

Dahua HDCVI Standalone DVR User's Manual

V2.1.2

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Welcome

Thank you for purchasing our HDCVI DVR!

This user's manual is designed to be a reference tool for the installation and operation of your system.

Here you can find information about this series standalone DVR features and functions, as well as a detailed menu tree.

Before installation and operation please read the following safeguards and warnings carefully!

Important Safeguards and Warnings

1. Electrical safety

All installation and operation here should conform to your local electrical safety codes. The product must be grounded to reduce the risk of electric shock.

We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

2. Transportation security

Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

3. Installation

Keep upwards. Handle with care. Do not apply power to the DVR before completing installation. Do not place objects on the DVR.

4 . Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers. We are not liable for any problems caused by unauthorized modifications or attempted repair.

5. Environment

The DVR should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc.

6. Accessories

Be sure to use all the accessories recommended by manufacturer. Before installation, please open the package and check all the components are included. Contact your local retailer ASAP if something is broken in your package.

7. Lithium battery

Improper battery use may result in fire, explosion, or personal injury! When replace the battery, please make sure you are using the same model! RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.



FOR YOUR OWN SAFETY, PLEASE CHANGE SYSTEM DEFAULT PASSWORD AFTER YOU FIRST LOGIN!

1 FEATURES AND SPECIFICATIONS

1.1 Overview

The standalone series DVR is an excellent digital monitor product designed for security field.

It adopts embedded Linux OS to maintain reliable operation. Popular H.264 compression algorithm and G.711 audio compression technology realize high quality, low bit stream. Unique frame by frame play function is suitable for detailed analysis. It has various functions such as record, playback, monitor at the same time and can guarantee audio video synchronization. This series product has advanced technology and strong network data transmission function.

This series device adopts embedded design to achieve high security and reliability. It can work in the local end, and at the same time, when connecting it to the professional surveillance software (PSS), it can connect to the security network to realize strong network and remote monitor function.

This series product can be widely used in various areas such as banking, telecommunication, electric power, interrogation, transportation, intelligent resident zone, factory, warehouse, resources, and water conservancy.

1.2 Features

This series product has the following features:

• Real-time surveillance

Support VGA port and HDMI port. Realize the surveillance through displayer. Support HDMI, VGA, and TV output at the same time.

Storage function

Special data format to guarantee data security and can remove the risk of the vicious data modification. Support digital watermark.

• Compression format

Support multiple-channel audio and video. An independent hardware decodes the audio and video signal from each channel to maintain video and audio synchronization.

Backup function

Support backup operation via USB port (such as U disk, portable HDD, burner) Client-end user can download the file to local HDD to backup via network.

• Record & playback function

Support each channel real-time record independently, and at the same time it can support search, forward play, network monitor, record search, download and etc.

Support various playback modes: slow play, fast play, backward play and frame by frame play.

Support time title overlay so that you can view event accurate occurred time Support customized zoom function during the preview.

• Network operation

Support network remote real-time monitor, remote record search and remote PTZ control.

• Alarm activation function

Several relay alarm outputs to realize alarm activation and on-site light control. The alarm input port and output has the protection circuit to guarantee device safety.

• Communication port

RS485 port can realize alarm input and PTZ control.

RS232 port can connect to keyboard to realize central control, and can also connect to PC COM to upgrade system and realize maintenance, and matrix control.

Standard Ethernet port can realize network access function.

The dual-network port has the multiple-access, fault-tolerance, load-balance setup mode.

• PTZ control

Support PTZ decoder via RS485.

• Intelligent operation

Mouse operation function In the menu, support copy and paste setup function

• UPNP (Universal Plug and Play)

Establish mapping connection between LAN and WAN via UPNP protocol.

Slight function differences may be found due to different series.

1.3 Specifications

1.3.1 HCVR5104C Series

	Parameter	HCVR5104C		
System	Main	High-performance industrial embedded micro controller		
	Processor			
OS Embedded LINUX		Embedded LINUX		
	System	Multiplex operations: Multiple-channel record, multiple-channel playback		
	Resources	and network operation simultaneously		
	Interface	User-friendly graphical user interface		

	Input	USB mouse			
	Devices				
	Input	Arabic number, English character, donation and extension Chinese			
	Method	(optional)			
	Shortcut	Copy/paste operation, USB mouse right-key shortcut menu, double click			
	Function	USB mouse to switch screen.			
Compression	Video				
Standard	Compressio	H.264			
	n				
	Audio				
	Compressio	G711A, G711U, PCM			
	n				
	Video Input	4-CH composite video input: (NTSC/PAL) BNC (1.0V _{P-P} , 75Ω)			
	Video	1-ch VGA output.			
	Output	1-ch HDMI output.			
		Support VGA/HDMI video output at the same time.			
Video monitor	Video Standard	Support PAL/NTSC.			
	Record	Real-time Mode: PAL 1f/s to 25f/s per channel and NTSC 1f/s to 30f/s per			
	Speed	channel			
	Video	1/4 windows(Optional)			
MonitorSupport monitor tour functions such as motion detectionTouringauto control.		Support monitor tour functions such as motion detection, and schedule			
		auto control.			
		PAL/NTSC			
		Real-time monitor:			
		720P 1280*720			
	Resolution	Playback:			
	(PAL/NTSC)	All-ch: 720P 1280*720, 960H 960 ×576/960×480, D1			
		704×576/704×480, HD1 352×576/352×480, 2CIF 704×288/704×240,			
		CIF 352×288/ 352×240 , QCIF 176×144/176×120			
		Support dual streams: extra stream resolution CIF 352×288/ 352×240,			
		QCIF 176×144/176×120.			
Image 6-level image quality (Adjustable) Quality Privacy Privacy Support one privacy mask of user-defined size in mask Support max 4 zones.		6-level image quality (Adjustable)			
		Support one privacy mask of user-defined size in full screen.			
	Image Information	Channel information, time information and privacy mask zone.			
	TV Adjust	Adjust TV output zone suitable to anamorphic video.			

Channel Channel name, recording status, screen lock status, video loss statu Information motion detection status are shown on the bottom left of display scree Color Hue, brightness, contrast, saturation and gain setup for each chann Configuratio n Audio N/A Audio N/A Bidirectional N/A Audio N/A	en.
Configuratio N/A Audio Audio Input Audio N/A Output Bidirectional Audio N/A	iel.
Audio N/A Output Bidirectional Audio N/A	
Output Bidirectional Audio	
Audio	
1 huilt in CATA nort Cunnert (UDD	
Hard Disk 1 built-in SATA port. Support 1 HDD.	
Hard disk One HDD 4T Space	
Hard Disk Audio: PCM 28.8MByte/h	
Occupation Video: 56-900MByte/h	
	ng and tection
Record and recording>schedule recording. playback Storage	
Mode Support channel record quota setup	
Recording 1 to 120 minutes single record duration (Default setup is 60 minutes Length	3)
Playback When hard disk is full, system can overwrite previous video file.	
RecordVarious search engines such as time, type and channel.Search	
PlaybackVarious fast play, slow play speeds, manual frame by frame playbacModereverse play mode.	ck and
Various File Can switch to previous or next file or any file in current play list.	
Switch Can switch to file on other channel of the same time. (If there is a fil	le)
Ways Support file continuous play, when a file is end system auto plays th file in the current channel	ie next
Playback Way Support mark playback	
Multi-chann There is 1/4-channel playback mode. el Playback	
Window Switch between self-adaptive screen/full screen when playback Zoom Image: Source of the street str	

	Partial	When in one-window full-screen playback mode, you can select any zone		
	Enlargemen	to activate partial enlargement function.		
	t			
Backup		HDD backup		
function		Support peripheral USB backup device. (Flash disk, portable disk and		
Turiotion	Backup	etc.)		
	Mode	Support peripheral USB burner.		
		Support peripheral COB burnel. Support network download and save		
		View monitor channel remotely.		
		DVR configuration through client-end and web browser		
Network		Upgrade via client or browser to realize remote maintenance.		
Function		View alarm information such as motion detection and video loss via client.		
Function		Support network PTZ lens control		
	Network	File download backup and playback		
	control	Multiple devices share information via corresponding software such as		
		professional surveillance software (PSS)		
		Duplex transparent COM		
		Network alarm input and output		
		Zero-channel encoding		
		Bidirectional audio.		
	Motion	Zone setup: support 396((PAL 22×18, NTSC 22×15)) detection zones.		
Motion	Detection	Various sensitivity levels.		
Detection and		Alarm can activate record or external alarm or screen message prompt.		
Alarm	Video Loss	Alarm can activate screen message prompt.		
External N/A		N/A		
	Alarm			
	Manual	N/A		
	Alarm			
	Control			
	Alarm Input	N/A		
	Alarm	N/A		
	Output			
	Alarm Relay	N/A		
	USB	2 USB 2.0 port.		
Interface	Interface			
	Network	1 RJ45 10M/100M self-adaptable Ethernet port		
	connection			
	RS485	N/A		
	RS232	N/A		
System	Hard Disk	Display HDD current status		
Information	Information			
monnation	information			

	Data	Data stream statistics for each channel (in wave mode)	
Stream			
	Statistics		
		Poolsup to 1024 log filop	
Log		Backup to 1024 log files.	
	statistics	Support various search engines such as time and type.	
	Version	Display version information: channel amount, system version and release	
		date.	
	On-line user	Display current on-line user	
User		Multi-lever user management; various management modes	
Management	User	Integrated management for local user, serial port user and network user.	
	Manageme	Configurable user power.	
	nt	Support user /group and its corresponding rights modification.	
		No limit to the user or group amount.	
		Password modification	
	Password	Administrator can modify other user's password.	
	Authenticati	Account lock strategy	
	on	Five times login failure in thirty minutes may result in account lock.	
Upgrade		Web browser, client-end and update tool.	
		Password login protection to guarantee safety	
		User-friendly interface when login. Provide the following options: Logout	
Login, Logout a	and Shutdown	/shutdown/ restart.	
		Right authentication when shut down to make sure only those proper	
		people can turn off DVR	
-	Power	DC 12V	
	Power		
General	Consumptio		
Parameter	n .	\leq 15W (With adapter, no HDD)	
	Working	-10℃−+55℃	
	Temperatur		
	e		
	Working	10%-90%	
	Humidity		
	Air Pressure	86kpa-106kpa	
	Dimension	SMART 1U case 270(W) x205 (D) x41mm(H)	
	Weight	1.25KG(no HDD)	
	Installation	Desktop installation	
	Mode		
	Wode		

1.3.2 HCVR51XXC-V2 Series

	Parameters	HCVR5104C-V2	HCVR5108C-V2
System	System Main Processor Industrial embedded micro co		er
OS Embedo		Embedded LINUX	

	Parameters	HCVR5104C-V2	HCVR5108C-V2	
Video	Video Encode	H.264	•	
Parameters	Standard			
	Encode	720P/D1/HD1/2CIF/CIF/QCIF		
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s		
	Rate			
	Video Bit Rate	1536Kbps-4096Kbps,		
		For 720P: default setup is 2Mbps, max supports 4Mbps		
	Bit Stream Type	Video stream/composite stream		
	Dual-Stream	Support		
Audio	Encode	G.711A/G.711U/PCM		
Parameters	Standard			
	Audio Sampling	8KHz,16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port	
	Input			
	Network Video	N/A		
	Input			
	Video Output	1-channel VGA output,		
		1-channel HDMI output (of the same video source),		
		HDMI/ VGA video output at the same time.		
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	N/A		
	Audio Output	N/A		
	Bidirectional	N/A		
	Talk Input			
Record	Record Mode	Schedule record/manual record/MD record/Alarm record		
	Record	Max 4-channel playback	Max 8-channel playback	
	Playback			
	Backup Mode	HDD, burner, USB device, network backup		
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does not support eSATA port		
	One HDD Space	4T		
Communication	Network	1 RJ45 port, 100Mbps Ethernet port		
Port	Communication	N/A		
	USB	2 USB ports		
Others	Power	DC12V		
	Power	≤15W (With power adapter, no HD	D)	

Parameters	HCVR5104C-V2	HCVR5108C-V2
Consumption		
Working	-10°C-+55°C	
Temperature		
Working	10%~90%	
Humidity		
Dimensions	SMART 1U case, 270mm (W) x205mm (D) x41mm (H)	
Weight	1.25KG (No HDD)	
Installation	Desk	
Mode		

1.3.3 HCVR7104C-V2 Series

	Parameters	HCVR7104C-V2
System	Main Processor	Industrial embedded micro controller
	OS	Embedded LINUX
Video	Video Encode	H.264
Parameters	Standard	
	Encode	1080P /720P/D1/HD1/2CIF/CIF/QCIF
	Resolution	
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s
	Rate	
	Video Bit Rate	2048Kbps-6144Kbps,
		For 1080P: default setup is 4Mbps, max supports 6Mbps
	Bit Stream Type	Video stream/composite stream
	Dual-Stream	Support
Audio	Encode	G.711A/G.711U/PCM
Parameters	Standard	
	Audio Sampling	8KHz, 16Bit
	Rate	
	Audio Bit Rate	64Kbps
Video Port	Analog Video	4-channel, BNC port
	Input	
	Network Video	N/A
	Input	
	Video Output	1-channel VGA output,
		1-channel HDMI output (of the same video source),
		HDMI/ VGA video output at the same time.
	Loop Output	N/A
	Matrix Output	N/A
Audio Port	Audio Input	N/A
	Audio Output	N/A
	Bidirectional	N/A

	Parameters	HCVR7104C-V2		
	Talk Input			
Record Record Mode		Schedule record/manual record/MD record/Alarm record		
	Record	Max 4-channel playback		
	Playback			
	Backup Mode	HDD, burner, USB device, networ	rk backup	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does not support es	SATA port	
	One HDD Space	4T		
Communication	Network	1 RJ45 port, 100Mbps Ethernet p	ort	
Port	Communication	N/A		
	USB	2 USB ports		
Others	Power	DC12V		
	Power	≤20W (With power adapter, no HDD)		
	Consumption			
	Working	-10°C-+55°C		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimensions	SMART 1U case, 270mm (W) x205mm (D) x41mm (H)		
	Weight	1.25KG (No HDD)		
	Installation	Desk		
Mode				
1.3.4 HCVR41	10XC-S2 Series			
	Parameters	HCVR4104C-S2	HCVR4108C-S2	
System	Main Processor	Industrial embedded micro contro	ller	
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard			
	Encode	720P/960H/D1/HD1/	720P(1~15fps)/960H/D1/	
	Resolution	2CIF/CIF/QCIF	HD1/2CIF/CIF/QCIF	
	Video Frame	HDCVI: 1~25f/s(PAL); 1~30f/s	HDCVI: 1 \sim 15f/s (The 1 st	
	Rate	(NTSC)	channel supports 25/30f)	
		CVBS: 1~25f/s (PAL); 1~30f/s	CVBS: 1~25f/s (PAL); 1~30f/s	
	1			

(NTSC)

2048Kbps-4096Kbps,

For 720P: default setup is

For 960H: default setup is

2Mbps, max supports 4Mbps.

1Mbps, max supports 3Mbps.

Video stream/composite stream

Video Bit Rate

Bit Stream Type

For 720P: default setup is

For 960H: default setup is

1Mbps, max supports 4Mbps.

1Mbps, max supports 3Mbps.

(NTSC)

1024Kbps-4096Kbps,

	Parameters	HCVR4104C-S2	HCVR4108C-S2	
	Dual-Stream	Support		
Audio	Encode	G.711A/G.711U/PCM		
Parameters	Standard			
	Audio Sampling	8KHz, 16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port	
	Input			
	Network Video	Max 2-channel IPC connections (8M)	
	Input			
	Video Output	1-channel VGA output,		
		1-channel HDMI output (of the sa	me video source),	
		HDMI/ VGA video output at the sa	ame time.	
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	1-channel RCA port.		
	Audio Output	1-channel RCA port.		
	Bidirectional	Reuse the audio input/output port.		
	Talk Input			
Record	Record Mode	Schedule record/manual record/MD record/Alarm record		
	Record	Max 4-channel playback	Max 8-channel playback	
	Playback			
	Backup Mode	HDD, burner, USB device, network backup		
Alarm	Irm Alarm Input N/A			
Alarm Output		N/A		
HDD	HDD HDD Port 1 SATA port, does not support eSATA port		SATA port	
	One HDD Space	4T		
Communication	Network	1 RJ45 port, 100Mbps Ethernet port		
Port	Communication	N/A		
	USB	2 USB ports		
Others	Power	DC12V		
	Power	≤15W(With power adapter, no HDD)		
	Consumption			
	Working	-10°C-+55°C		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimensions	SMART 1U case, 270mm (W) ×205mm (D) ×41mm (H)		
	Weight	1.25KG (No HDD)		
	Installation	Desk		
	Mode			

1.3.5 HCVR510XC-S2 Series

	Parameters	HCVR5104C-S2	HCVR5108C-S2	
System	Main Processor	Industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard			
	Encode	1080P(1~15fps) /720P/960H/D1/HD1/2CIF/CIF/QCIF		
	Resolution			
	Video Frame	HDCVI: 1~25f/s (PAL); 1~30f/s (NTSC)		
	Rate	CVBS: 1~25f/s (PAL); 1~30f/s (NTSC)		
	Video Bit Rate	2048Kbps-4096Kbps,		
		For 1080P/720P: default setup is	2Mbps, max supports 4Mbps.	
		For 960H: default setup is 1Mbps	, max supports 3Mbps.	
	Bit Stream Type	Video stream/composite stream		
	Dual-Stream	Support		
Audio	Encode	G.711A/G.711U/PCM		
Parameters	Standard			
	Audio Sampling	8KHz, 16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port	
	Input			
	Network Video	Max 2-channel IPC connections (8M)		
	Input			
	Video Output	1-channel VGA output,		
		1-channel HDMI output (of the same video source),		
		HDMI/ VGA video output at the same time.		
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	1-channel RCA port.		
	Audio Output	1-channel RCA port.		
	Bidirectional	Reuse the audio input/output port.		
	Talk Input			
Record	Record Mode	Schedule record/manual record/N	ID record/Alarm record	
	Record	Max 4-channel playback	Max 8-channel playback	
	Playback			
	Backup Mode	HDD, burner, USB device, netwo	rk backup	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does not support eSATA port		
	One HDD Space	4T		

	Parameters	HCVR5104C-S2	HCVR5108C-S2
Communication	Network	1 RJ45 port, 100Mbps Ethernet port	
Port	Communication	N/A	
	USB	2 USB ports	
Others	Power	DC12V	
	Power	≤15W (With power adapter, no H	DD)
	Consumption		
	Working	-10℃−+55℃ re	
	Temperature		
	Working	10%~90%	
	Humidity		
Dimensions SMART 1U case, 270mm (W) ×205mm (I		x205mm(D)x41mm(H)	
	Weight	1.25KG(No HDD)	
	Installation	Desk	
	Mode		

1.3.6 HCVR7104C-S2 Series

ICVR7104C-52 Series			
Parameters	HCVR7104C-S2		
Main Processor	Industrial embedded micro controller		
OS	Embedded LINUX		
Video Encode	H.264		
Standard			
Encode	1080P/720P/960H/D1/HD1/2CIF/CIF/QCIF		
Resolution			
Video Frame	HDCVI: 1~25f/s (PAL); 1~30f/s (NTSC)		
Rate	CVBS: 1~25f/s (PAL); 1~30f/s (NTSC)		
Video Bit Rate	2048Kbps-6144Kbps,		
	For 1080P: default setup is 4Mbps, max supports 6Mbps.		
	For 720P: default setup is 2Mbps, max supports 4Mbps.		
Bit Stream Type	Video stream/composite stream		
Dual-Stream	Support		
Encode	G.711A/G.711U/PCM		
Standard			
Audio Sampling	8KHz, 16Bit		
Rate			
Audio Bit Rate	64Kbps		
Analog Video	4-channel, BNC port		
Input			
Network Video	Max 2-channel IPC connections (16M)		
Input			
Video Output	1-channel VGA output,		
	1-channel HDMI output (of the same video source),		
	Main Processor OS Video Encode Standard - Encode - Resolution - Video Frame Rate - Video Bit Stream - Bit Stream - Dual-Stream - Standard - Audio Sampling - Audio Bit Rate - Analog Video Input -		

	Parameters	HCVR7104C-S2
		HDMI/ VGA video output at the same time.
	Loop Output	N/A
	Matrix Output	N/A
Audio Port	Audio Input	1-channel RCA port.
	Audio Output	1-channel RCA port.
	Bidirectional	Reuse the audio input/output port.
	Talk Input	
Record	Record Mode	Schedule record/manual record/MD record/Alarm record
	Record	Max 4-channel playback
	Playback	
	Backup Mode	HDD, burner, USB device, network backup
Alarm	Alarm Input	N/A
	Alarm Output	N/A
HDD HDD Port 1 SATA port, does not support eSATA port		1 SATA port, does not support eSATA port
	One HDD Space	4T
Communication	Network	1 RJ45 port, 100Mbps Ethernet port
Port Communication N/A		N/A
	USB	2 USB ports
Others	Power	DC12V
	Power	≤15W (With power adapter, no HDD)
	Consumption	
	Working	-10℃−+55℃
	Temperature	
	Working	10%~90%
	Humidity	
	Dimensions	SMART 1U case, 270mm (W) x205mm (D) x41mm (H)
	Weight	1.25KG(No HDD)
	Installation	Desk
	Mode	

1.3.7 HCVR2108C-S2 Series

	Parameters HCVR2108C-S2	
System	Main Processor	Industrial embedded micro controller
	OS	Embedded LINUX
Video	Video Encode	H.264
Parameters	Standard	
	Encode	720P(1~15fps) /960H/D1/HD1/2CIF/CIF/QCIF
	Resolution	
	Video Frame	HDCVI: 1~12f/s
	Rate	CVBS: 1~20f/s (PAL); 1~20f/s (NTSC)
	Video Bit Rate	1024Kbps-4096Kbps,

	Parameters	HCVR2108C-S2
		For 720P: default setup is 1Mbps, max supports 4Mbps.
		For 1080P: default setup is 1Mbps, max supports 2Mbps.
	Bit Stream Type	Video stream/composite stream
	Dual-Stream	Support
Audio	Encode	G.711A/G.711U/PCM
Parameters	Standard	
	Audio Sampling	8KHz, 16Bit
	Rate	
	Audio Bit Rate	64Kbps
Video Port	Analog Video	8-channel, BNC port
	Input	
	Video Output	1-channel VGA output,
		1-channel HDMI output (of the same video source),
		HDMI/ VGA video output at the same time.
	Loop Output	N/A
	Matrix Output	N/A
Audio Port	Audio Input	1-channel RCA port.
	Audio Output	1-channel RCA port.
	Bidirectional	Reuse the audio input/output port.
	Talk Input	
Record	Record Mode	Schedule record/manual record/MD record/Alarm record
	Record	Max 8-channel playback
	Playback	
	Backup Mode	HDD, burner, USB device, network backup
Alarm	Alarm Input	N/A
	Alarm Output	N/A
HDD	HDD Port	1 SATA port, does not support eSATA port
	One HDD Space	4T
Communication	Network	1 RJ45 port, 100Mbps Ethernet port
Port	Communication	N/A
	USB	2 USB ports
Others	Power	DC12V
	Power	≤15W(With power adapter, no HDD)
	Consumption	
	Working	-10℃−+55℃
	Temperature	
	Working	10%~90%
	Humidity	
	Dimensions	SMART 1U case, 270mm (W) x205mm (D) x41mm (H)
	Dimensions	
	Weight	1.25KG (No HDD)

Parameters	HCVR2108C-S2
Mode	

1.3.8 HCVR410XC-S3 Series

	Parameters	HCVR4104C-S3	HCVR4108C-S3
System	Main Processor	Industrial embedded micro controlle	r
	OS	Embedded LINUX	
Video	Video Encode H.264		
Parameters	Standard		
	Encode Resolution	1080N/720P/960H/D1/HD1/2CIF/CII	F 1080N@12f/720P(Non realtime)/960H/D1/HD1/2C IF/CIF
	Video Frame Rate	PAL:1~25f/s; NTSC: 1~30f/s	
	Video Bit Rate	32Kbps-4096Kbps, For 720P: default setup is 1.5Mbps,	
		For 1080P: default setup is 1.5Mbps	, max supports 4Mbps.
	Bit Stream Type	Video stream/composite stream	
	Dual-Stream	Support	
Audio	Encode	G.711A/G.711U/PCM	
Parameters	Standard		
	Audio Sampling	8KHz, 16Bit	
	Rate		
	Audio Bit Rate	64Kbps	
Video Port	Analog Video Input	4-ch BNC port(HDCVI HD video/general standard definition video self-adaptive)	8-ch BNC port(HDCVI HD video/general standard definition video self-adaptive)
	Network Video Input	 Max add 1 IP channel connection Analog/digital channel switch. Max 5 IP channel connections Connection bandwidth:4Mbps-20Mbps 	 Max add 2 IP channel connections Analog/digital channel switch. Max 10 IP channel connections Connection bandwidth:8Mbps-56Mbp s
	Video Output	1-channel VGA output, 1-channel HDMI output (of the same video source), HDMI/ VGA video output at the same time.	
	Loop Output	N/A	
	Matrix Output	N/A	
Audio Port	Audio Input	1-channel RCA port.	
	Coaxial Audio Input	4-ch	8-ch

	Parameters	HCVR4104C-S3	HCVR4108C-S3
	Audio Output	1-channel RCA port.	
	Bidirectional	Reuse the audio input/output port of the 1 st channel.	
	Talk Input		
Record	Record Mode	Schedule record/manual record/MD	record/Alarm record
	Playback Mode	Instant playback, normal playback, event playback, mark playback, smart playback	
	Backup Mode	HDD, burner, USB device, network l	packup
Alarm	Alarm Input	N/A	
	Alarm Output	N/A	
HDD	HDD Port	1 SATA port, does not support eSA	TA port
	One HDD Space	6T	
Communication Network 1 RJ45 port, 100Mbps Ethernet port			
Port	Communication	RS485 port	
	USB	2 USB2.0 ports(at the rear panel)	
Others	Power	DC12V	
	Power	≤7W	≤8W
	Consumption		
	(No HDD)		
	Working	-10°C−+55°C	
	Temperature		
	Working	10%~90%	
	Humidity		
	Dimensions	SMART 1U case, 270mm (W) ×205mm (D) ×41mm (H)	
	Weight (No	≤0.5KG	≪0.55KG
	HDD)		
	Installation	Desk	
	Mode		

1.3.9 HCVR510XC-S3 Series

	Parameters	HCVR5104C-S3	HCVR5108C-S3
System	Main Processor	Industrial embedded micro controller	
	OS	Embedded LINUX	
Video	Video Encode	H.264	
Parameters	Standard		
	Encode	ncode 1080P@15f/1080N/720P/960H/D1/HD1/2CIF/CIF/	
	Resolution		
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s	
	Rate		
	Video Bit Rate	32Kbps-6144Kbps,	
		For 720P: default setup is 2Mbps, max	x supports 4Mbps.
		For 1080P: default setup is 2Mbps, ma	ax supports 6Mbps.

	Parameters	HCVR5104C-S3	HCVR5108C-S3
	Bit Stream Type	Video stream/composite stream	
	Dual-Stream	Support	
Audio	Encode	G.711A/G.711U/PCM	
Parameters	Standard		
	Audio Sampling	8KHz,16Bit	
	Rate		
	Audio Bit Rate	64Kbps	
Video Port	Analog Video	4-ch BNC port(HDCVI HD	8-ch BNC port(HDCVI HD
	Input	video/general standard definition	video/general standard
		video self-adaptive)	definition video self-adaptive)
	Network Video	 Max add 1 IP channel 	Max add 2 IP channel
	Input	connection	connections
		 Analog/digital channel switch. 	Analog/digital channel
		Max 5 IP channel	switch. Max 10 IP channel
		connections	connections
		Connection	Connection
		bandwidth:8Mbps-24Mbps	bandwidth:16Mbps-48Mb
			ps
	Video Output	1-channel VGA output,	
		1-channel HDMI output (of the same video source), HDMI/ VGA video output at the same time.	
	Loop Output	N/A	
	Matrix Output	N/A	
Audio Port	Audio Input	1-channel RCA port.	
Addio F off	Coaxial Audio	4-ch	8-ch
	Input		0-01
	Audio Output	1-channel RCA port.	
	Bidirectional	Reuse the audio input/output port of the 1st channel.	
	Talk Input		
Record	Record Mode	Schedule record/manual record/MD	record/Alarm record
	Playback Mode	Instant playback, normal playback,	event playback, mark playback,
	,	smart playback	
	Backup Mode	HDD, burner, USB device, network	backup
Alarm	Alarm Input		
	Alarm Output	N/A	
HDD	HDD Port	1 SATA port, does not support eSA	TA port
	One HDD Space	6T	
Communication	Network	1 RJ45 port, 100Mbps Ethernet port	
Port	Communication	RS485 port	
	USB	2 USB2.0 ports(at the rear panel)	
Others	Power	DC12V	
	1		

Parameters	HCVR5104C-S3	HCVR5108C-S3
Power	≤7W	≤8W
Consumption		
(No HDD)		
Working	-10℃−+55℃	
Temperature		
Working	10%~90%	
Humidity		
Dimensions	SMART 1U case, 270mm (W) ×20	05mm (D) ×41mm (H)
Weight (No	≤0.5KG	≤0.55KG
HDD)		
Installation	Desk	
Mode		

1.3.10 HCVR7104C-S3 Series

	Parameters	HCVR7104C-S3
System	Main Processor	Industrial embedded micro controller
	OS	Embedded LINUX
Video	Video Encode	H.264
Parameters	Standard	
	Encode	1080P/720P/960H/D1/HD1/2CIF/CIF
	Resolution	
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s
	Rate	
	Video Bit Rate	32Kbps-6144Kbps,
		For 720P: default setup is 2Mbps, max supports 4Mbps.
		For 1080P: default setup is 4Mbps, max supports 6Mbps.
	Bit Stream Type	Video stream/composite stream
	Dual-Stream	Support
Audio	Encode	G.711A/G.711U/PCM
Parameters	Standard	
	Audio Sampling	8KHz, 16Bit
	Rate	
	Audio Bit Rate	64Kbps
Video Port	Analog Video	4-ch BNC port(HDCVI HD video/general standard definition video
	Input	self-adaptive)
	Network Video	 Max add 2 IP channel connections.
	Input	 Analog/digital channel switch. Max 6 IP channel connections.
		 Connection bandwidth:8Mbps-24Mbps
	Video Output	1-channel VGA output,
		1-channel HDMI output (of the same video source),
		HDMI/ VGA video output at the same time.
	Loop Output	N/A

	Parameters	HCVR7104C-S3	
	Matrix Output	N/A	
Audio Port	Audio Input	1-channel RCA port.	
	Coaxial Audio	4-ch	
	Input		
	Audio Output	1-channel RCA port.	
	Bidirectional	Reuse the audio input/output port of the 1st channel.	
	Talk Input		
Record	Record Mode	Schedule record/manual record/MD record/Alarm record	
	Playback Mode	Instant playback, normal playback, event playback, mark playback,	
		smart playback	
	Backup Mode	HDD, burner, USB device, network backup	
Alarm	Alarm Input	N/A	
	Alarm Output	N/A	
HDD	HDD Port	1 SATA port, does not support eSATA port	
	One HDD Space	6T	
Communication	Network	1 RJ45 port, 100Mbps Ethernet port	
Port	Communication	RS485 port	
	USB	2 USB2.0 ports(at the rear panel)	
Others	Power	DC12V	
	Power	≤8W	
	Consumption		
	(No HDD)		
	Working	-10℃−+55℃	
	Temperature		
	Working	10%~90%	
	Humidity		
	Dimensions	SMART 1U case, 270mm (W) x205mm (D) x41mm (H)	
	Weight (No	≤0.5KG	
	HDD)		
	Installation	Desk	
	Mode		

1.3.11 HCVR51XXH Series

	Parameter	HCVR5104H	HCVR5108H		
System	Main Processor	Processor			
	OS				
	System	Multiplex operations: Multiple-channel record, multiple-channel pla			
	Resources	and network operation simultaneously			
	Interface	ace User-friendly graphical user interface			

	Input Devices	USB mouse			
	Input Method	Arabic number, English character, donation and extension Chinese (optional)			
	Shortcut	Copy/paste operation, USB mouse right-key shortcut menu, double click USB mouse to switch screen.			
	Function				
Compression Standard	Video Compressio n	H.264			
	Audio Compressio n	G711A, G711U, PCM			
	Video Input	4-CH composite video input: (NTSC/PAL) BNC (1.0V _{P-P} ,75Ω)	8-CH composite video input: (NTSC/PAL) BNC (1.0V _{P-P} ,75Ω)		
	Video Output	1-ch VGA output. 1-ch HDMI output. Support VGA/HDMI video output at the same time.			
Video monitor	Video Standard	Support PAL/NTSC.			
	Record Speed	Real-time Mode: PAL 1f/s to 25f/s per channel and NTSC 1f/s to 30f/s per channel			
	Video Partition	1/4 windows(Optional)	1/4/8/9 windows		
	Monitor Touring	Support monitor tour functions such as motion detection, and schedule auto control.			
		PAL/NTSC Real-time monitor: 720P 1280*720			
	Resolution (PAL/NTSC)	Playback: All-ch: 720P 1280*720, 960H 960 ×576/960×480, D1 704×576/704×480, HD1 352×576/352×480, 2CIF 704×288/704×240, CIF 352×288/ 352×240, QCIF 176×144/176×120 Support dual streams: extra stream resolution CIF 352×288/ 352×240,			
		QCIF 176×144/176×120.			
	Image Quality	6-level image quality (Adjustable)			
	Privacy mask	Support one privacy mask of user-defined size in full screen. Support max 4 zones.			
	Image Information	Channel information, time information and privacy mask zone.			
	TV Adjust	Adjust TV output zone suitable to anamorphic video.			

	Channel Lock Channel Information Color Configuratio	Cover secret channel with black screen though system is encoding normally. Screen-lock function to prevent unauthorized user seeing secret video. Channel name, recording status, screen lock status, video loss status and motion detection status are shown on the bottom left of display screen. Hue, brightness, contrast, saturation and gain setup for each channel.		
Audio	Audio Input	1-ch 200-2000mv 10KΩ(RCA)		
	Audio Output	1-ch audio output 200-3000mv 5KΩ(RCA)		
	Bidirectional Audio	Reuse the audio input/output channel.		
	Hard Disk	1 built-in SATA port. Support 1 HDD.		
Hard disk	One HDD Space	4T		
	Hard Disk	Audio: PCM 28.8MByte/h		
	Occupation	Video: 56-900MByte/h		
Record and	Recording Mode	Manual recording, motion detection recording, schedule recording and alarm recording Priority: Manual recording> alarm recording>motion detection recording>schedule recording.		
playback	Storage Mode	Support channel record quota setup		
	Recording Length	1 to 120 minutes single record duration (Default setup is 60 minutes)		
	Playback Repeat Way	When hard disk is full, system can overwrite previous video file.		
	Record Search	Various search engines such as time, type and channel.		
	Playback Mode	Various fast play, slow play speeds, manual frame by frame playback and reverse play mode.		
	Various File Switch Ways	Can switch to previous or next file or any file in current play list. Can switch to file on other channel of the same time. (If there is a file) Support file continuous play, when a file is end system auto plays the next file in the current channel		
	Playback Way	Support mark playback		
	Multi-chann el Playback	There is 1/4-channel playback mode.		
	Window Zoom	Switch between self-adaptive screen/full screen when playback		

	Partial	When in one-window full-screen playback mode, you can select any zone	
	Enlargemen	to activate partial enlargement function.	
	t		
Backup		HDD backup	
function	Backup	Support peripheral USB backup device. (Flash disk, portable disk and	
	Mode	etc.)	
		Support network download and save	
		View monitor channel remotely.	
		DVR configuration through client-end and web browser	
		Upgrade via client or browser to realize remote maintenance.	
Network	View alarm information such as motion detection and video lo		
Function	tion Support network PTZ lens control		
	Network	File download backup and playback	
	control	Multiple devices share information via corresponding software such as	
		professional surveillance software (PSS)	
		Duplex transparent COM	
		Network alarm input and output	
		Zero-channel encoding.	
		Bidirectional audio.	
	Motion	Zone setup: support 396((PAL 22×18, NTSC 22×15)) detection zones.	
Motion	Detection	Various sensitivity levels.	
Detection and		Alarm can activate record or external alarm or screen message prompt.	
Alarm	Video Loss Alarm can activate screen message prompt.		
	External	N/A	
	Alarm		
	Manual	N/A	
	Alarm		
	Control		
	Alarm Input	N/A	
	Alarm	N/A	
	Output		
	Alarm Relay	N/A	
	USB	2 USB 2.0 ports.	
Interface	Interface		
	Network	1 RJ45 10M/100M self-adaptable Ethernet port	
	connection		
	RS485	PTZ control port	
		Support various PTZ control protocols.	
	RS232	N/A	
System	Hard Disk	Display HDD current status	
Information	Information		

	Data	Data stream statistics for each channel (in wave mode)		
	Stream			
	Statistics			
	Log	Backup to 1024 log files.		
statistics		Support various search engines such as time and type.		
	Statistics			
	Version	Display version information: channel amount, system version and release date.		
	On line week			
11	On-line user	Display current on-line user		
User		Multi-lever user management; various management modes		
Management	User	Integrated management for local user, serial port user and network user.		
	Manageme	Configurable user power.		
	nt	Support user /group and its corresponding rights modification.		
		No limit to the user or group amount.		
	Password	Password modification		
	Authenticati	Administrator can modify other user's password.		
	on	Account lock strategy		
		Five times login failure in thirty minutes may result in account lock.		
Upgrade		Web browser, client-end and update tool.		
		Password login protection to guarantee safety		
		User-friendly interface when login. Provide the following options: Logout		
Login, Logout a	and Shutdown	/shutdown/ restart.		
		Right authentication when shut down to make sure only those proper		
		people can turn off DVR		
	Power	DC 12V		
	Power			
General	Consumptio			
Parameter	n	\leq 15W (With adapter, exclude HDD)		
	Working	-10℃−+55℃		
	Temperatur			
	e			
	Working	10%-90%		
	Humidity			
	Air Pressure	86kpa-106kpa		
	Dimension	325(W) x245 (D) x45mm(H)		
	Weight	1.25KG(Exclude HDD)		
	Installation	Desktop installation		
	Mode			
	Wode			

1.3.12 HCVR51XXH-V2 Series

	Parameters	HCVR5104H-V2	HCVR5108H-V2	HCVR5116H-V2	
System	Main Processor	Industrial embedded micro controller			
	OS	Embedded LINUX			

	Parameters	HCVR5104H-V2	HCVR5108H-V2	HCVR5116H-V2		
Video	Video Encode	H.264				
Parameters	Standard					
	Encode	720P/D1/HD1/2CIF/C	IF/QCIF			
	Resolution					
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s				
	Rate					
	Video Bit Rate	1536Kbps-4096Kbps,				
		For 720P: default setup is 2Mbps, max supports 4Mbps				
	Bit Stream Type	Video stream/compos	ite stream			
	Dual-Stream	Support				
Audio	Encode	G.711A/G.711U/PCM				
Parameters	Standard					
	Audio Sampling	8KHz,16Bit				
	Rate					
	Audio Bit Rate	64Kbps				
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port	16-channel, BNC		
	Input			port		
	Network Video	N/A				
	Input					
	Video Output	1-channel VGA output,				
		1-channel HDMI output (of the same video source),				
		HDMI/ VGA video output at the same time.				
	Loop Output	N/A				
	Matrix Output	N/A				
Audio Port	Audio Input	1-channel RCA				
	Audio Output	1-channel RCA				
	Bidirectional	Support (reuse the audio port)				
	Talk Input					
Record	Record Mode	Schedule record/man	ual record/MD record/A	larm record		
	Record	Max 4-channel	Max 8-channel	Max 16-channel		
	Playback	playback	playback	playback		
	Backup Mode	HDD, burner, USB de	vice, network backup			
Alarm	Alarm Input	N/A				
	Alarm Output	N/A				
HDD	HDD Port	1 SATA port, does no	ot support eSATA port			
	One HDD Space	4T				
Communication	Network	1 RJ45 port, 100Mbps	Ethernet port			
Port	Communication	RS485 port				
	USB	2 USB ports				
Others	Power	DC12V				
	Power	≤30W (With power adapter, no HDD)				

Parameters	HCVR5104H-V2	HCVR5108H-V2	HCVR5116H-V2
Consumption			
Working	-10℃-+55℃		
Temperature			
Working	10%~90%		
Humidity			
Dimensions	Mini 1U case, 325mn	n (W) x245mm (D)	x45mm (H)
Weight	1.25KG (No HDD)		
Installation	Desk		
Mode			

1.3.13 HCVR51XXHC Series

	Parameter	HCVR5104HC	HCVR5108HC		
	Main	High-performance industrial embedded micro controller			
System	Processor				
	OS	Embedded LINUX			
	System	Multiplex operations: Multiple-channe	el record, multiple-channel playback		
	Resources	and network operation simultaneousl	у		
	Interface	User-friendly graphical user interfac	ce		
	Input	USB mouse			
	Devices				
	Input Method	Arabic number, English character (optional)	, donation and extension Chinese		
	Shortcut		ight-key shortcut menu, double click		
	Function	USB mouse to switch screen.	ight-key shorteut menu, double click		
Compression	Video				
Standard	Compressio	H.264			
	n				
	Audio				
	Compressio	N/A			
	n				
	Video Input	4-CH composite video input: (NTSC/PAL) BNC (1.0V _{P-P} 75Ω)	8-CH composite video input: (NTSC/PAL) BNC ($1.0V_{P-P}$, 75 Ω)		
		1-ch VGA output.			
	Video	1-ch HDMI output.			
	Output	Support VGA/HDMI video output at the	ne same time.		
Video monitor	Video	Support PAL/NTSC.			
	Standard				
	Record	Real-time Mode: PAL 1f/s to 25f/s per channel and NTSC 1f/s to 30f/s per			
	Speed	channel			
	Video	1/4 windows(Optional)	1/4/8/9 windows		
	Partition				

	Monitor	Support monitor tour functions such as motion detection, and schedule		
	Touring	auto control.		
		PAL/NTSC		
		Real-time monitor:		
		720P 1280*720		
		Playback:		
	Resolution	All-ch: 720P 1280*720, 960H 960 ×576/960×480, D1		
	(PAL/NTSC)	704×576/704×480, HD1 352×576/352×480, 2CIF 704×288/704×240,		
		CIF 352×288/ 352×240 , QCIF 176×144/176×120		
		Support dual streams: extra stream resolution CIF 352×288/ 352×240, QCIF 176×144/176×120.		
	Image	6-level image quality (Adjustable)		
	Quality			
	Privacy	Support one privacy mask of user-defined size in full screen.		
	mask	Support max 4 zones.		
	Image	Channel information, time information and privacy mask and		
	Information	Channel information, time information and privacy mask zone.		
	TV Adjust	Adjust TV output zone suitable to anamorphic video.		
	Channel	Cover secret channel with black screen though system is encoding		
	Lock	normally.		
		Screen-lock function to prevent unauthorized user seeing secret video.		
	Channel	Channel name, recording status, screen lock status, video loss status and		
	Information	motion detection status are shown on the bottom left of display screen.		
	Color	Hue, brightness, contrast, saturation and gain setup for each channel.		
	Configuratio			
	n			
Audio	Audio Input	N/A		
	Audio	N/A		
	Output			
	Bidirectional	N/A		
	Audio			
	Hard Disk	1 built-in SATA port. Support 1 HDD.		
	One HDD	4T		
Hard disk	Space			
	Hard Disk	Audio: PCM 28.8MByte/h		
	Occupation	Video: 56-900MByte/h		
		Manual recording, motion detection recording, schedule recording and		
	Recording	alarm recording		
	Mode	Priority: Manual recording> alarm recording>motion detection		
Record and		recording>schedule recording.		

playback	Storage Mode	Support channel record quota setup	
	Recording Length	1 to 120 minutes single record duration (Default setup is 60 minutes)	
	Playback Repeat Way	When hard disk is full, system can overwrite previous video file.	
	Record Search	Various search engines such as time, type and channel.	
	Playback Mode	Various fast play, slow play speeds, manual frame by frame playback and reverse play mode.	
	Various File Switch Ways	Can switch to previous or next file or any file in current play list. Can switch to file on other channel of the same time. (If there is a file) Support file continuous play, when a file is end system auto plays the next	
	Playback Way	file in the current channel Support mark playback	
	Multi-chann el Playback	There is 1/4-channel playback mode.	
	Window Zoom	Switch between self-adaptive screen/full screen when playback	
	Partial Enlargemen t	When in one-window full-screen playback mode, you can select any zone to activate partial enlargement function.	
Backup		HDD backup	
function	Backup Mode	Support peripheral USB backup device. (Flash disk, portable disk and etc.)	
		Support network download and save	
Network		View monitor channel remotely.	
Function		DVR configuration through client-end and web browser	
		Upgrade via client or browser to realize remote maintenance.	
		View alarm information such as motion detection and video loss via client.	
		Support network PTZ lens control	
	Network	File download backup and playback	
	control	Multiple devices share information via corresponding software such as professional surveillance software (PSS)	
		Duplex transparent COM	
		Network alarm input and output	
		Zero-channel encoding.	
		Bidirectional audio.	
Motion	Motion	Zone setup: support 396((PAL 22×18, NTSC 22×15)) detection zones.	
Detection and	Detection	Various sensitivity levels.	
Alarm		Alarm can activate record or external alarm or screen message prompt.	
	Video Loss	Alarm can activate screen message prompt.	

	External	N/A
	Alarm	
	Manual	N/A
	Alarm	
	Control	
	Alarm Input	N/A
	Alarm	N/A
	Output	
	Alarm Relay	N/A
	USB	2 USB 2.0 port.
Interface	Interface	
	Network	1 RJ45 10M/100M self-adaptable Ethernet port
	connection	
	RS485	N/A
	RS232	N/A
System	Hard Disk	Display HDD current status
Information	Information	
	Data	Data stream statistics for each channel (in wave mode)
	Stream	
	Statistics	
	Log	Backup to 1024 log files.
	statistics	Support various search engines such as time and type.
	Varsian	Display version information: channel amount, system version and release
	Version	date.
	On-line user	Display current on-line user
User		Multi-lever user management; various management modes
Management	User	Integrated management for local user, serial port user and network user.
	Manageme	Configurable user power.
	nt	Support user /group and its corresponding rights modification.
		No limit to the user or group amount.
	Password	Password modification
	Authenticati	Administrator can modify other user's password.
	on	Account lock strategy
	011	Five times login failure in thirty minutes may result in account lock.
Upgrade		Web browser, client-end and update tool.
		Password login protection to guarantee safety
Login, Logout and Shutdown		User-friendly interface when login. Provide the following options: Logout
		/shutdown/ restart.
		Right authentication when shut down to make sure only those proper
		people can turn off DVR
	Power	DC 12V

	Power	
General	Consumptio	\leqslant 15W (With adapter, exclude HDD)
Parameter	n	
	Working	-10°C-+55°C
	Temperatur	
	е	
	Working	10%-90%
	Humidity	
	Air Pressure	86kpa—106kpa
	Dimension	325(W) x245 (D) x45mm(H)
	Weight	1.25KG(Exclude HDD)
	Installation	Desktop installation
	Mode	

1.3.14 HCVR51XXHC-V2 Series

	Parameters	HCVR5104HC-V2	HCVR5108HC-V2	HCVR5116HC-V2	
System	Main Processor	Industrial embedded r	nicro controller		
	OS	Embedded LINUX			
Video	Video Encode	ncode H.264			
Parameters	Standard				
	Encode	720P/D1/HD1/2CIF/C	IF/QCIF		
	Resolution				
	Video Frame	PAL:1~25f/s; NTSC:	1~30f/s		
	Rate				
	Video Bit Rate	1536Kbps-4096Kbps,			
		For 720P: default setu	ip is 2Mbps,max supp	orts 4Mbps	
	Bit Stream Type	Video stream/compos	Video stream/composite stream		
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz,16Bit			
	Rate				
	Audio Bit Rate	64Kbps	1	Γ	
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port	16-channel , BNC	
	Input			port	
	Network Video	N/A			
	Input				
	Video Output	1-channel VGA output,			
			ut (of the same video so	ource),	
		HDMI/ VGA video output at the same time.			
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	N/A			
	Audio Output	N/A			

	Parameters	HCVR5104HC-V2	HCVR5108HC-	V2	HCVR51	16HC-V2
	Bidirectional	N/A				
	Talk Input					
Record	Record Mode	Schedule record/manual record/MD record/Alarm record				
	Record	Max 4-channel	Max 8-ch	annel	Max	16-channel
	Playback	playback	playback		playback	(
	Backup Mode	HDD, burner, USB dev	vice, network bac	ckup		
Alarm	Alarm Input	N/A				
	Alarm Output	N/A				
HDD	HDD Port	1 SATA port, does no	t support eSATA	port		
	One HDD Space	4T				
Communication	ion Network 1 RJ45 port, 100Mbps Ethernet port					
Port	Communication	RS485 port				
	USB	2 USB ports				
Others	Power	DC12V				
	Power	≤30W (With power adapter, no HDD)				
	Consumption					
	Working	-10°C-+55°C				
	Temperature					
	Working	10%~90%				
	Humidity					
	Dimensions	Mini 1U case, 325mm (W) x245mm (D) x45mm (H)				
	Weight	1.25KG (No HDD)				
	Installation	Desk				
	Mode					

1.3.15 HCVR51XXHE Series

	Parameter	HCVR5104HE	HCVR5108HE		
System	Main	High-performance industrial embedded micro controller			
	Processor				
	OS	Embedded LINUX			
	System	Multiplex operations: Multiple-channe	Multiplex operations: Multiple-channel record, multiple-channel playback		
	Resources	and network operation simultaneously			
	Interface	User-friendly graphical user interface			
	Input	USB mouse			
	Devices				
	Input	Arabic number, English character, donation and extension Chinese			
	Method	(optional)			
	Shortcut	Copy/paste operation, USB mouse right-key shortcut menu, double click			
	Function	USB mouse to switch screen.			

Compression	Video					
Standard	Compressio	H.264				
Olandara	n	1.204				
	Audio					
	Compressio	G711A, G711U, PCM				
	n					
-		4-CH composite video input:	8-CH composite video input:			
	Video Input	(NTSC/PAL) BNC (1.0V _{P-P} ,75Ω)	(NTSC/PAL) BNC (1.0V _{P-P} , 75Ω)			
	Video	1-ch VGA output.				
	Output	1-ch HDMI output.				
		Support VGA/HDMI video output at t	he same time.			
Video monitor	Video	Support PAL/NTSC.				
	Standard	Destations Marchae DAL 46/a to OF6/a as				
	Record		r channel and NTSC 1f/s to 30f/s per			
	Speed	channel				
	Video	1/4 windows(Optional)	1/4/8/9 windows			
	Partition					
	Monitor	Support monitor tour functions such as motion detection, and schedule				
	Touring	auto control.				
		PAL/NTSC				
		Real-time monitor: 720P 1280*720				
	Resolution	Playback: All-ch: 720P 1280*720, 960H 960 ×576/960×480, D1				
	(PAL/NTSC)	All-ch: 720P 1280*720, 960H 960 ×576/960×480, D1 704×576/704×480, HD1 352×576/352×480, 2CIF 704×288/704×240,				
		CIF 352×288/ 352×240 , QCIF 176×144/176×120				
		Support dual streams: extra stream resolution CIF 352×288/ 352×240,				
		QCIF 176×144/176×120.				
	Image	6-level image quality (Adjustable)				
	Quality					
	Privacy	Support one privacy mask of user-de	fined size in full screen.			
	mask	Support max 4 zones.				
	Image	Channel information, time information	n and privacy mask zone			
	Information					
	TV Adjust	Adjust TV output zone suitable to ana	amorphic video.			
	Channel	Cover secret channel with black s	screen though system is encoding			
	Lock	normally.				
		Screen-lock function to prevent unauthorized user seeing secret video.				
	Channel	Channel name, recording status, screen lock status, video loss status and				
	Information	motion detection status are shown or	n the bottom left of display screen.			

	Color Configuratio n	Hue, brightness, contrast, saturation and gain setup for each channel.
Audio	Audio Input	1-ch 200-2000mv 10KΩ(RCA)
	Audio Output	1-ch audio output 200-3000mv 5KΩ(RCA)
	Bidirectional Audio	Reuse the audio input/output channel.
	Hard Disk	1 built-in SATA port. Support 1 HDD.
Hard disk	One HDD Space	4T
	Hard Disk Occupation	Audio: PCM 28.8MByte/h Video: 56-900MByte/h
Record and playback	Recording Mode	Manual recording, motion detection recording, schedule recording and alarm recording Priority: Manual recording> alarm recording>motion detection recording>schedule recording.
	Storage Mode	Support channel record quota setup
	Recording Length	1 to 120 minutes single record duration (Default setup is 60 minutes)
	Playback Repeat Way	When hard disk is full, system can overwrite previous video file.
	Record Search	Various search engines such as time, type and channel.
	Playback Mode	Various fast play, slow play speeds, manual frame by frame playback and reverse play mode.
	Various File Switch Ways	Can switch to previous or next file or any file in current play list. Can switch to file on other channel of the same time. (If there is a file) Support file continuous play, when a file is end system auto plays the next file in the current channel
	Playback Way	Support mark playback
	Multi-chann el Playback	There is 1/4-channel playback mode.
	Window Zoom	Switch between self-adaptive screen/full screen when playback
	Partial Enlargemen t	When in one-window full-screen playback mode, you can select any zone to activate partial enlargement function.

Backup		HDD backup		
function	Backup	Support peripheral USB backup de	vice. (Flash disk, portable disk and	
	Mode	etc.)		
		Support network download and save		
		View monitor channel remotely.		
		DVR configuration through client-end and web browser		
		Upgrade via client or browser to reali	ze remote maintenance.	
Network		View alarm information such as motion	on detection and video loss via client.	
Function	Network	Support network PTZ lens control		
	Network	File download backup and playback		
	control	Multiple devices share information	via corresponding software such as	
		professional surveillance software (P	SS)	
		Duplex transparent COM		
		Network alarm input and output		
		Bidirectional audio.		
	Motion	Zone setup: support 396((PAL 22×18	, NTSC 22×15)) detection zones.	
Motion	Detection	Various sensitivity levels.		
Detection and		Alarm can activate record or external	alarm or screen message prompt.	
Alarm	Video Loss	Alarm can activate screen message	prompt.	
	External	Support record activation function of	or activate external alarm or screen	
	Alarm	message in specified period.		
	Manual	Enable or disable alarm input channe	el	
	Alarm	Support analog alarm signal to speci	fic alarm output channel.	
	Control			
	Alarm Input	4-ch alarm input (NO/NC)	8-ch alarm input (NO/NC)	
	Alarm	3-channel relay output.		
	Output			
	Alarm Relay	30V DC 2A, 125VAC 1A (activation	ation alarm)	
	USB	2 USB 2.0 ports.		
Interface	Interface			
	Network	One RJ45 10M/100M self-adaptable	Ethernet port	
	connection			
	RS485	PTZ control port		
	1.0400	Support various PTZ control protocol	S.	
	RS232	N/A		
System	Hard Disk	Display HDD current status		
Information	Information			
	Data	Data stream statistics for each channel (in wave mode)		
	Stream			
	Statistics			
	Log	Backup to 1024 log files.		
	statistics	Support various search engines such	as time and type.	

	Version	Display version information: channel amount, system version and release	
		date.	
	On-line user	Display current on-line user	
User		Multi-lever user management; various management modes	
Management	User	Integrated management for local user, serial port user and network user.	
	Manageme	Configurable user power.	
	nt	Support user /group and its corresponding rights modification.	
		No limit to the user or group amount.	
	Deserverd	Password modification	
	Password	Administrator can modify other user's password.	
	Authenticati	Account lock strategy	
	on	Five times login failure in thirty minutes may result in account lock.	
Upgrade		Web browser, client-end and update tool.	
		Password login protection to guarantee safety	
		User-friendly interface when login. Provide the following options: Logout	
Login, Logout a	and Shutdown	/shutdown/ restart.	
		Right authentication when shut down to make sure only those proper	
		people can turn off DVR	
	Power	DC 12V	
	Power		
General	Consumptio		
Parameter	n	\leq 15W (With adapter, exclude HDD)	
	Working	-10℃−+55℃	
	Temperatur		
	e		
	Working	10%-90%	
	Humidity		
	Air Pressure	86kpa-106kpa	
	Dimension	325(W) x245 (D) x45mm(H)	
	Weight	1.25KG(Exclude HDD)	
	Installation	Desktop installation	
	Mode		
		1	

1.3.16 HCVR51HE-V2 Series

	Parameters	HCVR5104HE-V2	HCVR5108HE-V2	HCVR5116HE-V2
System	Main Processor	Industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard	ndard		
	Encode	720P/D1/HD1/2CIF/C	IF/QCIF	
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC:	1~30f/s	

	Parameters	HCVR5104HE-V2	HCVR5108HE-V2	HCVR5116HE-V2	
	Rate				
	Video Bit Rate	1536Kbps-4096Kbps,			
		For 720P: default setup is 2Mbps, max supports 4Mbps		orts 4Mbps	
	Bit Stream Type	Video stream/composite stream			
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz,16Bit			
	Rate				
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port	16-channel, BNC	
	Input			port	
	Network Video	N/A			
	Input				
	Video Output	1-channel VGA output	,		
		1-channel HDMI output (of the same video source),			
		HDMI/ VGA video output at the same time.			
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	4-channel RCA			
	Audio Output	1-channel RCA			
	Bidirectional	Support (reuse the audio port)			
	Talk Input				
Record	Record Mode	Schedule record/manu	ual record/MD record/A	larm record	
	Record	Max 4-channel	Max 8-channel	Max 16-channel	
	Playback	playback	playback	playback	
	Backup Mode	HDD, burner, USB dev	vice, network backup		
Alarm	Alarm Input	4-channel alarm	8-channel alarm	16-channel alarm	
		input	input	input	
	Alarm Output	3-channel alarm outpu	ıt		
HDD	HDD Port	1 SATA port, does no	t support eSATA port		
	One HDD Space	4T			
Communication	Network	1 RJ45 port, 100Mbps Ethernet port			
Port	Communication	RS485 port			
	USB	2 USB ports			
Others	Power DC12V				
	Power	≤30W (With power ac	dapter, no HDD)		
	Consumption				
	Working	-10℃−+55℃			
	Temperature				
	Working	10%~90%			

Pa	arameters	HCVR5104HE-V2	HCVR5108HE-V2	HCVR5116HE-V2
Hu	umidity			
Dimensions		Mini 1U case, 325mm (W) x245mm (D) x45mm (H)		
Weight		1.25KG (No HDD)		
Ins	stallation	Desk		
Мо	ode			

1.3.17 HCVR71XXH-V2 Series

	Parameters	HCVR7104H-V2	HCVR7108H-V2	
System	Main Processor	Industrial embedded micro contro	ller	
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard			
	Encode	1080P /720P/D1/HD1/2CIF/CIF/C	QCIF	
	Resolution			
	Video Frame Rate	PAL:1~25f/s; NTSC: 1~30f/s		
	Video Bit Rate	2048Kbps-6144Kbps,		
		For 1080P: default setup is 4Mbp	s, max supports 6Mbps	
	Bit Stream Type	Video stream/composite stream		
	Dual-Stream	Support		
Audio	Encode	G.711A/G.711U/PCM		
Parameters	Standard			
	Audio Sampling	8KHz, 16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video Input	4-channel, BNC port	8-channel, BNC port	
	Network Video Input	N/A		
	Video Output	1-channel VGA output,		
		1-channel HDMI output (of the same video source),		
		HDMI/ VGA video output at the same time.		
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	1-channel RCA		
	Audio Output	1-channel RCA		
	Bidirectional	Support (reuse the audio port)		
	Talk Input			
Record	Record Mode	Schedule record/manual record/M	1D record/Alarm record	
	Record	Max 4-channel playback	Max 8-channel playback	
	Playback			

	Parameters	HCVR7104H-V2	HCVR7108H-V2
	Backup Mode	HDD, burner, USB device, network backup	
Alarm	Alarm Input	N/A	
	Alarm Output	N/A	
HDD	HDD Port	1 SATA port, does not support es	SATA port
	One HDD Space	4T	
Communication	Network	1 RJ45 port, 100Mbps Ethernet p	ort
Port	Communication	N/A	
	USB	2 USB ports	
Others	Power DC12V		
	Power	≤30W (With power adapter, no H	DD)
	Consumption		
	Working	-10°C−+55°C	
	Temperature		
	Working	10%~90%	
	Humidity		
	Dimensions	Mini 1U case, 325mm (W) ×24	5mm(D)×45mm(H)
	Weight	1.25KG (No HDD)	
	Installation Mode	Desk	

1.3.18 HCVR71XXHC-V2 Series

	Parameters	HCVR7104HC-V2	HCVR7108HC-V2	
System	Main Processor	Industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard			
	Encode	1080P/720P/D1/HD1/2CIF/CIF/Q	CIF	
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s		
	Rate			
	Video Bit Rate	2048Kbps-6144Kbps,		
		For 1080P: default setup is 4Mbps, max supports 6Mbps		
	Bit Stream Type	Video stream/composite stream		
	Dual-Stream	Support		
Audio	Encode	G.711A/G.711U/PCM		
Parameters	Standard			
	Audio Sampling	8KHz,16Bit		
	Rate			
Audio Bit Rate 64Kbps		64Kbps		
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port	
	Input			

	Parameters	HCVR7104HC-V2	HCVR7108HC-V2
	Network Video	N/A	
	Input		
	Video Output	1-channel VGA output,	
		1-channel HDMI output (of the sa	me video source),
		HDMI/ VGA video output at the sa	ame time.
	Loop Output	N/A	
	Matrix Output	N/A	
Audio Port	Audio Input	N/A	
	Audio Output	N/A	
	Bidirectional	N/A	
	Talk Input		
Record	Record Mode	Schedule record/manual record/M	ID record/Alarm record
	Record	Max 4-channel playback	Max 8-channel playback
	Playback		
	Backup Mode	HDD, burner, USB device, networ	rk backup
Alarm	Alarm Input	N/A	
	Alarm Output	N/A	
HDD	HDD Port	1 SATA port, does not support es	SATA port
	One HDD Space	4T	
Communication	Network	1 RJ45 port, 100Mbps Ethernet p	ort
Port	Communication	RS485 port	
	USB	2 USB ports	
Others	Power	DC12V	
	Power	≤30W (With power adapter, no H	IDD)
	Consumption		
	Working	-10°C−+55°C	
	Temperature		
	Working	10%~90%	
	Humidity		
	Dimensions	Mini 1U case, 325mm (W) x245mm (D) x45mm (H)	
	Weight	1.25KG (No HDD)	
	Installation	Desk	
	Mode		

1.3.19 HCVR71XHE-V2 Series

	Parameters	HCVR7104HE-V2	HCVR7108HE-V2
System	Main Processor	Industrial embedded micro controller	
	OS	Embedded LINUX	
Video	Video Encode	H.264	
Parameters	Standard		
	Encode	1080P/720P/D1/HD1/2CIF/CIF/Q	CIF

	Parameters	HCVR7104HE-V2	HCVR7108HE-V2	
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s		
	Rate			
	Video Bit Rate	2048Kbps-6144Kbps,		
		For 1080P: default setup is 4Mbp	s,max supports 6Mbps	
	Bit Stream Type	Video stream/composite stream		
	Dual-Stream	Support		
Audio	Encode	G.711A/G.711U/PCM		
Parameters	Standard			
	Audio Sampling	8KHz, 16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port	
	Input			
	Network Video	N/A		
	Input			
	Video Output	1-channel VGA output,		
		1-channel HDMI output (of the same video source),		
		HDMI/ VGA video output at the same time.		
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	4-channel RCA		
	Audio Output	1-channel RCA		
	Bidirectional	Support (reuse the audio port)		
	Talk Input			
Record	Record Mode	Schedule record/manual record/N		
	Record	Max 4-channel playback	Max 8-channel playback	
	Playback			
	Backup Mode	HDD, burner, USB device, netwo		
Alarm	Alarm Input	4-channel alarm input	16-channel alarm input	
	Alarm Output	3-channel alarm output		
HDD	HDD Port	1 SATA port, does not support e	SATA port	
	One HDD Space	4T		
Communication	Network	1 RJ45 port, 100Mbps Ethernet p	ort	
Port	Communication	RS485 port		
	USB	2 USB ports		
Others	Power	DC12V		
	Power	≤30W (With power adapter, no HDD)		
	Consumption			
	Working	-10°C -+ 55°C		
	Temperature			

Parameters	HCVR7104HE-V2	HCVR7108HE-V2
Working Humidity	10%~90%	
Dimensions	Mini 1U case, 325mm (W) x245mm (D) x45mm (H)	
Weight	1.25KG (No HDD)	
Installation	Desk	
Mode		

1.3.20 HCVR41XXHE-S2 Series

	Parameters	HCVR4104HE-S2	HCVR4108HE-S2	HCVR4116HE-S2	
System	Main Processor	Industrial embedded mic	ro controller		
,	OS	Embedded LINUX			
Video	Video Encode	H.264			
Parameters	Standard				
	Encode	720P/960H/D1/	720P(1~15fps)/960H/		
	Resolution	HD1/2CIF/CIF/QCIF	D1/HD1/2CIF/CIF/QCI	F	
	Video Frame	HDCVI : 1 \sim 25f/s	HDCVI : $1 \sim 15 \text{f/s}$	(The 1 st channel	
	Rate	(PAL); 1~30f/s	supports 25/30f)		
		(NTSC)	CVBS: 1~25f/s (PAL)); 1~30f/s (NTSC)	
		CVBS: 1~25f/s (PAL);			
		1~30f/s (NTSC)			
	Video Bit Rate	2048Kbps-4096Kbps,	1024Kbps-4096Kbps,		
		For 720P: default setup	For 720P: default set	up is 1Mbps, max	
		is 2Mbps , max	supports 4Mbps.		
		supports 4Mbps.	For 960H: default set	up is 1Mbps, max	
		For 960H: default	supports 3Mbps.		
		setup is 1Mbps, max			
		supports 3Mbps.	atroom		
	Bit Stream Type Dual-Stream	Video stream/composite	stream		
Audia		Support			
Audio	Encode Standard	G.711A/G.711U/PCM			
Parameters					
	Audio Sampling Rate	8KHz, 16Bit			
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port	16-channel,	
	Input		o-channel, bive port	BNC port	
	Network Video	Max 2-channel IPC conr	l ections (8M)	Dito por	
	Input				
	Video Output	1-channel VGA output,			
		1-channel HDMI output (of the same video sour	ce),	
		HDMI/ VGA video output	at the same time.		
	Loop Output	N/A			

	Parameters	HCVR4104HE-S2	HCVR4108HE-S2	HCVR4116HE-S2	
	Matrix Output	N/A			
Audio Port	Audio Input	4-channel RCA port.			
	Audio Output	1-channel RCA port.			
	Bidirectional	Reuse the audio input/ou	itput port.		
	Talk Input				
Record	Record Mode	Schedule record/manual	record/MD record/Ala	arm record	
	Record	Max 4-channel playback	Max 8-channe	el Max 16-channel	
	Playback		playback	playback	
	Backup Mode	HDD, burner, USB device	e, network backup		
Alarm	Alarm Input	4-channel input 8-channel input 16-channel input			
	Alarm Output	3-channel output			
HDD	HDD Port	1 SATA port, does not s	upport eSATA port		
	One HDD Space	4T			
Communication	Network	1 RJ45 port, 100Mbps Ethernet port			
Port	Communication	RS485 port			
	USB	2 USB ports			
Others	Power	DC12V			
Power ≤15W (With power ada			I5W(With power adapter, no HDD)		
	Consumption				
	Working	-10℃−+55℃			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimensions	Mini 1U case, 325mm (W) x245mm (D) x	45mm (H)	
	Weight	1.25KG(No HDD)			
	Installation	Desk			
	Mode				
1.3.21 HCVR51	XXH-S2 Series				
	Parameters		CVR5108H-S2	HCVR5116H-S2	
System	Main Processor	Industrial embedded mic	ro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264			
Parameters	Standard				
	Encode	1080P(1~15fps)/720P/96	0H/D1/HD1/2CIF/CIF	/QCIF	
	Resolution				
	Video Frame	HDCVI: 1~25f/s (PAL)			
	Rate	CVBS: 1~25f/s (PAL);	1~30f/s (NTSC)		
	Video Bit Rate	2048Kbps-4096Kbps,			
		For 1080P/720P: default	• •		
		For 960H: default setup i		orts 3Mbps.	
	Bit Stream Type	Video stream/composite	stream		

	Parameters	HCVR5104H-S2	HCVR5108H-S2	HCVR5116H-S2		
	Dual-Stream	Support				
Audio	Encode	G.711A/G.711U/PCM				
Parameters	Standard					
	Audio Sampling	8KHz, 16Bit				
	Rate					
	Audio Bit Rate	64Kbps				
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC por	t 16-channel,		
	Input		•	BNC port		
	Network Video	Max 2-channel IPC co	nnections (8M)	•		
	Input					
	Video Output	1-channel VGA output	,			
		1-channel HDMI outpu	t (of the same video so	ource),		
		HDMI/ VGA video output at the same time.				
	Loop Output	N/A				
	Matrix Output	N/A				
Audio Port	Audio Input	1-channel RCA port.				
	Audio Output	1-channel RCA port.				
	Bidirectional	Reuse the audio input/output port.				
	Talk Input					
Record	Record Mode	Schedule record/manual record/MD record/Alarm record				
	Record	Max 4-channel	Max 8-channe	el Max 16-channel		
	Playback	playback	playback	playback		
	Backup Mode	HDD, burner, USB dev	vice, network backup			
Alarm	Alarm Input	N/A				
	Alarm Output	N/A				
HDD	HDD Port	1 SATA port, does no	t support eSATA port			
	One HDD Space	4T				
Communication	Network	1 RJ45 port, 100Mbps	Ethernet port			
Port	Communication	RS485 port				
	USB	2 USB ports				
Others	Power	DC12V				
	Power	≤15W(With power ac	apter, no HDD)			
	Consumption					
	Working	-10℃−+55℃				
	Temperature					
	Working	10%~90%				
	Humidity					
	Dimensions		(W) x245mm (D) >	« 45mm (H)		
	Weight	1.25KG(No HDD)				
	Installation	Desk				
	Mode					

1.3.22 HCVR51XXHE-S2 Series

	Parameters	HCVR5104HE-S2	HCVR5108HE-S2	HCVR5116HE-S2	
System	Main Processor	Industrial embedded m	icro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264			
Parameters	Standard				
	Encode	1080P(1~15fps)/720P/960H/D1/HD1/2CIF/CIF/QCIF			
	Resolution				
	Video Frame	HDCVI: 1~25f/s (PAL); 1~30f/s (NTSC)			
	Rate	CVBS: 1~25f/s (PAL)	; 1~30f/s (NTSC)		
	Video Bit Rate	2048Kbps-4096Kbps,			
			Ilt setup is 2Mbps, max	••	
			o is 1Mbps, max suppo	rts 3Mbps.	
	Bit Stream Type	Video stream/composit	e stream		
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz, 16Bit			
	Rate				
	Audio Bit Rate	64Kbps	Γ	1	
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port	16-channel,	
	Input			BNC port	
	Network Video	Max 2-channel IPC connections (8M)			
	Input				
	Video Output	1-channel VGA output,			
		1-channel HDMI output (of the same video source),			
		HDMI/ VGA video output at the same time.			
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	4-channel RCA port.			
	Audio Output	1-channel RCA port.			
	Bidirectional	Reuse the audio input/	output port.		
<u> </u>	Talk Input				
Record	Record Mode		al record/MD record/Ala		
	Record	Max 4-channel	Max 8-channel		
	Playback	playback	playback	playback	
A.L	Backup Mode	HDD, burner, USB dev			
Alarm	Alarm Input	4-channel input	8-channel input	16-channel input	
	Alarm Output	3-channel output			
HDD	HDD Port	1 SATA port, does not support eSATA port			
<u> </u>	One HDD Space	4T			
Communication	Network	1 RJ45 port, 100Mbps Ethernet port			

	Demonstern			- 00	
_	Parameters	HCVR5104HE-S2	HCVR5108HE	:-52	HCVR5116HE-S2
Port	Communication	RS485 port			
	USB	2 USB ports			
Others	Power	DC12V			
	Power	≤15W(With power ac	lapter, no HDD))	
	Consumption				
	Working	-10℃−+55℃			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimensions	Mini 1U case, 325mm	n (W) x245mn	n (D) x	45mm (H)
	Weight	1.25KG(No HDD)			
	Installation	Desk			
	Mode				
1.3.23 HCVR71	0XH-S2 Series				
	Parameters	HCVR7104H-S2	F	HCVR71	08H-S2
System	Main Processor	Industrial embedded n	nicro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264			
Parameters	Standard				
	Encode	1080P/720P/960H/D1/	/HD1/2CIF/CIF/	QCIF	
	Resolution				
	Video Frame	HDCVI: 1~25f/s (PA	AL); 1~30f/s (NTSC)	
	Rate	CVBS: 1~25f/s (PAL); 1~30f/s (N	TSC)	
	Video Bit Rate	2048Kbps-6144Kbps,			
		For 1080P: default setup is 4Mbps, max supports 6Mbps.			
		For 720P: default setu	p is 2Mbps, ma	ax suppo	orts 4Mbps.
	Bit Stream Type	Video stream/composi	te stream		
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				

Audio	Encode	G.711A/G.711U/PCM		
Parameters	Standard			
	Audio Sampling	8KHz,16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video Input	4-channel, BNC port	8-channel, BNC port	
	Network Video Input	Max 2-channel IPC connections (16M)		
	Video Output	1-channel VGA output,		
		1-channel HDMI output (of the same video source),		
		HDMI/ VGA video output at the same time.		
	Loop Output	N/A		

	Parameters	HCVR7104H-S2	HCVR7108H-S2	
	Matrix Output	N/A		
Audio Port	Audio Input	1-channel RCA port.		
	Audio Output	1-channel RCA port.		
	Bidirectional	Reuse the audio input/output port.		
	Talk Input			
Record	Record Mode	Schedule record/manual record/MD record/Alarm record		
	Record	Max 4-channel playback	Max 8-channel playback	
	Playback			
	Backup Mode	HDD, burner, USB device, network	backup	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does not support eSA	ATA port	
	One HDD Space	4T		
Communication	Network	1 RJ45 port, 100Mbps Ethernet por	t	
Port	Communication	RS485 port		
	USB	2 USB ports		
Others	Power	DC12V		
	Power ≤15W (With power adapter, no HDD)		D)	
	Consumption			
	Working	-10℃-+55℃		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimensions	Mini 1U case, 325mm (W) x245r	mm(D)×45mm(H)	
	Weight	1.25KG(No HDD)		
	Installation	Desk		
	Mode			
1.3.24 HCVR71	0XHE-S2 Series	i		
	Parameters	HCVR7104HE-S2	HCVR7108HE-S2	
System	Main Processor	Industrial embedded micro controlle	er	
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard			
	Encode	1080P/720P/960H/D1/HD1/2CIF/C	IF/QCIF	
	Resolution			
	Video Frame	HDCVI: 1~25f/s (PAL); 1~30f/s	(NTSC)	
	Rate	CVBS: 1~25f/s (PAL); 1~30f/s (NTSC)	
	Video Bit Rate	2048Kbps-6144Kbps,		
		For 1080P: default setup is 4Mbps,		
		For 720P: default setup is 2Mbps,	max supports 4Mbps.	
	Bit Stream Type	Video stream/composite stream		

	Parameters	HCVR7104HE-S2	HCVR7108HE-S2		
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz, 16Bit			
	Rate				
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	4-channel, BNC port	8-channel, BNC port		
	Input				
	Network Video	Max 2-channel IPC connection (16	M)		
	Input				
	Video Output	1-channel VGA output,			
		1-channel HDMI output (of the same video source),			
		HDMI/ VGA video output at the same time.			
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	4-channel RCA port.			
	Audio Output	1-channel RCA port.			
	Bidirectional	Reuse the audio input/output port.			
	Talk Input				
Record	Record Mode	Schedule record/manual record/MD record/Alarm record			
	Record	Max 4-channel playback	Max 8-channel playback		
	Playback				
	Backup Mode	HDD, burner, USB device, network backup			
Alarm	Alarm Input	8-channel input	16-channel input		
	Alarm Output	3-channel output			
HDD	HDD Port	1 SATA port, does not support eSA	ATA port		
	One HDD Space	4T			
Communication	Network	1 RJ45 port, 100Mbps Ethernet por	t		
Port	Communication	RS485 port			
	USB	2 USB ports			
Others	Power	DC12V			
	Power	≤15W(With power adapter, no HD	D)		
	Consumption				
	Working	-10℃-+55℃			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimensions	Mini 1U case, 325mm (W) ×245r	mm (D) x45mm (H)		
	Weight	1.25KG(No HDD)			
	Installation	Desk			
	Mode				

1.3.25 HCVR41XXHE-S3 Series

	Parameters	HCVR4104HE-S3	HCVR4108HE-S3	HCVR4116HE-S3
System	Main Processor	Industrial embedded m	nicro controller	
	OS	Embedded LINUX		
Video Parameters	Video Encode Standard	H.264		
	Encode Resolution Video Frame Rate	1080N/720P/960H/ D1/HD1/2CIF/CIF PAL:1~25f/s; NTSC:	1080N@12f/720P@15f, /CIF 1~30f/s	/960H/D1/HD1/2CIF
	Video Bit Rate Bit Stream Type	-	p is 1.5Mbps,max supp up is 1.5Mbps,max sup te stream	-
	Dual-Stream	Support		
Audio Parameters	Encode Standard	G.711A/G.711U/PCM		
	Audio Sampling Rate	8KHz, 16Bit		
	Audio Bit Rate	64Kbps		-
Video Port	Analog Video Input	4-ch BNC port (HDCVI HD video/general standard definition video self-adaptive)	8-ch BNC port(HDCVI HD video/general standard definition video self-adaptive)	port(HDCVI HD
	Network Video Input	 Max add 1 IP channel Connection. Analog /digital channel switch. Max 5 IP channel connections Connection bandwidth:4Mbp s-20Mbps 	 Max add 2 IP channel connections Analog /digital channel switch. Max 10 IP channel connections Connection bandwidth:8Mbp s-40Mbps 	channel connections • Analog /digital
1-channel HDMI ou		1-channel VGA output, 1-channel HDMI outpu HDMI/ VGA video outp	t (of the same video sou	rce),

	Parameters	HCVR4104HE-S3	HCVR4108HE-S3	HCVR4116HE-S3	
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	4-channel RCA port.	8-channel RCA port.	16-channel RCA	
	, add mpat			port.	
	Coaxial Audio	4-ch	8-ch-	16-ch	
	Input				
	Audio Output	1-channel RCA port.			
	Bidirectional	Support (Reuse the a	udio port of the 1st cha	nnel)	
	Talk Input				
Record	Record Mode	Schedule record/manu	al record/MD record/Al	arm record	
	Playback Mode	Instant playback, normal playback, event playback, mark playback,			
		smart playback	-		
	Record	Max 4-channel	Max 8-channe	el Max 16-channel	
	Playback	playback	playback	playback	
	Backup Mode	HDD, burner, USB device, network backup			
Alarm	Alarm Input	8-channel input	8-channel input	16-channel input	
	Alarm Output	3-channel output			
HDD	HDD Port	1 SATA port, does no	t support eSATA port		
	One HDD Space	6T			
Communication	Network	1 RJ45 port, 100Mbps	Ethernet port		
Port	Communication	RS485 port			
	USB	2 USB2.0 ports(One a	t the front panel and one	e at the rear panel)	
Others	Power	DC12V	•	-	
	Power	≪7W	≪8W	≤10W	
	Consumption				
	Working	-10°C-+55°C			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimensions	,	n (W) ×245mm (D) ×		
	Weight	≤1.1KG	≤1.25KG	≤1.45KG	
	Installation	Desk			
	Mode				

1.3.26 HCVR51XXH-S3 Series

	Parameters	HCVR5104HS3	HCVR5108H-S3	HCVR5116H-S3
System	Main Processor	Industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard			
	Encode	1080P (non-realtime)	/1080N/720P /720P/960)H/D1/HD1/2CIF/CIF

	Parameters	HCVR5104HS3	HCVR5108H-S3 H	ICVR5116H-S3
	Resolution			
	Video Frame Rate	PAL:1~25f/s; NTSC:	1~30f/s	
	Video Bit Rate	32Kbps-6144Kbps, For 720P: default setup	o is 2Mbps, max support	ts 4Mbps.
		For 1080P: default setu	up is 4Mbps, max suppo	orts 6Mbps.
	Bit Stream Type	Video stream/composit	e stream	
	Dual-Stream	Support		
Audio Parameters	Encode Standard	G.711A/G.711U/PCM		
	Audio Sampling Rate	8KHz,16Bit		
	Audio Bit Rate	64Kbps		
Video Port	Analog Video Input	4-ch BNC port (HDCVI HD video/general standard definition video self-adaptive)	8-ch BNC port(HDCVI HD video/general standard definition video self-adaptive)	16-chBNCport(HDCVIHDvideo/generalstandard definitionvideoself-adaptive)
	Network Video Input	 Max add 2 IP channel Connection. Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:8Mbp s-24Mbps 	 Max add 4 IP channel connections Analog /digital channel switch. Max 12IP channel connections Connection bandwidth:16Mb ps-48Mbps 	Max add 8 IP channel connections Analog /digital channel switch. Max 24 IP channel connections Connection bandwidth:32 Mbps-96Mbp s
	Video Output	HDMI/ VGA video outp	t (of the same video sour	ce),
	Loop Output	N/A		
Audia Dart	Matrix Output	N/A		
Audio Port	Audio Input Coaxial Audio Input	1-channel RCA port. 4-ch	8-ch-	16-ch
	Audio Output	1-channel RCA port.	1	1
	Bidirectional		udio port of the 1st chanr	

	Parameters	HCVR5104HS3	HCVR5108H-S3	HCVR5116H-S3	
	Talk Input				
Record	Record Mode	Schedule record/manu	al record/MD record/Ala	arm record	
	Playback Mode	Instant playback, normal playback, event playback, mark playback,			
		smart playback			
	Record	Max 4-channel	Max 8-channe	l Max 16-channel	
	Playback	playback	playback	playback	
	Backup Mode	HDD, burner, USB dev	rice, network backup		
Alarm	Alarm Input	8-channel input	8-channel input	16-channel input	
	Alarm Output	3-channel output			
HDD	HDD Port	1 SATA port, does not support eSATA port			
	One HDD Space	6T			
Communication	Network	1 RJ45 port, 100Mbps Ethernet port			
Port	Communication	RS485 port			
	USB	2 USB2.0 ports(One	1 USB2.0 port at the	e 1 USB2.0 port at	
		at the front panel and	front panel and one	e the front panel	
		one at the rear panel)	USB3.0 port at the	e and one USB3.0	
			rear panel	port at the rear panel	
Others	Power	DC12V		1.	
	Power			<	
	Consumption	≪8W	≤10W	≪15W	
	Working	-10°C-+55°C			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimensions	Mini 1U case, 325mm	(W) ×245mm (D) ×	45mm (H)	
	Weight	≤1.1KG	≤1.25KG	≤1.45KG	
	Installation	Desk			
	Mode				

1.3.27 HCVR51XXHE-S3 Series

	Parameters	HCVR5104HE-S3	HCVR5108HE-S3	HCVR5116HE-S3	
System	Main Processor	Industrial embedded r	Industrial embedded micro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264			
Parameters	Standard				
	Encode	1080P@12f/720P@1	5f/960H/D1/HD1/2CIF/0	CIF	
	Resolution				
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32Kbps-6144Kbps,			

	Parameters	HCVR5104HE-S3	HCVR5108HE-S3	HCVR5116HE-S3	
		For 720P: default setup	is 2Mbps, max suppor	rts 4Mbps.	
		For 1080P: default setu	ip is 2Mbps, max suppo	orts 6Mbps.	
	Bit Stream Type	Video stream/composit	e stream		
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz,16Bit			
	Rate				
	Audio Bit Rate	64Kbps		1	
Video Port	Analog Video Input	4-ch BNC port (HDCVI HD video/general standard definition video self-adaptive)	8-ch BNC port(HDCVI HD video/general standard definition video self-adaptive)	port(HDCVI HD	
	Network Video Input	 Max add 2 IP channel Connection. Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:8Mbp s-24Mbps 	 Max add 4 IP channel connections Analog /digital channel switch. Max 12IP channel connections Connection bandwidth:16Mb ps-48Mbps 	 Max add 8 IP channel connections Analog /digital channel switch. Max 24 IP channel connections Connection bandwidth:32 Mbps-96Mbp s 	
	Video Output	1-channel VGA output, 1-channel HDMI output HDMI/ VGA video outpu	t (of the same video sou ut at the same time.	rce),	
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	4-channel RCA port.	8-channel RCA port.	16-channel RCA port.	
	Coaxial Audio Input	4-ch	8-ch-	16-ch	
	Audio Output	1-channel RCA port.		-	
	Bidirectional	Support (Reuse the audio port of the 1st channel)			
	Talk Input				
Record	Talk Input Record Mode	Schedule record/manua	al record/MD record/Ala	rm record	

	Parameters	HCVR5104HE-S3	HCVR5108HE-S3	HCVR5116HE-S3
		smart playback		
	Record	Max 4-channel	Max 8-channe	I Max 16-channel
	Playback	playback	playback	playback
	Backup Mode	HDD, burner, USB dev	ice, network backup	
Alarm	Alarm Input	8-channel input	8-channel input	16-channel input
	Alarm Output	3-channel output		
HDD	HDD Port	1 SATA port, does not	support eSATA port	
	One HDD Space	6T		
Communication	Network	1 RJ45 port, 100Mbps Ethernet port		
Port	Communication	RS485 port		
	USB	2 USB2.0 ports(One at	the front panel and one	e at the rear panel)
Others	Power	DC12V		
	Power Consumption	≤7W	≪8W	≤10W
	Working Temperature	-10°C-+55°C		
	Working Humidity	10%~90%		
	Dimensions	Mini 1U case, 325mm	(W) x245mm (D) x	45mm(H)
	Weight	≤1.1KG	≤1.25KG	≤1.45KG
	Installation Mode	Desk		

1.3.28 HCVR71XXHE-S3 Series

	Parameters	HCVR7104HE-S3	HCVR7108HE-S3	HCVR7116HE-S3	
System	Main Processor	Industrial embedded micro controller			
	OS	Embedded LINUX			
Video	Video Encode	H.264	H.264		
Parameters	Standard				
	Encode	1080P/720P/960H/D1/HD1/2CIF/CIF			
	Resolution				
	Video Frame	ame PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32Kbps-6144Kbps,			
		For 720P: default setu	ıp is 2Mbps,max supp	orts 4Mbps.	
		For 1080P: default set	tup is 4Mbps, max sup	ports 6Mbps.	
	Bit Stream Type	Video stream/composite stream			
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz, 16Bit			

	Parameters	HCVR7104HE-S3	HCVR7108HE-S3	HCVR7116HE-S3
	Rate	L		
	Audio Bit Rate	64Kbps		
Video Port	Analog Video Input	4-ch BNC port (HDCVI HD video/general standard definition video self-adaptive)	8-ch BNC port(HDCVI HD video/general standard definition video self-adaptive)	16-ch BNC port(HDCVI HD video/general standard definition video self-adaptive)
	Network Video Input	 Max add 2 IP channel Connection. Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:8Mbp s-24Mbps 	 Max add 4 IP channel connections Analog /digital channel switch. Max 12IP channel connections Connection bandwidth:16Mb ps-48Mbps 	 Max add 8 IP channel connections Analog /digital channel switch. Max 24 IP channel connections Connection bandwidth:32 Mbps-96Mbp s
	Video Output	1-channel VGA output, 1-channel HDMI outpu HDMI/ VGA video outp	t (of the same video sour	ce),
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	4-channel RCA port.	8-channel RCA port.	16-channel RCA port.
	Coaxial Audio Input	4-ch	8-ch-	16-ch
	Audio Output	1-channel RCA port.		
	Bidirectional Talk Input	Support (Reuse the a	udio port of the 1st chanr	nel)
Record	Record Mode	Schedule record/manu	al record/MD record/Alar	m record
	Playback Mode	Instant playback, norm smart playback	al playback, event playb	ack, mark playback,
	Record	Max 4-channel	Max 8-channel	Max 16-channel
	Playback	playback	playback	playback
	Backup Mode	HDD, burner, USB dev	ice, network backup	
Alarm	Alarm Input	8-channel input	8-channel input	16-channel input
	Alarm Output	3-channel output		
HDD	HDD Port	1 SATA port, does not support eSATA port		

	Parameters	HCVR7104HE-S3	HCVR7108HE-S3	HCVR7116HE-S3	
	One HDD Space	6T			
Communication	Network	1 RJ45 port, 100Mbps	Ethernet port		
Port	Communication	RS485 port			
	USB	2 USB2.0 ports(One	1 USB2.0 port at the	e 1 USB2.0 port at	
	at the front panel and front panel and one the				
		one at the rear panel)	USB3.0 port at the	e and one USB3.0	
			rear panel	port at the rear	
		panel			
Others	Power	DC12V			
	Power	≪8W	≤10W	≤15W	
	Consumption	~000	≪10₩	≤15₩	
	Working	-10°C-+55°C			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimensions	Mini 1U case, 325mm	(W) x245mm (D) x	45mm(H)	
	Weight	≤1.1KG	≤1.25KG	≤1.45KG	
	Installation	Desk			
	Mode				

1.3.29 HCVR71XXH-S3 Series

	Parameters	HCVR7104HS3	HCVR7108H-S3	HCVR7116H-S	3
System	Main Processor	Industrial embedded r	nicro controller		
	OS	Embedded LINUX			
Video Parameters	Video Encode Standard	H.264			
	Encode Resolution	1080P/720P/960H/D1	/HD1/2CIF/CIF		
	Video Frame PAL:1~25f/s; NTSC: 1~30f/s Rate				
	Video Bit Rate	32Kbps-6144Kbps, For 720P: default setup is 2Mbps, max supports 4Mbps. For 1080P: default setup is 4Mbps, max supports 6Mbps.			
	Bit Stream Type	Video stream/compos	ite stream		
	Dual-Stream	Support			
Audio Parameters	Encode Standard	G.711A/G.711U/PCM			
	Audio Sampling Rate	npling 8KHz, 16Bit			
	Audio Bit Rate	64Kbps			
Video Port	Analog Video Input	4-ch BNC por (HDCVI HD			BNC HD

	Parameters	HCVR7104HS3	HCVR7108H-S3	HCVR7116H-S3
	Network Video Input	video/general standard definition video self-adaptive) • Max add 2 IP channel Connection.	 standard definition video self-adaptive) Max add 4 IP channel connections 	video/general standard definition video self-adaptive) Max add 8 IP channel connections
		 Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:8Mbp s-24Mbps 	 Analog /digital channel switch. Max 12IP channel connections Connection bandwidth:16Mb ps-48Mbps 	 Analog /digital channel switch. Max 24 IP channel connections Connection bandwidth:32 Mbps-96Mbp s
	Video Output	1-channel VGA output, 1-channel HDMI output (of the same video source), HDMI/ VGA video output at the same time.		
	Loop Output	N/A		
	Matrix Output	N/A	1	
Audio Port	Audio Input	4-channel RCA port.	8-channel RCA port.	16-channel RCA port.
	Coaxial Audio Input	4-ch	8-ch-	16-ch
	Audio Output	1-channel RCA port.		
	Bidirectional Talk Input	Support (Reuse the a	udio port of the 1st chanr	nel)
Record	Record Mode	Schedule record/manu	al record/MD record/Alar	m record
	Playback Mode	Instant playback, norm smart playback	al playback, event playb	ack, mark playback,
	Record	Max 4-channel	Max 8-channel	Max 16-channel
	Playback	playback	playback	playback
	Backup Mode	HDD, burner, USB dev	ice, network backup	•
Alarm	Alarm Input	8-channel input	8-channel input	16-channel input
	Alarm Output	3-channel output		
HDD	HDD Port	1 SATA port, does not	support eSATA port	
	One HDD Space	6T		
Communication	Network	1 RJ45 port, 100Mbps	Ethernet port	
Port	Communication	RS485 port		
	USB	2 USB2.0 ports(One	1 USB2.0 port at the	1 USB2.0 port at

	Parameters	HCVR7104HS3	HCVR7108H-S3	HCVR7116H-S3	
		at the front panel and	front panel and one	the front panel	
		one at the rear panel)	USB3.0 port at the	e and one USB3.0	
			rear panel	port at the rear	
				panel	
Others	Power	DC12V			
	Power	≪8W	≤10W	≤15W	
	Consumption				
	Working	-10°C-+55°C			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimensions	Mini 1U case, 325mm	(W) x245mm (D) x4	45mm(H)	
	Weight	≤1.1KG	≤1.25KG	≤1.45KG	
	Installation	Desk			
	Mode				

1.3.30 HCVR41XXHS-S2 Series

	Parameters	HCVR4104HS-S2	HCVR4108HS-S2	HCVR4116HS-S2
System	Main Processor	Industrial embedded m	nicro controller	
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard			
	Encode	720P/960H/D1/HD1/	720P(1-15f/s)/960	H/D1/HD1/
	Resolution	2CIF/CIF/QCIF	2CIF/CIF/QCIF	
	Video Frame	HDCVI : 1 \sim 25f/	s HDCVI : $1 \sim 15$	if/s (The 1 st channel
	Rate	(PAL); 1~30f/	s supports 25/30fps/	()
		(NTSC)	CVBS: 1~25f/s (F	PAL); 1~30f/s (NTSC)
		CVBS: 1~25f/s (PAL)	;	
		1~30f/s (NTSC)		
	Video Bit Rate	2048Kbps-4096Kbps,	1024Kbps-4096Kb	ops,
		For 720P: default setu	For 720P: default	setup is 1Mbps, max
		is 2Mbps , ma	x supports 4Mbps.	
		supports 4Mbps.	For 960H: default	setup is 1Mbps, max
		For 960H: defau	It supports 3Mbps.	
		setup is 1Mbps, ma	x	
		supports 3Mbps.		
	Bit Stream Type	Video stream/composi	te stream	
	Dual-Stream	Support		
Audio	Encode	G.711A/G.711U/PCM		
Parameters	Standard			
	Audio Sampling	8KHz,16Bit		
	Rate			

	Parameters	HCVR4104HS-S2	HCVR4108HS-S2	HC	VR4116HS-S2	
	Audio Bit Rate	64Kbps				
Video Port	Analog Video Input	4-channel, BNC port	8-channel, BN	C port	16-channel, BNC port	
	Network Video	Max 2-channel IPC co	nnections (8M)		I I	
	Input					
	Video Output	1-channel VGA output,				
		1-channel HDMI outpu	ut (of the same vide	o sourc	e),	
		HDMI/ VGA video out	out at the same time	Э.		
	Loop Output	N/A				
	Matrix Output	N/A				
Audio Port	Audio Input	1-channel RCA port.				
	Audio Output 1-channel RCA port.					
	Bidirectional	Reuse the audio input	/output port.			
	Talk Input					
Record	Record Mode	Schedule record/manu		d/Alarm	n record	
	Record	Max 4-channe		hannel	Max 16-channel	
	Playback	playback	playback		playback	
	Backup Mode	HDD, burner, USB dev	vice, network backu	р		
Alarm	Alarm Input	N/A				
	Alarm Output	N/A				
HDD	HDD Port	1 SATA port, does no	t support eSATA po	ort		
	One HDD Space	4T				
Communication	Network	1 RJ45 port, 100Mbps	Ethernet port			
Port	Communication	RS485 port				
-	USB	2 USB ports				
Others	Power	DC12V				
	Power	≤15W (With power ac	lapter, no HDD)			
	Consumption					
	Working	-10℃ - +55℃				
	Temperature Working	10%~90%				
	Humidity	10%~90%				
	Dimensions	Compact 1U case, 26	$(M) \times 220 mm$	n (D) ·	v44mm (H)	
	Weight	1.25KG (No HDD)				
	Installation	Desk				
	Mode	Desk				
1.3.31 HCVR21	XXHS-S2 Series	5				
	Parameters	HCVR2108HS-S2	HCV	′R2116ŀ	HS-S2	
System	Main Processor	Industrial embedded n				
-	OS	Embedded LINUX				
Video	Video Encode	H.264				

	Parameters	HCVR2108HS-S2	HCVR2116HS-S2	
Parameters	Standard			
	Encode	720P(1-15f/s)/960H/D1/HD1/2CIF/CIF/QCIF		
	Resolution			
	Video Frame	HDCVI: 1~12f/s		
	Rate	CVBS: 1~20f/s (PAL); 1~20f/s (NTSC)		
	Video Bit Rate	1024Kbps-4096Kbps,		
		For 720P: default setup is 1Mbps, max supports 4Mbps.		
		For 960H: default setup is 1Mbps, max supports 3Mbps.		
	Bit Stream Type	Video stream/composite stream		
	Dual-Stream	Support		
Audio	Encode	G.711A/G.711U/PCM		
Parameters	Standard			
	Audio Sampling	8KHz, 16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	8-channel, BNC port	16-channel, BNC port	
	Input			
	Video Output	1-channel VGA output,		
		1-channel HDMI output (of the same video source),		
		HDMI/ VGA video output at the same time.		
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	1-channel RCA port.		
	Audio Output	1-channel RCA port.		
	Bidirectional	Reuse the audio input/output port.		
	Talk Input			
Record	Record Mode	Schedule record/manual record/MD record/Alarm record		
	Record	960H: Max 4-channel playback		
	Playback	720P: Max 1-channel playback		
	Backup Mode	HDD, burner, USB device, network backup		
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does not support eSATA port		
	One HDD Space	4T		
Communication	rt			
Port	Communication	RS485 port		
	USB	2 USB ports		
Others	Power	DC12V		
	Power	≤15W(With power adapter, no HD		
	Consumption			
	Working	-10℃−+55℃		

Param	eters	HCVR2108HS-S2	HCVR2116HS-S2	
Tempe	erature			
Workir	ng	10%~90%		
Humid	ity			
Dimen	sions	Compact 1U case, 260mm (W) x220mm (D) x44mm (H)		
Weigh	t	1.25KG (No HDD)		
Installa	ation	Desk		
Mode				

1.3.32 HCVR21XXHS-S3 Series

	Parameters	2104HS-S3	2108HS-S3	2116HS-S3		
System	Main Processor	Industrial embedded micro controller				
	OS	Embedded LINUX				
Video	Video Encode	H.264				
Parameters	Standard	1080N@12f/720P@15f/960H/D1/HD1/2CIF/CIF				
	Encode					
	Resolution					
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s				
	Rate					
	Video Bit Rate	32Kbps-4096Kbps,				
		For 720P: default setup is 1.5Mbps, max supports 4Mbps.				
		For 1080N: default setup is 1.5Mbps, max supports 4Mbps.				
	Bit Stream Type	Video stream/composite stream				
	Dual-Stream	Support				
Audio	Encode	G.711A/G.711U/PCM				
Parameters	Standard					
	Audio Sampling	8KHz,16Bit				
	Rate					
	Audio Bit Rate	64Kbps				
Video Port	Analog Video	4-ch BNC port(HDCVI				
	Input	HD video/general	•	• •		
		standard definition		U		
		video self-adaptive)	video self-adaptive)	standard definition		
				video		
				self-adaptive)		
	Network Video	Analog/digital channel switch. Max 2 IP channel connections				
	Input	Connection bandwidth:8Mbps				
	Video Output	1-channel VGA output,				
		1-channel HDMI output (of the same video source), HDMI/ VGA video output at the same time.				
	Loop Output	N/A				
	Matrix Output	N/A				
Audio Port	Audio Input					
		1-channel RCA port.				

	Parameters	2104HS-S3	2108HS-S3	2116HS-S3		
	Coaxial Audio	4-ch	8-ch	16-ch		
	Input					
	Audio Output	1-channel RCA port. Reuse the audio input/output port of the 1st channel.				
	Bidirectional					
	Talk Input					
Record	Record Mode					
	Playback Mode		al playback, event play	back, mark playback,		
		smart playback				
	Backup Mode	HDD, burner, USB dev	rice, network backup			
Alarm	Alarm Input	N/A				
	Alarm Output	N/A	N/A			
HDD	HDD Port	1 SATA port, does not support eSATA port				
	One HDD Space	6T				
Communication	Network	1 RJ45 port, 100Mbps	Ethernet port			
Port	Communication	RS485 port				
	USB	2 USB2.0 ports(One at	t the front panel and on	e at the rear panel)		
Others	Power	DC12V				
	Power	≤10W				
	Consumption					
	(No HDD)					
	Working	-10℃−+55℃				
	Temperature					
	Working	10%~90%				
	Humidity					
	Dimensions	Compact 1U case, 260)mm (W) x220mm (C) x 44mm (H)		
	Weight (No	≤1.25KG	≤1.35KG	≤1.45KG		
	HDD)					
	Installation	Desk				
	Mode					

1.3.33 HCVR41XXHS-S3 Series

	Parameters	HCVR4104HS-S3	HCVR4108HS-S3	HCVR4116HS-S3	
System	Main Processor	Industrial embedded micro controller			
	OS	Embedded LINUX			
Video	Video Encode	H.264			
Parameters	Standard				
	Encode	1080N/720P/960H/D1	1080N@12f/720P@ ⁻	15f/960H/D1/HD1/2CI	
	Resolution	/HD1/2CIF/CIF/	F/CIF/		
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32Kbps-4096Kbps,			

	Parameters	HCVR4104HS-S3	HCVR4108HS-S3	HCVR4116HS-S3	
		For 720P: default setur	o is 1.5Mbps, max supp	oorts 4Mbps.	
		For 1080P: default set	up is 1.5Mbps, max sup	oports 4Mbps.	
	Bit Stream Type	Video stream/composit	te stream		
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz, 16Bit			
	Rate				
	Audio Bit Rate	64Kbps	1	T	
Video Port	Analog Video Input	4-ch BNC port (HDCVI HD video/general standard definition video self-adaptive)	8-ch BNC port(HDCVI HD video/general standard definition video self-adaptive)	port(HDCVI HD	
	Network Video Input	 Max add 1 IP channel connection Analog /digital channel switch. Max 5 IP channel connections Connection bandwidth:4Mbp s-20Mbps 	 Max add 1 IP channel connection Analog /digital channel switch. Max 9 IP channel connections Connection bandwidth:8Mbp s-40Mbps 	channel connections • Analog /digital	
	Video Output	1-channel VGA output, 1-channel HDMI outpu HDMI/ VGA video outp	t (of the same video sou		
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	1-channel RCA port.	1		
	Coaxial Audio	4-ch	8-ch-	16-ch	
	Input				
	Audio Output	1-channel RCA port.			
	Bidirectional Reuse the audio input/output port.				
	Talk Input				
Record	Record Mode		al record/MD record/Ala		
	Playback Mode		al playback, event playl	back, mark playback,	
		smart playback			

	Parameters	HCVR4104HS-S3	HCVR4108HS-S3	HCVR4116HS-S3	
	Record	Max 4-channel	Max 8-channel	Max 16-channel	
	Playback	playback	playback	playback	
	Backup Mode	HDD, burner, USB dev	ice, network backup		
Alarm	Alarm Input	N/A			
	Alarm Output	N/A			
HDD	HDD Port	1 SATA port, does not	support eSATA port		
	One HDD Space	6T			
Communication	Network	1 RJ45 port, 100Mbps	Ethernet port		
Port	Communication	RS485 port			
	USB	2 USB2.0 ports(One at	the front panel and one	e at the rear panel)	
Others	Power	DC12V			
	Power				
	Consumption	≪7W	≪8W	≤10W	
	(No HDD)				
	Working	-10°C-+55°C			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimensions	Compact 1U case, 260	mm (W) ×220mm (D)×44mm(H)	
	Weight (No HDD)	≪0.85KG	≪0.95KG	≤1.05KG	
	Installation Mode	Desk			

1.3.34 HCVR51XXHS-S3 Series

				-	
	Parameters	HCVR5104HS-S3	HCVR5108HS-S3	HCVR5116HS-S3	
System	Main Processor	Industrial embedded micro controller			
	OS	Embedded LINUX			
Video	Video Encode	H.264			
Parameters	Standard				
	Encode	1080P@15f/1080N/720P/960H/D1/HD1/2CIF/CIF/1080P@15f/720			
	Resolution	P@15f/960H/D1/HD1/2CIF/CIF			
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32Kbps-6144Kbps,			
		For 720P: default setu	ıp is 2Mbps, max supp	orts 4Mbps.	
		For 1080P: default set	tup is 2Mbps, max sup	ports 6Mbps.	
	Bit Stream Type	Video stream/composite stream Support			
	Dual-Stream				
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				

	Parameters	HCVR5104HS-S3	HCVR5108HS-S3	HCVR5116HS-S3
	Audio Sampling	8KHz,16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video Input	4-ch BNC port (HDCVI HD video/general standard definition video self-adaptive)	8-ch BNC port(HDCVI HD video/general standard definition video self-adaptive)	16-chBNCport(HDCVIHDvideo/generalstandard definitionvideoself-adaptive)
	Network Video Input	 Max add 2 IP channel connections Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:8Mbp s-24Mbps 	 Max add 4 IP channel connection Analog /digital channel switch. Max 12 IP channel connections Connection bandwidth:16Mb ps-48Mbps 	 Max add 8 IP channel connections Analog /digital channel switch. Max 24 IP channel connections Connection bandwidth:32 Mbps-96Mbp s
	Video Output	1-channel VGA output 1-channel HDMI outpu HDMI/ VGA video outp	t (of the same video sou	rce),
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	1-channel RCA port.		
	Coaxial Audio Input	4-ch	8-ch-	16-ch
	Audio Output	1-channel RCA port.		
	Bidirectional Talk Input	Reuse the audio input/	output port of the 1 st cha	nnel.
Record	Record Mode	Schedule record/manu	al record/MD record/Ala	rm record
	Playback Mode	Instant playback, norm smart playback	al playback, event playb	oack, mark playback,
	Record	Max 4-channel	Max 8-channel	Max 16-channel
	Playback	playback	playback	playback
	Backup Mode	HDD, burner, USB dev	ice, network backup	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does not	t support eSATA port	

	Parameters	HCVR5104HS-S3	HCVR5108HS-S3	HCVR5116HS-S3
	One HDD Space	6T		
Communication	Network	1 RJ45 port, 100Mbps Ethernet port		
Port	Communication	RS485 port		
	USB	2 USB2.0 ports(One at the front panel and one at the rear panel)		
Others	Power	DC12V		
	Power			
	Consumption	≪7W	≪8W	≤10W
	(No HDD)			
	Working	-10°C-+55°C		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimensions	Compact 1U case, 260	0mm (W) x220mm (D) x 44mm (H)
	Weight (No HDD)	≪0.85KG	≪0.95KG	≤1.05KG
	Installation Desk Mode			

1.3.35 HCVR71XXHS-S3 Series

	Parameters	HCVR7104HS-S3
System	Main Processor	Industrial embedded micro controller
	OS	Embedded LINUX
Video	Video Encode	H.264
Parameters	Standard	
	Encode	1080P/720P/960H/D1/HD1/2CIF/CIF
	Resolution	
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s
	Rate	
	Video Bit Rate	32Kbps-6144Kbps,
		For 720P: default setup is 2Mbps, max supports 4Mbps.
		For 1080P: default setup is 4Mbps, max supports 6Mbps.
	Bit Stream Type	Video stream/composite stream
	Dual-Stream	Support
Audio	Encode	G.711A/G.711U/PCM
Parameters	Standard	
	Audio Sampling	8KHz, 16Bit
	Rate	
	Audio Bit Rate	64Kbps
Video Port	Analog Video	4-ch BNC port(HDCVI HD video/general standard definition video
	Input	self-adaptive)
	Network Video	Max add 2 IP channel connections

	Parameters	HCVR7104HS-S3
	Input	Analog/digital channel switch. Max 6 IP channel connections
		 Connection bandwidth:8Mbps-24Mbps
	Video Output	1-channel VGA output,
		1-channel HDMI output (of the same video source),
		HDMI/ VGA video output at the same time.
	Loop Output	N/A
	Matrix Output	N/A
Audio Port	Audio Input	1-channel RCA port.
	Coaxial Audio	4-ch
	Input	
	Audio Output	1-channel RCA port.
	Bidirectional	Reuse the audio input/output port of the 1 st channel.
	Talk Input	
Record	Record Mode	Schedule record/manual record/MD record/Alarm record
	Playback Mode	Instant playback, normal playback, event playback, mark playback,
		smart playback
	Backup Mode	HDD, burner, USB device, network backup
Alarm	Alarm Input	N/A
	Alarm Output	N/A
HDD	HDD Port	1 SATA port, does not support eSATA port
	One HDD Space	6T
Communication	Network	1 RJ45 port, 100Mbps Ethernet port
Port	Communication	RS485 port
	USB	2 USB2.0 ports(One at the front panel and one at the rear panel)
Others	Power	DC12V
	Power	≤8W
	Consumption	
	(No HDD)	
	Working	-10℃−+55℃
	Temperature	
	Working	10%~90%
	Humidity	
	Dimensions	Compact 1U case, 260mm (W) x220mm (D) x44mm (H)
	Weight (No	0.85KG
	HDD)	
	Installation	Desk
	Mode	

1.3.36 HCVR52XXA-V2 Series

Model	Parameters	HCVR5204A-V2	HCVR5208A-V2	HCVR5216A-V2
System	Main Processor	High-performance industrial embedded micro controller		nicro controller

Model	Parameters	HCVR5204A-V2	HCVR5208A-V2	HCVR5216A-V2	
	OS	Embedded LINUX			
Video	Video Encode	H.264			
	Standard				
	Encode Resolution	720P/960H/D1/HD1	/2CIF/CIF/QCIF (for	sub-stream only)	
	Video Frame Rate	PAL:1~25f/s; NTS	C: 1~30f/s		
	Video Bit Rate	1536Kbps-4096Kbp	os,		
		For 720P:default va	lue is 2Mbps, max	value is 4Mbps	
	Bit Stream Type	Video stream/comp	osite stream		
	Dual-Stream	Support			
Audio	Encode Standard	G.711A, G.711U, P	СМ		
	Audio Sampling Rate	8KHz, 16Bit			
	Audio Bit Rate	64Kbps			
Video Port	Analog Video Input	4-ch, BNC port	8-ch, BNC port	16-ch, BNC port	
	Network Video Input	Switch 2 analog cha	annels to the IP char	nnels (8Mbps)	
	Video Output	1-ch VGA output,			
		1-ch HDMI output,			
		HDMI/ VGA video o	utput at the same tin	ne (VGA/HDMI of the	
		same video source)			
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	4-ch, RCA port, au	dio via coaxial cable)	
	Audio Output	1-ch, RCA port			
	Bidirectional Talk	Support (Reuse the	e audio port)		
	Input				
Record	Record Mode	Auto record, manu	al record, motion o	detect record, alarm	
		record			
	Record Playback	Max 4-ch playback	Max 8-ch	Max 16-ch	
			playback	playback	
	Backup Mode	HDD, burner, flash o	· · ·		
Alarm	Alarm Input	4-ch alarm input	8-ch alarm input	16-ch alarm input	
	Alarm Output	3-ch alarm output			
HDD	HDD Port	2 SATA ports. Does	not support eSATA	port	
	Space/HDD	4T			
Communication	Network	1 RJ45 port, 1000M	bps Ethernet port		
Port	Communication	RS485 port			
	USB	2 USB ports			
Other	Power	DC12V			
	Power Consumption	≤30W (exclude HD	D)		
	Working Temperature	-10℃−+55℃			
	Working Humidity	10%~90%			
	Dimension	1U case, 375mm	(W) x280mm (D)	×50mm (H)	

Model	Parameters	HCVR5204A-V2	HCVR5208A-V2	HCVR5216A-V2
	Weight	1.5kg~2.5kg (exclude HDD)		
	Installation Mode	Desk installation		

1.3.37 HCVR72XXA-V2 Series

Model	Parameters	HCVR7204A-V2	HCVR7208A-V2		
System	Main Processor	High-performance industrial emb	edded micro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264			
	Standard				
	Encode Resolution	1080P /720P/960H/D1/HD1/2CIF	CIF/QCIF (for sub-stream		
		only)			
	Video Frame Rate	PAL:1~25f/s; NTSC: 1~30f/s			
	Video Bit Rate	2048Kbps-6144Kbps Kbps-4096Kbps,			
		For 1080P:default value is 4Mbps	s, max value is 6Mbps		
	Bit Stream Type	Video stream/composite stream			
	Dual-Stream	Support			
Audio	Encode Standard	G.711A, G.711U, PCM			
	Audio Sampling Rate	8KHz,16Bit			
	Audio Bit Rate	64Kbps			
Video Port	Analog Video Input	4-ch, BNC port 8-ch, BNC port			
	Network Video Input	Switch 2 analog channels to the IP channels (16Mbps			
	Video Output	1-ch VGA output,			
		1-ch HDMI output,			
		HDMI/ VGA video output at the sa	ame time (VGA/HDMI of the		
		same video source)			
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	4-ch, RCA port, audio via coaxia	al cable		
	Audio Output	1-ch, RCA port			
	Bidirectional Talk	Support (Reuse the audio port)			
Decord	Input Deserved Marcle	Auto record manual record m	ation datast record clarm		
Record	Record Mode	Auto record, manual record, m	otion detect record, alarm		
	Record Playback	record Max 4-ch playback	Max 16-ch playback		
	Backup Mode	HDD, burner, flash disk, network			
Alarm	Alarm Input	4-ch alarm input	16-ch alarm input		
	Alarm Output	3-ch alarm output			
HDD	HDD Port	2 SATA ports. Does not support e	SATA port		
	Space/HDD	4T			
Communication	Network	1 RJ45 port, 1000Mbps Ethernet	port		
Port	Communication		port		
	Communication	RS485 port			

Model	Parameters	HCVR7204A-V2	HCVR7208A-V2	
	USB	2 USB ports		
Other	Power	DC12V		
	Power Consumption	≤30W (exclude HDD)		
	Working Temperature	-10°C-+55°C		
	Working Humidity	10%~90%		
	Dimension	1U case, 375mm (W) x280mm (D) x50mm (H)		
	Weight	1.5kg~2.5kg (exclude HDD) Desk installation		
	Installation Mode			

1.3.38 HCVR42XXA-S2/4216AN-S2 Series

Model	Parameters	HCVR4204A-	HCVR4208A-	HCVR4216A-	HCVR4216AN	
		S2	S2	S2	-S2	
System	Main Processor	High-performance	ce industrial embe	edded micro contr	oller	
	OS	Embedded LINU	IX			
Video	Video Encode	H.264				
	Standard					
	Encode	720P(1-15fps)/960H/D1/HD1/2CIF/CIF/QCIF (for sub-stream only)				
	Resolution					
	Video Frame	HDCVI: 1~15f	/s(The 1 st chann	el supports 25/30	f/s)	
	Rate	CVBS: 1~25f/s (PAL); 1~30f/s (NTSC)				
	Video Bit Rate	1024Kbps-4096Kbps,				
		For 720P:default value is 1Mbps, max value is 4Mbps				
		For 960H:defaul	t value is 1Mbps,	max value is 3M	lbps	
	Bit Stream	Video stream/composite stream				
	Туре					
	Dual-Stream	Support				
Audio	Encode	G.711A, G.711L	I, PCM			
	Standard					
	Audio	8KHz,16Bit				
	Sampling Rate					
	Audio Bit Rate	64Kbps				
Video Port	Analog Video	4-ch, BNC port	8-ch, BNC por		16-ch, BNC	
	Input			port	port	
	Network Video	Max 2 IPC conn	ections (8Mbps)			
	Input					
	Video Output	1-ch VGA output,				
		1-ch HDMI output,				
		HDMI/ VGA video output at the same time (VGA/HDMI of the same				
		video source) N/A				
	Loop Output	N/A				
	Matrix Output	IN/A				

Model	Parameters	HCVR4204A-	HCVR4208A-	HCVR4216A-	HCV	R4216AN
		S2	S2	S2	-S2	
Audio Port	Audio Input	4-ch, RCA port	,			1-ch , RCA
						port
	Audio Output	1-ch, RCA port				
	Bidirectional	Support (Reuse	the audio port)			
	Talk Input					
Record	Record Mode	Auto record, ma	nual record, moti	on detect record,	alarm	record
	Record	Max 4-ch	Max 8-	ch Max 16-ch p	laybad	:k
	Playback	playback	playback			
	Backup Mode	HDD, burner, flash disk, network backup.				
Alarm	Alarm Input	8-ch alarm input	8-ch alarm inp	ut 16-ch alarm	input	N/A
	Alarm Output	3-ch alarm output N/A			N/A	
HDD	HDD Port	2 SATA ports. D	oes not support e	eSATA port.		
	Space/HDD	4T				
Communication	Network	1 RJ45 port, 100	Mbps Ethernet p	ort		
Port	Communication	RS485 port				
	USB	2 USB ports				
Other	Power	DC12V/4A				
	Power	≤30W (No HDD))			
	Consumption					
	Working	-10℃−+55℃				
	Temperature					
	Working	10%~90%				
	Humidity					
	Dimension	1U case, 375m	m (W) x 280mm	n (D) x 50mm (H	H)	
	Weight	1.5-2.5kg(no H	DD)			
	Installation	Desk installation	l			
	Mode					

1.3.39 HCVR4224/4232AN-S2 Series

Model	Parameters		HCVR4224AN-S2	HCVR4232AN-S2	
System	Main Processor		High-performance industrial embedde	ed micro controller	
	OS		Embedded LINUX		
Video	Video En	code	H.264		
	Standard				
	Encode		720P(1-15fps)/960H/D1/HD1/2CIF/CI	F/QCIF (for sub-stream only)	
	Resolution				
	Video F	rame	HDCVI: 1~15f/s (The 1 st / 2 nd channel supports 25/30f/s) CVBS: 1~25f/s (PAL); 1~30f/s (NTSC)		
	Rate				

Model	Parameters	HCVR4224AN-S2	HCVR4232AN-S2	
	Video Bit Rate	1024Kbps~4096Kbps,		
		For 720P realtime (The first two chan	inels):default value is 2Mbps,	
		max value is 4Mbps.		
		For 720P non-realtime: default val	ue is 1Mbps, max value is	
		2Mbps.		
	Bit Stream	Video stream/composite stream		
	Туре			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio	8KHz, 16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	24-ch, BNC port	32-ch, BNC port	
	Input			
	Network Video	Max 4 IPC connections (16Mbps)		
	Input	1-ch VGA output, 1-ch HDMI output, HDMI/ VGA video output at the same time (VGA/HDMI of the same video source)		
	Video Output			
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	1-ch, RCA port, Coaxibale audio	1-ch, RCA port. Coaxibale audio	
	Audio Output	1-ch, RCA port		
	Bidirectional	Support (Reuse the audio port)		
	Talk Input			
Record	Record Mode	Auto record, manual record, motion of	letect record, alarm record	
	Record	Max 16-ch playback		
	Playback			
	Backup Mode	HDD, burner, flash disk, network bac	kup.	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	2 SATA ports. Does not support eSATA port.		
	Space/HDD	4T		
Communication	Network	1 RJ45 port, 1000Mbps Ethernet por	t	
Port				
	USB	2 USB ports		
		-		

Model	Parameters	HCVR4224AN-S2	HCVR4232AN-S2	
	Power	≤30W (With adapter, no HDD) -10°C -+55°C		
	Consumption			
	Working			
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimension	1U case, 375mm (W) x280mm (D) ×50mm (H)	
	Weight	1.5-2.5kg (no HDD)		
	Installation	Desk installation		
	Mode			

1.3.40 HCVR52XXA-S2/HCVR5216AN-S2 Series

Model	Parameters	HCVR5204A-	HCVR5208A-	HCVR5216A-	HCVF	R5216AN
		S2	S2	S2	-S2	
System	Main Processor	High-performanc	e industrial emb	edded micro cont	roller	
	OS	Embedded LINU	Х			
Video	Video Encode	H.264				
	Standard					
	Encode	1080P(1-15fps)	/720P/960H/D1/H	HD1/2CIF/CIF/QC	IF	
	Resolution					
	Video Frame	HDCVI: 1~25f/s	<i>,</i>			
	Rate	CVBS: 1~25f/s	(PAL); 1~30f/s	(NTSC)		
	Video Bit Rate	2048Kbps-4096	•			
		For 1080P/720P:default value is 2Mbps, max value is 4Mbps				
		For 960H:default value is 1Mbps, max value is 3Mbps rream Video stream/composite stream				
	Bit Stream					
	Туре					
	Dual-Stream	Support				
Audio	Encode	G.711A, G.711U	, PCM			
	Standard					
	Audio	8KHz,16Bit				
	Sampling Rate					
	Audio Bit Rate	64Kbps				-
Video Port	Analog Video	4-ch, BNC port	8-ch, BNC po	ort 16-ch,	BNC	16-ch,
	Input			port		BNC
						port
	Network Video	Max 2 IPC conn	ections (8Mbps))		
	Input					
	Video Output	1-ch VGA output,				
		1-ch HDMI outpu				
			o output at the sa	ame time (VGA/H	DMI of	the same
		video source)				

Model	Parameters	HCVR5204A-	HCVR5208A-	HCV	/R5216A-	HCVF	R5216AN
		S2	S2	S2		-S2	
	Loop Output	N/A	N/A				
	Matrix Output	N/A					
Audio Port	Audio Input	4-ch, RCA port,	audio via coaxi	al cabl	е		
	Audio Output	1-ch, RCA port					
	Bidirectional	Support (Reuse the audio port)					
	Talk Input						
Record	Record Mode	Auto record, mai	nual record, mot	ion det	tect record	, alarm r	ecord
	Record	Max 4-c	h Max	8-ch	Max 16-c	h playb	ack
	Playback	playback	playback				
	Backup Mode	HDD, burner, fla	sh disk, network	backu	ıp.		
Alarm	Alarm Input	8-ch alarm input	8-ch alarm i	nput	16-ch input	alarm	N/A
	Alarm Output	3-ch alarm output N/A			N/A		
HDD	HDD Port	2 SATA ports. D	oes not support	eSATA	A port.		
	Space/HDD	4T					
Communication	Network	1 RJ45 port, 100	Mbps Ethernet	oort			
Port	Communication	RS485 port					
	USB	2 USB ports					
Other	Power	DC12V/4A					DC12V/ 5A
	Power	≤30W (No HDD)				
	Consumption						
	Working	-10℃−+55℃					
	Temperature						
	Working	10%~90%					
	Humidity						
	Dimension	1U case, 375m	m (W) x 280mr	n (D)	×50mm (H)	
	Weight	1.5-2.5kg (No ⊢	IDD)				
	Installation	Desk installation					
	Mode						

1.3.41 HCVR720XA-S2 Series

Model	Parameters	HCVR7204A-S2	HCVR7208A-S2		
System	Main Processor	High-performance industrial embedded micro controller			
	OS	Embedded LINUX			
Video	Video Encode	H.264			
	Standard				
	Encode	1080P /720P/960H/D1/HD1/2CIF/CIF/QCIF			
	Resolution				

Model	Parameter	rs	HCVR7204A-S2	HCVR7208A-S2	
	Video	Frame	HDCVI: 1~25f/s (PAL); 1~30f/s (NTSC)	
	Rate		CVBS: 1~25f/s (PAL); 1~30f/s (N	ITSC)	
	Video Bit	Rate	2048Kbps-6144Kbps		
			For 1080P:default value is 4Mbps,r	max value is 6Mbps	
			For 720P:default value is 2Mbps, m	ax value is 4Mbps	
	Bit S	Stream	Video stream/composite stream		
	Туре				
	Dual-Strea	am	Support		
Audio	Encode		G.711A, G.711U, PCM		
	Standard				
	Audio		8KHz, 16Bit		
	Sampling	Rate			
	Audio Bit		64Kbps		
Video Port		Video	4-ch, BNC port	8-ch, BNC port	
	Input				
	Network	Video	·		
	Input				
	Video Out	tput	1-ch VGA output,		
			1-ch HDMI output,		
			HDMI/ VGA video output at the same	e time (VGA/HDMI of the same	
		nu t	video source) N/A		
	Loop Out Matrix Ou	-	N/A		
Audio Port	Audio Inp	-	4-ch, RCA port, audio via coaxial ca		
Audio Port	Audio Inp Audio Out		1-ch, RCA port		
	Bidirectio	-	Support (Reuse the audio port)		
	Talk Input		Support (Reuse the audio port)		
Record	Record M		Auto record, manual record, motion	detect record alarm record	
	Record	ouc	Max 4-ch playback	Max 8-ch playback	
	Playback				
	Backup M	lode	HDD, burner, flash disk, network bac	kup.	
Alarm	Alarm Inp		8-ch alarm input	16-ch alarm input	
	Alarm Out		3-ch alarm output	l '	
HDD	HDD Port	•	2 SATA ports. Does not support eSA	TA port.	
	Space/HD		4T		
Communication	Network		1 RJ45 port, 100Mbps Ethernet port		
Port	Communi	cation			
	USB		2 USB ports		
Other			DC12V/4A DC12V/5A		
Other	Power		DCTZV/4A	DOIZVIJA	
Other	Power Power		≤30W (No HDD)	DOTZVISA	

Model	Parameters	HCVR7204A-S2	HCVR7208A-S2	
	Working	-10℃−+55℃ 10%~90%		
	Temperature			
	Working			
	Humidity			
	Dimension	1U case, 375mm (W) x280mm (I	D) x50mm (H)	
	Weight	1.5-2.5kg (No HDD) Desk installation		
	Installation			
	Mode			

1.3.42 HCVR42XXA-S3 Series

Model	Parameters	HCVR4204A-S3	HCVR4208A-S3 H	CVR4216A-S3
System	Main Processor	High-performance indus	trial embedded micro cor	ntroller
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	1080N/720P/	1080N@12f/720P@15f	/960H/D1/HD1/2
	Resolution	960H/D1/HD1/	CIF/CIF	
		2CIF/CIF/		
	Video Frame	PAL:1~25f/s; NTSC: 1	~30f/s	
	Rate			
	Video Bit Rate	32Kbps~4096Kbps,		
		For 720P:default value is 1.5Mbps, max value is 4Mbps.		
		For 1080P:default value is 1.5Mbps, max value is 4Mbps.		
	Bit Stream Type	Video stream/composite	stream	
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio	8KHz,16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-ch BNC port (HDCVI	8-ch BNC port(HDCVI	16-ch BNC
	Input	HD video/general	HD video/general	port(HDCVI
		standard definition standard definition HD		HD
		video self-adaptive)	video self-adaptive)	video/general
				standard
				definition video
				self-adaptive)

Model	Parameters	HCVR4204A-S3	HCVR4208A-S3	HCVR4216A-S3		
	Network Video Input	 Max add 1 IP channel connection Analog /digital channel switch. Max 5 IP channel connections Connection bandwidth:4Mbps- 20Mbps 	 Max add 2 channel connections Analog /digital channel switch. Max 10 channel connections Connection bandwidth:8Mbp 40Mbps 	channel switch. Max 18 IP		
	Video Output	1-ch VGA output, 1-ch HDMI output, HDMI/ VGA video outpu video source)	It at the same time (VG			
	Loop Output	N/A				
	Matrix Output	N/A				
Audio Port	External Audio Input	4-ch, RCA port,				
	Coaxial Audio Input	4-ch	8-ch	16-ch		
	Audio Output	1-ch RCA port				
		•				
	Bidirectional Talk Input	Support (Reuse the au	dio port of the 1 st chan	nel)		
Record		•				
Record	Talk Input	Support (Reuse the au	cord, motion detect reco	ord, alarm record		
Record	Talk Input Record Mode Playback Mode Record	Support (Reuse the au Auto record, manual rec Instant playback, norma	cord, motion detect reco	ord, alarm record back, mark playback, Max 16-ch		
Record	Talk Input Record Mode Playback Mode Record Playback	Support (Reuse the aud Auto record, manual rec Instant playback, norma smart playback Max 4-ch playback	ord, motion detect reco I playback, event playb Max 8-ch playback	ord, alarm record back, mark playback,		
	Talk Input Record Mode Playback Mode Record Playback Backup Mode	Support (Reuse the aud Auto record, manual reconstruction Instant playback, normatismart playback Max 4-ch playback HDD, burner, flash disk,	ord, motion detect reco l playback, event playb Max 8-ch playback network backup.	ord, alarm record back, mark playback, Max 16-ch playback		
Record	Talk Input Record Mode Playback Mode Record Playback	Support (Reuse the aud Auto record, manual rec Instant playback, norma smart playback Max 4-ch playback	ord, motion detect reco I playback, event playb Max 8-ch playback	ord, alarm record back, mark playback, Max 16-ch playback 16-ch alarm		
	Talk Input Record Mode Playback Mode Record Playback Backup Mode Alarm Input	Support (Reuse the aud Auto record, manual reconstruction Instant playback, normatismart playback Max 4-ch playback HDD, burner, flash disk,	ord, motion detect reco l playback, event playb Max 8-ch playback network backup.	ord, alarm record back, mark playback, Max 16-ch playback		
	Talk Input Record Mode Playback Mode Record Playback Backup Mode	Support (Reuse the au Auto record, manual rec Instant playback, norma smart playback Max 4-ch playback HDD, burner, flash disk, 8-ch alarm input 3-ch alarm output	cord, motion detect reco I playback, event playb Max 8-ch playback network backup. 8-ch alarm input	ord, alarm record back, mark playback, Max 16-ch playback 16-ch alarm		
Alarm	Talk Input Record Mode Playback Mode Record Playback Backup Mode Alarm Input Alarm Output	Support (Reuse the au Auto record, manual rec Instant playback, norma smart playback Max 4-ch playback HDD, burner, flash disk, 8-ch alarm input	cord, motion detect reco I playback, event playb Max 8-ch playback network backup. 8-ch alarm input	ord, alarm record back, mark playback, Max 16-ch playback 16-ch alarm		

Model	Parameters	HCVR4204A-S3	HCVR4208A-S3	HCVR4216A-S3		
Port	Communication	RS485 port				
	USB	2 USB2.0 ports(One a	t the front panel and on	e at the rear panel)		
Other	Power	DC12V				
	Power	≤7W ≤8W ≤10W -10°C -+55°C				
	Consumption					
	(No HDD)					
	Working					
	Temperature					
	Working	10%~90%				
	Humidity					
	Dimension	1U case, 375mm (W) x280mm (D) x50m	m (H)		
	Weight					
	(No HDD)	≤1.5KG ≤1.65KG ≤1.8KG				
	Installation	Desk installation				
	Mode					

1.3.43 HCVR42XXAN-S3 Series

Model	Parameters	HCVR4216AN-S3	HCVR4232AN-S3		
System	Main Processor	High-performance industrial embedde	ed micro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264			
	Standard				
	Encode	1080N@12f/720P@15f/960H/D1/HD?	1/2CIF/CIF		
	Resolution				
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32Kbps~4096Kbps,			
		For 720P:default value is 1.5Mbps, r	nax value is 4Mbps.		
		For 1080P:default value is 1.5Mbps,	max value is 4Mbps.		
	Bit Stream	Video stream/composite stream			
	Туре				
	Dual-Stream	Support			
Audio	Encode	G.711A, G.711U, PCM			
	Standard				
	Audio	8KHz,16Bit			
	Sampling Rate				
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	16-ch BNC port(HDCVI HD	32-ch BNC port(HDCVI HD		
	Input	video/general standard definition	video/general standard definition		
		video self-adaptive)	video self-adaptive)		

Model	Parameters	HCVR4216AN-S3	HCVR4232AN-S3	
	Network Video Input	 Max add 2 IP channel connections Analog /digital channel switch. Max 18 IP channel connections Connection bandwidth:8Mbps-56Mbps 	 Analog /digital channel switch. Max 16 IP channel connections Connection bandwidth: Max 64Mbps 	
	Video Output	1-ch VGA output, 1-ch HDMI output, HDMI/ VGA video output at the same source)	time (VGA/HDMI of the same video	
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	External Audio Input	1-ch, RCA port		
	Coaxial Audio Input	16-ch	32-ch	
	Audio Output	1-ch RCA port		
	Bidirectional Talk Input	Support (Reuse the audio port of the	1 st channel)	
Record	Record Mode	Auto record, manual record, motion d	etect record, alarm record	
	Playback Mode	Instant playback, normal playback, ev playback	vent playback, mark playback, smart	
	Record Playback	Max 16-ch playback		
	Backup Mode	HDD, burner, flash disk, network back	kup.	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	2 SATA ports. Does not support eSA	•	
	Space/HDD	6T	8T	
Communication	Network	1 RJ45 port, 100Mbps Ethernet port		
Port	Communication	RS485 port		
Other	USB	2 USB2.0 ports(One at the front pane	and one at the rear panel)	
Other	Power	DC12V	<2014	
	Power Consumption (No HDD)	≤10	≤20W	
	Working Temperature	-10°C-+55°C		

Model	Parameters	HCVR4216AN-S3	HCVR4232AN-S3	
	Working	10%~90%		
	Humidity			
	Dimension	1U case, 375mm (W) x280mm (D) x50mm (H)		
	Weight		≤3.3KG	
	(No HDD)	≤1.8KG	≈3.3NG	
	Installation	Desk installation		
	Mode			

1.3.44 HCVR52XXA-S3 Series

Model	Parameters	HCVR5204A-S3	HCVR5208A-S3	HCVR5216A-S3	
System	Main Processor	High-performance indust	rial embedded micro cont	roller	
	OS	Embedded LINUX			
Video	Video Encode	H.264			
	Standard				
	Encode	1080P@15f/1080N/720P/960H/D1/HD1/2CIF/CIF			
	Resolution				
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32Kbps~6144Kbps,			
		For 720P:default value is 2Mbps, max value is 4Mbps			
		For 1080P:default value is 2Mbps, max value is 6Mbps			
	Bit Stream	Video stream/composite stream			
	Туре				
	Dual-Stream	Support			
Audio	Encode	G.711A, G.711U, PCM			
	Standard				
	Audio	8KHz, 16Bit			
	Sampling Rate				
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	4-ch BNC port (HDCVI	8-ch BNC port(HDCVI	16-ch BNC	
	Input	HD video/general	HD video/general	port(HDCVI HD	
		standard definition	standard definition	video/general	
		video self-adaptive)	video self-adaptive)	standard definition	
				video self-adaptive)	

Model	Parameters	HCVR5204A-S3	HCVR5208A-S3	HCVR5216A-S3	
	Network Video Input	 Max add 2 IP channel connections Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:8Mbps- 24Mbps 	 Max add 4 IP channel connections Analog /digital channel switch. Max 12 IP channel connections Connection bandwidth:16Mbp s-48Mbps 	 Max add 8 IP channel connections Analog /digital channel switch. Max 24 IP channel connections Connection bandwidth:32Mb ps-96Mbps 	
	Video Output	1-ch VGA output, 1-ch HDMI output, HDMI/ VGA video output at the same time (VGA/HDMI of the same vide source)			
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	External Audio Input	t 4-ch, RCA port,			
	Coaxial Audio Input	4-ch	8-ch-	16-ch	
	Audio Output	1-ch RCA port			
	Bidirectional Talk Input	Support (Reuse the auc	lio port of the 1 st channel)		
Record	Record Mode	Auto record, manual reco	ord, motion detect record,	alarm record	
	Playback Mode	Instant playback, normal playback	playback, event playback	k, mark playback, smart	
	Record Playback	Max 4-ch playback	Max 8-ch playback	Max 16-ch playback	
	Backup Mode	HDD, burner, flash disk,	network backup.		
Alarm	Alarm Input	8-ch alarm input	8-ch alarm input	16-ch alarm input	
	Alarm Output	3-ch alarm output			
HDD	HDD Port	2 SATA ports. Does not	support eSATA port.		
	Space/HDD	4T	6T		
Communication	Network	1 RJ45 port, 100Mbps E	thernet port		
Port	Communication	RS485 port			
	USB	2 USB2.0 ports(One at the	he front panel and one at	the rear panel)	
Other	Power	DC12V			
	Power Consumption (No HDD)	≤7W	≤8W	≤10W	

Model	Parameters	HCVR5204A-S3	HCVR5208A	-S3 HCVR5216A-S3	
	Working	-10℃−+55℃			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimension	1U case, 375mm (W) :	x280mm (D)	x50mm (H)	
	Weight	≤1.5KG	≤1.65KG	≤1.8KG	
	(no HDD)	≪1.5KG	<1.05KG		
	Installation	Desk installation			
	Mode				
1.3.45 H	CVR52XXAN-S3 S	eries			
Model	Parameters	HCVR5216AN-S3		HCVR5232AN-S3	
System	Main Processor	High-performance indust	rial embedded	l micro controller	
	OS	Embedded LINUX			
Video	Video Encode	Je H.264			
	Standard				
	Encode	1080P@15f/1080N/720P/960H/D1/HD1/2CIF/CIF			
	Resolution				
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32 Kbps \sim 6144Kbps,			
		For 720P:default value is	•		
		For 1080P:default value i	•	ax value is 6Mbps	
	Bit Stream	Video stream/composite stream			
	Туре				
	Dual-Stream	Support			
Audio	Encode	G.711A, G.711U, PCM			
	Standard				
	Audio Sampling Rate	8KHz,16Bit			
	Audio Bit Rate	64Kbps			
Video Port					
Video Port	Analog Video	16-ch BNC port(HD video/general standard		32-ch BNC port(HDCVI HE video/general standard definitior	
	Input	video self-adaptive)		video/general standard demnitor	
	Network Video	 Max add 8 IP channel 		 Analog 	
	Input	connections		 Analog /digital channel 	
	inpat	 Analog 		switch. Max 32 IP channe	
		/digital channel		connections	
		switch. Max 24	P channel	 Connection bandwidth: Max 	
		connections		128Mbps	
		 Connection 			
		bandwidth:32Mbps-9	6Mbpc		

Model	Parameters	HCVR5216AN-S3	HCVR5232AN-S3	
	Video Output	1-ch VGA output,		
		1-ch HDMI output,		
		HDMI/ VGA video output at the same	time (VGA/HDMI of the same video	
		source)		
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	External	1-ch, RCA port		
	Audio Input			
	Coaxial Audio 16-ch		32-ch	
	Input			
	Audio Output	1-ch RCA port Support (Reuse the audio port of the 1 st channel)		
	Bidirectional			
	Talk Input			
Record	Record Mode	Auto record, manual record, motion detect record, alarm record		
	Playback Mode	Instant playback, normal playback, event playback, mark playback, sm		
		playback		
	Record	Max 16-ch playback		
	Playback			
	Backup Mode	HDD, burner, flash disk, network bac	kup.	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	2 SATA ports. Does not support eSA	TA port.	
	Space/HDD	6T	8T	
Communication	Network	1 RJ45 port, 1000Mbps Ethernet port		
Port	Communication	RS485 port		
	USB	2 USB2.0 ports(One at the front panel	el and one at the rear panel)	
Other	Power	DC12V		
	Power	≤10W	≤25W	
	Consumption			
	(No HDD)			
	Working	-10℃−+55℃		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimension	1U case, 375mm (W) x280mm (D	0) ×50mm (H)	
	Weight (no HDD)	≤1.8KG		
	Installation	Desk installation		
	Mode			

1.3.46 HCVR72XXA-S3/HCVR7216AN-S3 Series

Model	Parameters	HCVR7204A-S3	HCVR7208A-S3	HCVR7216A-S3	HCVR7216AN- S3
System	Main Processor	High-performance	e industrial embedd	ed micro controller	
	OS	Embedded LINUX			
Video	Video Encode Standard	H.264			
	Encode Resolution	1080P@15f/1080N/720P/960H/D1/HD1/2CIF/CIF			
	Video Frame Rate	PAL:1~25f/s; NTSC: 1~30f/s			
	Video Bit Rate	32Kbps~6144Kbps, For 720P:default value is 2Mbps, max value is 4Mbps For 1080P:default value is 2Mbps, max value is 6Mbps			
	Bit Stream Type	Video stream/com	•	·	
	Dual-Stream	Support			
Audio	Encode Standard	G.711A, G.711U,	PCM		
	Audio Sampling Rate	8KHz,16Bit			
	Audio Bit Rate	64Kbps			
Video Port	Analog Video Input	4-ch BNC port (HDCVI HD video/general standard definition video	8-ch BNC port(HDCVI HD video/general standard definition video	16-ch BNC port(HDCVI HD video/general standard definition video	16-ch BNC port(HDCVI HD video/general standard definition video
		self-adaptive)	self-adaptive)	self-adaptive)	self-adaptive)

Model	Parameters	HCVR7204A-S3	HCVR7208A-S3	HCVR7216A-S3	HCVR7216AN- S3
	Network Video Input	 Max add 2 IP channel connections Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:8 Mbps-24Mb ps 	 Max add 4 IP channel connection Analog /digital channel switch. Max 12 IP channel connection s Connection n bandwidth: 16Mbps-48 Mbps 	 Max add 8 IP channel connections Analog /digital channel switch. Max 24 IP channel connections Connection bandwidth:3 2Mbps-96M bps 	 Max add 8 IP channel connection Analog /digital channel switch. Max 24 IP channel connection s Connection bandwidth: 32Mbps-96 Mbps
	Video Output	1-ch VGA output, 1-ch HDMI output, HDMI/ VGA video output at the same time (VGA/HDMI of the same video source)			of the same video
	Loop Output	N/A			
	Matrix Output	N/A			1
Audio Port	External Audio Input	4-ch, RCA port,			1-ch, RCA port
	Coaxial Audio Input	4-ch	8-ch-	16-ch	16-ch
	Audio Output	1-ch RCA port			
	Bidirectional Talk Input	Support (Reuse t	he audio port of the	e 1 st channel)	
Record	Record Mode	Auto record, manu	ual record, motion of	detect record, alarm	record
	Playback Mode	Instant playback, i playback	normal playback, e	event playback, marl	k playback, smart
	Record	Max 4-ch	Max 8-ch	Max 16-ch playba	ck
	Playback	playback	playback		
	Backup Mode		n disk, network bac		I
Alarm	Alarm Input	8-ch alarm input	8-ch alarm input	16-ch alarm input	N/A
	Alarm Output	3-ch alarm output N/A			
HDD	HDD Port	•	es not support eSA	TA port.	
	Space/HDD	4T	6T		
Communication	Network	1 RJ45 port, 100M	Ibps Ethernet port		

Model	Parameters	HCVR7204A-S3	HCVR7208A-S3	HCVR7216A-S3	HCVR7216AN- S3
Port	Communication	RS485 port	RS485 port		
	USB	2 USB2.0 ports(O	ne at the front pane	el and one at the re	ar panel)
Other	Power	DC12V			
	Power	≤8W	≤10W	≤15W	≤15W
	Consumption				
	(No HDD)				
	Working	-10°C−+55°C			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimension	1U case, 375mm	n (W) x280mm (E	D) x50mm (H)	
	Weight (no HDD)	≤1.5KG	≤1.65KG	≤1.8KG	≤1.8KG
	Installation	Desk installation			
	Mode				

1.3.47 HCVR52XXL-V2 Series

Model	Parameters	HCVR5204L-V2	HCVR5208L-V2	HCVR5216L-V2
System	Main Processor	High-performance industrial e	mbedded micro controller	
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	720P/960H/D1/HD1/2CIF/CIF	QCIF (for sub-stream only	/)
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/	Ś	
	Rate			
	Video Bit Rate	1536Kbps-4096Kbps,		
		For 720P:default value is 2Mbps, max value is 4Mbps		
	Bit Stream	Video stream/composite stream		
	Туре			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio	8KHz,16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-ch, BNC port 8-ch, BNC port 16-ch, BNC p		16-ch, BNC port
	Input			
	Network Video	Switch 2 analog channels to the IP channels (8Mbps)		
	Input			

Model	Parameters	HCVR5204L-V2	HCVR5208L-V2	HCVR5216L-V2	
	Video Output	1-ch VGA output,			
		1-ch HDMI output,			
		HDMI/ VGA video output at the	ne same time (VGA/HDM	I of the same video	
		source)			
	Loop Output	N/A	N/A		
	Matrix Output	N/A	N/A		
Audio Port	Audio Input	4-ch, RCA port, audio via co	axial cable		
	Audio Output	1-ch, RCA port			
	Bidirectional	Support (Reuse the audio po	ort)		
	Talk Input				
Record	Record Mode	Auto record, manual record, r	notion detect record, alar	m record	
	Record	Max 4-ch playback	Max 8-ch playback	Max 16-ch	
	Playback			playback	
	Backup Mode	HDD, burner, flash disk, network backup.			
Alarm	Alarm Input	4-ch alarm input 8-ch alarm input 16-ch alarm		16-ch alarm input	
	Alarm Output	3-ch alarm output			
HDD	HDD Port	2 SATA ports. Does not supp	ort eSATA port		
	Space/HDD	4T			
Communication	Network	1 RJ45 port, 1000Mbps Ether	net port		
Port	Communication	RS485 port			
	USB	2 USB ports			
Other	Power	DC12V			
	Power	≤30W (exclude HDD)			
	Consumption				
	Working	-10℃−+55℃			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimension	1.5U case, 440mm (W) x4	10mm (D) x70mm (H)		
	Weight	3.0kg \sim 3.5kg (exclude HDD))		
	Installation	Desk installation			
	Mode				
1.3.48 HC	VR54XXL-V2 Se	ries			

1.3.48 HCVR54XXL-V2 Series

Model	Parameters	HCVR5404L-V2	HCVR5408L-V2	HCVR5416L-V2
System	Main Processor	High-performance industrial	High-performance industrial embedded micro controller	
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	720P/960H/D1/HD1/2CIF/CIF/QCIF (for sub-stream only)		
	Resolution			

Model	Parameters	HCVR5404L-V2	HCVR5408L-V2	HCVR5416L-V2
	Video Frame	PAL:1~25f/s; NTSC: 1~30	f/s	•
	Rate			
	Video Bit Rate	1536Kbps-4096Kbps,		
		For 720P:default value is 2M	lbps, max value is 4Mbp	S
	Bit Stream	Video stream/composite stre	am	
	Туре			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio	8KHz,16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps	ſ	-
Video Port	Analog Video	4-ch, BNC port	8-ch, BNC port	16-ch, BNC port
	Input			
	Network Video	Switch 2 analog channels to	the IP channels (8Mbps)
	Input			
	Video Output	1-ch VGA output,		
		1-ch HDMI output,		
		1-ch TV output,	it at the same time ()/(N/UDM//TV/ of the
		HDMI/ VGA/TV video outpu same video source)	ut at the same time (ve	
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	4-ch, BNC port, audio via c	navial cable	
Addio Fort	Audio Output	1-ch, BNC port		
	Bidirectional	Support (Independent bidire	ectional talk port)	
	Talk Input			
Record	Record Mode	Auto record, manual record,	motion detect record. ala	rm record
	Record	Max 4-ch playback	Max 8-ch playback	Max 16-ch
	Playback			playback
	Backup Mode	HDD, burner, flash disk, net	work backup.	
Alarm	Alarm Input	8-ch alarm input	8-ch alarm input	16-ch alarm input
	Alarm Output	6-ch alarm output		
HDD	HDD Port	4 SATA ports. Does not sup	port eSATA port	
	Space/HDD	4T		
Communication	Network	1 RJ45 port, 1000Mbps Ethe	ernet port	
Port	Communication			
	USB	3 USB ports (One at the front panel and two at the rear panel)		
Other	Power	AC90~264V 50+2% Hz (4/	8-ch max 75W)	
	Power	≤35W (exclude HDD)		
	Consumption			

Model	Parameters	HCVR5404L-V2	HCVR5408L-V2	HCVR5416L-V2
	Working	-10℃−+55℃		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimension	1.5U case, 440mm (W) x410mm (D) x70mm (H)		
	Weight	4.5kg~5.5kg (exclude HDD)		
	Installation	Desk/rack installation		
	Mode			

1.3.49 HCVR4224/32L-S2 Series

Model	Parameters	HCVR4224L-S2	HCVR4232L-S2
System	Main Processor	High-performance industrial embedded mi	cro controller
	OS	Embedded LINUX	
Video	Video Encode	H.264	
	Standard		
	Encode	720P(1-15fps)/960H/D1/HD1/2CIF/CIF/QC	CIF (for sub-stream only)
	Resolution		
	Video Frame	HDCVI: $1 \sim 15$ (The 1 st / 2 nd channel supports 25/30 f/s)	
	Rate	CVBS: 1~25f/s (PAL); 1~30f/s (NTSC)	
	Video Bit Rate	1024Kbps \sim 4096Kbps,	
		For 720P realtime (The first two channels)	:default value is 2Mbps, max
		value is 4Mbps.	
		For 720P non-realtime: default value is 1Mbps, max value is 2Mbps.	
	Bit Stream Type	Video stream/composite stream	
	Dual-Stream	Support	
Audio	Encode	G.711A, G.711U, PCM	
	Standard		
	Audio Sampling	8KHz,16Bit	
	Rate		
	Audio Bit Rate	64Kbps	
Video Port	Analog Video	24-ch, BNC port	32-ch, BNC port
	Input		
	Network Video	Max 4 IPC connections (16Mbps)	
	Input		
	Video Output	1-ch VGA output,	
		1-ch HDMI output,	
		HDMI/ VGA video output at the same time (VGA/HDMI of th	
		source)	
	Loop Output		
	Matrix Output	N/A	
Audio Port	Audio Input	4-ch, RCA port, Coaxible audio	4-ch, RCA port. Coaxible audio

Model	Parameters	HCVR4224L-S2	HCVR4232L-S2
	Audio Output	1-ch, RCA port	
	Bidirectional	Support (Reuse the audio port)	
	Talk Input		
Record	Record Mode	Auto record, manual record, motion detec	t record, alarm record
	Record	Max 16-ch playback	
	Playback		
	Backup Mode	HDD, burner, flash disk, network backup.	
Alarm	Alarm Input	16-channel alarm input	
	Alarm Output	3-channel alarm output	
HDD	HDD Port	2 SATA ports. Does not support eSATA port.	
	Space/HDD	4T	
Communication	Network	1 RJ45 port, 1000Mbps Ethernet port	
Port	Communication	1 RS232 port, 1 RS485 port	
	USB	2 USB ports	
Other	Power	DC12V/5A	
	Power	≤30W (With adapter, no HDD)	
	Consumption		
	Working	-10°C-+55°C	
	Temperature		
	Working	10%~90%	
	Humidity		
Dimension1.5U case, 440mm (1.5U case, 440mm (W) x410mm (D)	x70mm (H)
	Weight	4.5-5.5kg (no HDD)	
	Installation Desk/rack installation		
	Mode		

1.3.50 HCVR44XXL-S2 Series

Model	Parameters	HCVR4404L-S2	HCVR4408L-S2	HCVR4416L-S2	
System	Main Processor	High-performance industria	High-performance industrial embedded micro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264			
	Standard				
	Encode	720P/960H/D1/HD1/2CIF/0	CIF/QCIF (for sub-stream of	only)	
	Resolution				
	Video Frame	HDCVI: 1 \sim 15f/s (The 1s	t channel supports 25/30f/	s)	
	Rate	CVBS: 1~25f/s (PAL); 1	~30f/s(NTSC)		
	Video Bit Rate	1536Kbps-4096Kbps,			
		For 720P:default value is 2	For 720P:default value is 2Mbps, max value is 4Mbps		
	Bit Stream Type	Video stream/composite stream			
	Dual-Stream	Support			

Model	Parameters	HCVR4404L-S2	HCVR4408L-S2	HCVR4416L-S2	
Audio	Encode	G.711A, G.711U, PCM			
	Standard				
	Audio Sampling	8KHz, 16Bit			
	Rate				
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	4-ch, BNC port	8-ch, BNC port	16-ch, BNC port	
	Input				
	Network Video	Switch 2 analog channels to the IP channels (8Mbps)			
Input					
	Video Output	1-ch VGA output,			
		1-ch HDMI output,			
		1-ch TV output,			
		HDMI/ VGA/TV video out	put at the same time (V	GA/HDMI/TV of the	
		same video source)			
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	4-ch, BNC port, audio via coaxial cable			
	Audio Output	1-ch, BNC port			
	Bidirectional	Support (Independent bidirectional talk port)			
	Talk Input				
Record	Record Mode	Auto record, manual record			
	Record	Max 4-ch playback	Max 8-ch playback	Max 16-ch	
	Playback	playback			
	Backup Mode	HDD, burner, flash disk, ne			
Alarm	Alarm Input	8-ch alarm input	8-ch alarm input	16-ch alarm input	
	Alarm Output	6-ch alarm output			
HDD	HDD Port	4 SATA ports. Does not su	pport eSATA port		
	Space/HDD	6T			
Communication	Network	1 RJ45 port, 1000Mbps Etl	•		
Port	Communication	1 RS232 port, 1 RS422 po	•		
	USB	3 USB ports (One at the fro	•	ear panel)	
Other	Power	AC90~264V 50+2% Hz (4/8-ch max 75W)		
	Power	≤35W (exclude HDD)			
	Consumption				
	Working	-10℃−+55℃			
	Temperature	400/ 000/			
	Working	10%~90%			
	Humidity	1 El 2000 440mm (M/)	v410mm (D) · 70mm (1	<u> (۱</u>	
	Dimension	1.5U case, 440mm (W)		ער	
	Weight	4.5kg \sim 5.5kg (exclude HE	(ענ		

Model	Parameters	HCVR4404L-S2	HCVR4408L-S2	HCVR4416L-S2
	Installation	Desk/rack installation		
	Mode			

Model	Parameters	HCVR4424L-S2	HCVR4432L-S2
System	Main Processor	High-performance industrial embedded	micro controller
	OS	Embedded LINUX	
Video	Video Encode Standard	H.264	
	Encode		
	Resolution	720P/960H/D1/HD1/2CIF/CIF/QCIF (fc	or sub-stream only)
		L(DC)/L 4 456/2 (The d st / 2 nd charge	
	Video Frame	HDCVI: $1 \sim 15f/s$ (The 1 st / 2 nd channel supports 25/30f/s) CVBS: $1 \sim 25f/s$ (PAL); $1 \sim 30f/s$ (NTSC)	
	Rate		30)
	Video Bit Rate	1024Kbps-4096Kbps,	ala):default value in 2Mbra may
		For 720P realtime (The first two chann	leis).derault value is zivibps, max
		value is 4Mbps.	1 Mana may value is 2 Mana
		For 720P non-realtime: default value is	
	Bit Stream Type	Video stream/composite stream	
A 11	Dual-Stream	Support	
Audio	Encode	G.711A, G.711U, PCM	
	Standard	g 8KHz, 16Bit	
	Audio Sampling		
	Rate		
	Audio Bit Rate	64Kbps	
Video Port	Analog Video Input	24-ch, BNC port	32-ch, BNC port
	Network Video	Switch 4 analog channels to the IP cha	annels (16Mbps)
	Input		
	Video Output	1-ch VGA output,	
		1-ch HDMI output,	
		1-ch TV output,	
		HDMI/ VGA/TV video output at the s	ame time (VGA/HDMI/TV of the
		same video source)	
	Loop Output	N/A	
	Matrix Output	N/A	
Audio Port	Audio Input	4-ch, BNC port, audio via coaxial cab	e
	Audio Output	1-ch, BNC port	
	Bidirectional	Support (Independent bidirectional tal	k port)
	Talk Input		
Record	Record Mode	Auto record, manual record, motion de	tect record, alarm record
	Record	Max 16-ch playback	
	Playback		
	Backup Mode	HDD, burner, flash disk, network back	

Model	Parameters	HCVR4424L-S2	HCVR4432L-S2	
Alarm	Alarm Input	16-ch alarm input		
	Alarm Output	6-ch alarm output		
HDD	HDD Port	4 SATA ports. Does not support eSATA	A port	
	Space/HDD	6T		
Communication	Network	1 RJ45 port, 1000Mbps Ethernet port		
Port	Communication	1 RS232 port, 1 RS422 port		
	USB	3 USB ports (One at the front panel and	d two at the rear panel)	
Other	Power	AC110~240V 50+2%HZ (max 220W)		
	Power	≤35W (exclude HDD)		
	Consumption			
	Working	-10℃−+55℃		
	Temperature			
Working 10%~90%				
	Humidity			
	Dimension	1.5U case, 440mm (W) x410mm (D) x70mm (H)		
	Weight	4.5kg \sim 5.5kg (exclude HDD)		
	Installation	Desk/rack installation		
	Mode			

1.3.51 HCVR48XXS-S2 Series

Model	Parameters	HCVR4804S-S2	HCVR4808S-S2	HCVR4816S-S2
System	Main Processor	High-performance industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	720P/960H/D1/HD1/2CIF/0	CIF/QCIF (for sub-stream of	only)
	Resolution			
	Video Frame	HDCVI: 1~15f/s (The 1s	t channel supports 25/30f/s	s)
	Rate	CVBS: 1~25f/s (PAL); 1~30f/s (NTSC)1536Kbps-4096Kbps,For 720P:default value is 2Mbps, max value is 4MbpsVideo stream/composite streamSupport		
	Video Bit Rate			
	Bit Stream Type			
	Dual-Stream			
Audio	Encode	G.711A, G.711U, PCM		
Standard				
	Audio Sampling 8KHz, 16Bit			
Rate				
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-ch, BNC port	8-ch, BNC port	16-ch, BNC port
	Input			

Model	Parameters	HCVR4804S-S2	HCVR4808S-S2	HCVR4816S-S2
	Network Video	Switch 2 analog channels to the IP channels (8Mbps)		
	Input			
	Video Output	1-ch VGA output,		
		1-ch HDMI output,		
		1-ch TV output,		
		HDMI/ VGA/TV video output at the same time (VGA/HDMI/TV of the		
		same video source)		
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	4-ch, BNC port, audio via	8-ch, BNC port,	16-ch, BNC port,
		coaxial cable	audio via coaxial	audio via coaxial
			cable	cable
	Audio Output	1-ch, BNC port		
	Bidirectional	Support (Independent bidi	rectional talk port)	
	Talk Input			
Record	Record Mode	Auto record, manual record	, motion detect record, a	alarm record
	Record	Max 4-ch playback	Max 8-ch playback	Max 16-ch
	Playback			playback
	Backup Mode	HDD, burner, flash disk, ne	•	
Alarm	Alarm Input	8-ch alarm input 8-ch alarm input 16-ch alarm input		16-ch alarm input
	Alarm Output	6-ch alarm output		
HDD	HDD Port	8 SATA ports, does not su	ipport eSATA port	
	Space/HDD	6T		
Communication	Network	1 RJ45 port, 1000Mbps Eth	nernet port	2 RJ45 ports,
Port				1000Mbps
				Ethernet ports
	Communication	1 RS232 port, 1 RS422 por	•	
	USB	4 USB ports (Two at the fro	•	rear panel)
Other	Power	AC90~264V 50+2% Hz (N	Max 220W)	
	Power	≤35W (exclude HDD)		
	Consumption			
	Working	-10°C-+55°C		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimension	2U case, 440mm (W) x460mm (D) x89mm (H)		
	Weight	7.0kg~8.0kg (exclude HDD)		
	Installation	Desk/rack installation		
	Mode			

Model	Parameters	HCVR4824S-S2	HCVR4832S-S2	
System	Main Processor	High-performance industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	720P/960H/D1/HD1/2CIF/CIF/QCIF (for sub-stream only)		
	Resolution			
	Video Frame	HDCVI: 1~15f/s (The 1 st / 2 nd channed	el supports 25/30f/s)	
	Rate	CVBS: 1~25f/s (PAL); 1~30f/s (NT	SC)	
	Video Bit Rate	1024Kbps-4096Kbps,		
		For 720P realtime (The first two chann	els):default value is 2Mbps, max	
		value is 4Mbps.		
		For 720P non-realtime: default value is	1Mbps, max value is 2Mbps.	
	Bit Stream Type	Video stream/composite stream		
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio Sampling	8KHz,16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	24-ch, BNC port	32-ch, BNC port	
	Input			
	Network Video	Switch 4 analog channels to the IP channels (16Mbps)		
	Input			
		ch VGA output,		
		1-ch HDMI output,		
		1-ch TV output,	ame time ()(CA/UDA/UT)/ of the	
		HDMI/ VGA/TV video output at the s same video source)	ame time (VGA/HDMI/TV of the	
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	16-ch, BNC port, audio via coaxial	16-ch, BNC port, audio via	
Audio Fort	Audio input	cable	coaxial cable	
	Audio Output	1-ch, BNC port		
	Bidirectional	Support (Independent bidirectional talk port)		
	Talk Input			
Record	Record Mode	Auto record, manual record, motion de	tect record. alarm record	
	Record	Max 16-ch playback		
Playback				
	Backup Mode	HDD, burner, flash disk, network backu	JD.	
Alarm	Alarm Input	16-ch alarm input		
	Alarm Output	6-ch alarm output		
HDD	HDD Port	8 SATA ports		

Model	Parameters	HCVR4824S-S2	HCVR4832S-S2	
	Space/HDD	6T		
Communication	Network	2 RJ45 ports, 1000Mbps Ethernet ports	5	
Port	Communication	1 RS232 port, 1 RS422 port		
	USB	4 USB ports (Two at the front panel and	d two at the rear panel)	
Other	Power	AC110~240V 50+2%HZ (Max 220W)		
	Power	≤35W (exclude HDD)		
	Consumption			
	Working	-10°C-+55°C		
	Temperature			
	Working	10%~90%		
	Humidity	2U case, 440mm (W) x460mm (D) x89mm (H) 7.0kg~8.0kg (exclude HDD) Desk/rack installation		
	Dimension			
	Weight			
	Installation			
	Mode			

1.3.52 HCVR58XXS-V2 Series

Model	Parameters	HCVR5804S-V2	HCVR5808S-V2	HCVR5816S-V2
System	Main Processor	High-performance industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	720P/960H/D1/HD1/2CIF/0	CIF/QCIF (for sub-stream of	only)
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC: 1~3	Of/s	
	Rate	1536Kbps-4096Kbps, For 720P:default value is 2Mbps, max value is 4Mbps Video stream/composite stream		
	Video Bit Rate			
	Bit Stream Type			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio Sampling	8KHz,16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-ch, BNC port	8-ch, BNC port	16-ch, BNC port
	Input			
	Network Video	Switch 2 analog channels to the IP channels (8Mbps)		
	Input			

Model	Parameters	HCVR5804S-V2	HCVR5808S-V2	HCVR5816S-V2	
	Video Output	1-ch VGA output,			
		1-ch HDMI output,			
		1-ch TV output,			
		HDMI/ VGA/TV video output at the same time (VGA/HDMI/TV of the			
		same video source)			
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	Audio Input	4-ch, BNC port, audio via	8-ch , BNC port,	16-ch, BNC port,	
		coaxial cable	audio via coaxial	audio via coaxial	
			cable	cable	
	Audio Output	1-ch, RCA port			
	Bidirectional	Support (Independent bidi	rectional talk port)		
	Talk Input				
Record	Record Mode	Auto record, manual record	l, motion detect record,	alarm record	
	Record	Max 4-ch playback	Max 8-ch playback	Max 16-ch	
	Playback			playback	
	Backup Mode	HDD, burner, flash disk, ne	twork backup.		
Alarm	Alarm Input	8-ch alarm input	8-ch alarm input	16-ch alarm input	
	Alarm Output	6-ch alarm output			
HDD	HDD Port	8 SATA ports, does not support eSATA port			
	Space/HDD	4T			
Communication	Network	2 RJ45 ports, 1000Mbps Ethernet port			
Port	Communication	1 RS232 port, 1 RS422 por	t, 1 RS485 port		
	USB	3 USB ports (One at the fro	ont panel and two at the	e rear panel)	
Other	Power	AC90~264V 50+2% Hz (M	Max 220W)		
	Power	≤35W (exclude HDD)			
	Consumption				
	Working	-10℃−+55℃			
	Temperature				
	Working	10%~90%			
	Humidity	2U case, 440mm (W) x460mm (D) x89mm (H) 7.0kg~8.0kg (exclude HDD) Desk/rack installation			
	Dimension				
	Weight				
	Installation				
	Mode				
1.3.53 HC	R71XXH-4M Ser	ies			
Model	Parameters	HCVR7104H-4M H	ICVR7108H-4M H	CVR7116H-4M	
System	Main Processor	Industrial embedded mic	ro controller		

System	Main Processor		Industrial embedded micro controller		
	OS		Embedded LINUX		
Video	Video	Encode	H.264+/H.264		
Parameters	Standard				

Model	Parameters	HCVR7104H-4M	HCVR7108H-4M	HCVR7116H-4M
	Encode	Main	·	stream:
	Resolution	2K(2560*1440)@15f/1	080P/720P/960H/D1/	HD1/BCIF/CIF/QCIF
		Sub stream: D1/CIF/Q	CIF	
	Video Frame Rate	 2K resolution: PAL:1~15f/s; NTSC: 1~15f/s Other resolutions: PAL:1~25f/s; NTSC: 1~30f/s 32Kbps-6144Kbps, For 720P: default setup is 2Mbps, max supports 4Mbps. 		
	Video Bit Rate			
		For 1080N: default setup is 4Mbps, max supports 6Mbps.		
		For 2K: non realtime d	lefault setup is 4Mbps	, max supports 6Mbps.
	Bit Stream Type	Video stream/composi	te stream	
	Dual-Stream	Support		
Audio	Encode Standard	G.711A/G.711U/PCM		
Parameters	Audio Sampling	8KHz, 16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-ch BNC port	8-ch BNC port	16-ch BNC port
	Input	(HDCVI/CVBS)	(HDCVI/CVBS)	(HDCVI/CVBS)
	Network Video	• Max add 2 IP	• Max add 4 IP	Max add 8 IP
	Input	channel	channel	channel
		connection.	connection.	connection.
		 Analog 	 Analog 	 Analog
		/digital channel	/digital channel	/digital channel
		switch. Max 6 IP	switch. Max 12	switch. Max 24 IP
		channel	IP channel	channel
		connections	connections	connections
		 Connection 	 Connection 	Connection
		bandwidth:8Mbp	bandwidth:16	bandwidth:32Mbps-
		s-24Mbps	Mbps-48Mbps	96Mbps
	Video Output	1-channel VGA output	,	
		1-channel HDMI outpu	ıt, max 4K(3840*2160)@30f
		HDMI/ VGA video out	out at the same time (of the same video source
		or different video source	ce).	
	Loop Output	N/A		
	Matrix Output	When the HDMI and	d VGA are of differe	ent video output, system
		supports one matrix ou	utput.	
Audio Port	Audio Input	1-channel RCA port.		
	Coaxial Audio	N/A		
	Input			
	Audio Output	1-channel RCA port.		
	Bidirectional Talk	Reuse the audio input	/output port	
	Input			
	1	Schedule record/manual record/MD record/Alarm record/intelligent		

Model	Parameters	HCVR7104H-4M	HCVR7108H-4M	HCVR7116H-4M
		record		•
	Playback Mode	Instant playback, normal playback, event playback, mark playback, smart playback		
	Playback Channel	4-channel	8-channel	16-channel
	Backup Mode	HDD, burner, USB dev	vice, network backup	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port		
	One HDD Space	8T		
Communication	Network	1 RJ45 port, 1000Mbp	os Ethernet port	
Port	Communication	1 RS485 port		
	USB	2 USB ports(One USB2.0 port at the front panel and one USB3.0 port		
		at the rear panel)		
Others	Power	DC12V		
	Power	≤12W	≤13W	≤20W
	Consumption (No			
	HDD)			
	Working	-10°C - + 55°C		
	Temperature			
	Working Humidity	10%~90%		
	Dimensions	Mini 1U case, 325mm	L	x45mm (H)
	Weight (No HDD)	≤1.25KG	≤1.25KG	≤1.40KG
	Installation Mode	Desk		

1.3.54 HCVR72XXAN-4M Series

Model	Parameters	HCVR7204AN-4M	HCVR7208AN-4M	HCVR7216AN-4M
System	Main Processor	Industrial embedded n	Industrial embedded micro controller	
	OS	Embedded LINUX		
Video	Video Encode	H.264+/H.264		
Parameters	Standard			
	Encode	Main		stream:
	Resolution	2K(2560*1440)/1080P	/720P/960H/D1/HD1/I	BCIF/CIF/QCIF
		Sub stream: D1/CIF/QCIF		
	Video Frame Rate	2K resolution: PAL:1~15f/s; NTSC: 1~15f/s		
		Other resolutions: PAL:1~25f/s; NTSC: 1~30f/s		30f/s
	Video Bit Rate	32Kbps-6144Kbps,		
		For 720P: default setu	p is 2Mbps, max sup	ports 4Mbps.
		For 1080N: default setup is 4Mbps, max supports 6Mbps.		
		For 2K: non realtime default setup is 4Mbps, max supports 6Mbps.		
	Bit Stream Type	Video stream/composite stream		
	Dual-Stream	Support		

Model	Parameters	HCVR7204AN-4M	HCVR7208AN-4M	HCVR7216AN-4M	
Audio	Encode Standard	G.711A/G.711U/PCM			
Parameters	Audio Sampling	8KHz, 16Bit			
	Rate				
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	4-ch BNC port	8-ch BNC port	16-ch BNC port	
	Input	(HDCVI/CVBS)	(HDCVI/CVBS)	(HDCVI/CVBS)	
	Network Video	• Max add 2 IP	• Max add 4 IP	• Max add 8 IP	
	Input	 channel connection. Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:8Mbp s-24Mbps 	channel connection. • Analog /digital channel switch. Max 12 IP channel connections • Connection bandwidth:16 Mbps-48Mbps	 channel connection. Analog /digital channel switch. Max 24 IP channel connections Connection bandwidth:32Mbps- 96Mbps 	
	Video Output		, it, max 4K(3840*2160) out at the same time (o ce).	@30f of the same video source	
	Loop Output	N/A			
	Matrix Output		When the HDMI and VGA are outputting different video, system		
Audia Dart		supports one matrix output.			
Audio Port	Audio Input Coaxial Audio	1-channel RCA port. N/A			
	Input	IN/A			
	Audio Output	1-channel RCA port.			
	Bidirectional Talk	Reuse the audio input	output port		
	Input				
Record	Record Mode	record		d/Alarm record/intelligent	
	Playback Mode	Instant playback, norr smart playback	nal playback, event p	layback, mark playback,	
	Playback Channel	4-channel	8-channel	16-channel	
	Backup Mode	HDD, burner, USB dev	vice, network backup		
Alarm	Alarm Input	N/A			
	Alarm Output	N/A			
HDD	HDD Port	2 SATA ports			
	One HDD Space	8T			
Communication	Network	1 RJ45 port, 1000Mbps Ethernet port			
Port	Communication	1 RS485 port			

Model	Parameters	HCVR7204AN-4M	HCVR7208AN-4M	HCVR7216AN-4M
	USB	2 USB ports(One USE	2 USB ports(One USB2.0 port at the front panel and one USB3.0 port	
		at the rear panel)		
Others	Power	DC12V		
	Power	≤12W	≤13W	≤20W
	Consumption (No			
	HDD)			
	Working	-10℃-+55℃		
	Temperature			
	Working Humidity	10%~90%		
	Dimensions	1U case, 375mm (W) x280mm (D) x50mm (H)		
	Weight (No HDD)	≤1.60KG	≤1.60KG	≤1.75KG
	Installation Mode Desk			

1.3.55 XVR410XC Series

	Parameters	XVR4104C	XVR4108C	
System	Main Processor	Industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard			
	Encode Resolution	1080N/720P/960H/D1/HD1/2CIF/CIF	1080N@12f/720P@15f	
			/960H/D1/HD1/2CIF/CIF	
	Video Frame Rate	PAL:1~25f/s; NTSC: 1~30f/s		
	Video Bit Rate	32Kbps-4096Kbps		
	Bit Stream Type	Video stream/composite stream		
	Dual-Stream	Support		
Audio	Encode Standard	G.711A/G.711U/PCM		
Parameters	Audio Sampling	8KHz, 16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video Input	4-ch BNC port(CVBS/CVI/AHD/ other	8-ch BNC port(CVBS/CVI/	
		analog HD video self-adaptive)	AHD/other analog HD video	
			self-adaptive)	
	Network Video Input	• There is no IP channel by default.	• There is no IP channel	
		Max add 1 IP channel	by default.Max add 2 IP	
		connection	channel connections	
		• Analog/digital channel switch. Max	Analog/digital channel	
		5 IP channel connections	switch. Max 10 IP	
		Connection	channel connections	
		bandwidth:0Mbps-20Mbps	 Connection bandwidth:0Mbps_40M 	
			bandwidth:0Mbps-40M bps	
	Video Output	1-channel VGA output,	oho	

	Parameters	XVR4104C	XVR4108C	
		1-channel HDMI output (of the same HDMI/ VGA video output at the same		
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	1-channel RCA port.		
	Coaxial Audio Input	N/A		
	Audio Output	1-channel RCA port.		
	Bidirectional Talk Input	Reuse the audio input/output port of t	he 1 st channel.	
Record	Record Mode	Schedule record/manual record/MD re	ecord/Alarm record	
	Playback Mode	Instant playback, normal playback, event playback, mark playback,		
		smart playback		
	Backup Mode	HDD, burner, USB device, network backup		
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does not support eSAT	A port	
	One HDD Space	6T		
Communication	Network	1 RJ45 port, 100Mbps Ethernet port		
Port	Communication	RS485 port		
	USB	2 USB2.0 ports(at the rear panel)		
Others	Power	DC12V		
	Power Consumption	≤7W	≤8W	
	(No HDD)			
	Working	-10℃−+55℃		
	Temperature			
	Working Humidity	10%~90%		
	Dimensions	SMART 1U case, 270mm(W)×205	mm (D) x41mm (H)	
	Weight (No HDD)	≪0.5KG	≤0.55KG	
	Installation Mode	Desk		

1.3.56 XVR510XC Series

	Parameters	XVR5104C	XVR5108C
System	Main Processor	Industrial embedded micro controller	
	OS	Embedded LINUX	
Video	Video Encode	H.264	
Parameters	Standard		
	Encode Resolution	1080P@15f/1080N/720P/960H/D1/HD1/2CIF/CIF/	
	Video Frame Rate	PAL:1~25f/s; NTSC: 1~30f/s	
	Video Bit Rate	32Kbps-6144Kbps	
	Bit Stream Type	Video stream/composite stream	
	Dual-Stream	Support	

	Parameters	XVR5104C	XVR5108C	
Audio	Encode Standard	G.711A/G.711U/PCM		
Parameters	Audio Sampling	8KHz, 16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video Input	4-ch BNC port(CVBS/CVI/AHD	8-ch BNC	
		/other analog HD video	port(CVBS/CVI/AHD/other	
		self-adaptive)	analog HD video self-adaptive)	
	Network Video Input	• There is no IP channel by	,	
		default. Max add 2 IP channel	default. Max add 4 IP	
			channel connections	
		 Analog/digital channel switch. Max 6 IP channel connections 	 Analog/digital channel switch. Max 12 IP channel 	
		 Connection 	connections	
		bandwidth:0Mbps-24Mbps	 Connection 	
			bandwidth:0Mbps-48Mbp	
			S	
	Video Output	1-channel VGA output,		
		1-channel HDMI output (of the same video source),		
		HDMI/ VGA video output at the same time.		
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	1-channel RCA port.		
	Coaxial Audio Input	N/A		
	Audio Output	1-channel RCA port.		
	Bidirectional Talk	Reuse the audio input/output port of the 1st channel.		
	Input			
Record	Record Mode	Schedule record/manual record/MD re	ecord/Alarm record	
	Playback Mode	Instant playback, normal playback, event playback, mark playback,		
		smart playback		
	Backup Mode	HDD, burner, USB device, network ba	ackup	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does not support eSATA	A port	
	One HDD Space	6T		
Communication	Network	1 RJ45 port, 100Mbps Ethernet port		
Port	Communication	RS485 port		
	USB	2 USB2.0 ports(at the rear panel)		
Others	Power	DC12V	1	
	Power Consumption (No HDD)	≤7W	≤8W	
	Working	-10℃−+55℃		

Parameters	XVR5104C	XVR5108C
Temperature		
Working Humidity	10%~90%	
Dimensions	SMART 1U case, 270mm (W) x205mm (D) x41mm (H)	
Weight (No HDD)	≤0.5KG	≪0.55KG
Installation Mode	Desk	

1.3.57 XVR7104C Series

	Parameters	XVR7104C
System	Main Processor	Industrial embedded micro controller
	OS	Embedded LINUX
Video	Video Encode	H.264
Parameters	Standard	
	Encode	1080P/720P/960H/D1/HD1/2CIF/CIF
	Resolution	
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s
	Rate	
	Video Bit Rate	32Kbps-6144Kbps
	Bit Stream Type	Video stream/composite stream
	Dual-Stream	Support
Audio	Encode	G.711A/G.711U/PCM
Parameters	Standard	
	Audio Sampling	8KHz, 16Bit
	Rate	
	Audio Bit Rate	64Kbps
Video Port	Analog Video	4-ch BNC port(CVBS/CVI/AHD/other analog HD video
	Input	self-adaptive)
	Network Video	• There is no IP channel by default. Max add 2 IP channel
	Input	connections
		 Analog/digital channel switch. Max 6 IP channel connections
		Connection bandwidth:0Mbps-24Mbps
	Video Output	1-channel VGA output,
		1-channel HDMI output (of the same video source),
		HDMI/ VGA video output at the same time.
	Loop Output	N/A
	Matrix Output	N/A
Audio Port	Audio Input	1-channel RCA port.
	Coaxial Audio	N/A
	Input	
	Audio Output	1-channel RCA port.
	Bidirectional	Reuse the audio input/output port of the 1st channel.
	Talk Input	

	Parameters	XVR7104C
Record	Record Mode	Schedule record/manual record/MD record/Alarm record
	Playback Mode	Instant playback, normal playback, event playback, mark playback,
		smart playback
	Backup Mode	HDD, burner, USB device, network backup
Alarm	Alarm Input	N/A
	Alarm Output	N/A
HDD	HDD Port	1 SATA port, does not support eSATA port
	One HDD Space	6T
Communication	Network	1 RJ45 port, 100Mbps Ethernet port
Port	Communication	RS485 port
	USB	2 USB2.0 ports(at the rear panel)
Others	Power	DC12V
	Power	≤8W
	Consumption	
	(No HDD)	
	Working	-10℃−+55℃
	Temperature	
	Working	10%~90%
	Humidity	
	Dimensions	SMART 1U case, 270mm (W) x205mm (D) x41mm (H)
	Weight (No	≤0.5KG
	HDD)	
	Installation	Desk
	Mode	

1.3.58 XVR41XXHE Series

	Parameters	XVR4104HE	XVR4108HE	XVR4116HE	
System	Main Processor	Industrial embedded r	nicro controller	·	
	OS	Embedded LINUX			
Video	Video Encode	H.264			
Parameters	Standard				
	Encode	1080N/720P/960H/	1080N@12f/720P@1	5f/960H/D1/HD1/2CIF	
	Resolution	D1/HD1/2CIF/CIF	/CIF		
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32Kbps-4096Kbps			
	Bit Stream Type	Video stream/compos	ite stream		
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz,16Bit			

	Parameters	XVR4104HE	XVR4108HE	XVR4116HE
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video Input	4-ch BNC port (CVBS/CVI/AHD /other analog HD video self-adaptive)	8-ch BNC port(CVBS/CVI/AHD /other analog HD video self-adaptive)	port(CVBS/CVI/A
	Network Video Input	 There is no IP channel by default. Max add 1 IP channel connection. Analog /digital channel switch. Max 5 IP channel connections Connection bandwidth:0Mbp s-20Mbps 	 There is no IP channel by default. Max add 2 IP channel connections Analog /digital channel switch. Max 10 IP channel connections Connection bandwidth:0Mbp s-40Mbps 	 channel by default. Max add 2 IP channel connections Analog
	Video Output	1-channel VGA output, 1-channel HDMI outpu HDMI/ VGA video outp	t (of the same video sou	ırce),
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	4-channel RCA port.	8-channel RCA port.	16-channel RCA port.
	Coaxial Audio Input	N/A		
	Audio Output	1-channel RCA port.		
	Bidirectional Talk Input	Support (Reuse the a	udio port of the 1st chan	nnel)
Record	Record Mode	Schedule record/manu	al record/MD record/Ala	arm record
	Playback Mode	ode Instant playback, normal playback, event playback, mark pla smart playback		back, mark playback,
	Record Playback	Max 4-channel playback	Max 8-channel playback	l Max 16-channel playback
	Backup Mode	HDD, burner, USB dev	ice, network backup	

	Parameters	XVR4104HE	XVR4108HE	XVR4116HE
Alarm	Alarm Input	8-channel input	8-channel input	16-channel input
	Alarm Output	3-channel output		
HDD	HDD Port	1 SATA port, does not	support eSATA port	
	One HDD Space	6Т		
Communication	Network	1 RJ45 port, 100Mbps Ethernet port		
Port	Communication	RS485 port		
	USB	2 USB2.0 ports(One at the front panel and one at the rear panel)		
Others	Power	DC12V		
	Power	≤7W	≪8W	≤10W
	Consumption		<0VV	
	Working	-10°C-+55°C		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimensions	Mini 1U case, 325mm	(W) x245mm (D) x	45mm(H)
	Weight	≤1.1KG	≤1.25KG	≤1.45KG
	Installation	Desk		
	Mode			

1.3.59 XVR51XXH Series

	Parameters	XVR5104H	XVR5108H	XVR5116H	
System	Main Processor	Industrial embedded n	nicro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264			
Parameters	Standard				
	Encode	1080P@15fps/1080N/	720P/960H/D1/HD1/2CIF/	′CIF	
	Resolution				
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32Kbps-6144Kbps			
	Bit Stream Type	Video stream/compos	te stream		
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz, 16Bit			
	Rate				
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	4-ch BNC port	8-ch BNC	16-ch BNC	
	Input	(CVBS/CVI/AHD	port(CVBS/CVI/AHD	port(CVBS/CVI/A	
		/other analog HD	/other analog HD	HD /other analog	
		video self-adaptive)	video self-adaptive)	HD video	

	Parameters	XVR5104H	XVR5108H	XVR5116H
				self-adaptive)
	Network Video Input	 There is no IP channel by default. Max add 2 IP channel connections Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:0Mbp s-24Mbps 	 There is no IP channel by default. Max add 4 IP channel connections Analog /digital channel switch. Max 12 IP channel connections Connection bandwidth:0Mbp s-48Mbps 	 There is no IP channel by default. Max add 8 IP channel connections Analog /digital channel switch. Max 24 IP channel connections Connection bandwidth:0 Mbps-96Mbp s
	Video Output	1-channel VGA output, 1-channel HDMI outpu HDMI/ VGA video outp	t (of the same video sourc	ce),
	Loop Output	N/A		
	Matrix Output	N/A		VGA/HDMI optional
Audio Port	Audio Input	1-channel RCA port.		
	Coaxial Audio Input	N/A		
	Audio Output	1-channel RCA port.		
	Bidirectional Talk Input	Support (Reuse the a	udio port of the 1st channe	el)
Record	Record Mode	Schedule record/manu	al record/MD record/Alarr	n record
	Playback Mode	Instant playback, norm smart playback	al playback, event playba	ack, mark playback,
	Record	Max 4-channel	Max 8-channel	Max 16-channel
	Playback	playback	playback	playback
	Backup Mode	HDD, burner, USB dev	ice, network backup	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does not	t support eSATA port	
	One HDD Space	6T		
Communication Port	Network	1 RJ45 port, 100Mbps	Ethernet port	1 RJ45 port, 1000Mbps Ethernet port

	Parameters	XVR5104H	XVR5108H	XVR5116H	
	Communication	RS485 port			
	USB	2 USB2.0 ports(One a	2 USB2.0 ports(One at the front panel and one		
		at the rear panel)	at the rear panel)		
				port (One	
				USB2.0 port at	
				the front panel	
				and one USB3.0	
				port at the rear	
	_			panel)	
Others	Power	DC12V	T		
	Power	≤7W	≪8W	≤10W	
	Consumption				
	Working	-10°C-+55°C			
	Temperature				
	Working	10%~90%			
	Humidity				
	Dimensions	Mini 1U case, 325mm	ı (W) x245mm (D) x45ı	mm(H)	
	Weight	≤1.1KG	≤1.25KG	≤1.45KG	
	Installation	Desk			
	Mode				

1.3.60 XVR51XXHE Series

	Parameters	XVR5104HE	XVR5108HE	XVR5116HE	
System	Main Processor	Industrial embedded m	icro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264	H.264		
Parameters	Standard				
	Encode	1080P@15f/720P/960H	H/D1/HD1/2CIF/CIF		
	Resolution				
	Video Frame	PAL:1~25f/s; NTSC:	1~30f/s		
	Rate				
	Video Bit Rate	32Kbps-6144Kbps			
	Bit Stream Type	Video stream/composit	e stream		
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz,16Bit			
	Rate				
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	4-ch BNC port	8-ch BNC	16-ch BNC	
	Input	(CVBS/CVI/AHD	port(CVBS/CVI/AHD	port(CVBS/CVI/A	
		/other analog HD	/other analog HD	HD /other analog	

	Parameters	XVR5104HE	XVR5108HE	XVR5116HE
		video self-adaptive)	video self-adaptive)	HD video
				self-adaptive)
	Network Video	• There is no IP	• There is no IP	• There is no IP
	Input	channel by	channel by	channel by
		default. Max add	default. Max add	default. Max
		2 IP channel	4 IP channel	add 8 IP
		connections	connections	channel
		Analog	Analog	connections
		/digital channel	/digital channel	Analog
		switch. Max 6 IP	switch. Max 12 IP	/digital
		channel connections	channel connections	channel switch. Max
		 Connections 	 Connections 	24 IP channel
		bandwidth:0Mbp	 bandwidth:0Mbp 	connections
		s-24Mbps	s-48Mbps	 Connection
		0 Z 111690	e lomope	bandwidth:0
				Mbps-96Mbp
				S
	Video Output	1-channel VGA output,		
		1-channel HDMI outpu	t (of the same video sour	ce),
		HDMI/ VGA video outp	out at the same time.	
	Loop Output	N/A		
	Matrix Output	N/A		VGA/HDMI
			1	optional
Audio Port	Audio Input	4-channel RCA port.	8-channel RCA port.	16-channel RCA
				port.
	Coaxial Audio	N/A		
	Input	· · · ·		
	Audio Output	1-channel RCA port.		
	Bidirectional	Support (Reuse the a	udio port of the 1st chann	el)
	Talk Input			
Record	Record Mode	Schedule record/manu	al record/MD record/Alarr	m record
	Playback Mode	Instant playback, norm	nal playback, event playba	ack, mark playback,
		smart playback		
	Record	Max 4-channel	Max 8-channel	Max 16-channel
	Playback	playback	playback	playback
	Backup Mode	HDD, burner, USB dev		
Alarm	Alarm Input	8-channel input	8-channel input	16-channel input
	Alarm Output	3-channel output		
HDD	HDD Port	1 SATA port, does no	t support eSATA port	
	One HDD Space	6T		

	Parameters	XVR5104HE	XVR5108HE	XVR5116HE
Communication Port	Network	1 RJ45 port, 100Mbps Ethernet port		1 RJ45 port, 1000Mbps Ethernet port
	Communication	RS485 port		
	USB	2 USB2.0 ports(One at the front panel and one at the rear panel)		1 USB2.0 port and 1 USB3.0 port (One USB2.0 port at the front panel and one USB3.0 port at the rear panel)
Others	Power	DC12V		
	Power Consumption	≤7W	≪8W	≤10W
	Working Temperature	-10°C-+55°C		
	Working Humidity	10%~90%		
	Dimensions	Mini 1U case, 325mm	n (W) ×245mm (D) ×45	mm (H)
	Weight	≤1.1KG	≤1.25KG	≤1.45KG
	Installation Mode	Desk		

1.3.61 XVR71XXHE Series

	Parameters	XVR7104HE	XVR7108HE	XVR7116HE	
System	Main Processor	Industrial embedded i	micro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264			
Parameters	Standard				
	Encode	1080P/720P/960H/D1	/HD1/2CIF/CIF		
	Resolution				
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32Kbps-6144Kbps			
	Bit Stream Type	Video stream/compos	site stream		
	Dual-Stream	Support			
Audio	Encode	G.711A/G.711U/PCM			
Parameters	Standard				
	Audio Sampling	8KHz, 16Bit			
	Rate				
	Audio Bit Rate	64Kbps			

	Parameters	XVR7104HE	XVR7108HE X	VR7116HE
Video Port	Analog Video Input	4-ch BNC port (CVBS/CVI/AHD /other analog HD video self-adaptive)	8-ch BNC port(CVBS/CVI/AHD /other analog HD video self-adaptive)	HD video self-adaptive)
	Network Video Input	 There is no IP channel by default. Max add 2 IP channel connection Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:0Mbp s-24Mbps 	 There is no IP channel by default. Max add 4 IP channel connections Analog /digital channel switch. Max 12 IP channel connections Connection bandwidth:0Mbp s-48Mbps 	default. Max add 8 IP channel connections • Analog
	Video Output	HDMI/ VGA video outp	t (of the same video sou	rce),
	Loop Output Matrix Output	N/A N/A	VGA/HDMI optional	
Audio Port	Audio Input	4-channel RCA port.	8-channel RCA port.	16-channel RCA port.
	Coaxial Audio Input	N/A		
	Audio Output	1-channel RCA port.		
	Bidirectional Talk Input	Support (Reuse the at	udio port of the 1st chan	nel)
Record	Record Mode	Schedule record/manua	al record/MD record/Ala	rm record
	Playback Mode	Instant playback, norm smart playback	al playback, event playb	oack, mark playback,
	Record	Max 4-channel	Max 8-channel	Max 16-channel
	Playback	playback	playback	playback
	Backup Mode	HDD, burner, USB dev	ice, network backup	1
Alarm	Alarm Input	8-channel input	8-channel input	16-channel input
HDD	Alarm Output HDD Port	3-channel output 1 SATA port, does not		

	Parameters	XVR7104HE	XVR7108HE	XVR7116HE
	One HDD Space	6T		
Communication	Network	1 RJ45 port,	1 RJ45 port, 1000MI	ops Ethernet port
Port		100Mbps Ethernet		
		port		
	Communication	RS485 port		
	USB	2 USB2.0 ports(One	1 USB2.0 port and	d 1 USB3.0 port (One
		at the front panel and	USB2.0 port at the	e front panel and one
		one at the rear panel)	USB3.0 port at the rear panel)	
Others	Power	DC12V		
	Power		≤10W	≤15W
	Consumption	≪8W		
	Working	-10°C-+55°C		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimensions	Mini 1U case, 325mn	m(W)x245mm(D)x45mm(H)	
	Weight	≤1.1KG	≤1.25KG	≤1.45KG
	Installation	Desk		
	Mode			

1.3.62 XVR71XXH Series

	Parameters	XVR7104H	XVR7108H	XVR7116H
System	Main Processor	Industrial embedded r	nicro controller	
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard			
	Encode	1080P/720P/960H/D1	/HD1/2CIF/CIF	
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC:	1~30f/s	
	Rate			
	Video Bit Rate	32Kbps-6144Kbps		
	Bit Stream Type	Video stream/compos	ite stream	
	Dual-Stream	Support		
Audio	Encode	G.711A/G.711U/PCM		
Parameters	Standard			
	Audio Sampling	8KHz,16Bit		
	Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-ch BNC por	t 8-ch BN	IC 16-ch BNC
	Input	(CVBS/CVI/AHD	port(CVBS/CVI/AHE	D port(CVBS/CVI/A
		/other analog HD	5	ID HD /other analog
		video self-adaptive)	video self-adaptive)	HD video

	Parameters	XVR7104H	XVR7108H X	KVR7116H
				self-adaptive)
	Network Video Input	 There is no IP channel by default. Max add 2 IP channel connections Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:0Mbp s-24Mbps 	 There is no IP channel by default. Max add 4 IP channel connections Analog /digital channel switch. Max 12IP channel connections Connection bandwidth:0Mbp s-48Mbps 	 channel by default. Max add 8 IP channel connections Analog
	Video Output	1-channel VGA output 1-channel HDMI outpu HDMI/ VGA video outp	t (of the same video sou	
	Loop Output	N/A		
	Matrix Output	N/A	VGA/HDMI optional	
Audio Port	Audio Input Coaxial Audio Input	1-channel RCA port. N/A		
	Audio Output	1-channel RCA port.		
	Bidirectional Talk Input	Support (Reuse the a	udio port of the 1st chan	nnel)
Record	Record Mode	Schedule record/manu	al record/MD record/Ala	arm record
	Playback Mode	Instant playback, norm smart playback	nal playback, event playl	back, mark playback,
	Record	Max 4-channel	Max 8-channel	I Max 16-channel
	Playback	playback	playback	playback
	Backup Mode	HDD, burner, USB dev	vice, network backup	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does not	t support eSATA port	
	One HDD Space	6T		
Communication Port	Network	1 RJ45 port, 100Mbps Ethernet port	1 RJ45 port, 1000Mbp	s Ethernet port
	Communication	RS485 port		

	Parameters	XVR7104H	XVR7108H	XVR7116H
	USB	2 USB2.0 ports(One	1 USB2.0 port and	1 USB3.0 port (One
		at the front panel and	USB2.0 port at the	front panel and one
		one at the rear panel)	USB3.0 port at the r	ear panel)
Others	Power	DC12V		
	Power	≪8W	≤10W	≪15W
	Consumption	~000		< 1500
	Working	-10°C-+55°C		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimensions	Mini 1U case, 325mm	(W) ×245mm (D)	×45mm(H)
	Weight	≤1.1KG	≤1.25KG	≤1.45KG
	Installation	Desk		
	Mode			

1.3.63 XVR21XXHS Series

	Parameters	XVR2104HS XVR2108HS XVR2116HS
System	Main Processor	Industrial embedded micro controller
	OS	Embedded LINUX
Video	Video Encode	H.264
Parameters	Standard	
	Encode	1080N@12f/720P@12f/960H/D1/HD1/2CIF/CIF
	Resolution	
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s
	Rate	
	Video Bit Rate	32Kbps-4096Kbps
	Bit Stream Type	Video stream
	Dual-Stream	Support
Audio	Encode	N/A
Parameters	Standard	
	Audio Sampling	N/A
	Rate	
	Audio Bit Rate	N/A
Video Port	Analog Video	4-ch BNC 8-ch BNC 16-ch BNC
	Input	port(CVBS/CVI/AHD port(CVBS/CVI/AHD port(CVBS/CVI/AHD
		/other analog HD /other analog HD /other analog HD
		video self-adaptive) video self-adaptive) video self-adaptive)
	Network Video	There is no IP There is no IP There is no IP
	Input	channel by channel by channel by
		default. Max default. Max default. Max
		add 0 IP add 0 IP add 0 IP
		channel channel channel

	Parameters	XVR2104HS	XVR2108HS	XVR2116HS
	Video Output	connection Analog /digital channel switch. Max 2 IP channel connections Connection bandwidth:0Mb ps-8Mbps 1-channel VGA output 1-channel HDMI output HDMI/ VGA video output	ut (of the same video so	 connection Analog /digital channel switch. Max 2 IP channel connections Connection bandwidth:0Mb ps-8Mbps
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	Audio Input	N/A		
	Coaxial Audio Input	N/A		
	Audio Output	N/A		
	Bidirectional Talk Input	N/A		
Record	Record Mode	Schedule record/man	ual record/MD record/A	larm record
	Playback Mode	Instant playback, norn smart playback	nal playback, event pla	yback, mark playback,
	Backup Mode	HDD, burner, USB de	vice, network backup	
Alarm	Alarm Input	N/A	-	
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does no	t support eSATA port	
	One HDD Space	6T		
Communication	Network	1 RJ45 port, 100Mbps	Ethernet port	
Port	Communication	RS485 port		
	USB	2 USB2.0 ports(One a	it the front panel and or	ne at the rear panel)
Others	Power	DC12V		
	Power	≤10W		
	Consumption			
	(No HDD)			
	Working	-10℃−+55℃		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimensions		0mm (W) ×220mm (I	
	Weight (No	≤1.25KG	≤1.35KG	≤1.45KG

Parameters	XVR2104HS	XVR2108HS	XVR2116HS
HDD)			
Installation	Desk		
Mode			

1.3.64 XVR41XXHS Series

1.3.04 AVK41A	Parameters	XVR4104HS	XVR4108HS	XVR4116HS
System	Main Processor	Industrial embedded m	icro controller	
	OS	Embedded LINUX		
Video	Video Encode	H.264		
Parameters	Standard			
	Encode	1080N/720P/960H/D1	1080N@12f/720P@15f	/960H/D1/HD1/2CI
	Resolution	/HD1/2CIF/CIF/	F/CIF/	
	Video Frame Rate	PAL:1~25f/s; NTSC:	1~30f/s	
	Video Bit Rate	32Kbps-4096Kbps		
	Bit Stream Type	Video stream/composit	e stream	
	Dual-Stream	Support		
Audio Parameters	Encode Standard	G.711A/G.711U/PCM		
	Audio Sampling Rate	8KHz,16Bit		
	Audio Bit Rate	64Kbps		
Video Port	Analog Video Input	4-ch BNC port (CVBS/CVI/AHD /other analog HD video self-adaptive)	8-ch BNC port(CVBS/CVI/AHD /other analog HD video self-adaptive)	16-chBNCport(CVBS/CVI/AHD /other analogHDvideoself-adaptive)
	Network Video Input	 There is no IP channel by default. Max add 1 IP channel connection Analog /digital channel switch. Max 5 IP channel connections Connection bandwidth:0Mbp s-20Mbps 	 There is no IP channel by default. Max add 2 IP channel connections. Analog /digital channel switch. Max 10 IP channel connections Connection bandwidth:0Mbp s-40Mbps 	 There is no IP channel by default. Max add 2 IP channel connections Analog /digital channel switch. Max 18 IP channel connections Connection bandwidth:0 Mbps-56Mbp

$\begin{tabular}{ c c c c c } \hline Playback & playback & playback & playback \\ \hline Backup Mode & HDD, burner, USB device, network backup \\ \hline Backup Mode & HDD, burner, USB device, network backup \\ \hline Alarm Input & N/A \\ \hline Alarm Output & N/A \\ \hline HDD & HDD Port & 1 SATA port, does not support eSATA port \\ \hline One HDD Space & 6T \\ \hline Communication & Network & 1 RJ45 port, 100Mbps Ethernet port \\ \hline Communication & RS485 port \\ \hline USB & 2 USB2.0 ports(One at the front panel and one at the rear panel \\ \hline Others & Power & DC12V \\ \hline Power & Consumption & \leqslant 7W & \leqslant 8W & \leqslant 10W \\ \hline Working & -10°C-+55°C \\ \hline \end{tabular}$		Parameters	XVR4104HS	XVR4108HS	XVR4116HS	
Instant Playback Instant playback Instant playback Alarm Alarm Alarm N/A Alarm Alarm N/A N/A Instant playback Playback Playback Playback Playback Playback playback playback Alarm Alarm Input N/A N/A HDD HDD Port 1 SATA port, does not support eSATA port Playback Power Communication RS485 port USB 2 USB2.0 ports(One at the front panel and one at the rear panel Others Power Consumption <7W					S	
HDMI/ VGA video output at the same time. Loop Output N/A Matrix Output N/A Audio Port Audio Input 1-channel RCA port. Coaxial Audio N/A Audio Opot Audio Output 1-channel RCA port. Coaxial Audio N/A Audio Output 1-channel RCA port. Imput Audio Output 1-channel RCA port. Imput Bidirectional Reuse the audio input/output port. Imput Talk Input Record Mode Schedule record/manual record/MD record/Alarm record Playback Mode Instant playback, normal playback, event playback, mark playt smart playback playback Record Max 4-channel Max 8-channel Playback playback playback playback playback Backup Mode HDD, burner, USB device, network backup Alarm Alarm Output N/A Alarm Alarm Output N/A Alarm Output N/A HDD HDD Port 1 SATA port, does not support eSATA port One HDD Space		Video Output	1-channel VGA output	5		
$\begin{tabular}{ c c c c c c c } \hline Loop Output & N/A & & & & & & & & & & & & & & & & & & &$			1-channel HDMI outpu	1-channel HDMI output (of the same video source),		
Matrix OutputN/AAudio PortAudio Input1-channel RCA port.CoaxialAudioN/AInputInputAudio Output1-channel RCA port.BidirectionalReuse the audio input/output port.Talk InputTalk InputRecordRecord ModeSchedule record/manual record/MD record/Alarm recordPlayback ModeInstant playback, normal playback, event playback, mark playbackRecordMax44-channelPlaybackplaybackPlaybackplaybackBackup ModeHDD, burner, USB device, network backupAlarmAlarm InputAlarm OutputN/AHDDHDD Port1SATA port, does not support eSATA portOne HDD Space6TCommunicationRS485 portPortUSB2USB2.0 ports(One at the front panel and one at the rear panelOthersPowerConsumption<7W			HDMI/ VGA video outp	out at the same time.		
Audio Port Audio Input 1-channel RCA port. Coaxial Audio N/A Input Audio Output 1-channel RCA port. Bidirectional Reuse the audio input/output port. Talk Input Record Mode Schedule record/manual record/MD record/Alarm record Playback Mode Instant playback, normal playback, event playback, mark playb Record Max 4-channel Playback Instant playback Max Record Max 4-channel playback playback playback Backup Mode HDD, burner, USB device, network backup Alarm Alarm Output N/A HDD HDD Port 1 SATA port, does not support eSATA port One HDD Space 6T Communication RS485 port USB 2 USB2.0 ports(One at the front panel and one at the rear panel Others Power Consumption (No HDD) <		Loop Output	N/A			
Coaxial Audio N/A Input Audio Output 1-channel RCA port. Bidirectional Reuse the audio input/output port. Talk Input Talk Input Record Record Mode Schedule record/manual record/MD record/Alarm record Playback Mode Instant playback, normal playback, event playback, mark playt smart playback Record Max 4-channel Max 8-channel Max 16-cha Playback playback playback playback playback playback Alarm Alarm Input N/A Alarm Output N/A HDD HDD Port 1 SATA port, does not support eSATA port One HDD Space 6T Communication RS485 port USB 2 USB2.0 ports(One at the front panel and one at the rear panel Others Others Power Consumption <7W		Matrix Output	N/A			
$\begin{tabular}{ c c c c c } \hline Input & & & & & & & & & & & & & & & & & & &$	Audio Port	Audio Input	1-channel RCA port.			
Audio Output1-channel RCA port.Bidirectional Talk InputReuse the audio input/output port.RecordRecord ModeSchedule record/manual record/MD record/Alarm recordPlayback ModeInstant playback, normal playback, event playback, mark playbackRecordMax4-channelPlaybackRecordMaxPlaybackplaybackBackup ModeHDD, burner, USB device, network backupAlarmAlarm InputN/AAlarm OutputN/AHDDHDD Port1 SATA port, does not support eSATA portOne HDD Space6TCommunicationRS485 portVSB2 USB2.0 ports(One at the front panel and one at the rear panelOthersPowerPowerConsumption(No HDD) $<7W$ Working $-10^{\circ}C - +55^{\circ}C$		Coaxial Audio	N/A			
Bidirectional Talk Input Reuse the audio input/output port. Record Record Mode Schedule record/manual record/MD record/Alarm record Playback Mode Instant playback, normal playback, event playback, mark playback Record Max 4-channel Playback Record Max 4-channel Playback playback playback playback Alarm Alarm Input N/A N/A HDD HDD Port 1 SATA port, does not support eSATA port One HDD Space 6T Communication Network 1 RJ45 port, 100Mbps Ethernet port Port USB 2 USB2.0 ports(One at the front panel and one at the rear panel Others Power Consumption (No HDD) Working -10°C-+55°C		Input				
Talk Input Talk Input Record Record Mode Schedule record/manual record/MD record/Alarm record Playback Mode Instant playback, normal playback, event playback, mark playback Record Max 4-channel Max 8-channel Max 16-chaplayback Playback Playback playback playback playback playback playback Alarm Alarm Input N/A Alarm Output N/A HDD HDD Port 1 SATA port, does not support eSATA port One HDD Space 6T Communication Network 1 RJ45 port, 100Mbps Ethernet port 00e the rear panel Others Power DC12V Power \$ Working -10°C-+55°C \$ \$ \$		Audio Output	1-channel RCA port.			
RecordRecord ModeSchedule record/manual record/MD record/Alarm recordPlayback ModeInstant playback, normal playback, event playback, mark playbackPlaybackInstant playback, normal playback, event playback, mark playbackRecordMax4-channelPlaybackPlaybackPlaybackplaybackPlaybackplaybackPlaybackplaybackPlaybackplaybackPlaybackplaybackBackup ModeHDD, burner, USB device, network backupAlarmAlarm InputAlarm OutputN/AHDDHDD Port1 SATA port, does not support eSATA portOne HDD Space6TCommunicationRS485 portPortCommunicationVBB2 USB2.0 ports(One at the front panel and one at the rear panelOthersPowerConsumption $\leqslant7W$ (No HDD) $\leqslant0$ Working $-10°C - +55°C$		Bidirectional	Reuse the audio input	/output port.		
$\begin{tabular}{ c c c c c } \hline Playback Mode & Instant playback, normal playback, event playback, mark playback & smart playback & smart playback & mark playback & playback &$		Talk Input				
$\begin{tabular}{ c c c c c c } \hline Smart playback & Smart playback & Smart playback & Record & Max & 4-channel & Max & 8-channel & Max & 16-cha & playback & playback & playback & playback & playback & Playback & Smart playback & Record & Playback & Playback & Playback & Playback & Smart playbac$	Record	Record Mode	Schedule record/manu	al record/MD record/Alar	m record	
$\begin{tabular}{ c c c c c c c } \hline Record & Max & 4-channel & Max & 8-channel & Max & 16-channel \\ \hline Playback & playback & playback & playback & \\ \hline Playback & Backup Mode & HDD, burner, USB device, network backup & \\ \hline Backup Mode & HDD, burner, USB device, network backup & \\ \hline Alarm & Alarm Input & N/A & & \\ \hline Alarm Output & N/A & & & \\ \hline HDD & HDD Port & 1 SATA port, does not support eSATA port & \\ \hline One HDD Space & 6T & & \\ \hline Communication & Network & 1 RJ45 port, 100Mbps Ethernet port & \\ \hline Communication & RS485 port & & \\ \hline USB & 2 USB2.0 ports(One at the front panel and one at the rear panel & \\ \hline Others & Power & DC12V & & \\ \hline Power & & \\ \hline Consumption & \leqslant 7W & & \leqslant 8W & \leqslant 10W & \\ \hline Working & -10°C-+55°C & & \\ \hline \end{tabular}$		Playback Mode	Instant playback, norm	nal playback, event playba	ack, mark playback,	
$\begin{tabular}{ c c c c c c } \hline Playback & playback & playback & playback & playback & \\ \hline Backup Mode & HDD, burner, USB device, network backup & \\ \hline Alarm & Alarm Input & N/A & & \\ \hline Alarm Output & N/A & & & \\ \hline HDD & HDD Port & 1 SATA port, does not support eSATA port & \\ \hline One HDD Space & 6T & & \\ \hline Communication & Network & 1 RJ45 port, 100Mbps Ethernet port & \\ \hline Communication & RS485 port & & \\ \hline USB & 2 USB2.0 ports(One at the front panel and one at the rear panel & \\ \hline Others & Power & \\ \hline Consumption & \leqslant 7W & \leqslant 8W & \leqslant 10W & \\ \hline Working & -10^\circ\text{C}-+55^\circ\text{C} & & \\ \hline \end{tabular}$			smart playback			
Backup ModeHDD, burner, USB device, network backupAlarmAlarm InputN/AAlarm OutputN/AHDDHDD Port1 SATA port, does not support eSATA portOne HDD Space6TCommunicationNetwork1 RJ45 port, 100Mbps Ethernet portPortCommunicationRS485 portUSB2 USB2.0 ports(One at the front panel and one at the rear panelOthersPowerDC12VPowerConsumption(No HDD) \leq 7WWorking $-10^{\circ}C-+55^{\circ}C$		Record	Max 4-channel	Max 8-channel	Max 16-channel	
AlarmAlarm InputN/AAlarm OutputN/AHDDHDD Port1 SATA port, does not support eSATA portOne HDD Space6TCommunicationNetwork1 RJ45 port, 100Mbps Ethernet portPortCommunicationRS485 portUSB2 USB2.0 ports(One at the front panel and one at the rear panelOthersPowerDC12VPowerConsumption (No HDD) $\leqslant 7W$ Working-10°C-+55°C		Playback	playback	playback	playback	
Alarm OutputN/AHDDHDD Port1 SATA port, does not support eSATA portOne HDD Space6TCommunicationNetwork1 RJ45 port, 100Mbps Ethernet portPortCommunicationRS485 portUSB2 USB2.0 ports(One at the front panel and one at the rear panelOthersPowerDC12VPowerConsumption(No HDD) $\leqslant 7W$ Working $-10^{\circ}C - +55^{\circ}C$		Backup Mode	HDD, burner, USB dev	vice, network backup		
HDDHDD Port1 SATA port, does not support eSATA portOne HDD Space6TCommunicationNetwork1 RJ45 port, 100Mbps Ethernet portPortCommunicationRS485 portUSB2 USB2.0 ports(One at the front panel and one at the rear panelOthersPowerDC12VPowerConsumption $\leqslant 7W$ (No HDD) $\lor 0^{\circ}C - +55^{\circ}C$	Alarm	Alarm Input	N/A			
One HDD Space6TCommunicationNetwork1 RJ45 port, 100Mbps Ethernet portPortCommunicationRS485 portUSB2 USB2.0 ports(One at the front panel and one at the rear panelOthersPowerDC12VPowerConsumption $\leqslant 7W$ (No HDD) $\lor 0^\circ C - +55^\circ C$		Alarm Output	N/A			
Communication PortNetwork1 RJ45 port, 100Mbps Ethernet portCommunicationRS485 portUSB2 USB2.0 ports(One at the front panel and one at the rear panelOthersPowerPowerDC12VPowerConsumption (No HDD)Working-10°C-+55°C	HDD	HDD Port	1 SATA port, does no	t support eSATA port		
PortCommunicationRS485 portUSB2 USB2.0 ports(One at the front panel and one at the rear panelOthersPowerDC12VPowerConsumption $\leq 7W$ $\leq 8W$ (No HDD)Working $-10^{\circ}C - +55^{\circ}C$		One HDD Space	6T			
USB 2 USB2.0 ports(One at the front panel and one at the rear panel Others Power Dower DC12V Power Consumption <7W	Communication	Network	1 RJ45 port, 100Mbps	Ethernet port		
OthersPowerDC12VPowerPowerConsumption (No HDD)Working $-10^{\circ}C - +55^{\circ}C$	Port	Communication	RS485 port			
Power Consumption (No HDD) $\leq 7W$ $\leq 8W$ $\leq 10W$ Working $-10^{\circ}C - +55^{\circ}C$		USB	2 USB2.0 ports(One a	t the front panel and one	at the rear panel)	
$ \begin{array}{ c c c c } Consumption & \leqslant 7W & \leqslant 8W & \leqslant 10W \\ \hline (No \ HDD) & & & & & & & \\ \hline Working & -10^\circ C - +55^\circ C & & & & \\ \end{array} $	Others	Power	DC12V			
(No HDD)Working-10°C-+55°C		Power				
Working $-10^{\circ}\text{C} - +55^{\circ}\text{C}$		Consumption	≤7W	≪8W	≤10W	
		(No HDD)				
		Working	-10°C-+55°C	•		
Temperature		Temperature				
Working 10%~90%		Working	10%~90%			
Humidity		Humidity				
Dimensions Compact 1U case, 260mm (W) x220mm (D) x44mm (H)		Dimensions	Compact 1U case, 260	0mm (W) x220mm (D)	x 44mm (H)	
Weight HDD)(No ≤0.85KG≤0.95KG≤1.05KG		•	≪0.85KG	≪0.95KG	≤1.05KG	
Installation Desk		Installation	Desk	<u>.</u>		
Mode						

1.3.65 XVR51XXHS Series

Parameters XVR5104HS	XVR5108HS	XVR5116HS
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	Parameters	XVR5104HS	XVR5108HS	XVR5116HS
System	Main Processor	Industrial embedded m	nicro controller	
	OS	Embedded LINUX		
Video Parameters	Video Encode Standard	H.264		
	Encode Resolution	-	0P/960H/D1/HD1/2CIF/	CIF
	Video Frame Rate	PAL:1~25f/s; NTSC:	1~30f/s	
	Video Bit Rate	32Kbps-6144Kbps		
	Bit Stream Type	Video stream/composi	te stream	
	Dual-Stream	Support		
Audio Parameters	Encode Standard	G.711A/G.711U/PCM		
	Audio Sampling Rate	8KHz,16Bit		
	Audio Bit Rate	64Kbps		
Video Port	Analog Video Input	4-ch BNC port (CVBS/CVI/AHD /other analog HD video self-adaptive)	8-ch BNC port(CVBS/CVI/AHD /other analog HD video self-adaptive)	port(CVBS/CVI/A
	Network Video Input	 There is no IP channel by default. Max add 2 IP channel connections Analog /digital channel switch. Max 6 IP channel connections. Connection bandwidth:0Mbp s-24Mbps 	 There is no IP channel by default. Max add 4 IP channel connection Analog /digital channel switch. Max 12 IP channel connections. Connection bandwidth:0Mbps -48Mbps 	 channel by default.Max add 8 IP channel connections Analog /digital channel switch. Max 24 IP channel
	Video Output	HDMI/ VGA video outp	t (of the same video sou	ırce),
	Loop Output	N/A	T	
	Matrix Output	N/A		VGA/HDMI optional

	Parameters	XVR5104HS	XVR5108HS	XVR5116HS
Audio Port	Audio Input	1-channel RCA port.		
	Coaxial Audio	N/A		
	Input			
	Audio Output	1-channel RCA port.		
	Bidirectional	Reuse the audio input	/output port of the 1 st cha	nnel.
	Talk Input			
Record	Record Mode	Schedule record/manu	ual record/MD record/Alar	m record
	Playback Mode	Instant playback, norn	nal playback, event playb	ack, mark playback,
		smart playback		
	Record	Max 4-channel	Max 8-channel	Max 16-channel
	Playback	playback	playback	playback
	Backup Mode	HDD, burner, USB dev	vice, network backup	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port, does no	t support eSATA port	
	One HDD Space	6T		
Communication	Network	1 RJ45 port, 100Mbps Ethernet port 1		1 RJ45 port,
Port		1000Mbps		
				Ethernet port
	Communication	RS485 port		
	USB	2 USB2.0 ports(One at the front panel and 1 USB2.0 port a		1 USB2.0 port and
		one at the rear panel)		1 USB3.0 port
				(One USB2.0 port
				at the front panel
				and one USB3.0
				port at the rear
				panel)
Others	Power	DC12V		
	Power			
	Consumption	≪7W	≪8W	≤10W
	(No HDD)			
	Working	-10°C-+55°C		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimensions	Compact 1U case, 260	0mm (W) ×220mm (D)	x44mm (H)
	Weight (No HDD)	≪0.85KG	≪0.95KG	≤1.05KG
	Installation Mode	Desk		

1.3.66 XVR7104HS Series

	Parameters	XVR7104HS
System	Main Processor	Industrial embedded micro controller
	OS	Embedded LINUX
Video	Video Encode	H.264
Parameters	Standard	
	Encode	1080P/720P/960H/D1/HD1/2CIF/CIF
	Resolution	
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s
	Rate	
	Video Bit Rate	32Kbps-6144Kbps
	Bit Stream Type	Video stream/composite stream
	Dual-Stream	Support
Audio	Encode	G.711A/G.711U/PCM
Parameters	Standard	
	Audio Sampling	8KHz, 16Bit
	Rate	
	Audio Bit Rate	64Kbps
Video Port	Analog Video	4-ch BNC port(CVBS/CVI/AHD /other analog HD video
	Input	self-adaptive)
	Network Video	• There is no IP channel by default. Max add 2 IP channel
	Input	connections.
		Analog/digital channel switch. Max 6 IP channel connections
		Connection bandwidth: 0Mbps-24Mbps.
	Video Output	1-channel VGA output,
		1-channel HDMI output (of the same video source),
		HDMI/ VGA video output at the same time.
	Loop Output	N/A
	Matrix Output	N/A
Audio Port	Audio Input	1-channel RCA port.
	Coaxial Audio	N/A
	Input	
	Audio Output	1-channel RCA port.
	Bidirectional	Reuse the audio input/output port of the 1 st channel.
	Talk Input	
Record	Record Mode	Schedule record/manual record/MD record/Alarm record
	Playback Mode	Instant playback, normal playback, event playback, mark playback,
		smart playback
	Backup Mode	HDD, burner, USB device, network backup
Alarm	Alarm Input	N/A
	Alarm Output	N/A
HDD	HDD Port	1 SATA port, does not support eSATA port
	One HDD Space	6Т

	Parameters	XVR7104HS
Communication	Network	1 RJ45 port, 100Mbps Ethernet port
Port	Communication	RS485 port
	USB	2 USB2.0 ports(One at the front panel and one at the rear panel)
Others	Power	DC12V
	Power	≤8W
	Consumption	
	(No HDD)	
	Working	-10℃−+55℃
	Temperature	
	Working	10%~90%
	Humidity	
	Dimensions	Compact 1U case, 260mm (W) x220mm (D) x44mm (H)
	Weight (No	0.85KG
	HDD)	
	Installation	Desk
	Mode	

1.3.67 XVR42XXA Series

			1445 (000 A	NUE 40404
Model	Parameters	XVR4204A XVR4208A XVR4216A		
System	Main Processor	High-performance industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	1080N/720P/	1080N@12f/720P@15	f/960H/D1/HD1/2
	Resolution	960H/D1/HD1/	CIF/CIF	
		2CIF/CIF/		
	Video Frame	PAL:1~25f/s; NTSC: 1		
	Rate			
	Video Bit Rate	32Kbps \sim 4096Kbps		
	Bit Stream	Video stream/composite	stream	
	Туре			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio	8KHz,16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps		

Model	Parameters	XVR4204A	XVR4208A	XVR4216A
Video Port	Analog Video Input Network Video	 4-ch BNC port (CVBS/CVI/AHD /other analog HD video self-adaptive) ● There is no IP 	 8-ch BNC port(CVBS/CVI/AHD /other analog HD video self-adaptive) There is no IP 	16-ch BNC port(CVBS/CVI /AHD /other analog HD video self-adaptive) ● There is
	Input	channel by default. Max add 1 IP channel connection • Analog /digital channel switch. Max 5 IP channel connections • Connection bandwidth:0Mbps- 20Mbps	channel by default. Max add 2 IP channel connections Analog /digital channel switch. Max 10 IP channel connections Connection bandwidth:0Mbps- 40Mbps	no IP channel by default. Max add 2 IP channel connectio ns Analog /digital channel switch. Max 18 IP channel connectio ns Connectio ns
	Video Output	1-ch VGA output, 1-ch HDMI output,		
		•	at the same time (VGA/H	DMI of the same
	Loop Output	N/A		
	Matrix Output	N/A		
Audio Port	External Audio Input	4-ch, RCA port,		
	Coaxial Audio Input	N/A		
	Audio Output	1-ch RCA port		
	Bidirectional Talk Input	Support (Reuse the auc	lio port of the 1 st channel)	
Record	Record Mode	Auto record, manual reco	ord, motion detect record,	alarm record

Model	Parameters	XVR4204A	XVR4208A	XVR4216A	
	Playback Mode	Instant playback, normal	playback, event playback	, mark playback,	
		smart playback	smart playback		
	Record	Max 4-ch playback	Max 8-ch playback	Max 16-ch	
	Playback			playback	
	Backup Mode	HDD, burner, flash disk,	network backup.		
Alarm	Alarm Input	8-ch alarm input	8-ch alarm input	16-ch alarm input	
	Alarm Output	3-ch alarm output		mput	
HDD	HDD Port	2 SATA ports. Does not	support eSATA port.		
	Space/HDD	6T			
Communication	Network	1 RJ45 port, 100Mbps Ethernet port			
Port	Communication	RS485 port			
	USB	2 USB2.0 ports(One at the	he front panel and one at t	he rear panel)	
Other	Power	DC12V			
	Power	≤7W	≤8W	≤10W	
	Consumption				
	(No HDD)				
	Working Temperature	-10°C-+55°C			
	Working	10%~90%			
	Humidity				
	Dimension	1U case, 375mm (W) x280mm (D) x50mm (H)			
	Weight	≤1.5KG	≤1.65KG	≤1.8KG	
	(No HDD)				
	Installation	Desk installation			
	Mode				

1.3.68 XVR42XXAN Series

Model	Parameters	XVR4204AN	XVR4208AN	XVR4216AN	
System	Main Processor	High-performance industrial embedded micro controller Embedded LINUX			
	OS				
Video	Video Encode	H.264			
	Standard				
	Encode		1080N@12fps/720P@15fps/960H/D1/HD1		
	Resolution	D1/HD1/2CIF/CIF	2CIF/CIF/		
	Video Frame	PAL:1~25f/s; NTSC:	1~30f/s		
	Rate				
	Video Bit Rate	32Kbps \sim 4096Kbps			
	Bit Stream	Video stream/composite stream			
	Туре				
	Dual-Stream	Support			

	-				
Audio	Encode	G.711A, G.711U, PCM			
	Standard				
	Audio	8KHz,16Bit			
	Sampling Rate	64Kbpc			
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	4-ch BNC 8-ch BNC 16-ch BNC			
	Input	port(CVBS/CVI/AHD port(CVBS/CVI/AHD port(CVBS/CVI/AHD			
		/other analog HD /other analog HD /other analog HD			
	Network Video	 video self-adaptive) video self-adaptive) video self-adaptive) video self-adaptive) video self-adaptive) video self-adaptive) 			
	Input	channelbychannelbychannelbydefault.Maxdefault.Maxdefault.Maxadd1IPadd2IPchannelchannelchannelchannelconnectionconnectionsconnectionsconnections•Analog/digital channel/digital channelswitch.Max5switch.Max 10IDchannelchannelswitch.Max 18			
		IPchannelIPchannelIPchannelconnectionsconnectionsconnectionsconnectionsConnectionConnectionConnectionConnectionbandwidth:0Mbbandwidth:0Mbbandwidth:0Mbps-20Mbpsps-40Mbpsps-56Mbps			
	Video Output	1-ch VGA output,			
		1-ch HDMI output, HDMI/ VGA video output at the same time (VGA/HDMI of the same video source)			
	Loop Output	N/A			
	Matrix Output	N/A			
Audio Port	External	1-ch, RCA port			
	Audio Input				
	Coaxial Audio Input	N/A			
	Audio Output	1-ch RCA port			
	Bidirectional	Support (Reuse the audio port of the 1 st channel)			
	Talk Input				
Record	Record Mode	Auto record, manual record, motion detect record, alarm record			
	Playback Mode	Instant playback, normal playback, event playback, mark playback,			
		smart playback			
	Record	Max 16-ch playback			
	Playback				
	Backup Mode	HDD, burner, flash disk, network backup.			
Alarm	Alarm Input	N/A			

	Alarm Output	N/A		
HDD	HDD Port	2 SATA ports. Does not support eSATA port.		
	Space/HDD	6Т		
Communication	Network	1 RJ45 port, 100Mbps Ethernet port		
Port	Communication	RS485 port		
	USB	2 USB2.0 ports(One at the front pane	el and one at the rear panel)	
Other	Power	DC12V		
	Power	≤10W	≤20W	
	Consumption			
	(No HDD)			
	Working	-10℃−+55℃		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimension	1U case, 375mm (W) x280mm (D) x50mm (H)	
	Weight	≤1.8KG	≤3.3KG	
	(No HDD)		~0.010	
	Installation	Desk installation		
	Mode			

Model	Parameters	XVR4232AN		
System	Main Processor	High-performance industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	1080N@12fps/720P@15fps/960H/D1/HD1/2CIF/CIF/		
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s		
	Rate			
	Video Bit Rate	32Kbps~4096Kbps		
	Bit Stream	Video stream/composite stream		
	Туре			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio	8KHz,16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	32-ch BNC port(CVBS/CVI/AHD/other analog HD video		
	Input	self-adaptive)		

	Network Video	There is no IP channel by default.	
	Input	Analog/digital channel switch. Max 16 IP channel connections	
		Connection bandwidth:0Mbps-64Mbps	
	Video Output	1-ch VGA output,	
		1-ch HDMI output,	
		1-ch TV output,	
		TV/HDMI/ VGA video output at the same time (TV/VGA/HDMI of	
		the same video source)	
	Loop Output	N/A	
	Matrix Output	VGA/HDMI optional	
Audio Port	External	1-ch, RCA port	
	Audio Input		
	Coaxial Audio	N/A	
	Input		
	Audio Output	1-ch RCA port	
	Bidirectional	Support (Reuse the audio port of the 1 st channel)	
	Talk Input		
Record	Record Mode	Auto record, manual record, motion detect record, alarm record	
	Playback Mode	Instant playback, normal playback, event playback, mark playback,	
		smart playback(motion detect)	
	Record	Max 16-ch playback	
	Playback		
	Backup Mode	HDD, burner, flash disk, network backup.	
Alarm	Alarm Input	N/A	
	Alarm Output	N/A	
HDD	HDD Port	2 SATA ports. Does not support eSATA port.	
	Space/HDD	8T	
Communication	Network	1 RJ45 port, 1000Mbps Ethernet port	
Port	Communication	1 RS485 port	
	USB	2 USB ports(One USB2.0 port at the front panel and one USB3.0	
		at the rear panel)	
Other	Power	DC12V	
	Power	≤20W	
	Consumption		
	(No HDD)		
	Working	-10°C-+55°C	
	Temperature		
	Working	10%~90%	
	Humidity		
	Dimension	1U case, 375mm (W) x280mm (D) x50mm (H)	
	Net Weight		
	(No HDD)	≤2KG	

Installation	Desk installation
Mode	

1.3.69 XVR52XXA Series

Model	Parameters	XVR5204A	XVR5208A	XVR5216A
System	Main Processor	High-performance indust	rial embedded micro cont	roller
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	1080P@15f/1080N/720P/960H/D1/HD1/2CIF/CIF		
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC: 1-	~30f/s	
	Rate			
	Video Bit Rate	$32 { m Kbps}{\sim} 6144 { m Kbps}$		
	Bit Stream	Video stream/composite	stream	
	Туре			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio	8KHz,16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-ch BNC port	8-ch BNC	16-ch BNC
	Input	(CVBS/CVI/AHD /other	port(CVBS/CVI/AHD	port(CVBS/CVI
		analog HD video	/other analog HD video	/AHD /other
		self-adaptive)	self-adaptive)	analog HD
				video
				self-adaptive)

	Network Video Input		 There is no IP channel by default. Max add 4 IP channel connections Analog /digital channel switch. Max 12 IP channel connections Connection bandwidth:0Mbps-48Mbps 	 There is no IP channel by default. Max add 8 IP channel connectio ns Analog /digital channel switch. Max 24 IP channel connectio ns Connectio ns Connectio n bandwidth :0Mbps-96 Mbps
		video source) N/A		
	Loop Output Matrix Output	N/A		VGA/HDMI optional
Audio Port	External Audio Input	4-ch, RCA port,		
	Coaxial Audio Input	N/A		
	Audio Output	1-ch RCA port		
	Bidirectional Talk Input	Support (Reuse the audio port of the 1 st channel)		
Record	Record Mode	Auto record, manual rec	ord, motion detect record,	alarm record
Playback Mode Instant playback, normal playback, event playback, smart playback			k, mark playback,	
	Record Playback	Max 4-ch playback	Max 8-ch playback	Max 16-ch playback
	Backup Mode	HDD, burner, flash disk,	network backup.	. ,
Alarm	Alarm Input	8-ch alarm input	8-ch alarm input	16-ch alarm input

	Alarm Output	3-ch alarm output			
HDD	HDD Port	2 SATA ports. Does not support eSATA port.			
	Space/HDD	6T			
Communicatio n Port	Network	1 RJ45 port, 100Mbps Ethernet port		1 RJ45 port, 1000Mbps Ethernet port	
	Communicatio n	RS485 port			
	USB	the rear panel) and 1 U port USB2.0 the from and USB3.0		USB2.0 port at the front panel	
Other	Power	DC12V			
	Power Consumption (No HDD)	≤7W	≤8W	≤10W	
	Working Temperature	-10°C − +55°C			
	Working Humidity	10%~90%			
	Dimension	1U case, 375mm (W) x280mm (D) x50mm (H)			
	Weight (No HDD)	≤1.5KG	≤1.65KG	≤1.8KG	
	Installation Mode	Desk installation			

1.3.70 XVR52XXAN Series

Model	Parame	ters	XVR5204AN	XVR5208AN	XVR5216AN
System	Main Processor		High-performance industrial embedded micro controller		
	OS		Embedded LINUX		
Video	Video	Encode	H.264		
	Standard Encode Resolution Video Frame Rate Video Bit Rate				
			1080P@15f/1080N/72	20P/960H/D1/HD1/2CIF	F/CIF
			PAL:1~25f/s; NTSC:	1~30f/s	
			32Kbps \sim 6144Kbps		
	Bit	Stream	Video stream/compos	ite stream	
	Туре				

	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio	8KHz,16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-ch BNC port	8-ch BNC	16-ch BNC
	Input	(CVBS/CVI/AHD	port(CVBS/CVI/AHD	port(CVBS/CVI/AHD
		/other analog HD	/other analog HD	/other analog HD
		. ,	video self-adaptive)	video self-adaptive)
	Network Video Input	 channel by default. Max add 2 IP channel connections Analog /digital channel switch. Max 6 IP channel connections Connection bandwidth:0Mb ps-24Mbps 	 There is no IP channel by default. Max add 4 IP channel connections Analog /digital channel switch. Max 12 IP channel connections Connection bandwidth:0Mb ps-48Mbps 	 There is no IP channel by default. Max add 8 IP channel connections Analog /digital channel switch. Max 24 IP channel connections Connections Connection bandwidth:0Mb ps-96Mbps
	Video Output	1-ch VGA output, 1-ch HDMI output, HDMI/ VGA video outpuvideo source)	ut at the same time (V	GA/HDMI of the same
	Loop Output	N/A		
	Matrix Output	N/A		VGA/HDMI optional
Audio Port	External	1-ch, RCA port		
	Audio Input			
	Coaxial Audio	N/A		
	Input			
	Audio Output	1-ch RCA port	· · · ·	
	Bidirectional	Support (Reuse the au	udio port of the 1 st cha	nnel)
	Talk Input	•		
Record	Record Mode	Auto record, manual re		
	Playback Mode	Instant playback, normal playback, event playback, mark playback, smart playback		
	Record Playback	Max 16-ch playback		
	Backup Mode	HDD, burner, flash disk	k, network backup.	
		, -,		

Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	2 SATA ports. Does not support eSATA port.		
	Space/HDD			
Communication Port	Network	1 RJ45 port, 100Mbps Ethernet port		1 RJ45 port, 1000Mbps Ethernet port
	Communication	RS485 port		
	USB	2 USB2.0 ports(One at the front panel and one at the rear panel)		1 USB2.0 port and 1 USB3.0 port (One USB2.0 port at the front panel and one USB3.0 port at the rear panel)
Other	Power	DC12V		
	Power	≤7W	≤8W	≤10W
	Consumption			
	(No HDD)			
	Working Temperature	-10°C -+55°C		
	Working Humidity	10%~90%		
	Dimension	1U case, 375mm (W) x280mm (D) x50mm (H)		
	Weight (No HDD)	≤1.5KG	≤1.65KG	≤1.8KG
	Installation Mode	Desk installation		

Model	Parameters	XVR5232AN
System	Main Processor	High-performance industrial embedded micro controller
	OS	Embedded LINUX
Video	Video Encode	H.264
	Standard	
	Encode	1080P@15f/1080N/720P/960H/D1/HD1/2CIF/CIF
	Resolution	
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s
	Rate	
	Video Bit Rate	32Kbps \sim 6144Kbps
	Bit Stream	Video stream/composite stream
	Туре	
	Dual-Stream	Support
Audio	Encode	G.711A, G.711U, PCM
	Standard	

	Audio	8KHz,16Bit			
	Sampling Rate				
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	32-ch BNC port (CVBS/CVI/AHD/other analog HD video			
	Input	self-adaptive)			
	Network Video	There is no IP channel by default.			
	Input	 Analog/digital channel switch. Max 32 IP channel connection Connection has dwidth (0) these 1200 three 			
		Connection bandwidth:0Mbps-128Mbps			
	Video Output	1-ch VGA output,			
		1-ch HDMI output,			
		1-ch TV output,			
		TV/HDMI/ VGA video output at the same time (TV/VGA/HDMI of			
		the same video source)			
	Loop Output	N/A			
	Matrix Output	VGA/HDMI optional			
Audio Port	External	1-ch,RCA port			
	Audio Input				
	Coaxial Audio	N/A			
	Input				
	Audio Output	1-ch RCA port			
	Bidirectional	Support (Reuse the audio port of the 1 st channel)			
	Talk Input				
Record	Record Mode	Auto record, manual record, motion detect record, alarm record			
Playback Mode		Instant playback, normal playback, event playback, mark playback,			
		smart playback(human face,motion detect)			
	Record	Max 16-ch playback			
	Playback				
Backup Mode		HDD, burner, flash disk, network backup.			
Alarm	Alarm Input	N/A			
	Alarm Output	N/A			
HDD	HDD Port	2 SATA ports. Does not support eSATA port.			
	Space/HDD	8Т			
Communication	Network	1 RJ45 port, 1000Mbps Ethernet port			
Port	Communication	1 RS485 port			
	USB	2 USB port (One USB2.0 port at the front panel and one USB3.			
		port at the rear panel)			
Other	Power	DC12V			
	Power	≤27W			
	Consumption				
	(No HDD)				
	Working	-10℃−+55℃			
	Temperature				
	-	1			

Working	10%~90%	
Humidity		
Dimension	1U case, 375mm (W) x280mm (D) x50mm (H)	
Net Weight	≤2KG	
(No HDD)	<2KG	
Installation	Desk installation	
Mode		

1.3.71 XVR72XXA Series

Model	Parameters	XVR7204A	XVR7208A	XVR7216A
System	Main Processor	High-performance industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	1080P/720P/960H/D	I/HD1/2CIF/CIF	
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC:	1~30f/s	
	Rate			
	Video Bit Rate	32Kbps \sim 6144Kbps		
	Bit Stream	Video stream/compos	site stream	
	Туре			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PC	M	
	Standard			
	Audio	8KHz,16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-ch BNC port	8-ch BNC	16-ch BNC
	Input	(CVBS/CVI/AHD port(CVBS/CVI/AHD port(CVBS/CVI/AHD		port(CVBS/CVI/AHD
		/other analog HD	/other analog HD	/other analog HD
		video self-adaptive)	video self-adaptive)	video self-adaptive)

	Network Video Input	 There is no IP channel by default. Max add 2 IP channel connections. Analog /digital channel switch. Max 6 IP channel switch. Max 6 IP channel connections Connections 		
	Video Output	ps-24Mbps ps-48Mbps ps-96Mbps 1-ch VGA output, 1-ch HDMI output, HDMI/ VGA video output at the same time (VGA/HDMI of the same video source)		
	Loop Output	N/A		
	Matrix Output	N/A VGA/HDMI optional		
Audio Port	External Audio Input	4-ch, RCA port,		
	Coaxial Audio Input	N/A		
	Audio Output	1-ch RCA port		
	Bidirectional Talk Input	Support (Reuse the audio port of the 1 st channel)		
Record	Record Mode	Auto record, manual record, motion detect record, alarm record		
	Playback Mode	Instant playback, normal playback, event playback, mark playback, smart playback		
	Record Playback	Max 4-ch playback Max 8-ch playback Max 16-ch playback		
	Backup Mode	HDD, burner, flash disk, network backup.		
Alarm	Alarm Input	8-ch alarm input 8-ch alarm input 16-ch alarm input		
	Alarm Output	3-ch alarm output		
HDD	HDD Port	2 SATA ports. Does not support eSATA port.		
	Space/HDD	6T		
Communication Port	Network	1 RJ45 port, 1 RJ45 port, 1000Mbps Ethernet port 100Mbps Ethernet port		
	Communication	RS485 port		

			-	
	USB	2 USB2.0 ports(One	1 USB2.0 port and	1 USB3.0 port (One
		at the front panel	USB2.0 port at the front panel and o	
		and one at the rear	USB3.0 port at the rea	ar panel)
		panel)		
Other	Power	DC12V		
	Power	≤8W	≤10W	≤15W
	Consumption			
	(No HDD)			
	Working	-10℃−+55℃	-+55℃	
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimension	1U case, 375mm (W) x280mm (D) x50mm (H)		nm (H)
	Weight	≤1.5KG		≤1.8KG
	(No HDD)	<1.3∧G	≤1.65KG	
	Installation	Desk installation		
	Mode			

1.3.72 XVR72XXAN Series

Model	Parameters	XVR7204AN	XVR7208AN	XVR7216AN
System	Main Processor	High-performance industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264		
	Standard			
	Encode	1080P/720P/960H/D	1/HD1/2CIF/CIF	
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC	1~30f/s	
	Rate			
	Video Bit Rate	32 Kbps \sim 6144Kbps		
	Bit Stream	Video stream/compo	site stream	
	Туре			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PC	M	
	Standard			
	Audio	8KHz,16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps		
Video Port	Analog Video	4-ch BNC port	8-ch BNC	16-ch BNC
	Input	(CVBS/CVI/AHD port(CVBS/CVI/AHD port(CVBS/CVI/AH		port(CVBS/CVI/AHD
		/other analog HD	/other analog HD	/other analog HD
		video self-adaptive)	video self-adaptive)	video self-adaptive)

	Network Video	● There is no IP ● There is no IP ● There is no IP		
	Input	channel by channel by channel by default. Max default. Max		
		add 2 IP add 4 IP add 8 IP		
		channel channel channel		
		connections. connections connections		
		Analog Analog Analog Analog		
		/digital channel /digital channel /digital channel		
		switch. Max 6 switch. Max 12 switch. Max 24		
		IP channel IP channel IP channel		
		connections connections connections		
		Connection Connection Connection		
		bandwidth:0Mb bandwidth:0Mb bandwidth:0Mb		
		ps-24Mbps ps-48Mbps ps-96Mbps		
	Video Output	1-ch VGA output,		
	Video Odiput	1-ch HDMI output,		
		HDMI/ VGA video output at the same time (VGA/HDMI of the same		
		video source)		
	Loop Output	N/A		
	Matrix Output	N/A VGA/HDMI optional		
Audio Port	External	1-ch, RCA port,		
	Audio Input			
	Coaxial Audio	N/A		
	Input			
	Audio Output	1-ch RCA port		
	Bidirectional	Support (Reuse the audio port of the 1 st channel)		
	Talk Input			
Record	Record Mode	Auto record, manual record, motion detect record, alarm record		
	Playback Mode	Instant playback, normal playback, event playback, mark playback,		
		smart playback		
	Record	Max 4-ch playback Max 8-ch playback Max 16-ch playback		
	Record Playback	Max 4-ch playback Max 8-ch playback Max 16-ch playback		
		Max 4-ch playbackMax 8-ch playbackMax 16-ch playbackHDD, burner, flash disk, network backup.		
Alarm	Playback			
Alarm	Playback Backup Mode	HDD, burner, flash disk, network backup.		
Alarm HDD	Playback Backup Mode Alarm Input	HDD, burner, flash disk, network backup. N/A		
	Playback Backup Mode Alarm Input Alarm Output	HDD, burner, flash disk, network backup. N/A N/A		
	Playback Backup Mode Alarm Input Alarm Output HDD Port	HDD, burner, flash disk, network backup. N/A N/A 2 SATA ports. Does not support eSATA port.		
HDD	Playback Backup Mode Alarm Input Alarm Output HDD Port Space/HDD	HDD, burner, flash disk, network backup. N/A N/A 2 SATA ports. Does not support eSATA port. 6T		
HDD Communication	Playback Backup Mode Alarm Input Alarm Output HDD Port Space/HDD	HDD, burner, flash disk, network backup. N/A 2 SATA ports. Does not support eSATA port. 6T 1 RJ45 port, 1 RJ45 port, 1000Mbps Ethernet port		

	•			
	USB	2 USB2.0 ports(One	1 USB2.0 port and	1 USB3.0 port (One
		at the front panel	USB2.0 port at the	front panel and one
		and one at the rear	USB3.0 port at the rea	ar panel)
		panel)		
Other	Power	DC12V		
	Power	≤8W	≤10W	≤15W
	Consumption			
	(No HDD)			
	Working	-10℃-+55℃		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimension	1U case, 375mm (W) x280mm (D) x50mm (H)		nm (H)
	Weight	≤1.5KG		≤1.8KG
	(No HDD)		≤1.65KG	
	Installation	Desk installation		
	Mode			

1.3.73 XVR54XXL Series

Model	Parameters	XVR5408L	XVR5416L	XVR5432L	
System	Main Processor	High-performance ind	High-performance industrial embedded micro controller		
	OS	Embedded LINUX			
Video	Video Encode	H.264H, H.264, H.264B			
	Standard				
	Encode	1080P@15fps/1080N	/720P/960H/D1/HD1/20	CIF/CIF	
	Resolution				
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s			
	Rate				
	Video Bit Rate	32Kbps~6144Kbps			
		(For 720P:default val	ue is 2Mbps,max valu	ie is 4Mbps.	
		For 1080P:default va	lue is 2Mbps, max val	lue is 6Mbps)	
	Bit Stream	Video stream/compos	ite stream		
	Туре				
	Dual-Stream	Support			
Audio	Encode	G.711A, G.711U, PCM			
	Standard				
	Audio				
	Sampling Rate				
	Audio Bit Rate				

Video Port	Analog Video	8-ch BNC port		32-ch BNC
	Input	(HDCVI HD	port(HDCVI HD	port(HDCVI HD
		video/general	video/general	video/general
		standard definition	standard definition	standard definition
		video self-adaptive)	video self-adaptive)	video self-adaptive)
	Network Video	 Support 4 IP 	 Support 8 IP 	• There is no IP
	Input	channels by	channels by	channel by
		default.	default.	default.
		 Analog 	 Analog 	 Analog
		/digital channel	/digital channel	/digital channel
		switch. Max 12	switch. Max 24	switch. Max 32
		IP channel	IP channel	IP channel
		connections.	connections.	connections.
		 Connection 	 Connection 	 Connection
		bandwidth:16M	bandwidth:32M	bandwidth:0Mb
		bps-48Mbps	bps-96Mbps	ps-128Mbps
	Video Output	1-ch VGA output,	1-ch VGA output,	1-ch VGA output,
		1-ch HDMI output,	2-ch HDMI output,	2-ch HDMI output,
		1-ch TV output,	1-ch TV output,	1-ch TV output,
		HDMI/VGA/TV video	HDMI1/VGA/TV	HDMI1/VGA/TV
		output at the same	video output at the	video output at the
		time	same time	same time
		(HDMI/VGA/TV of	(HDMI1/VGA/TV	(HDMI1/VGA/TV
		the same video	of the same video	of the same video
		source)	source)	source)
	Loop Output	N/A		
	Matrix Output	N/A	HDMI2 port support m	natrix output
Audio Port	External	4-channel BNC port,		
	Audio Input			
			l	
	Coaxial Audio	8-channel	16-channel	32-channel
	Input			
	Audio Output	1-ch BNC port		
	Bidirectional	Support (Independent bidirectional talk port))
	Talk Input			
Record	Record Mode	Card number record, mark record, alarm record, motion detection		cord, motion detection
		record, regular record, manual record, intelligent record.		
	Playback Mode	Instant playback, normal playback, event playback, mark playbac		/back, mark playback,
		intelligent playback(human face, motion detection)		ction)
	Record	Max 8-ch playback	Max 16-ch playback	
	Playback			
	Backup Mode	HDD, burner, flash dis	sk, network backup.	
Alarm	Alarm Input	8-channel	16-channel	
	Alarm Output	6-channel		

HDD	HDD Port	4 SATA ports. Suppor	t eSATA port.	
	Space/HDD	8T		
Communication	Network	1 RJ45 port, 1000Mbp	s Ethernet port	
Port	Communication	1 RS232 port, 1 RS42	2 port, 1 RS485 port	
	USB	3 USB ports(One at	3 USB ports (One at t	he front panel and two
		the front panel and	at the rear panel. The	e rear panel supports
		two at the rear	USB3.0)	
		panel)		
Other	Power	AC100-240V 1.9A 5	0/60Hz	
	Power	30W (No HDD)		
	Consumption			
	(No HDD)			
	Working	-10℃-+55℃		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimension	1.5U case, 440mm (W) x410mm (D) x70mm (H)		
	Weight	≤7KG (No HDD)	≤7.2KG (No HDD)	≤7.5KG (No HDD)
	(No HDD)			
	Installation	Desk installation		
	Mode			

1.3.74 XVR74XXL Series

Model	Parameters	XVR7408L	XVR7416L	
System	Main Processor	High-performance industrial embedded micro controller		
	OS	Embedded LINUX		
Video	Video Encode	H.264H, H.264, H.264B		
	Standard			
	Encode	1080P/720P/960H/D1/HD1/2CIF/	CIF/	
	Resolution			
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s		
	Rate			
	Video Bit Rate	32Kbps \sim 6144Kbps		
		(For 720P:default value is 2Mbps	, max value is 4Mbps.	
		For 1080P:default value is 4Mbp	s, max value is 6Mbps)	
	Bit Stream	Video stream/composite stream		
	Туре			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio	8KHz,16Bit		
	Sampling Rate			
	Audio Bit Rate	64Kbps		

Video Port	Analog Video Input Video Input	 8-ch BNC port (HDCVI HD video/general standard definition video self-adaptive) Support 4 IP channels by default. Analog /digital channel switch. Max 12 IP channel connections. Connection bandwidth:16Mbps-48Mbp s 	 16-ch BNC port(HDCVI HD video/general standard definition video self-adaptive) Support 8 IP channels by default. Analog /digital channel switch. Max 24 IP channel connections. Connection bandwidth:32Mbps-96Mbp s 	
	Video Output			
	Loop Output	N/A		
	Matrix Output	· · · ·	rt support matrix output	
Audio Port	External Audio Input	4-channel BNC port,		
	Coaxial Audio Input	8-channel	16-channel	
	Audio Output	1-channel BNC port		
	Bidirectional	Support (Independent bidirection	nal talk port)	
	Talk Input			
Record	Record Mode	Card number record, mark record record, regular record, manual record, manual record record, manual record	d, alarm record, motion detection cord, intelligent record.	
	Playback Mode	Instant playback, normal playback intelligent playback(human face, r	k, event playback, mark playback, motion detection)	
	Record Playback	Max 8-ch playback	Max 16-ch playback	
	Backup Mode	HDD, burner, flash disk, network	backup.	
Alarm	Alarm Input	16-channel		
	Alarm Output	6-channel		
HDD	HDD Port	4 SATA ports. Support eSATA port.		
	Space/HDD	8T		
Communication	Network	1 RJ45 port, 1000Mbps Ethernet port		
Port	Communication	3 USB ports (One at the front panel and two at the rear panel. The		
	USB			
		rear panel supports USB3.0)		

F	Power	30W (No HDD)	
	Consumption		
	(No HDD)		
١	Working	-10°C−+55°C	
7	Temperature		
١	Working	10%~90%	
H	Humidity		
ſ	Dimension	1.5U case, 440mm (W) ×410m	nm (D) x70mm (H)
١	Weight (No HDD)	≪7KG (No HDD)	≤7.2KG (No HDD)
	nstallation	Desk installation	
l l	Mode		

1.3.75 XVR58XXS Series

1.3./3 XVR38X					
Model	Parameters	XVR5808S	XVR5816S	XVR5832S	
System	Main Processor	High-performance ind	ustrial embedded micro	o controller	
	OS	Embedded LINUX			
Video	Video Encode	H.264H, H.264, H.264	łB		
	Standard				
	Encode	1080P@15fps/1080N	/720P/960H/D1/HD1/20	CIF/CIF	
	Resolution				
	Video Frame	PAL:1~25f/s; NTSC:	1~30f/s		
	Rate				
	Video Bit Rate	32Kbps \sim 6144Kbps			
		(For 720P:default val	ue is 2Mbps,max valu	ie is 4Mbps.	
		For 1080P:default va	llue is 2Mbps, max val	lue is 6Mbps)	
	Bit Stream	Video stream/composite stream			
	Туре				
	Dual-Stream	Support			
Audio	Encode	G.711A, G.711U, PCI	N		
	Standard				
	Audio	8KHz,16Bit			
	Sampling Rate				
	Audio Bit Rate	64Kbps			
Video Port	Analog Video	8-ch BNC port	16-ch BNC	32-ch BNC	
	Input	(HDCVI HD	port(HDCVI HD	port(HDCVI HD	
		video/general	video/general	video/general	
		standard definition	standard definition	standard definition	
		video self-adaptive)	video self-adaptive)	video self-adaptive)	

	Network Video	Support 4 IP	Support 8 IP	• There is no IP
	Input	channels by	channels by	channel by
		default.	default.	default.
		 Analog 	 Analog 	 Analog
		/digital channel	/digital channel	/digital channel
		switch. Max 12	switch. Max 24	switch. Max 32
		IP channel	IP channel	IP channel
		connections.	connections.	connections.
		 Connection 	Connection	 Connection
		bandwidth:16M	bandwidth:32M	bandwidth:0Mb
		bps-48Mbps	bps-96Mbps	ps-128Mbps
	Video Output	1-ch VGA output,	1-ch VGA output,	1-ch VGA output,
		1-ch HDMI output,	2-ch HDMI output,	2-ch HDMI output,
		1-ch TV output,	1-ch TV output,	1-ch TV output,
		HDMI/VGA/TV video	HDMI1/VGA/TV	HDMI1/VGA/TV
		output at the same	video output at the	video output at the
		time	same time	same time
		(HDMI/VGA/TV of	,	(HDMI1/VGA/TV
		the same video	of the same video	of the same video
		source)		
	Loop Output	N/A		
	Matrix Output	N/A	HDMI2 port support matrix output	
Audio Port	External	8-channel BNC port,		
	Audio Input			
	Coaxial Audio	8-channel	16-channel	32-channel
	Input			
	Audio Output	1-ch BNC port		
	Bidirectional	Support (Independer	nt bidirectional talk port)
	Talk Input			
Record	Record Mode	Card number record,	mark record, alarm rec	cord, motion detection
		record, regular record	l, manual record, intellig	ent record.
	Playback Mode	Instant playback, normal playback, event playback, mark playback,		
		intelligent playback(human face, motion detection)		
	Record	Max 8-ch playback	Max 16-ch playback	
	Playback			
	Backup Mode	HDD, burner, flash dis	sk, network backup.	
Alarm	Alarm Input	8-channel	nnel 16-channel	
	Alarminput	6-channel		
	Alarm Output	6-channel	·	
HDD		6-channel 8 SATA ports. Suppor	rt eSATA port.	

Communication	Network	1 RJ45 port, 2 RJ45 ports, 1000Mbps Ethernet port		
Port		1000Mbps Ethernet	et	
		port		
	Communication	1 RS232 port, 1 RS42	2 port, 1 RS485 port	
	USB	4 USB ports(Two at	4 USB ports (Two at t	he front panel and two
		the front panel and	at the rear panel. Th	e rear panel supports
		two at the rear	USB3.0)	
		panel)		
Other	Power	AC100-240V 1.9A 5	0/60Hz	
	Power	35W (No HDD)		
	Consumption			
	(No HDD)			
	Working	-10℃−+55℃		
	Temperature			
	Working	10%~90%		
	Humidity			
	Dimension	2U case, 440mm (W	nm (W) ×460mm (D) ×89mm (H)	
	Weight			
	(No HDD)	≪9KG (No HDD)	≤9.2KG (No HDD)	≤9.4KG (No HDD)
	Installation	Desk installation		
	Mode			

1.3.76 XVR78XXS Series

Model	Parameters	XVR7808S	XVR7816S
System	Main Processor	High-performance industrial embedded micro controller	
	OS	Embedded LINUX	
Video	Video Encode	H.264H, H.264, H.264B	
	Standard		
	Encode	1080P/720P/960H/D1/HD1/2CIF/	CIF/
	Resolution		
	Video Frame	PAL:1~25f/s; NTSC: 1~30f/s	
	Rate		
	Video Bit Rate	32Kbps~6144Kbps	
		(For 720P:default value is 2Mbps	, max value is 4Mbps.
		For 1080P:default value is 4Mbp	es, max value is 6Mbps)
	Bit Stream	Video stream/composite stream	
	Туре		
	Dual-Stream	Support	
Audio	Encode	G.711A, G.711U, PCM	
	Standard		
	Audio	8KHz, 16Bit	
	Sampling Rate		
	Audio Bit Rate	64Kbps	

Video Port	Analog Video Input Network Video Input	 8-ch BNC port (HDCVI HD video/general standard definition video self-adaptive) Support 4 IP channels by default. Analog /digital channel switch. Max 12 IP channel connections. Connection bandwidth:16Mbps-48Mbp s 	 16-ch BNC port(HDCVI HD video/general standard definition video self-adaptive) Support 8 IP channels by default. Analog /digital channel switch. Max 24 IP channel connections. Connection bandwidth:32Mbps-96Mbp s 	
	Video Output	of the same video source)	the same time (HDMI1/VGA/TV	
Loop Output		N/A		
	Matrix Output	HDMI2 port support matrix output		
Audio Port	External Audio Input	8-channel BNC port,	16-channel BNC port,	
	Coaxial Audio Input	8-channel	16-channel	
	Audio Output	1-ch BNC port		
	Bidirectional Talk Input	Support (Independent bidirection	nal talk port)	
Record	Record Mode	Card number record, mark record record, regular record, manual re-	d, alarm record, motion detection cord, intelligent record.	
	Playback Mode	Instant playback, normal playback intelligent playback(human face, i	k, event playback, mark playback, motion detection)	
	Record Playback	Max 8-ch playback	Max 16-ch playback	
	Backup Mode	HDD, burner, flash disk, network	backup.	
Alarm	Alarm Input	16-channel		
	Alarm Output	6-channel		
HDD	HDD Port	8 SATA ports. Support eSATA po	ort.	
	Space/HDD	8T		
Communication	Network	2 RJ45 ports, 1000Mbps Etherne	•	
Port	Communication	n 1 RS232 port, 1 RS422 port, 1 RS485 port		
	USB	4 USB ports (Two at the front panel and two at the rear panel. The rear panel supports USB3.0)		
Other	Power	AC100-240V 1.9A 50/60Hz		

Power	35W (No HDD)	
Consumption		
(No HDD)		
Working	-10℃−+55℃	
Temperature		
Working	10%~90%	
Humidity		
Dimension	2U case, 440mm (W) ×460mm	n (D) x89mm (H)
Weight (No HDD)	9KG (No HDD)	9.2KG (No HDD)
Installation	Desk installation	
Mode		

1.3.77 HCVR710XH-4K Series

	UXH-4K Series	•		
Model	Parameters	HCVR7104H-4K	HCVR7108H-4K	
System	Main Processor	High-performance industrial emb	edded micro controller	
	OS	Embedded LINUX		
Video	Video Encode	de H.264+/H.264 Main strea		
	Standard			
	Encode			
	Resolution	4K(3840*2160)/2K(2560*1440)/1	080P/720P/960H/D1/HD1/BCIF/	
		CIF/QCIF;		
		Sub stream: D1/CIF/QCIF		
	Video Frame	4K: PAL:1~12f/s; NTSC: 1~15f/s	3	
	Rate	Other resolution: PAL:1~25f/s; N	ITSC: 1~30f/s	
	Video Bit Rate	32Kbps~12288 Kbps		
		(For 720P:default value is 2Mbp	s, max value is 4Mbps;	
		For 1080P:default value is 4Mbps, max value is 6Mbps;		
		For 2K:default value is 8Mbps,	max value is 12Mbps;	
		For 4K@15frame:default value i	s 8Mbps, max value is 12Mbps;)	
	Bit Stream	Video stream/composite stream		
	Туре			
	Dual-Stream	Support		
Audio	Encode	G.711A, G.711U, PCM		
	Standard			
	Audio			
	Sampling Rate			
	Audio Bit Rate			
Video Port	Analog Video	4-ch BNC port (HDCVI/CVBS)	8-ch BNC port (HDCVI/CVBS)	
	Input			

	Network Video Input	 Support 2 IP channels by default. Analog /digital channel switch. Max 6 IP channel connections. Connection bandwidth:8Mbps-24Mbps 	 Support 4 IP channels by default. Analog /digital channel switch. Max 12 IP channel connections. Connection bandwidth:16Mbps-48Mbp s 	
	Video Output	1-ch VGA output, 1-ch HDMI output(Max 4K: (3840 HDMI/VGA video output the sar video sources at the same time.	*2160)@30frames), me video source or the different	
	Loop Output	N/A		
	Matrix Output		e different video source, one port	
Audio Port	External Audio Input	1-channel RCA port	1-channel RCA port	
	Coaxial Audio Input			
	Audio Output	t 1-channel RCA port		
	Bidirectional	Reuse audio input and output port.		
Record	Talk Input Record Mode	Alarm record motion detection	record, regular record, manual	
Record	Record Mode	record, intelligent record.	record, regular record, manual	
	Playback Mode		<, event playback, mark playback,	
	Record	Max 4-ch playback	Max 8-ch playback	
	Playback			
	Backup Mode	HDD, burner, flash disk, network	backup.	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	1 SATA port.		
0	Space/HDD	8T		
Communication	Network	1 RJ45 port, 1000Mbps Ethernet	ροπ	
Port	Communication	2 USB ports (One USB2.0 port at the front panel and one USB3		
	USB			
Other	Power	port at the rear panel.) DC12V		
Other	Power			
	Consumption (No HDD)	≤13W	≤20W	

Working	-10°C-+55°C	
Temperature		
Working	10%~95%	
Humidity	325mm(W)×245mm(D)×45mm(H) ≤1.25KG ≤1.40KG Desk installation	
Dimension		
Weight (No HDD)		
Installation		
Mode		

1.3.78 HCVR720XAN-4K Series

Model	Parame	eters	HCVR7204AN-4K	HCVR7208AN-4K	
System	Main P	rocessor	High-performance industrial embedded micro controller		
	OS		Embedded LINUX		
Video	Video Encode H.264+/H.264				
	Standa	rd			
	Encode)	Main	stream:	
	Resolu	tion	4K(3840*2160)/2K(2560*1440)/10	080P/720P/960H/D1/HD1/BCIF/	
			CIF/QCIF;		
			Sub stream: D1/CIF/QCIF		
	Video	Frame	4K: PAL:1~12f/s; NTSC: 1~15f/s		
	Rate		Other resolution: PAL:1~25f/s; N	TSC: 1~30f/s	
	Video E	Bit Rate	32Kbps \sim 12288 Kbps		
			(For 720P:default value is 2Mbps, max value is 4Mbps;		
			For 1080P:default value is 4Mbps, max value is 6Mbps;		
			For 2K:default value is 8Mbps,	max value is 12Mbps;	
			For 4K@15frame:default value is	s 8Mbps, max value is 12Mbps;)	
	Bit	Stream	Video stream/composite stream		
	Туре				
	Dual-St	ream	Support		
Audio	Encode)	G.711A, G.711U, PCM		
	Standa	rd			
Audio 8KHz, 16Bit Sampling Rate					
		ng Rate			
	Audio I	Bit Rate	e 64Kbps		
Video Port	Analog	Video	4-ch BNC port (HDCVI/CVBS)	8-ch BNC port (HDCVI/CVBS)	
	Input				

	Network Video Input	 Support 2 IP channels by default. Analog /digital channel switch. Max 6 IP channel connections. Connection bandwidth:8Mbps-24Mbps 1-ch VGA output, 1-ch HDMI output(Max 4K: (3840) 	 Support 4 IP channels by default. Analog /digital channel switch. Max 12 IP channel connections. Connection bandwidth:16Mbps-48Mbp s 	
		HDMI/VGA video output the sar video sources at the same time.	me video source or the different	
	Loop Output	N/A		
	Matrix Output	When HDMI and VGA output the supports matrix output.	e different video source, one port	
Audio Port	External Audio Input	1-channel RCA port	1-channel RCA port	
	Coaxial Audio Input	N/A		
	Audio Output			
	Bidirectional			
	Talk Input			
Record	Record Mode	Alarm record, motion detection record, intelligent record.	record, regular record, manual	
	Playback Mode	Instant playback, normal playbacl intelligent playback	k, event playback, mark playback,	
	Record	Max 4-ch playback	Max 8-ch playback	
	Playback			
	Backup Mode	HDD, burner, flash disk, network	backup.	
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
HDD	HDD Port	2 SATA ports.		
	Space/HDD	8T		
Communication	Network	1 RJ45 port, 1000Mbps Ethernet	port	
Port	Communication	n 1 RS485 port		
	USB	2 USB ports (One USB2.0 port at the front panel and one US		
		port at the rear panel.)		
Other	Power	DC12V		
	Power Consumption	≤13W	≤20W	
	(No HDD)			

Working	-10°C-+55°C	
Temperature		
Working	10%~95%	
Humidity		
Dimension	1U case, 375mm(W)×280mm(D)×50mm(H)	
Weight (No HDD)	≤1.60KG	≤1.75KG
Installation	Desk installation	
Mode		

2 Overview and Controls

This section provides information about front panel and rear panel. When you install this series DVR for the first time, please refer to this part first.

2.1 Front Panel

2.1.1 HCVR5104C/HCVR51XXC-V2/HCVR71XXC-V2/ HCVR4104/4108C-S2/ HCVR5104 5108C-S2/ HCVR7104C-S2/ HCVR2108C-S2/ HCVR410XC-S3/HCVR510XC-S3/7104C-S3/ XVR410XC/XVR510XC/7104C Series

The front panel is shown as below. See Figure 2-1.

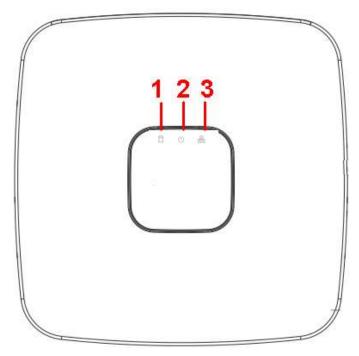


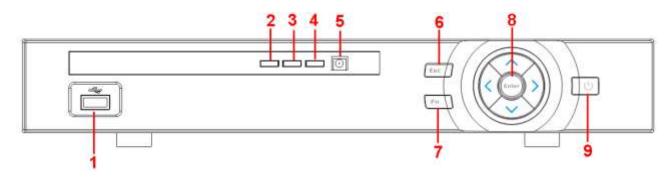
Figure 2-1

Please refer to the following sheet for front panel button information.

SN	Name	Function
1	HDD status indictor light	The red light becomes on when HDD is abnormal.
2	Power indicator light	The red light becomes on when the power connection is OK.
3	Network status indicator light	The red light becomes on when the network connection is abnormal.

2.1.2 HCVR51XXH/HCVR51XXHE/ HCVR51XXH-V2 / HCVR51XXHE-V2/HCVR71XXH-V2 / HCVR71XXHE-V2 Series

The front panel is shown as below. See Figure 2-2.



Please refer to the fo	ollowing sheet for fr	ront panel button information.

SN	lcon	Name	Function
1	e por temperature de la competition de la compet	USB port	To connect USB storage device, USB mouse and etc.
2	Alarm	Alarm indicator light	When an alarm occurs, the light becomes red to alert you.
3	NET	Network abnormal indicator light	Network error occurs or there is no network connection, the light becomes red to alert you.
3	HDD	HDD abnormal indicator light	HDD error occurs or HDD capacity is below specified threshold value, the light becomes red to alert you.
5	IR	IR Receiver	It is to receive the signal from the remote control.
6	500	500	Go to previous menu, or cancel current operation.
	ESC	ESC	When playback, click it to restore real-time monitor mode.
7	FN	Assist	One-window monitor mode, click this button to display assistant function: PTZ control and image color. Backspace function: in numeral control or text control, press it for 1.5seconds to delete the previous character before the cursor. In motion detection setup, working with Fn and direction keys to realize setup. In text mode, click it to switch between numeral, English character(small/capitalized) and etc. Realize other special functions.
8	Enter	ENTER	Confirm current operation Go to default button Go to menu
9	Ċ	Power button	Power button, press this button for three seconds to boot up or shut down DVR.
	▲、▼	Up Down	Activate current control, modify setup, and then move up and down. Increase/decrease numeral. Assistant function such as PTZ menu.
	∢ 、►	Left Right	Shift current activated control, When playback, click these buttons to control playback bar.

2.1.3 HCVR51XXHC/ HCVR51XXHC-V2/ HCVR71XXHC-V2 Series

The interface is shown as below. See Figure 2-3.

Half PHR Dicc	69	
 1		

Figure 2-3

Please refer to the following sheet for front panel button information.

SN	Icon	Name	Function
1	NET	Network abnormal indicator light	Network error occurs or there is no network connection, the light becomes red to alert you.
2	PWR	Power indicator light	The red light becomes on when the power connection is OK.
3	HDD	HDD abnormal indicator light	HDD error occurs or HDD capacity is below specified threshold value, the light becomes red to alert you.

2.1.4 HCVR41XXHE-S2/ HCVR51XXH-S2/ HCVR51XXHE-S2/ HCVR710XH-S2/ HCVR710XHE-S2/ HCVR41XXHE-S3/HCVR51XXH-S3/HCVR51XXHE-S3/HCVR71X XH-S3/HCVR71XXHE-S3 /HCVR41XXHS-S2/ HCVR21XXHS-S2/ HCVR21XXHS-S3/HCVR41XXHS-S3/51XXHS-S3/7104HS-S3/ XVR41XXHE/XVR51H/XVR51XXHE/XVR71XXH/XVR71XXHE /HCVR41XXHS-S2/ HCVR21XXHS-S2/ XVR21XXHS/XVR41XXHS/51XXHS/7104HS/HCVR71XX-4M/HCV R710XH-4K Series

The front panel is shown as below. See Figure 2-4.

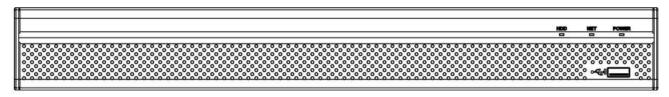


Figure 2-4

Please refer to the following sheet for front panel button information.

Icon	Name	Function
HDD	HDD status indicator	The blue light is on when the HDD is malfunction.
	light	
NET	Network status indicator	The blue light is on when the network connection is
	light	abnormal.
POWER	Power status indicator light	The blue light is on when the power connection is
		OK.

lcon	Name	Function
~ C	USB2.0 port	Connect to peripheral USB 2.0 storage device,
		mouse, burner and etc.

2.1.5 HCVR52XXA-V2/ HCVR72XXA-V2 Series

The front panel is shown as below. See Figure 2-5.



Figure	2-5
i iguio	20

Please refer to the following sheet for front panel button information.

Name	Icon	Function	
Power button	Ċ	Power button, press this button for three seconds to boot up or shut down DVR.	
Shift	Shift	In textbox, click this button to switch between numeral, English(Small/Capitalized),donation and etc.	
		Activate current control, modify setup, and then move up and down.	
Up/1Down/4	▲ 、▼	Increase/decrease numeral.	
		Assistant function such as PTZ menu.	
		In text mode, input number 1/4 (English character G/H/I)	
		Shift current activated control,	
Left/2 Right/3	• •	When playback, click these buttons to control playback bar. In text mode, input number 2(English character A/B/C) /3(English character D/E/F)	
ESC	ESC	Go to previous menu, or cancel current operation.	
		When playback, click it to restore real-time monitor mode.	
		Confirm current operation	
Enter	ENTER	Go to default button	
		Go to menu	
Record	REC	Manually stop/start recording, working with direction keys or numeral keys to select the recording channel.	
Slow play/8	Þ	Multiple slow play speeds or normal playback. In text mode, input number 8 (English character T/U/V).	

		One-window monitor mode, click this button to display assistant function: PTZ control and image color.
		Backspace function: in numeral control or text control, press it for 1.5seconds to delete the previous character before the
Assistant	Fn	In motion detection setup, working with Fn and direction keys to realize setup.
		In text mode, click it to switch between numeral, English character(small/capitalized) and etc.
		Realize other special functions.
Fast play/7	••	Various fast speeds and normal playback. In text mode, input number 7 (English character P/Q/R/S).
Play previous/0	◀	In playback mode, playback the previous video In text mode, input number 0.
Reverse/Pause/6		In normal playback or pause mode, click this button to reverse playback In reverse playback, click this button to pause playback.
Play Next/9	▶	In playback mode, playback the next video In menu setup, go to down ward of the dropdown list. In text mode, input number 9 (English character W/X/Y/Z)
Play/Pause /5	▶	In normal playback click this button to pause playback In pause mode, click this button to resume playback. In text mode, input number 5(English character J/K/L).
USB port	¢,	To connect USB storage device, USB mouse.
Network abnormal indication light	Net	Network error occurs or there is no network connection, the light becomes red to alert you.
HDD abnormal indication light	HDD	HDD error occurs or HDD capacity is below specified threshold value, the light becomes red to alert you.
Record light	1-16	System is recording or not. It becomes on when system is recording.
IR Receiver	IR	It is to receive the signal from the remote control.

2.1.6 HCVR42XXA-S2/ HCVR42XXAN-S2/ HCVR52XXA-S2/ HCVR5216AN-S2/HCVR720XA-S2/

HCVR42XXA-S3/HCVR42XXAN-S3/HCVR52XXA-S3/HCVR52XXAN-S3/HCVR72XXA-S3/HCVR7216AN-S3/XVR42XXA/XVR42XXAN/XVR 52XXA/XVR52XXAN/XVR72XXA/XVR7216AN/HCVR 72XXAN-4M/HCVR720XAN-4K Series

The front panel is shown as below. See Figure 2-6.

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	0	2	0
	00000		000000

Figure 2-6

Please refer to the following sheet for front panel button information.

Icon	Name	Function
STATUS	Status indicator light	The blue light is on when the device is working
		properly.
HDD	HDD status indicator	The blue light is on when the HDD is malfunction.
	light	
NET	Network status indicator	The blue light is on when the network connection is
	light	abnormal.
POWER	Power status indicator light	The blue light is on when the power connection is
		OK.
م تي.	USB2.0 port	Connect to peripheral USB 2.0 storage device,
		mouse, burner and etc.

2.1.7 HCVR42XXL-S2/HCVR44XXL-S2/ XVR54XXL/ XVR74XXL Series

The front panel is shown as below. See Figure 2-7.

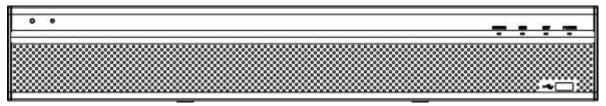


Figure 2-7

Please refer to the following sheet for front panel button information.

lcon	Name	Function
STATUS	Status indicator light	The blue light is on when the device is working properly.
HDD	HDD status indicator light	The blue light is on when the HDD is malfunction.
NET	Network status indicator light	The blue light is on when the network connection is abnormal.
POWER	Power status indicator light	The blue light is on when the power connection is OK.

Icon	Name	Function
~ ~	USB2.0 port	Connect to peripheral USB 2.0 storage device,
		mouse, burner and etc.

2.1.8 HCVR52XXL-V2/ HCVR54XXL-V2 Series

The front panel is shown as in Figure 2-8.

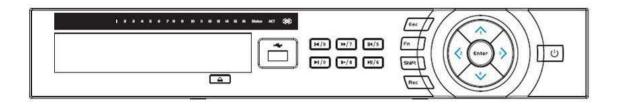


Figure 2-8

Please refer to the following sheet for front panel button information.

Name	Icon	Function		
Power button	Ċ	Power button, press this button for three seconds to boot up or shut down DVR.		
Shift	Shift	In textbox, click this button to switch between numera English(Small/Capitalized),donation and etc.		
Up/1 Down/4	▲、 ▼	Activate current control, modify setup, and then move up and down.		
		Increase/decrease numeral.		
		Assistant function such as PTZ menu.		
		In text mode, input number 1/4 (English character G/H/I)		
Left/2 Right/3	• •	Shift current activated control,		
		When playback, click these buttons to control playback bar. In text mode, input number 2(English character A/B/C) /3(English character D/E/F)		
ESC	ESC	Go to previous menu, or cancel current operation.		
		When playback, click it to restore real-time monitor mode.		
Enter	ENTER	Confirm current operation		
		Go to default button		
		Go to menu		
Record	REC	Manually stop/start recording, working with direction keys or numeral keys to select the recording channel.		

Slow play/8	Þ	Multiple slow play speeds or normal playback.	
• • • •	_	In text mode, input number 8 (English character T/U/V).	
Assistant	Fn	One-window monitor mode, click this button to display	
		assistant function: PTZ control and image color.	
		Backspace function: in numeral control or text control, press	
		it for 1.5seconds to delete the previous character before the	
		In motion detection setup, working with Fn and direction keys	
		to realize setup.	
		In text mode, click it to switch between numeral, English	
		character(small/capitalized) and etc.	
		Realize other special functions.	
Fast play/7	•	Various fast speeds and normal playback.	
		In text mode, input number 7 (English character P/Q/R/S).	
Play previous/0	◀	In playback mode, playback the previous video	
		In text mode, input number 0.	
Reverse/Pause/6	◀	In normal playback or pause mode, click this button to	
		reverse	
		playback	
		In reverse playback, click this button to pause playback.	
Play Next/9		In playback mode, playback the next video	
		In menu setup, go to down ward of the dropdown list.	
		In text mode, input number 9 (English character W/X/Y/Z)	
Play/Pause /5	▶	In normal playback click this button to pause playback	
		In pause mode, click this button to resume playback.	
		In text mode, input number 5(English character J/K/L).	
USB port	~ ~	To connect USB storage device, USB mouse.	
Network	Net	Network error occurs or there is no network connection, the	
abnormal		light becomes red to alert you.	
indication light			
HDD abnormal	HDD	HDD error occurs or HDD capacity is below specified	
indication light		threshold value, the light becomes red to alert you.	
Record light	1-16	System is recording or not. It becomes on when system is recording.	

2.1.9 HCVR58XXS-V2 Series

This series products' front panel is shown as below. See Figure 2-9.

Figure 2-9 Please refer to the following sheet for front panel button information.

Name	lcon	Function	
Power button	ი	Power button, press this button for three seconds to boot up or shut down DVR.	
Number button	0-9	Input Arabic number Switch channel	
Input number more than 10	-/	If you want to input a number more than 10, please click this button and then input.	
Shift	↑	In textbox, click this button to switch between numera English(Small/Capitalized),donation and etc. Enable or disable tour.	
Fast play	*	Various fast speeds and normal playback.	
Slow play	ŀ	Multiple slow play speeds or normal playback.	
Play/Pause	► II	In normal playback click this button to pause playback In pause mode, click this button to resume playback.	
Reverse/Pause	◄	In normal playback or pause mode, click this button to reverse playback In reverse playback, click this button to pause playback.	
Play previous	◀	In playback mode, playback the previous video	
Play Next	▶	In playback mode, playback the next video In menu setup, go to down ward of the dropdown list.	
Up/ Down	▲、▼	Activate current control, modify setup, and then move up and down. Increase/decrease numeral. Assistant function such as PTZ menu.	
Left/ Right	< ►	Shift current activated control, and then move left and right. When playback, click these buttons to control playback bar.	

		Go to previous menu, or cancel current operation.	
ESC	ESC	When playback, click it to restore real-time monitor mode.	
		Confirm current operation	
Enter	ENTER	Go to default button	
		Go to menu	
		One-window monitor mode, click this button to display assistant function: PTZ control and image color.	
		Backspace function: in numeral control or text control, press it for 1.5 seconds to delete the previous character before the cursor.	
		In motion detection setup, working with Fn and direction keys to realize setup.	
Assistant	Fn	In text mode, click it to switch between numeral, English character(small/capitalized) and etc.	
		In HDD management interface, you can click it to switch HDD record information and other information (Menu prompt)	
		Realize other special functions.	
Record	REC	Manually stop/start recording, working with direction keys or numeral keys to select the recording channel.	
Window switch	Mult	Click it to switch one-window/multiple-window.	
Shuttle(outer ring)		In real-time monitor mode it works as left/right direction key. Playback mode, counter clockwise to forward and clock wise to backward.	
Jog(inner dial)		Up/down direction key. Playback mode, turn the inner dial to realized frame by frame playback. (Only applies to some special versions.)	
USB port	~ C ;	To connect USB storage device, USB mouse, burner and etc.	
		For 4/8/16 channel device: indication light on means that the channel is in recording.	
Record light	1-32	For 32 channel device: Indication Light on: 1-16 channel is in recording Indication Light flashes: 17-32 channel is in recording Indication Light normally on: the corresponding channels are in recording	
Remote control indication light	ACT	Remote control indication light	

Status indication light	Status	The light is on if device operates properly.
Power indication light	PWR	Power indication light
IR Receiver	IR	It is to receive the signal from the remote control.

2.1.10 HCVR48XXS-S2/ XVR58XXS/ XVR78XXS Series

The front panel is shown as below. See Figure 2-10.

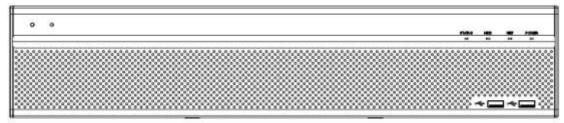


Figure 2-10

Please refer to the following sheet for front panel button information.

Icon	Name	Function
STATUS	Status indicator light	The blue light is on when the device is working
		properly.
HDD	HDD status indicator	The blue light is on when the HDD is malfunction.
	light	
NET	Network status indicator	The blue light is on when the network connection is
	light	abnormal.
POWER	Power status indicator light	The blue light is on when the power connection is
		OK.
~ ~ ~	USB2.0 port	Connect to peripheral USB 2.0 storage device,
		mouse, burner and etc.

2.2 Rear Panel

2.2.1 HCVR5104C Series

The HCVR5104C rear panel is shown as below. See Figure 2-11.

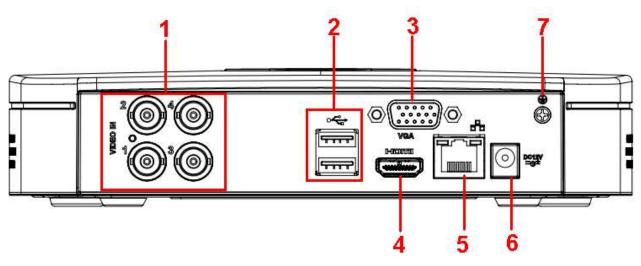


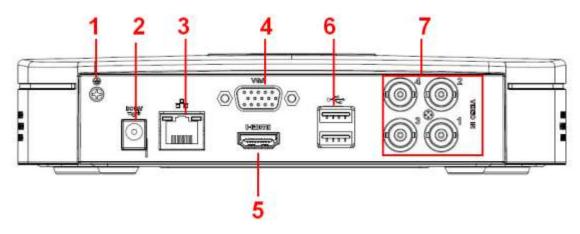
Figure 2-11

Please refer to the following sheet for detailed information.

SN	Icon	Name	Note
1	VIDEO IN	Video input port	Connect to analog camera, video
			input signal.
2	•	USB2.0 port	Connect to USB storage device,
			mouse, burning DVD-ROM and
			etc.
3	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can connect
			to the monitor to view ananlog
			video output.
4	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition
			video and multiple-channel data to
			the HDMI port of the display
			device.
5		Network port	100M Ethernet port
6	DC 12V 	Power input port	Input 12V DC.
7	Ŧ	GND	Ground end

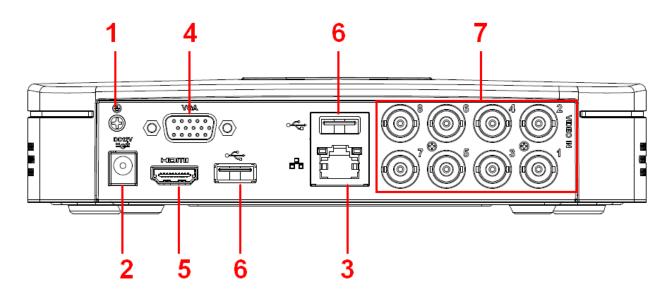
2.2.2 HCVR5104C-V2/HCVR5108C-V2 Series

The HCVR5104C-V2 rear panel is shown as below. See Figure 2-12.





The HCVR5108C-V2 rear panel is shown as below. See Figure 2-13.





Please refer to the following sheet for detailed information.

SN	Icon	Name	Note
1	Ŧ	GND	Ground end
2	DC 12V 	Power input port	Input 12V DC.
3	- -	Network port	100M Ethernet port
4	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can connect
			to the monitor to view ananlog
			video output.
5	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition

			video and multiple-channel data to the HDMI port of the display device.
6	•€•	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
7	VIDEO IN	Video input port	Connect to analog camera, video input signal.

2.2.3 HCVR7104C-V2 Series

The HCVR7104C-V2 rear panel is shown as below. See Figure 2-14.

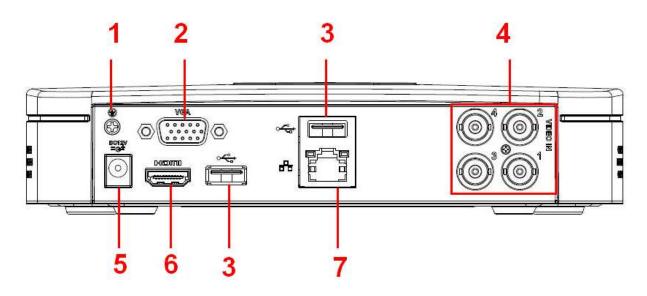


Figure	2-14

Please refer to the following sheet for detailed information.

SN	lcon	Name	Note
1	1	GND	Ground end
2	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can connect
			to the monitor to view ananlog
			video output.
3	•	USB2.0 port	Connect to USB storage device,
			mouse, burning DVD-ROM and
			etc.
4	VIDEO IN	Video input port	Connect to analog camera, video
			input signal.
5	DC 12V -C-	Power input port	Input 12V DC.
6	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition

		video and multiple-channel data to the HDMI port of the display device.
7	 Network port	100M Ethernet port

2.2.4 HCVR4104/HCVR4108C-S2/HCVR2108C-S2 Series

The HCVR4104C-S2 series rear panel is shown as below. See Figure 2-15.

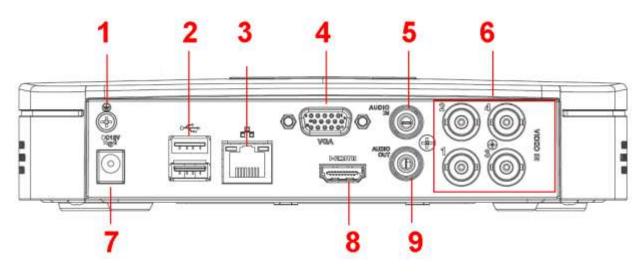


Figure 2-15

The HCVR4108C-S2/HCVR2108C-S2 series rear panel is shown as below. See Figure 2-16.

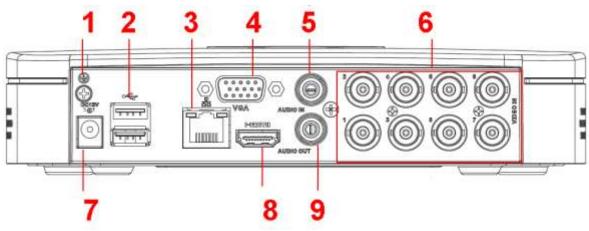


Figure 2-16

Please refer to the following sheet for detailed information.

SN	Icon	Name	Note
1	Ē	GND	Ground end
2	•	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.

3	6	Network port	100M Ethernet port
4	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
5	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
6	VIDEO IN	Video input port	Connect to analog camera, video input signal.
7	DC 12V 	Power input port	Input 12V DC.
8	HDMI	High definition media interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
9	AUDIO OUT	Audio output port	Connect to video output device such as sound box.

2.2.5 HCVR5104/5108C-S2 Series

The HCVR5104C-S2 series rear panel is shown as below. See Figure 2-17.

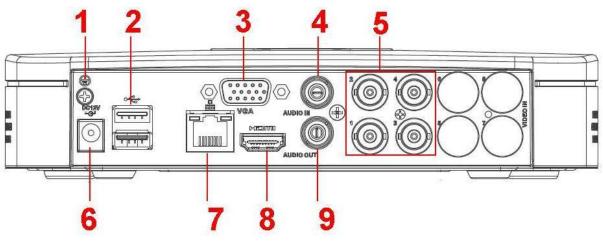


Figure 2-17

The HCVR5108C-S2 series rear panel is shown as below. See Figure 2-18.

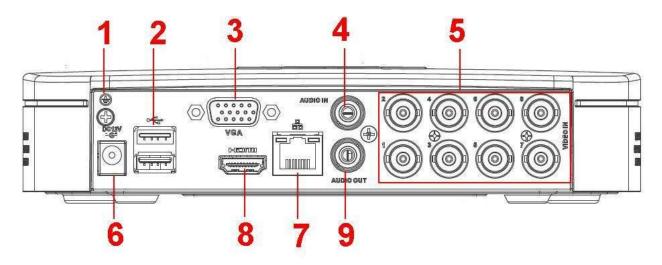


Figure 2-18

Please refer to the following sheet for detailed information.

SN	lcon	Name	Note
1	1	GND	Ground end
2	÷	USB2.0 port	Connect to USB storage device,
			mouse, burning DVD-ROM and
			etc.
3	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can connect
			to the monitor to view ananlog
			video output.
4	AUDIO IN	Audio input port	Connect to audio input device
			such as speaker.
5	VIDEO IN	Video input port	Connect to analog camera, video
			input signal.
6	DC 12V 	Power input port	Input 12V DC.
7		Network port	100M Ethernet port
8	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition
			video and multiple-channel data
			to the HDMI port of the display
			device.
9	AUDIO OUT	Audio output port	Connect to video output device
			such as sound box.

2.2.6 HCVR7104C-S2 Series

The HCVR7104C-S2 series rear panel is shown as below. See Figure 2-19.

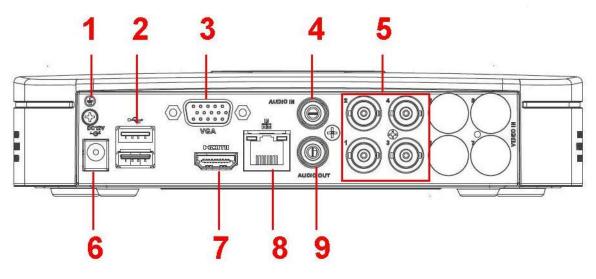


Figure 2-19

Please refer to the following sheet for detailed information.

SN	Icon	Name	Note
1	Ŧ	GND	Ground end
2	•	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
3	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
4	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
5	VIDEO IN	Video input port	Connect to analog camera, video input signal.
6	DC 12V 	Power input port	Input 12V DC.
7	HDMI	High definition media interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
8	- 0 -	Network port	100M Ethernet port
9	AUDIO OUT	Audio output port	Connect to video output device such as sound box.

2.2.7 HCVR410XC-S3/HCVR510XC-S3/7104C-S3/XVR410XC/XVR510XC/7 104C Series

These series rear panel is shown as below. See Figure 4-136.

The following figure is based on the HCVR4108C-S3/5108C-S3/XVR4108C/5108C series.

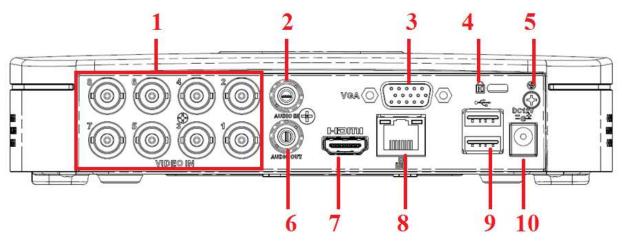


Figure 2-20

SN	Icon	Name	Note
1	VIDEO IN	Video input port	Connect to analog camera, video
			input signal.
2	AUDIO IN	Audio input port	Connect to audio input device
			such as speaker.
3	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can connect
			to the monitor to view analog
			video output.
4	Ŕ	Power cable	Use clamp to secure the power
		fastener	cable on the device in case there
			is any loss.
5	Ŧ	GND	Ground end
6	AUDIO OUT	Audio output port	Connect to video output device
			such as sound box.
7	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition
			video and multiple-channel data
			to the HDMI port of the display
			device.
8		Network port	100M Ethernet port
9	•	USB2.0 port	Connect to USB storage device,
			mouse, burning DVD-ROM and
			etc.

10	DC 12V 	Power input port	Input 12V DC.
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2.2.8 HCVR5104H/HCVR5108H Series

The HCVR5104H series rear panel is shown as below. See Figure 2-21.

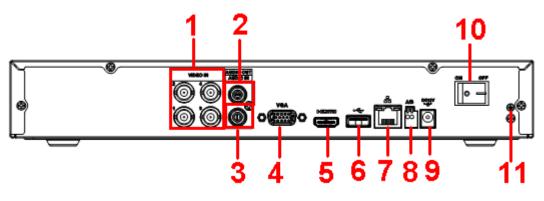


Figure 2-21

The HCVR5108H series rear panel is shown as below. See Figure 2-22.

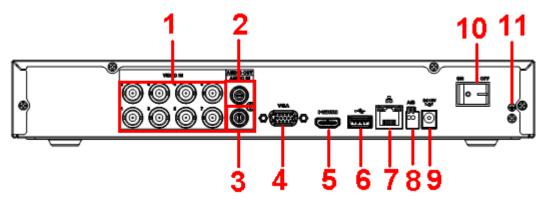


Figure 2-22

SN	Icon	Name	Note
1	VIDEO IN	Video input port	Connect to analog camera, video
			input signal.
2	AUDIO OUT	Audio output port	Connect to video output device
			such as sound box.
3	AUDIO IN	Audio input port	Connect to audio input device
			such as speaker.
4	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can connect
			to the monitor to view ananlog
			video output.
5	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits

			uncompressed high definition video and multiple-channel data to the HDMI port of the display
6	•	USB2.0 port	device. Connect to USB storage device, mouse, burning DVD-ROM and etc.
7	66	Network port	100M Ethernet port
8	AB	RS485 (RS-485) communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ. RS485_B.It is the cable B. You can connect to the control devices
	DC 12V		such as speed dome PTZ.
9	-G-	Power input port	Input 12V DC.
10	•	Power on-off button	Power on/off button.
11	1	GND	Ground end

2.2.9 HCVR5104H-V2/HCVR5108H-V2/HCVR5116H-V2 Series

The HCVR5104H-V2 series rear panel is shown as below. See Figure 2-23.

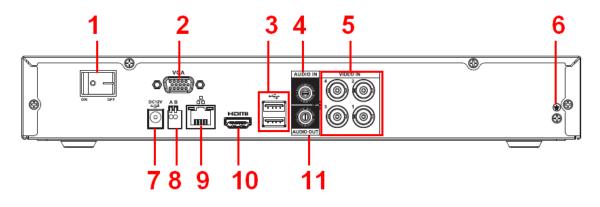


Figure 2-23

The HCVR5108H-V2 series rear panel is shown as below. See Figure 2-24.

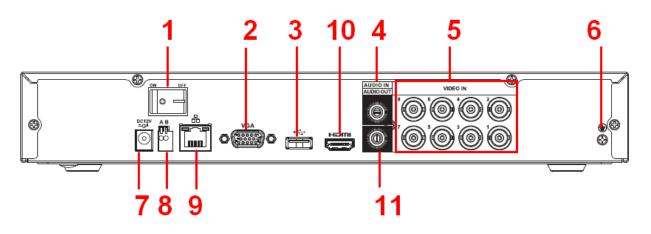


Figure 2-24

The HCVR5116H-V2 series rear panel is shown as below. See Figure 2-25.

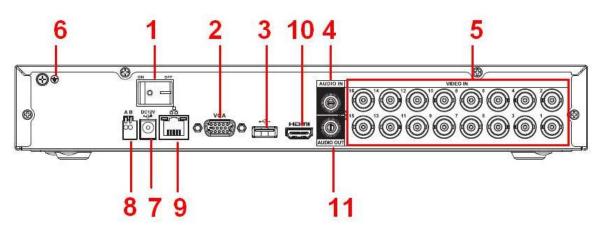


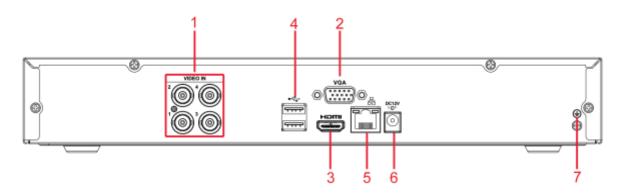
Figure 2-25

SN	lcon	Name	Note
1	•	Power on-off button	Power on/off button.
2	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
3	•	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
4	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
5	VIDEO IN	Video input port	Connect to analog camera, video input signal.
6	<u> </u>	GND	Ground end

7	DC 12V	Power input port	Input 12V DC.
8	A	RS485 (RS-485)	RS485_A port. It is the cable A.
		communication port	You can connect to the control
			devices such as speed dome
			PTZ.
	В		RS485_B.It is the cable B. You
			can connect to the control devices
			such as speed dome PTZ.
9		Network port	100M Ethernet port
10	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition
			video and multiple-channel data
			to the HDMI port of the display
			device.
11	AUDIO OUT	Audio output port	Connect to video output device
			such as sound box.

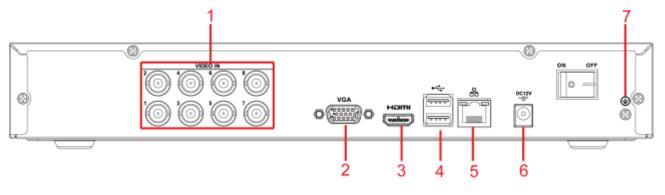
2.2.10 HCVR5104HC/HCVR5108HC Series

The HCVR5104HC series rear panel is shown as below. See Figure 2-26.





The HCVR5108HC series rear panel is shown as below. See Figure 2-27.



Please refer to the following sheet for detailed information.

SN	lcon	Name	Note
1	VIDEO IN	Video input port	Connect to analog camera, video
			input signal.
2	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can connect
			to the monitor to view ananlog
			video output.
3	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition
			video and multiple-channel data to
			the HDMI port of the display
			device.
4	•	USB2.0 port	Connect to USB storage device,
			mouse, burning DVD-ROM and
			etc.
5	P	Network port	100M Ethernet port
6	DC 12V -C-	Power input port	Input 12V DC.
7	1	GND	Ground end

2.2.11 HCVR5104HC-V2/HCVR5108HC-V2/HCVR5116HC-V2 Series The HCVR5104HC-V2 series rear panel is shown as below. See Figure 2-28.

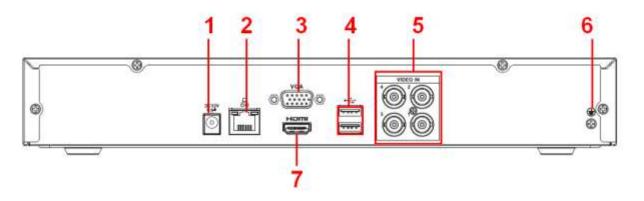
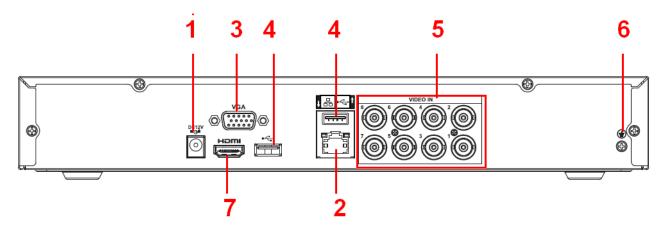


Figure 2-28

The HCVR5108HC-V2 series rear panel is shown as below. See Figure 2-29.





The HCVR5116HC-V2 series rear panel is shown as below. See Figure 2-30.

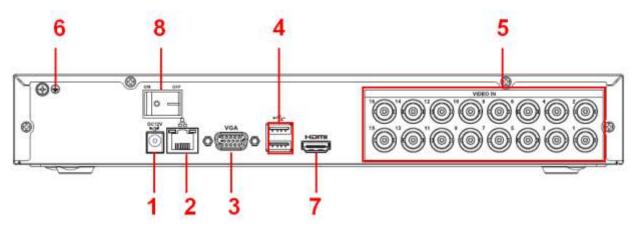


Figure 2-30

Please refer to the following sheet for detailed information.

SN	lcon	Name	Note
1	DC 12V	Power input port	Input 12V DC.
2		Network port	100M Ethernet port
3	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
4	⊷	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
5	VIDEO IN	Video input port	Connect to analog camera, video input signal.
6	Ŧ	GND	Ground end

7	HDMI	High	definition	High definition audio and video
		media in	iterface	signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
8	•	Power button	on-off	Power on/off button.

2.2.12 HCVR5104HE/HCVR5108HE Series

The HCVR5104HE4 series rear panel is shown as below. See Figure 2-31.

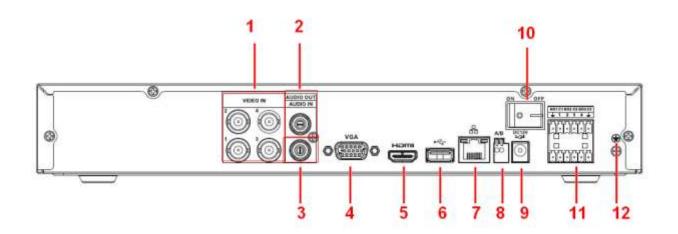


Figure 2-31

The HCVR5108HE series rear panel is shown as below. See Figure 2-32.

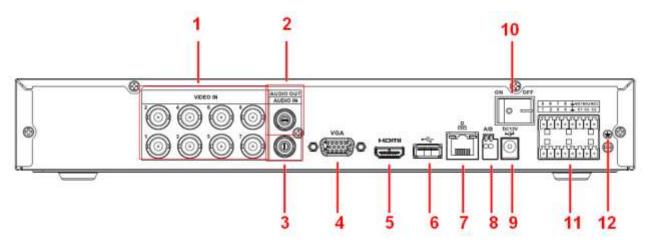


Figure 2-32

SN	Icon	Name	Note			
1	VIDEO IN	Video input port	Connect	to	analog	camera,

			video input signal
			video input signal.
2	AUDIO OUT	Audio output port	Connect to video output device
			such as sound box.
3	AUDIO IN	Audio input port	Connect to audio input device
			such as speaker.
4	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can
			connect to the monitor to view
			ananlog video output.
5	HDMI		High definition audio and video
			signal output port. It transmits
		High definition	uncompressed high definition
		media interface	video and multiple-channel data
			to the HDMI port of the display
			device.
6	•=	USB2.0 port	Connect to USB storage
			device, mouse, burning
			DVD-ROM and etc.
7		Network port	100M Ethernet port
8	А	RS485 (RS-485)	RS485_A port. It is the cable A.
		communication	You can connect to the control
		port	devices such as speed dome
			PTZ.
	В		RS485_B.It is the cable B. You
			can connect to the control
			devices such as speed dome
			PTZ.
9	DC 12V 	Power input port	Input 12V DC.
10			-
		Power on-off	Power on/off button.
	رىيىيى	button	
11	5 6 7 8 - M01N02N03		
		Alarm input/Alarm	Input/output alarm signal.
		output	
12	\perp	GND	Ground end
L	-	1	1

2.2.13 HCVR5104HE-V2/HCVR5108HE-V2/HCVR5116HE-V2 Series

The HCVR5104HE-V2 series rear panel is shown as below. See Figure 2-33.

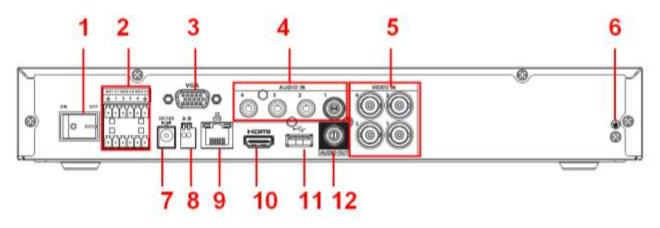


Figure 2-33

The HCVR5108HE-V2 series rear panel is shown as below. See Figure 2-34.

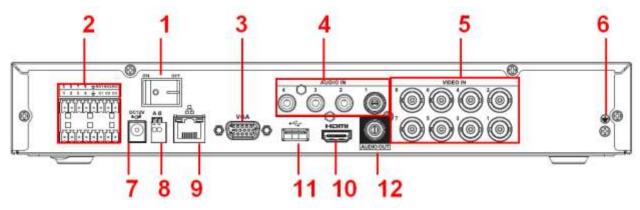


Figure 2-34

The HCVR5116HE-V2 series rear panel is shown as below. See Figure 2-35.

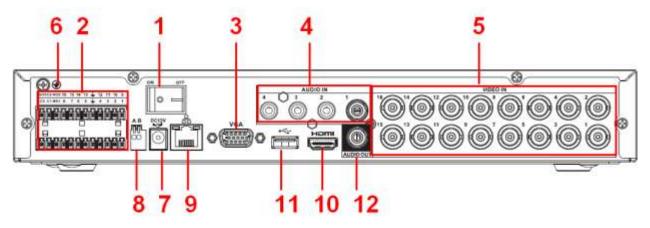


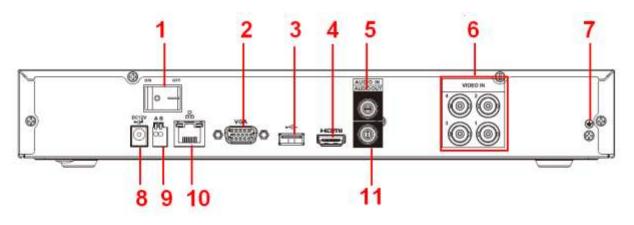
Figure 2-35

SN	lcon	Name	Note
1	•	Power on-of button	Power on/off button.

2	5 6 7 8 → MOINOZMOS 1 2 3 4 ↓ C1 C2 C3 5 6 0 0 0 0 1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0	Alarm input/Alarm output	Input/output alarm signal.
3	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
4	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
5	VIDEO IN	Video input port	Connect to analog camera, video input signal.
6	<u> </u>	GND	Ground end
7	DC 12V 	Power input port	Input 12V DC.
8	A	RS485 (RS-485) communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ. RS485_B.It is the cable B. You can connect to the control devices such as speed dome
9	676	Network port	PTZ. 100M Ethernet port
10	HDMI	High definition media interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
11	⊷	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
12	AUDIO OUT	Audio output port	Connect to video output device such as sound box.

2.2.14 HCVR7104H-V2/HCVR7108H-V2 Series

The HCVR7104H-V2 series rear panel is shown as below. See Figure 2-36.





The HCVR7108H-V2 series rear panel is shown as below. See Figure 2-37.

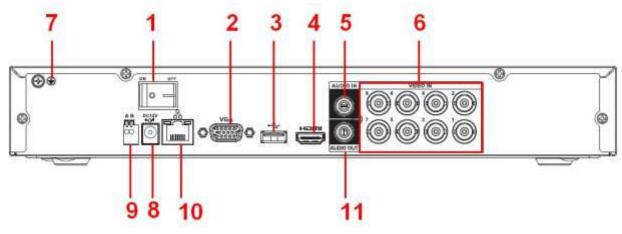


Figure 2-37

SN	lcon	Name	Note
1	•	Power on-off button	Power on/off button.
2	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
3	•	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
4	HDMI	High definition media interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.

	Τ		1
5	AUDIO IN	Audio input port	Connect to audio input device
			such as speaker.
6	VIDEO IN	Video input port	Connect to analog camera,
			video input signal.
7	Ŧ	GND	Ground end
8	DC 12V 	Power input port	Input 12V DC.
9	A	RS485 (RS-485)	RS485_A port. It is the cable A.
		communication	You can connect to the control
		port	devices such as speed dome
			PTZ.
	В		RS485_B.It is the cable B. You
			can connect to the control
			devices such as speed dome
			PTZ.
10		Network port	100M Ethernet port
11	AUDIO OUT	Audio output port	Connect to video output device
			such as sound box.

2.2.15 HCVR7104HC-V2/HCVR7108HC-V2 Series

The HCVR7104HC-V2 series rear panel is shown as below. See Figure 2-38.

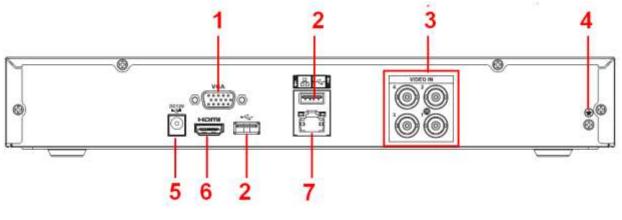
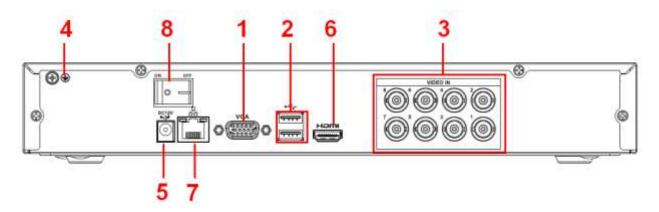


Figure 2-38

The HCVR7108HC-V2 series rear panel is shown as below. See Figure 2-39.





Please refer to the following sheet for detailed information.

SN	lcon	Name	Note
1	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can connect
			to the monitor to view ananlog
			video output.
2	•	USB2.0 port	Connect to USB storage device,
			mouse, burning DVD-ROM and
			etc.
3	VIDEO IN	Video input port	Connect to analog camera, video
			input signal.
4	Ŧ	GND	Ground end
5	DC 12V	Power input port	Input 12V DC.
6	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition
			video and multiple-channel data
			to the HDMI port of the display
			device.
7		Network port	100M Ethernet port
8		Power on-off	
		button	Power on/off button.
	تغصطنا		

2.2.16 HCVR7104HE-V2/HCVR7108HE-V2 Series

The HCVR7104HE-V2 series rear panel is shown as below. See Figure 2-40.

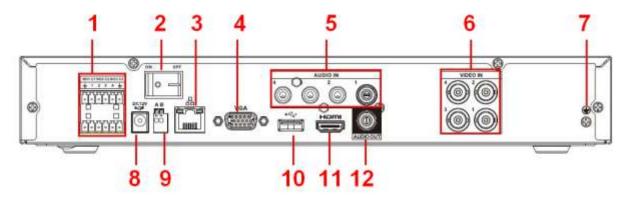


Figure 2-40

The HCVR7108HE-V2 series rear panel is shown as below. See Figure 2-41.

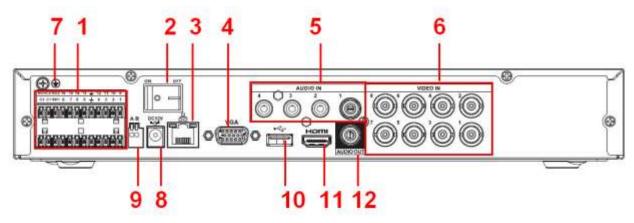


Figure 2-41

SN	Icon	Name	Note
1	5 6 7 8 WOTNO2NO3 1 2 3 4 C1 C2 C3 5 5 5 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5	Alarm input/Alarm output	Input/output alarm signal.
2	•	Power on-off button	Power on/off button.
3	- -	Network port	100M Ethernet port
4	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
5	AUDIO IN	Audio input port	Connect to audio input device such as speaker.

6	VIDEO IN	Video input port	Connect to analog camera, video input signal.
7	÷	GND	Ground end 0
8	DC 12V 	Power input port	Input 12V DC.
9	A	RS485 (RS-485)	RS485_A port. It is the cable A.
		communication	You can connect to the control
		port	devices such as speed dome
			PTZ.
	В		RS485_B.It is the cable B. You
			can connect to the control
			devices such as speed dome
			PTZ.
10	•	USB2.0 port	Connect to USB storage
			device, mouse, burning
			DVD-ROM and etc.
11	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition
			video and multiple-channel data
			to the HDMI port of the display
			device.
12	AUDIO OUT	Audio output port	Connect to video output device
			such as sound box.

2.2.17 HCVR4104/4108/4116HE-S2 Series

The HCVR4104HE-S2 series rear panel is shown as below. See Figure 2-42.

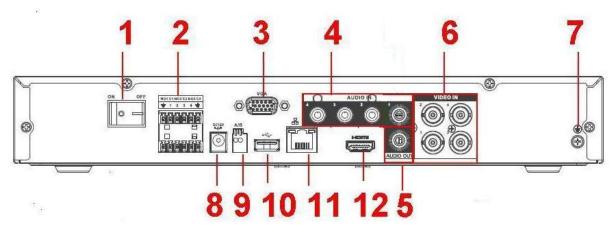


Figure 2-42

The HCVR4108HE-S2 series rear panel is shown as below. See Figure 2-43.

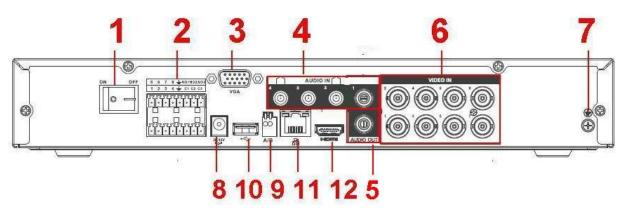


Figure 2-43

The HCVR4116HE-S2 series rear panel is shown as below. See Figure 2-44.

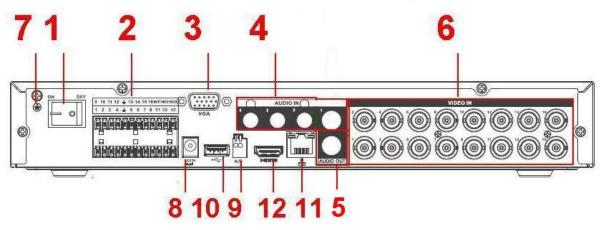


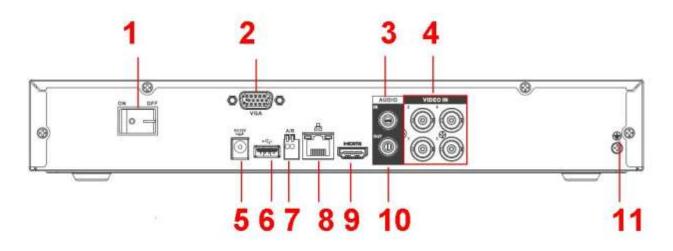
Figure 2-44

SN	Icon	Name	Note
1	•	Power on-off button	Power on/off button.
2	5 6 7 8 WOINO2NO3 1 2 3 4 C1 C2 C3 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5	Alarm input/Alarm output	Input/output alarm signal.
3	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can
			connect to the monitor to view
			ananlog video output.
4	AUDIO IN	Audio input port	Connect to audio input device
			such as speaker.
5	AUDIO OUT	Audio output port	Connect to video output device
			such as sound box.

6	VIDEO IN	Video input port	Connect to analog camera,
			video input signal.
7	Ŧ	GND	Ground end 0
8	DC 12V =_C=	Power input port	Input 12V DC.
9	A	RS485 (RS-485)	RS485_A port. It is the cable A.
		communication	You can connect to the control
		port	devices such as speed dome
			PTZ.
	В		RS485_B.It is the cable B. You
			can connect to the control
			devices such as speed dome
			PTZ.
10	•	USB2.0 port	Connect to USB storage
			device, mouse, burning
			DVD-ROM and etc.
11	<u>8</u> 6	Network port	
			100M Ethernet port
			·
12	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition
			video and multiple-channel data
			to the HDMI port of the display
			device.

2.2.18 HCVR5104/5108/5116H-S2 Series

The HCVR5104H-S2 series rear panel is shown as below. See Figure 2-45.





The HCVR5108H-S2 series rear panel is shown as below. See Figure 2-46.

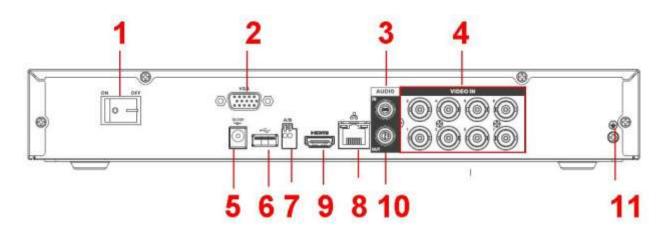


Figure 2-46

The HCVR5116H-S2 series rear panel is shown as below. See Figure 2-47.

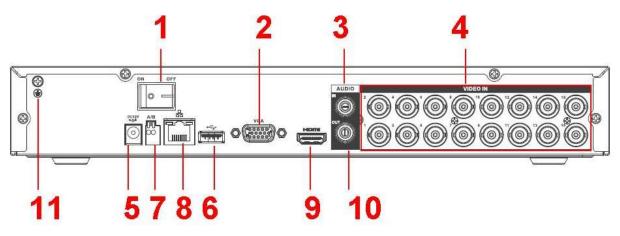


Figure 2-47

SN	lcon	Name	Note
1	•	Power on-off button	Power on/off button.
2	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
3	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
4	VIDEO IN	Video input port	Connect to analog camera, video input signal.
5	DC 12V 	Power input port	Input 12V DC.
6	•	USB2.0 port	Connect to USB storage device,

			mouse, burning DVD-ROM and etc.
7	A B	RS485 (RS-485) communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ. RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
8	<u>с</u> та	Network port	100M Ethernet port
9	HDMI	High definition media interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
10	AUDIO OUT	Audio output port	Connect to video output device such as sound box.
11	÷	GND	Ground end

2.2.19 HCVR5104/5108/5116HE-S2 Series

The HCVR5104HE-S2 series rear panel is shown as below. See Figure 2-48.

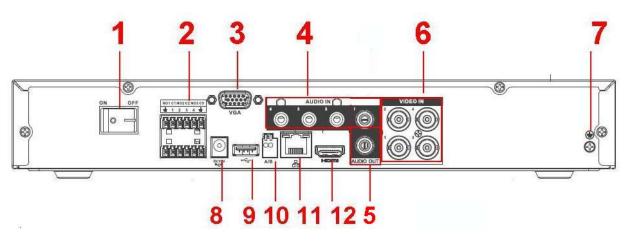


Figure 2-48

The HCVR5108HE-S2 series rear panel is shown as below. See Figure 2-49.

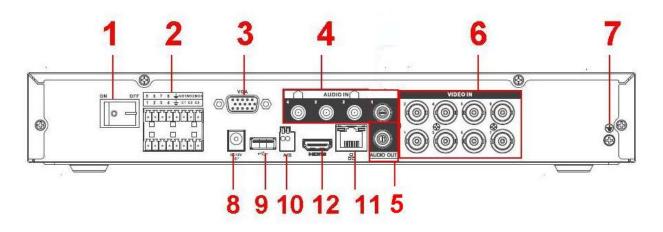


Figure 2-49

The HCVR5116HE-S2 series rear panel is shown as below. See Figure 2-50.

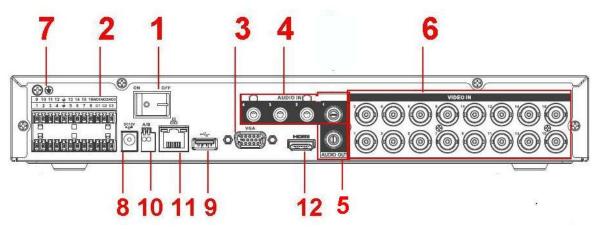


Figure 2-50

SN	Icon	Name	Note
1	•	Power on-off button	Power on/off button.
2	5 6 7 8 WOINO2NO3 1 2 3 4 WOINO2NO3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Alarm input/Alarm output	Input/output alarm signal.
3	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
4	AUDIO IN	Audio input port	Connect to audio input device such as speaker.

5	AUDIO OUT	Audio output port	Connect to video output device such as sound box.
6	VIDEO IN	Video input port	Connect to analog camera, video input signal.
7	<u> </u>	GND	Ground end
8	DC 12V 	Power input port	Input 12V DC.
9	⊷	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
10	AB	RS485 (RS-485) communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ. RS485_B.It is the cable B. You can connect to the control
			devices such as speed dome PTZ.
11	- 0 -5-	Network port	100M Ethernet port
12	HDMI	High definition media interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.

2.2.20 HCVR7104/7108H-S2 Series

The HCVR7104H-S2 series rear panel is shown as below. See Figure 2-51.

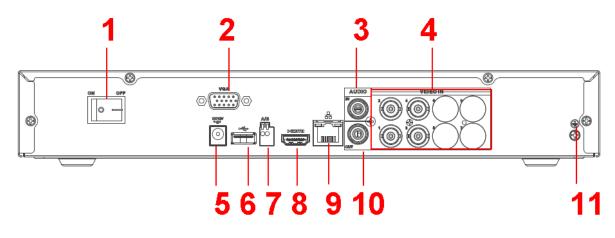


Figure 2-51

The HCVR7108H-S2 series rear panel is shown as below. See Figure 2-52.

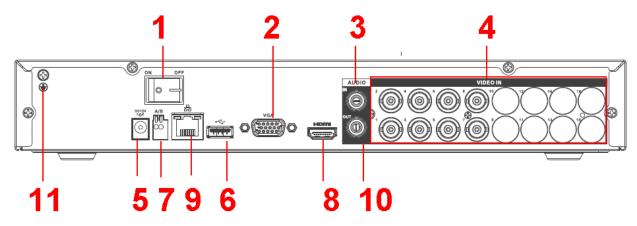


Figure 2-52

SN	lcon	Name	Note
1	•	Power on-off button	Power on/off button.
2	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
3	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
4	VIDEO IN	Video input port	Connect to analog camera, video input signal.
5	DC 12V 	Power input port	Input 12V DC.
6	•€•	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
7	A	RS485 (RS-485) communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
8	HDMI	High definition media interface	High definition audio and video signal output port. It transmits uncompressed high definition

			video and multiple-channel data to the HDMI port of the display device.
9		Network port	100M Ethernet port
10	AUDIO OUT	Audio output port	Connect to video output device such as sound box.
11	Ŧ	GND	Ground end

2.2.21 HCVR7104/7108HE-S2 Series

The HCVR7104HE-S2 series rear panel is shown as below. See Figure 2-53.

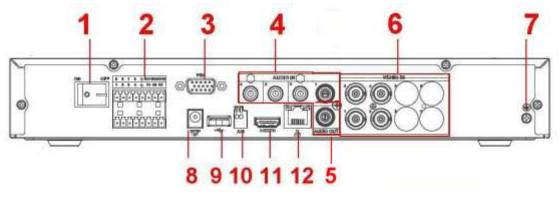


Figure 2-53

The HCVR7108HE-S2 series rear panel is shown as below. See Figure 2-54.

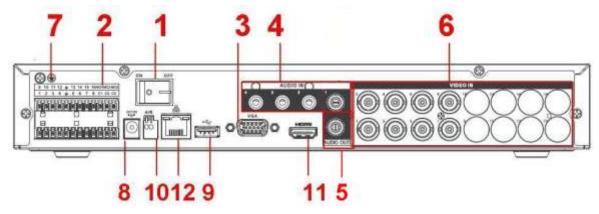


Figure 2-54

SN	Icon	Name		Note
1	•	Power button	on-off	Power on/off button.

2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Alarm input/Alarm output	Input/output alarm signal.
3	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
4	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
5	AUDIO OUT	Audio output port	Connect to video output device such as sound box.
6	VIDEO IN	Video input port	Connect to analog camera, video input signal.
7	Ť	GND	Ground end
8	DC 12V 	Power input port	Input 12V DC.
9	⊷	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
10	A B	RS485 (RS-485) communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ. RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
11	HDMI	High definition media interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
12		Network port	100M Ethernet port

2.2.22 HCVR41XXHE-S3/HCVR51XXH-S3/HCVR71XXH-S3/HCVR71XXHE-S3 /XVR41XXHE/XVR51XXH/XVR51XXHE/XVR71XXH/XVR71XXHE Series

The

HCVR41XXHE-S3/HCVR51XXH-S3/HCVR51XXHE-S3/HCVR71XXHE-S3/XVR41XXHE/ XVR51H/XVR51XXHE/XVR71XXHE series rear panel is shown as below. See Figure 4-53.

The following figure is based on HCVR4116HE-S3/HCVR5116HE-S3/HCVR7116HE-S3/XVR4116HE/XVR5116HE/XVR7116HE series.

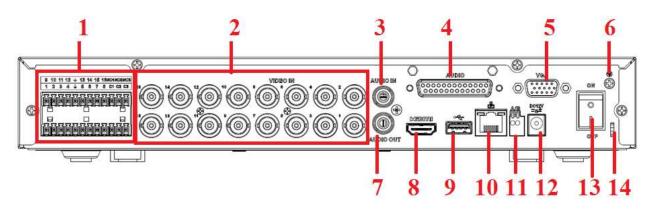


Figure 2-55

The HCVR71XXH-S3/XVR71XXH rear panel is shown as below. See Figure 4-52. The following figure is based on the HCVR7116H-S3/XVR7116H.

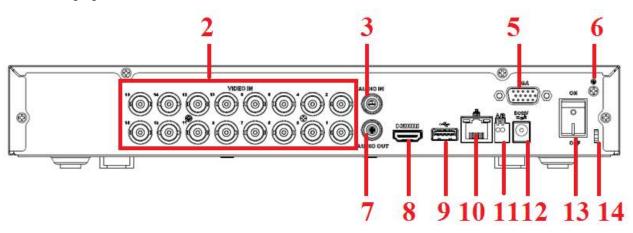


Figure 2-56

SN	Icon	Name	Note
1	9 10 11 12 + 13 14 16 18исновиса 1 3 3 4 4 6 8 7 8 стас 1 8 5 4 6 8 7 8 стас 1 8 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Alarm input/Alarm output	Input/output alarm signal.
2	VIDEO IN	Video input port	Connect to analog camera, video input signal.
3	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
4		DB25 port	The 5th to the 16th-channel audio input port.
5	VGA	VGA video output	VGA video output port.

		port	Output analog video signal.
		port	
			Can connect to the monitor
			to view ananlog video
			output.
6	÷	GND	Ground end
7	AUDIO OUT	Audio output port	Connect to video output
			device such as sound box.
8	HDMI	High definition	High definition audio and
		media interface	video signal output port. It
			transmits uncompressed
			high definition video and
			multiple-channel data to the
			HDMI port of the display
			device.
9	•	USB2.0 port	Connect to USB storage
			device, mouse, burning
			DVD-ROM and etc.
10		Network port	100M Ethernet port
	66		100M Ethernet port
11	A	RS485 (RS-485)	RS485_A port. It is the
		communication	cable A. You can connect to
		port	the control devices such as
			speed dome PTZ.
	В		RS485_B.It is the cable B.
			You can connect to the
			control devices such as
			speed dome PTZ.
12	DC 12V 	Power input port	Input 12V DC.
13	ож	Power on-off	Power on/off button.
		button	
	077		
14	Ħ	Power cable	Use clamp to secure the
		fastener	power cable on the device
			in case there is any loss.
L	1	I	· · ·

2.2.23 HCVR41XXHS-S2/ HCVR2108HS-S2/ HCVR2116HS-S2 Series

The HCVR4104HS-S2 series rear panel is shown as below. See Figure 2-57.

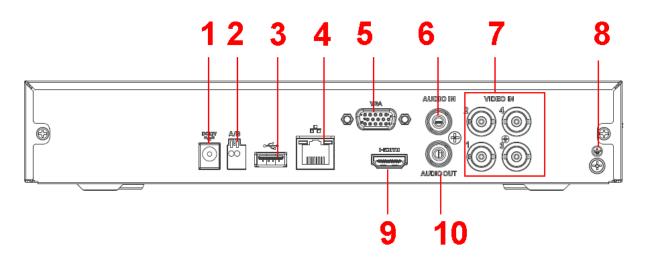


Figure 2-57

The HCVR4108HS-S2/HCVR2108HS-S2 series rear panel is shown as below. See Figure 2-58.

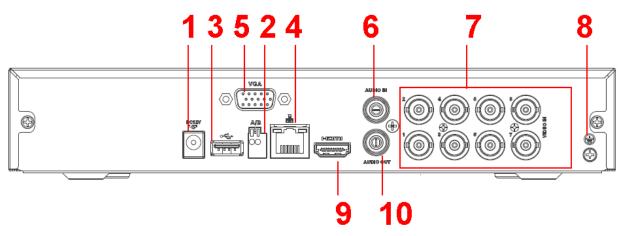


Figure 2-58

The HCVR4116HS-S2/ HCVR2116HS-S2 series rear panel is shown as below. See Figure 2-59.

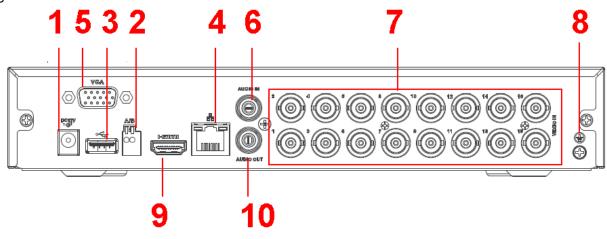


Figure 2-59

Please refer to the following sheet for detailed information.

SN	Icon	Name	Note
1	DC 12V 	Power input port	Input 12V DC.
2	A	RS485 (RS-485)	RS485_A port. It is the cable A.
		communication	You can connect to the control
		port	devices such as speed dome PTZ.
	В		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
3	•4	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
4		Network port	100M Ethernet port
5	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
6	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
7	VIDEO IN	Video input port	Connect to analog camera, video input signal.
8	÷	GND	Ground end
9	HDMI	High definition media interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
10	AUDIO OUT	Audio output port	Connect to video output device such as sound box.

2.2.24 HCVR21XXHS-S3/HCVR41XXHS-S3/51XXHS-S3/7104HS-S3 /XVR21XXHS/XVR41XXHS/51XXHS/7104HS Series

The

HCVR2116HS-S3/HCVR41XXHS-S3/51XXHS-S3/XVR2116HS/XVR41XXHS/XVR51XX HS series rear panel is shown as below. See Figure 2-60.

The following figure is based on the HCVR2116HS-S3/HCVR4116HS-S3/5116HS-S3 /XVR2116HS/XVR4116HS/XVR5116HS series product.

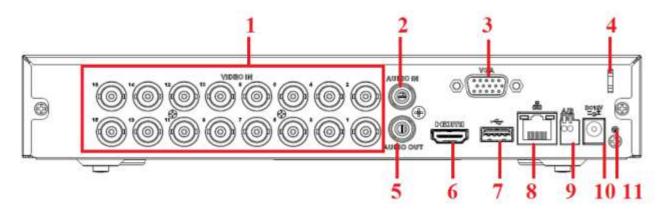


Figure 2-60

The HCVR7104HS-S3/XVR7104HS series rear panel is shown as below. See Figure 2-61.

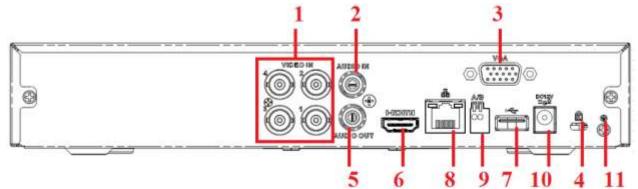


Figure 2-61

SN	Icon	Name	Note
1	VIDEO IN	Video input port	Connect to analog camera, video
			input signal.
2	AUDIO IN	Audio input port	Connect to audio input device
			such as speaker.
3	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can connect
			to the monitor to view analog
			video output.
4		Power cable	Use clamp to secure the power
		fastener	cable on the device in case there
			is any loss.
5	AUDIO OUT	Audio output port	Connect to video output device
			such as sound box.
6	HDMI	High definition	High definition audio and video
		media interface	signal output port. It transmits
			uncompressed high definition
			video and multiple-channel data

			to the HDMI port of the display device.
7	•€	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
8	- -	Network port	100M Ethernet port
9	A	RS485 (RS-485) communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
10	DC 12V 	Power input port	Input 12V DC.
11	1	GND	Ground end

2.2.25 HCVR52XXA-V2/ HCVR72XXA-V2 Series

This series products' rear panel is shown as below. See Figure 2-62. The following figure is based on HCVR7204A-V2 series product.

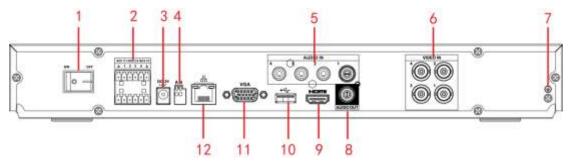


Figure 2-62 Please refer to the following sheet for detailed information.

SN	Icon	Name	Note
1		Power switch	Power on/off button.
2	1~4	Alarm input port 1~4	 There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the DVR have the same ground.

SN	Icon	Name	Note
	NO1~NO3 C1~C3	Alarm output port 1~3	 3 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port NO3~C3)).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end.
3	DC12V -œ⁺	Power input port	Input DC 12V/5A.
4	AB	RS-485 communicati on port	 RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ. RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
5	AUDIO IN	Audio input port	It is to receive the analog audio signal output from the devices such as mike phone, pickup.
6	VIDEO IN	Video input port	Connect to analog camera to input video signal.
7	Ŧ	GND	Alarm input ground port.
8	AUDIO OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
9	HDMI	High Definition Media Interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
10	•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
11	VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
12	6 6	Network port	1000M Ethernet port

2.2.26 HCVR42XXA-S2/ HCVR4216AN-S2 Series

This HCVR4204A-S2 rear panel is shown as below. See Figure 2-63.

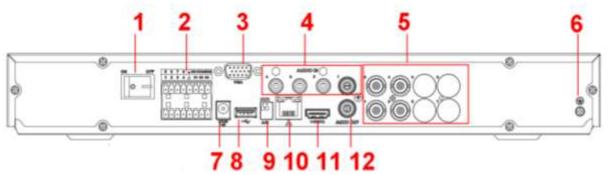


Figure 2-63

This HCVR4208A-S2 rear panel is shown as below. See Figure 2-64.

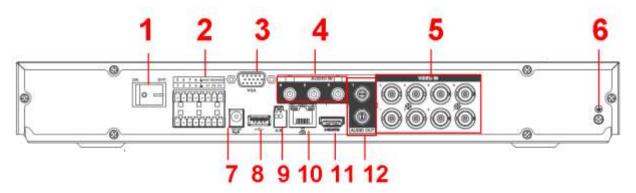


Figure 2-64

This HCVR4216A-S2 rear panel is shown as below. See Figure 2-65.

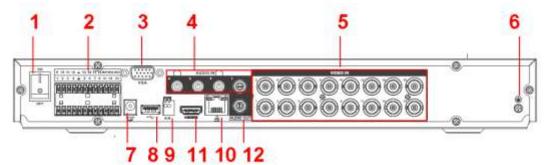
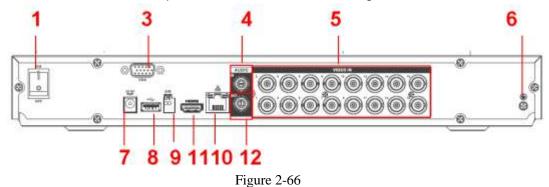


Figure 2-65

This HCVR4216AN-S2 rear panel is shown as below. See Figure 2-66.



Please refer to the following sheet for detailed information.

SN	Icon	Name	Note
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SN	Icon	Name	Note
1		Power switch	Power on/off button.
2	1~8(16)	Alarm input port 1~8(16)	 There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the DVR have the same ground.
	NO1~NO3	Alarm output port 1~3	 3 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port NO3~C3)).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end.
	C1~C3		
3	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
4	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
5	VIDEO IN	Video input port	Connect to analog camera, video input signal.
6	Ŧ	GND	Alarm input ground port.
7	DC 12V G-	Power input port	Input 12V DC.
8	•4	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
9	A	RS485 (RS-485)	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В	communicati on port	RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
10		Network port	1000M Ethernet port
11	HDMI	High Definition Media Interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
12	AUDIO OUT	Audio output port	Connect to video output device such as sound box.

2.2.27 HCVR4224/HCVR4232AN-S2 Series

The rear panel is shown as below. See Figure 2-67. The following figure is based on the HCVR4232AN-V2 series product.

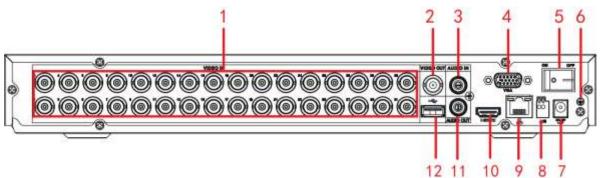


Figure 2-67

SN	Icon	Name	Note
1	VIDEO IN	Video input port	Connect to analog camera, video input signal.
2	VIDEO OUT	Video output port	Connect to output devices such as TV.
3	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
4	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
5		Power switch	Power on/off button.
6	4	GND	Alarm input ground port.
7	DC12V ∸⊖±	Power input port	Input 12V/5A DC.
8	А	RS485 (RS-485)	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В	communicatio n port	RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
9		Network port	1000M Ethernet port
10	HDMI	High Definition Media Interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
11	AUDIO OUT	Audio output port	Connect to video output device such as sound box.

SN	lcon	Name	Note
12	÷	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.

2.2.28 HCVR52XXA-S2/ HCVR5216AN-S2 Series

This HCVR5204A-S2 products' rear panel is shown as below. See Figure 2-68.

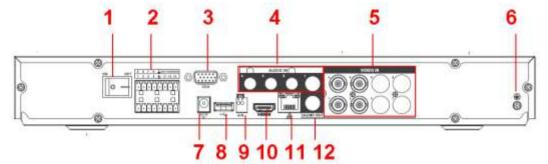


Figure 2-68

This HCVR5208A-S2 products' rear panel is shown as below. See Figure 2-69.

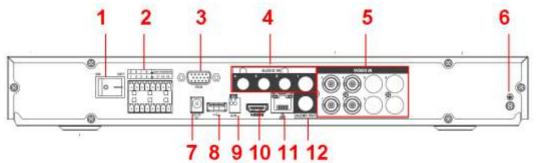


Figure 2-69

This HCVR5216A-S2 products' rear panel is shown as below. See Figure 2-70.

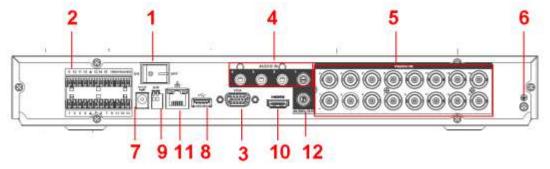


Figure 2-70

This HCVR5216AN-S2 products' rear panel is shown as below. See Figure 2-71.

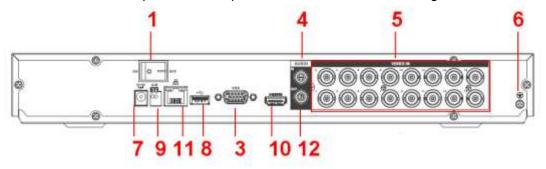


Figure 2-71 Please refer to the following sheet for detailed information.

SN	lcon	Name	Note
1		Power switch	Power on/off button.
2	1~8(16)	Alarm input port 1~8(16)	 There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the DVR have the same ground.
	NO1~NO3	Alarm output port 1~3	 3 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port NO3~C3)).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end.
3	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
4	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
5	VIDEO IN	Video input port	Connect to analog camera, video input signal.
6	Ŧ	GND	Alarm input ground port.
7	DC 12V 	Power input port	Input 12V DC.
8	•€	USB2.0 port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
9	A	RS485 (RS-485)	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В	communicati on port	RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
10	HDMI	High Definition Media Interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
11	6 6	Network port	100M Ethernet port

SN	Icon	Name	Note
12	AUDIO	Audio output	Connect to video output device such as sound box.
	OUT	port	

2.2.29 HCVR720XA-S2 Series

The HCVR7204A-S2 products' rear panel is shown as below. See Figure 2-72.

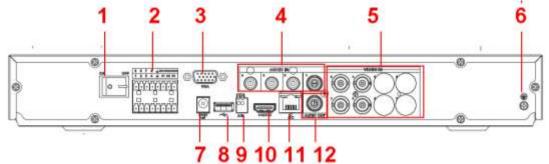


Figure 2-72

The HCVR7208A-S2 products' rear panel is shown as below. See Figure 2-73.

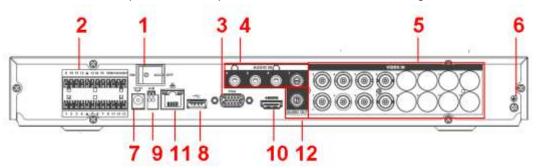


Figure 2-73

SN	Icon	Name	Note
1		Power switch	Power on/off button.
2	1~8(16)	Alarm input port 1~8(16)	 There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the DVR have the same ground.
	NO1~NO3	Alarm output port 1~3	 3 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port NO3~C3)).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end.
	C1~C3		

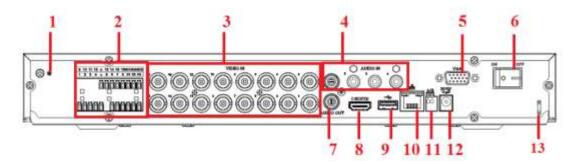
SN	lcon	Name	Note
3	VGA	VGA video	VGA video output port. Output analog video signal.
		output	Can connect to the monitor to view ananlog video
		port	output.
4	AUDIO IN	Audio input	Connect to audio input device such as speaker.
		port	
5	VIDEO IN	Video input	Connect to analog camera, video input signal.
		port	
6	_	GND	Alarm input ground port.
	-		
7	DC 12V	Power input	Input 12V DC.
		port	
8	•	USB2.0 port	Connect to USB storage device, mouse, burning
			DVD-ROM and etc.
9	А	RS485	RS485_A port. It is the cable A. You can connect to
		(RS-485)	the control devices such as speed dome PTZ.
	В	communicati	RS485_B.It is the cable B. You can connect to the
		on port	control devices such as speed dome PTZ.
10	HDMI	High	High definition audio and video signal output port. It
		Definition	transmits uncompressed high definition video and
		Media	multiple-channel data to the HDMI port of the display
		Interface	device.
11	<u> </u>	Network port	100M Ethernet port
12	AUDIO	Audio output	Connect to video output device such as sound box.
	OUT	port	

2.2.30 HCVR42XXA-S3/HCVR42XXAN-S3/HCVR52XXA-S3/HCVR52XXAN-S3/HCVR72XXA-S3/HCVR7216AN-S3/XVR42XXA/XVR42XXAN/XVR 52XXA/XVR52XXAN/XVR72XXA/XVR7216AN Series

The

HCVR42XXA-S3/HCVR52XXA-S3/HCVR72XXA-S3/XVR42XXA/XVR52XXA/XVR72XXA products' rear panel is shown as below. See Figure 2-74.

ThefollowingfigureisbasedontheHCVR4216A-S3/5216A-S3/7216A-S3/XVR4216A/XVR5216A/XVR7216A series product.





The HCVR42XXAN-S3/52XXAN-S3/7216AN-S3/XVR4216AN/5216AN/7216AN rear panel is shown as below. See Figure 2-75.

ThefollowingfigureisbasedontheHCVR4216AN-S3/5216AN-S3/XVR4216AN/XVR5216AN series product.

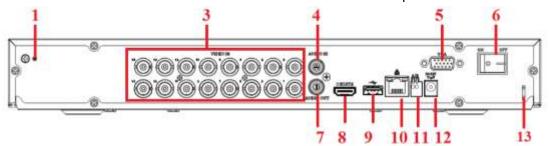


Figure 2-75

The XVR4232AN/5232AN rear panel is shown as below. See Figure 2-76.

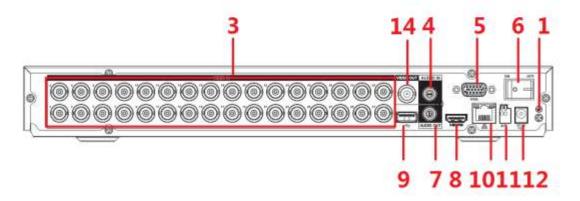


Figure 2-76 Please refer to the following sheet for detailed information.

SN	Icon	Name	Note
1	ψ	GND	Alarm input ground port.

SN	lcon	Name	Note
2	1~8(16) NO1~NO3	Alarm input port 1~8(16) Alarm output port 1~3	 There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the DVR have the same ground. 3 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port NO3~C3)).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end.
3	VIDEO IN	Video input port	Connect to analog camera, video input signal.
4	AUDIO IN	Audio input port	Connect to audio input device such as speaker.
5	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
6		Power switch	Power on/off button.
7	AUDIO OUT	Audio output port	Connect to video output device such as sound box.
8	HDMI	High Definition Media Interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
9	•	USB port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
10	 _	Network port	100 or 1000M Ethernet port
11	A B	RS485 (RS-485) communicati on port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ. RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
12	DC 12V 	Power input port	Input 12V DC.
13		Power cable fastener	Use clamp to secure the power cable on the device in case there is any loss.

SN	lcon	Name	Note
14	VIDEO	Video output	Connect to output devices such as TV
	OUT	port	Connect to output devices such as TV.

2.2.31 HCVR52XXL-V2/ HCVR54XXL-V2/HCVR44L-S2 Series

This series products' rear panel is shown as below. See Figure 2-77. The following figure is based on the HCVR5416L-V2 series product.

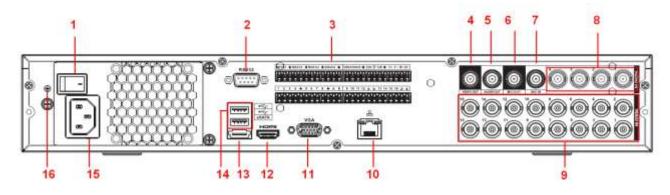


Figure 2-77

The HCVR4432L-S2 rear panel is shown as below. See Figure 2-78.

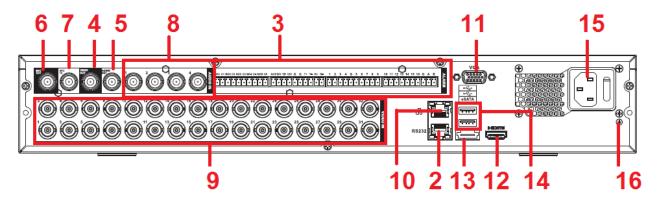


Figure 2-78

SN	Icon	Name	Note
1		Power switch	Power on/off button.
2	RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.

SN	lcon	Name	Note
3	1~16	Alarm input port 1~16	 There are four groups. The first group is from port 1 to port 4, the second group is from port 5 to port 8, the third group is from 9 to 12, and the fourth group is from 13 to 16. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the DVR have the same ground.
	NO1~NO5	Alarm output port 1~5	• 5 groups of alarm output
	C1~C5		ports. (Group 1 : port NO1 \sim C1 Group 2:port
	NC5	RS-485 communication	 NO1 ~ C1,Group 2:port NO2 ~ C2,Group 3:port NO3~C3, Group 4: port NO4~C4, Group 5: port NO5, C5, NC5).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end. NC: Normal close alarm output port. RS485_A port. It is the cable
		port	A. You can connect to the control devices such as speed dome PTZ.
	В		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
	T+、T-、R+、R-	Four-wire full-duplex 485	Four-wire full-duplex 485 port.
		port	T+, T- is the output wire. R+, R- is the input wire.
I			

SN	Icon	Name	Note
	CTRL 12V	Control power output	Controller 12V power output. It is to control the on-off alarm relay output.
4	VIDEO OUT	Video output port	Connect to video output devices such as TV.
5	AUDIO OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
6	MIC OUT	Audio output port	 Audio output port. It is to output the analog audio signal to the devices such as the sound box. Bidirectional talk output. Audio output on 1-window video monitor. Audio output on 1-window video playback.
7	MIC IN	Audio input port	Bidirectional talk input port. It is to receive the analog audio signal output from the devices such as mike phone, pickup.
8	AUDIO IN	Audio input port	It is to receive the analog audio signal output from the devices such as mike phone, pickup.
9	VIDEO IN	Video input port	Connect to analog camera to input video signal.
10		Network port	1000M Ethernet port
11	VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
12	HDMI	High Definition Media Interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.

SN	lcon	Name	Note
13	eSATA	eSATA port	External SATA port. It can
			connect to the device of the
			SATA port. Please jump the
			HDD when there is peripheral
			connected HDD.
14	•	USB2.0 port	USB2.0 port. Connect to
			mouse, USB storage device,
			USB burner and etc.
15		Power socket	Power socket
16		GND	GND
	Ŧ		

2.2.32 HCVR42XXL-S2 Series

The rear panel is shown as in Figure 2-79

The following figure is based on the HCVR4232L-V2 series product.

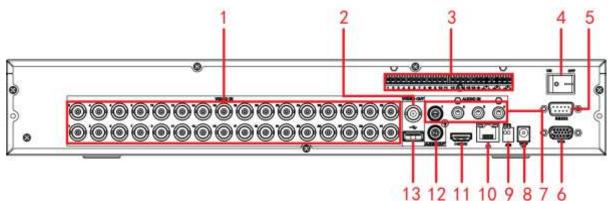


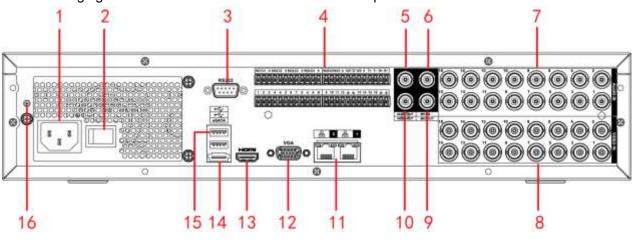
Figure 2-79

SN	lcon	Name	Note	
1	VIDEO IN	Video input	Connect to analog camera, video input signal.	
		port		
2	VIDEO OUT	Video output port	Connect to output devices such as TV.	
3	1~16	Alarm input port 1∼16	 There are four groups. The first group is from port 1 to port 4, the second group is from port 5 to port 8, the third group is from 9 to 12, and the fourth group is from 13 to 16. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the 	

SN	Icon	Name	Note	
			DVR have the same ground.	
	NO1~NO3 C1~C3	Alarm output port 1~3	 3 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port NO3~C3)).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end. 	
	Ŧ	GND	Alarm input ground port.	
4		Power switch	Power on/off button.	
5	RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.	
6	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.	
7	AUDIO IN	Audio input port	Connect to audio input device such as speaker.	
8	DC12V =ϱ	Power input port	Input 12V/5A DC.	
0	A	RS-485	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.	
9	В	communicatio n port	RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.	
10		Network port	1000M Ethernet port	
11	HDMI	High Definition Media Interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.	
12	AUDIO OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.	
13	•4	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.	

2.2.33 HCVR58XXS-V2/HCVR48XXS-S2 Series

The rear panel is shown as in Figure 2-80.



The following figure is based on the HCVR5816S-V2 series product.

Figure 2-80

The HCVR4832S-S2 rear panel is shown as in Figure 2-81.

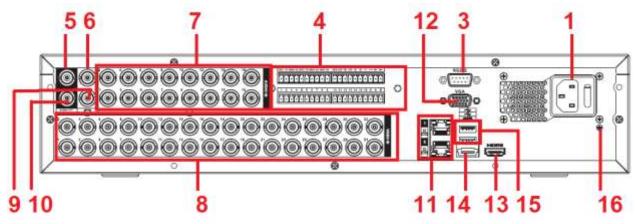


Figure 2-81

SN	Icon	Name	Note
1		Power socket	Power socket
2		Power switch	Power on/off button.
3	RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.

SN	lcon	Name	Note
4	1~16	Alarm input port 1~16	 There are four groups. The first group is from port 1 to port 4, the second group is from port 5 to port 8, the third group is from 9 to 12, and the fourth group is from 13 to 16. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the DVR have the same ground.
	NO1~NO5 C1~C5 NC5	Alarm output port 1~5	 5 groups of alarm output ports. (Group 1 : port NO1 ~ C1,Group 2:port NO2 ~ C2,Group 3:port NO3~C3, Group 4: port NO4~C4, Group 5: port NO5, C5, NC5).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end. NC: Normal close alarm output port.
	A	RS-485 communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
	T+、T-、R+、R-	Four-wire full-duplex 485 port	Four-wire full-duplex 485 port. T+, T- is the output wire. R+, R- is the input wire.
	CTRL 12V	Control power output	Controller 12V power output. It is to control the on-off alarm

SN	Icon	Name	Note
			relay output.
5	AUDIO OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
6	MIC IN	Audio input port	Bidirectional talk input port. It is to receive the analog audio signal output from the devices such as mike phone, pickup.
7	AUDIO IN	Audio input port	It is to receive the analog audio signal output from the devices such as mike phone, pickup.
8	VIDEO IN	Video input port	Connect to analog camera to input video signal.
9	MIC OUT	Audio output port	 Audio output port. It is to output the analog audio signal to the devices such as the sound box. Bidirectional talk output. Audio output on 1-window video monitor. Audio output on 1-window video playback.
10	VIDEO OUT	Video output port	Connect to video output devices such as TV.
11	6 6	Network port	1000M Ethernet port
12	VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
13	HDMI	High Definition Media Interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.
14	eSATA	eSATA port	External SATA port. It can connect to the device of the SATA port. Please jump the

SN	Icon	Name	Note
			HDD when there is peripheral
			connected HDD.
15	•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
16	Ť	GND	GND

2.2.34 HCVR71XXH-4M Series

The rear panel is shown as in Figure 2-82.

The following figure is based on the HCVR7116H-4M series product.

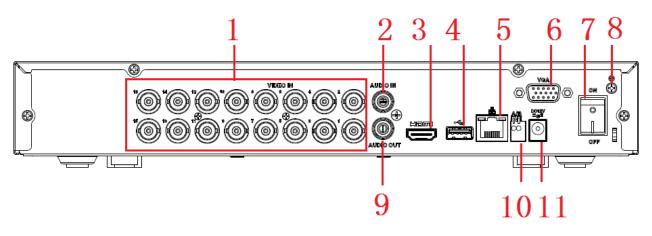


Figure 2-82

SN	lcon	Name	Function
1	VIDEO IN	Video input port	Connect to analog camera, video input signal.
2	AUDIO IN	Audio input port	Connect to microphone and etc to input signal.
3	HDMI	High definition media interface	High definition audio and video signal output port. It transmits the same video signal as that of the VGA/TV or different video signal from that of the VGA/TV (support customized setup). Support mouse operation.
4	•	USB3.0 port	Connect to mouse, USB storage media, USB-burner and etc.
5	<u>-</u>	Network port	1000M Ethernet port

SN	lcon	Name	Function
0		VGA video	VGA video output port. Output analog video signal. It can
6	VGA	output port	connect to the monitor to view analog video.
7		Power switch	Power on/off button.
8	Ē	GND	Ground port
9	AUDIO OUT	Audio output	Connect to sound box and etc to output audio signal.
Ŭ		port	
10	А	RS485	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
10	6	communicatio	RS485_B.It is the cable B. You can connect to the control
	В	n port	devices such as speed dome PTZ.
11	N	Power socket	Power input port

2.2.35 HCVR72XXAN-4M Series

The rear panel is shown as in Figure 2-83.

The following figure is based on the HCVR7208SAN-4M series product.

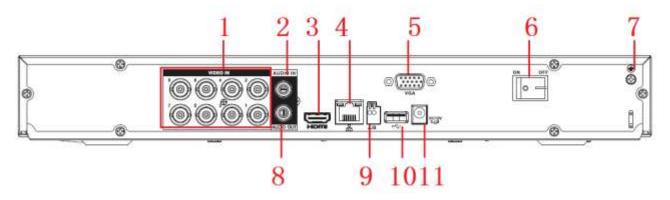


Figure 2-83

SN	lcon	Name		Function
1	VIDEO IN	Video ir port	nput	Connect to analog camera, video input signal.
2	AUDIO IN	Audio ir port	nput	Connect to microphone and etc to input signal.

SN	lcon	Name	Function
3	HDMI	High definition	High definition audio and video signal output port. It
		media	transmits the same video signal as that of the VGA/TV or
		interface	different video signal from that of the VGA/TV $(\mbox{support}$
			customized setup).
			Support mouse operation.
4	<u>-</u> - -	Network port	1000M Ethernet port
5	VGA	VGA	VGA video output port
6		Power switch	Power on/off button.
7	GND	Power switch	Power on/off button.
8	AUDIO OUT	Audio output port	Connect to sound box and etc to output audio signal.
9	A	RS485 communicatio	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В	n port	RS485_B.It is the cable B. You can connect to the control
			devices such as speed dome PTZ.
10	•====	USB3.0 port	Connect to mouse, USB storage media, USB-burner and
			etc.
11	\bigcirc	Power socket	Power input port

2.2.36 XVR54XXL/ XVR74XXL Series

The XVR5408L rear panel is shown as below. See Figure 2-84.

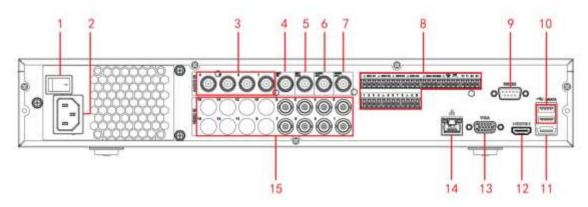


Figure 2-84

SN Icon Name Note

SN	Icon	Name	Note
1		Power switch	Power on/off button.
2		Power socket	Power socket
3	AUDIO IN	Audio input port	It is to receive the analog audio signal output from the devices such as microphone.
4	MIC OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
5	MIC IN	Audio input port	Bidirectional talk input port. It is to receive the analog audio signal output from the devices such as microphone, pickup.
6	AUDIO OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
7	VIDEO OUT	Video output port	Connect to video output devices such as TV.
8	1~8	Alarm input port 1~ 8	 There are two groups. The first group is from port 1 to port 4; the second group is from port 5 to port 8. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the NVR have the same ground.
	NO1~NO5 C1~C5	Alarm output port 1∼5	● 5 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port NO3 ~ C3, Group 4 : port

SN	Icon	Name	Note
	NC5		 NO4~C4, Group 5: port NO5, C5, NC5).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end. NC: Normal close alarm output port.
	A	RS-485 communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
	T+、T-、R+、R-	Four-wire full-duplex 485 port	Four-wire full-duplex 485 port. T+, T- is the output wire. R+, R- is the input wire.
	CTRL 12V	Control power output	Controller 12V power output. It is to control the on-off alarm relay output.
	12V	+12V power output port	+12V power output port. It can provide the power to some peripheral devices such as the camera or the alarm device. Please note the supplying power shall be below 1A.
	G	Ground	Ground
9	RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
10	•	USB port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
11	eSATA	eSATA port	External SATA port. It can connect to the device of the SATA port. Please make sure there is power supplying when there is peripheral connected HDD.
12	HDMI 1	High Definition Media Interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device.

SN	Icon	Name	Note
13	VGA	VGA video output	VGA video output port. Output
		port	analog video signal. Can connect to
			the monitor to view ananlog video
			output.
14		Network port	1000Mbps Ethernet port
15	VIDEO IN	Video input port	Connect to analog camera, video
			input signal.

The XVR5416L/XVR7408L/XVR7416L rear panel is shown as below. See Figure 2-85.

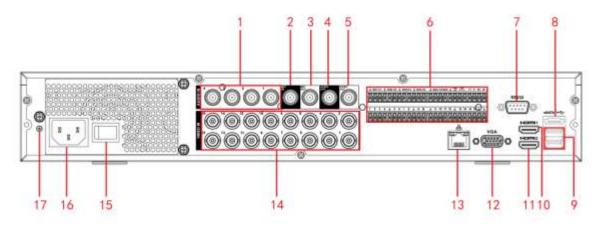


Figure 2-85

SN	Icon	Name	Note
1	AUDIO IN	Audio input port	It is to receive the analog audio signal output from the devices such as microphone.
2	MIC OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
3	MIC IN	Audio input port	It is to receive the analog audio signal output from the devices such as microphone.
4	AUDIO OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
5	VIDEO OUT	Video output port	Connect to video output devices such as TV.

SN	Icon	Name	Note
	1~16	Alarm input port 1~ 16	 There are four groups. The first group is from port 1 to port 4, the second group is from port 5 to port 8, the third group is from 9 to 12, and the fourth group is from 13 to 16. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the NVR have the same ground.
	NO1~NO5		● 5 groups of alarm output ports.
	C1~C5		(Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port NO3~C3, Group 4: port
	NC5	Alarm output port 1∼5	 NO4~C4, Group 5: port NO5, C5, NC5).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output
6			port.C: Alarm output public end.
			 NC: Normal close alarm output port.
	А	RS-485	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В	communication port	RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
	T+、T-、R+、R-	Four-wire full-duplex 485 port	Four-wire full-duplex 485 port. T+, T- is the output wire. R+, R- is the input wire.
	CTRL 12V	Control power output	Controller 12V power output. It is to control the on-off alarm relay output.
	12V	+12V power output port	+12V power output port. It can provide the power to some peripheral devices such as the camera or the alarm device. Please note the supplying power shall be below 1A.

SN	Icon	Name	Note
	Ŧ	Ground	Ground
7	RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
8	eSATA	eSATA port	External SATA port. It can connect to the device of the SATA port. Please make sure there is power supplying when there is peripheral connected HDD.
9	•	USB port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
10	HDMI1	High Definition Media Interface 1	High definition audio and video signal output port. It outputs the same video source as VGA/TV. Support mouse operation and control.
11	HDMI2	High Definition Media Interface 2	High definition audio and video signal output port. Support multiple-window video matrix output. Support tour function.
12	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
13		Network port	1000Mbps Ethernet port
14	VIDEO IN	Video input port	Connect to analog camera, video input signal.
15	_	Power switch	Power on/off button.
16		Power socket	Power socket
17	ŧ	Ground terminal	Ground

The XVR5432L rear panel is shown as below. See Figure 2-86.

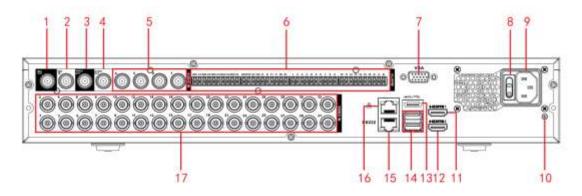


Figure 2-86

SN	Icon	Name	Note
1	MIC OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
2	MIC IN	Audio input port	Bidirectional talk input port. It is to receive the analog audio signal output from the devices such as microphone, pickup.
3	VIDEO OUT	Video output port	Connect to video output devices such as TV.
4	AUDIO OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
5	AUDIO IN	Audio input port	It is to receive the analog audio signal output from the devices such as microphone.
6	1~16	Alarm input port 1~ 16	 There are four groups. The first group is from port 1 to port 4, the second group is from port 5 to port 8, the third group is from 9 to 12, and the fourth group is from 13 to 16. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please
			make sure the device and the NVR have the same ground.
	NO1~NO5	Alarm output port	• 5 groups of alarm output ports.
	C1~C5	1~5	(Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port

SN	Icon	Name	Note
	NC5		 NO3~C3, Group 4: port NO4~C4, Group 5: port NO5, C5, NC5).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end. NC: Normal close alarm output port.
	А	RS-485	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В	communication port	RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
	T+、T-、R+、R-	Four-wire full-duplex 485 port	Four-wire full-duplex 485 port. T+, T- is the output wire. R+, R- is the input wire.
	CTRL 12V	Control power output	Controller 12V power output. It is to control the on-off alarm relay output.
	12V	+12V power output port	+12V power output port. It can provide the power to some peripheral devices such as the camera or the alarm device. Please note the supplying power shall be below 1A.
	Ŧ	Ground	Ground
7	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
8		Power switch	Power on/off button.
9		Power socket	Power socket
10	Ð	Ground terminal	Ground

SN	lcon	Name	Note
11	HDMI1	High Definition Media Interface 1	High definition audio and video signal output port. It outputs the same video source as VGA/TV. Support mouse operation and control.
12	HDMI2	High Definition Media Interface 2	High definition audio and video signal output port. Support multiple-window video matrix output. Support tour function.
13	eSATA	eSATA port	External SATA port. It can connect to the device of the SATA port. Please make sure there is power supplying when there is peripheral connected HDD.
14	•	USB port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
15	RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
16		Network port	1000Mbps Ethernet port
17	VIDEO IN	Video input port	Connect to analog camera, video input signal.

2.2.37 XVR58XXS/ XVR78XXS Series

The XVR5808S rear panel is shown as below. See Figure 2-87.

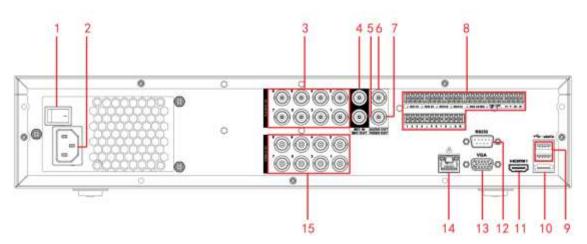


Figure 2-87

The XVR7808S/XVR7816S rear panel is shown as below. See Figure 2-88.

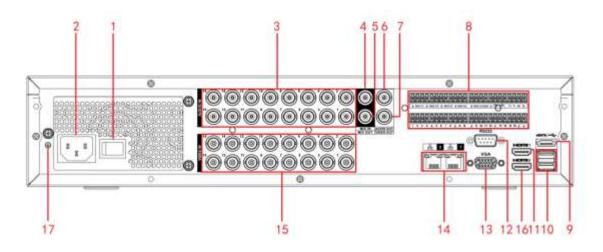


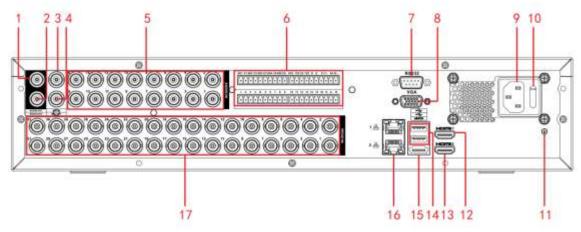
Figure 2-88

SN	Icon	Name	Note
1		Power switch	Power on/off button.
2		Power socket	Power socket
3	AUDIO IN	Audio input port	It is to receive the analog audio signal output from the devices such as microphone.
4	MIC IN	Audio input port	Bidirectional talk input port. It is to receive the analog audio signal output from the devices such as microphone, pickup.
5	MIC OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
6	AUDIO OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
7	VIDEO OUT	Video output port	Connect to video output devices such as TV.
8	1~8	Alarm input port 1~ 8	• There are two groups. The first group is from port 1 to port 4; the second group is from port 5 to port 8. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC

SN	lcon	Name	Note
			 (normal close). When your alarm input device is using external power, please make sure the device and the NVR have the same ground.
	NO1~NO5 C1~C5 NC5	Alarm output port 1∼5	 5 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port NO3~C3, Group 4: port NO4~C4, Group 5: port NO5, C5, NC5).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end. NC: Normal close alarm output port.
	A	RS-485 communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
	В		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
	T+、T-、R+、R-	Four-wire full-duplex 485 port	Four-wire full-duplex 485 port. T+, T- is the output wire. R+, R- is the input wire.
	CTRL 12V	Control power output	Controller 12V power output. It is to control the on-off alarm relay output.
	12V	+12V power output port	+12V power output port. It can provide the power to some peripheral devices such as the camera or the alarm device. Please note the supplying power shall be below 1A.
	G	Ground terminal	Ground
9	•	USB port	Connect to USB storage device, mouse, burning DVD-ROM and etc.
10	eSATA	eSATA port	External SATA port. It can connect to the device of the SATA port. Please make sure there is power

SN	Icon	Name	Note
			supplying when there is peripheral connected HDD.
11	HDMI 1	High Definition Media Interface 1	High definition audio and video signal output port. It outputs the same video source as VGA/TV. Support mouse operation and control.
12	RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
13	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
14		Network port	1000Mbps Ethernet port
15	VIDEO IN	Video input port	Connect to analog camera, video input signal.
16	HDMI2	High Definition Media Interface 2	High definition audio and video signal output port. Support multiple-window video matrix output. Support tour function.
17	\	Ground terminal	Ground

The XVR5832S rear panel is shown as below. See Figure 2-89.





	0		
SN	Icon	Name	Note

SN	Icon	Name	Note
1	AUDIO OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
2	VIDEO OUT	Video output port	Connect to video output devices such as TV.
3	MIC IN	Audio input port	Bidirectional talk input port. It is to receive the analog audio signal output from the devices such as microphone, pickup.
4	MIC OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box.
5	AUDIO IN	Audio input port	It is to receive the analog audio signal output from the devices such as microphone.
	1~16	Alarm input port 1~ 16	 There are four groups. The first group is from port 1 to port 4, the second group is from port 5 to port 8, the third group is from 9 to 12, and the fourth group is from 13 to 16. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device and the NVR have the same ground.
6	NO1~NO5 C1~C5 NC5	Alarm output port 1∼5	 5 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port NO3 ~ C3, Group 4: port NO4~C4, Group 5: port NO5, C5, NC5).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port. C: Alarm output public end. NC: Normal close alarm output port.
	А	RS-485 communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.

SN	Icon	Name	Note
	В		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
	T+、T-、R+、R-	Four-wire full-duplex 485 port	Four-wire full-duplex 485 port. T+, T- is the output wire. R+, R- is the input wire.
	CTRL 12V	Control power output	Controller 12V power output. It is to control the on-off alarm relay output.
	12V	+12V power output port	+12V power output port. It can provide the power to some peripheral devices such as the camera or the alarm device. Please note the supplying power shall be below 1A.
	G	Ground	Ground
7	RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
8	VGA	VGA video output port	VGA video output port. Output analog video signal. Can connect to the monitor to view ananlog video output.
9		Power socket	Power socket
10		Power switch	Power on/off button.
11	\	Ground terminal	Ground
12	HDMI 1	High Definition Media Interface 1	High definition audio and video signal output port. It outputs the same video source as VGA/TV. Support mouse operation and control.
13	HDMI2	High Definition Media Interface 2	High definition audio and video signal output port. Support multiple-window video matrix output. Support tour function.
14	•€•	USB port	Connect to USB storage device, mouse, burning DVD-ROM and etc.

SN	Icon	Name	Note
15	eSATA	eSATA port	External SATA port. It can connect to the device of the SATA port. Please make sure there is power supplying when there is peripheral connected HDD.
16		Network port	1000Mbps Ethernet port
17	VIDEO IN	Video input port	Connect to analog camera, video input signal.

2.2.38 HCR710XH-4K Series

This series product rear panel is shown as in Figure 2-90. Here we use HCVR7108H-4K for an example.

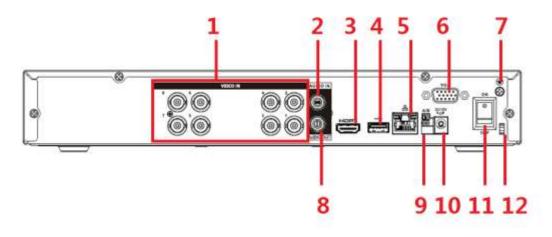


Figure	2-90

SN	lcon	Name	Note
1	VIDEO IN	Video input	Connect to analog camera, video input signal.
		port	
2	AUDIO IN	Audio input	Connect to audio input device such as speaker.
		port	
3	HDMI	High	High definition audio and video signal output port. It
		Definition	transmits uncompressed high definition video and
		Media	multiple-channel data to the HDMI port of the display
		Interface	device.
4	•	USB port	Connect to USB storage device, mouse, burning
			DVD-ROM and etc.
5		Network port	1000M Ethernet port

SN	lcon	Name	Note
6	VGA	VGA video	VGA video output port. Output analog video signal.
		output	Can connect to the monitor to view ananlog video
		port	output.
7	Ŧ	GND	Ground end
8	AUDIO	Audio output	Connect to video output device such as sound box.
	OUT	port	
9	А	RS485	RS485_A port. It is the cable A. You can connect to
		(RS-485)	the control devices such as speed dome PTZ.
	В	communicati	RS485_B.It is the cable B. You can connect to the
		on port	control devices such as speed dome PTZ.
10	DC 12V 	Power input	Input 12V DC.
		port	
11		Power switch	Power on/off button.
12		Power cable	Use clamp to secure the power cable on the device in
		fastener	case there is any loss.

2.2.39 HCVR720XAN-4K Series

This series product rear panel is shown as in Figure 2-91. Here we use HCVR7108AN-4K for an example.

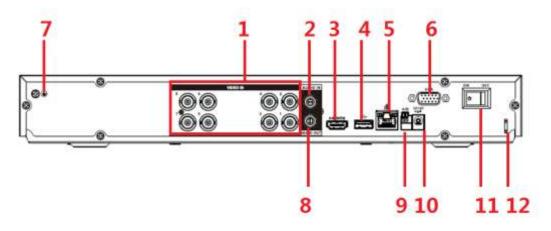


Figure 2-91

SN	Icon	Name		Note
1	VIDEO IN	Video	input	Connect to analog camera, video input signal.
		port		
2	AUDIO IN	Audio port	input	Connect to audio input device such as speaker.
3	HDMI	High		High definition audio and video signal output port. It

SN	lcon	Name	Note
		Definition	transmits uncompressed high definition video and
		Media	multiple-channel data to the HDMI port of the display
		Interface	device.
4	•	USB port	Connect to USB storage device, mouse, burning
			DVD-ROM and etc.
5		Network port	1000M Ethernet port
6	VGA	VGA video	VGA video output port. Output analog video signal.
		output	Can connect to the monitor to view ananlog video
		port	output.
7	÷	GND	Ground end
8	AUDIO	Audio output	Connect to video output device such as sound box.
	OUT	port	
9	А	RS485	RS485_A port. It is the cable A. You can connect to
		(RS-485)	the control devices such as speed dome PTZ.
	В	communicati	RS485_B.It is the cable B. You can connect to the
		on port	control devices such as speed dome PTZ.
10	DC 12V 	Power input	Input 12V DC.
		port	
11	•	Power switch	Power on/off button.
12	Ħ	Power cable	Use clamp to secure the power cable on the device in
		fastener	case there is any loss.

When connect the Ethernet port, please use crossover cable to connect the PC and use the straight cable to connect to the switch or router.

2.3 Connection Sample

2.3.1 Smart Box Series

Please refer to Figure 2-79 for connection sample.

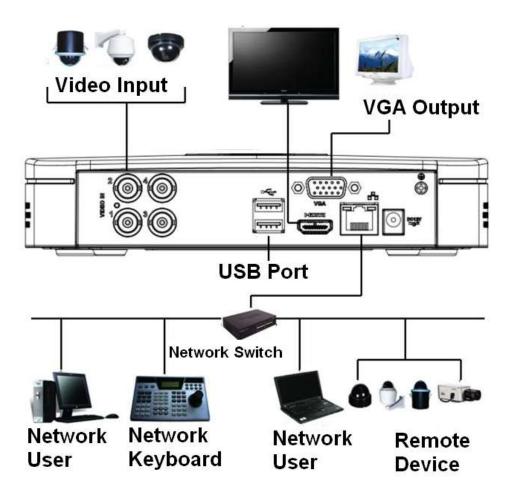


Figure 2-92

2.3.2 Smart 1U Series

Please refer to Figure 2-93 for connection sample.

The following figure is based on the HCVR4108C-S3/5108C-S3/XVR4108C/5108C series.

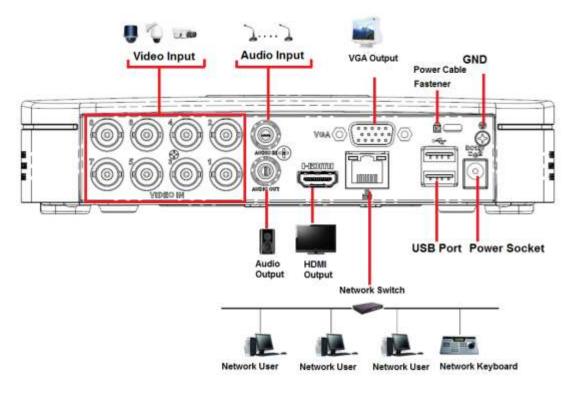


Figure 2-93

2.3.3 Compact 1U Series

Please refer to Figure 2-79 for connection sample.

The following figure is based on the HCVR2116HS-S3/HCVR4116HS-S3/5116HS-S3 /XVR2116HS/XVR4116HS/5116HS series product.

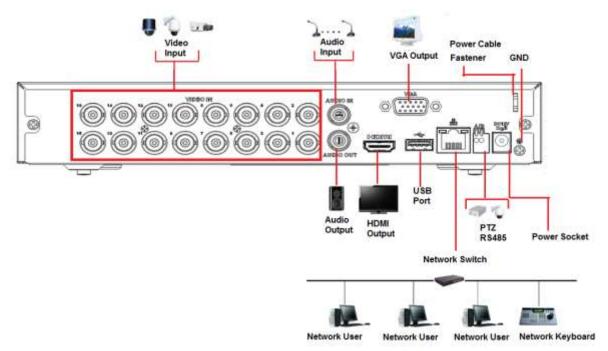


Figure 2-94

2.3.4 Mini 1U Series

Please refer to Figure 2-95 for connection sample.

The following figure is based on HCVR4116HE-S3/HCVR5116HE-S3/HCVR7116HE-S3/XVR4116HE/XVR5116HE/XVR7116HE series.

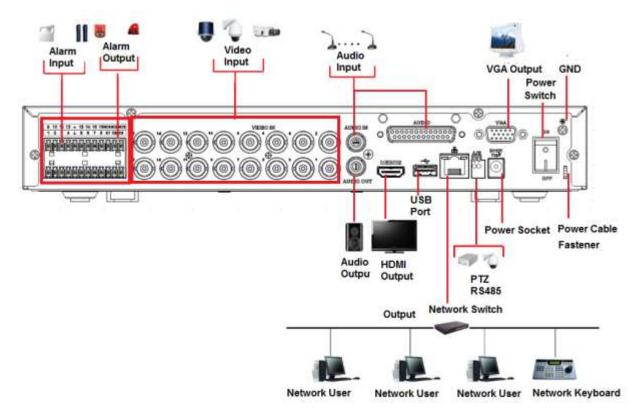


Figure 2-95

2.3.5 1U Series

Please refer to the following figure for detailed information. See Figure 2-96. The following interface is based on the HCVR4216A-S3/HCVR5216A-S3/ HCVR7216A-S3/XVR4216A/XVR5216A/XVR7216A series product.

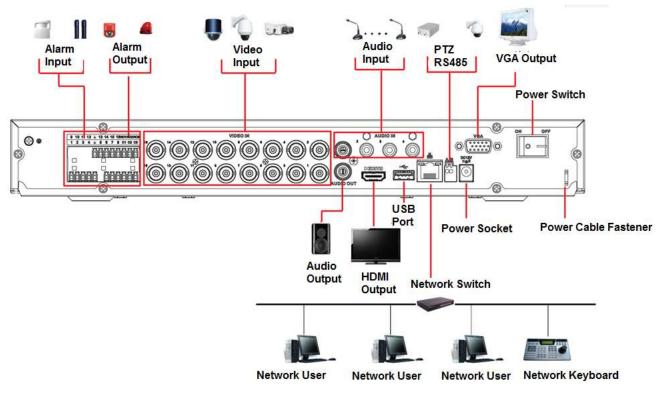


Figure 2-96

2.3.6 1.5U Series

The connection sample is shown as below. See Figure 2-97.

The following interface is based on the HCVR4232L-S2 series product.

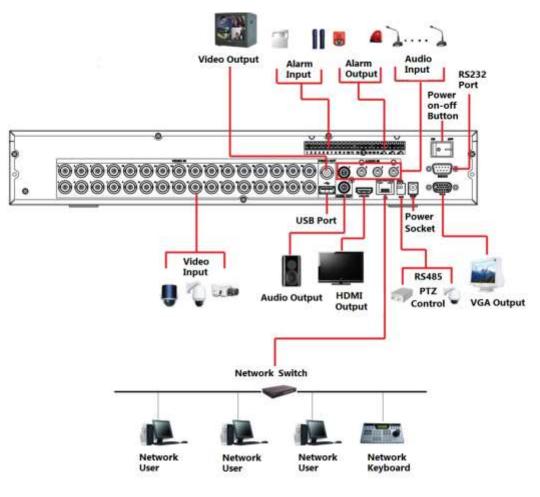


Figure 2-97

2.3.7 2U Series

Please refer to the following figure for detailed information. See Figure 2-98. The following interface is based on the HCVR5816S-V2 series product.

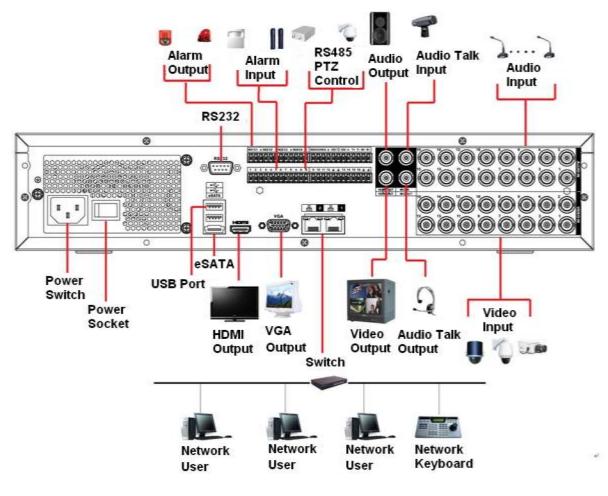


Figure 2-98

2.4 Remote Control

The remote control interface is shown as in Figure 2-99.

Please note remote control is not our standard accessory and it is not included in the accessory bag.

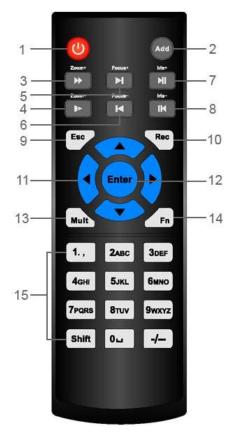


Figure 2-99

Serial Number	Name	Function
1	Power button	Click it to boot up or shut down
		the device.
2	Address	Click it to input device number, so
		that you can control it.
3	Forward	Various forward speeds and
		normal speed playback.
4	Slow play	Multiple slow play speeds or
		normal playback.
	Next record	In playback mode, playback the
5		next video.
	Previous record	In playback mode, playback the
6		previous video.
7	Play/Pause	In pause mode, click this button
		to realize normal playback.
		In normal playback click this
		button to pause playback.
		In real-time monitor mode, click
		this button to enter video search
		menu.
	Reverse/pause	Reverse playback pause mode,

8		click this button to realize normal playback. In reverse playback click this button to pause playback.
9	Esc.	Go back to previous menu or cancel current operation (close upper interface or control)
10	Record	Start or stop record manually In record interface, working with the direction buttons to select the record channel. Click this button for at least 1.5 seconds, system can go to the Manual Record interface.
11	Direction keys	Switch current activated control, go to left or right. In playback mode, it is to control the playback process bar. Aux function(such as switch the PTZ menu)
12	Enter /menu key	go to default button go to the menu
13	Multiple-window switch	Switch between multiple-window and one-window.
14	Fn	In 1-ch monitor mode: pop up assistant function: PTZ control and Video color. Switch the PTZ control menu in PTZ control interface. In motion detection interface, working with direction keys to complete setup. In text mode, click it to delete character.
15	0-9 number key	Input password, channel or switch channel. Shift is the button to switch the input method.

2.5 Mouse Control

Left	click	System pops up password input dialogue box if you have not logged in.
mouse		In real-time monitor mode, you can go to the main menu.

	When you have selected one menu item, left click mouse to view menu
	content.
	Implement the control operation.
	Modify checkbox or motion detection status.
	Click combo box to pop up drop down list
	In input box, you can select input methods. Left click the corresponding button on the panel you can input numeral/English character (small/capitalized). Here \leftarrow stands for backspace button stands for space button.
	In English input mode: _stands for input a backspace icon and \leftarrow stands for deleting the previous character.
	ABCDEFG HIJKLMN OPQRST□ UVWXYZ← opqrst□ uvwxyz←
	In numeral input mode: _ stands for clear and \leftarrow stands for deleting the previous numeral.
	When input special sign, you can click corresponding numeral in the front panel to input. For example, click numeral 1 you can input"/", or you can click the numeral in the on-screen keyboard directly.
	1 / 2 : 3 . 4 ? 5 - 6 _ 7 @ 8 # 9 % 0 & ←
Double left	Implement appaid control operation such as double glick and item in
Double left click mouse	Implement special control operation such as double click one item in the file list to playback the video
	the file list to playback the video. In multiple-window mode, double left click one channel to view in
	full-window.
	Double left click current video again to go back to previous multiple-window mode.
	กานแม่เอ-พากนอพ กายนอ.

Right click mouse	In real-time monitor mode, pops up shortcut menu: one-window, four-window, nine-window and sixteen-window, Pan/Tilt/Zoom, color setting, search, record, alarm input, alarm output, main menu. Among which, Pan/Tilt/Zoom and color setting applies for current selected channel. If you are in multiple-window mode, system automatically switches to the corresponding channel.		
	III View 1 ► View 4		
	 ■ PTZ [+] Auto Focus ⊕ Color Setting 		
	 Q. Search ● Manual ▶ ➡ Remote Device ☆ Main Menu 		
	Exit current menu without saving the modification.		
Press	In numeral input box: Increase or decrease numeral value.		
middle	Switch the items in the check box.		
button	Page up or page down		
Move mouse	Select current control or move control		
Drag	Select motion detection zone		
mouse	Select privacy mask zone.		

2.6 Virtual Keyboard & Front Panel

2.6.1 Virtual Keyboard

The system supports two input methods: numeral input and English character (small and capitalized) input.

Move the cursor to the text column, the text is shown as blue, input button pops up on the right. Click that button to switch between numeral input and English input (capitalized and small), Use > or < to shift between small character and capitalized character.

2.6.2 Front Panel

Move the cursor to the text column. Click Fn key and use direction keys to select number you wanted. Please click enter button to input.

3 Installation and Connections

Note: All the installation and operations here should conform to your local electric safety rules.

3.1 Check Unpacked DVR

When you receive the DVR from the forwarding agent, please check whether there is any visible damage. The protective materials used for the package of the DVR can protect most accidental clashes during transportation. Then you can open the box to check the accessories.

Please check the items in accordance with the list. Finally you can remove the protective film of the DVR.

Note

Remote control is not a standard accessory and it is not included in the accessory bag.

3.2 About Front Panel and Rear Panel

The model in the front panel is very important; please check according to your purchase order.

The label in the rear panel is very important too. Usually we need you to represent the serial number when we provide the service after sales.

3.3 HDD Installation



Shut down the device and then unplug the power cable before you open the case to replace the HDD!

All figures listed below for reference only!

This series DVR has 1 to 8 HDDs (no limitation for capacity). Please use HDD of 7200rpm or higher. Usually we do not recommend the HDD for the PC. You can refer to the Appendix for recommended HDD brand.

Please follow the instructions listed below to install hard disk.

3.3.1 Smart Box Series

Please make sure the metal surface of the HDD is facing up when you are installing! This series product has only one 2.5-inch SATA HDD.

Please follow the instructions below to install HDD.

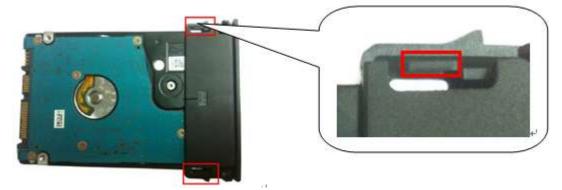






(1) Draw out the HDD bracket
(2) Make sure the HDD metal surface is facing up and then put the HDD into the bracket horizontally. After the HDD is in the proper position, the columns on the two sides can lock the screw holes of the HDD to secure it.

When you remove the HDD, please refer to the following figure to pull the spring up and then remove the HDD.



3.3.2 Smart 1U Series

The smart 1U series includes HCVR5104C/HCVR51XXC-V2/HCVR71XXC-V2/ HCVR4104/4108C-S2/ HCVR5104 5108C-S2/ HCVR7104C-S2/ HCVR2108C-S2/ XVR410XC/XVR510XC/7104C series. The series DVR has one SATA HDD.



①. Loosen the screws of the upper cover and side panel.



O Fix four screws in the HDD

(Turn just three rounds).



③ Place the HDD in

accordance with the four holes in the bottom.



④ Turn the device upside down and

then turn the screws in firmly.

⑦ Put the cover in accordance with

the clip and then place the upper cover back.

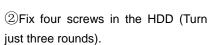
3.3.3 Compact 1U and Mini 1U Series

- The mini 1U series includes HCVR51XXH/51XXHC/51XXHE/51XXH-V2/HC-V2/HE-V2/71XXH-V2/71XXHC-V2/7 1XXHE-V2/ HCVR41XXHE-S2/ HCVR51XXH-S2/ HCVR51XXHE-S2/ HCVR710XH-S2/HCVR710XHE-S2/ XVR41XXHE/XVR51XXHE/XVR71XXH/XVR71XXHE/HCVR710XH-4K and etc.
- The compact 1U series includes HCVR41XXHS-S2/HCVR2108HS-S2/ HCVR2116HS-S2/HCVR21XXHS-S2/XVR21XXHS/XVR41XXHS/51XXHS/7104HS and etc.

The series DVR has one SATA HDD.



①Loosen the screws of the upper cover and side panel.





3 Place the HDD in accordance with the four holes in the bottom.

247

6 Connect the HDD cable and power cable.

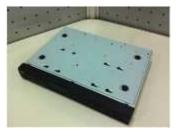




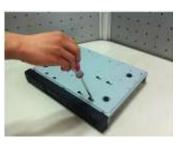


(5) Fix the HDD firmly.

⑧ Secure the screws in the rear panel and the side panel.



④Turn the device upside down and then turn the screws in firmly.



⑤Fix the HDD firmly.



6 Connect the HDD cable and power cable.





⑦Put the cover in accordance with the clip and then place the upper cover and the side panel. back.

⁽⁸⁾Secure the screws in the rear panel

Important:

- You can connect the HDD data cable and the power cable first and then fix the HDD • in the device.
- Please pay attention to the front cover. It adopts the vertical sliding design. You need to push the clip first and then put down.

3.3.4 The 1U Series

The 1U series includes HCVR52XXA-V2/HCVR72XXA-V2/HCVR42XXA-S2/HCVR4216AN-S2/HCVR52XXA-S2/ HCVR5216AN-S2/HCVR720XA-S2/XVR42XXA/XVR4216AN/XVR52XXA/XVR5216AN/X VR72XXA/XVR7216AN/HCVR720XAN-4K and etc. This series DVR has two SATA HDDs.







① Loosen the screws of the upper ② Fix four screws in the HDD cover and side panel. Remove (Turn just three rounds).

③ Place the HDD in accordance with the four holes in the bottom.

the cover.



(4) Turn the device upside down and then turn the screws in firmly.



(5)Connect the HDD cable and power cable.



(6) Put the cover in accordance with the clip and then place the upper cover back. Secure the screws in the rear panel and the side panel.

3.3.5 The 1.5U Series

The1.5UseriesincludesHCVR52XXL-V2/HCVR54XXL-V2/HCVR44L-S2/XVR54XX-L/XVR74XX-L and etc.This series DVR max has four SATA HDDs. Please use HDD of 7200rpm or higher.



(1) Loosen the screws of the

upper cover. Remove the cover.



② Line up the HDD to the

four holes of the HDD bracket. Use four screws to fix HDD.



(4) Connect the other end of



(5) Connect the power cable



6 Put the cover back and fix the screws to secure firmly.

the HDD cable to the to the HDD. mainboard.

3.3.6 The 2U Series

The 2U series includes HCVR58XXS-V2/HCVR48XXS-V2/XVR54XX-S/XVR74XX-S and etc.

③ Connect the one end of the HDD cable to the HDD.

This series DVR max supports 8 SATA HDDs. Please use HDD of 7200rpm or higher.



 Loosen the screws of the upper cover and side panel. Remove the cover.



② Fix the HDD(s) on the bracket. Remove the top bracket if you want to install HDD to the bottom bracket.



③Connect the one end of the HDD cable to the HDD.



(4) Connect the other end of the HDD cable to the mainboard.



5Connect the power cable to the HDD.



(6)Put the cover back and fix the screws to secure firmly.

Important:

If the HDD amount is less than four, you do not need to install the HDD bracket. When there is a bracket, please make sure the installation direction of HDDs is the same.

3.3.7 Rack Installation

The DVR occupies 1.5U/2U rack units of vertical rack space.

- Use twelve screws to fix the unit
- Please make sure the indoor temperature is below 35 °C (95°f).
- Please make sure there is 15cm (6 inches) space around the device to guarantee sound ventilation.
- Please install from the bottom to the top.
- If there are more accessories connected in the rack, please take precaution measures in case the rack power is overload.

3.4 Connecting Power Supply

Please check input voltage and device power button match or not. We recommend you use UPS to guarantee steady operation, DVR life span, and other

peripheral equipments operation such as cameras.

3.5 Connecting Video Input and Output Devices

3.5.1 Connecting Video Input

The video input interface is BNC. The input video format includes: PAL/NTSC BNC $(1.0V_{P-P}\,,~75\Omega.)$.

The input video format: BNC $\,(0.8\text{VP-P},~75\Omega)$,

The video signal should comply with your national standards.

The input video signal shall have high SNR, low distortion; low interference, natural color and suitable lightness.

Guarantee the stability and reliability of the camera signal:

The camera shall be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc.

The camera and the DVR should have the same grounding to ensure the normal operation of the camera.

Guarantee stability and reliability of the transmission line

Please use high quality, sound shielded BNC. Please select suitable BNC model according to the transmission distance.

If the distance is too long, you should use twisted pair cable, and you can add video compensation devices or use optical fiber to ensure video quality.

You should keep the video signal away from the strong electromagnetic interference, especially the high tension current.

Keep connection lugs in well contact

The signal line and shielded wire should be fixed firmly and in well connection. Avoid dry joint, lap welding and oxidation.

3.5.2 Connecting Video Output

Video output includes a BNC(PAL/NTSC, 1.0VP- P, 75Ω) output, a VGA output and a HDMI output.

System supports BNC, VGA and HDMI output at the same time.

When you are using pc-type monitor to replace the monitor, please pay attention to the following points:

- To defer aging, do not allow the pc monitor to run for a long time.
- Regular demagnetization will keep device maintain proper status.
- Keep it away from strong electromagnetic interference devices.

Using TV as video output device is not a reliable substitution method. You also need to reduce the working hour and control the interference from power supply and other devices. The low quality TV may result in device damage.

3.6 Connecting Audio Input & Output, Bidirectional Audio

3.6.1 Audio Input

BNC port is adopted for audio input port.

Due to high impedance of audio input, please use active sound pick-up.

Audio transmission is similar to video transmission. Try to avoid interference, dry joint, loose contact and it shall be away from high tension current.

3.6.2 Audio Output

The audio output signal parameter is usually over 200mv 1K Ω (BNC). It can directly connect to low impedance earphone, active sound box or amplifier-drive audio output device.

If the sound box and the pick-up cannot be separated spatially, it is easy to arouse squeaking. In this case you can adopt the following measures:

- Use better sound pick-up with better directing property.
- Reduce the volume of the sound box.
- Using more sound-absorbing materials in decoration can reduce voice echo and improve acoustics environment.
- Adjust the layout to reduce happening of the squeaking.

3.7 Alarm Input and Output Connection

Please read the followings before connecting.

1. Alarm input

a. Please make sure alarm input mode is grounding alarm input.

- b. Grounding signal is needed for alarm input.
- c. Alarm input needs the low level voltage signal.
- d. Alarm input mode can be either NC (normal Open) or NO (Normal Close)

e. When you are connecting two DVRs or you are connecting one DVR and one other device, please use a relay to separate them,

2. Alarm output

The alarm output port should not be connected to high power load directly (It shall be less than 1A) to avoid high current which may result in relay damage. Please use the co contactor to realize the connection between the alarm output port and the load.

3. How to connect PTZ decoder

a. Ensure the decoder has the same grounding with DVR, otherwise you may not control the PTZ. Shielded twisted wire is recommended and the shielded layer is used to connect to the grounding.

b. Avoid high voltage. Ensure proper wiring and some thunder protection measures.

c. For too long signal wires, 120Ω should be parallel connected between A, B lines on the far end to reduce reflection and guarantee the signal quality.

d. "485 A, B" of DVR cannot parallel connect with "485 port" of other device.

e. The voltage between of A,B lines of the decoder should be less than 5v.

4. Please make sure the front-end device has soundly earthed.

Improper grounding may result in chip damage.

3.7.1 Alarm Input and Output Details

Important

Please refer to the specifications for the alarm input and output channel amount.

Do not merely count the alarm input and out channel amount according to the ports on the rear panel.

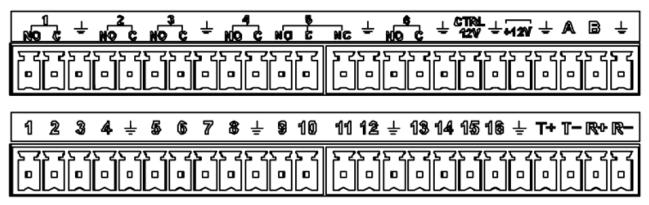


Figure 3-1

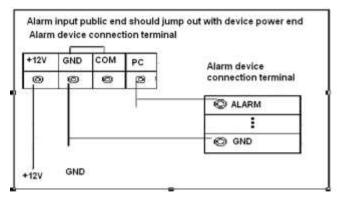
1, 2, 3, 4, 5, 6,	ALARM 1 to ALARM 16. The alarm becomes active in low voltage.
7, 8, 9, 10, 11,	
12, 13, 14, 15, 16	
In the second line,	There are six groups of normal open activation output (on/off button)
from the left to the	
right:	
NO1 C1,	
NO2 C2,	
NO3 C3,	
NO4 C4,	
NO5 C5,	
NO6 C6.	
CTRL 12V	Control power output. For external alarm, you need to close the
	device power to cancel the alarm.
	Voltage current; 500mA.
+12V	Rated current.
	Voltage current; 500mA.
	Earth cable.
-	
485 A/B	485 communication port. They are used to control devices such as
	decoder. 120 Ω should be parallel connected between A, B lines if
	there are too many PTZ decoders.
T+,T-,R+,R-	They are four-wire full-duplex RS485 port
	T+ T-: output wire
	R+ R-: input wire

3.7.2 Alarm Input Port

Please refer to the following sheet for more information.

• Grounding alarm inputs. Normal open or Normal close type)

- Please parallel connect COM end and GND end of the alarm detector (Provide external power to the alarm detector).
- Please parallel connect the Ground of the DVR and the ground of the alarm detector.
- Please connect the NC port of the alarm sensor to the DVR alarm input(ALARM)
- Use the same ground with that of DVR if you use external power to the alarm device.





3.7.3 Alarm Output Port

- Provide external power to external alarm device.
- To avoid overloading, please read the following relay parameters sheet carefully.
- RS485 A/B cable is for the A/B cable of the PTZ decoder.
- T+,T-,R+,R- are four-wire double duplex RS485 port.
 - T+ T-: output wire

R+ R-: input wire

Model		HFD23/005-1ZS	HRB1-S-DC5V		
Material of the touch		AgNi+ gold-plating	AuAg10/AgNi10/CuNi30		
	Rated switch	30V DC 1A/125V AC 0.5A	24V DC 1A/125V AC 2A		
	capacity	300 DC 1A/1230 AC 0.3A			
	Maximum	62.5VA/30W	250VA/48W		
Rating	switch power	02.3VA/30VV			
(Resistance	Maximum	125V AC/60V DC	125V AC/60V DC		
Load)	switch voltage	125V AC/00V DC			
	Maximum				
	switch	2A	2A		
	currency				
	Between	400VAC 1 minute	500VAC 1 minute		
Insulation	touches	400VAC 1 minute			
Insulation	Between touch	1000VAC 1 minute	1000VAC 1 minute		
	and winding	1000VAC 1 minute			
Turn-on Time		5ms max	5ms max		
Turn-off Time		5ms max	5ms max		
Longevity	Mechanical	1×10 ⁷ times (300	5×10^{6} times (300		

Relay Specification

Model		HFD23/0	005-1ZS			HRB1-S-I	DC5V		
		times/MIN)		times/MIN)					
	Electrical	1×10 ⁵	times	(30	2.5×10 ⁴	times	(30
	Electrical	times/MIN)			times/MIN)				
Working Temperature		-30℃~-	+70 ℃			-40°C~+7	70 ℃		

3.8 RS485

When the DVR receives a camera control command, it transmits that command up the coaxial cable to the PTZ device. RS485 is a single-direction protocol; the PTZ device can't return any data to the unit. To enable the operation, connect the PTZ device to the RS485 (A,B) input on the DVR.

Since RS485 is disabled by default for each camera, you must enable the PTZ settings first. This series DVRs support multiple protocols such as Pelco-D, Pelco-P.

To connect PTZ devices to the DVR:

- 1. Connect RS485 A,B on the DVR rear panel.
- 2. Connect the other end of the cable to the proper pins in the connector on the camera.

3. Please follow the instructions to configure a camera to enable each PTZ device on the DVR.

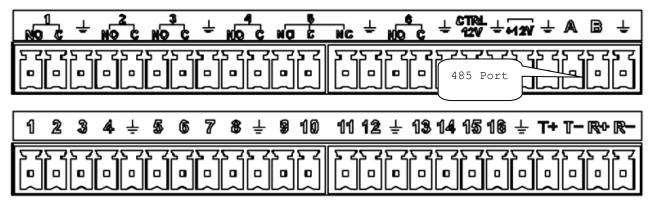


Figure 3-3

3.9 Other Interfaces

There are still other interfaces on the DVR, such as USB ports.

4 Overview of Navigation and Controls

4.1 Boot up and Shutdown

4.1.1 Boot up

Before the boot up, please make sure:

- The rated input voltage matches the device power on-off button. Please make sure the power wire connection is OK. Then click the power on-off button.
- Always use the stable current, if necessary UPS is a best alternative measure.

Please follow the steps listed below to boot up the device.

- Connect the device to the monitor and then connect a mouse.
- Connect power cable.
- Click the power button at the front or rear panel and then boot up the device. After device booted up, the system is in multiple-channel display mode by default.

4.1.2 Shutdown

Note

- When you see corresponding dialogue box "System is shutting down..." Do not click power on-off button directly.
- Do not unplug the power cable or click power on-off button to shutdown device directly when device is running (especially when it is recording.)

There are three ways for you to log out.

a) Main menu (**RECOMMENDED**)

From Main Menu->Shutdown, select shutdown from dropdown list. Click OK button, you can see device shuts down.

b) From power on-off button on the front panel or remote control

Press the power on-off button on the DVR front panel or remote control for more than 3 seconds to shutdown the device.

c) From power on-off button on the rear panel.

4.1.3 Auto Resume after Power Failure

The system can automatically backup video and resume previous working status after power failure.

4.1.4 Replace Button Battery

Please make sure to use the same battery model if possible.

We recommend replace battery regularly (such as one-year) to guarantee system time accuracy.

Note:

Before replacement, please save the system setup, otherwise, you may lose the data completely!

4.2 Set/Reset Password

4.2.1 Set Password

For your own safety, please set your administrator default password after you first boot up the device.

After system booted up, you can see the following interface if it is your first time to use or you have restored default setup. See Figure 4-1. Please input a password and then input again to set a password.

- You can set security questions here to reset the password in case you forgot. System supports customized setup. Please note you need to set two security questions at the same time. When you reset the password, you need to answer these two security questions too.
 - ADMIN SECURITY

 User Name

 admin

 Enter Password

 Confirm Password

 Confirm Password

 Secure Questions (Optional)

 Question 1

 What's your favorite pet?

 Answer

 Question 2

 What's your first car model?

 Answer
- For reset information, please refer to chapter 4.2.2.

Figure 4-1

After you complete the setup, click OK button, system pops up the following interface for you to confirm. Click OK button to exit. See Figure 4-2.

Message
Successfully set the password!
ОК

Figure 4-2

4.2.2 Reset Password

Once you forgot password, you can answer the security questions you set in chapter 4.2.1 to reset the password.

In login interface, click	
---------------------------	--

0

	SYSTEM LOGIN
User Name Password	admin 🔹 🔓
	OK Cancel



System pops up the following dialogue box, please answer the security questions and then input the new password twice. See Figure 4-4.

	Reset
Question 1	What's your favorite pet?
Answer	
Question 2	What's your first car model?
Answer	
Reset password	of (admin)
New Password	
Confirm Passwor	b b b b b b b b b b b b b b b b b b b
	Reset Cancel

Figure 4-4

4.3 Startup Wizard

After device successfully booted up, it goes to startup wizard.

Click Cancel/Next button, you can see system goes to login interface.

Tips

Check the box Startup button here, system goes to startup wizard again when it boots up the next time.

Cancel the Startup button, system goes to the login interface directly when it boots up the next time.



Figure 4-5

Click Cancel button or Next Step button, system goes to login interface. See Figure 4-6. System consists of three accounts:

- Username: admin. Password: admin. (administrator, local and network)
- Username: 888888. Password: 888888. (administrator, local only)
- **Username**: default. **Password**: default (hidden user). Hidden user "default" is for system interior use only and can not be deleted. When there is no login user, hidden user "default" automatically login. You can set some rights such as monitor for this user so that you can view some channel view without login.

	SYSTEM LOGIN
User Name Password	(admin 💽 🔒
	OK Cancel

Figure 4-6



- For security reason, please modify password after you first login.
- Continuous three times login failure will result in system alarm and five times login failure will result in account lock!
- Please reboot the device or wait for 30 minutes to try again if your account has been locked.

After input corresponding user name and password, you can click OK button. System goes to the startup wizard.

- When there are all analog channels, the startup wizard includes general, encode, schedule, record control, network, P2P.
- When there is an IP channel, the startup wizard includes general, network, P2P, remote device and schedule.

Click OK button, you can go to General interface. See Figure 4-7. For detailed information, please refer to chapter 4.11.5.1.

		GENERAL		
General	Date&Time	Holiday		
Device Name	HEVR			
Device No.	8)		
Language	ENGLISH	Э		
Video Standard	PAL	9		
HDD Full	Overwrite	9		
Pack Mode	Time Length	• (60)min.	
Realtime Play	(5)min.		
Auto Logout	(10)min.		
PC Time Sync	(24	Dh		
Navigation Bar				
Mouse Sensitivity	Slow	Fast		
Detault				Apply
		-		Connect
		Bac	k Next	Cancel

Figure 4-7

Note

You can only see the remote device interface if you have set IP channel (Chapter 4.11.1.3.5)

Click Next button, you can go to network interface. See Figure 4-8.

For detailed information, please refer to chapter 4.10.3.

	NETWORK
IP Version	(Pv4)
MAC Address	(90:02:A9:DA:9C:77
Mode	STATIC O DHCP
IP Address	10 15 6 145 Test
Subnet Mask	255 255 0 0
Default Gateway	(10 , 15 , 0 , 1)
Preferred DNS	
Alternate DNS	10 1 2 81
мти	(1500
0	LAN Download
	Back Next Cancel

Figure 4-8

Click Next button, you can set P2P function. Scan the QR code, download the App to the cellphone, you can use the smart phone to add the device. See Figure 4-9. For detailed information, please refer to chapter4.11.2.15.



Figure 4-9

Now you can go to the remote device interface to add the camera to the corresponding channel. See Figure 4-10.

For detailed information, please refer to chapter4.11.1.1.

Please note you can not see the following interface if there is no digital channel. You can go to Main menu->Setting->Camera->Channel type to set IP channel first. Please refer to chapter 4.11.1.3.5 for detailed setup information.

0	Edit	IP Address	Manufacturer	Туре	
(IP Search	h) Ad	id Manual	Add)	Show Filter (IPC -
A data a part				~	
Added De Channe	1000 C	Delete Stat	tus IP Addre	ss Port	Device Nan
and she off the second second		Delete Stat	tus IP Addre	ss Port	
and she off the second second	l Edit	Delete Stat	tus IP Addre	ss Port	

Figure 4-10

Click Next button, you can go to Encode interface. See Figure 4-11. For detailed information, please refer to chapter 4.11.1.3.

		ENCOD			
Encode	Snapshot	Overla	r		
Channel	1	D 0	SVC		
Туре	Regular	19 (3	ub Stream'		
Compression	(H.264H	ÐŒ	.264H	D	
Resolution	(1280*720(72	0 3	52*288(CIF	D	
Frame Rate(FPS)	(25	19 (6	8	D	
Bit Rate Type	CBR	•	BR	D	
I Frame Interval	(15	D (s	D	
Bit Rate(Kb/S)	2048 •	0	60 -		
Reference Bit Rate	1536-4096Kb	/S 40	-256Kb/S		
Audio/Video		C			
Audio Format	(G711a	D A	udio Sourc	e (LOCAL	•
Audio Sampling Rat	e (8K	3			
Default Cop	y				Apply
		1	Back	Next	Cancel

Figure 4-11

Click Next button, you can go to Schedule interface. See Figure 4-12. For detailed information, please refer to chapter 4.11.4.1.

		Regu	ar	ME			Alarm			D&Ai				
	0	2	4	6	8	10	12	14	16	18	20	22 24	7	1
O Sunday							1						2	1
🗢 Monday													2	1
 Tuesday 							11							1
🗢 Wednesda	ny 🗌												۲	1
Thursday													۲	3
🗢 Friday							1.1							-
Saturday	-					1	111		-100					1

Figure 4-12

Click Finish button, system pops up a dialogue box. Click the OK button, the startup wizard is complete. See Figure 4-13.

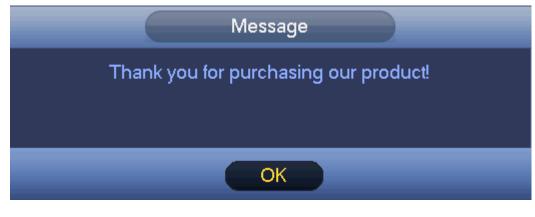


Figure 4-13

4.4 Live Viewing

After you logged in, the system is in live viewing mode. You can see system date, time, channel name and window No. If you want to change system date and time, you can refer to general settings (Main Menu->Setting->System->General). If you want to modify the channel name, please refer to the display settings (Main Menu->Camera->CAM name)



<u>Tips</u>

- Preview drag: If you want to change position of channel 1 and channel 2 when you are previewing, you can left click mouse in the channel 1 and then drag to channel 2, release mouse you can switch channel 1 and channel 2 positions.
- Use mouse middle button to control window split: You can use mouse middle button to switch window split amount.

Please note you can not switch position of one analog channel and one digital channel.

Preview Control

The preview control function has the following features.

- Support preview playback.
 - In the preview desktop, system can playback previous 5-60 minutes record of current channel. Please go to the Main Menu->General to set real-time playback time.
 - Support drag and play function. You can use your mouse to select any playback start time.
 - ♦ Support playback, pause and exit function.

- Right now, system does not support slow playback and backward playback function.
- Support digital zoom function.
- Support real-time backup function.

You can follow the contents listed below for the operation instruction.

Preview control interface

Move you mouse to the top center of the video of current channel, you can see system pops up the preview control interface. See Figure 4-14 and Figure 4-15. If your mouse stays in this area for more than 6 seconds and has no operation, the control bar automatically hides.

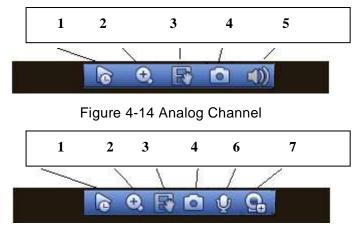


Figure 4-15 Digital Channel

1) Realtime playback

It is to playback the previous 5-60 minutes record of current channel.

Please go to the Main menu->Setting->->System->General to set real-time playback time.

System may pop up a dialogue box if there is no such record in current channel.

2) Digital zoom

It is to zoom in specified zone of current channel. It supports zoom in function of multiple-channel.

Click button S, the button is shown as S.

There are two ways for you to zoom in.

• Drag the mouse to select a zone, you can view an interface show as Figure 4-16.

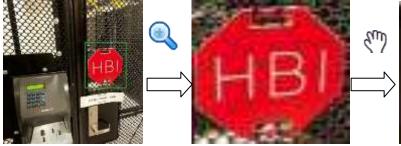




Figure 4-16

• Put the middle button at the center of the zone you want to zoom in, and move the mouse, you can view an interface shown as in Figure 4-17.



Figure 4-17

Right click mouse to cancel zoom and go back to the original interface.

3) Manual record function

It is to backup the video of current channel to the USB device. System can not backup the video of multiple-channel at the same time.

Click button system begins recording. Click it again, system stops recording. You can find the record file on the flash disk.

4) Manual Snapshot

Click Los snapshot 1-5 times. The snapshot file is saved on the USB device or HDD.

You can go to the Search interface (chapter 4.9.1) to view.

5) Mute (For analog channel only)

Click to mute. Click again to enable audio function when preview.

Please note this function is for one-window mode only.

6) Bidirectional talk (For digital channel only)

If the connected front-end device supports bidirectional talk function, you can click this

button. Click button $\underbrace{\mathbb{V}}$ to start bidirectional talk function the icon now is shown as $\underbrace{\mathbb{V}}$. Now the rest bidirectional talk buttons of digital channel becomes null too.

Click Zagain, you can cancel bidirectional talk and the bidirectional talk buttons of

other digital channels become as \mathbb{W}

7) Remote device (For digital channel only)

Shortcut menu. Click it to go to the remote device interface to add/delete remote device or view its corresponding information. Please refer to chapter 4.11.1.1 for detailed information.

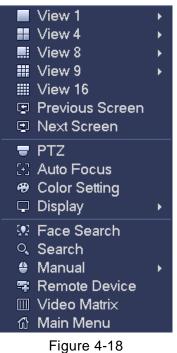
4.5 Right-Click Menu

On the preview interface, right click mouse, you can view menu interface shown as in Figure 4-18.

Tips

After you go to the corresponding interface, right click mouse to go back to the upper-level.

- Window split mode: You can select window amount and then select channels.
- PTZ: Click it to go to PTZ interface.
- Auto focus: Please make sure you connected network camera supports this function.
- Color setting: Set video corresponding information.
- Search: Click it to go to Search interface to search and playback a record file.
- Record control: Enable/disable record channel.
- Remote device: Click it to add remote device.
- Main menu: Go to system main menu interface.



4.5.1 Window Switch

System supports 1/4/8/9-window (The options here depend on your product channel amount). You can select from the dropdown list. See Figure 4-19.





4.5.2 Previous Screen/Next Screen

Click it to go to the previous screen/next screen. For example, if you are using 4-split mode, the first screen is displaying the channel 1-4, click Next screen, you can view channel 5-8.

4.5.3 PTZ Control

The PTZ setup is shown as in See Figure 4-20.

Please note the commend name is grey once device does not support this function. The PTZ operation is only valid in one-window mode.

Here you can control PTZ direction, speed, zoom, focus, iris, preset, tour, scan, pattern aux function, light and wiper, rotation and etc.

Speed is to control PTZ movement speed. The value ranges from 1 to 8. The speed 8 is faster than speed 1. You can use the remote control to click the small keyboard to set.

You can click and the zoom, focus and iris to zoom in/out, definition and brightness.

The PTZ rotation supports 8 directions. If you are using direction buttons on the front panel, there are only four directions: up/down/left/right.



Figure 4-20

In the middle of the eight direction arrows, there is a 3D intelligent positioning key. See Figure 4-21. Please make sure your protocol supports this function and you need to use mouse to control.

Click this key, system goes back to the single screen mode. Drag the mouse in the screen to adjust section size. The dragged zone supports 4X to 16X speeds. It can realize PTZ automatically. The smaller zone you dragged, the higher the speed.



Name	Function	function	Shortcut	Function	function	Shortcut
	key		key	key		key
Zoom	0	Near	ŕ	•	Far	•
Focus	0	Near	◀	•	Far	▶
Iris	•	close	◀	•	Open	▶ II

In Figure 4-20, click to open the menu, you can set preset, tour, pattern, scan and etc. See Figure 4-22.



Figure 4-22

Please refer to the following sheet for detailed information.

Please note the above interface may vary due to different protocols. The button is grey and can not be selected once the current function is null.

Right click mouse or click the ESC button at the front panel to go back to the Figure 4-20.

lcon	Function	Icon	Function
•	Preset		Flip
	Tour	Ð	Reset
~	Pattern		Aux
	Scan	0	Aux on-off button
•	Rotate	0	Go to menu

4.5.3.1 PTZ Function Setup

Click you can go to the following interface to set preset, tour, pattern, and scan. See Figure 4-23.



Figure 4-23

Preset Setup

In Figure 4-23, click preset button and use eight direction arrows to adjust camera to the proper position. The interface is shown as in Figure 4-24.

Click Set button and then input preset number.

Click Set button to save current preset.



Figure 4-24

Tour Setup

In Figure 4-23, click tour button.

Input tour value and preset No. Click Add preset button to add current preset to the tour. See Figure 4-25.

Tips

Repeat the above steps to add more presets to the tour. Click Del preset button to remove it from the tour. Please note some protocols do not support delete preset function.





Pattern Setup

In Figure 4-23, click Pattern button and input pattern number.

Click Begin button to start direction operation. Or you can go back to Figure 4-20 to operate zoom/focus/iris/direction operation.

In Figure 4-23, click End button.



Figure 4-26

Scan Setup

In Figure 4-23, click Scan button.

Use direction buttons to set camera left limit and then click Left button.

Use direction buttons to set camera right limit and then click Right button. Now the scan setup process is complete.

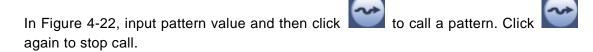


Figure 4-27

4.5.3.2 Call PTZ Function Call Preset

In Figure 4-22, input preset value and then click to call a preset. Click again to stop call.

Call Pattern



Call Tour

In Figure 4-22, input tour value and then click to stop call.

Call Scan

In Figure 4-22, input Scan value and then click to call a tour. Click again to stop call.

Rotate

In Figure 4-22, click to enable the camera to rotate.

System supports preset, tour, pattern, scan, rotate, light and etc function. Note:

- Preset, tour and pattern all need the value to be the control parameters. You can • define it as you require.
- You need to refer to your camera user's manual for Aux definition. In some cases, it can be used for special process.

Aux

system goes to the following interface. The options here are defined by the Click protocol. The aux number is corresponding to the aux on-off button of the decoder. See Figure 4-28.

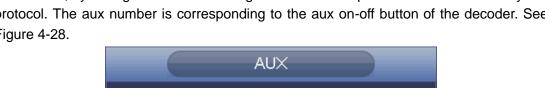
4.5.4 Auto Focus

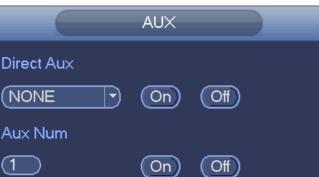
It is to set auto focus function. Please make sure the camera supports this function.

Figure 4-28

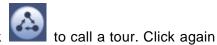
4.5.5 Color

Here you can set hue, brightness, contrast, saturation, gain, white level, color mode and etc. See Figure 4-29.













	COLOR
Time Period	Time Period 1
Effective Time 🗹	00 :00 - 24 : 00
Sharpness 🔺	_ 1
Chroma 🔫	50
Brightness 🔅	50
Contrast 🕕	50
Saturation 🖌	 50
Color mode	Standard
EQ 🗖	● ● ● ● ●
Position 😁	8
Customized	Default OK Cancel



Please refer to the following sheet for detailed information.

Item	Note
Period	There are two periods in one day. You can set different
	sharpness, brightness, and contrast setup for different periods.
Effective Time	Check the box here to enable this function and then set period time.
Sharpness	The value here is to adjust the edge of the video. The value ranges from 0 to 100. The larger the value is, the clear the edge is and vice versa. Please note there is noise if the value here is too high. The default value is 50
Brightness	and the recommended value ranges from 40 to 60.It is to adjust monitor window bright. The value ranges from 0 to 100. The default value is 50.
	The larger the number, the bright the video is. When you input the value here, the bright section and the dark section of the video will be adjusted accordingly. You can use this function when the whole video is too dark or too bright. Please note the video may become hazy if the value is too high. The recommended value ranges from 40 to 60.
Contrast	It is to adjust monitor window contrast. The value ranges

Item	Note
	from 0 to 100. The default value is 50.
	The larger the number, the higher the contrast is. You
	can use this function when the whole video bright is OK
	but the contrast is not proper. Please note the video may
	become hazy if the value is too low. If this value is too
	high, the dark section may lack brightness while the
	bright section may over exposure .The recommended
	value ranges from 40 to 60.
Saturation	It is to adjust monitor window saturation. The value ranges from 0 to 100. The default value is 50.
	The larger the number, the strong the color is. This value
	has no effect on the general brightness of the whole
	video. The video color may become too strong if the
	value is too high. For the grey part of the video, the
	distortion may occur if the white balance is not accurate.
	Please note the video may not be attractive if the value
	is too low. The recommended value ranges from 40 to
	60.
Gain	The gain adjust is to set the gain value. The default
	value may vary due to different device models. The
	smaller the value, the low the noise. But the brightness is
	also too low in the dark environments. It can enhance
	the video brightness if the value is high. But the video
	noise may become too clear.
Color mode	It includes several modes such as standard, color, bright,
	gentle. Select a color mode, the sharpness, brightness,
	contrast and etc can automatically switch to
50	corresponding setup.
EQ	Click O or O to adjust image equalization value.
	Click
	Click reset button , system can auto adjust the video
	to the best effect.
	This function is for analog channel only.
Image position	It is to adjust the image position on the screen. The
	value here refers to the pixel. The default pixel value is
	16.
	This function is for analog channel only.
Dicplay	

4.5.6 Display It is to set display output mode. There are two modes: full screen (4:3)/image original rate

(16:9). Icon means current display output mode. See Figure 4-30.

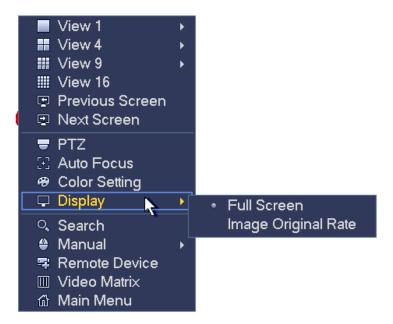


Figure 4-30

4.5.7 Face Search

It is to display human face record list, and view human face recognition record file.

4.5.8 Search

Please refer to chapter 4.9.1 for detailed information.

4.5.9 Record Control

Please refer to chapter 4.11.4.3 for detailed information.

4.5.10 Alarm Output

Please refer to chapter 4.11.3.6 for detailed information.

4.5.11 Remote Device

Please refer to chapter 4.11.1.1 for detailed information.

4.5.12 Video Matrix

Please refer to chapter 4.11.5.3 for detailed information.

4.5.13 Main menu

Please refer to chapter 4.8 for detailed information.

4.6 Navigation Bar

You need to go to the Main menu->Setting->System->General to enable navigation bar function; otherwise you can not see the following interface. The navigation bar is shown as below. See Figure 4-31.

	Image: Second secon
Figure 4-31	
4.6.1 Main Menu	
Click button Click button to go to the main menu in	terface.
4.6.2 Output Screen	
Select corresponding window-split mode and outp	ut channels.
4.6.3 Previous/Next Screen Click to go to the previous screen, click	to go to the next screen. For
example, if you are using 4-split mode, the first s	creen is displaying the channel 1-4,
click, you can view channel 5-8.	
4.6.4 Tour	
Click button 🔃 to enable tour, the icon becomes	, you can see the tour is in
process.	
4.6.5 Favorites	
Click system pops up add/edit favorites. See F	ïgure 4-32.
Add to Favorites Edit Favorites	
	≪ ⊂ Δ = ≒ Ξ = =



4.6.6 Channel

It is to pop up channel tree. You can left click to select a channel on the tree and then drag it to the preview window on the left pane.

4.6.7 PTZ

Click, system goes to the PTZ control interface. Please refer to chapter 4.5.3.

4.6.8 Color

Click button (3), system goes to the color interface. Please refer to chapter 4.5.5.

4.6.9 Search

Click button, system goes to search interface. Please refer to chapter 4.9.1

4.6.10 Alarm Status

Click button , system goes to alarm status interface. It is to view device status and channel status. Please refer to chapter 4.11.3.

4.6.11 Channel Info

Click button even goes to the channel information setup interface. It is to view information of the corresponding channel. See Figure 4-33.

Channel	Mation	Video Loss	Tampering	Record State	us Record Mode	Resolution	Frame Rate	Bit Ri
	10		0	· (0)	Pre-record	1280'720	25	
2			0		Pre-record	12801720	25	
234567	- O		0		Pre-record	1280*720	25	
4	0		0		Pre-record	1280-720	25	
5	0		0		Pre-record	1280 720	25	
6	6		6		Pre-record	1280'720	25	
	8		0	0	Pre-record	1280'720	25	
8 9	0		- 10 I	(Ö	Pre-record	12801720	25	
9			6	. i i i i i i i i i i i i i i i i i i i	Pre-record	1280'720	25	
10	10			í í	Pre-record	1280*720	25	
11			<u> </u>	10	Pre-record	12801720	25	
12	100	- 78	8	100	Pre-record	1280"720	25	
13	0		0		Pre-record	12801720	25	
14			<u> 7</u>	- i i i i i i i i i i i i i i i i i i i	Pre-record	12801720	25	
15			÷.	6				
16	0		0	ĕ	Pre-record	960'480	25	
•								
Contraction of the local division of the loc				_				



4.6.12 Remote Device

Click system goes to an interface for you to view remote device information. Please refer to chapter 4.11.1.1.

4.6.13 Network

Click, system goes to the network interface. It is to set network IP address, default gateway and etc. Please refer to chapter 4.11.2.

4.6.14 HDD Manager

Click System goes to the HDD manager interface. It is to view and manage HDD information. Please refer to chapter 4.11.4.2.

4.6.15 USB Manager

Click , system goes to the USB Manager interface. It is to view USB information, backup and update. Please refer to chapter 4.9.3, chapter 4.10.4, chapter 4.11.5.10, and chapter 4.11.5.12 for detailed information.

4.7 USB Device Auto Pop-up

After you inserted the USB device, system can auto detect it and pop up the following dialogue box. It allows you to conveniently backup file, log, configuration or update system. See Figure 4-34. Please refer to chapter 4.9.3, chapter 4.10.4, chapter 4.11.5.10, and chapter 4.11.5.12 for detailed information.

		Find USB device
 •	Name: Capacity:	sdb1(USB DISK) 14.05 GB/15.00 GB(Free/Total)
	File Backup onfig Backup	Log Backup System Upgrade

Figure 4-34

4.8 Main Menu

The main menu interface is shown as below. See Figure 4-35.

		MAIN MENU			
OPERATE	FACE SEARCH	BACKUP	SHUTDOWN		
INFO SYSTEM	EVENT	NETWORK	LOG		
SETTING	NETWORK		STORAGE	SYSTEM	

Figure 4-35

4.9 Operation

4.9.1 Search

Click search button in the main menu, search interface is shown as below. See Figure 4-36.

Usually there are four file types:

- R: Regular recording file.
- A: External alarm recording file.
- M: Motion detection recording file
- Orange: Intelligent recording file.



Figure 4-36

Please refer to the following sheet for more information.

SN	Name	Function
1	Display	 Here is to display the searched picture or file.
1	window	 Support 1/4/9/16-window playback.
		 Here you can select to search the picture or the recorded file.
		• You can select to play from the read-write HDD, from peripheral device or from
		redundancy HDD.
		• Before you select to play from the peripheral device, please connect the
		corresponding peripheral device. You can view all record files of the root directory
	Search type	of the peripheral device. Click the Browse button; you can select the file you want to
2		play.
		• Check the box here; you can enable splice playback function. Please refer to
		chapter 4.9.1.4 for detailed information.
		Important
		• Redundancy HDD does not support picture backup function, but it
		supports picture playback function. You can select to play from redundancy
		HDD if there are pictures on the redundancy HDD.
		• The blue highlighted date means there is picture or file. Otherwise, there is no
3	Calendar	picture or file.
		 In any play mode, click the date you want to see, you can see the

 Playback mode: 1/4/9/16/customized. (It may vary due to different series.) In 1-window playback mode: you can select 1-16 channels. In 1-window playback mode: you can select 4 channels according to your requirement. In 9-window playback mode, you can select 4 channels according to your requirement. In 16-window playback mode, you can switch between 1-8 and 9-16 channels. In 16-window playback mode, you can switch between 1-8 and 9-16 channels. In 16-window playback mode, you can switch between 1-8 and 9-16 channels. In 16-window playback mode, you can switch between 1-8 and 9-16 channels. In 16-window playback mode, you can switch between 1-8 and 9-16 channels. In 16-window playback mode, you can switch between 1-8 and 9-16 channels. In customized mode, you can select one or more channel(s) you want to playback at the same time. See chapter 4.9.1.4. The time bar will change once you modify the playback mode or the channel option. The card number search interface is shown as below. Here you can view card number/field setup bar. You can implement advanced search. Inter card number search interface. You can view all mark information of current channel by time. Please refer to chapter 4.9.1.3 for detailed information. Please note only the product of this icon supports mark function. Double click it, you can view the picture/record file. The system can display max 128 files in one time. Use the < and > or the mouse to view the file. Select one item, and then double click the mouse or click the ENTER button to playback. You can input the period in the following interface to begin accurate search. File list stife type: R—regular record; A—external alarm record; M—Motion detect record. Use file type: R—regular record; A—external alarm record; M—Motion detect re			corresponding record file trace in the time bar.				
4 Playback mode and channel selection pane. A -window playback mode; you can select 4 channels. In 4-window playback mode; you can switch between 1-8 and 9-16 channels. In 16-window playback mode, you can switch between 1-16 and 17-32 channels. In customized mode, you can select one or more channel(s) you want to playback at the same time. See chapter 4.9.1.4. The time bar will change once you modify the playback mode or the channel option. 5 Card number search The card number search interface is shown as below. Here you can view card number/field setup bar. You can implement advanced search. 6 Mark file list button Click it to go to mark file list interface. You can view all mark information of current channel by time. Please refer to chapter 4.9.1.3 for detailed information. 7 File Click it, you can view the picture/record file list of current day. 7 File File list switch button Click it, you can view the picture/record file list of current day. 7 File File list switch button File type: R—regular record: A—external alarm record; M—Motion detect record. 7 Switch button • Lock file. Click the file you want to lock and click the button • bolck. The file you locked will not be overwritten. 7 Switch button • Search locked file: Click the button • to view the locked file.							
4 Playback mode and channel selection pane. In 4-window playback mode, you can switch between 1-8 and 9-16 channels. In 9-window playback mode, you can switch between 1-8 and 9-16 channels. In 16-window playback mode, you can switch between 1-6 and 17-32 channels. In customized mode, you can select one or more channel(s) you want to playback at the same time. See chapter 4.9.1.4. The time bar will change once you modify the playback mode or the channel option. 6 Mark file list button Click it to go to mark file list interface is shown as below. Here you can view card number/field setup bar. You can implement advanced search. 6 Mark file list button Click it to go to mark file list interface. You can view all mark information of current channel by time. Please refer to chapter 4.9.1.3 for detailed information. Please note only the product of this icon supports mark function. 7 File Ist to go to mark file list interface. You can view all mark information of current channel by time. Please refer to chapter 4.9.1.3 for detailed information. Please note only the product of this icon supports mark function. 7 File Ist to go to mark file list is to display the first channel of the record file. 7 File list switch • The file list is to display the first channel of the record file. 7 File Ist to playback. 7 Vou can input the period in the following inter							
4 Preyoack mode and channel selection pane. · In 9-window playback mode, you can switch between 1-8 and 9-16 channels. · In 16-window playback mode, you can switch between 1-16 and 17-32 channels. · In customized mode, you can select one or more channel(s) you want to playback at the same time. See chapter 4.9.1.4. · The time bar will change once you modify the playback mode or the channel option. 5 Card number The card number search interface is shown as below. Here you can view card number/field setup bar. You can implement advanced search. 6 Mark file list button Click it to go to mark file list interface. You can view all mark information of current channel by time. Please refer to chapter 4.9.1.3 for detailed information. Please note only the product of this icon supports mark function. 7 File Elist button · Double click it, you can view the picture/record file list of current day. · The file list is to display the first channel of the record file. · The system can display max 128 files in one time. Use the < and ▶ or the mouse to view the file. Select one item, and then double click the mouse or click the ENTER button to playback. · You can input the period in the following interface to begin accurate search. · File type: R—regular record; A—external alarm record; M—Motion detect record. · Lock file. Click the file you want to lock and click the button is to lock. The file you locked will not be overwritten. · Search locked file: Click the buttonic to view the locked file. Play/Pause There are three ways for you to begin playback.							
4 mode and channel selection pane. In 9-window playback mode, you can switch between 1-8 and 9-16 channels. In 16-window playback mode, you can switch between 1-16 and 17-32 channels. In 16-window playback mode, you can switch between 1-16 and 17-32 channels. In customized mode, you can select one or more channel(s) you want to playback at the same time. See chapter 4.9.1.4. The time bar will change once you modify the playback mode or the channel option. 5 Card number search The card number search interface is shown as below. Here you can view card number/field setup bar. You can implement advanced search. 6 Mark file list button Click it to go to mark file list interface. You can view all mark information of current channel by time. Please refer to chapter 4.9.1.3 for detailed information. Please note only the product of this icon supports mark function. 7 File list button Double click it, you can view the picture/record file list of current day. The system can display the first channel of the record file. The system can display the first channel of the record file. You can input the period in the following interface to begin accurate search. File type: R—regular record; A—external alarm record; M—Motion detect record. 7 File type: R—regular record; A—external alarm record; M—Motion detect record. <li< td=""><td></td><td>Playback</td><td></td></li<>		Playback					
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8 control • Double click the item in the file list.	ŏ		• Double click the item in the file list.				
pane. In slow play mode, click it to switch between play/pause.		pane.	In slow play mode, click it to switch between play/pause.				
Stop			Stop				
Backward play			Backward play				
			In normal play mode, left click the button, the file begins backward play.				
			In normal play mode, left click the button, the file begins backward play.				

		Click it again to pause current play.		
		In backward play mode, click ►/ II to restore normal play.		
		 In playback mode, click it to play the next or the previous section. You can click continuously when you are watching the files from the same channel. In normal play mode, when you pause current play, you can click < and ▶ to begin frame by frame playback. In frame by frame playback mode, click ►/II to restore normal playback. 		
		Slow play		
		In playback mode, click it to realize various slow play modes such as slow play 1, slow play 2, and etc.		
		Fast forward		
		In playback mode, click to realize various fast play modes such as fast play 1,fast play 2 and etc.		
		Note: The actual play speed has relationship with the software version.		
		Smart search		
		The volume of the playback		
		Click the snapshot button in the full-screen mode, the system can snapshot 1 picture.		
		System supports custom snap picture saved path. Please connect the peripheral device first, click snap button on the full-screen mode, you can select or create path. Click Start button, the snapshot picture can be saved to the specified path.		
		Mark button. Please note this function is for some series product only. Please make sure there is a mark button in the playback control pane. You can refer to chapter 4.9.1.3 for detailed information.		
		• It is to display the record type and its period in current search criteria.		
	Time bar	• In 4-window playback mode, there are corresponding four time bars. In other playback mode, there is only one time bar.		
9		 Use the mouse to click one point of the color zone in the time bar, system begins playback. The time bar is beginning with 0 o'clock when you are setting the configuration. The time bar zooms in the period of the current playback time when you are playing 		
		 the file. The green color stands for the regular record file. The red color stands for the external alarm record file. The yellow stands for the motion detect record file. 		
10	Time bar unit	 The option includes: 24H, 12H, 1H and 30M. The smaller the unit, the larger the zoom rate. You can accurately set the time in the time bar to playback the record. The time bar is beginning with 0 o'clock when you are setting the configuration. 		
		The time bar zooms in the period of the current playback time when you are playing the file.		

11	Backup	 Select the file(s) you want to backup from the file list. You can check from the list. Then click the backup button, now you can see the backup menu. System supports customized path setup. After select or create new folder, click the Start button to begin the backup operation. The record file(s) will be saved in the specified folder. Check the file again you can cancel current selection. System max supports to display 32 files from one channel. After you clip on record file, click Backup button you can save it. For one device, if there is a backup in process, you can not start a new backup operation.
12	Clip	 It is to edit the file. Please play the file you want to edit and then click this button when you want to edit. You can see the corresponding slide bars in the time bar of the corresponding channel. You can adjust the slide bar or input the accurate time to set the file end time. After you set, you can click Clip button again to edit the second period. You can see the slide bar restore its previous position. Click Backup button after clip, you can save current contents in a new file. You can clip for one channel or multiple-channel. The multiple-channel click operation is similar with the one-channel operation. Please note: System max supports 1024 files backup at the same time. You can not operate clip operation if there is any file has been checked in the file list.
13	Record type	In any play mode, the time bar will change once you modify the search type.
		Other Functions
14	Smart search	 When system is playing, you can select a zone in the window to begin smart search. Click the motion detect button to begin play. Once the motion detect play has begun, click button again will terminate current motion detect file play. There is no motion detect zone by default. If you select to play other file in the file list, system switches to motion detect play of other file. During the motion detect play process, you can not implement operations such as change time bar, begin backward playback or frame by frame playback. Please refer to chapter 4.9.1.1 Smart Search for detailed operation.
15	Other channel synchroni zation switch to play	When playing the file, click the number button, system can switch to the same period of the corresponding channel to play.

	when playback	
16	Sync	In pane 13 of Figure 4-36, click Sync button, you can playback the files of different channels occurred at the same time.
17	Digital zoom	When the system is in full-screen playback mode, left click the mouse in the screen. Drag your mouse in the screen to select a section and then left click mouse to realize digital zoom. You can right click mouse to exit.
18	Manually switch channel when playback	During the file playback process, you can switch to other channel via the dropdown list or rolling the mouse. This function is null if there is no record file or system is in smart search process.

4.9.1.1 Smart Search

During the multiple-channel playback mode, double click one channel and then click the

button, system begins smart search. System supports 396(22*18 PAL) and 330(22*15 NTSC) zones. Please left click mouse to select smart search zones. See Figure 4-37.

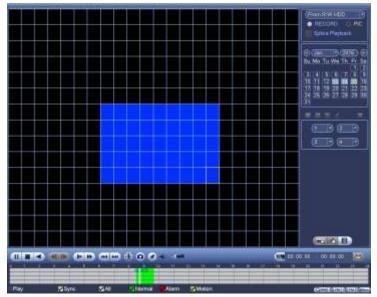


Figure 4-37

Click the , you can go to the smart search playback. Click it again, system stops smart search playback.

Important

• System does not support motion detect zone setup during the full-screen mode.

• During the multiple-channel playback, system stops playback of rest channels if you implement one-channel smart search.

4.9.1.2 Accurate playback by time

Select records from one day, click the list, you can go to the file list interface. You can input time at the top right corner to search records by time. See image on the left side of

the Figure 4-38 For example, input time 11:00.00 and then click Search button, you can view all the record files after 11:00.00 (The records includes current time.). See image on the right side of the Figure 4-38 Double click a file name to playback. **Note**

- After you searched files, system implement accurate playback once you click Play for the first time.
- System does not support accurate playback for picture.
- System supports synchronization playback and non-synchronous playback. The synchronization playback supports all channels and non-synchronous playback only supports accurately playback of current select channel.

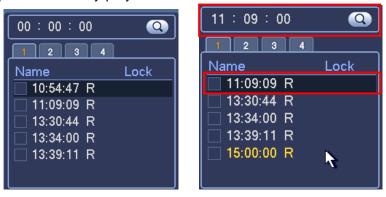


Figure 4-38

4.9.1.3 Mark Playback

Please make sure your purchased device support this function. You can use this function only if you can see the mark playback icon on the Search interface (Figure 4-36).

When you are playback record, you can mark the record when there is important information. After playback, you can use time or the mark key words to search corresponding record and then play. It is very easy for you to get the important video information.

Add Mark

When system is playback, click Mark button, you can go to the following interface. See Figure 4-39.

Add Mark
Mark Time (2013-09-27 10:01:08 Mark Name (
Default OK Cancel

Figure 4-39

Playback Mark

During 1-window playback mode, click mark file list button in Figure 4-36, you can go to mark file list interface. Double click one mark file, you can begin playback from the mark time.

• Play before mark time

Here you can set to begin playback from previous N seconds of the mark time.

Note

Usually, system can playbacks previous N seconds record if there is such kind of record file. Otherwise, system playbacks from the previous X seconds when there is such as kind of record.



Click the mark manager button on the Search interface (Figure 4-36); you can go to Mark Manager interface. See Figure 4-40. System can manage all the record mark information of current channel by default. You can view all mark information of current channel by time.

	-	M	arks Manag	er /			
	And in case of) 00 : 00 : 00 00 : 00 : 00	n 9	0	Search	1
	CH	Mark Tirr	ie 27 10 00 12		Mark Na report	me	
				۲			
Delete			_			Exit)

Figure 4-40

Modify

Double click one mark information item, you can see system pops up a dialogue box for you to change mark information. You can only change mark name here.

Delete

Here you can check the mark information item you want to delete and then click Delete button, you can remove one mark item. .

Note

- After you go to the mark management interface, system needs to pause current playback. System resume playback after you exit mark management interface.
- If the mark file you want to playback has been removed, system begins playback from the first file in the list.

4.9.1.4 Customized Playback

You can select one or more channel(s) to playback at the same time.

From main menu->Search or you can right click mouse on the preview interface and then select Search, you can go to Figure 4-36.

In pane 4, click , you can see the following interface. See Figure 4-41.



Figure 4-41

Now you can select one or more channel(s) and then click Q to search record(s).

System supports one or more channels. The window split mode can auto adjust according to the channel amount. System max supports 16-split.

Click button to select all channels at the same time.

Click **C**, system begins playback.

4.9.1.5 Splice Playback

For the large record file, you can use splice playback function to play the same file in several sections at the same time. It is very convenient for you to find the video footages you desire.

On the main menu, click Search button, or right click mouse and then select Search. You can go to the Figure 4-36.

On the right pane, check the box to enable splice playback function, and then set channel, date, split mode. The splice playback interface is shown as below. Each section has a See small triangle; you can adjust it to set time. Figure 4-42. 0:45 0.95

Figure 4-42

Note

Select split mode, so that the record can be spliced in several sections.

Select splice file.

- Click Playback, system playbacks from the first of current date by default.
- Click time bar, system playbacks from the time you click.
- Click I, you can select on the file list.

Note

- The splice playback is for 1-window playback mode.
- System supports 1/4/8/16-split mode. Slight different may be found here.
- The min period of each section is 5 minutes. For the record is less than 20 minutes, if you select 4-split mode (or more than 4-split mode), system can auto adjust so that the each section period is 5 minutes. In this situation, some channel may have no video.

4.9.2 Human Face Search

On the preview window, right click mouse and then select face search, or from the main menu, click Face search, you can go to the following interface. See Figure 4-43.

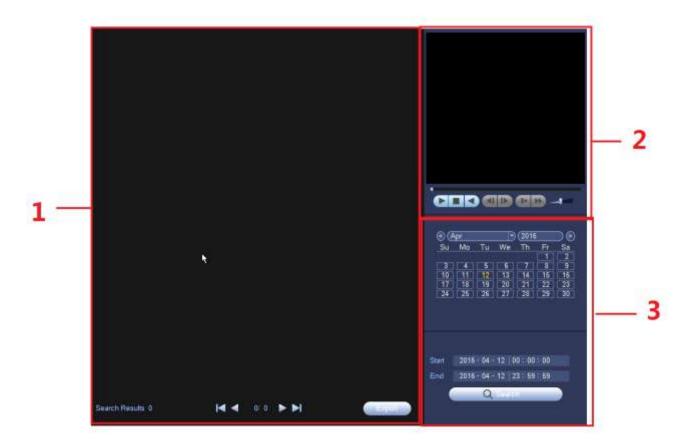


Figure 4-43

Please refer to the following sheet for detailed information.

SN	Name	Function			
1	Display	• It is to display human face detection file list. The latest file is at the			
	pan	top. \			
		• Click Export, you can export the selected file to the USB device.			
		There are two types: image/record.			
		Image: Export the recognized human face image.			
		\diamond Record: Export the record file before and after 10 seconds			
		when the DVR recognizes the human face.			
2	Playback	Play the searched record file or image. Double click to playback in full			
	pane	screen.			
3	Search	Set date, start time and end time, click Search button, you can view the			
	pane	corresponding file list.			

4.9.3 Backup

DVR support CD-RW, DVD burner, USB device backup, network download and eSATA. Here we introduce USB, eSATA backup. You can refer to Chapter 7 Web Client Operation for network download backup operation.

Click backup button, you can see an interface is shown as in Figure 4-44. Here is for you to view devices information.

You can view backup device name and its total space and free space. The device includes CD-RW, DVD burner, USB device, flash disk, eSATA backup.

				BACKUP			
Device Na			D				Browse
0.00 KB(Sj		ded)	13.78 GB/1	5.00 GB(Free/Total)			
Гуре	(Al						
			18 00 00 00	Record CH	2		-
			18 12:11:34) File Format (DA		Add	Remove
0 0	Inannel	Туре	Start Time	End Time	Si	:e(KB)	
							Start

Figure 4-44

Select backup device and then set channel, file start time and end time.

Click add button, system begins search. All matched files are listed below. System automatically calculates the capacity needed and remained. See Figure 4-45.

Start Tir	ne	6(2013 -	10 - 10	00	00 - 00	1	Recar	d CH	0	9			
End Tir	ne		2013 -	10 - 10	12 :	11:34	1) File F	ormat	DAV	5		Add	Remove
43	K	Ch	annel T	ype :	Start T	ime		E	nd Tim	è	s	ize(KB	1	
1	K	1	R		13-10	-14 22:0	00:00	13	8-10-14	23:00:00	4	8176		
234567	12	1	R			-14 23:0				00:00:00		8037		
3	18		R		13-10	-15 00:0	00:00	13	3-10-15	00:28:50		2528		
4	R		R			-15 00:2				01:00:00		4668	(22)	
5	12		R			-15 01:0				02:00:00		6815		
6	10		R			-15 02:0				03:00:00		7802		
7	R		R			-15 03:0				04:00:00		7666		
8 9	18	1	R			15 04:0				05.00.00		7468		
9	10	1	R			15 05:0				06:00:00		7358		
10	12	1	R			-15 06:0				07:00:00		7773		
11	12	1	R			-15 07:0				08:00:00		7229		
12	X	1	R			15 08:0				09:00:00		7865		
13	1	1	R			15 09:0				09:03.02		780		
<u> </u>	172	•			12.10	10.00-0	10-22	- 41	10.15	00.67.90	- '	neen		
														(Start)

Figure 4-45

System only backup files with a $~~\checkmark~$ before channel name. You can use Fn or cancel

button to delete $\sqrt{}$ after file serial number.

Click Start button, system begins copy. At the same time, the backup button becomes stop button. You can view the remaining time and process bar at the left bottom. See Figure 4-46.

Туре		(AI	d) 13.78 GB/15.00	GB(Free/Total)	A		
		The second se	10 00 00 00	1 PROVIDENT			
Start Tin		6 2013 - 10		CONTRACTOR DATES	(1)	_2	
End Tin	nini	C 2013 · 10	18 12 11 34	File Format	DAV	3	Add (Remove)
43	Ð	Channel Type	Start Time	End Tim	6	Size(KB) [-]
1		1 R	13-10-14 22:00:00	13-10-14	23:00:00	48176	
2 3	2	1 R	13-10-14 23:00:00	13-10-15	00:00:00	48037	
	12	1 R	13-10-15 00:00:00	13-10-15	00:28:50	22528	
4 5	X		13-10-15 00:28:50	13-10-15	01:00:00	24668	
5	2		13-10-15 01:00:00	13-10-15		46815	1
6		1 R	13-10-15 02:00:00	13-10-15	03:00:00	47802	
7		1 R	13-10-15 03:00:00	13-10-15	04:00:00	47565	
8		1 R	13-10-15 04:00:00	13-10-15	05:00:00	47468	
9		1 R	13-10-15 05:00:00	13-10-15	06:00:00	47358	
10		1 R	13-10-15 06:00:00	13-10-15	07:00:00	47773	
11		1 R	13-10-15 07:00:00	13-10-15	08:00:00	47229	
12		1 R	13-10-15 08:00:00	13-10-15	09:00:00	47865	
13		1 R	13-10-15 09:00:00	13-10-15		2780	
. 44	10	1 D	12 10 16 00 06 66	12 10 16	09-67-21	40060	
							Stop)
Demain	ina	time 0:2:59		- X			



When the system completes backup, you can see a dialogue box prompting successful backup.

• File format: Click the file format; you can see there are two options: DAV/ASF. The file name format usually is: Channel number+Record type+Time. In the file name, the YDM format is Y+M+D+H+M+S. File extension name is .day.

Tips:

During backup process, you can click ESC to exit current interface for other operation. The system will not terminate backup process.

Note:

When you click stop button during the burning process, the stop function becomes activated immediately. For example, if there are ten files, when you click stop system just backup five files, system only save the previous 5 files in the device (But you can view ten file names).

4.9.4 Shut Down

In Figure 4-35, select Shut Down, you can go to the following interface. See Figure 4-47. There are three options: Shutdown/logout/reboot.

For the user who does not have the shut down right, please input corresponding password to shut down.



Figure 4-47

4.10 Information

4.10.1 System Info

Here is for you to view system information. There are total four items: HDD (hard disk information), record, BPS (data stream statistics), version. See Figure 4-48.

		-	INFO			
SYSTEM	EVEN	ग 😹	NETWORK	NS LOG		
HDD RECORD RECESTIMATE BPS	SATA	12 - 0				
VERSION		Туре	Total Space	Free Space	Status	SMART]
	All		1.81 TB	1.64 TB		ė
		Read/Write	1.31 TB	1.64 TB	Normal	

Figure 4-48

4.10.1.1 HDD Information

Here is to list hard disk type, total space, free space, video start time and status. See Figure 4-49.

• SATA: 1-2 here means system max supports 2 HDDS. o means current HDD is

normal. X means there is error. - means there is no HDD. If disk is damaged, system shows as "?". Please remove the broken hard disk before you add a new one.

- SN: You can view the HDD amount the device connected to. * means the second HDD is current working HDD.
- Type: The corresponding HDD properties.
- Total space: The HDD total capacity.
- Free space: The HDD free capacity.
- Status: HDD can work properly or not.
- SMART: Display HDD information. See Figure 4-50.

-		-	INFO				-
SYSTEM		π 💽 I	NETWORK	🚺 LOG			
HDO RECORD REC ESTIMATE BPS	SATA	12					
VERSION	1	Туре	Total Space	Free Space	Status	SMART	
	Ali		1.81 TB	1.64 TB		and the second s	
		Read/Write	1.81 TB	1.64 TB	Normal	2	

Figure 4-49

Double click one HDD information; you can see the HDD SMART information. . See Figure 4-50.

	2000V×000-1CU164					
	E4TXG4					
Status OK						
Describe:						
Smart ID	Atribute	Threshol	d Value	Worst Value	Status	-
1	Read Error Rate	6	116	91	OK	
3	Spin Up Time		96	95	OK	
4	Start/Stop Count	20	100	100	OK	
5 7	Reallocated Sector Count	10	100	100	OK	
	Seek Error Rate	- 30	72	60	OK	
9	Power On Hours Count	0	93	93	OK	
10	Spin-up Retry Count	97	100	100	OK	
12	Power On/Off Count	20	100	-100	OK	
184	End-to-End Error	99	100	100	OK	
187	Reported Uncorrect	0	86	86	OK	
188	Command Timeout	0	100	99	OK	
189	High Fly Writes	0	1	1	OK	
191	G-Sense Error Rate	0	100	100	OK	
192	Power-Off Retract Cycle	0	100	100	OK	
193	Load/Unload Cycle Count	0	100	100	OK	
404	T	<u> </u>				

Figure 4-50

4.10.1.2 Record Info

It is to view record start time and end time. See Figure 4-51.

		NF0		
SYSTEM	📆 EVENT	NETWORK	🐚 LOG	
HDD RECORD REC ESTIMATE BPS	SATA 1	2 O		
VERSION	All 1*	Start Time 2015-12-07 16:59:43 2015-12-07 16:59:43 2015-12-14 15:15:54 2016-01-13 09:46:28	End Time 2016-01-13 15:09:30 2015-12-11 13:17:43 2015-12-14 19:35:54 2016-01-13:15:09:30	

Figure 4-51

4.10.1.3 Record Estimate

System can calculate the record time based on the HDD space, or you can input the

RECORD RECESTIMATE BPS	V Ch	annel 1	Edit	Bit Rate(Kb/S) 2048	Record Time	Resolution	1000
				2040	24	1280*720(720P)	
100		2	1	2048	24	1280*720(720P)	
	12	23456789	1	2048	24	1280"720(720P)	
	2	4	1	2048	24	1280*720(720P)	
/ERSION	2	5	1	2048	24	1280*720(720P)	
	2	6	1	2048	24	1280*720(720P)	
	2	7	1	2048	24	1280°720(720P)	
	2	8	1	2048	24	1280*720(720P)	
	2		1	2048	24	1280'720(720P)	
	X X	10	1	2048	24	1280'720(720P)	
		1	1	2048	24	1280°720(720P)	
	2	12	1	2048	24	1280°720(720P)	
	1	dise					
	Kno	wn Sp	ace	Known Time			
	Capac	tity (0)тв = (0)GB (Seli	ect)	
	Time	(0)Days			
				mation data here is ting record period.	for reference only. Ple	ase be cautious	

record time you want to calculate the HDD space you need. See Figure 4-52.

Figure 4-52

Click *label{eq:click}* after the channel name, system pops up Edit dialogue box. See Figure 4-53. You can input resolution, frame rate, bit stream, record time of the corresponding channel,

system can calculate the record time based on the channel setup and HDD space.



• Calculate the record period based on the HDD space

Check the channel you want to record file.

Click Known Space and then click the Select button to set HDD. Click OK button. Now you can see the record period (such as 5 days). See Figure 4-54.

HDD	6			NEW CONTRACTOR NO.		-
RECORD	Chan	inel Edit	Bit Rate(Kb/S)	Record Time	Resolution	
		1	2048	24	1280°720(720P)	
REC ESTIMATE	2 3 3 3 3 3 3 3 3 3 5 5 5 5 7 7 8 9 9 9 9 9	4	2048	24	1280°720(720P)	
3PS	23		2048 2048	24	1280*720(720P)	
VERSION	8 4	<u> </u>	2048	24 24	1280°720(720P)	
VENDION V	× 5		2048	24	1280*720(720P) 1280*720(720P)	
	8 9		2048	24	1280 720(720P) 1280 720(720P)	
	7 7 8	1	2048	24	1280 720(720P)	
	Š Š	<u> </u>	2048	24	1280 720(720P) 1280 720(720P)	
	× 10		2048	24	1280 720(720P)	
			2048	24	1280'720(720P)	
	Š i		2048	24	1280'720(720P)	
			0040		1000120012001	
		5 55		WHITE	Contraction of the second second	4
	Know	n Space	Known Time			
	Capacity	4.000	TB = (4000	GB Sel	ect	
	Time	(5	Days			
			imation data here is ting record period.	for reference only. Ple	ase be cautious	

Figure 4-54

• Calculate the HDD space based on the record period

Check the channel you want to record file.

Input days(s) you want to records, system can auto calculate the HDD space needed (such as 5.109TB). See Figure 4-55.

SYSTEM	EVENT		NETWORK	N. LOG		
DD	(T-1)					
ECORD	Channe	Edit	Bit Rate(Kb/S)	Record Time	Resolution	
		1	2048	24	1280"720(720P)	
EC ESTIMATE	2345 56789	1	2048	24	1280'720(720P)	
RS	2 3	1	2048	24	1280*720(720P)	
	× 1	1	2048	24	1280*720(720P)	
ERSION	✓ 5	1	2048	24	1280"720(720P)	
	× 6	1	2048	24	1280'720(720P)	
		1	2048	24	1280"720(720P)	
	S 8	1	2048	24	1280'720(720P)	
		1	2048	24	1280°720(720P)	
	2 10	1	2048	24	1280*720(720P)	
	× 11	1 M 1	2048	24	1280"720(720P)	
	2 12	1	2048	24	1280"720(720P)	-
			70.10		1900/200/2000	1
	Known S	pace	Known Time			
	Time (i.	Days			
	Capacity (109	TB = (5109)GB		
			mation data here is ting record period.	for reference only. Ple	ase be caulous	

Figure 4-55

4.10.1.4 BPS

Here is for you to view current video data stream (KB/s) and occupied hard disk storage (MB/h). See Figure 4-56.

SYSTEM	EVE	NT	NE NE	TWORK	1.0	LOG	
6DD	Channel	Kb/S	Resolution	Wave			
ECORD		91	1280*720	1		10	
EC ESTIMATE	2	93	1280"720	1		Ĩ	
PS		93	1280*720	1		È	
ERSION	4	92	1280*720	1			
		90	1280*720	1			
	6	91	1280*720	ĩ		ì	
		92	1280*720	1			
	8	92	12801720	1			
	9	93	12801720	1		ì	
	10	93	1280*720	1		Ī	
	11	91	1280*720	T			
	12	93	1280*720	1		Ĩ	
	13	93	1280*720	E		Ē	
	14	92	1280*720	1		i.	
	15	0		I		1	
	16	65	960*480	1			

4.10.1.5 Device Status

It is to view device status information. See Figure 4-57. Please note this function is for some series only.

		INFO		
SYSTEM		NETWORK	📜 LOG	
HDD RECORD RECESTIMATE BPS CHANNEL INFO DEVICE STATUS VERSION	Pan State	CPU Temperature	Case Temper	Memory 43%

Figure 4-57

4.10.1.6 Version

Here is for you to view some version information such as version number, built date, serial number and etc. See Figure 4-58.

		INFO		
SYSTEM	EVENT	NETWORK	🚺 LOG	
HDD RECORD REC ESTIMATE BPS VERSION	Device Model Record CH Alarm In Alarm Out Hardware Version System Version Build Date Web SN Onvit Server Version Onvit Client Version	2015-09-24 3.2.7.59066 1E025A2YAZT90 1.2.4.1	12	

Figure 4-58

4.10.2 Event

It is to display device status and channel status. See Figure 4-59.



Figure 4-59

4.10.3 Network 4.10.3.1 Online Users

Here is for you to manage online users. See Figure 4-60.

You can disconnect one user or block one user if you have proper system right. Max disconnection setup is 65535 seconds.

System detects there is any newly added or deleted user in each five seconds and refresh the list automatically.

SYSTEM		NETWORK	No LOG	
ONLINE USERS LOAD TEST	User Name admin Block for (60	P 10.15.6.144	User Login Time 2013-10-21 03:25:05 PM	Block for
	Block for (60	•		
	_	_		

Figure 4-60

4.10.3.2 Network Load

Network load is shown as in Figure 4-61. Here you can view the follow statistics of the device network adapter.

Here you can view information of all connected network adapters. The connection status is shown as offline if connection is disconnected. Click one network adapter, you can view the flow statistics such as send rate and receive rate at the top panel.



Figure 4-61

4.10.3.3 Network Test

Network test interface is shown as in Figure 4-62.

- Destination IP: Please input valid IPV4 address or domain name.
- Test: Click it to test the connection with the destination IP address. The test results can display average delay and packet loss rate and you can also view the network status as OK, bad, no connection and etc.
- Network Sniffer backup: Please insert USB2.0 device and click the Refresh button, you can view the device on the following column. You can use the dropdown list to select peripheral device. Click Browse button to select the snap path. The steps here are same as preview backup operation.

You can view all connected network adapter names (including Ethernet, PPPoE, WIFI,

and 3G), you can click the button on the right panel to begin Sniffer. Click the grey stop button to stop. Please note system can not Sniffer several network adapters at the same time.

After Sniffer began, you can exit to implement corresponding network operation such as

login WEB, monitor. Please go back to Sniffer interface to click stop Sniffer. System can save the packets to the specified path. The file is named after "Network adapter name+time". You can use software such as Wireshark to open the packets on the PC for the professional engineer to solve complicated problems.

SYSTEM		NETWORK	LOG	
ONLINE USERS LOAD TEST	Network Test Destination IP Test Result Network Snitter Device Name	Packet Backup (sdb1(USB DISK)	•) Refresh	Test
	Address	(19 (11111)	Browse
	Name	P	Sniller Packet Size	Sniffer Packet Backup
	LANI	10.15.6,144	0KB	

Figure 4-62

4.10.4 Log

4.10.4.1 Local Log

Here is for you to view system log file. System lists the following information. See Figure 4-63.

Log types include system operation, configuration operation, data management, alarm event, record operation, account manager, log clear, file operation and etc. It optimized reboot log. There are only three types: normal reboot, abnormal reboot and protection reboot. 0x02、0x03、0x04 is included in the protection reboot type.

- Start time/end time: Pleased select start time and end time, then click search button. You can view the log files in a list. System max displays 100 logs in one page. It can max save 1024 log files. Please use page up/down button on the interface or the front panel to view more.
- Backup: Please select a folder you want to save; you can click the backup button to save the log files. After the backup, you can see there is a folder named Log_time on the backup path. Double click the folder, you can see the log file
- Details: Click the Details button or double click the log item, you can view the detailed information. See Figure 4-64. Here you can use rolling bar to view information, or you can use Page up/Page down to view other log information.

SYSTEM	EVENT NETWORK K LOG
LOG	Тура (АШ 💌
	Start Time (2014 + 08 + 21 00 : 00 - 09
	End Time (2014 - 08 - 22 00 00 00 00 (Details) (Search)
	38 Log Time Event
	27 2014-08-21 13:29:45 <video 4="" :="" loss=""></video>
	28 2014-08-21 13:29:45 HDD totals<1>, Current working HDD<1>
	29 2014-08-21 13:32:25 User logged in <admin></admin>
	30 2014-08-21 13:33:45 Save Channel Name Config
	31 2014-08-21 13:33:45 Save Channel Name Config
	32 2014-08-21 13:33:45 Save Channel Name Config
	33 2014-08-21 13:33:45 Save Channel Name Config 34 2014-08-21 13:33:45 Save OVERLAY Config
	34 2014-08-21 13:33:45 Save OVERLAY Config 35 2014-08-21 13:33:45 Save OVERLAY Config
	36 2014-08-21 13:33:45 Save OVERLAY Config 36 2014-08-21 13:33:45 Save OVERLAY Config
	37 2014-08-21 13:33:45 Save OVERLAY Config
	38 2014-08-21 13:47:25 User logged in<10.15.6.140>
	(Backup.) (Clear
	🚽 1/1 🕨 🛛 Jump To 🌘 (GD)

Figure 4-63

Select an item on the list and then click the Details button or double click the log item, you can view the detailed information such as log time, log type, log user, IP address and etc. See Figure 4-64.

_	Detailed Information	
Log Time	2014-08-21 13:47:25	
Log Type	User Management>User logged in	
IP Address User	10.15.6.140 admin	
·		/
Previous)		OK

Figure 4-64

Note

- If there is no HDD, system max supports 1024 logs.
- If you have connected to the unformatted HDD, system max supports 5000 logs.
- If you have connected to the formatted HDD, system max supports 500,000 logs.
- System operation logs are saved in system memory. Other types of logs are saved in the HDD. If there is no HDD, other types of logs are saved in the system memory too.
- The logs are safe when you format the HDD. But the logs may become loss once you removed the HDD.

4.11 Setting

4.11.1 Camera

4.11.1.1 Remote Device (For digital channel only)

4.11.1.1.1 Remote Device

In the main menu, from Camera ->Remote, you can go to an interface shown as in Figure 4-65. Here you can add/delete remote device and view its corresponding information.

- IP search: Click it to search IP address. It includes device IP address, port, device name, manufacturer, type. Use your mouse to click the item name, you can refresh display order. Click IP address, system displays IP address from small to large. Click IP address again, you can see icon, system displays IP address from large to small. You can click other items to view information conveniently. For the network device already added to the device, you can see there is a small icon "*" after the SN in case there is repeatedly add operation.
- Add: Click it to connect to the selected device and add it to the Added device list. Support Batch add.

You can see the corresponding dialogue box if all digital-channel has connected to the front-end.

System can not add new device if the device you want to add has the same IP and TCP port as the device in the list.

- Show filter: You can use it to display the specified devices from the added device.
- Edit: Click button is or double click a device in the list, you can change channel setup.
- Delete: Please select one device in the Added device list and then click to remove.
- Status: emeans connection is OK and emeans connection failed.
- Delete: Select a device on the Added device list, click Delete button, system disconnect device first and then remove its name from the list.
- Manual add: Click it to add the IPC manually. The port number is 37777. The default user name is admin and password is admin.

		SETTING			
CAMERA	T NETWORK	To EVENT	STORAGE	SYSTEM	
REMOTE	Remote	Status	Firmware		
IMAGE ENCODE CAM NAME CHANNEL TYPE UPGRADE	8 Edi	IP Address *	Manufacturer	Туре	E
		10.15.7.111	Private	IPC	
		10.15.10.41	Private	PC	
	3 🛃	10.15.11.108	Private	IPC-HFW1220S	
	4 200	10.15.55.11	Private	IPC .	
	5 🛃	10.15.67.23	Private	IPC-HDBW8281	
		192.168.1.52	Private	IPC-HFW8351E	
	7 🗆 🖽	192,168,1,120	Private	PC	
		100 100 1000	- Aires		1
	(IP Search) (Add (Manual A			IPC 🕤
	Channel Edi	Delete Statu	IP Address	Port De	vice Nam
	32 💋	1 🕺 🧿	10.15.65.11	37777 1J013	02AAN0
				(Export)	

Figure 4-65

Click the Manual Add button; you can go to the following interface. See Figure 4-66. Channel number: The dropdown list here displays unconnected channel number. You can go to Figure 4-65 to set remote channel connection.

Please note:

- This series product supports the IPC from many popular manufactures such as Sony, Hitachi, Axis, Samsung, Dynacolor, Arecont, Onvif and Dahua.
- System default IP address is 192.168.0.0 if you do not input IP address. System will not add current IP address.
- You can not add two or more devices in the Manual Add interface (Figure 4-66). Click O K button, system connects to the corresponding front-end device of current channel on the interface.

	Manual Add
Channel Manufacturer	25 Private
IP Address TCP Port User	(192.168.0.0 (37777)
Password Remote Channel	
Decoder Buffer	(280)msec
	OK Cancel

Figure 4-66

- Show filer: It is to filter the searched device.
 - None: it is to display all searched devices.
 - IPC: It is to display all cameras.
 - DVR: It is to display all storage devices such as NVR, DVR.
- Change IP:
 - Clickel, you can change the information such as IP address, subnet mask, and default gateway, user name, password of the checked device. See Figure 4-67.

	Modify IP
IP Address	10 . 15 . 3 . 23
Subnet Mask	255 . 255 . 0 . 0
Default Gateway 🤇	10 . 15 . 0 . 1
User Name 🤇	admin
Password	
	OK Cancel

Figure 4-67

 \diamond You can check several devices at the same time and then click the edit

button See Figure 4-3. Please check Batch modify button and then input start IP, end IP and default gateway.

	Modify IP	
✓Batch Modify Start Address	(10 . 15 . 3 . 23)	
Subnet Mask	255 . 255 . 0 . 0	
Default Gateway User Name	(10 · 15 · 0 · 1) (admin	
Password		
	OK Cancel	

Figure 4-68

• IP Export

System can export the Added device list to your local USB device.

Please insert the USB device and then click the Export button; you can see the following interface. See Figure 4-69.

		Browse		
Device Name	(sdb1(USB DISK) •	Retresh		
Total Space	(14.43 G8	Free Space (11.72 GB		
Address	C			
Name			Size Type	Delete *
- English			Folder	*
(New Folder)	(Format)			
			OK	Cancel

Figure 4-69

Select the directory and then click the OK button. System pops up a dialogue box to remind you successfully exported. Please click OK button to exit.

Note

The exported file extension name is .CVS. The file information includes IP address, port, remote channel number, manufacturer, user name and password.

IP Import

Click Import button, you can see the following interface. See Figure 4-70.



Figure 4-70

Select the import file and then click the OK button. System pops up a dialogue box to remind you successfully exported. Please click OK button to exit.

Note:

If the imported IP has conflicted with current added device, system pops up a dialogue box to remind you. You have two options:

- OK: Click OK button, system uses the imported setup to overlay current one.
- Cancel: Click Cancel button, system adds the new IP setup.

- You can edit the exported .CVS file. Do not change the file format; otherwise it may result in import failure.
- Does not support customized protocol import and export.
- The import and export device shall have the same language format.
 - 4.11.1.1.2 Channel Status

Here you can view the IPC status of the corresponding channel such as motion detect, video loss, tampering, alarm and etc. See Figure 4-71.

• IPC status: Front-end does not support. Front-end supports. There is alarm event from current front-end.

- Connection status: Connection succeeded.
- Refresh: Click it to get latest front-end channel status.

		6	SETTING				
CAMERA		6		ST	ORAGE	SYST	TEM
REMOTE	Remote	2	Status	Firmware			
IMAGE ENCODE	Device Stat.	<i>n</i> .					
CAM NAME	Channel	Status	IP Address	MD	Video Loss	Tampering	Alarm in
CHANNEL TYPE UPGRADE	17 18	8	10 15 1 114 10 15 3 172	-	-	123	
	Refresh	ñ					[0]
	- Contraction						

Figure 4-71

4.11.1.1.3 Firmware

It is to view channel, IP address, manufacturer, type, system version, SN, video input, audio input, and etc. See Figure 4-72.



Figure 4-72

4.11.1.2 Image

For analog channel, the camera interface is shown as in Figure 4-73. For digital channel, the camera interface is shown as in Figure 4-74.

- Channel: Select a channel from the dropdown list.
- Cable type: It is to set the cable type of the corresponding analog channel. When the setup here matches the actual cable you are using, you can get the best image effect. The default setup is COAXIAL. Please note this function is for some series products only.
- ♦ COAXIAL: When the corresponding channel is using coaxial cable, please select COAXIAL.
- ♦ UTP: When the corresponding channel is using UTP cable, please select UTP. Usually we recommend 10Ohm UTP cable.
- Saturation: It is to adjust monitor window saturation. The value ranges from 0 to 100. The default value is 50. The larger the number, the strong the color is. This value has no effect on the general brightness of the whole video. The video color may become too strong if the value is too high. For the grey part of the video, the distortion may occur if the white balance is not accurate. Please note the video may not be attractive if the value is too low. The recommended value ranges from 40 to 60.
- Brightness: It is to adjust monitor window bright. The value ranges from 0 to 100. The default value is 50. The larger the number is, the bright the video is. When you input the value here, the bright section and the dark section of the video will be adjusted accordingly. You can use this function when the whole video is too dark or too bright. Please note the video may become hazy if the value is too high. The recommended value ranges from 40 to 60.
- Contrast: It is to adjust monitor window contrast. The value ranges from 0 to 100. The default value is 50. The larger the number is, the higher the contrast is. You can use this function when the whole video bright is OK but the contrast is not proper. Please note the video may become hazy if the value is too low. If this value is too high, the dark section may lack brightness while the bright section may over exposure .The recommended value ranges from 40 to 60.
- Sharpness: The value here is to adjust the edge of the video. The value ranges from 0 to 100. The larger the value is, the clear the edge is and vice versa. Please note there is noise if the value here is too high. The default value is 50 and the recommended value ranges from 40 to 60.
- Mirror: It is to switch video up and bottom limit. This function is disabled by default.
- Flip: It is to switch video left and right limit. This function is disabled by default.
- BLC: It includes several options: BLC/WDR/HLC/OFF.
- BLC: The device auto exposures according to the environments situation so that the darkest area of the video is cleared
- WDR: For the WDR scene, this function can lower the high bright section and enhance the brightness of the low bright section. So that you can view these two sections clearly at the same time. The value ranges from 1 to 100. When you switch the camera from no-WDR mode to the WDR mode, system may lose several seconds record video.

- ♦ HLC: After you enabled HLC function, the device can lower the brightness of the brightest section according to the HLC control level. It can reduce the area of the halo and lower the brightness of the whole video.
- ♦ OFF: It is to disable the BLC function. Please note this function is disabled by default.
- Profile: It is to set the white balance mode. It has effect on the general hue of the video. This function is on by default. You can select the different scene mode such as auto, sunny, cloudy, home, office, night, disable and etc to adjust the video to the best quality.
- ♦ Auto: The auto white balance is on. System can auto compensate the color temperature to make sure the vide color is proper.
- Sunny: The threshold of the white balance is in the sunny mode.
- ♦ Night: The threshold of the white balance is in the night mode.
- Customized: You can set the gain of the red/blue channel. The value reneges from 0 to 100.
- Day/night. It is to set device color and the B/W mode switch. The default setup is auto.
- ♦ Color: Device outputs the color video.
- Auto: Device auto select to output the color or the B/W video according to the device feature (The general bright of the video or there is IR light or not.)
- ♦ B/W: The device outputs the black and white video.
- Sensor: It is to set when there is peripheral connected IR light.
- Image enhancement: It is to enhance video quality. The larger the value is, the clearer the video is. But the noise may become large too.
- 2D NR: It is to process the noise of the single image. The video may become soft after process. The larger the value is, the better the effect is.
- 3D NR: it is to process the multiple-frame (at least two frames). It is to use the frame information between the following two frames to reduce noise. The larger the value is, the better the effect is.

	2	SETTING			
CAMERA	T NETWORK	To EVENT	STORAGE	SYSTEM	
IMAGE ENCODE CAMINAME CHANNEL TYPE	Channel Period Effective Time Saturation Brightness Contrast Hue Sharpness Image Enhance NR	1 Time Period 1 ♥ 00:00 - 24 00:00 - 24 00:00 - 50 0 - 50 0 - 50 0 - 50 0 - 50 0 - 50 50 50 50 50 50 50 50 50 50	Cable Type	COAXIAL	Ð
	Default		Save	Cancel Apply	\Box

Figure 4-73

		SETTING		
CAMERA		TE EVENT	😼 STORAGE	SYSTEM
REMOTE IMAGE ENCODE CAM NAME	Channel	•	Config Files Day	
CHANNEL TYPE	Auto Iris Mirror Flip	On O Of On O Of On O Of On Of On	Saturation — Brightness — Contrast — Chroma —	50 50 50 50 50 50
	3D Denoise BLC Mode Profile Day & Night Detault	On O Off Off Auto Auto Refresh	(Save) C	ancel) Apply
	_		_	

Figure 4-74

4.11.1.3 Encode

It is to set video bit stream, picture bit stream, video overlay parameter and etc.

4.11.1.3.1 Video

Video setting includes the following items. See Figure 4-75.

- Channel: Select the channel you want.
- SVC: SVC is so called scaled video coding. Check the box to enable this function. During the network transmission process, system discards unimportant frames when the bandwidth is not sufficient or the decode capability is low. It is to guarantee video quality and transmission fluency.
- Type: Please select from the dropdown list. There are three options: regular/motion detect/alarm. You can set the various encode parameters for different record types.
- Compression: System supports H.264H, H.264, H.264B, and MJPEG.
 - H.264H: It is the High Profile compression algorithm. It has the high encode compression rate. It can achieve high quality encode at low bit stream. Usually we recommend this type.
 - ♦ H.264 is the general compression algorithm.
 - ♦ H.264B is the Baseline algorithm. Its compression rate is low. For the same video quality, it has high bit stream requirements.
- Smart codec: Select Start from the dropdown list to enable smart codec function. The DVR can auto reduce the video bit stream of the non-important surveillance object to save the storage space.
- Resolution: For analog channel, system supports various resolutions, you can select from the dropdown list. Please note the option may vary due to different series. For digital channel, the resolution here refers to the capability of the network camera.
- Frame rate: It ranges from 1f/s to 25f/s in NTSC mode and 1f/s to 30f/s in PAL mode.
- Bit rate type: System supports two types: CBR and VBR. In VBR mode, you can set video quality.
- Quality: There are six levels ranging from 1 to 6. The sixth level has the highest image quality.
- Video/audio: You can enable or disable the video/audio.
- Audio format: Please select from the dropdown list. There are three options: G711a/G711u/PCM.
- Audio source: Please select from the dropdown list. There are two options: local/HDCVI. For local mode, the audio signal is from the Audio In port. For HDCVI mode, the audio signal is from the coaxial cable of the camera.

-		SETTING			
CAMERA		EVENT	STOR	AGE	SYSTEM
REMOTE IMAGE	Encode	Snapshot	Overlay		
ENCODE	Channel				
CAM NAME	Туре	Regular	D	Sub Strea	mt 💽
CHANNEL TYPE	Compression	(H.264H	D	(H.264H	Ð
UPGRADE	Smart Codec	Stop	D		
	Resolution	(1920*1080(1080P)	Ð	(352*288(0	15) D
	Frame Rate(FPS)	(15	D	(15	D
	Bit Rate Type	(CBR	Ð	CBR	Ð
	I Frame Interval	(15	D	(15	D
	Bit Rate(Kb/S)	2048 •		320 -	
	Reference Bit Rate	640-6144Kb/S		32-640Kb/S	
	AudioVideo	0			
	Audio Format	(G711a	D	Audio Sou	Ince (LOCAL
	Default Co	ру)		Save) (Cancel Apply

Figure 4-75

4.11.1.3.2 Snapshot

Here you can set snapshot mode, picture size, quality and frequency. See Figure 4-76.

- Snapshot mode: There are two modes: regular and trigger. If you set timing mode, you need to set snapshot frequency. If you set trigger snapshot, you need to set snapshot activation operation.
- Image size: Here you can set snapshot picture size.
- Image quality: Here you can set snapshot quality. The value ranges from 1 to 6.
- Interval: It is for you to set timing (schedule) snapshot interval.

		SETTING		
CAMERA				SYSTEM
REMOTE	Encode	Snapshot	Overlay	
ENCODE	Manual Snap (1 🕤 /Time		
CAM NAME CHANNEL TYPE UPGRADE	Mode (Image Size (Image Quality (1 •) Timing •) 352*288(CIF) •) 4 •) 1 SPL •)		
	Default	Copy)	ОК	Cancel Apply

Figure 4-76

4.11.1.3.3 Overlay

Overlay interface is shown as in Figure 4-77.

- Cover area: Here is for you to set cover area. You can drag you mouse to set proper section size. In one channel video, system max supports 4 zones in one channel.
- Preview/monitor: privacy mask has two types. Preview and Monitor. Preview means the privacy mask zone can not be viewed by user when system is in preview status. Monitor means the privacy mask zone can not be view by the user when system is in monitor status.
- Time display: You can select system displays time or not when you playback. Please click set button and then drag the title to the corresponding position in the screen.
- Channel display: You can select system displays channel number or not when you playback. Please click set button and then drag the title to the corresponding position in the screen.
- Copy: After you complete the setup, you can click Copy button to copy current setup to other channel(s). You can see an interface is shown as in Figure 4-78. You can see current channel number is grey. Please check the number to select the channel or you can check the box ALL. Please click the OK button in Figure 4-78 and Figure 4-77 respectively to complete the setup.

Please highlight icon 🔳 to select the corresponding function.

D		SETTING		
CAMERA	METWORK			SYSTEM
REMOTE IMAGE ENCODE CAM NAME CHANNEL TYPE UPGRADE	Encode Channel (12 12 14	Overlay	334
	(Default) Co	עקנ	Save	Cancel Apply

Figure 4-77

Сору
1234
OK Cancel

Figure 4-78

4.11.1.3.4 Channel Name

It is to modify channel name. It max supports 31-character. See Figure 4-79.

Please note for digital channel, you can only modify the channel name of the connected network camera.

		SETTING		
CAMERA		THE EVENT	STORAGE	SYSTEM
REMOTE MAGE ENCODE CAM NAME CHANNEL TYPE UPGRADE	CAM 1 CAM 3 CAM 5 CAM 7 CAM 9 CAM 11 CAM 13 CAM 15		CAM 2 CAM 4 CAM 6 CAM 8 CAM 10 CAM 12 CAM 14 CAM 16	(2 (4 (6 (8) (10) (12) (14) (14) (16)
	Delaut		Save	Cancel Apply

Figure 4-79

4.11.1.3.5 Channel Type

It is to set channel type.

- For analog channel (CVBS signal or HDCVI HD signal), you can select coaxial cable or UTP cable. Please check first and then save setup. There is no need to reboot.
- You can switch analog channel type to digital channel type if you want to connect to network camera. The IP channel shall start from the last channel. System needs to reboot to activate current setup.

Note

If there is no connected channel, the channel type here just displays previous connection record. System supports self-adaptive after camera connection.

The interface is shown as in Figure 4-80 (XVR series product) or Figure 4-81 (HCVR series product).

CAMERA	T NETWORK		EVENT	STO	ORAGE	SYSTE	vi
MAGE	Channel			Analog			P 🗍
ENCODE	Get tal 10101	AUTO 🗹	CVI 📄	AHD 🗋	CVBS	OTHER	- 0
CAM NAME							
	2	NON Non					
CHANNEL TYPE	3						
	5						
	.6	g					
	7			<u> </u>	<u> </u>		
	8	<u> </u>				_ <u>U</u>	
	9	Q	<u>@</u>		<u> </u>	<u> </u>	
	10	Ø					
	11	ğ		<u> </u>		<u> </u>	
	12	<u>Q</u>			<u> </u>		
	13			<u> </u>	<u>_</u>	<u> </u>	
	14						
	15		<u></u>		<u> </u>		
	16	e one analog					

Figure 4-80



Figure 4-81

Important notice about XVR series product:

• Nowadays, there are mainly two analog signal types on today market: analog

standard definition (CVBS) and analog HD (CVI, AHD or Other). For XVR series product, each channel supports all types of signal connection (analog signal/IP signal). For analog signal connection, the default setup is AUTO, that is to say, no matter what analog signal (CVBS, CVI, AHD or other analog HD signal) connected; the XVR can automatically recognize the signal and display the proper image. There is no need to set manually.

 If the auto recognition error occurred, XVR series product supports manual setup too. The manual setup featuring high recognition speed and usually there is no error. For example, in Figure 4-82, you can set channel 1 to connect to CVI camera, channel 2 to connect to AHD camera, channel 3 to connect to CVBS camera.



Figure 4-82

Important

Add/cancel IP CAM function is for some 4/8/16-channel series product only.

 Add IP CAM: Click it; you can add corresponding X IP channels. Here X refers to the product channel amount such as 4/8/16. System needs to restart to activate new setup. See Figure 4-83 (XVR series product) or Figure 4-84 (HCVR series product).



Figure 4-83



Figure 4-84

For example, there is a 4-channel analog device, after the A/D switch, it can max supports 4 analog channels and 4 IP channels. Once it has become the 3+1 mode (3 analog

Add IP CAM

button, system becomes 3+5 mode

(3 analog channels+5 IP channel).

channels+1 IP channel), you click

• Cancel IP CAM: Click it, you can cancel IP channel. System needs to restart to

restore original status.

CAMERA	T NETWORK	EVENT	STORAGE	SYSTEM	
REGISTRATION IMAGE ENCODE CAM NAME CHANNEL TYPE UPGRADE	setup shall beg	The shalog channel, yo	u can add one iP chanr d		Apply

Figure 4-85



Figure 4-86



XVR series product does not support upgrade function via coaxial cable. That is to say, you cannot use this interface to upgrade the connected CVI camera if you are using XVR.

It is to update the online camera.

From main menu->setting->camera->remote upgrade, the interface is shown as below. See Figure 4-87.

Click Browse button and then select the upgrade file. Then select a channel (or you can select device type filter to select several devices at the same time.)

Click Start upgrade button to update. You can see the corresponding dialogue once the upgrade is finish.



Figure 4-87

4.11.2 Network

4.11.2.1 TCP/IP

The single network adapter interface is shown as in Figure 4-88 and the dual network adapters interface is shown as in Figure 4-89

- Network Mode : Includes multiple access, fault tolerance, and load balancing
 - Multiple-address mode: eth0 and eth1 operate separately. You can use the services such as HTTP, RTP service via etho0 or the eth1. Usually you need to set one default card (default setup is etho) to request the auto network service

form the device-end such as DHCP, email, FTP and etc. In multiple-address mode, system network status is shown as offline once one card is offline.

- Network fault-tolerance: In this mode, device uses bond0 to communicate with the external devices. You can focus on one host IP address. At the same time, you need to set one master card. Usually there is only one running card (master card).System can enable alternate card when the master card is malfunction. The system is shown as offline once these two cards are both offline. Please note these two cards shall be in the same LAN.
- Load balance: In this mode, device uses bond0 to communicate with the external device. The eth0 and eth1 are both working now and bearing the network load. Their network load are general the same. The system is shown as offline once these two cards are both offline. Please note these two cards shall be in the same LAN.
- Default Network Card: Please select eth0/eth1/bond0(optional) after enable multiple-access function
- Main Network Card: Please select eth0/eth1 (optional).after enable multiple access function.

Note: Some series support the above three configurations and supports functions as multiple-access, fault-tolerance and load balancing.

- IP Version: There are two options: IPv4 and IPv6. Right now, system supports these two IP address format and you can access via them.
- MAC address: The host in the LAN can get a unique MAC address. It is for you to access in the LAN. It is read-only.
- IP address: Here you can use up/down button (▲▼) or input the corresponding number to input IP address. Then you can set the corresponding subnet mask the default gateway.
- Default gateway: Here you can input the default gateway. Please note system needs to check the validity of all IPv6 addresses. The IP address and the default gateway shall be in the same IP section. That is to say, the specified length of the subnet prefix shall have the same string.
- DHCP: It is to auto search IP. When enable DHCP function, you can not modify IP/Subnet mask /Gateway. These values are from DHCP function. If you have not enabled DHCP function, IP/Subnet mask/Gateway display as zero. You need to disable DHCP function to view current IP information. Besides, when PPPoE is operating, you can not modify IP/Subnet mask /Gateway.
- MTU: It is to set MTU value of the network adapter. The value ranges from 1280-7200 bytes. The default setup is 1500 bytes. Please note MTU modification may result in network adapter reboot and network becomes off. That is to say, MTU modification can affect current network service. System may pop up dialog box for you to confirm setup when you want to change MTU setup. Click OK button to confirm current reboot, or you can click Cancel button to terminate current modification. Before the modification, you can check the MTU of the gateway; the MTU of the DVR shall be the same as or is lower than the MTU of the gateway. In this way, you can reduce packets and enhance network transmission efficiency.

The following MTU value is for reference only.

- 1500: Ethernet information packet max value and it is also the default value. It is the typical setup when there is no PPPoE or VPN. It is the default setup of some router, switch or the network adapter.
- ♦ 1492: Recommend value for PPPoE.
- ♦ 1468: Recommend value for DHCP.
- Preferred DNS server: DNS server IP address.
- Alternate DNS server: DNS server alternate address.
- Transfer mode: Here you can select the priority between fluency/video qualities.
- LAN download: System can process the downloaded data first if you enable this function. The download speed is 1.5X or 2.0X of the normal speed.
- LAN download: System can process the downloaded data first if you enable this function. The download speed is 1.5X or 2.0X of the normal speed.

After completing all the setups please click save button, system goes back to the previous menu.

CAMERA Image: NETWORK Image: NETWORK Image: Storage Storage Storage TCPNP Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK CONNECTION WiFi Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK WIFi MAC Address Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK SG44G P Version Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK WIFi MAC Address Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK SG44G P Version Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK PPPoE DoNS Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK IPPLITER Preferred DNS Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK UPnP MILL Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK Image: NETWORK UPnP MILL Image: NET			SETTING		
CONNECTION P Version Pv4 WIFI MAC Address 90.02.A3.97.92.44 3G4G Mode STATIC O DHCP PPPoE P Address 10 15 6 145 Test DONS Subnet Mask 255 256 0 0 IP FILTER Default Gateway 10 15 0 1 EMAIL Preferred DNS 10 1 2 80 FTP Attemate DNS 10 1 2 81 MULTICAST MTU 1500 ALARM CENTER ALARM CENTER	CAMERA	T NETWORK	TO EVENT	STORAGE	SYSTEM
SNMP (1500 SNMP LAN Download MULTICAST REGISTER ALARM CENTER	CONNECTION WIFI 3G/4G PPPoE DDNS IP FILTER EMAIL	MAC Address Mode IP Address Subnet Mask Default Gateway Preferred DNS	90.02-A9.97.92-44 • STATIC O DH (10 15 6 265 255 0 (10 15 0 10 1 2	145 Test 0 1 80	
	SNMP MIU MULTICAST REGISTER ALARM CENTER	Accessed and the second			
Default Save Cancel Apply		Default		Save	Cancel Apply

Figure 4-88

CAMERA	T NETWORK	T EVENT	TORAGE	SYSTEM
TCP/IP CONNECTION WIFI 3G/4G PPPoE DDNS IP FILTER EMAIL FTP UPnP SNMP MULTICAST REGISTER ALARM CENTER P2P	Net Mode Ethernet Card MAC Address Mode IP Address Subnet Mask Delault Gateway Preferred DNS Atternate DNS	Multi-address Default Ethe (Ethernet1) P Version 14:10:25:10:10:10 • STATIC O DHCP 10 15 6 145 255 255 0 0 10 15 0 1 10 16 0 1 10 1 2 80 16 1 2 81 1500 LAN Download	ernet Port Ether	net
	Detault		Save (Cancel Apply

Figure 4-89

4.11.2.2 Connection

The connection setup interface is shown as in Figure 4-90.

- Max connection: system support maximal 128 users. 0 means there is no connection limit.
- TCP port: Default value is 37777.
- UDP port: Default value is 37778.
- HTTP port: Default value is 80.
- HTTPS port: Default value is 443.
- RTSP port: Default value is 554.

Important: System needs to reboot after you changed and saved any setup of the above four ports. Please make sure the port values here do not conflict.

		SETTIN	G D	
CAMERA	TWORK	THE EVENT	STORAGE	SYSTEM
TCP/IP CONNECTION WIFI 3G PPPoE DDNS IP FILTER EMAIL FTP UPnP SNMP MULTICAST REGISTER ALARM CENTRE P2P	Max Connection TCP Port UDP Port HTTP Port HTTPS Port RTSP Port	(37777 (37778) (80) (443)	(0 -128) (1025 - 65535) (1025 - 65535) (1 - 65535) (1 - 65535) (1 - 65535)	
	Default		Save	Cancel Apply

Figure 4-90

4.11.2.3 WIFI

The WIFI interface is shown as below. See Figure 4-91.

- Auto connect WIFI: Check the box here, system automatically connects to the previous WIFI hotspot.
- Refresh: You can click it to search the hotspot list again. It can automatically add the information such as the password if you have set it before.
- Disconnect: Here you can click it to turn off the connection.
- Connect: Here you can click it to connect to the hotspot. System needs to turn off current connection and then connect to a new hotspot if there is connection of you selected one.

		SETTING	
CAMERA	NETWORK	To EVENT	STORAGE 🛃 SYSTEM
CAMERA TCP/IP CONNECTION WIFI 3G PPPoE DDNS IP FILTER EMAIL FTP UPnP SNMP MULTICAST REGISTER	Auto Connect V		
ALARM CENTRE P2P	(Refresh) (C	Connect) (Disconnect)	OK Cancel Apply

Figure 4-91

• WIFI working status: Here you can view current connection status.

Please note:

- After successful connection, you can see WIFI connection icon at the top right corner of the preview interface.
- When the hotspot verification type is WEP, system displays as AUTO since the device can not detect its encryption type.
- System does not support verification type WPA and WPA2. The display may become abnormal for the verification type and encryption type.

After device successfully connected to the WIFI, you can view the hotspot name, IP address, subnet mask, default gateway and etc.

4.11.2.4 3G

3G setup interface is shown as below. See Figure 4-92.

Please refer to the following contents for the parameter information.

- Pane 1: Display 3G signal intensity after you enabled 3G function.
- Pane 2: Display 3G module configuration information after you enabled 3G function.
- Pane 3: Display 3G module status information after you enabled 3G function.

It is to display current wireless network signal intensity such as EVDO, CDMA1x, WCDMA, WCDMA, EDGE and etc.

- 3G module: It is to display current wireless network adapter name.
- 3G Enable/Disable: Check the box here to enable 3G module.
- Network type: There are various network types for different 3G network modules. You can select according to your requirements.

- APN: It is the wireless connection server. It is to set you access the wireless network via which method.
- AUTH: It is the authentication mode. It supports PAP/CHAP.
- Dial number: Please input 3G network dialup number you got from your ISP.
- User name: It is the user name for you to login the 3G network.
- Password: It is the password for you to login the 3G network.
- Pulse interval: You can set dialup duration. Once you disable the extra stream, the connection time begins. For example, if you input 5 seconds here, then 3G network connection period is 5 seconds. The device automatically disconnect when time is up. If there is no extra stream, 3G network connection is valid all the time. If the alive time is 0, then the 3G network connection is valid all the time.
- Dial: Here you can enable or disable 3G network connection/disconnection manually.
- 3G wireless network: Here is to display wireless network status, SIM card status, dial status. If the 3G connection is OK, then you can see the device IP address the wireless network automatically allocates.

		SETTING			1	
CAMERA	#NETWORK		STORAGE	SYSTEM	11	
TCP/IP CONNECTION WIFI	No signal Ethernet Card	<u> </u>	Enable			_ 1
3G PPPoE DDNS IP FILTER EMAIL FTP UPnP SNMP MULTICAST REGISTER ALARM CENTRE P2P	APN AUTH Dial Number User Name User Password			Dial		2
	Wireless Networ Module State : SIM State - PPP State -	k into IP Su	Address - bnet Mask - tault Gateway -			3
	Detault		<u>OK</u>) Cancel Ac	pply	

Figure 4-92

4.11.2.5 PPPoE

PPPoE interface is shown as in Figure 4-93.

Input "PPPoE name" and "PPPoE password" you get from your ISP (Internet service provider).

Click save button, you need to restart to activate your configuration.

After rebooting, DVR will connect to internet automatically. The IP in the PPPoE is the DVR dynamic value. You can access this IP to visit the unit.

		SETTING		
CAMERA	NETWORK		STORAGE	SYSTEM
TCP/IP CONNECTION WIFI 3G PPPoE DDNS IP FILTER EMAIL FTP UPnP SNMP MULTICAST REGISTER ALARM CENTRE P2P	2			
	Detault		COK	Cancel Apply

Figure 4-93

4.11.2.6 DDNS Setup

DDNS setup interface is shown as in Figure 4-94.

You need a PC of fixed IP in the internet and there is the DDNS software running in this PC. In other words, this PC is a DNS (domain name server).

In network DDNS, please select DDNS type and highlight enable item. Them please input your PPPoE name you get from you IPS and server IP (PC with DDNS). Click save button and then reboot system.

Click save button, system prompts for rebooting to get all setup activated.

After rebooting, open IE and input as below:

http: //(DDNS server IP)/(virtual directory name)/webtest.htm

e.g.: http: //10.6.2.85/DVR _DDNS/webtest.htm.)

Now you can open DDNSServer web search page.

		SETTIN	a d	
CAMERA			STORAGE	SYSTEM
TCP/IP CONNECTION WIFI	Enable			
3G PPPoE	Server P	Dahua DDNS 💽 www.dahuaddns.com	om Name	
DDNS IP FILTER	Domain Name Email	201310131633) .quickddns.com Please input email :	address.
EMAIL FTP				
UPnP SNMP MULTICAST			i that is idle for more than he reclaim if your email a	i one year. You can get a iddress setup is right.
REGISTER ALARM CENTRE P2P				
	(Default)	Test_)	Cok	Cancel Apply
ļ				

Figure 4-94

Please note DDNS type includes: CN99 DDNS, NO-IP DDNS, Dahua DDNS, Dyndns DDNS and sysdns DDNS. All the DDNS can be valid at the same time, you can select as you requirement.

Private DDNS function shall work with special DDNS server and special Professional Surveillance Software (PSS).

Dahua DDNS and Client-end Introduction

1) Background Introduction

Device IP is not fixed if you use ADSL to login the network. The DDNS function allows you to access the DVR via the registered domain name. Besides the general DDNS, the Dahua DDNS works with the device from the manufacturer so that it can add the extension function.

2) Function Introduction

The Dahua DDNS client has the same function as other DDNS client end. It realizes the bonding of the domain name and the IP address. Right now, current DDNS server is for our own devices only. You need to refresh the bonding relationship of the domain and the IP regularly. There is no user name, password or the ID registration on the server. At the same time, each device has a default domain name (Generated by MAC address) for your option. You can also use customized valid domain name (has not registered.).

3) Operation

Before you use Dahua DDNS, you need to enable this service and set proper server address, port value and domain name.

- Server address: www.dahuaddns.com
- Port number: 80

• Domain name: There are two modes: Default domain name and customized domain name.

Except default domain name registration, you can also use customized domain name (You can input your self-defined domain name.) After successful registration, you can use domain name to login installed of the device IP.

• User name: It is optional. You can input your commonly used email address.

Important

- Do not register frequently. The interval between two registrations shall be more than 60 seconds. Too many registration requests may result in server attack.
- System may take back the domain name that is idle for one year. You can get a notification email before the cancel operation if your email address setup is OK.

4.11.2.7 IP Filter

IP filter interface is shown as in Figure 4-95. You can add IP in the following list. The list supports max 64 IP addresses. System supports valid address of IPv4 and IPv6. **Please note system needs to check the validity of all IPv6 addresses and implement optimization.**

After you enabled trusted sites function, only the IP listed below can access current DVR. If you enable blocked sites function, the following listed IP addresses can not access current DVR.

- Enable: Highlight the box here, you can check the trusted site function and blocked sites function. You can not see these two modes if the Enable button is grey.
- Type: You can select trusted site and blacklist from the dropdown list. You can view the IP address on the following column.
- Start address/end address: Select one type from the dropdown list, you can input IP address in the start address and end address. Now you can click Add IP address or Add IP section to add.
 - a) For the newly added IP address, it is in enable status by default. Remove the $\sqrt{}$ before the item, and then current item is not in the list.
 - b) System max supports 64 items.

 - d) System automatically removes space if there is any space before or after the newly added IP address.
 - e) System only checks start address if you add IP address. System check start address and end address if you add IP section and the end address shall be larger than the start address.
 - System may check newly added IP address exists or not. System does not add if input IP address does not exist.
- Delete: Click it to remove specified item.
- Edit: Click it to edit start address and end address. See Figure 4-96. System can check the IP address validity after the edit operation and implement IPv6 optimization.

• Default: Click it to restore default setup. In this case, the trusted sites and blocked sites are both null.

Note:

- If you enabled trusted sites, only the IP in the trusted sites list can access the device.
- If you enabled blocked sites, the IP in the blocked sites can not access the device.
- System supports add MAC address.

		SETT	NG		
CAMERA	T NETWORK		STORAGE	📑 sys	TEM
TCP/IP CONNECTION	Enable				
WIFI	Туре	Trusted Sites •			
3G	Start Address	0		Add IP Addres	•
PPPoE	End Address (ć –		Add IP Segme	
DDNS	Start Ad	dress	End Address	Edit	Delete
IP FILTER					
EMAIL					
FTP UPnP					
SNMP					
MULTICAST					
REGISTER					
ALARM CENTRE					
P2P	0. 				
	Default		(ok	Cancel	Apply

Figure 4-95

Edit
Start Address 10.15.6.140 123 End Address (10.15.6.145
OK Cancel



4.11.2.8 Email

The email interface is shown as below. See Figure 4-97.

- SMTP server: Please input your email SMTP server IP here.
- Port: Please input corresponding port value here.
- User name: Please input the user name to login the sender email box.
- Password: Please input the corresponding password here.
- Sender: Please input sender email box here.

- Title: Please input email subject here. System support English character and Arabic number. Max 32-digit.
- Receiver: Please input receiver email address here. System max supports 3 email boxes. System automatically filters same addresses if you input one receiver repeatedly.
- SSL enable: System supports SSL encryption box.
- Interval: The send interval ranges from 0 to 3600 seconds. 0 means there is no interval.
- Health email enable: Please check the box here to enable this function. This function allows the system to send out the test email to check the connection is OK or not.
- Interval: Please check the above box to enable this function and then set the corresponding interval. System can send out the email regularly as you set here. Click the Test button, you can see the corresponding dialogue box to see the email connection is OK or not.

Please note system will not send out the email immediately when the alarm occurs. When the alarm, motion detection or the abnormity event activates the email, system sends out the email according to the interval you specified here. This function is very useful when there are too many emails activated by the abnormity events, which may result in heavy load for the email server.

		SETTIN	IG	
CAMERA	T NETWORK	To EVENT	STORAGE	SYSTEM
TCP/IP CONNECTION WIFI 3G/4G PPPoE		(MailServer Pc	on (25	
DDNS IP FILTER EMAIL	Receiver Sender Subject	((HCVR ALERT) At	tachment 🧭	
FTP UPnP SNMP	Encrypt Type Interval			
MULTICAST REGISTER ALARM CENTER P2P		60mir		
	Default C	Test	Save	Cancel Apply

Figure 4-97

4.11.2.9 FTP

You need to download or buy FTP service tool (such as Ser-U FTP SERVER) to establish

FTP service.

Please install Ser-U FTP SERVER first. From "start" -> "program" -> Serv-U FTP Server -> Serv-U Administrator. Now you can set user password and FTP folder. Please note you need to grant write right to FTP upload user. See Figure 4-98.

Servill Servers Servill Servers Servil	Account General Or Access Dr Access
	Austy O Bestore

Figure 4-98

You can use a PC or FTP login tool to test setup is right or not.

For example, you can login user ZHY to <u>FTP://10.10.7.7</u> and then test it can modify or delete folder or not. See Figure 4-99.

Internet	Explorer 🔰
?	To log on to this FTP server, type a user name and password.
	PTP server: 10,10.7.7 User name: Password:
	After you log on, you can add this server to your Favorites and return to it easily. Log on anonymously Log On Cancel

Figure 4-99

System also supports upload multiple DVRs to one FTP server. You can create multiple folders under this FTP.

FTP interface is shown as in Figure 4-100.

Please highlight the icon 🔳 in front of Enable to activate FTP function.

Here you can input FTP server address, port and remote directory. When remote directory is null, system automatically create folders according to the IP, time and channel.

User name and password is the account information for you to login the FTP.

File length is upload file length. When setup is larger than the actual file length, system will upload the whole file. When setup here is smaller than the actual file length, system only

uploads the set length and auto ignore the left section. When interval value is 0, system uploads all corresponding files.

After completed channel and weekday setup, you can set two periods for one each channel.

Click the Test button, you can see the corresponding dialogue box to see the FTP connection is OK or not.

CAMERA Image: Network Image: Event Image: Storage Storage TCP/IP CONNECTION WIFI Enable Server IP 0 . 0 . 0 . 0 Port (21) 3G User Name	_	SETTING
CONNECTION Enable WIFI Server IP 0 . 0 . 0 Port (21)	CAMERA	TRANSPORT SYSTEM
PPPoE Password Anonymous DDNS Remote Directory File Length (0 M IP FILTER Image Upload Interval (2 s) EMAIL	CONNECTION WIFI 3G PPPoE DDNS IP FILTER EMAIL	Server IP 0.0.0 Port 21 User Name Anonymous Password File Length 0 M
UPnP Channel 1 • SNMP Weekday Thu • Alarm Motion Regular MULTICAST Time Period 1 00:00 + 24:00 • • REGISTER Time Period 2 00:00 + 24:00 • • ALARM CENTRE P2P • • • Default Test OK Cancel Apply	SNMP MULTICAST REGISTER ALARM CENTRE	Weekday Thu Alarm Motion Regular Time Period 1 00:00 Alarm Motion Regular Time Period 2 00:00 Alarm Motion Regular

Figure 4-100

4.11.2.10 UPnP

The UPNP protocol is to establish a mapping relationship between the LAN and the WAN. Please input the router IP address in the LAN in Figure 4-88. See Figure 4-101.

- UPNP on/off : Turn on or off the UPNP function of the device.
- Status: When the UPNP is offline, it shows as "Unknown". When the UPNP works it shows "Success"
- Router LAN IP: It is the router IP in the LAN.
- WAN IP: It is the router IP in the WAN.
- Port Mapping list: The port mapping list here is the one to one relationship with the router's port mapping setting.
- List:
 - ♦ Service name: Defined by user.
 - ♦ Protocol: Protocol type
 - \diamond Internal port: Port that has been mapped in the router.
 - ♦ External port: Port that has been mapped locally.

- Default: UPNP default port setting is the HTTP, TCP and UDP of the DVR.
- Add to the list: Click it to add the mapping relationship.
- Delete: Click it to remove one mapping item.

Double click one item; you can change the corresponding mapping information. See Figure 4-102.

Important:

When you are setting the router external port, please use 1024~5000 port. Do not use well-known port 1~255 and the system port 256~1023 to avoid conflict.

For the TCP and UDP, please make sure the internal port and external port are the same to guarantee the proper data transmission.

		SETTING		
CAMERA		vent 🔥 sto	RAGE	SYSTEM
TCP/IP CONNECTION WIFI 3G PPPoE DDNS IP FILTER	PAT O Enable UPnP Status Router LAN IP 0 0 WAN IP 0 0 PAT Table 7 Service Name 1 VHTTP		int.Port 80	Ext.Port
EMAIL FTP UPnP SNMP MULTICAST REGISTER ALARM CENTRE	2 V TCP 3 V UDP 4 RTSP 5 RTSP 6 SNMP 7 V HTTPS	TCP UDP UDP TCP UDP TCP	80 37777 37778 554 554 161 443	80 37777 37778 554 554 161 443
P2P	Default Add (Delete	<u>ok</u>) (Cancel Capply

Figure 4-101

PC	RT INFO
Service Name (TCP Protocol (TCP Int.Port (37777) Ext.Port (37777	
ОК	Cancel

Figure 4-102

4.11.2.11 SNMP

SNMP is an abbreviation of Simple Network Management Protocol. It provides the basic network management frame of the network management system. The SNMP widely used in many environments. It is used in many network device, software and system. You can set in the following interface. See Figure 4-103.

SETTING						
CAMERA	NETWORK			SYSTEM		
TCP/IP CONNECTION	Enable					
WIFI 3G PPPoE DDNS IP FILTER EMAIL FTP UPnP SNMP MULTICAST REGISTER ALARM CENTRE P2P	SNMP Veraion SNMP Port Read-Community Write-Community Trap Address Trap Port	V1 V2 (161 (public (private) (162				
	Default		Save	Cancel Apply		

Figure 4-103

Please enable the SNMP function. Use the corresponding software tool (MIB Builder and MG-SOFT MIB Browser. You still need two MIB file: BASE-SNMP-MIB, DVR-SNMP-MIB) to connect to the device. You can get the device corresponding configuration information after successfully connection.

Please follow the steps listed below to configure.

- In Figure 4-103, check the box to enable the SNMP function. Input the IP address of the PC than is running the software in the Trap address. You can use default setup for the rest items.
- Compile the above mentioned two MIB file via the software MIB Builder.
- Run MG-SOFT MIB Browser to load the file from the previous step to the software.
- Input the device IP you want to manage in the MG-SOFT MIB Browser. Please set the corresponding version for your future reference.
- Open the tree list on the MG-SOFT MIB Browser; you can get the device configuration. Here you can see the device has how many video channels, audio channels, application version and etc.

Note

Port conflict occurs when SNMP port and Trap port are the same.

4.11.2.12 Multicast

Multicast setup interface is shown as in Figure 4-104.

SETTING						
	NETWORK	To EVENT	STORAGE	SYSTEM		
TCP/IP CONNECTION WIFI 3G PPPoE DDNS IP FILTER EMAIL FTP UPnP SNMP MULTICAST REGISTER ALARM CENTRE P2P	Enable IP Address (2) Port (36)		>			
	Default		ОК	Cancel Apply		

Figure 4-104

Here you can set a multiple cast group. Please refer to the following sheet for detailed information.

• IP multiple cast group address

-224.0.0.0-239.255.255.255

-"D" address space

• The higher four-bit of the first byte="1110"

• Reserved local multiple cast group address

-224.0.0.0-224.0.0.255

-TTL=1 When sending out telegraph

-For example

224.0.0.1 All systems in the sub-net

- 224.0.0.2 All routers in the sub-net
- 224.0.0.4 DVMRP router

224.0.0.5 OSPF router

224.0.0.13 PIMv2 router

Administrative scoped addressees

-239.0.0.0-239.255.255.255

-Private address space

- Like the single broadcast address of RFC1918
- Can not be used in Internet transmission
- Used for multiple cast broadcast in limited space.

Except the above mentioned addresses of special meaning, you can use other addresses. For example:

Multiple cast IP: 235.8.8.36

Multiple cast PORT: 3666.

After you logged in the Web, the Web can automatically get multiple cast address and add it to the multiple cast groups. You can enable real-time monitor function to view the view. Please note multiple cast function applies to special series only.

4.11.2.13 Auto register

This function allows the device to auto register to the proxy you specified. In this way, you can use the client-end to access the DVR and etc via the proxy. Here the proxy has a switch function. In the network service, device supports the server address of IPv4 or domain.

Please follow the steps listed below to use this function.

Please set proxy server address, port, and sub-device name at the device-end. Please enable the auto register function, the device can auto register to the proxy server.

1) The setup interface is shown as in Figure 4-105.

Important

Do not input network default port such as TCP port number.

SETTING							
CAMERA	#NETWORK	TO EVENT		SYSTEM			
TCP/IP CONNECTION WIFI 3G PPPoE DDNS IP FILTER EMAIL FTP UPnP SNMP MULTICAST REGISTER ALARM CENTRE P2P	Enable No. 1 Server IP 0.00 Port 8000 ID 0						
	Detault	_	Save	Cancel Apply			

Figure 4-105

2) The proxy server software developed from the SDK. Please open the software and input the global setup. Please make sure the auto connection port here is the same as the port you set in the previous step.

3) Now you can add device. Please do not input default port number such as the TCP port

in the mapping port number. The device ID here shall be the same with the ID you input in Figure 4-105. Click Add button to complete the setup.

4) Now you can boot up the proxy server. When you see the network status is Y, it means your registration is OK. You can view the proxy server when the device is online.

Important

The server IP address can also be domain. But you need to register a domain name before you run proxy device server.

4.11.2.14 Alarm Centre

This interface is reserved for you to develop. See Figure 4-106.

SETTING						
CAMERA	NETWORK	EVENT	STORAGE	SYSTEM		
TCP/IP CONNECTION WIFI 3G PPPoE DDNS IP FILTER EMAIL FTP UPnP SNIMP MULTICAST REGISTER ALARM CENTRE P2P	Protocol Type (Server IP	Private	р 2 С ок	Cancel Apply		

Figure 4-106

4.11.2.15 P2P

You can use your cell phone to scan the QR code and add it to the cell phone client. Via the SN from scanning the QR code, you can access the device in the WAN. Please refer to the P2P operation manual included in the resources CD.

From main menu->Setting->Network->P2P, you can go to the following interface, the P2P interface is shown as in Figure 4-107.

SETTING						
CAMERA	T NETWORK	The EVENT	STORAGE	SYSTEM		
TCP/IP CONNECTION WIFI 3G/4G PPPoE DDNS IP FILTER EMAIL FTP UPoP SNMP MULTICAST REGISTER ALARM CENTER P2P	Enable Status Offine Cell Phor		ce SN			
	Default		Save	Cancel Apply		

Figure 4-107

• Android:

Open Google Play app in your smart phone. Search gDMSS Lite or gDMSS Plus, download it and install.

• iOS:

Open App Store app in your smart phone. Search iDMSS Lite or iDMSS Plus, download it and install.

Please follow the steps listed below.



- Open App; tap to go to the Live preview.
- Tap 🗮 at the top left corner, you can see the main menu.
- Tap Device manager button, you can use several modes (P2P/DDNS/IP and etc) to

add the device. Click ^(I) to save current setup. Tap Start Live preview to view all-channel video from the connected device. See Figure 4-108.

F P	2P 🗒
Register Mode:	P2P
Name:	
SN:	1
Username:	admin
Password:	•••••
Live Preview:	Extra >
Playback:	Extra >
ক্ত	Check VTO
Start Liv	e Preview

Figure 4-108

4.11.3 Event

4.11.3.1 Detect

In the main menu, from Setting->Event->Detect, you can see motion detect interface. See Figure 4-109.There is three detection types: motion detection, video loss, tampering.

- The video loss has no detection region and sensitivity setup and tampering has no detection region setup.
- You can see motion detect icon if current channel has enabled motion detect alarm.
- You can drag you mouse to set motion detect region. Please click OK button to save current region setup. Right click mouse to exit current interface.
- For digital channel, the detect function refers to support detection function of the front-end and support local activation function. The front-end can get enable/disable status, sensitivity and region setup. You can get corresponding prompt if front-end can not get the above information. You can change front-end setup if it can get.

4.11.3.1.1 Motion Detect

After analysis video, system can generate a video loss alarm when the detected moving signal reached the sensitivity you set here.

Detection menu is shown as below. See Figure 4-109.

- Event type: From the dropdown list you can select motion detection type.
- Channel: Select a channel from the dropdown list to set motion detect function.
- Enable: Check the box here to enable motion detect function.

- Region: Click select button, the interface is shown as in Figure 4-110. Here you can set motion detection zone. There are four zones for you to set. Please select a zone first and then left drag the mouse to select a zone. The corresponding color zone displays different detection zone. You can click Fn button to switch between the arm mode and disarm mode. In arm mode, you can click the direction buttons to move the green rectangle to set the motion detection zone. After you completed the setup, please click ENTER button to exit current setup. Do remember click save button to save current setup. If you click ESC button to exit the region setup interface system will not save your zone setup.
- Sensitivity: System supports 6 levels. The sixth level has the highest sensitivity.
- Anti-dither: Here you can set anti-dither time. The value ranges from 5 to 600s. The anti-dither time refers to the alarm signal lasts time. It can be seem as the alarm signal activation stays such as the buzzer, tour, PTZ activation, snapshot, channel record. The stay time here does not include the latch time. During the alarm process, the alarm signal can begin an anti-dither time if system detects the local alarm again. The screen prompt, alarm upload, email and etc will not be activated. For example, if you set the anti-dither time as 10 second, you can see the each activation may last 10s if the local alarm is activated. During the process, if system detects another local alarm signal at the fifth second, the buzzer, tour, PTZ activation, snapshot, record channel will begin another 10s while the screen prompt, alarm upload, email will not be activated again. After 10s, if system detects another alarm signal, it can generate an alarm since the anti-dither time is out.
- Period: Click set button, you can see an interface is shown as in Figure 4-112. Here you can set motion detect period. System only enables motion detect operation in the specified periods. It is not for video loss or the tampering. There are two ways for you to set periods. Please note system only supports 6 periods in one day.
- ♦ In Figure 4-112, Select icon of several dates, all checked items can be edited

together. Now the icon is shown as . Click to delete a record type from one period.

- ♦ In Figure 4-112. Click button after one date or a holiday, you can see an interface shown as in Figure 4-113. There are four record types: regular, motion detection (MD), Alarm, MD & alarm.
- Alarm output: when an alarm occurs, system enables peripheral alarm devices.
- Latch: when motion detection complete, system auto delays detecting for a specified time. The value ranges from 1-300(Unit: second)
- Show message: System can pop up a message to alarm you in the local host screen if you enabled this function.
- Alarm upload: System can upload the alarm signal to the network (including alarm center) if you enabled current function.
- Send email: System can send out email to alert you when an alarm occurs.

- Record channel: System auto activates motion detection channel(s) to record once an alarm occurs. Please make sure you have set MD record in Schedule interface(Main Menu->Setting->Schedule) and schedule record in manual record interface(Main Menu->Advanced->Manual Record)
- PTZ activation: Here you can set PTZ movement when an alarm occurs. Such as go to preset, tour &pattern when there is an alarm. Click "select" button, you can see an interface is shown as in Figure 4-111.
- Record Delay: System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
- Tour: Here you can enable tour function when an alarm occurs. System one-window tour.
- Snapshot: You can enable this function to snapshot image when a motion detect alarm occurs.
- Video matrix Check the box here to enable this function. When an alarm occurs, SPOT OUT port displays device video output. It displays video (1-window tour) from alarm activation channel you select at the Record channel item.
- Buzzer: Highlight the icon to enable this function. The buzzer beeps when an alarm occurs.
- Log: Check the box here, system can record motion detect log.
- Test: Click it to test current motion detect setup (do not need to save). Click Select button after Region, you can set motion detect area.
- Voice prompts: Check the box here to trigger audio broadcast function. You can select specified audio file here. System can play the audio file once the corresponding event occurs.

Please highlight icon III to select the corresponding function. After all the setups please click save button, system goes back to the previous menu.

Note:

In motion detection mode, you can not use copy/paste to set channel setup since the video in each channel may not be the same.

In Figure 4-110, you can left click mouse and then drag it to set a region for motion detection. Click Fn to switch between arm/withdraw motion detection. After setting, click enter button to exit.

		SETTING		
CAMERA		EVENT	STORAGE	SYSTEM
VIDEO DETECT ALARM ABNORMALITY ALARM OUTPUT	Motion Detect Channel Enable	Video Loss	Tampering Diagr Region Set)
	Period Alarm Out Show Message Record Channel PTZ Activation Tour Snapshot Video Matrix Voice Prompts	Set	Anti-dither 6 Latch 10 Send Email Delay 10 Delay	sec. Sec. Sec. Sec. Sec. Sec. Sec. Sec.

Figure 4-109



Figure 4-110

		PTZ A	ctivation		
CAM 1 CAM 3 CAM 5 CAM 7	None None None None		CAM 2 CAM 4 CAM 6 CAM 8	None•0None•0None•0None•0	
		ОК	Cancel		

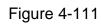




Figure 4-112



Figure 4-113

Motion detect here only has relationship with the sensitivity and region setup. It has no relationship with other setups.

4.11.3.1.2 Video Loss

In Figure 4-109, select video loss from the type list. You can see the interface is shown as in Figure 4-114. This function allows you to be informed when video loss phenomenon occurred. You can enable alarm output channel and then enable show message function.

Tips:

You can enable preset/tour/pattern activation operation when video loss occurs. Please refer to chapter 4.11.3.1.1 motion detection for detailed information.

		SETTING			_
CAMERA	THE NETWORK	EVENT	STORAGE	SYSTEM	
VIDEO DETECT ALARM ABNORMALITY ALARM OUTPUT	Motion Detect Channel Enable	Video Loss	Tampering	Diagnosis	
	Period Alarm Out Show Message Record Channel PTZ Activation Tour Snapshot Buzzer Voice Prompts	Set 123456 123456 ØLog File Name (None)7890012 ^{Delay} (10)7890012)7890012		pły)

Figure 4-114

4.11.3.1.3 Tampering

When someone viciously masks the lens, or the output video is in one-color due to the environments light change, the system can alert you to guarantee video continuity. Tampering interface is shown as in Figure 4-115. You can enable "Alarm output "or "Show message" function when tampering alarm occurs.

• Sensitivity: The value ranges from 1 to 6. It mainly concerns the brightness. The level 6 has the higher sensitivity than level 1. The default setup is 3.

Tips:

You can enable preset/tour/pattern activation operation when video loss occurs. Please refer to chapter 4.11.3.1.1 motion detection for detailed information.

Note:

- In Detect interface, copy/paste function is only valid for the same type, which means you can not copy a channel setup in video loss mode to tampering mode.
- About Default function. Since detection channel and detection type may not be the same, system can only restore default setup of current detect type. For example, if you click Default button at the tampering interface, you can only restore default tampering setup. It is null for other detect types.
- System only enables tampering function during the period you set here. It is null for motion detect or video loss type.

1		SETTING	
CAMERA		EVENT	STORAGE
VIDEO DETECT	Motion Detect	Video Loss	Tampering Diagnosis
ABNORMALITY	Channel	(P	
ALARM OUTPUT	Enable		Sensitivity (3
	Period	Set	CAM AntiD(0sec.
	Alarm Out	023	Latch 10 sec.
	Show Message	Alarm Upload	Send Email
	Record Channel	123456	
	PT2 Activation	Set	Delay (10)sec.
	Tour	123856	
	Snapshot	023456	
	Buzzer	Log	
	Voice Prompts	File Name None	
	Default Cop	y)	Save Cancel Apply

Figure 4-115

4.11.3.1.4 Diagnosis

Note

This function is for some series only.

System can trigger an alarm when the stripe, noise, color cast, out of focus, over exposure event occurred. See Figure 4-116.

Please refer to chapter 4.11.3.1.1 motion detection for detailed information.

		SETTIN	IG
CAMERA			STORAGE SYSTEM
VIDEO DETECT ALARM ABNORMALITY ALARM OUTPUT	Motion Detect Channel Enable	Video Loss	Tampering Diagnosis
	Period Alarm Out Send Email Buzzer	Set 123 PLog File Name (No	Latch 10 sec.
	Default Co	ру	Save Cancel Apply



This function allows you to be informed when video is blurry, over exposure or color cast occurs. You can enable alarm output channel and then enable show message function. Click the Rule Set button, or move the cursor to Set button and then click the Enter button on the front panel, the interface is shown as below. See Figure 4-117. You can check corresponding type and then input alarm threshold.

- Stripe: The strip occurs when the device is old or there is electronic interference. There may be cross strip, vertical strip, slanting strip and etc.
- Noise: The video noise refers to the blurry video, poor video quality. It may result from the optical system distortion or the hardware problem during the video transmission when recording.
- Color cast: Usually the video is color containing RGB. When these three colors displayed in abnormal rate, we can say color cast occurred.
- Out of focus: The clear video presents abundant video details. The video definition decreases when the distortion event occurs. The out of focus event may result from many sources such as video transmission, processing and etc.
- Over exposure: The color brightness refers to the image pixel intensity. Black is the darkest and the white is the brightest. We use number 0 to stand for black and use number 255 to stand for white. Once the brightness threshold of the whole image has exceeded the threshold value, it means the image is over exposure.
- Threshold: The value ranges from 1 to 30. System can generate an alarm once the value is higher than the threshold you set here.



Figure 4-117

Note

Video analysis alarm can trigger PTZ preset, tour, and pattern.

Please refer to chapter 4.11.3.1.1 motion detection for detailed information.

4.11.3.2 Intelligence (Optional)



- The intelligence function is optional.
- The different series products support different IVS functions. Please refer to your purchased product actual interface for detailed information.
- The IVS function supports 1 analog channel only. Right now some series products support IP channel.

Once any object violate the rule, the DVR can trigger an alarm and alert you as the specified alarm mode.

• From main menu->Setting->Event->Intelligence, you can go to the following interface. Here you can set IVS rule. System can generate an alarm as the mode you previously set once there is any object violates the rule. See Figure 4-118.

		SETTING	i		
CAMERA	TWORK		STORAGE	SYSTEM	
VIDEO DETECT	Channel (1				
INTELLIGENCE	0 Enable	Name	Type Prese	Draw Trigger Delete	
FACE DETECT ALARM ABNORMALITY ALARM OUTPUT					
	Default	_	(Add)	Cancel Apply	

Figure 4-118

- Select a channel from the dropdown list.
- Click Add button to add a rule and then select a rule type from the dropdown list.
- Click *L* to draw the rule. For detailed information, please refer to chapter 4.11.3.2.1 Tripwire, chapter 4.11.3.2.2 Intrusion, chapter 4.11.3.2.3 Abandoned.
- Click to set corresponding parameters. Please refer to chapter 4.11.3.2.1
 Tripwire for detailed information.
- Check the box to enable current rule.
- Click Apply button to complete the setup.

4.11.3.2.1 Tripwire (Optional)

Note:

- The tripwire function is valid once your network camera or your DVR supports this function.
- If your purchased DVR supports the tripwire function, it supports one analog channel. It is not for the digital channel.

System generates an alarm once there is any object crossing the tripwire in the specified direction.

From main menu->Setting->Event->Intelligence->Tripwire, the interface is shown as below. See Figure 4-119.

		SETTING		
CAMERA		THE EVENT	STORAGE	SYSTEM
VIDEO DETECT	Tripwire	Intrusion /	Abandoned	
FACE DETECT	Channel	(1	Ð	
ALARM ABNORMALITY	Enable	Ø	RULE	Set
ALARM OUTPUT	Period	Set		
	Alarm Out	023	Latch	(10) sec.
	Send Email			
	Record Channe	• 0234	SCREED	000
	PTZ Activation	Set	Delay	(10) sec.
	Tour	0234	GEREBU	000
	Snapshot	0236	6603988	
	Buzzer			
	Voice Prompts	File Name (None	
	Default		Save	Cancel Apply

Figure 4-119

Check the Enable box to enable tripwire function. Click Rule setup to draw the tripwire. See Figure 4-120.

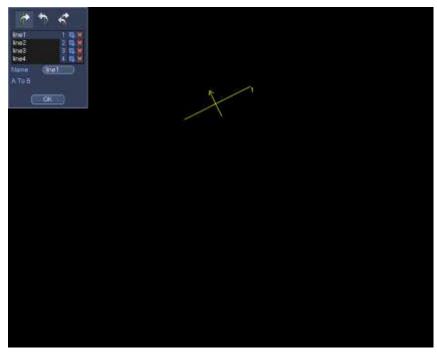


Figure 4-120

Select SN (Line1/2/3/4) and direction, and then input customized rule name.

- Line1/2/3/4: System supports four tripwires. Each SN stands for one tripwire.
- Direction (): System can generate an alarm once there is any object crossing in the specified direction.

Now you can draw a rule. Left click mouse to draw a tripwire. The tripwire can be a direct line, curve or polygon. Right click mouse to complete.

Click 💾 to draw filte	er object.	
ine1 1 5 × 1 ine2 2 5 × 1 ine3 3 1 5 × 1 ine4 4 5 ×		
Name (ine) A To B		
	¢¢	



Select the blue line and then use mouse to adjust zone size.

Note

Each rule can set two sizes (min size/max size). Once the object is smaller than the min size or larger than the max size, there is no alarm. Please make sure the max size is larger than the min size.

Click Ok to complete the rule setup.

Tips

Click K to delete the corresponding rule.

You can refer to the following information to set other parameters.

- Channel: Select a channel from the dropdown list to set tripwire function.
- Enable: Check the box here to enable tripwire function.
- Rule: input customized rule name here.
- Period: Click set button, you can see an interface is shown as in Figure 4-112. Here you can set tripwire period. System only enables tripwire operation in the specified periods. There are two ways for you to set periods. Please note system only supports 6 periods in one day.

♦ In Figure 4-112, Select icon of several dates, all checked items can be edited

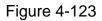
together. Now the icon is shown as . Click to delete a record type from one period.

- ♦ In Figure 4-112. Click button after one date or a holiday, you can see an interface shown as in Figure 4-113.
- Alarm output: when an alarm occurs, system enables peripheral alarm devices.
- Latch: when tripwire complete, system auto delays detecting for a specified time. The value ranges from 0-300(Unit: second). The default setup is 10 seconds. The o second means there is no delaying time.
- Show message: System can pop up a message to alarm you in the local host screen if you enabled this function.
- Alarm upload: System can upload the alarm signal to the network (including alarm center) if you enabled current function.
- Send email: System can send out email to alert you when an alarm occurs.
- Record channel: System auto activates tripwire channel(s) to record once an alarm occurs. Please make sure you have set intelligent record in Schedule interface(Main Menu->Setting->Schedule) and schedule record in manual record interface(Main Menu->Advanced->Manual Record)
- PTZ activation: Here you can set PTZ movement when an alarm occurs. Such as go to preset, tour &pattern when there is an alarm. Click "select" button, you can see an interface is shown as in Figure 4-111.
- Record Delay: System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
- Tour: Here you can enable tour function when an alarm occurs. System one-window tour.
- Snapshot: You can enable this function to snapshot image when a motion detect alarm occurs.
- Buzzer: Highlight the icon to enable this function. The buzzer beeps when an alarm occurs.

CANE 1	None	• 0	CAM 2	None))
CAMB	None	<u> </u>	CAM4	None	
CAME	None	• @	CAME	None	-) (O_)
CAM 7	(None	<u> </u>	CAME	None	<u> </u>
GAMIS	None	0	CAM 10	None	
CAM 11	None	0	CAM 12	None	
CAM 13	None	D (0	CAM 14	None	
CAM 15	None	D @	CAM 16	(None	

Figure 4-122





	Time Period
Current Date: Sur	
Period 1 (00 :00	0 - 24 - 00 🕑
Period 2 00 100	0 - 24 00 🗍
Period 3 (00 100	0 - 24 00 0
Period 4 00 100	8 24 00)
Period 5 (00::00	0 24 00
Period 6 (00 100	0 - 24 00
Сору	
II All	Sun 💭 Mon 💭 Tue 💭 Wed 💭 Thu 🔃 Fri 🛄 Sat
	Save

Figure 4-124

4.11.3.2.2 Intrusion (Cross warning zone)

Note:

- The intrusion function is valid once your network camera or your DVR supports this function.
- If your purchased DVR supports the intrusion function, it supports one analog channel. It is not for the digital channel.

System generates an alarm once there is any object entering or exiting the zone in the specified direction.

From main menu->Setting->Event->Intelligence->Intrusion, the intrusion interface is shown as below. See Figure 4-125.

	6	SETTING		
CAMERA		EVENT		SYSTEM
VIDEO DETECT	Tripwire	Intrusion A	bandoned	
FACE DETECT	Channel	0	Ð	
ALARM ABNORMALITY	Enable	Ø	RULE	Set
ALARM OUTPUT	Period	Set		
	Alarm Out	023	Latch	(10) sec.
	Send Email			
	Record Channe	1234	SG729QQ	000
	PTZ Activation	Set) Delay	(10) sec.
	Tour	0234	6678900	
	Snapshot		6672900	000
	Buzzer			
	Voice Prompts	File Name (None 🕑	
	Default		Save	Cancel Apply

Figure 4-125

Check the enable box to enable intrusion function. Click Rule setup to draw the zone. See Figure 4-126.

areal area2 area3			
area4			•
Name (area1	p.		
CK			

Figure 4-126

Select SN (Area1/2/3/4) and direction, and then input customized rule name.

• Area1/2/3/4: System supports four zones. Each SN stands for one zone.



): System can generate an alarm once there is

any object enter/exit (Or both) the zone.

•

Now you can draw a rule. Left click mouse to draw a line first and then right click mouse to draw another line until you draw a rectangle, you can right click mouse to exit. Click Ok to complete the rule setup.

Tips

Click to delete the corresponding rule.

You can refer to the chapter 4.11.3.2.1 to set parameters.

4.11.3.2.3 Object protection (Optional)

Note:

- The object protection function is valid once your network camera or your DVR supports this function.
- If your purchased DVR supports the object protection function, it supports one analog channel. It is not for the digital channel.

System generates an alarm when the object missing/abandoned object alarm occurs. From main menu->Setting->Event-> Intelligence ->Object, the object protection interface is shown as below. See Figure 4-127.

		SETTING		
CAMERA	T NETWORK	EVENT		SYSTEM
VIDEO DETECT	Tripwire Ir	ntrusion A	bandoned	
FACE DETECT	Channel	(1	Ð	
ALARM ABNORMALITY	Enable		RULE	Set
ALARM OUTPUT	Period	Set		
	Alarm Out	023	Latch	(10 sec.
	Send Email			
	Record Channel	0234	6008900	
	PTZ Activation	Set	Deiay	(10 sec.
	Tour	0234(678900	
	Snapshot	0234(5678900	
	Buzzer	Cog		
	Voice Prompts	File Name	lone 🍸	
	Default		Save	Cancel Apply
		_		

Figure 4-127

Check the enable box to enable object detect function. Click Rule setup to draw the rule.

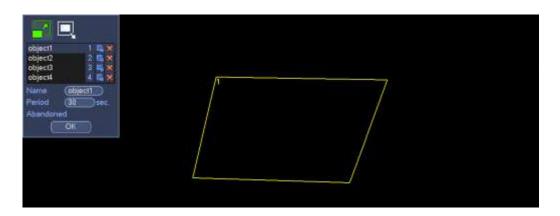


Figure 4-128

Select SN (object1/2/3/4) and direction, and then input customized rule name.

- Object1/2/3/4: System supports four zones. Each SN stands for one zone.
- Direction (): For icon , system can generate an alarm once the

object left in the one for the specified time. For icon _____, system can generate an

alarm once the object is out of the zone for the specified time.

Period: It refers to the object in/out the zone time.

Now you can draw a rule. Left click mouse to draw a line, until you draw a rectangle, you can right click mouse.

Click Ok to complete the rule setup.

Tips

Click to delete the corresponding rule.

You can refer to the chapter 4.11.3.2.1 to set parameters.

4.11.3.2.4 Abandoned Object Detection (Optional)

System generates an alarm when there is abandoned object in the specified zone. From main menu->Setting->Event->IVS, click Add button and then select the type as abandoned object. The object interface is shown as below. See Figure 4-127.

- System supports customized area shape and amount.
- Support duration setup.
- Support objects filter function.

		SETT	NG		_		_
CAMERA	T NETWORK	THE EVENT	STOR	AGE	😼 s	YSTEM	
VIDEO DETECT SMART PLAN	Channel (1						
IVS FACE DETECT PEOPLE COUNT AUDIO DETECT SMART TRACK ALARM ABNORMALITY	1 Ensb	le Name Rule3	Type Abandoned *	Presel 0	Draw	Trigger	X
ALARM OUTPUT	• Default		A	1 d) (Cancel)(4	ppty

Figure 4-129

Click draw button *L* to draw the zone. See Figure 4-130.



Figure 4-130

• Name: Input customized rule name.

- Period: System can generate an alarm once the object is in the zone for the specified period.
- Target filter: Click , you can set filter object size. Each rule can set two sizes (min size/max size). Once the object is smaller than the min size or larger than the max

size, there is no alarm. Please make sure the max size is larger than the min size. Now you can draw a rule. Left click mouse to draw a zone, until you draw a rectangle, you can right click mouse.

Tips

Click kt to delete the corresponding rule.

Click (you can refer to the chapter 4.11.3.2.1 to set other parameters.

Click Apply to complete the setup.

4.11.3.2.5 Missing Object Detection (Optional)

System generates an alarm when there is missing object in the specified zone. From main menu->Setting->Event->IVS, select the type as abandoned object, the object interface is shown as below. See Figure 4-131.

- System supports customized area shape and amount.
- Support duration setup.
- Support objects filter function.

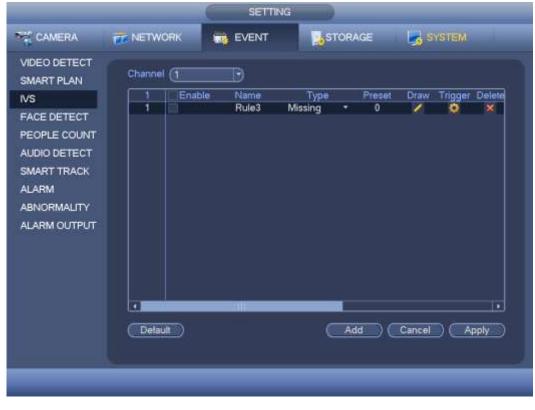


Figure 4-131

Click Draw button *L* to draw a zone. See Figure 4-132.

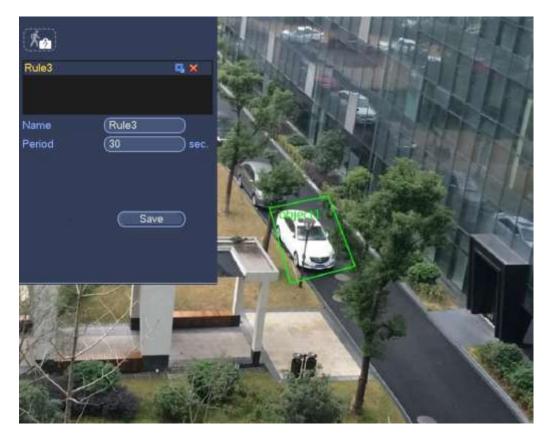


Figure 4-132

- Name: Input customized rule name.
- Period: System can generate an alarm once the object in the zone is missing for the specified period.
- Target filter: Click , you can set filter object size. Each rule can set two sizes (min

size/max size). Once the object is smaller than the min size or larger than the max size, there is no alarm. Please make sure the max size is larger than the min size.

Now you can draw a rule. Left click mouse to draw a zone, until you draw a rectangle, you can right click mouse.

Tips

Click to delete the corresponding rule.

Click 🥸, you can refer to the chapter 4.11.3.2.1 to set other parameters.

Click Apply to complete the setup.

4.11.3.3 Face Detect (Optional)

The face detection function is optional. The intelligence function and the human face detection can not be valid at the same time!

Note

- The face detection function is valid once your network camera or your DVR supports this function.
- If your purchased DVR supports the face detection function, it supports one analog channel. It is not for the digital channel.

System can detect and filter the human face via analyzing the video. When it detects the human face in the specified zone, it can draw the rectangle around the human face and trigger record, snapshot, alarm operation and etc. See Figure 4-133.

- Channel: Select a channel you want to enable face detect function.
- Alarm face number: Once the detected human face number reaches the threshold you set here, system can generate an alarm.
- Human face RO (region of interest): Check the box, system can highlight the human face region.
- Enable: Check the box here to enable face detect function.

For detailed setup information, please refer to chapter 4.11.3.2.1.

		SETTING		
CAMERA	T NETWORK	EVENT	STORAGE	SYSTEM
VIDEO DETECT INTELLIGENCE FACE DETECT ALARM	Channel Enable	(<u> </u>	Target Filter	Set
ABNORMALITY ALARM OUTPUT	Period ØAlarm Out	Set 123) Latch	(10 sec.
	Record Chann		56789001)) Delay	(10 sec.
	Snapshot Buzzer	CLog	56(789 101) Ione	166
	Default		Save	Cancel Apply

Figure 4-133

4.11.3.4 Alarm

XVR series product does not support HDCVI alarm function (Figure 4-136).

Before operation, please make sure you have properly connected alarm devices such as buzzer.

In the main menu, from Setting->Event->Alarm, you can see alarm setup interface. For analog channel, the interface is shown as in Figure 4-134 and Figure 4-135 For HDCVI channel, there are three alarm types. See Figure 4-134 to Figure 4-136. For digital channel, there are four alarm types. See Figure 4-134 to Figure 4-138.

- Local alarm: The alarm signal system detects from the alarm input port.
- Network alarm: It is the alarm signal from the network.
- HDCVI: System can get the camera temperature, smoke, external alarm and set corresponding alarm activation operation.
- IPC external alarm: It is the on-off alarm signal from the front-end device and can activate the local HDVR.
- IPC offline alarm: Once you select this item, system can generate an alarm when the front-end IPC disconnects with the local HDVR. The alarm can activate record, PTZ, snap and etc. The alarm can last until the IPC and the HDVR connection resumes.

Important

- If it is your first time to boot up the device, the disconnection status of the front-end network camera will not be regarded as offline. After one successfully connection, all the disconnection events will be regarded as IPC offline event.
- When IPC offline alarm occurs, the record and snapshot function of digital channel is null.
- Alarm in: Here is for you to select channel number.
- Type: normal open or normal close.
- PTZ activation: Here you can set PTZ movement when an alarm occurs. Such as go to preset, tour& pattern when there is an alarm. Click "select" button, you can see an interface is shown as in Figure 4-139.
- Period: Click set button, you can see an interface is shown as in Figure 4-140. There are two ways for you to set periods. There are max 6 periods in one day. There are four record types: regular, motion detection (MD), Alarm, MD & alarm.
 - ♦ In Figure 4-140, Select icon of several dates, all checked items can be

edited together. Now the icon is shown as . Click to delete a record type from one period.

- ♦ In Figure 4-140. Click button after one date or a holiday, you can see an interface shown as in Figure 4-141. There are four record types: regular, motion detection (MD), Alarm, MD & alarm.
- Anti-dither: Here you can set anti-dither time. Here you can set anti-dither time. The value ranges from 5 to 600s. The anti-dither time refers to the alarm signal lasts time. It can be seem as the alarm signal activation stays such as the buzzer, tour, PTZ

activation, snapshot, channel record. The stay time here does not include the latch time. During the alarm process, the alarm signal can begin an anti-dither time if system detects the local alarm again. The screen prompt, alarm upload, email and etc will not be activated. For example, if you set the anti-dither time as 10 second, you can see the each activation may last 10s if the local alarm is activated. During the process, if system detects another local alarm signal at the fifth second, the buzzer, tour, PTZ activation, snapshot, record channel will begin another 10s while the screen prompt, alarm upload, email will not be activated again. After 10s, if system detects another alarm signal, it can generate an alarm since the anti-dither time is out.

- Show message: System can pop up a message to alarm you in the local host screen if you enabled this function.
- Alarm upload: System can upload the alarm signal to the network (including alarm center) if you enabled current function.
- Send email: System can send out email to alert you when an alarm occurs.
- Record channel: you can select proper channel to record alarm video (Multiple choices). At the same time you need to set alarm record in schedule interface (Main Menu->Setting->Schedule) and select schedule record in manual record interface (Main Menu->Advance->Manual Record).
- Latch: Here is for you to set proper delay duration. Value ranges from 10 to 300 seconds. System automatically delays specified seconds in turning off alarm and activated output after external alarm cancelled.
- Tour: Here you can enable tour function when an alarm occurs. System supports 1/8-window tour. Please note the tour setup here has higher priority than the tour setup you set in the Display interface. Once there two tours are both enabled, system can enable the alarm tour as you set here when an alarm occurred. If there is no alarm, system implements the tour setup in the Display interface.
- Snapshot: System can snapshot corresponding channel when an alarm occurs. Please note the activation snapshot has the higher priority than schedule snapshot. If you have enabled these two types at the same time, system can activate the activation snapshot when an alarm occurs, and otherwise system just operates the schedule snapshot.
- Video matrix Check the box here to enable this function. When an alarm occurs, SPOT OUT port displays device video output. It displays video (1-window tour) from alarm activation channel you select at the Record channel item.
- Log: Check the box here, system can record local alarm log.
- Buzzer: Highlight the icon to enable this function. The buzzer beeps when an alarm occurs.
- Voice prompts: Check the box here to trigger audio broadcast function. You can select specified audio file here. System can play the audio file once the corresponding event occurs.

Please note, network alarm means the alarm signal from the TCP/IP. You can use NET SDK to activate network alarm. Comparing with the local alarm, there is no type, anti-dither, alarm upload function.

Please highlight icon <a>

 to select the corresponding function. After setting all the setups please click save button, system goes back to the previous menu.

-	-	SETTING	iii		
CAMERA		EVENT	STORA	se 😽 si	(STEM
VIDEO DETECT	Local	Net	HDCVI	IPC Ext	IPC Offine
ABNORMALITY	Alarm In	1) Alam Name	Alam In 1	
ALARM OUTPUT	Enable		Туре	NO	
	Period	(Set)	Anti-differ (5)	sec	
	Alarm Our	023	Latch (10	sec	
	Show Message	Alarm Upload	Send Email		
	Record Channe	023456	Deceu	20200	
	PTZ Activation	Set	Delay (10	sec	
	Tour	023656	DOCODO	DCCCC	
	Snapshot	DEEEE	DICE		
	Video Matrix	Buzzer			
	Voice Prompts	File Name (None	• •		
	Default Co	ру	Si	we Cance	it Apply
	(Default) Co	<u>py)</u>	(Si	we_) (Cance	i Apply

Figure 4-134

		SETTING			
CAMERA	THE NETWORK	EVENT	STORAGE	i 🔡 SYS	STEM
VIDEO DETECT	Local	Net	HDCVI	IPC Ext	IPC Offine
ABNORMALITY ALARM OUTPUT	Alarm In Enable	() Ø	Alarm Name 🥝	Varm In 1	
	Period	Set			
	Alarm Out	023	Latch 10 Send Email)sec.	
	Record Channel	123456 (Set)		0000)	
	Tour	023056			
	Wideo Matrix	Buzzer		00000	
	Voice Prompts	File Name (None			
	Delault Cop		(Save	e Cancel	

Figure 4-135

SETTING						
CAMERA	T NETWORK	EVENT	STORAG	iE 🛛 🌄 Sh	STEM	
VIDEO DETECT	Local	Net	HDCVI	IPC Ext	IPC Offline	
ABNORMALITY	Alarm in	(1) Alarm Name 🥥	Alarm In 1		
ALARM OUTPUT	Enable					
	Period	Set				
	Alarm Out	023	Latch (10	Sec.		
	Show Message		Send Email			
	Record Channe	023456	DOODDO			
	PTZ Activation	Set	Delay 10			
	Tour	023436	0089990	00066		
	Snapshot	023456	DTSOBEL	ICECC		
	Video Matrix	Buzzer	Clog			
	Voice Prompts	File Name None	• •			
	(Default) (Co	рру	Sa	ve Cance		
		_	_	_		

Figure 4-136

		SETTING			
CAMERA		THE EVENT	STOR/	IGE 🛃 SI	STEM
VIDEO DETECT	Local	Net	HDCVI	IPC Ext	IPC Offline
ALARM	Channel	(15 -			D
ALARM OUTPUT	Enable		Туре		
	Period	Set	Anti-dither (0	sec	
	Alarm Out	023	Latch (0	sec	
	Show Message	Alarm Upload	Send Emai		
	Record Channe	023466	DOCOD	CCCCC	
	PTZ Activation	Set	Delay 🚺	0)sec	
	Tour	DOGAGG	DOCODE	CCCC	
	Snapshot	023466	Deset	CCCCC	
	Video Matrix	Buzzer	Log		
	Voice Prompts	File Name None	• •		
	Default Co	ypy)		iave Cance	

Figure 4-137

	6	SETTING			
CAMERA			STOR/	AGE 🛛 🛃 S'	/STEM
VIDEO DETECT ALARM ABNORMALITY ALARM OUTPUT	Local Channel Enable	Net (15)**	HDCVI	IPC Ext	IPC Offline
	Alarm Out Show Message Precord Channel PTZ Activation Tour Snapshot Video Matrix Voice Prompts	Set 123456 123456 Buzzer File Name (None	©8900 ^{Delay} († 078900 078900 ©Log €	1	
	(Default) Cop	y		Save Cance	H Apply

Figure 4-138

		PTZ.	Activation		
CAM 1 CAM 3 CAM 5 CAM 7	(None (None (None (None		CAM 2 CAM 4 CAM 6 CAM 8	None None None None	
_	_	ОК	Cancel		_

Figure 4-139





		Time Period
Current Date: Su	n	
Period 1 (00 10	24 00	0
Period 2 (00 ±0)	- 24 00	0
Period 3 (00 10	- 24 00	
Period 4 (00 10	- 24 : 00	0
Period 5 (00 ::0	- 24 = 00	0
Period 6 (00 10	- 24 : 00)	0
Сору		
All	Sun 🔂 Mon	🖸 Tue 🔂 Wed 💭 Thu 💽 Fri 🛄 Sat
		Save

Figure 4-141

4.11.3.5 Abnormality

There are four types: HDD/Network/User/Device. Please note device interface is for some series only.

- \diamond HDD: HDD error, no disk, no space. See Figure 4-142 and Figure 4-143.
- ♦ Network: Disconnection, IP conflict, MAC conflict. See Figure 4-144.
- ♦ User:Illegal login. See Figure 4-145.
- ♦ Device: High temperature, fan speed abnormal. See Figure 4-146.
- Alarm output: Please select alarm activation output port (multiple choices).

- Less than: System can alarm you when the HDD space is less than the threshold you set here (For HDD no space type only).
- Latch: Here you can set corresponding delaying time. The value ranges from 0s-300s. System automatically delays specified seconds in turning off alarm and activated output after external alarm cancelled. When the value is 0, there is no latch time.
- High temperature: In Device interface (Figure 4-146), select High temperature from the dropdown list, and then input the max temperature. The value ranges from 30 °C ~ 90 °C. Device can trigger an alarm once the case temperature is higher than the value you set.
- Fan speed abnormal: In Device interface (Figure 4-146), select Fan speed abnormal from the dropdown list, and then click the OK button after the Fan calibration. It can correct fan manually. Please note we recommend this function after you replaced or maintained the fan.
- Show message: system can pop up the message in the local screen to alert you when an alarm occurs.
- Alarm upload: System can upload the alarm signal to the network (including alarm center) if you enabled current function. For disconnection event, IP conflict event and MAC conflict event, this function is null.
- Send email: System can send out email to alert you when an alarm occurs.
- Buzzer: Highlight the icon to enable this function. The buzzer beeps when an alarm occurs.
- Log: Check the box here, system can record HDD event log.
- Voice prompts: Check the box here to trigger audio broadcast function. You can select specified audio file here. System can play the audio file once the corresponding event occurs.

		SETTING		
CAMERA		EVENT	STORAGE	SYSTEM
VIDEO DETECT ALARM	HDD	Network	User	
ABNORMALITY	Event Type	No HDD		
ALARM OUTPUT	Enable			
	Alarm Out Show Message Buzzer	123 Alam Upload Log File Name None		Cancel Apply

Figure 4-142

	5	SETTING			
CAMERA		EVENT	ST	ORAGE	SYSTEM
VIDEO DETECT	HDD	Network	User		
ABNORMALITY ALARM OUTPUT	Event Type Enable	(HDD No Spac •)	Less	(20	
	Alarm Out	023455		(10)sec.
	Show Message		Send E	imail	
	Buzzer	⊡ Log			
	Voice Prompts	File Name None)		
				Save	Cancel Apply

Figure 4-143

De la constante mental de la constante	NETWORK		STORAGE	SYSTEM
VIDEO DETECT	HDD	Network	User	
ABNORMALITY	Event Type Enable	(Net Disconne •)		
	Alarm Out Show Message		Laich (10 Send Email 7890072013	sec.
	— □Buzzer □Voice Prompts	Cog File Name (None	Delay (10	Dsec.
			Save (Cancel Apply

Figure 4-144

		SETTING		
CAMERA	TWORK	EVENT	STORAGE	SYSTEM
VIDEO DETECT ALARM	HDD	Network	User	
ABNORMALITY	Event Type	(Illegal Login 🕤		\supset
ALARM OUTPUT	Enable		Lock Time 30	min.
	Alarm Out	123 ØAlarm Upload	Latch (10	sec.
	Buzzer		The second of the second	
	Voice Prompts	File Name (None		
			Save	Cancel Apply

Figure 4-145

	(1	SETTIN	5	
CAMERA	THE NETWORK	EVENT	STORAGE	Marena 🛃
VIDEO DETECT	HDD	Network	User D	evice
FACE DETECT ALARM ABNORMALITY	Event Type Enable	(Fan Spe	E Alarm Name Fan Calibrator	(Fan Alarm
ALARM OUTPUT	Alarm Out Show Message Buzzer		المالية (Latch Send Email e(None)	10 sec.
	_			

Figure 4-146

4.11.3.6 Alarm Output

Here is for you to set proper alarm output such as schedule, manual.

Please highlight icon 🔳 to select the corresponding alarm output.

After all the setups please click OK button, system goes back to the previous menu. See Figure 4-147.



Figure 4-147

4.11.4 Storage

4.11.4.1 Schedule

4.11.4.1.1 Record

Note:

You need to have proper rights to implement the following operations. Please make sure the HDDs have been properly installed.

After the system booted up, it is in default 24-hour regular mode. You can set record type and time in schedule interface.

In the main menu, from Setting->Storage->Schedule, you can go to schedule menu. See Figure 4-151.

Please note you need to go to main menu->Setting->System->General->Holiday to set holiday date first, otherwise, there is no holiday setup item.

- Channel: Please select the channel number first. You can select "all" if you want to set for the whole channels.
- ♦ Sync connection icon. Select icon of several dates, all checked items

can be edited together. Now the icon is shown as

- ♦ ▲ Click it to delete a record type from one period.
- Record Type: Please check the box to select corresponding record type. There are four types: Regular/MD (motion detect)/Alarm/MD&Alarm.
- Week day: There are eight options: ranges from Saturday to Sunday and all.
- Holiday: It is to set holiday setup. Please note you need to go to the General interface (Main Menu->System->General) to add holiday first. Otherwise you can not see this item.
- Pre-record: System can pre-record the video before the event occurs into the file. The value ranges from 1 to 30 seconds depending on the bit stream.
- Redundancy: System supports redundancy backup function. You can highlight Redundancy button to activate this function. Please note, before enable this function, please set at least one HDD as redundant. (Main menu->Setting->Storage->HDD Manager). Please note this function is null if there is only one HDD.
- Period setup: Click button after one date or a holiday, you can see an interface shown as in Figure 4-152. There are four record types: regular, motion detection (MD), Alarm, MD & alarm.

Please following the steps listed below to draw the period manually.

♦ Select a channel you want to set. See Figure 4-148.



Figure 4-148

♦ Set record type. See Figure 4-149.





 Please draw manually to set record period. There are six periods in one day. See Figure 4-150.



Figure 4-150

Please highlight icon loss to select the corresponding function. After completing all the setups please click save button, system goes back to the previous menu.

There are color bars for your reference. Green color stands for regular recording, yellow color stands for motion detection and red color stands for alarm recording. The white means the MD and alarm record is valid. Once you have set to record when the MD and alarm occurs, system will not record neither motion detect occurs nor the alarm occurs.



Figure 4-151

	26:.00	fleguler	C MO	C Alarm	C MD&A6
Ferend 2 (00 100	- 24 (¢)	Citterin	OW:	(CAlem	OMD&AN
Ferind 3 (05:00)	- 241 10	Reputer	Стир	Alam	E MD6Ab
Penud 4 (02:100		Regula	D MO	- Aliann	C MD&Ab
Parend 5 (02.110	24 40	Citiegeter	OMP	C Alem	DMD440
Fered 6 (01100	- 241 00	C Regular	CI MD	Alam	MDAAN
100.00			1991 15m		
04 8:	iun ()Mon ()Ti			*	

Figure 4-152

4.11.4.1.1.1 Quick Setup

Copy function allows you to copy one channel setup to another. After setting in channel 1, click Copy button, you can go to interface Figure 4-153. You can see current channel name is grey such as channel 1. Now you can select the channel you want to paste such as channel 5/6/7. If you want to save current setup of channel 1 to all channels, you can click the first box "ALL". Click the OK button to save current copy setup. Click the OK button in the Encode interface, the copy function succeeded.



Figure 4-153

4.11.4.1.1.2 Redundancy

Redundancy function allows you to memorize record file in several disks. When there is file damage occurred in one disk, there is a spare one in the other disk. You can use this function to maintain data reliability and safety.

- In the main menu, from Setting->Storage-> Schedule, you can highlight redundancy button to enable this function.
- In the main menu, from Main menu->Setting->Storage->HDD Manager, you can set one or more disk(s) as redundant. You can select from the dropdown list. System auto overwrites old files once hard disk is full.

Please note only read/write disk or read-only disk can backup file and support file search function, so you need to set at least one read-write disk otherwise you can not record video.

Note

About redundancy setup:

- If current channel is not recording, current setup gets activated when the channel begin recording the next time.
- If current channel is recording now, current setup will get activated right away, the current file will be packet and form a file, then system begins recording as you have just set.

After all the setups please click save button, system goes back to the previous menu. **Playback or search in the redundant disk.**

There are two ways for you to playback or search in the redundant disk.

- Set redundant disk(s) as read-only disk or read-write disk (Main menu->Setting->Storage->HDD Manager)). System needs to reboot to get setup activated. Now you can search or playback file in redundant disk.
- Dismantle the disk and play it in another PC.

4.11.4.1.2 Snapshot

4.11.4.1.2.1 Schedule Snapshot

 On the preview interface, right click mouse and then select Manual->Record, or in the main menu, from Setting->Storage->Record, check the box to enable snapshot function of corresponding channels. See Figure 4-154.

- In main menu, from Setting->Camera->Encode->Snapshot interface, here you can input snapshot mode as regular, size, quality and frequency. See Figure 4-155.
- In main menu, from Setting->Camera->Encode->Schedule interface, please enable snapshot function. See interface on the right of Figure 4-156.

SETTING THE EVENT STORAGE SYSTEM CAMERA NETWORK SCHEDULE HDD MANAGE 0 RECORD HDD DETECT Sub Stream_ Schedule 0 0000 0 OK Cancel Apply

Please refer to the following figure for detailed information.

Figure 4-154

		SI SI	ETTING		
		📷 EVE	NT.		SYSTEM
REMOTE	Encode	Snapshot	Overlay	re -	
ENCODE	Manual Snap		🕤 /Time		
CAM NAME CHANNEL TYPE	Channel Mode Image Size Image Quality Interval	(Regular CIF (4			
	Default (Сору	_	ОК	Cancel Apply

Figure 4-155





4.11.4.1.2.2 Trigger Snapshot

Please follow the steps listed below to enable the activation snapshot function. After you enabled this function, system can snapshot when the corresponding alarm occurred.

- In main menu, from Setting->Camera->Encode->Snapshot interface, here you can input snapshot mode as trigger, size, quality and frequency. See Figure 4-157.
- In main menu, from Setting->Event->Detect, please enable snapshot function for specified channels (Figure 4-158). Or In main menu, from Setting->Event->Alarm (Figure 4-159) please enable snapshot function for specified channels.

SETTING								
CAMERA	NETWORK	EVENT		STORAGE	SYSTEM			
REMOTE	Encode	Snapshot	Overlay					
ENCODE	Manual Snap	0	/Time					
CAM NAME	Channel	• •						
CHANNEL TYPE	Mode	(Trigger 🕒						
	Image Size Image Quality							
	Interval	(4) (15)						
	(Default)	Сору		ОК	Cancel Apply			

Figure 4-157

		SETTING			
CAMERA	NETWORK		STOR	AGE	SYSTEM
VIDEO DETECT	Motion Detect	Video Loss	Tampering	Diagno	sis
ALARM ABNORMALITY ALARM OUTPUT	Channel Enable	(1)		Set)	
	Period	Set	Anti-dither	5)sec.
	Alarm Out	023	Latch (10	Disac.
	Show Message	Alarm Upload	Send Em	ail	
	Record Channel	023866	DBODO	10899	909
	PTZ Activation	(Set)	Delay	10	Disec.
	Tour	023456	COOC	30303030	909
	Snapshot	023466	DBOBU	11213148	18
	Video Matrix	Buzzer	Log		
	Voice Prompts	File Name (None	(-)		

Figure 4-158

		SETTING				
CAMERA	NETWORK	EVENT	STORA	ige 📑 sys	TEM	
VIDEO DETECT	Local	Net	HDCM	IPC Ext	IPC Offline	
ABNORMALITY	Alarm In	(T D	Alarm Name	(Alarm In1)	
ALARM OUTPUT	Enable	2	Туре	(NO 🕞		
	Period	Set	Anti-dither (5)sec.		
	Alarm Out	129	Latch 🗐	0		
	Show Message	Alarm Upload	Send Email			
	PTZ Activation	Set	Delay 🚺	0)sec:		
	Tour	<u>0</u> 23466	ത്രത്തെ	120203030303	_	
	Snapshot	023466	00000	COCOC		
	Video Matrix	Buzzer	E Log			
	Voice Prompts	File Name None	Ð			
	Detault Cop	y)	(S	ave Cancel	Apply	

Figure 4-159

4.11.4.1.2.3 Priority

Please note the activation snapshot has the higher priority than schedule snapshot. If you have enabled these two types at the same time, system can activate the activation snapshot when an alarm occurs, and otherwise system just operates the schedule snapshot.

4.11.4.1.2.4 Image FTP

In the main menu, from Setting->Network->FTP, you can set FTP server information. Please enable FTP function and then click save button. See Figure 4-160. Please boot up corresponding FTP server.

Please enable schedule snapshot (Chapter 4.11.4.1.2.1) or activation snapshot (Chapter 4.11.4.1.2.2) first, now system can upload the image file to the FTP server.

		SETTING	3		
	THE NETWORK	EVENT	STORAGE	SYSTEM	
CAMERA TCP/IP CONNECTION WIFI 3G PPPoE DDNS IP FILTER EMAIL FTP UPnP SNMP MULTICAST REGISTER ALARM CENTRE P2P	NETWORK Enable Server IP User Name Password Remote Directory image Upload Inte Channel Weekday Time Period 1 Time Period 2	0 0 erval (2 (1 (Thu. (00 00) -	0 0 Port 21 0 Anonymous File Length 0 0 5 Alarm Mr 24 00 0 1	Please inp	information
	Default T	est_)		Cancel Apply	

Figure 4-160

4.11.4.2 HDD Manager

Here is for you to view and implement hard disk management. See Figure 4-161. You can see current HDD type, status, capacity and etc. The operation includes format HDD, and change HDD property (read and write/read-only/redundancy).

	SETTING
CAMERA	📅 NETWORK 🦙 EVENT STORAGE SYSTEM
SCHEDULE HDD MANAGE RECORD HDD DETECT	SATA 1 2 - O
	1* Device Name Type Status Free Space/Total Space All - 1.64 TB/1.81 TB 1* SATA-2 Read/Write * Normal 1.64 TB/1.81 TB
	(Refresh) (Format) (Save) (Cancel) (Apply)

Figure 4-161

4.11.4.3 Record

4.11.4.3.1 Record Control

Note:

You need to have proper rights to implement the following operations. Please make sure the HDD has been properly installed.

There are three ways for you to go to manual record menu.

- Right click mouse and then select Manual->Record.
- In the main menu, from Setting->Storage->Record.
- In live viewing mode, click record button in the front panel or record button in the remote control.

System supports main stream and sub stream. There are three statuses: schedule/manual/stop. See Figure 4-162. Please highlight icon " \bigcirc " to select corresponding channel.

- Manual: The highest priority. After manual setup, all selected channels will begin ordinary recording.
- Schedule: Channel records as you have set in recording setup (Main Menu->Setting->System->>Schedule)
- Stop: Current channel stops recording.
- All: Check All button after the corresponding status to enable/disable all-channel schedule/manual record or enable/disable all channels to stop record.

			SETTING		-
CAMERA	TWORK 1	11.0	EVENT	STORAGE	SYSTEM
SCHEDULE HDD MANAGE RECORD HDD DETECT	Main Stream Schedule Manual Stop Sub Stream Schedule Manual Stop	All 0 • 0	0000		
	Shapshot Open Stop	•	••••	ОК) Cancel Apply

Figure 4-162

4.11.4.3.2 Snapshot Operation

Check the corresponding box to enable/disable schedule snapshot function. See Figure 4-163.

		SETTING			
CAMERA			STORAGE	SYSTEM	
SCHEDULE HDD MANAGE RECORD HDD DETECT	Main Stream Schedule Manual Stop Sub Stream Schedule Manual Stop Snapsnot Open Stop	A4 1234 00000 00000 00000 00000	OK) (Cancel) (Apply
	_	_			

Figure 4-163

Tips

You can check All button after the corresponding status to enable/disable all-channel

snapshot function.

4.11.4.4 HDD Detect

The HDD detect function is to detect HDD current status so that you can clearly understand the HDD performance and replace the malfunction HDD. There are two detect types:

- Quick detect is to detect via the universal system files. System can quickly complete the HDD scan. If you want to use this function, please make sure the HDD is in use now. If the HDD is removed from other device, please make sure the write-data once was full after it installed on current device.
- Global detect adopts Windows mode to scan. It may take a long time and may affect the HDD that is recording.

4.11.4.4.1 Manual Detect

The manual detect interface is shown as below. See Figure 4-164.

Please select detect type and HDD. Click start detect to begin. You can view the corresponding detect information. See Figure 4-165.

		SETTING			
CAMERA	NETWORK	To EVENT	STORAGE	SYSTEM	
SCHEDULE HDD MANAGE RECORD	Manual Detect, De Type (Duick Date		Heat HDD(s) - (S	tart Detect) (Stop Detect)	
HDD DETECT			- G - -	ood Bad Bad Block 0 MB and HDD No. 6	
			Tatal (Error	Space 0.00 GB	
				nt HDD -	
			Detec Proce	I Speed	
			Detec	rTime	

Figure 4-164

Ű.	SETTING		
CAMERA	TWORK To EVENT	STORAGE	STEM
SCHEDULE HDD MANAGE	Manual Detect Detect Report		
RECORD	Type Quick Detect HDD SA	TA - 1 Start Detect)	(Stop Detect)
HDD DETECT		Good Bas	l Block
		Detected HDD N	
		Total Space	232.89 GB
		Error	
		Current HDD	
		Detect Speed	10:00 GB/S
		Process	100.00 %
		Detect Time	00:00:01
		Remaining Time	00:00:00

Figure 4-165

4.11.4.4.2 Detect Report

After the detect operation, you can go to the detect report to view corresponding information.

The detect report interface is shown as below. See Figure 4-166.

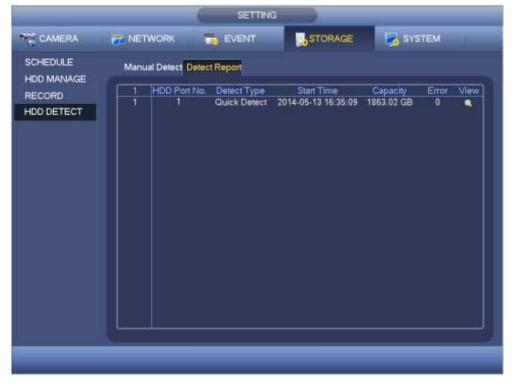


Figure 4-166

Click the item you can see the detailed information such as detect result. See Figure 4-167.

Good = 103 M	Bad Block
Detected HD	
Total Space	232.89 GB
Error	Ū.
HDD Port No	a 1

Figure 4-167

4.11.5 System

4.11.5.1 General

4.11.5.1.1 Device

General setting includes the following items. See Figure 4-168.

- Device ID: Please input a corresponding device name here.
- Device No: Here you can set device number.
- Language: System supports various languages: Chinese (simplified), Chinese (Traditional), English, Italian, Japanese, French, Spanish (All languages listed here are optional. Slight difference maybe found in various series.)
- Video standard: There are two formats: NTSC and PAL.
- HDD full: Here is for you to select working mode when hard disk is full. There are two
 options: stop recording or rewrite. If current working HDD is overwritten or the current
 HDD is full while the next HDD is no empty, then system stops recording, If the
 current HDD is full and then next HDD is not empty, then system overwrites the
 previous files.
- Pack duration: Here is for you to specify record duration. The value ranges from 1 to 120 minutes. Default value is 60 minutes.
- Real-time playback: It is to set playback time you can view in the preview interface. The value ranges from 5 to 60 minutes.

- Auto logout: Here is for you to set auto logout interval once login user remains inactive for a specified time. Value ranges from 0 to 60 minutes.
- IPC Time Sync: You can input an interval here to synchronize the DVR time and IPC time.
- Navigation bar: Check the box here, system displays the navigation bar on the interface.
- Startup wizard: Once you check the box here, system will go to the startup wizard directly when the system restarts the next time. Otherwise, it will go to the login interface.
- Mouse property: You can set double click speed via dragging the slide bard. You can Click Default button to restore default setup.

		SETTING	3	
CAMERA		EVENT	STORAGE	SYSTEM
GENERAL DISPLAY VIDEO MATRIX PTZ ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	General Device Name Device No. Language Video Standard HDD Full Pack Mode Realtime Play Auto Logout IPC Time Sync Navigation Bar Mouse Sensitivity	Startup Wizar) 60min.)min.)h	
	Default		Save	Cancel Apply

Figure 4-168

4.11.5.1.2 Date and Time

The interface is shown as in Figure 4-169.

- Date format: There are three types: YYYYY-MM-DD: MM-DD-YYYYY or DD-MM-YYYY.
- Date separator: There are three denotations to separate date: dot, beeline and solidus.
- DST: Here you can set DST time and date. Here you can set start time and end time by setting corresponding week setup or by setting corresponding date setup.
- NTP: It is to set NTP server information.

CAMERA NETWORK EVENT STORAGE SYSTEM GENERAL General DateSTime Holiday DisPLAY VIDEO MATRIX PTZ ATMIPOS VOICE ACCOUNT AUTO MAINITAIN IMPIEXP DEFAULT UPGRADE NTP Host IP ime.windows.com Manual Update Port 123 Interval 60 min.		SETTING
DispLAY Date Format Date Format Offer Format VIDEO MATRIX Date Format YYYY MM* Time Format 24-HOUR PTZ Date Separator • ATM.POS System Time 2016 - 01 - 14 15 56 39 GMT+08.00 • Save VOICE OST DST DST Type Week Date AUTO MAINTAIN Start Time © 2000 - 01 - 01 00 00 DEFAULT ONTP Host IP time.windows.com Manual Update Port 123 Interval 60 min.	CAMERA	📅 NETWORK 📷 EVENT STORAGE SYSTEM
Default Save Cancel Apply	DISPLAY VIDEO MATRIX PTZ ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT	Date Format YYYY MM. Time Format 24-HOUR Date Separator • • System Time 2016 - 01 - 14 15 56 39 GMT+08:00 • Save DST DST DST DST Save • • • • DST Type Week Date Start Time • 2000 - 01 - 01 00 • End Time • 2000 - 01 - 01 00 • • • NTP Host IP time.windows.com Manual Update Port 123

Figure 4-169

4.11.5.1.3 Holiday

Holiday setup interface is shown as in Figure 4-170. Click Add new holiday button, you can input new holiday information. See Figure 4-171. Here you can set holiday name, repeat mode and start/end time.

Note

- When you enable Holiday settings and schedule setup at the same time, holiday setting has the priority. If the selected day is a holiday, then system records as you set in holiday setting. If it is not a holiday, system records as you set in Schedule interface. Please note
- Please note, there is no year setup on the holiday setup. For example, if you set 30th Oct, 2012 as a holiday, then the date of 30th Oct in each year will be set as a holiday.

		SETTI	NG	
ST CAMERA	NETWORK	EVENT		SYSTEM
GENERAL	General	Date&Time	Holiday	
VIDEO MATRIX PTZ ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	0 5		Name	(Add = Holiday)

Figure 4-170

Add New Holdays	
Holiday Name Repeat Mode O Once Only All-Year Holiday Range Date O Week Start Time 2013 - 10 - 18 End Time 2013 - 10 - 18	
Add More	
	Add Cancel

Figure 4-171

4.11.5.2 Display

4.11.5.2.1 Display

Display setup interface is shown as below. See Figure 4-172.

- Time display: You can select to display time or not when system is playback.
- Channel display: You can select to channel name or not when system is playback.

- Image original rate: Check the box here, the video can be displayed at its actual size.
- Transparency: Here is for you to adjust menu transparency. The higher the value is, the more transparent the menu is.
- Resolution: There are four options: 1920×1080, 1280×1024(default),1280× 720,1024×768. Please note the system needs to reboot to activate current setup.
- Preview enhance: Check the box; it can optimize the video quality of the preview video.
- Video matrix: Check the box to enable video matrix function.

Please highlight icon 🔳 to select the corresponding function.

After completing all the setups please click save button, system goes back to the previous menu.

		SETTI	NG		
CAMERA			STORAGE	SYSTEM	
GENERAL DISPLAY VIDEO MATRIX PTZ ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Display Time Display Channel Disp Image Origina Preview Enha Transparency Resolution (128 Video Matrix	al Rate incement 0% 0x1024	Zero-Channel		
	Default		Save) Cancel Appl	

Figure 4-172

4.11.5.2.2 TV Adjust

Note

This function is for some series only.

Here is for you to adjust TV output setup. See Figure 4-173.

Please drag slide bar to adjust each item.

After all the setups please click OK button, system goes back to the previous menu.

f		SE	TTING		-
CAMERA	💏 NETWORK	EVEN	D I	STORAGE	SYSTEM
GENERAL	Display	TV Adjust	Tour	Zero Channel	Favorites
RS232 PTZ ATM/POS ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Top Margin Bottom Margin Lett Margin Right Margin Brightness		0 0 0 128		
	Default			ОК	Cancel Apply

Figure 4-173

4.11.5.2.3 Tour

Here you can activate tour function. Click Setup button, you can see an interface shown as in Figure 4-174

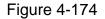
- Enable tour: Highlight box here to enable this function.
- Interval: System supports 1/8/-window tour. Input proper interval value here. The value ranges from 5-120 seconds. It is for schedule tour/alarm/motion detect tour.
- Split: You can select window split mode from the dropdown list.
- Channel group: It is to display all channel groups on current split mode. You can edit and delete a channel group here. Double click an item in the list; you can edit its channel group setup. Right now system max supports 32.
- Add: Under specified window split mode, click it to add channel group.
- Delete: Click it to remove selected channel group.
- Move up: Click it to move current selected channel up.
- Move down: Click it to move current selected channel down.
- Default: Click it to restore default setup.

Tips:

Use mouse or Shift button to switch I and I button to enable /disable tour.

means the tour funciton is enabled and 🙆 meas tour funciton is disabled.

• On the navigation bar, click is or to enable/disable tour function.



4.11.5.2.4 Zero-channel Encoding

Click zero-channel encoding button, you can go to the following interface. See Figure 4-175. Here you can enable and set zero-channel encoding function so that you can view several video sources at one channel.

- Enable: This function is disabled by default. Check the box here to enable this function so that you can control the zero-channel encoding function at the WEB.
- Compression: System default setup is H.264. You can set according to device capability.
- Resolution: The resolution value may vary due to different device capabilities. Please select from the dropdown list.
- Frame rate: The frame rate value may vary due to different device capabilities. Please select from the dropdown list.
- Bit Rate: The bit rate value may vary due to different device capabilities and frame rate setups. Please select from the dropdown list.
- Save: Click the Save button to save current setup. If this function is disabled, you can not operate zero-channel encoding function at the WEB, the video is black or null even you operate when the function is disabled. After you enabled this function, login

the Web and you can select zero-channel encoding mode at the right corner of the

interface		. Select a m	node; you can vie	ew the local previ	iew video.
		SETTI	NG		
CAMERA	📅 NETWORK	EVENT	STORAGE	SYSTEM	
GENERAL	Display	Tour	Zero-Channel		
DISPLAY VIDEO MATRIX	Enable				
PTZ ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Compression Resolution Frame Rate(FPS) Bit Rate(Kb/S)	(704*480(D1)) (30			
	Default		Save	Cancel C	Apply

Figure 4-175

4.11.5.3 Video Matrix

Here you can set matrix output channel and its interval. You can set HDMI2 port tour and its interval See Figure 4-176.

- Enable tour: Check the box here to enable this function.
- Interval: Input proper interval value here.
- Resolution: The resolution of the tour window. Please note this function is for HDMI only.
- Split: You can select window split mode from the dropdown list. For BNC, it supports 1-split mode only. For HDMI, it supports 1/4/9/16-split mode. Some series product support 24/36-split. Please refer to the actual product.
- Add: Under specified window split mode, click it to add channel group. See Figure 4-177.
- Modify: Double click a channel or select a channel and then click Modify button, you can change current channel setup. See Figure 4-178.
- Delete: Click it to remove selected channel group.
- Move up: Click it to move current selected channel up.

- Move down: Click it to move current selected channel down.
- Default: Click it to restore default setup.

	SETTING
CAMERA	📅 NETWORK 📷 EVENT STORAGE SYSTEM
GENERAL DISPLAY VIDEO MATRIX PTZ ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Enable Interval 6 sec. Resolution 1280x720 Window Split View 1 14 Channel Group 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 10 10 11 11 12 12 Add Modity Default Save Cancel Apply

Figure 4-176

Add Group
1234567891011213141516 Group Order:
OK Cancel

Figure 4-177



Figure 4-178

4.11.5.4 RS232

RS232 interface is shown as below. There are five items. See Figure 4-179.

- Function: There are various devices for you to select. Console is for you to use the COM or mini-end software to upgrade or debug the program. The control keyboard is for you to control the device via the special keyboard. Transparent COM (adapter) is to connect to the PC to transfer data directly. Protocol COM is for card overlay function. Network keyboard is for you to use the special keyboard to control the device. PTZ matrix is to connect to the peripheral matrix control.
- Baud rate: You can select proper baud rate.
- Data bit: You can select proper data bit. The value ranges from 5 to 8.
- Stop bit: There are two values: 1/2.
- Parity: There are five choices: none/odd/even/space mark.
- System default setup is:
- Function: Console
- Baud rate:115200
- Data bit:8
- Stop bit:1
- Parity: None

After completing all the setups please click save button, system goes back to the previous menu.

		SETTING	34		
	INETWORK.	EVENT		SYSTEM	
GENERAL DISPLAY VIDEO MATRX RS232 PTZ ATM/POS ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Function (Corr Baudrate (1152 Data Bits (8 Stop Bits (1 Patity (Non	•			
	Default		Save	Cancel A	pply

Figure 4-179

4.11.5.5 PTZ

The pan/tilt/zoom setup includes the following items. Please select channel first. See Figure 4-180.

- PTZ type: There are two options: local/remote. Please select remote if you are connecting to the network PTZ.
- Control mode: You can select control mode from the dropdown list. There are two
 options: Serial/HDCVI. For HDCVI series product, please select HDCVI. The control
 signal is sent to the PTZ via the coaxial cable. For the serial mode, the control signal
 is sent to the PTZ via the RS485 port.
- Protocol: If the control mode is HDCVI, please select HDCVI protocol. The default setup is HDCVI3.0
- Address: input corresponding PTZ address.
- Baud rate: Select baud rate.
- Data bit: Select data bit.
- Stop bit: Select stop bit.
- Parity: There are three choices: none/odd/even.

After completed all the setups please click save button, system goes back to the previous menu.

		SETTING		
CAMERA	TWORK 1	To EVENT	STORAGE	SYSTEM
GENERAL DISPLAY VIDEO MATRIX PTZ ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	PTZ Type Control Mode Protocol Address Baudrate Data Bits Stop Bits	1 (Local HDCVI HDCVI3.0 1 9600 8 1 1 None 7		
	Default	Сору	Save) Cancel Apply

Figure 4-180

For digital channel, the interface is shown as below. See Figure 4-181.

		SETTING			
CAMERA			STORAGE	SYSTEM	
GENERAL DISPLAY VIDEO MATRIX PTZ ATMIPOS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Channel PTZ Type	(12 •) Remote •)			
	(Detault) (Сору	Save	Cancel App	ا

Figure 4-181

4.11.5.6 ATM/POS

The ATM/POS function is for financial areas. It includes Sniffer, information analysis and title overlay function. The Sniffer mode includes COM and network.

4.11.5.6.1 COM Type

The COM interface is shown as below. See Figure 4-182.

- Protocol: Please select from the dropdown list.
- Setting: Click COM setting button, the interface is shown as in RS232 interface. Please refer to Chapter 5.3.4 RS232.
- Overlay channel: Please select the channel you want to overlay the card number.
- Overlay mode: There are two options: preview and encode. Preview means overlay the card number in the local monitor video. Encode means overlay the card number in the record file.
- Overlay Position: Here you can select the proper overlay position from the dropdown list.

		SETTING		
CAMERA	NETWORK	To EVENT	STORAGE	SYSTEM
GENERAL DISPLAY RS232	Com Current Snifler Mo	Net ode is COM		
PTZ ATMPOS ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Protocol Overlay Channel Overlay Mode Overlay Position	POS Preview Pencode (Top Left)		
			Save	Cancel Apply

Figure 4-182

4.11.5.6.2 Network Type

The network type interface is shown as below. See Figure 4-183.

Please use network type if you using network to connect to the device. The interface is generally the same as the COM mode. The protocol depends on your self-develop protocol. The setup may vary since connected device or the protocol is not the same. Here we take the ATM/POS protocol to continue.

• Protocol: It is to set COM sniffer protocol. You need to select protocol according to

your own development situation.

- Overlay mode: There are two options: preview and encode. Preview means overlay the card number in the local monitor video. Encode means overlay the card number in the record file. You can view the corresponding information when playback.
- Overlay Position: Here you can select the proper overlay position from the dropdown list.
- Data group: There are total four groups IP.
- Source IP: Source IP refers to host IP address that sends out information (usually it is the device host.)
- Destination IP: Destination IP refers to other systems that receive information.
- Source port/destination port: Please input according to your own situation.
- Record channel: It is for you to check record channel. The record channel applies to one group (optional) only.
- Frame ID: Six frame ID groups verification can guarantee information validity and legal. You need to input start position, length, key and etc according to your communication protocol and data packet contents.

		SETTING		
CAMERA		EVENT	STORAGE	SYSTEM
GENERAL	Com	Net		
DISPLAY RS232	Protocol	ATMPOS •	Current	Sniffer Mode is COM
PTZ ATM/POS	Overlay Mode		Overlay	Position Top Left
ACCOUNT	Data Group Source IP	Data Group1	0 Port (0	\supset
AUTO MAINTAIN	Destination IP Overlay Channel	(• • • • • • • • • • • • • • • • • • •	0 Port (0	
DEFAULT	Frame ID1 Frame ID2 Frame ID3 Frame ID4 Frame ID5 Frame ID6	StarPosition Length		Data Data Data Data Data Data
	<		Save	Cancel Apply

Figure 4-183

In Figure 4-183, click data button after frame ID the interface is shown as in Figure 4-184. Here you can set field start position, length, and overlay title.

)
Field1 (1 Field2 (1 Field3 (1	Lengh Tile	
		Save Cancel

Figure 4-184

4.11.5.7 Voice

The audio function is to manage audio files and set schedule play function. It is to realize audio broadcast activation function.

4.11.5.7.1 File List

Here you can add audio file, listen to the audio file, or rename/delete audio file. Here you can also set audio volume. See Figure 4-185.

Z CAMERA	METWOR	K 📷 EVENT	STORAGE	-	SYSTEM	
JENERAL DISPLAY	File Mana	ge Schedule				
IDEO MATRIX IS232 TZ ITMPOS IOICE ICCOUNT IUTO MAINTAIN MPIEXP IEFAULT IPGRADE		ile Name /hen You Know.mp3	Size 3 77 MB	Play	Rename	X
	Voice : U	S8 Mode				Add A

Figure 4-185

Click Add button, you can add audio file and import the audio file via the USB device. See Figure 4-186.

		Add				
Device Name	(sdc1(USB DISK)).	Refresh				
Total Space	(14/43 GB	Free Space	(12.07 GB	2		
Address						
Name				St21 Type	Deleta	•
50				Folder		
English				Folder	××	
55553277	_20140225			Folder	*	
						-
Import ()						
				0	OK Ca	ncel

Figure 4-186

The audio file can be saved on the HDD or on the USB device.

- In Figure 4-185, when it is HDD mode, the newly added audio file can be saved on the HDD automatically. You do not need to connect to the USB device if you want to use it the next time.
- In Figure 4-185, when it is USB mode, after you imported, you need to connect the USB device all the time; otherwise, the audio link function may fail. So, if you want to use the audio trigger function, please make sure the audio file is on the UBS device and the USB device has connected to the DVR before the DVR boots up. You need to make sure the USB device connection is always there if you want to manage and use the audio file function.
- If there is a USB device (containing the audio file) and the HDD (containing the audio file) at the same time, the HDD mode has higher priority. That is to say, DVR uses the audio file from the HDD.

4.11.5.8 Account

Here is for you to implement account management. See Figure 4-187. Here you can:

- Add new user
- Modify user
- Add group
- Modify group
- Modify password.

For account management please note:

• For the user account name and the user group, the string max length is 6-byte. The backspace in front of or at the back of the string is invalid. There can be backspace in the middle. The string includes the valid character, letter, number, underline, subtraction sign, and dot.

- The default user amount is 64 and the default group amount is 20. System account adopts two-level management: group and user.
- For group or user management, there are two levels: admin and user.
- The user name and group name can consist of eight bytes. One name can only be used once. There are three default users: admin/888888 and hidden user "default".
- Hidden user "default" is for system interior use only and can not be deleted. When there is no login user, hidden user "default" automatically login. You can set some rights such as monitor for this user so that you can view some channel view without login.
- One user should belong to one group. User right can not exceed group right.
- About reusable function: this function allows multiple users use the same account to login.
- About user account and MAC. When you add a new user, you can input the MAC address of current user. Only the user of the same MAC address can access the device remotely.(MAC address is for the device of the same LAN.) If you leave MAC address item in blank when you add a new user, the user of any MAC address can access the device remotely. You can set or change MAC address when you add or modify a user. The MAC address function is also valid for PSS login. Please note current function does not support IPV6.

After all the setups please click save button, system goes back to the previous menu.



Figure 4-187

4.11.5.8.1 Add User

Click modify user button *C* in Figure 4-187, the interface is shown as in Figure 4-188.

Please input the user name, password, select the group it belongs to from the dropdown list.

Then you can check the corresponding rights for current user.

For convenient user management, usually we recommend the general user right is lower than the admin account.

- Username: admin. Password: admin. (administrator, local and network)
- Username: 888888. Password: 888888. (administrator, local only)
- **Username**: default. **Password**: default (hidden user). Hidden user "default" is for system interior use only and can not be deleted. When there is no login user, hidden user "default" automatically login. You can set some rights such as monitor for this user so that you can view some channels without login.

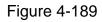
User Name (Add User Confirm Pat	ssword (
Memo:	Imin 🕞) User MAC	
System	Playback	Monitor	
	JNT 💟 SYSTI	EM 🕅 DISCOP	NNECT USER 🖌 DEFAULT&UPGRADE
🖸 PTZ			AL CONTROL 🗹 BACKUP

Figure 4-188

When you create a new user, you can input the corresponding MAC address of current user. If you leave this item in blank, any MAC address user can share this user account to login. Please note system needs to check the validity of MAC. Only the 12-digit 0-f format address can pass the validity verification. System only saves small character even you input capitalized one. You can see the corresponding prompt if there is any illegal input.

Click the Set button after the period, you can set valid period to use current account. See Figure 4-189.





Click Set button, you can set six periods in one day. See Figure 4-190. Check the box after the period, you can enable current setup.

			Period
Current D	ate: Sunday		
Period 1		- 24 00	
Period 2	00 : 00	- 24 00	
Period 3	00:00	- 24 00)	
Period 4	(00 : 00)	- 24 : 00	
Period 5	00:00	- 24:00	
Period 6	00:00	- 24 00)	
Сору	Tana a din		
			ок

Figure 4-190

4.11.5.8.2 Modify user

Click / you can go to the following interface to change user information. See Figure 4-191.

For admin, 888888, and default (hidden user), you can not change period setup.

	Mc	dify User
User Name (def. Modify Password) Old Password (New Password) Confirm Password (User MAC User Name Group user
Authority	Playback Monitor	
All		
PTZ		
	CLEAR LOG	SHUTDOWN
		Save Cancel

Figure 4-191

4.11.5.8.3 Change Password

In Figure 4-191, check the Modify password box, you can change password. Please input old password, and then input new password twice to confirm.

The password can contain 32-byte and the space at the begin or at the end of the password are null. It can contain in the middle of the password. For the user of account right, it can change the password of other users.

4.11.5.8.4 Add/Modify Group

In Figure 4-187, click Group button, you can see the following interface. See Figure 4-192.

CAMERA Image: Network Image: Event Storage System GENERAL User Group Secure Question DispLay VIDEO MATRIX 2 Group Name Modify Delete Memo PTZ 1 admin X administrator group 2 user X user group 2 user X user group 2 user X user group 4 Attor Maintain Holes Holes MP/EXP DEFAULT Image: User Image: User
User Group Secure Cuestion DISPLAY 2 Group Name Modify Delete Memo PTZ 1 admin X administrator group PTZ 2 user X user group ATM/POS VOICE VOICE VOICE VOICE ACCOUNT AUTO MAINTAIN Indicate the second sec
PTZ 1 admin X administrator group ATM/POS 2 user X user group VOICE 4 4 4 4 ACCOUNT 4 4 4 4 AUTO MAINTAIN 4 4 4 4 IMP/EXP 4 4 4 4
UPGRADE (Add Group)

Figure 4-192

Click add group button in Figure 4-192 , the interface is shown as below. See Figure 4-193.

Here you can input group name and then input some memo information if necessary. There are total 98 rights such as control panel, shut down, real-time monitor, playback, record, record file backup, PTZ, user account, system information view, alarm input/output setup, system setup, log view, clear log, upgrade system, control device and etc.

Group Name 📻		dd Group
Memo Carlon Authority System	Playback Monitor	
AI ACCOUNT PTZ COLOR CAMERA	SYSTEM	DISCONNECT USER DEFAULTAUPGRADE MANUAL CONTROL BACKUP EVENT NETWORK SHUTDOWN
_	_	Save Cancel

Figure 4-193

4.11.5.8.5 Security Question

The security question is shown as below. See Figure 4-194. Here you can change security questions.

		SETT	ING	
CAMERA	💏 NETWORK	EVENT	STORAGE	SYSTEM
GENERAL DISPLAY	User	Group	Secure Question	
VIDEO MATRIX	Please set a sec	unity question so I	hat you can find the passw	ord of (admin) again.
PTZ ATM/POS	Question 1 (Wh	at's your favorite j	pet?	
	Answer 🤇			
AUTO MAINTAIN	Question 2 (Wh	at's your first car i	model?	Ð
DEFAULT	Answer			
UPGRADE				
				Set Delete
-				

Figure 4-194

4.11.5.9 Auto Maintain

Here you can set auto-reboot time and auto-delete old files setup. You can set to delete the files for the specified days. See Figure 4-195.

You can select proper setup from dropdown list.

After all the setups please click save button, system goes back to the previous menu.

		SETTING		
CAMERA	📻 NETWORK	EVENT		SYSTEM
GENERAL DISPLAY VIDEO MATRIX PTZ	Auto-Delete Old	l Files) Day(s) Ago	
ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Customized	• (22	∑ bay(s) ngu	
			Save	Cancel Apply

Figure 4-195

4.11.5.10 Config Backup

The configuration file backup interface is shown as below. See Figure 4-196. This function allows you to import/export system configuration. You can use this function when there are several devices need the same setup.

- Export: Please connect the peripheral device first and then go to the following interface. Click Export button, you can see there is a corresponding "Config_Time" folder. Double click the folder, you can view some backup files.
- Import: Here you can import the configuration files from the peripheral device to current device. You need to select a folder first. You can see a dialogue box asking you to select a folder if you are selecting a file. System pops up a dialogue box if there is no configuration file under current folder. After successfully import, system needs to reboot to activate new setup.
- Format: Click Format button, system pops up a dialogue box for you to confirm current operation. System begins format process after you click the OK button.

Note:

- System can not open config backup interface again if there is backup operation in the process.
- System refreshes device when you go to the config backup every time and set current directory as the root directory of the peripheral device.
- If you go to the configuration backup interface first and then insert the peripheral device, please click Refresh button to view the newly added device.

		SETTING				
CAMERA	👼 NETWORK	EVENT	STORAGE	SYST	EM	
GENERAL DISPLAY VIDEO MATRIX PTZ	Device Name Total Space Address	(sdc1(USB DISK) • (14.43 GB	Refresh Free Space	(4.67 GB		
ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Name English	(Format) (Import	Export	Size Type Folder	Delete X	
	_	_	_	_		

Figure 4-196

4.11.5.11 Default

Click default icon, system pops up a dialogue box. You can highlight **III** to restore default factory setup. See Figure 4-197.

- Camera
- Network
- Event
- Storage
- System

Please highlight icon 📕 to select the corresponding function.

Click factory default button, you can restore factory default setup.

After all the setups please click save button, system goes back to the previous menu.

Warning!

System menu color, language, time display mode, video format, IP address, user account will not maintain previous setup after default operation!

	_	-	SETTING			
CAMERA		1	EVENT		TORAGE	SYSTEM
GENERAL DISPLAY VIDEO MATRIX PTZ ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Please select : Select All CAMERA EVENT SYSTEM		ntries that you wa NETWORK STORAGE	ent to de	tault.	Cancel Apply

Figure 4-197

4.11.5.12 Update

Here is for you to view hardware features, software version, built date, release SN information and etc. You can also update system here. See Figure 4-198.

• Start: Please insert the USB device that have the update file to the device and then click the Start button to begin the update.

Important

Please make sure the upgrade file name shall be update.bin.

	SETTIN	lg 🔰	
CAMERA	To EVENT	STORAGE	SYSTEM
GENERAL DISPLAY VIDEO MATRIX PTZ ATM/POS VOICE ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE		please insert USB upgrad	le disk then press the start grade!
_	_		

Figure 4-198

5 WEB OPERATION

Slightly difference may be found in the interface due to different series.

5.1 Network Connection

Before web client operation, please check the following items:

- Network connection is right
- DVR and PC network setup is right. Please refer to network setup(main menu->Setting->Network)
- Use order ping ***.***.***(* DVR IP address) to check connection is OK or not. Usually the return TTL value should be less than 255.
- Current series product supports various browsers such as Safari, fire fox browser, Google browser. Device supports multiple-channel monitor, PTZ control, DVR parameter setup on the Apple PC.

5.2 Login

Open IE and input DVR address in the address column. For example, if your DVR IP is 10.10.3.16, then please input http:// 10.10.3.16 in IE address column.

System pops up warning information to ask you whether install control or not. Please click Install button. See Figure 5-1.

	stall controls	
-		
Install	Cancel	

Figure 5-1

After installation, the interface is shown as below. See Figure 5-2.

Please input your user name and password.

Default factory name is admin and password is admin.

Note: For security reasons, please modify your password after you first login.





System pops up the following dialogue box for you to change default administrator password. See Figure 5-3.

ADMIN SECURITY					
User Name	admin				
Old Password					
New Password					
	Low Middle High				
Confirm Password					
* The password can contain * For your account security, (s), and special character(s * For your device safety, the name in case there is illega	password shall not be the same as the user				

Figure 5-3

For you own safety, please change the default password after you first login.

Click Cancel button, system pops up the following dialogue box to confirm the exit. See Figure 5-4.

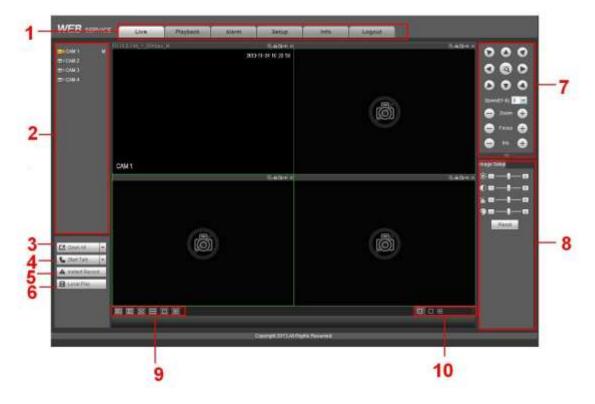
Check the box here, system will not pop up the change password interface the next time.

Message				
For your device safety, please change admin default password! Are you sure to quit changing now?				
Do not prompt admin to change its default password.				
Save Cancel				

Figure 5-4

5.3 LAN Mode

For the LAN mode, after you logged in, you can see the main window. See Figure 5-5.





This main window can be divided into the following sections.

- Section 1: there are five function buttons: Live (chapter 5.4), setup (chapter 5.8), search (chapter 5.10), alarm (chapter 5.11), face search (chapter 5.11)and logout (chapter 5.13).
- Section 2: There are channel number and one button: Start all. Start all button is to enable/disable all-channel real-time monitor. Click it the button becomes yellow. See Figure 5-6.



Figure 5-6

Please refer to Figure 5-7 for main stream and extra stream switch information.

E@CAM 1	M
Main Stream	
Sub Stream	
CAM 2	

Figure 5-7

• Section 3: Start dialogue button.

You can click this button to enable audio talk. Click [\checkmark] to select bidirectional talk mode. There are four options: DEFAULT, G711a, G711u and PCM. After you enable the bidirectional talk, the Start talk button becomes End Talk button and it becomes yellow. See Figure 5-8.

Please note, if audio input port from the device to the client-end is using the first channel audio input port. During the bidirectional talk process, system will not encode the audio data from the 1-channel.





 Section 4: Instant record button. Click it, the button becomes yellow and system begins manual record. See Figure 5-9. Click it again, system restores previous record mode..



Figure 5-9

• Section 5: Local play button.

The Web can playback the saved (Extension name is dav) files in the PC-end. Click local play button, system pops up the following interface for you to select local play file. See Figure 5-10.

Open			?
Look in: 🔯 Desktor	8	* 📾 🗕 도	
My Documents My Computer My Network Places Access IBM Access IBM AOL Double-Click to BarthLink Internet:	کی کے 10 Start 10 10 10 10 10 10 10 10 10 10 10 10 10	orton AntiVirus hinkVantage Technologies Vireless Manager 008_04_08 CF09042008_00000	Secu Secu
K	.101		Open
	d files (*.*)		Cancel

Figure 5-10

- Section 6: From the left to the right ,you can see video quality/fluency/ full screen/1-window/4-window/6-window/8-window/9-window/13-window/16-window/20window/25-window/36-window.. You can set video fluency and real-time feature priority.
- Section 7: PTZ operation panel. Please refer to chapter 5.5 for detailed information.
- Section 8: Image setup and alarm setup. Please refer to chapter 5.6 for detailed information.
- Section 9: From left to right, it is to set video quality, video latency, full screen, 1-window, 4-window.
- Section 10: Zero-channel encoding. This function allows you to view several-channel in one window. It supports 1/4-channel mode. Please go to chapter 4.11.5.2.4 to enable zero-channel encoding function first.

5.4 Real-time Monitor

In section 2, left click the channel name you want to view, you can see the corresponding video in current window.

On the top left corner, you can view device IP, channel number, network monitor bit stream. See Figure 5-11.

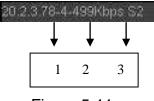


Figure 5-11

On the top right corner, there are six unction buttons. See Figure 5-12.

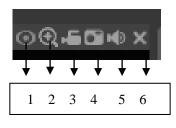


Figure 5-12

- 1: Fisheye: Click to adjust fisheye installation mode and display mode. See Figure 5-13. Please note this function is for some series only.
- 2: Digital zoom: Click this button and then left drag the mouse in the zone to zoom in. right click mouse system restores original status.
- 3: Local record. When you click local record button, the system begins recording and this button becomes highlighted. You can go to system folder RecordDownload to view the recorded file.
- 4: Snapshot picture. You can snapshot important video. All images are memorized in system client folder PictureDownload (default).
- 5: Audio :Turn on or off audio.(It has no relationship with system audio setup)
- 6: Close video.

5.4.1 Fisheye de-warp

Fisheye de-warp interface is shown as in Figure 5-13.



Figure 5-13

There are three installation modes: ceiling mount/wall mount/ground mount. The different installations modes have different de-warp modes.

Please refer to the following sheet for detailed information.

Installation modes	lcon	Note
(Ceiling mount)	0	360°panorama original view

	↔	1 de-warp window+1 panorama stretching					
(Ground mount)	$\stackrel{\longleftrightarrow}{\longleftrightarrow}$	2 panorama stretching view					
	C	1 360° panorama view+3 de-warp windows					
		1 360°panorama view+4 de-warp windows					
	\downarrow	6 de-warp windows+1 panorama stretching					
	Q	1 360° panorama view+8 de-warp windows					
	0	360°panorama original view					
(Wall mount)	\times	Panorama stretching					
	X	1 panorama unfolding view+3 de-warp windows					
	$\times +$	1 panorama unfolding view +4 de warp windows					
	×	1 panorama unfolding view +8 de warp windows					

In Figure 5-14, there are one ceiling mount 360° panorama view + four de-warp windows.

You can adjust the color pane on the left pane or use your mouse to change the position of the small images on the right pane to realize fish eye de-warp. Please use mouse to zoom in/out, move, rotate and etc to adjust.



Figure 5-14

5.5 PTZ

Before PTZ operation, please make sure you have properly set PTZ protocol. (Please refer to chapter 5.8.5.5).

There are eight direction keys. In the middle of the eight direction keys, there is a 3D intelligent positioning key.

Click 3D intelligent positioning key, system goes back to the single screen mode. Drag the mouse in the screen to adjust section size. It can realize PTZ automatically.

Please refer to the following sheet for PTZ setup information.

Parameter	Function
Scan	Select Scan from the dropdown list.
	Click Set button, you can set scan left and right limit.
	• Use direction buttons to move the camera to you desired location
	and then click left limit button. Then move the camera again and
	then click right limit button to set a right limit.
Preset	Select Preset from the dropdown list.
	• Turn the camera to the corresponding position and Input the
	preset value. Click Add button to add a preset.
Tour	Select Tour from the dropdown list.
	• Input preset value in the column. Click Add preset button, you
	have added one preset in the tour.
	• Repeat the above procedures you can add more presets in one
	tour.
	• Or you can click delete preset button to remove one preset from
	the tour.
Pattern	Select Pattern from the dropdown list.
	• You can input pattern value and then click Start button to begin
	PTZ movement such as zoom, focus, iris, direction and etc. Then
	you can click Add button to set one pattern.
Aux	Please input the corresponding aux value here.
	• You can select one option and then click AUX on or AUX off
	button.
Light and wiper	You can turn on or turn off the light/wiper.

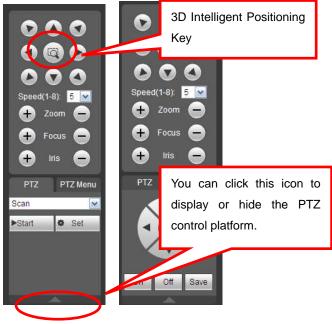


Figure 5-15

5.6 Image/Relay-out

Select one monitor channel video and then click Image button in section 8, the interface is shown as Figure 5-16.

5.6.1 Image

Here you can adjust its brightness, contrast, hue and saturation. (Current channel border becomes green).

Or you can click Reset button to restore system default setup.

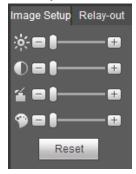


Figure 5-16

5.6.2 Relay output

Here you can enable or disable the alarm signal of the corresponding port. See Figure 5-17.



Figure 5-17

5.7 WAN Login

In WAN mode, after you logged in, the interface is shown as below. See Figure 5-18.



Figure 5-18

Please refer to the following contents for LAN and WAN login difference.

1) In the WAN mode, system opens the main stream of the first channel to monitor by default. The open/close button on the left pane is null.

2) You can select different channels and different monitor modes at the bottom of the interface.

Important

The window display mode and the channel number are by default. For example, for the 16-channel, the max window split mode is 16.

3) Multiple-channel monitor, system adopts extra stream to monitor by default. Double click one channel, system switches to single channel and system uses main stream to monitor. You can view there are two icons at the left top corner of the channel number for you reference. M stands for main stream. S stands for sub stream (extra stream).

4) If you login via the WAN mode, system does not support alarm activation to open the video function in the Alarm setup interface.

Important

• For multiple-channel monitor mode, system adopts extra stream to monitor by default. You can not modify manually. All channels are trying to synchronize. Please note the synchronization effect still depends on your network environments. • For bandwidth consideration, system can not support monitor and playback at the same time. System auto closes monitor or playback interface when you are searching setup in the configuration interface. It is to enhance search speed.

5.8 Setup

5.8.1 Camera

5.8.1.1 Remote Device (For digital channel only) Remote device interface is shown as below. See Figure 5-19.

140	2112		iF Ad	diesą.	Part		Device ID	Manufactu		Tipe
٩.	13		10.15	5.87	10188			Onvit		
2			10.11	5.88	801/1			Onvill		
3			10 15	6 169	8083			0out.		
			10.18	8,218	81			Crivit		
-11-			10.18	6.247	80			Cinvit		
	0		10 14	8.257	30			\$net		
Τ.	0		10.12	5.85	0093			Dirivit.		
8	D		18.15	18.85	8080			ONT		
2,418	Starte	Modify	Dates	Citation .	F Athens	Part	Desize 10	Remde Chamie	Grune Flor 1	tere 💌
-1.	17	2	0	-	10.15.0.00	37777	Y2030W20700016	1	Privato	(PC+FVIS10)
		3			10.15.5.218	31771	YECH WORKOOS43	1	Private	PC-HDBmm100
	19				10.15.5.169	40009	P291K0x038000001	1	Privale	SD6483+4N
1	19 21	1	0	15						ED-DATA HI
		0	0		10.155.160	40009	FZR1KN00600821	1	Private	SPECIE AND

Figure 5-19

Manual Add	×
Channel	18
Manufacturer	Private 💌
IP Address	192.168.0.0
TCP Port	37777 (1~65535)
User Name	admin
Password	•••••
Remote Channel No.	1
Decode Buffer	280 ms (80~480)
	Save Cancel

Figure 5-20

Please refer to the following sheet for log parameter information.

Parameter	Function
Device search	Click Device search button, you can view the searched device information on the list. It includes device IP address, port, device name, manufacturer and type.
Add	Select a device in the list and then click Add button, system can connect the device automatically and add it to the Added device list. Or you can double click one item in the list to add a device.
Modify	Click or any device in the Added device list, you can change the corresponding channel setup.
Delete	Click ² , you can delete the remote connection of the corresponding channel.
Connection status	 Connection succeeded. Connection failed.
Delete	Select a device in the Added device list and then click Delete button, system can disconnect the device and remove it from the Added device list.
Manual Add	 Click it, the interface is shown as in Figure 5-20. Here you can add network camera manually. You can select a channel from the dropdown list (Here only shows disconnection channel.) Note: System supports manufactures such as Panasonic, Sony, Dynacolor, Samsung, AXIS, Arecont, Dahua and Onvif standard protocol. If you do not input IP address here. System uses default IP 192.168.0.0 and system does not connect to this IP. Can not add two devices at the same time. Click OK button here, system only connect to the corresponding device of current channel.

5.8.1.2 Conditions

Here you can view device property information. The setups become valid immediately after you set.

The analog channel is shown as in Figure 5-21.

Conditions						
	2016-08-24 00 51 25	Channel 1	1		Cable Type COAXIAL	
		Period	00 00 - 24	00	00 : 00 - 24 : 00	
		Saturation	×0-	- 50		
		Brightness	*-0-	50		
		Contrast	0-0-	50		
		Hue	9-0-	50		
		Sharpness	M ()	-1	-01	
		Color Mode	Standard	-	Standard 💌	
		Image Enhance	-0	30		
		NR.		50		
CAM 1						
Customized Defau	d Cancel					

Figure 5-21

The digital channel is shown as in Figure 5-22.

	201440 ar 200 - 11	Channel 4				
11 A		antigutation Files Day				
/					Baturation 🐔 —	- 35
and the state of the second	Contraction of the	O roniti	On 💿	Off	Brightness 200-	-50
	And the second se				Contrast 0 -	- 50
	AT THE R. L.				Ctroma 🎓	 - 50
	All Land	File File tag		~		
N. N	1 1 C	BLC Mode OF		~		
		Profile Auto				
6		Day & Night Auto				
Default Save	Retreat					
22100 H. 200						

Figure 5-22

Please refer to the following sheet for detailed information.

Parameter	Function
Channel	Please select a channel from the dropdown list.
Cable type	 It is to set the cable type of the corresponding analog channel. When the setup here matches the actual cable you are using, you can get the best image effect. The default setup is COAXIAL. Please note this function is for some series product only. COAXIAL: When the corresponding channel is using coaxial cable, please select COAXIAL. UTP: When the corresponding channel is using UTP cable, please select UTP. Usually we recommend 100hm UTP cable.
Period	It divides one day (24 hours) to two periods. You can set

	different hue, brightness, and contrast for different periods.
Hue	It is to adjust monitor video brightness and darkness level. The default value is 50.
	The bigger the value is, the large the contrast between the bright and dark section is and vice versa.
Brightness	It is to adjust monitor window brightness. The default value is 50. The larger the number is , the bright the video is. When you input the value here, the bright section and the dark section of the video will be adjusted accordingly. You can use this function when the whole video is too dark or too bright. Please note the video may become hazy if the value is too high. The value ranges from 0 to 100. The recommended value ranges from 40 to 60.
Contrast	It is to adjust monitor window contrast. The value ranges from 0 to 100. The default value is 50. The larger the number is, the higher the contrast is. You can use this function when the whole video bright is OK but the contrast is not proper. Please note the video may become hazy if the value is too low. If this value is too high, the dark section may lack brightness while the bright section may over exposure .The recommended value ranges from 40 to 60.
Saturation	It is to adjust monitor window saturation. The value ranges from 0 to 100. The default value is 50. The larger the number is, the strong the color is. This value has no effect on the general brightness of the whole video. The video color may become too strong if the value is too high. For the grey part of the video, the distortion may occur if the white balance is not accurate. Please note the video may not be attractive if the value is too low. The recommended value ranges from 40 to 60.
Color mode	It includes several modes such as standard, color. You can select corresponding color mode here, you can see hue, brightness, and contrast and etc will adjust accordingly.

5.8.1.3 Encode

5.8.1.3.1 Encode

The encode interface is shown as below. See Figure 5-23.

Encode	Snapshot	Overlay	Path		
-	-	7	-		
Channel	1				
Main Stream			Sub Stream		
Code-Stream Type	Regular]	✓ Video Enable		
Compression	H.264H]	Compression	H.264H 💌	
Smart Codec	Stop 💌]			
Resolution	1920*1080(1080P)]	Resolution	352*288(CIF)	
Frame Rate(FPS)	15 💌]	Frame Rate(FPS)	15 💌	
Bit Rate Type	CBR]	Bit Rate Type	CBR	
Bit Rate	2048 💌	Kb/S	Bit Rate	320 • Kb/	s
Reference Bit Rate	640-6144Kb/S		Reference Bit Rate	32-640Kb/S	
I Frame Interval	1sec.]	I Frame Interval	1sec. 💌	
Audio Enable			Audio Enable		
		1			
Audio Format	G711a 🔹]	Audio Format	G711a 💌	
Audio Source	LOCAL]	Audio Source	LOCAL	
Watermark Enable			Watermark String		
	Сору	Save	Refresh	Default	

Figure 5-23

Please refer to the following sheet for detailed information.

Parameter	Function			
Channel	Please select a channel from the dropdown list.			
SVC	SVC is so called scaled video coding. Check the box to enable this function. During the network transmission process, system discards unimportant frames when the bandwidth is not sufficient or the decode capability is low. It is to guarantee video quality and transmission fluency.			
Video enable	Check the box here to enable extra stream video. This item is enabled by default.			
Code stream type	It includes main stream, motion stream and alarm stream. You can select different encode frame rates form different recorded events.			
	System supports active control frame function (ACF). It allows you to record in different frame rates.			
	For example, you can use high frame rate to record important events, record scheduled event in lower frame rate and it allows you to set different frame rates for motion detection record and alarm record.			

Smart Codec	Select Start from the dropdown list to enable smart codec function. The DVR can auto reduce the video bit stream of the non-important surveillance object to save the storage space.
Compression	 Compression: System supports H.264H, H.264, H.264B, and MJPEG. H.264H: It is the High Profile compression algorithm. It has the high encode compression rate. It can achieve high quality encode at low bit stream. Usually we recommend this type. H.264 is the general compression algorithm. H.264B is the Baseline algorithm. Its compression rate is low. For the same video quality, it has high bit stream requirements.
Resolution	For analog channel, system supports various resolutions, you can select from the dropdown list. Please note the option may vary due to different series. For digital channel, the resolution here refers to the capability of the network camera.
Frame Rate	PAL: 1~25f/s; NTSC: 1~30f/s.
Bit Rate	 Main stream: You can set bit rate here to change video quality. The large the bit rate is , the better the quality is. Please refer to recommend bit rate for the detailed information. Extra stream: In CBR, the bit rate here is the max value. In dynamic video, system needs to low frame rate or video quality to guarantee the value. The value is null in VBR mode.
Reference bit rate	Recommended bit rate value according to the resolution and frame rate you have set.
I Frame	Here you can set the P frame amount between two I frames. The value ranges from 1 to 150. Default value is 50. Recommended value is frame rate *2.
Audio source	Please select from the dropdown list. There are two options: Normal/HDCVI. In the normal mode, the audio signal comes from the Audio In. In the HDCVI mode, the audio signal comes from the coaxial cable of the camera.
Watermark enable	This function allows you to verify the video is tampered or not. Here you can select watermark bit stream, watermark mode and watermark character. Default character is DigitalCCTV. The max length is 85-digit. The character can only include number, character and underline.

5.8.1.3.2 Snapshot

The snapshot interface is shown as in Figure 5-24.

Encode	Snapshot	Overlay	Path	
Observat				
Channel	1	•		
Mode	Timing	•		
Image Size	352*288(CIF)	•		
Quality	4	•		
Snapshot Frequency	y 1 SPL	•		
	Сору	Save Ref	iresh Default	

Figure 5-24

Please refer to the following sheet for detailed information.

Parameter	Function
Snapshot type	 There are two modes: Regular (schedule) and Trigger. Regular snapshot is valid during the specified period you set. Trigger snapshot only is valid when motion detect alarm, tampering alarm or local activation alarm occurs.
Image size	It is the same with the resolution of the main stream.
Quality	It is to set the image quality. There are six levels.
Interval	It is to set snapshot frequency. The value ranges from 1s to 7s. Or you can set customized value. The max setup is 3600s/picture.
Сору	Click it; you can copy current channel setup to other channel(s).

5.8.1.3.3 Video Overlay

The video overlay interface is shown as in Figure 5-25.

Encode	Scapshot	Overlay	Path
	2013-	10-24 17 00 05	Cover-Area Freework III Nonitor
			Channel Dagtay Setup
CAM 1	aine R	etesh Default	
	A second se		

Figure 5-25

Please refer to the following sheet for detailed information.

Parameter	Function
Cover-area	Check Preview or Monitor first.
	Click Set button, you can privacy mask the specified video in the preview or monitor video.
	System max supports 4 privacy mask zones.
Time Title	You can enable this function so that system overlays time information in video window.
	You can use the mouse to drag the time title position.
	You can view time title on the live video of the WEB or the playback video.
Channel Title	You can enable this function so that system overlays channel information in video window.
	You can use the mouse to drag the channel title position.
	You can view channel title on the live video of the WEB or the playback video.

5.8.1.3.4 Path

The storage path interface is shown as in Figure 5-26.

Here you can set snap image saved path (I in the preview interface) and the record

storage path (in the preview interface). The default setup is C:\PictureDownload and C:\RecordDownload.

Please click the Save button to save current setup.

Encode	Snapshot	Quenay	Path
Snapshot Path	C. PictureDownload		Browse
Record Path	C RecordDownload		Erawse
	Save	Default.	

Figure 5-26

5.8.1.4 Channel Name

Here you can set channel name. See Figure 5-27.

Please note this function is for analog channel only. The digital channel name here is read-only.

Camera Name				
Channel 1	CAM 1	Channel 2	CAM 2	
Channel 3	CAM 3	Channel 4	CAM 4	
Channel 5	CAM 5	Channel 6	CAM 6	
Channel 7	CAM 7	Channel 8	CAM 8	
Channel 9	CAM 9	Channel 10	CAM 10	
Channel 11	CAM 11	Channel 12	CAM 12	
Channel 13	CAM 13	Channel 14	CAM 14	
Channel 15	CAM 15	Channel 16	CAM 1	
		,,, _,		
	Save	Refresh D	Default	

Figure 5-27

5.8.1.5 Channel Type

It is to set channel type.

- For analog channel (CVBS signal or HDCVI HD signal), you can select coaxial cable or UTP cable. Please check first and then save setup. There is no need to reboot.
- You can switch analog channel type to digital channel type if you want to connect to network camera. The IP channel shall start from the last channel. System needs to reboot to activate current setup.

Note

If there is no connected channel, the channel type here just displays previous connection record. System supports self-adaptive after camera connection.

The interface is shown as in Figure 5-28 (XVR series product) and Figure 5-29 (HCVR series product).

Λ_{m}

Important notice about XVR series product:

- Nowadays, there are mainly two analog signal types on today market: analog standard definition (CVBS) and analog HD (CVI, AHD or Other). For XVR series product, each channel supports all types of signal connection (analog signal/IP signal). For analog signal connection, the default setup is AUTO, that is to say, no matter what analog signal (CVBS, CVI, AHD or other analog HD signal) connected; the XVR can automatically recognize the signal and display the proper image. There is no need to set manually.
- If the auto recognition error occurred, XVR series product supports manual setup too. The manual setup featuring high recognition speed and usually there is no error. For example, you can set channel 1 to connect to CVI camera, channel 2 to connect to AHD camera, channel 3 to connect to CVBS camera.

Channel –		0.4	Analog	0.100	IP 📃
	AUTO 🗖	CVI 🔲	AHD 🗖	CVBS	
1	1				
2	\checkmark				
3	\checkmark				
4	V				
5	1				
6	V				
7	\checkmark				
8					
9	1				
10					
11					
12					
13	2				
14					
15					
16					
			channel. IP channel se		

Figure 5-28

Channel	COAXIAL 🗖	UTP 🗖	IP 📃	
1	\checkmark			
2				
3	\checkmark			
4				
5	\checkmark			
6				
7	\checkmark			
8	V			
9	\checkmark			
10	V			
11	\checkmark			
12				
13	\checkmark			
14	V			
15			\checkmark	
16				

Figure 5-29

Important

Add/cancel IP CAM function is for some series product only.

• Add IP CAM: Click it; you can add corresponding X IP channels. Here X refers to the product channel amount. Please refer to chapter 1.3 Specifications for IP channel amount information. System needs to restart to activate new setup.

For example, there is a 4-channel analog device, after the A/D switch, it can max supports 4 analog channels and 4 IP channels. Once it has become the 3+1 mode (3

analog channels+1 IP channel), you click button, system becomes 3+5 mode (3 analog channels+5 IP channel).

• Cancel IP CAM: Click it, you can cancel IP channel. System needs to restart to restore original status.

5.8.2 Network

5.8.2.1 TCP/IP

TCP/IP		
Ethernet Port	Ethernet Port1	•
IP Version	IPv4	
MAC Address	90,02,a9,	da . 9c . 7
Mode	STATIC ○	DHCP
IP Address	10 . 15 .	6 . 145
Subnet Mask	255 . 255 .	0.0
Default Gateway	10 . 15 .	0.1
Preferred DNS	10 . 1 .	2 . 80
Alternate DNS	10 . 1 .	2 . 81
мти	1500	
	LAN Download	
	EAN DOWINGad	
	Save	R

The single-Ethernet port interface is shown as in Figure 5-30.

Figure 5-30

The dual-Ethernet port interface is shown as in Figure 5-31.

терле				
Network Mode	Multi-	address		Y
Detaut Card	Ether	et Card	11	1
Ethermet Cand	Ether	vet Clark	11	(S)
Mode	0 ST	THE C) DHC	p
WAC Address		3 10	11.1	
MTU				
#* Version	Pi4			
₽ Address	10	15	6	252
≣ubnetMask.	255	255	0	Q.
Detault Galeway	10	15	0	1
Preferred O145	U	8	U	0
Alternate DRIS	8	8	4	4
LAN Dewoload				
		Bave		Refle
Dewoload		3ave .		Rette

Figure 5-31

Please refer to the following sheet for detailed information.

Parameter	Function		
Mode	There are two modes: static mode and the DHCP mode.		
	 The IP/submask/gateway are null when you select the DHCP mode to auto search the IP. 		
	 If you select the static mode, you need to set the IP/submask/gateway manually. 		
	 If you select the DHCP mode, you can view the IP/submask/gateway from the DHCP. 		
	 If you switch from the DHCP mode to the static mode, you need to reset the IP parameters. 		
	 Besides, IP/submask/gateway and DHCP are read-only when the PPPoE dial is OK. 		
Mac Address	It is to display host Mac address.		
IP Version	It is to select IP version. IPV4 or IPV6.		
	You can access the IP address of these two versions.		
IP Address	Please use the keyboard to input the corresponding number to modify the IP address and then set the corresponding subnet mask and the default gateway.		
Preferred DNS	DNS IP address.		
Alternate DNS	Alternate DNS IP address.		
	es of IPv6 version, default gateway, preferred DNS and e input value shall be 128-digit. It shall not be left in blank.		
LAN load	System can process the downloaded data first if you enable this function. The download speed is 1.5X or 2.0X of the normal speed.		

5.8.2.2 Connection

The connection interface is shown as in Figure 5-32.

Connection				
Max Connection	128	(0~128)		
TCP Port	37777	(200~65535)		
UDP Port	37778	(200~65535)		
HTTP Port	80	(1~65535)		
HTTPS Port	443	(128~65535)		
RTSP Port	554	(128~65535)		
RTSP Format	rtsp:// <username>:<password>@<ip address="">:<port>/cam/realmonitor?channel=1&subtype=0</port></ip></password></username>			
	channel: Channel, 1-32; sub	type: Code-Stream Type, Main Stream 0, Sub Stream 1.		
	Save	Jresh Default		

Figure 5-32

Please refer to the following sheet for detailed information.

Parameter	Function
Max connection	It is the max Web connection for the same device. The value ranges from 1 to 120. The default setup is 120.
TCP port	The default value is 37777. You can input the actual port number if necessary.
UDP port	The default value is 37778. You can input the actual port number if necessary.
HTTP port	The default value is 80. You can input the actual port number if necessary.
HTTPS	The default value is 443. You can input the actual port number if necessary.
RTSP port	The default value is 554.

5.8.2.3 WIFI

Please note this function is for the device of WIFI module.

The WIFI interface is shown as in Figure 5-33.

	530	Carried made	Autorite Mode	Signal Intertaits
WFI Working Into				
Current Histapot				
F Address				
Subort Hask				
Default Gateway				

Figure 5-33

Please check the box to enable WIFI function and then click the Search SSID button. Now you can view all the wireless network information in the following list. Double click a name to connect to it. Click Refresh button, you can view latest connection status.

5.8.2.4 3G

5.8.2.4.1 CDMA/GPRS

The CDMA/GPRS interface is shown as in Figure 5-34.

CDMA/GPRS Setup	Mobile Setup	
WLAN TIDE	No Service	F Erable
APN		T Duarsale Advate
aum+	PAP	Ti in the second se
Dial No.		
UserName		
Password		
Pusa Interval		Betand
WLAR Status		
JP Azidress		
Wireless Signal	- Beach	
	Ears	Rafresh Collaut
	L	

Figure 5-34

Please refer to the following sheet for detailed information.

Parameter	Function
WLAN type	Here you can select 3G network type to distinguish the 3G module from different ISP. The types include WCDMA, CDMA1x and etc.
APN/Dial No.	Here is the important parameter of PPP.
Authorization	It includes PAP,CHAP,NO_AUTH.
Pulse interval	It is to set time to end 3G connection after you close extra stream monitor. For example, if you input 60 here, system ends 3G connection after you close extra stream monitor 60 seconds.
you close the	nterval is 0, then system does not end 3G connection after e extra stream monitor. Il here is for extra stream only. This item is null if you are tream to monitor.

5.8.2.4.2 Mobile

The mobile setup interface is shown as in Figure 5-35.

Here you can activate or turn off the 3G connected phone or mobile phone, or the phone you set to get alarm message.

Senz SMS		SMS Adivate] Tel Activate		
Reader	+	Sender		Caber	+	
	1-1		1-1		-	
Title DVR Messag						
Letter Letter House						
	Save	Refinsh	Detault.			

Figure 5-35

5.8.2.5 PPPoE

The PPPoE interface is shown as in Figure 5-36.

Input the PPPoE user name and password you get from the IPS (internet service provider) and enable PPPoE function. Please save current setup and then reboot the device to get the setup activated.

Device connects to the internet via PPPoE after reboot. You can get the IP address in the WAN from the IP address column.

Please note, you need to use previous IP address in the LAN to login the device. Please go to the IP address item to via the device current device information. You can access the client-end via this new address.

PPPoE	
Enable	
User Name	
Password	
IP Address	0,0,0,0
	0.0.0
	Sawa Retreat Default

Figure 5-36

5.8.2.6 DDNS

The DDNS interface is shown as in Figure 5-37.

The DDNS is to set to connect the various servers so that you can access the system via the server. Please go to the corresponding service website to apply a domain name and then access the system via the domain. It works even your IP address has changed. Please select DDNS from the dropdown list (Multiple choices). Before you use this function, please make sure your purchased device support current function.

DONS		
Enaltre		
DOVER TIDE	Dahua DDNS	×
Seiver #		
Dootan Mode	() Detault () Cuntan	n Harrier
Domain Name	malless 1776	mankaben men Test
Emai	13	(Outstralifficuse input omail accheos

Figure 5-37

Please refer to the following sheet for detailed information.

Parameter	Function
Server Type	You can select DDNS protocol from the dropdown list and then enable DDNS function.
Server IP	DDNS server IP address
Server Port	DDNS server port.
Domain Name	Your self-defined domain name.
User	The user name you input to log in the server.
Password	The password you input to log in the server.
Update period	Device sends out alive signal to the server regularly. You can set interval value between the device and DDNS server here.

Dahua DDNS and Client-end Introduction

1) Background Introduction

Device IP is not fixed if you use ADSL to login the network. The DDNS function allows you to access the DVR via the registered domain name. Besides the general DDNS, the Dahua DDNS works with the device from the manufacturer so that it can add the extension function.

2) Function Introduction

The Dahua DDNS client has the same function as other DDNS client end. It realizes the bonding of the domain name and the IP address. Right now, current DDNS server is for our own devices only. You need to refresh the bonding relationship of the domain and the IP regularly. There is no user name, password or the ID registration on the server. At the same time, each device has a default domain name (Generated by MAC address) for your option. You can also use customized valid domain name (has not registered.).

3) Operation

Before you use Dahua DDNS, you need to enable this service and set proper server address, port value and domain name.

- Server address: www.dahuaddns.com
- Port number: 80
- Domain name: There are two modes: Default domain name and customized domain name.

Except default domain name registration, you can also use customized domain name (You can input your self-defined domain name.) After successful registration, you can use domain name to login installed of the device IP.

• User name: It is optional. You can input your commonly used email address.

Important

- Do not register frequently. The interval between two registrations shall be more than 60 seconds. Too many registration requests may result in server attack.
- System may take back the domain name that is idle for one year. You can get a notification email before the cancel operation if your email address setup is OK.

5.8.2.7 IP filter

The IP filter interface is shown as in Figure 5-38.

After you enabled trusted sites function, only the IP listed below can access current DVR. If you enable blocked sites function, the following listed IP addresses can not access current DVR.

IP Filter					
Enable	 Trusted Sites Blocked Site 	5			
Trusted Site	Blocked Sites				
	IP Add	ess	Edit	Delete	
					4
					6
Add]				
Save	Refresh Default				

Figure 5-38

5.8.2.8 Email

The email interface is shown as in Figure 5-39.

Email		
- Enable		
SMTP Server	123 58 178 201	
For	25	
🔄 Ananomina		
Useritame	amound (21	
Password		
Bander		
Encrypt Type	HONE	
Bubject	DVR ALERT El attachment	
Received		2
	dongquang0721@126.com	
Hebervali	130 Second (0-3600)	
🗋 Heam Enable	60 (Minuta (30-1440)	
	Email Test	
	Save Retrest Default	

Figure 5-39

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	Please check the box here to enable email function.
SMTP Server	Input server address and then enable this function.
Port	Default value is 25. You can modify it if necessary.
Anonymity	For the server supports the anonymity function. You can auto login anonymously. You do not need to input the user name. password and the sender information.
User Name	The user name of the sender email account.
Password	The password of sender email account.
Sender	Sender email address.
Authentication (Encryption mode)	You can select SSL or none.
Subject	Input email subject here.
Attachment	System can send out the email of the snapshot picture once you check the box here.
Receiver	Input receiver email address here. Max three addresses. It supports SSL, TLS email box.
Interval	The send interval ranges from 0 to 3600 seconds. 0 means there is no interval. Please note system will not send out the email immediately when the alarm occurs. When the alarm, motion detection or the abnormity event activates the email, system sends out the email according to the interval you specified here. This function is very useful when there are too many emails activated by the abnormity events, which may result in heavy load for the email server.

Parameter	Function
Health mail enable	Please check the box here to enable this function.
Update period (interval)	This function allows the system to send out the test email to check the connection is OK or not. Please check the box to enable this function and then set the corresponding interval. System can send out the email regularly as you set here.
Email test	The system will automatically sent out a email once to test the connection is OK or not .Before the email test, please save the email setup information.

5.8.2.9 FTP

The FTP interface is shown as in Figure 5-40.

It is to set FTP IP, port and etc for remote storage.

FTP			
Enable			
Berver IF	10 18 116 89	le la	
#oit	21		
UserName	dq		
Password		T ATOMONIA	
Remate Deestory			
FileLongth	65536	M.	
Image Opticed Inter	4.2	Becond	
Channai			
Westiter	Thursday		
Time Period 1	00 00 - 24 00		C Repue
Time Period 2	00 00 - 24 00	Marm 🛄 MD	Regian
	FIF.Ieal		
	Jane Be	Testi Detaut	
	1		

Figure 5-40

5.8.2.10 UPnP

It allows you to establish the mapping relationship between the LAN and the public network.

Here you can also add, modify or remove UPnP item. See Figure 5-41.

- In the Windows OS, From Start->Control Panel->Add or remove programs. Click the "Add/Remove Windows Components" and then select the "Network Services" from the Windows Components Wizard.
- Click the Details button and then check the "Internet Gateway Device Discovery and Control client" and "UPnP User Interface". Please click OK to begin installation.
- Enable UPnP from the Web. If your UPnP is enabled in the Windows OS, the DVR can auto detect it via the "My Network Places"

ALP	0 0	0 0					
VAN IP	and the second s	0 0					
Port Mappin	g List	Senica Name	Protocol	Internal Port	Edunal Pat	Monty	Deste
	2	HTTP	TOP	80	00	(2)	0
- 3	Ð	TOP	108	37777	37777	1	0
3	Ø	UDF	UDP	37778	37778	2	٠
4	E	RISP	UDF	554	554	1	
1	12	RTSP	TOP	554	554	2	•
. 8	Ð	StatP	UDP	767	787	2	0
	E	HITTES	TCP.	443	443	1	0

Figure 5-41

5.8.2.11 SNMP

The SNMP interface is shown as in Figure 5-42.

The SNMP allows the communication between the network management work station software and the proxy of the managed device. It is reserved for the 3rd party to develop.

SNMP		
🔄 Enatre		
STALEP Front	161	(0-6835)
Read Community	public	
Vinte Community	private	
Trad Address		
Trap Port	162	(0-65635)
SNMP Version	EVI EVI	
	1	Refresh Default
	L	

Figure 5-42

Please refer to the following sheet for detailed information.

Parameter	Function
SNMP Port	The listening port of the proxy program of the device. It is a UDP port not a TCP port. The value ranges from 1 to 65535. The default value is 161
Read Community	It is a string. It is a command between the manage process and the proxy process. It defined the authentication, access control and the management relationship between one proxy and one group of the managers. Please make sure the device and the proxy are the same. The read community will read all the objects the SNMP supported in the specified name. The default setup is public.
Write Community	It is a string. It is a command between the manage process and the proxy process. It defined the authentication, access control and the management relationship between one proxy

Parameter	Function
	and one group of the managers. Please make sure the device and the proxy are the same. The read community will read/write/access all the objects the SNMP supported in the specified name. The default setup is write.
Trap address	The destination address of the Trap information from the proxy program of the device.
Trap port	The destination port of the Trap information from the proxy program of the device. It is for the gateway device and the client-end PC in the LAN to exchange the information. It is a non-protocol connection port. It has no effect on the network applications. It is a UDP port not TCP port. The value ranges from 1 to 165535. The default value is 162.
SNMP version	 Check V1, system only processes the information of V1. Check V2, system only processes the information of V2.

5.8.2.12 Multicast

The multicast interface is shown as in Figure 5-43.

Multicast is a transmission mode of data packet. When there is multiple-host to receive the same data packet, multiple-cast is the best option to reduce the broad width and the CPU load. The source host can just send out one data to transit. This function also depends on the relationship of the group member and group of the outer.

Multicast	
😥 Enatile	
IF Address	239 256 42 42 (224.0.0.0-200.255.255.255)
Port	36666 (1-66600)
	Save Refeth Defaut

Figure 5-43

5.8.2.13 Auto Register

The auto register interface is shown as below. See Figure 5-44.

This function allows the device to auto register to the proxy you specified. In this way, you can use the client-end to access the DVR and etc via the proxy. Here the proxy has a switch function. In the network service, device supports the server address of IPv4 or domain.

Please follow the steps listed below to use this function.

Please set proxy server address, port, and sub-device name at the device-end. Please enable the auto register function, the device can auto register to the proxy server.

Auto Register						
 Enable 						
Server IP	0.0.0.0					
Port	8000					
Sub-device ID	0					
	Save	Refresh	Default			

Figure 5-44

5.8.2.14 Alarm Centre

The alarm center interface is shown as below. See Figure 5-45.

This interface is reserved for you to develop. System can upload alarm signal to the alarm center when local alarm occurs.

Before you use alarm center, please set server IP, port and etc. When an alarm occurs, system can send out data as the protocol defined, so the client-end can get the data.

larm Centre			
2 Enable			
Protocol Type	Private		
Bener IP	10 1 0	2	
Port	1		
Switteport Time	Everyday	₩ # 00	00 [m]
	38/4	Refresh	Default
	1		1

Figure 5-45

5.8.2.15 P2P

You can use your cell phone to scan the QR code and add it to the cell phone client. Via the SN from scanning the QR code, you can access the device in the WAN. Please refer to the P2P operation manual included in the resources CD.

The P2P interface is shown as in Figure 5-46.

Check the Enable box to enable P2P function and then click the Save button. Now you can view the device status and SN.

Enable Status Offline	
Cell Phone Client	Device SN
Scan QR to Download	1E025A2YAZT9012
	Save Refresh

Figure 5-46

5.8.2.16 HTTPS

In this interface, you can set to make sure the PC can successfully login via the HTTPS. It is to guarantee communication data security. The reliable and stable technology can secure the user information security and device safety. See Figure 5-47.

Note

- You need to implement server certificate again if you have changed device IP.
- You need to download root certificate if it is your first time to use HTTPS on current PC.

HTTPS		
Create Server Certif	Certificate Download Root Certificate	



5.8.2.16.1 Create Server Certificate

If it is your first time to use this function, please follow the steps listed below.

In Figure 5-47, click Create Server Certificate button, input country name, state name and etc. Click Create button. See Figure 5-48.

Note

Please make sure the IP or domain information is the same as your device IP or domain name.

Create Server Certifi	cate		×
	-		
Country	AU		
State			
Locatity			
Oragnization			
Oragnization Unit			
IP or Domain Name	10.10.6.238		
	Create	Cancel	



You can see the corresponding prompt. See Figure 5-49. Now the server certificate is successfully created.

HTTPS			
Create Server Ceditic	ats. Openioad Rost Certificate		
Create Succeed			

Figure 5-49

5.8.2.16.2 Download root certificate

In Figure 5-47, click Download Root Certificate button, system pops up a dialogue box. See Figure 5-50.



Figure 5-50

Click Open button, you can go to the following interface. See Figure 5-51.

Certificate	? 🗙
General Details Certification Path	
Certificate Information	
This CA Root certificate is not trusted. To enable trust, install this certificate in the Trusted Root Certification Authorities store.	
Issued to: Product Root CA	-
Issued by: Product Root CA	
Valid from 2013-6-18 to 2023-6-16	
Install Certificate	ent
	к

Figure 5-51

Click Install certificate button, you can go to certificate wizard. See Figure 5-52.



Figure 5-52

Click Next button to continue. Now you can select a location for the certificate. See Figure 5-53.

Certificate Import Wizard	\mathbf{X}
Certificate Store Certificate stores are system areas where certificates are kept.	
Windows can automatically select a certificate store, or you can specify a location for Automatically select the certificate store based on the type of certificate	
Place all certificates in the following store Certificate store: Browse	
< Back Next > Cancel	_

Figure 5-53

Click Next button, you can see the certificate import process is complete. See Figure 5-54.

Certificate Import Wizard		X
	Wizard	Certificate Import
	You have successfully compl wizard.	eted the Certificate Import
	You have specified the follow	ving settings:
	Certificate Store Selected Content	Automatically determined by t Certificate
	< <u>B</u> ack	Finish Cancel

Figure 5-54

Click Finish button, you can see system pops up a security warning dialogue box. See Figure 5-55.



Figure 5-55

Click Yes button, system pops up the following dialogue box, you can see the certificate download is complete. See Figure 5-56.

Certific	ate Import Wizard 🛛 🔀
(į)	The import was successful.
	ОК

Figure 5-56

5.8.2.16.3 View and set HTTPS port

From Setup->Network->Connection, you can see the following interface. See Figure 5-57.

You can see HTTPS default value is 443.

Connection		
Mar Connection	128	(0-129)
TCP Part	37777	(200-65535)
UDP Port	3777B	(200-65535)
HTTP Port	80	(1~65535)
HTTPS Pod	443	(128-65535)
RTSP Port	554	(128-86536)
RTSP Format	rtsp.% <user name<="" td=""><td><<password+⊜-ip address×="" cam="" realmonitor?channel="1&subtype=0</td" «fort-=""></password+⊜-ip></td></user>	< <password+⊜-ip address×="" cam="" realmonitor?channel="1&subtype=0</td" «fort-=""></password+⊜-ip>
	channel Channel.	1-32 subtype: Code-Stream Type, Main Stream 0, Sub Stream 1.
		Refresh Default
	Datest -	Verdaul

Figure 5-57

5.8.2.16.4 Login

Open the browser and then input <u>https://xx.xx.xx.xx:port</u>.

xx.xx.xx.xx: is your device IP or domain mane.

Port is your HTTPS port. If you are using default HTTPS value 443, you do not need to add port information here. You can input <u>https://xx.xx.xx</u> to access.

Now you can see the login interface if your setup is right.

5.8.3 Event

5.8.3.1 Video detect

5.8.3.1.1 Motion Detect

The motion detect interface is shown as in Figure 5-58.

Motion Detect	Video Loss	Tampering	Diagnosis	
✓ Enable	1	•		
Period Anti-dither Region	Setup 5 sec. (0- Setup	600)		
Record Channel Delay	Setup 10 sec. (1	0-300)		
 Alarm Out Latch 	1 2 3 10 sec. (0-	~300)		
PTZ ActivationTour	Setup Setup			
SnapshotVideo Matrix	Setup			
Voice Prompts	File Name None	•		
Show Message	🔲 Send Email 🔲 Bu	izzer 🗌 Message 🔲	Log	
Alarm Upload				
	Сору	Save	fresh Default	

Figure 5-58

Setup		
	Thursday 🔽 Copy	
	☑ 00 : 00 - 24 : 00	
	00 : 00 - 24 : 00	
	00 : 00 - 24 : 00	
	00 : 00 - 24 : 00	
	00 : 00 - 24 : 00	
	00 : 00 - 24 : 00	
	Save Cancel	

Figure 5-59

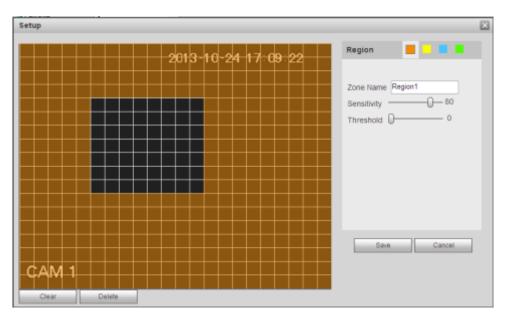


Figure 5-60

PTZ Activation				×
Channel 1	None	•	0	
Channel 2	None	•	0	
Channel 3	None	•	0	
Channel 4	None	•	0	
Channel 5	None	•	0	
Channel 6	None	•	0	
Channel 7	None	•	0	
Channel 8	None	•	0	
	Save	Cano	cel	

Figure 5-61

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	You need to check the box to enable motion detection function. Please select a channel from the dropdown list.
Period	Motion detection function becomes activated in the specified periods. See Figure 5-59.
	There are six periods in one day. Please draw a circle to enable corresponding period.
	Click OK button, system goes back to motion detection interface, please click save button to exit.

Parameter	Function		
Anti-dither	System only memorizes one event during the anti-dither period. The value ranges from 5s to 600s.		
Sensitivity	There are six levels. The sixth level has the highest sensitivity.		
Region	If you select motion detection type, you can click this button to set motion detection zone. The interface is shown as in Figure 5-60. Here you can set motion detection zone. There are four zones for you to set. Please select a zone first and then left drag the mouse to select a zone. The corresponding color zone displays different detection zone. You can click Fn button to switch between the arm mode and disarm mode. In arm mode, you can click the direction buttons to move the green rectangle to set the motion detection zone. After you completed the setup, please click ENTER button to exit current setup. Do remember click save button to save current setup. If you click ESC button to exit the region setup interface system will not save your zone setup.		
Record channel	System auto activates motion detection channel(s) to record once an alarm occurs. Please note you need to set motion detect record period and go to Storage-> Schedule to set current channel as schedule record.		
Record Delay	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.		
Alarm out	Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when an alarm occurs.		
Latch	System can delay the alarm output for specified time after an alarm ended. The value ranges from 1s to 300s.		
Video Matrix	This function is for motion detect only. Check the box here to enable video matrix function. Right now system supports one-channel tour function. System takes "first come and first serve" principle to deal with the activated tour. System will process the new tour when a new alarm occurs after previous alarm ended. Otherwise it restores the previous output status before the alarm activation.		
Snapshot	You need to check the box here to enable this function. You can set corresponding channel to snapshot when motion detect alarm occurs.		
Show message	System can pop up a message to alarm you in the local host screen if you enabled this function.		
Buzzer	Check the box here to enable this function. The buzzer beeps when an alarm occurs.		
Alarm upload	System can upload the alarm signal to the center (Including alarm center.		
Message	When 3G network connection is OK, system can send out a message when motion detect occurs.		
Send Email	If you enabled this function, System can send out an email to alert you when an alarm occurs.		

Tour	You need to check the box here to enable this function. System begins 1-wiindow or multiple-window tour display among the channel(s) you set to record when an alarm occurs.
PTZ Activation	Here you can set PTZ movement when an alarm occurs. Such as go to preset X. See Figure 5-61.
Log	Check the box here, system can record motion detect event log.

5.8.3.1.2 Video Loss

The video loss interface is shown as in Figure 5-62.

After analysis video, system can generate a video loss alarm when the detected moving signal reached the sensitivity you set here.

Please note video loss does not support anti-dither, sensitivity, region setup. For rest setups, please refer to chapter 5.8.3.1.1 motion detect for detailed information.

Motion Detect	Video Loss	Tampering	Diagnosis	
✓ Enable	1	•		
Period	Setup			
CAM AntiDither	0 sec. (0	-300)		
Record Channel	Setup			
Delay	10 sec. (10-300)		
Alarm Out	123			
Latch	10 sec. (0	~300)		
PTZ Activation	Setup			
Tour	Setup			
Snapshot	Setup			
Voice Prompts	File Name None	•		
Show Message	🔲 Send Email 🔲 B	uzzer 🔲 Message 🔽	Log	
Alarm Upload				
	Сору	Save	efresh Default	

Figure 5-62

5.8.3.1.3 Tampering

The tampering interface is shown as in Figure 5-63.

After analysis video, system can generate a tampering alarm when the detected moving signal reached the sensitivity you set here.

For detailed setups, please refer to chapter 5.8.3.1.1 motion detect for detailed information.

Motion Detect	Video Loss Tampering Diagnosis
Enable	1
Period Sensitivity	Setup 3 💌
Record Channel	Setup
Delay	10 sec. (10-300)
🔽 Alarm Out	1 2 3
Latch	10 sec. (0~300)
PTZ Activation	Setup
Tour	Setup
Snapshot	Setup
Voice Prompts	File Name None 💌
Show Message	📄 Send Email 📄 Buzzer 📄 Message 🔽 Log
Alarm Upload	
	Copy Save Refresh Default

Figure 5-63

5.8.3.1.4 Diagnosis

System can trigger an alarm when the stripe, noise, color cast, out of focus, over exposure event occurred. See Figure 5-64.

Motion Detect	Video Loss	Tampering	Diagnosis		
Channel	1	✓ Set			
Enable					
Period	Set				
Alarm Out	1 2 3				
Latch	10 sec. (0~3	00)			
Voice Prompts	File Name None	•			
🗌 Send Email 🔽 Buzzer 🔲 Message 🔽 Log					
	Save	Refresh D	efault		

Figure 5-64

Click Set button, you can check the corresponding box to select diagnosis type. See Figure 5-65.

Diagnosis		×
Stripe	v —0-	30
Noise	☑ — ()-	30
Color Cast	☑ — ()—	30
Out of Focus	☑ — ()—	30
Overexposure	☑ —0-	30
	Save	Cancel

Figure 5-65

Note

Video diagnosis alarm can trigger PTZ preset, tour, and pattern.

For detailed setups, please refer to chapter 5.8.3.1.1 motion detect for detailed information.

5.8.3.2 Intelligence (Optional)



ے Important

- The intelligence function is optional.
- The different series products support different IVS functions. Please refer to your purchased product actual interface for detailed information.
- The IVS function supports 1 analog channel only. Right now some series products support IP channel.

Once any object violates the rule, the DVR can trigger an alarm and alert you as the specified alarm mode.

From main menu->Setup->Event->IVS, you can see the following interface. Here you can set behavior analytics rule. See Figure 5-66.

Please follow the steps listed below.

- 1) Please select a channel from the dropdown list.
- 2) Click ¹ and then select corresponding rule.
- 3) Set rule type and set corresponding parameters. For detailed information, please refer to chapter 5.8.3.2.1 Tripwire, chapter 5.8.3.2.2 Intrusion, chapter 5.8.3.2.3 Object detection.
- 4) Check the box to enable the rule.
- 5) Click OK button to save current setup.

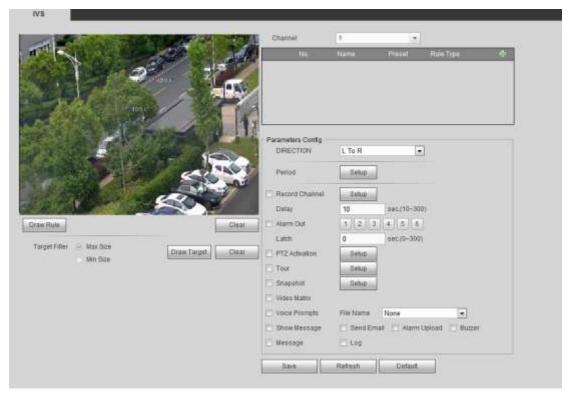


Figure 5-66

5.8.3.2.1 Tripwire

Note:

- The tripwire function is valid once your network camera or your DVR supports this function.
- If your purchased DVR supports the tripwire function, it supports one analog channel.
 It is not for the digital channel.

From main menu->Setup->Event->IVS->Tripwire, you can see the following interface. See Figure 5-67.

System generates an alarm once there is any object crossing the tripwire in the specified direction.

Tripwire	intrusion	Abandoned				
	1-1-	2014-07-03 09 31:53	Tripwire		2	
	- Andrews		Period	Set		
			No.	1	~	
			Name	line1.		
R:	N. N.	1	DIRECTION	Both	~	
			Record CH	Set		
-			Delay	10 sec (10-		
status resources		The second s	Alarm Out	1 2 3 4 5	6 7 8	
			Latch	10 sec (1-3	00)	
Charget 1			PTZ Activation	Set		
	_		Tour	Set		
Draw Rule		Clear	Snapshot	Set		
	Max Size Min Size	Draw Target Clear	Alarm Upload	Send Email	Buzzer 🗹 Log	
	Inter washing		ок	Refresh Defau	R	

Figure 5-67

Check the Tripwire box to enable tripwire function.

Select SN (Line1/2/3/4) and direction, and then input customized rule name.

- No. and Line1/2/3/4: System supports four tripwires. Each SN stands for one tripwire.
- Direction: There are three options: A->B, B->A, both. System can generate an alarm once there is any object crossing in the specified direction.

Now you can draw a rule. Click Draw rule button and then left click mouse to draw a tripwire. The tripwire can be a direct line, curve or polygon. Right click mouse to complete. See Figure 5-68.

2014	-07-03 09:38:07	Tripwire		2	*
		Period	Set		
		No.	1		
	The second second	Name	line1		
		DIRECTION	Both		
		Record CH	Set		
	X N	Delay	10 sec. (10~30	0)	
] Alarm Out	1 2 3 4 5 6	7 8	
		Latch	10 sec. (1~300)	
Channel 1		PTZ Activation	Set		
	C] Tour	Set		
Draw Rule	Clear] Snapshot	Set		
Target Filter Max Size Draw Tar		Alarm Upload	Send Email 🔲 B	uzzer 🗹 Log	
		ок	Refresh Default		

Figure 5-68

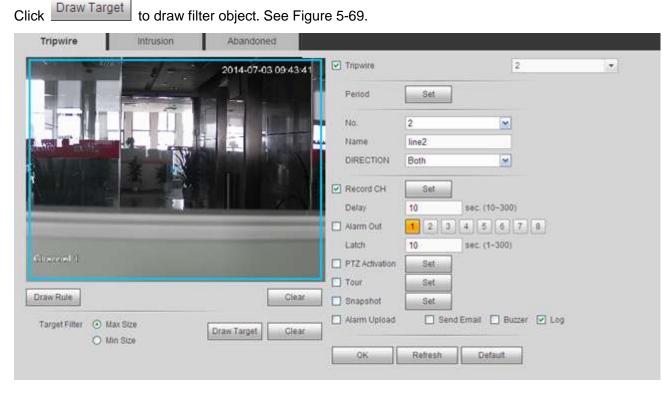


Figure 5-69

Select the blue line and then use mouse to adjust zone size.

Note

Each rule can set two sizes (min size/max size). Once the object is smaller than the min size or larger than the max size, there is no alarm. Please make sure the max size is larger than the min size.

Click Ok to complete the rule setup.

For detailed setups, please refer to chapter 5.8.3.1.1 motion detect for detailed information.

5.8.3.2.2 Intrusion (Cross warning zone)

Note:

- The intrusion function is valid once your network camera or your DVR supports this function.
- If your purchased DVR supports the intrusion function, it supports one analog channel.
 It is not for the digital channel.

From main menu->Setup->Event->IVS->Intrusion, the intrusion interface is shown as below. See Figure 5-70.

Tripwire	Intrusion	Abandoned				
1.10	× × - *	2014-07-03 09:49:18	Intrusion		2	*
	- And		Period	Set		
			No.	1	X	
E.T.			Name	area1		
			DIRECTION	Both	M	
			Record CH	Set		
			Delay	10 sec (10-300)	
		-	Alarm Out	1 2 3 4 5	6 7 8	
			Latch	10 sec. (1-300)	
Cliancel 1			PTZ Activation	Set		
-	_		Tour	Set		
Draw Rule		Clear	Snapshot	Set		
IN CONTRACTOR OF A DECK	Max Size	Draw Target Clear	Alarm Upload	Send Email	🖸 Buzzer 🗹 Log	
0	Min Size		ок	Refresh	fault	



Check the Intrusion box to enable intrusion function.

Select SN (Area1/2/3/4) and direction, and then input customized rule name.

- No. and Area1/2/3/4: System supports four zones. Each SN stands for one zone.
- Direction: There are three options: A->B, B->A, both. System can generate an alarm once there is any object enter/exit (Or both) the zone.

Now you can draw a rule. Left click mouse to draw a line first and then right click mouse to draw another line until you draw a rectangle, you can right click mouse to exit. Click Ok to complete the rule setup.

Click Draw Rule to draw the zone. See Figure 5-71.

Tripwire	Intrusion	Abandoned				
- 1.0V	" [2014-07-03 09:53:57	Intrusion		2	•
	The second second		Period	Set		
			No.	1	M	
			Name	area1		
R.			DIRECTION	Both		
			Record CH	Set		
			Delay	10 sec.	(10-300)	
			Alarm Out	1234	5 6 7 8	
		-	Latch	10 sec.	(1-300)	
(Instantion)			PTZ Activation	Set		
			Tour	Set		
Draw Rule		Clear	Snapshot	Set		
	Max Size	Draw Target Clear	Atarm Upload	Send Email	🗌 Buzzer 🗹 Log	
0	Min Size		ок	Refresh	Default	



For detailed setups, please refer to chapter 5.8.3.1.1 motion detect for detailed information.

5.8.3.2.3 Object Detect

Note:

- The object detection function is valid once your network camera or your DVR supports this function.
- If your purchased DVR supports the object detection function, it supports one analog channel. It is not for the digital channel.

From main menu->Setup->Event->IVS->Object, the object interface is shown as below. See Figure 5-72.

Tripwire	Intrusion	Object				
No. No.		2014-07-03 09:52:01	Dbject		2	•
	-		Period	Set		
			No.	1		
E. THE COLUMN			Rule Type	Abandoned	M	
a la	N		Name	object1		
3			Period	10	(5)	
$r \sim 100$			Record CH	Set		
The second se			Delay	10 sec	: (10-300)	
			Alarm Out	1 2 3 4	5 6 7 8	
Givennet (Latch	10 sec	2 (1~300)	
			PTZ Activation	Set		
Draw Rule		Clear	Tour	Set		
Target Filter 💿 I	Max Size		Snapshot	Set		
01	ulin Size	Draw Target Clear	Alarm Upload	Send Erna	il 🗌 Buzzer 🗹 Log	
				Datash	Data a	
			ОК	Retresh	Default	



Check the Object box to enable object detect function.

Select SN (object1/2/3/4) and rule type, and then input customized rule name.

- No. and Object1/2/3/4: System supports four zones. Each SN stands for one zone.
- Rule type: Please select from the dropdown list. There are two types: Missing object detect/abandoned object detect.
- Period: It refers to the object in/out the zone time.

Click

Draw Rule to draw the rule. See Figure 5-73.

Tripwire	Intrusion	Object						
and they	1 1-*	2014-07-03 09:58	21 🗹 Obj	ect			2	•
			Per	lod [Set			
			No.	N [1		~	
E.S.			Rule	e Type	Abandoned		•	
10			near .	ne	object1			
3	Pobject1	1	Pen	ioa [10		(9)	
1			Rec	ord CH	Set			
-			Dela	ay [10	sec. (10-	300)	
			Alar	m Out	1 2 3	4 5	5 7 8	
Clannel I			Late	n (10	10C (1-3	90)	
-	_		PTZ	Activation	Set			
Draw Rule		Ciea	Tou	t Î	Set			
Target Filter 💿 I	Max Size		🖸 Sna	pshot	Set			
	Min Size	Draw Target Clea	s 🗌 🗖 Alar	m Upload	Send	tEmail	Butzer 🕑 Log	
					_			
				ж	Refresh	Defau	1	

Figure 5-73

Now you can draw a rule. Left click mouse to draw a line, until you draw a rectangle, you can right click mouse.

Click Ok to complete the rule setup.

For detailed setups, please refer to chapter 5.8.3.1.1 motion detect for detailed information.

5.8.3.3 Face Detect (Optional)

The face detection function is optional. The intelligence function and the human face detection can not be valid at the same time!

When camera detects human face, system can draw a rectangle around the human face

and generate an alarm.

From main menu->Setup->Event->Face detect, the interface is shown as in Figure 5-74.

- Enable face boost: Check the box here, system can enhance the human face display pane.
- Sensitivity: System supports 6 levels. The sixth level has the highest sensitivity.

For detailed setups, please refer to chapter 5.8.3.1.1.

FACE DETECT	
Enable	22
Human Face ROI	
Alarm Face No.	1 (1~35)
Period	Setup
Record Channel	Setup
Delay	sec. (10~300)
Alarm Out	1 2 3 4 5 6
Latch	sec. (0~300)
PTZ Activation	Setup
🔲 Tour	Setup
🔲 Snapshot	Setup
Voice Prompts	File Name
🔲 Send Email 🔲 B	uzzer 🔲 Message 📄 Log
	Save Refresh

Figure 5-74

5.8.3.4 Alarm

Before operation, please make sure you have properly connected alarm devices such as buzzer. The input mode includes local alarm and network alarm.

5.8.3.4.1 Local Alarm

The local alarm interface is shown as in Figure 5-75. It refers to alarm from the local device.

Local Alarm	Net Alarm	IPC External Alarm IPC Offline Alarm
Enable	1	✓ Alarm Name Alarm In1
Period Anti-dither	Setup 5 sec.	(0-600) Type NO 💌
Record Channel	Setup	
Delay	10 sec.	(10-300)
Alarm Out	1 2 3	
Latch	10 sec.	(0~300)
PTZ Activation	Setup	
🔽 Tour	Setup	
Snapshot	Setup	
Video Matrix		
Voice Prompts	File Name None	•
🔲 Show Message	🔲 Send Email 🔲	Buzzer 🔲 Message 🗹 Log
Alarm Upload		
	Сору	Save Refresh Default

Figure 5-75

Setup		×
	Thursday 🕑 Copy	
	✓ 00 : 00 - 24 : 00	
	00 : 00 - 24 : 00	
	00 : 00 - 24 : 00	
	00 : 00 - 24 : 00	
	00 : 00 - 24 : 00	
	00 : 00 - 24 : 00	
	Save Cancel	

Figure 5-76

PTZ Activation				X
Channel 1	None	•	0	
Channel 2	None	-	0	
Channel 3	None	-	0	
Channel 4	None	•	0	
Channel 5	None	•	0	
Channel 6	None	•	0	
Channel 7	None	•	0	
Channel 8	None	•	0	
	Save	Cance	I	

Figure 5-77

Please refer to the following sheet for detailed information.	

Parameter	Function
Enable	You need to check the box to enable this function.
	Please select a channel from the dropdown list.
Period	This function becomes activated in the specified periods.
	There are six periods in one day. Please draw a circle to enable corresponding period.
	Select date. If you do not select, current setup applies to today only. You can select all week column to apply to the whole week.
	Click OK button, system goes back to local alarm interface, please click save button to exit.
Anti-dither	System only memorizes one event during the anti-dither period. The value ranges from 5s to 600s.
Sensor type	There are two options: NO/NC.
Record channel	System auto activates motion detection channel(s) to record once an alarm occurs. Please note you need to set alarm record period and go to Storage-> Schedule to set current channel as schedule record.
Record Delay	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
Alarm out	Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when an alarm occurs.
Latch	System can delay the alarm output for specified time after an alarm ended. The value ranges from 1s to 300s.
Show message	System can pop up a message to alarm you in the local host screen if you enabled this function.

Parameter	Function
Buzzer	Check the box here to enable this function. The buzzer beeps when an alarm occurs.
Alarm upload	System can upload the alarm signal to the center (Including alarm center).
Send Email	If you enabled this function, System can send out an email to alert you when an alarm occurs.
Tour	You need to check the box here to enable this function. System begins 1-wiindow or multiple-window tour display among the channel(s) you set to record when an alarm occurs.
PTZ Activation	Here you can set PTZ movement when an alarm occurs. Such as go to preset X.
Log	Check the box here, system can record local alarm event log.

5.8.3.4.2 Net Alarm

The network alarm interface is shown as in Figure 5-78.

Network alarm refers to the alarm signal from the network. System does not anti-dither and sensor type setup. For setup information, please refer to chapter 5.8.3.4.1.

Local Alarm	Net Alarm	IPC External Alarm	IPC Offline Alarm	
Enable	1	▼ Alarm Name A	Narm In1	
Period	Setup			
Record Channel	Setup			
Delay	10 sec. (1	10-300)		
Alarm Out	1 2 3			
Latch	10 sec. (0)~300)		
PTZ Activation	Setup			
🔲 Tour	Setup			
Snapshot	Setup			
Video Matrix				
Voice Prompts	File Name None	•		
Show Message	🔲 Send Email 🔲 B	uzzer 🔲 Message 🔽	Log	
	Сору	Save	efresh Default	

Figure 5-78

5.8.3.4.3 IPC External Alarm

IPC external alarm interface is shown as below. See Figure 5-79. For setup information,

please refer to chapter 5.8.3.4.1.

Local Alarm	Net Alarm	IPC External Alarm	IPC Offline Alarm	
Channel	15	▼ Alarm Name Alarm	arm In1]
Period	Setup			
Anti-dither	0 sec.	(0-600) Type NO	•	
Record Channel	Setup			
Delay	10 sec.	(10-300)		
Alarm Out	123			
Latch	10 sec.	(0~300)		
PTZ Activation	Setup			
Tour	Setup			
Snapshot	Setup			
Video Matrix				
Voice Prompts	File Name None	▼		
Show Message	📄 Send Email 📃	Buzzer 🔲 Message 🔽 L	og	
Alarm Upload				
	Сору	Save Refr	esh Default	

Figure 5-79

5.8.3.4.4 IPC Offline Alarm

IPC offline alarm is shown as in Figure 5-80. For setup information, please refer to chapter 5.8.3.4.1.

Local Alarm	Net Alarm IPC External Alarm IPC Offline Alarm
Channel	15 💌
Record Channel Delay	Setup 10 sec. (10-300)
 Alarm Out Latch 	1 2 3 10 sec. (0~300)
 PTZ Activation Tour Snapshot Video Matrix 	Setup Setup Setup
 Voice Prompts Show Message Alarm Upload 	File Name None Send Email Buzzer Message V Log
	Copy Save Refresh Default

Figure 5-80

5.8.3.5 Abnormality

It includes four types: HDD/Network/User/Device. See Figure 5-81 through Figure 5-84.

- HDD includes: No disk, disk error, disk no space.
- Network includes net disconnection, IP conflict, and MAC conflict.
- User: It includes illegal login.
- Device: It includes device temperature alarm, fan alarm and etc.

HDD	Network	User	
Event Type	No HDD	•	
Enable			
✓ Alarm Out	1 2 3		
Latch	10 sec. (0-	~300)	
Voice Prompts	File Name None	-	
🔽 Show Message	📃 Send Email 🛛 Bu	izzer 🔲 Message 🔽	Log
🔽 Alarm Upload			
	Save	Refresh	

Figure 5-81

HDD	Network User
Event Type	Disconnect 💌
Enable	
✓ Alarm Out	1 2 3
Latch	10 sec. (0~300)
Voice Prompts	File Name None 💌
Show Message	📄 Send Email 📄 Buzzer 📄 Message 🔽 Log
Record Channel	Setup
Delay	10 sec. (10-300)
	Save Refresh

Figure 5-82

HDD	Network	User	Device
Event Type	Illegal Login	¥	
Enable			
Attempt(s)	5		
Lock Time	5	Min.	
🕑 Alarm Out	123	4 5 6	
Latch	10	Sec.(0~300)	
Voice Prompts	File Name	None	T
🗌 Send Email 🗌	Buzzer		
🗌 Message	🕑 Log		
	Save	Refresh	

Figure 5-83

HDD	Network	User	Device	
			-	
Event Type	High Temperatu	re 🔻		
Alarm Name	Case Temperatu	ure		
Max Temperature	60	č		
Enable				
Alarm Out	1 2 3	4 5 6		
Latch	10	Sec.(0~300)		
Voice Prompts	File Name	None	•	
Show Message	e 📃 Send Ema	ill 🗌 Buzzer		
🗌 Message	✓ Log			
	Save	Refresh		

Figure 5-84

Parameter	Function
Event Type	The abnormal events include: No disk, disk error, disk no space, net disconnection, IP conflict and MAC conflict.
	You can set one or more items here.
	Less than: You can set the minimum percentage value here (For disk not space only). The device can alarm when capacity is not sufficient.
	You need to draw a circle to enable this function.
Enable	Check the box here to enable selected function.
Alarm Out	Please select corresponding alarm output channel when an alarm occurs. You need to check the box to enable this function.
Latch	The alarm output can delay for the specified time after an alarm stops. T
	value ranges from 0s to 300s. The default setup is 10 seconds. The o
	second means there is no delaying time.
Attempt(s)	It is to set login attempt times. Once the login attempt exceeds the
	threshold you set here, current account will be locked. This function is
	for illegal login only.
Lock time	It is to set account lock time once its login attempt has exceeded the
	threshold you set. This function is for illegal login only.
High	In Device interface (Figure 5-84), select High temperature from the
temperature	dropdown list, and then input the max temperature. The value ranges
	from 30 $^\circ\!\!\!\mathrm{C}\sim$ 90 $^\circ\!\!\!\mathrm{C}$. Device can trigger an alarm once the case
	temperature is higher than the value you set.
Fan speed	In Device interface (Figure 5-84), select Fan speed abnormal from the
abnormal	dropdown list, and then click the OK button after the Fan calibration. It
	can correct fan manually. Please note we recommend this function after
	you replaced or maintained the fan.
Show message	System can pop up a message to alarm you in the local host screen if you enabled this function.
Alarm upload	System can upload the alarm signal to the center (Including alarm center.
Send Email	If you enabled this function, System can send out an email to alert you when an alarm occurs.
Buzzer	Check the box here to enable this function. The buzzer beeps when an alarm occurs.
Log	Check the box here, system can record the network event alarm log.

5.8.3.6 Alarm Output It is to set alarm output mode. See Figure 5-85.

Alarm Out					
Alarm Type	All	1	2	3	
Schedule	۲	۲	۲	۲	
Manual	0	0	0	0	
Stop	0	0	0	0	
Status					
	A	larm Save	Relea	ise	Refresh

Figure 5-85

5.8.4 Storage

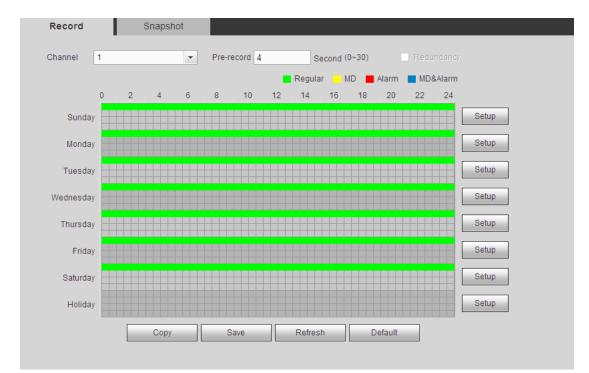
5.8.4.1 Schedule

5.8.4.1.1 Schedule Record

In this interfaces, you can add or remove the schedule record setup. See Figure 5-86. There are three record modes: general (auto), motion detect and alarm. There are six periods in one day.

You can view the current time period setup from the color bar.

- Green color stands for the general record/snapshot.
- Yellow color stands for the motion detect record/snapshot..
- Red color stands for the alarm record/snapshot.
- Blue color stands for MD&alarm record/snapshot.





Time Period 4 00 00 24 00 Image: Regular MD Alarm MD&Alarm Time Period 5 00 00 24 00 Image: Regular MD Alarm MD&Alarm Time Period 5 00 00 24 00 Image: Regular MD Alarm MD&Alarm Time Period 5 00 00 24 00 Image: Regular MD Alarm MD&Alarm Image: All Sundar Image: Mode: Machine Regular Image: MD Alarm MD&Alarm Image: All Sundar Image: Machine Regular Image: MD Alarm MD&Alarm	Time Period 1	00:00	-	24 00	Regular	D MD	Alarm	
Time Period 4 00 00 -24 00 Regular MD Alarm MO&Alarm Time Period 5 00 00 -24 00 Regular MD Alarm MO&Alarm Time Period 5 00 00 -24 00 Regular MD Alarm MO&Alarm Time Period 5 00 00 -24 00 Regular MD Alarm MO&Alarm All Sundar Modar Tuesdar Wednescar Thuradar Fridar Saturdar	Time Period 2	00:00		24 00	Regular	D MD	🔲 Alaim	D ND&Atarm
Time Period 5 00 00 - 24 00 Regular D MD Alarm D MD&Alarm Time Period 5 00 00 - 24 00 Regular D MD Alarm D MD&Alarm D Al D Sunday D Monday D Tuesday D Wednesday D Thursday D Friday D Saturday	Time Period 3	00:00		24 00	🗖 Regular	D MD	🔲 Alann	MD&Atarm
Time Ferlod 5 00 00 - 24 00 C Regular MD Aann O MD&Alarm	Time Period 4	00:00	1	24 00	🔲 Regular	D MD	🔲 Alann	D MD&Alarm
🗆 All 🔷 Sunday 💭 Monday 💭 Tuesday 💭 Wednesday 💭 Thursday 💭 Friday 💭 Saturday	Time Period 5	00:00	1	24 00	🔲 Regular	🗆 MD	🔲 Alanm	MO&Alarm
	Time Futtod 5	00:00	1	24 00	C Regutar	П мр	🔲 Alarm	Di MD&Alarm
	Holita)	unday 🗔 K	londay	🗆 Tuesday 🖸] Wednesday [] Thursda	iy 🔲 Friday	Baturday



	×
Channel 1	Channel 2
Channel 3	Channel 4
Save	Cancel

Figure 5-88

Parameter	Function
Channel	Please select a channel from the dropdown list.
Pre-record	Please input pre-record time here. The value ranges from 0 to 30.
Redundancy	Check the box here to enable redundancy function. Please note this function is null if there is only one HDD.
Snapshot	Check the box here to enable snapshot function.
Holiday	Check the box here to enable holiday function.
Setup (Sunday to Saturday)	Click the Setup button, you can set record period. See Figure 5-87. There are six periods in one day. If you do not check the date at the bottom of the interface, current setup is for today only. Please click Save button and then exit.
Setup (Holiday)	Click the Setup button, you can set record period. See Figure 5-87. There are six periods in one day. If you check Holiday box, current channel shall record as your holiday setup here.
Сору	Copy function allows you to copy one channel setup to another. After setting in channel, click Copy button, you can go to interface Figure 5-88. You can see current channel name is grey such as channel 1. Now you can select the channel you want to paste such as channel 5/6/7. If you want to save current setup of channel 1 to all channels, you can click the first box "ALL". Click the OK button to save current copy setup. Click the OK button in the Encode interface, the copy function succeeded.

5.8.4.1.2 Schedule snapshot

The schedule snapshot interface is shown as below. See Figure 5-89.

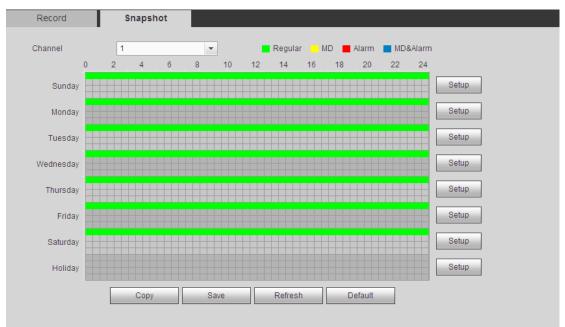


Figure 5-89

For detailed operation information, please refer to chapter 5.8.4.1.1. 5.8.4.2 HDD Manage

The interface is shown as in Figure 5-90. Here you can see HDD information. You can also operate the read-only, read-write, redundancy (if there are more than on HDD) and format operation.

Device Name	HOD Operation	Type	Status	Free Space/Tetal Space	Start TimeEnd Time
SATA-1	Set as mod-write HDD	Read-Mone	Normal	200.13GB/232.79GB	2014-07-25 15:24:47 / 2014-08-21 18:39:41

Figure 5-90

5.8.4.3 Manual Record

The interface is shown as in Figure 5-91.

Record																	
Main Stream	All	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Auto	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲
Manual	\bigcirc	\odot	\odot	\odot	\bigcirc	\bigcirc	\bigcirc	\odot	\odot	\odot	\odot	\odot	\bigcirc	\odot	\odot	\bigcirc	\odot
Stop	\odot	\odot	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\odot	\odot	\odot	\odot	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\odot
Sub Stream																	
Auto	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot
Manual	\odot	\odot	$^{\odot}$	$^{\odot}$	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	$^{\odot}$	\odot
Stop	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲
Snapshot																	
Open	\odot	\odot	\bigcirc	\odot	\bigcirc	\bigcirc	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\odot	\bigcirc	\odot
Stop	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲
			Sav	е			Ret	fresh									
										_							

Figure 5-91

Parameter	Function
Channel	Here you can view channel number. The number displayed here is the max channel amount of your device.
Status	There are three statuses: schedule, manual and stop.
Schedule	System enables auto record function as you set in record schedule setup (general, motion detect and alarm).

Manual	It has the highest priority.
	Enable corresponding channel to record no matter what period
	applied in the record setup.
Stop	Stop current channel record no matter what period applied in the
	record setup.
Start all/	Check the corresponding All button, you can enable or disable all
stop all	channels record.

5.8.5 Setting

5.8.5.1 General

The general interface includes general, date/time and holiday setup.

5.8.5.1.1 General

The general interface is shown as in Figure 5-92.

General	Date&Time	Holiday
_		
Device Name	HCVR	
Device No.	8	
Language	ENGLISH	•
Video Standard	PAL	•
HDD Full	Overwrite	•
Pack Mode	Time Length	✓ 60 min.
Auto Logout	10	min. (0-60)
Startup Wizard		
Navigation Bar		
IPC Time Sync	24	h
	Save	Refresh Default

Figure 5-92

Parameter	Function
Device ID	It is to set device name.
Device No.	It is device channel number.
Language	You can select the language from the dropdown list.
	Please note the device needs to reboot to get the modification activated.
Video Standard	This is to display video standard such as PAL.

HDD full	Here is for you to select working mode when hard disk is full. There are two options: stop recording or rewrite. If current working HDD is overwritten or the current HDD is full while the next HDD is no empty, then system stops recording, If the current HDD is full and then next HDD is not empty, then system overwrites the previous files.
Pack duration	Here is for you to specify record duration. The value ranges from 1 to 120 minutes. Default value is 60 minutes.

5.8.5.1.2 Date and time

The date and time interface is shown as in Figure 5-93.

General	Date&Time Holiday	
Date Format	YYYY MM DD	
Time Format	24-HOUR	
Date Separator	-	
Time Zone	GMT+08:00	
System Time	2016 - 01 - 12 17 : 13 : 50 Sync PC	
DST		
DST Type	O Date O Week	
Begin Time	2000 - 01 - 01 00 : 00	
End Time	2000 - 01 - 01 00 : 00	
NTP		
Server	time.windows.com Manual Update	
Port	123 (1~65535)	
Interval	60 min. (0~65535)	
	Save Refresh Default	

Figure 5-93

Parameter	Function
Date format	Here you can select date format from the dropdown list.
Time Format	There are two options: 24-H and 12-H.
Time zone	The time zone of the device.
System time	It is to set system time. It becomes valid after you set.
Sync PC	You can click this button to save the system time as your PC current time.

DST	Here you can set day night save time begin time and end time. You can set according to the date format or according to the week format.
NTP	You can check the box to enable NTP function.
NTP server	You can set the time server address.
Port	It is to set the time server port.
Interval	It is to set the sync periods between the device and the time server.

5.8.5.1.3 Holiday Setup

Holiday setup interface is shown as in Figure 5-94.

Here you can click Add box to add a new holiday and then click Save button to save.

						. Ast
No.	Status	Honday Mame	Cale	Ferrod	Edit	Delete
1	Open 💌	national_day	8.21	t dags)	2	0
Bave	10 1					
	Rebash					

Figure 5-94

5.8.5.2 Display

Display interface includes GUI, TV adjust, Tour and zero-channel encoding.

5.8.5.2.1 Display

Here you can set background color and transparency level. See Figure 5-95.

Display	Tour	Zero-Channel		
Resolution	1280*1024	•		
Transparency	⊡0	+ 0%		
Image Original Rate				
Time Display				
Channel Display				
Preview Enhancement				
Video Matrix				
	Save	Refresh	Default	

Figure 5-95

Parameter	Function		
ResolutionThere are four options: $1920 \times 1080, 1280 \times 1024$ (defau 720, 1024 \times 768. Please note the system needs to reboot current setup.			
Transparency	Here is for you to adjust transparency. The value ranges from 128 to 255.		
Time title/channel title	Check the box here, you can view system time and channel number on the monitor video.		
Image enhance	Check the box; you can optimize the margin of the preview video.		

5.8.5.2.2TV Adjust

Note

This function is for some series product only. It is to set TV output region. See Figure 5-96.

GUI	TV Adjust	Tour	Zero Channel
Top Margin	©)		
Bottom Margin	©0		
Leff Margin	©0		
Right Margin	©0		
Brightness	0	()	
	Save	Refresh	Default



5.8.5.2.3 Tour

The tour interface is shown as in Figure 5-97. Here you can set tour interval, split mode, motion detect tour and alarm tour mode.

Display	Tour	Zero Channel
Enable Tour		
Interval	5	Second (5-120)
Interval	0	Second (3-120)
Split	View 1	M
	4 🔽 Channel G	roup 🛆 🛨
	1 🗹 1	
	2 🗹 2	*
	3 🗹 3	*
	4 🗹 4	
		v
	<	
Motion Tour Type	View 1	▼
Alarm Tour Type	View 1	~
	Save	Refresh Default

Figure 5-97

Parameter	Function
Enable tour	Check the box here to enable tour function.
Interval	Here is for you to adjust transparency. The value ranges from 5 to 120s. The default setup is 5s.
Split	Here you can set window mode and channel group. System can support 1/4/8/9/16/25/36-window according to device channel amount.
Motion tour/Alarm tour	Here you can set motion detect tour/alarm tour window mode. System supports 1/8-window now.

5.8.5.2.4 Zero-channel Encoding

The interface is shown as in Figure 5-98.

Display	Tour	Zero Channel	
Enable			
Compression	H.264	~	
Resolution	D1	~	
Frame Rate	25	~	
Bit Rate	1024	Kb/S	
	Save	Refresh Default	

Figure 5-98

Parameter	Function
Enable This function is disabled by default. Check the box here to	
	this function so that you can control the zero-channel encoding
	function at the WEB.
Compression	System default setup is H.264. You can set according to device
	capability.
Resolution	The resolution value may vary due to different device capabilities.
	Please select from the dropdown list.
Frame rate	The frame rate value may vary due to different device capabilities.
	Please select from the dropdown list.
Bit Rate	The default setup is 1024Kb/S. The bit rate value may vary due to
	different device capabilities and frame rate setups. Please select
	from the dropdown list.

5.8.5.3 Video Matrix

The interface is shown as in Figure 5-99.

Here you can set video output channel and interval.

BNC	
_	
Enable	
Interval	5 sec.(5-120)
Resolution	1280*720 💌
Window Split	View 1
	14 📝 Channel Group 🔺 🛨
	1 ☑ 1
	2 🗹 2
	3 📝 3 🐳
	4 🗹 4
	5 📝 5
	6 🗹 6 🗸
	4 III +
	Save Refresh Default

Figure 5-99

Parameter	Function		
Enable	Check the box here to enable this function.		
Interval	It is to set the interval from current channel group to the next channel group.		
Window split	Support 1-window split only.		
Delete	Select a channel group and then click 🔲 to delete it.		
Up/Down	Click 🔊 or 🗵 to adjust channel tour sequence.		

Add channel group

Click ,you can see system pops up the following dialogue box. See Figure 5-100. Please select the channels and then click OK button.

Add Channel Group	×
1 2 3 4 5 6 7 8 9 10	11 12 13 14 15 16
Save	Cancel

Figure 5-100

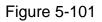
Delete channel group

Select a channel group and then click ,you can delete it.

Modify channel group

Select a channel group and then double click, you can see the following interface. See Figure 5-101. You can change the setup and then click OK button.

Modify Channel Group						
1 2 3 4 5 6	7 8 9 10	11 12 13 14	15 16			
	Save	Cancel				



Adjust channel group sequence.



Click or to change channel sequence.

5.8.5.4 RS232

The RS232 interface is shown as in Figure 5-102.

R\$232			
Function	Console	~	
Baud Rate	115200	M	
Data Bit	8	M	
Stop Bit	1	M	
Parity	None	M	
	Save	Refresh	Default

Figure 5-102

Parameter	Function
Protocol	Select the corresponding dome protocol. Default setup is console.
Baud Rate	Select the baud rate. Default setup is 115200.
Data Bit	The value ranges from 5 to 8.
	Default setup is 8.
Stop bit	There are two options: 1/2. Default setup is 1.
Parity	There are five options: none/odd/even/space/mark.

Parameter	Function
	Default setup is none.

5.8.5.5 PTZ

The PTZ interface is shown as in Figure 5-103 and Figure 5-104.

Before setup, please check the following connections are right:

- PTZ and decoder connection is right. Decoder address setup is right.
- Decoder A (B) line connects with DVR A (B) line.

Click Save button after you complete setup, you can go back to the monitor interface to control speed dome.

PTZ				
Channel	4			
Channel	1	•		
PTZ Type	Local	-		
Control Mode	HDCVI	-		
Protocol	HDCVI3.0	•		
Address	1			
Baud Rate	9600			
Data Bit	8			
Stop Bit	1			
Parity	None			
	Сору	Save	Refresh	Default

Figure 5-103

PTZ				
Channel PTZ Type	4 Remote	•		
	Сору	Save	Refresh	Default

Figure 5-104

Parameter	Function
Channel	Select speed dome connected channel.
PTZ type	There are two types: local/remote. Please select local mode if you are connect RS485 cable to connect to the Speed dome (PTZ). Please select remote mode if you are connecting to the network PTZ camera.

Parameter	Function
Control	You can select control mode from the dropdown list. There are two
mode	options: Serial/HDCVI. For HDCVI series product, please select
	HDCVI. The control signal is sent to the PTZ via the coaxial cable. For
	the serial mode, the control signal is sent to the PTZ via the RS485
	port.
Protocol	Please select protocol from the dropdown list.
	If the control mode is HDCVI, please select HDCVI protocol. The
	default setup is HDCVI3.0.
Address	Set corresponding dome address. Default value is 1. Please note
	your setup here shall comply with your dome address; otherwise
	you can not control the speed dome.
Baud Rate	Select the dome baud rate. Default setup is 9600.
Data Bit	Default setup is 8. Please set according to the speed dome dial switch setup.
Stop bit	Default setup is 1. Please set according to the speed dome dial switch
	setup.
Parity	Default setup is none. Please set according to the speed dome dial switch setup.

5.8.5.6 ATM/POS

The ATM/POS function is for financial areas. It includes Sniffer, information analysis and title overlay function. The Sniffer mode includes COM and network.

5.8.5.6.1 COM Type

The COM interface is shown as below. See Figure 5-105.

- Protocol: Please select from the dropdown list according to your actual situation.
- Overlay channel: Please select the channel you want to overlay the card number.
- Overlay mode: There are two options: preview and encode. Preview means overlay the card number in the local monitor video. Encode means overlay the card number in the record file.
- Overlay Position: Here you can select the proper overlay position from the dropdown list.

СОМ	Net	
Current Sniffer Mod	in in COM	
Protocol	POS	V
Overlay Channel	1 2 3	
Overlay Mode	Preview 🗹 Encod	е
Overlay Position	Top Left	v
Save	Refresh	

Figure 5-105

5.8.5.6.2 Network Type

The network type interface is shown as below. See Figure 5-106.

Here we take the ATM/POS protocol to continue.

There are two types: with or without the protocol according to client's requirements.

With the protocol

For ATM/POS with the protocol, you just need to set the source IP, destination IP (sometimes you need to input corresponding port number).

Current Sniffer Mode is	COM			
Protocol	ATM/POS (M		
Overlay Mode	Preview V Encode			
Overlay Position	Top Left	M		
Sniffer Group	Sniffer Group1	~		
Source IP Address	0.0.0.0	Source Port	0	
Destination IP Address	0.0.0.0	Destination Port	0	
Overlay Channel	1 2 3			
	Start Position	Length	Value	
Key Words1	1	0		÷
Key Words2	1	0		@
Key Words3	1	0		\$
Key Words4	1	0		@
Key Words5	1	0		@
Key Words6	1	0		@

Figure 5-106

Without the protocol

For the ATM/POS without the protocol, the interface is shown as in Figure 5-107. Source IP refers to host IP address that sends out information (usually it is the device host.)

Destination IP refers to other systems that receive information.

Usually you do not need to set source port and target port.

There are total four groups IP. The record channel applies to one group (optional) only. Six frame ID groups verification can guarantee information validity and legal.

СОМ				
СОМ				
POS	~			
1 2 3				
Preview V Enc	ode			
Top Left	~			
0.0.0	. 0	Source Port	0	
0.0.0	. 0	Destination Port	0	
Refresh				
	 ✓ Preview ✓ Enci Top Left 0 . 0 . 0 0 . 0 . 0 	 ✓ Preview ✓ Encode Top Left ✓ 0 . 0 . 0 . 0 0 . 0 . 0 . 0 	✓ Preview ✓ Encode Top Left ✓ 0 0 0 0 0 0 0 0 0	✓ Preview ✓ Encode Top Left ✓ 0 . 0 . 0 . 0 . 0 0 . 0 . 0 .

Figure 5-107

5.8.5.7 Voice

The audio function is to manage audio files and set schedule play function. It is to realize audio broadcast activation function.

5.8.5.7.1 File List

Here you can add audio file, or delete audio file. See Figure 5-108.

File List			
No	File Matte	File Star(Bite)	Deixte
1	When You Whow mp3	3053581	0
	Swied aucto		

Figure 5-108

Click Add button, you can add audio file and import the audio file via the local computer. See Figure 5-109.

Choose File to	Upload				? 🐱
Look jn:	🞯 Desktop		~ (3 🕸 📂 🎹	-
My Recent Documents	My Computer My Documents My Network Pla Adobe Acrobat Microsoft Office Microsoft Office	7.0 Professional e Access 2003 e PowerPoint 2003			
My Documents					
My Computer	<				>
	File <u>n</u> ame:			~	<u>O</u> pen
My Network	Files of <u>type</u> :	All Files (*.*)		~	Cancel

Figure 5-109

5.8.5.7.2 Schedule

It is to set schedule broadcast function. You can play the different audio files in the specified periods.

From main menu->Setup->System->Voice->.Schedule, you can see the following interface. See Figure 5-110.

	in the		Pen			Sched	100	interval		Ropeat Pta/back	Ordent	
Enable	00	00		24	00	None	M	60	min.	0	Mic	<u>×</u>
Enable	00	00		24	00	None	*	60	mn	0	Mic	(m)
Enable	00	00	-	24	00	None	*	68	min	0	Mic	S
Enable	.00	00	-	24	00	None	*	60	min	0	Mic	~
Enable	00	00	-	24	00	None	1	60	mm.	0	Mic	
Enable	00	00	-	24	00	None	~	60	min.	0	Mic	-

Figure 5-110

Parameter	Function
Period	There are six periods. Check the box to enable current setup.
Repeat	It is to set audio file repeat times in the specified period.
Interval	It is the audio file repeated interval in the specified period.

Parameter	Function
Output port	There are two options: MIC (default)/audio. When reuse the MIC port and bidirectional talk port, the bidirectional port has the higher priority. Please note some series product does not support audio function.

Note

- The audio file end time depends on the audio file size and the interval setup.
- Priority: Bidirectional talk>Event trigger alarm>Trial listening>Audio schedule broadcast.

5.8.5.8 Account

Note:

- For the character in the following user name or the user group name, system max supports 6-digits. The space in the front or at the end of the string is null. The valid string includes: character, number, and underline.
- The user amount default setup is 64 and the group amount default setup is 20. The factory default setup includes two levels: user and admin. You can set the corresponding group and then set the rights for the respective user in the specified groups.
- User management adopts group/user modes. The user name and the group name shall be unique. One user shall be included in only one group.
 5.8.5.8.1 User name

In this interface you can add/remove user and modify user name. See Figure 5-111.

SN	Uper Name	Gruup Nama	Liver MAC	Marris	Medity	Delete
3	888888	admin		admin(888) 's account	100	0
2	aditiin	admin.		admin 'a account	1	0
3	delault	user		default account.	2	•
uthority						
athority Shutdown Account		ual Control	File Backup Clear Log	Storage Ortau#AUpdate	PTZ Control System	

Figure 5-111

Add user: It is to add a name to group and set the user rights. See Figure 5-112. There are three default users: admin (password: admin)/888888(password: 888888) and hidden user "default".

Hidden user "default" is for system interior use only and can not be deleted. When there is no login user, hidden user "default" automatically login. You can set some rights such as monitor for this user so that you can view some channel view without login.

Here you can input the user name and password and then select one group for current user.

Please note the user rights shall not exceed the group right setup.

For convenient setup, please make sure the general user has the lower rights setup than the admin.

Add User			
User Name Reutable Password			
Confirm Pass	word		
Group	admin.	~	
User MAC		a 3 a	1
Memo			
Authority			
System Mana	per Plays	back 1	lonitor
인Account 인PTZ Control 인Color Setting 인CAMERA	⊠Bystem ⊠System Info ⊠Storage ⊠Clear Log	Disconnect Manual Control Event Shuttown	Defau83Update Pris Backup Network
	Save	Cancel]

Figure 5-112

Modify user

It is to modify the user property, belonging group, password and rights. See Figure 5-113. **Modify password**

It is to modify the user password. You need to input the old password and then input the new password twice to confirm the new setup. Please click the OK button to save.

Please note, the password ranges from 1-digit to 6-digit. It shall include the number only. For the user of the account rights, he can modify the password of other users.

Modify User	_	_	_	X
User Name	uu	~		
User Name	uu			
Reusable				
Memo				
Group	admin	~		
User MAC	:	: : :	:	
Modify Password				
Authority				
System Manager	Playbac	k M	onitor	_
PTZ Control Color Setting	System System Info Storage Clear Log	Disconnect Manual Control Event Shutdown	 ✓ Default&Update ✓ File Backup ✓ Network 	
				<u>~</u>
	Save	Cancel		

Figure 5-113

5.8.5.8.2 Group

The group management interface can add/remove group, modify group password and etc. The interface is shown as in Figure 5-114.

5N	Group Name	Nemo	Nodify	Delete
1	admin	administrator group		õ
2	user	user group	*	۰
uthority.				



Add group: It is to add group and set its corresponding rights. See Figure 5-115. Please input the group name and then check the box to select the corresponding rights. It

includes: shutdown/reboot device, live view, record control, PTZ control and etc.

Add Group					×
Group Name Memo					
Authority					
System Manag	er Playt	back	N	Ionitor	
✓AII ✓Account ✓PTZ Control ✓Color Setting ✓CAMERA	♥System ♥System Info ♥Storage ♥Clear Log	✓Discor ✓Manua ✓Event ✓Shutd	al Control	✓Default&Up ✓File Backup ✓Network	
	Save		Cancel		

Figure 5-115

Modify group

Click the modify group button, you can see an interface is shown as in Figure 5-116. Here you can modify group information such as remarks and rights.

Modify Group					6
Group Name	user		~		
Group Name	user				
Memo	user group				
Authority					
System Manager	Playba	ack	N	Ionitor	
PTZ Control	System System Info Storage Clear Log	✓Discon	al Control	Default&U File Backu Network	
	Save		Cancel		

Figure 5-116

5.8.5.9 Auto maintain

The auto maintain interface is shown as in Figure 5-117.

Here you can select auto reboot and auto delete old files interval from the dropdown list. If you want to use the auto delete old files function, you need to set the file period. Click Manual reboot button, you can restart device manually.

Auto Maintain	
Auto Reboot	Sunday 2 : 00
Auto Delete Old Files	Customized 💌 21 Days ago
	Manual Reboot
[Save Refresh

Figure 5-117

5.8.5.10 Import/Export

The interface is shown as in Figure 5-118.

Import&Export		
Config Import	Config Export	

Figure 5-118

Please refer to the following sheet for detailed information.

Parameter	Function
Import	It is to import the local setup files to the system.
Export	It is to export the corresponding WEB setup to your local PC.

5.8.5.11 Default

The default setup interface is shown as in Figure 5-119.

Here you can select Channel/Network/Event/Storage/System. Or you can check the All box to select all items.

Default		
Select All		
CAMERA	VETWORK	V EVENT
STORAGE	SYSTEM	
Default	Factory Default	

Figure 5-119

5.8.5.12 Upgrade

The upgrade interface is shown as in Figure 5-120.

Please select the upgrade file and then click the update button to begin update. Please note the file name shall be as *.bin. During the upgrade process, do not unplug the power cable, network cable, or shutdown the device.

Important

Improper upgrade program may result in device malfunction!

Upgrade	
Select Firmware File	Browse Upgrade

Figure 5-120

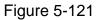
5.9 Information

5.9.1 Version

The version interface is shown as in Figure 5-121.

Here you can view record channel, alarm input/output information, software version, release date and etc. Please note the following information is for reference only.

Version	
Record Channel:	4
Alarm In:	4
Alarm Out:	3
SN:	YPA4HQ041W00030
System Version:	3.200.0001.8, Build Date: 2014-08-13



5.9.2 Log

Here you can view system log. See Figure 5-122.

N		Event	
1		Shut down	
2		Boot up	
3		Video Loos	
4		Video Lona	
5		Video Loss	
-0		Video Loos	
7	2014-00-21 11:36:36	HOD	
8	2014-08-21 11:38:58	User logged in	
estern Log into	A11	•	

Figure 5-122

Please refer to the following sheet for log parameter information.

Parameter	Function
Туре	Log types include: system operation, configuration operation, data
	operation, event operation, record operation, user management, log
	clear.
Start time	Set the start time of the requested log.
End time	Set the end time of the requested log.
Search	You can select log type from the drop down list and then click search
	button to view the list.
	You can click the stop button to terminate current search operation.
Detailed information	You can select one item to view the detailed information.
Clear	You can click this button to delete all displayed log files. Please note system does not support clear by type.
Backup	You can click this button to backup log files to current PC.

Note

- If there is no HDD, system max supports 1024 logs.
- If you have connected to the unformatted HDD, system max supports 5000 logs.
- If you have connected to the formatted HDD, system max supports 500,000 logs.
- System operation logs are saved in system memory. Other types of logs are saved in the HDD. If there is no HDD, other types of logs are saved in the system memory too.
- The logs are safe when you format the HDD. But the logs may become loss once you removed the HDD.

5.9.3 Online User

The online user interface is shown as in Figure 5-123.

No.	User Name	Group Name	IF Address	User Login Time
1	admin	admin	10.15.9.152	2013-10-24 04 31 33 PM
.2	ninbe	admin	10.15.9.152	2013-10-24 04 21 12 PM
3	admin	admin	10.15.5.145	2013-10-24 04 50 01 PM

Figure 5-123

5.9.4 HDD

The HDD interface is shown as in Figure 5-124. Here you can view HDD information.

HUU				
No.	Device Name	Status	Free Space/Total Space	S.M.A.R.T
1	SATA-1	Normal	1.64TB/1.81TB	Normal ^
Retresh				

Figure 5-124

5.10 Playback

Click Playback button, you can see an interface is shown as in Figure 5-125.

WEB service CAREven	PLAYSACK ALARM SETUP MICO LOSDUT	
Ø		
ð		
00000 2 2 3 1 5 10 10 10 10 10 10 10 10 10 10		(1111-111)

Figure 5-125

5.10.1 Search Record

Please set record type, record date, window display mode and channel name.

Select Date

You can click the date on the right pane to select the date. The green highlighted date is system current date and the blue highlighted date means it has record files.

• Window Split

Select window split mode. Click ESI to display in full screen. Click ESC button to exit.

See Figure 5-126.



Figure 5-126

• Customized playback

Click , you can see the following interface. See Figure 5-127.



Figure 5-127

Now you can select one or more channel(s) and then click Search to search record(s).

System supports one or more channels. The window split mode can auto adjust according to the channel amount. System max supports 16-split.

Click button to select all channels at the same time.

Click

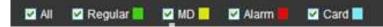
, system begins playback.

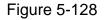
Select Channel

 $1 \sim n(n \text{ depends on your product channel amount})$ means main stream and A1 \sim An ((n depends on your product channel amount)) means sub stream.

Select Record Type

Check the corresponding box to select record type. See Figure 5-128.





5.10.2 Fisheye Playback De-Warp

Note

Some series product supports de-warp function.

When playing fisheye channel record file, it can de-warp.

In 1-window playback mode, click the at the top right corner, system pops up installation mode and display mode interface. Select the corresponding mode, it can display the dewarp video. Please refer to Fisheye de-warp in chapter 5.4.1 for detailed information.

5.10.3 File List

Click File list button, you can see the corresponding file(s) in the list. See Figure 5-129.



Figure 5-129

5.10.4 Playback

Select a file you want to play and then click Play button, system can begin playback. You can select to playback in full-screen. Please note for one channel, system can not playback and download at the same time. You can use the playback control bar to implement various operations such as play, pause, stop, slow play, fast play and etc.

5.10.5 Download

Select the file(s) you want to download and then click download button, you can see an interface shown as in Figure 5-130. The Download button becomes Stop button and there is a process bar for your reference. Please go to you default file saved path to view the files.

E		00	:	00	:	00		C	۶.
	1		2			3		4	
	Sta	rt Ti	me	9		Туре			
✓	08	:34:	59			R			
×	08	:40:	03			R			
M	∢ 1/	1 🕨	Þ	Ju	mp	То	1		
En	art Ti Id Tir e Siz	ne:							
	<u>v</u>	Mor	e			⊻ 9 ←	itop(; Ba)

Figure 5-130

5.10.6 Load more

It is for you to search record or picture. You can select record channel, record type and record time to download. Or you can use watermark function to verify file.

5.10.6.1 Download By File

Select channel, record type, bit stream type and then input start time and end time. Click Search button, the download by file interface is shown as in Figure 5-131.

	100	File Ske	Ulari Tome	Krist Time	File Tops	list Stewarth Tislee	Channel
	1	2048438	2014-02-17 118-34-59	2014-02-17 38:39 15	Regular	Man Steam	1
	2	1211040	2014-02-12 08-40.03	2014-02-17 06 63 08	Regular	Main Officiani	9
	1	3848B	2014-02-17 08:34:59	2014-02-17.58(3)(15	Regular	Main Stream	2
-	4	atene.	2014-02-17 86-40 03	2014-02-17 06 63 08	Regular	Man Illuarii	2
	8	23+8KB	2014-02-17 08:34:59	2014-02-17-58.38:18	Regular	Marn Stream	1
	0	0423KE	2014-02-17 08 40 03	2014-02-17-06-59118	Regular	Main Direarti	3
	7	384KB	2014-02-17 08:34:98	2014-02-17 58:38:15	Reputar	Marn Stream	4
	8	0.7478H	2014-02-17 08:40 03	2014-02-17-00 09:09	Regular	Man Diream	4
Convertioned to La	111		2514-02-17 08-40 03	2014-02-17-06 19:09	Regular	511-2013	4 1 🕨 🖬 June Te 1

Check the file(s) you want to download and there are two options for you to save the file(s).

• Download to local

Click Download to local, system pops up the following interface for you to set record format and saved path. See Figure 5-132.

Record Format	DAV	<u>m</u>	
SeaPut	C RecontDow	niaad)	(invest)

Figure 5-132

You can click OK to download and view the download process. After the download operation, you can see corresponding dialog box.

Download to USB

Connect the corresponding p peripheral device, and then click Download to USB button, you can see the following interface. See Figure 5-133.

Diapolei Sele	All Incords In	itset filme Bind Tome	2014 - 32 - 14 2014 - 32 - 17	00 14 00 22 19 29	Sam Prethand		
10.24+4+17(0+1	May Sub 👘						
	1985	1 Alley Parts	Difference -	Emil Trees	First Type:	Replevate Frame	David
	1	204648	2014年10月1日1日1日	2014-102-17 86 38 15	frepalar	Man Thiam	1.1
		211040	2014/02/17 58 47 51	2214-1211-24-58-58	hepdat	Han Shaan	U
0	- 0	There are a second seco	2014-02-01 08:34:09	1014-0017-003016	Report	Have The arr	- C
Ö	0.4.0	adapted.	2014-02-17:08-02:03	anteres et aveteres.	. Hepest .	Ban ibnam .	1
0	8	204648	2014-02-07.08/Jama	2014/02/17 10:28:10	Repte	Mart Stream.	3.
		WALLING.	2016-02-17-08-00-02	2014-02179238-08	Bapalar	Hard Sheare	T
0	1.8	20102	2014-30/17 08:34 59	2019/02/17 08:30:10	Reprier	Nav Down	¥.
0		00+04M	2014/02/17 20:48:02	2014/02/11/06 20:06	Happer	Ban Divert	
	Control b						• . Hang to 1
inter contra la			Renta tan GAN	N.	Table Spaceston		

Figure 5-133

Select Backup device and backup type first and then click Start backup button.

After the download operation, you can see corresponding dialogue box.

5.10.6.2 Download by Time

Select channel, bit stream type, start time and end time.

Click Download to Local button, you can see download by time interface is shown as in Figure 5-134.

Deemicod by File Download by Time Deemicod by File Deemicod by Time Deemicod by Time Deemicod by Time Deemicod by Lacase Deemicod by Lacase	a 2014 BZ = 14 00 00 00	
	Hercard Format DAM Hercard Format DAM C Ascord Dourload Catcut Catcut	
fast.		

Figure 5-134

Set record format and saved path, you can click OK to download and view the download process. After the download operation, you can see corresponding dialog box.

5.10.6.3 Watermark

Watermark interface is shown as In Figure 5-135. Please select a file and then click Verify button to see the file has been tampered with or not

Doenitaal by Pie 0 Local Pie C reconfront/Centre pie Volkement boti		atermark] vinti			
Volument Revaulant						
5. 5.	Markingtown taek Hormai	Vila	nnan Thron ;;			
fiet						

Figure 5-135

5.11 Face Search

On the main interface, click Face search button, you can see an interface shown as below. See Figure 5-136.



Figure 5-136

Please refer to the following sheet for detailed information.

SN	Name	Function					
1	Display	• It is to display human face detection file list. The latest file is at the					
	pan	top. \					
		 Click Export, you can export the selected file to the USB dev 					
		There are two types: image/record.					
		\diamond Image: Export the recognized human face image.					
		\diamond Record: Export the record file before and after 10 seconds					
		when the DVR recognizes the human face.					
2	Playback	Play the searched record file or image. Double click to playback in full					
	pane	screen.					
3	Search	Set date, start time and end time, click Search button, you can view the					
	pane	corresponding file list.					

5.12 Alarm

Click alarm function, you can see an interface is shown as Figure 5-137.

Here you can set device alarm type and alarm sound setup (Please make sure you have enabled audio function of corresponding alarm events.).

	REVIEW PLAYBACK	ALARM SETUP	INFO: LODGUT		
Alarm Type Alarm Type Transacting Alarm Social Alarm Social Sound Path	C Edema Alam		Time	-Alatite Sybe	

Figure 5-137

Please refer to the following sheet for detailed information.

Туре	Parameter	Function					
Alarm	Video loss	System alarms when video loss occurs.					
Туре	Motion detection	System alarms when motion detection alarm					
		occurs.					
	Tampering	System alarms when camera is viciously masking.					
	Disk full	System alarms when disk is full.					
	Disk error	System alarms when disk error occurs.					
	External alarm	Alarm input device sends out alarm.					
Operation	Prompt	Check the box here, system can automatically pops					
		up an alarm icon on the Alarm button in the main					
		interface when there is an alarm.					
Alarm	Play alarm	System sends out alarm sound when an alarm					
Sound	sound	occurs. You can specify as you wish.					
	Sound path	Here you can specify alarm sound file.					

5.13 Log out

Click log out button, system goes back to log in interface. See Figure 5-138. You need to input user name and password to login again.

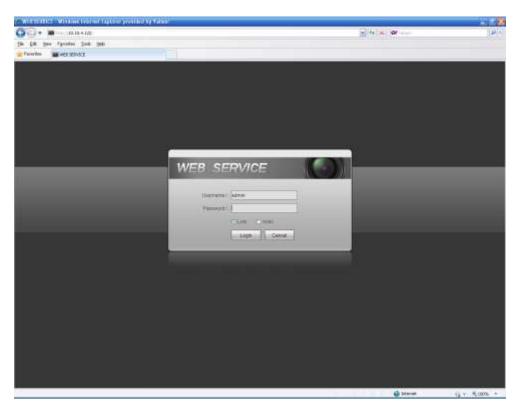


Figure 5-138

5.14 Un-install Web Control

You can use web un-install tool "uninstall web.bat" to un-install web control.

Please note, before you un-installation, please close all web pages, otherwise the un-installation might result in error.

6 Professional Surveillance System

Besides Web, you can use our Smart PSS to login the device. For detailed information, please refer to *Smart PSS user's manual.*

7 FAQ

1. DVR can not boot up properly.

There are following possibilities:

- Input power is not correct.
- Power connection is not correct.
- Power switch button is damaged.
- Program upgrade is wrong.
- HDD malfunction or something wrong with HDD ribbon.
- Seagate DB35.1, DB35.2, SV35 or Maxtor 17-g has compatibility problem. Please upgrade to the latest version to solve this problem.
- Front panel error.
- Main board is damaged.

2. DVR often automatically shuts down or stops running.

There are following possibilities:

- Input voltage is not stable or it is too low.
- HDD malfunction or something wrong with the ribbon.
- Button power is not enough.
- Front video signal is not stable.
- Working environment is too harsh, too much dust.
- Hardware malfunction.

3. System can not detect hard disk.

There are following possibilities:

- HDD is broken.
- HDD ribbon is damaged.
- HDD cable connection is loose.
- Main board SATA port is broken.

4. There is no video output whether it is one-channel, multiple-channel or all-channel output.

There are following possibilities:

- Program is not compatible. Please upgrade to the latest version.
- Brightness is 0. Please restore factory default setup.
- There is no video input signal or it is too weak.
- Check privacy mask setup or your screen saver.
- DVR hardware malfunctions.

5. Real-time video color is distorted.

There are following possibilities:

• When using BNC output, NTSC and PAL setup is not correct. The real-time video becomes black and white.

- DVR and monitor resistance is not compatible.
- Video transmission is too long or degrading is too huge.
- DVR color or brightness setup is not correct.

6. Can not search local records.

There are following possibilities:

- HDD ribbon is damaged.
- HDD is broken.
- Upgraded program is not compatible.
- The recorded file has been overwritten.
- Record function has been disabled.

7. Video is distorted when searching local records.

There are following possibilities:

- Video quality setup is too low.
- Program read error, bit data is too small. There is mosaic in the full screen. Please restart the DVR to solve this problem.
- HDD data ribbon error.
- HDD malfunction.
- DVR hardware malfunctions.

8. There is no audio when monitor.

There are following possibilities:

- It is not a power picker.
- It is not a power acoustics.
- Audio cable is damaged.
- DVR hardware malfunctions.

9. There is audio when monitor but there is no audio when system playback.

There are following possibilities:

- Setup is not correct. Please enable audio function
- Corresponding channel has no video input. Playback is not continuous when the screen is blue.

10. Time display is not correct.

There are following possibilities:

- Setup is not correct
- Battery contact is not correct or voltage is too low.
- Crystal is broken.

11. DVR can not control PTZ.

There are following possibilities:

• Front panel PTZ error

- PTZ decoder setup, connection or installation is not correct.
- Cable connection is not correct.
- PTZ setup is not correct.
- PTZ decoder and DVR protocol is not compatible.
- PTZ decoder and DVR address is not compatible.
- When there are several decoders, please add 120 Ohm between the PTZ decoder A/B cables furthest end to delete the reverberation or impedance matching. Otherwise the PTZ control is not stable.
- The distance is too far.

12. Motion detection function does not work.

There are following possibilities:

- Period setup is not correct.
- Motion detection zone setup is not correct.
- Sensitivity is too low.
- For some versions, there is hardware limit.

13. Can not log in client-end or web.

There are following possibilities:

- For Windows 98 or Windows ME user, please update your system to Windows 2000 sp4. Or you can install client-end software of lower version. Please note right now, our DVR is not compatible with Windows VISTA control.
- ActiveX control has been disabled.
- No dx8.1 or higher. Please upgrade display card driver.
- Network connection error.
- Network setup error.
- Password or user name is invalid.
- Client-end is not compatible with DVR program.

14. There is only mosaic no video when preview or playback video file remotely.

There are following possibilities:

- Network fluency is not good.
- Client-end resources are limit.
- There is multiple-cast group setup in DVR. This mode can result in mosaic. Usually we do not recommend this mode.
- There is privacy mask or channel protection setup.
- Current user has no right to monitor.
- DVR local video output quality is not good.

15. Network connection is not stable.

There are following possibilities:

- Network is not stable.
- IP address conflict.

- MAC address conflict.
- PC or DVR network card is not good.

16. Burn error /USB back error.

There are following possibilities:

- Burner and DVR are in the same data cable.
- System uses too much CPU resources. Please stop record first and then begin backup.
- Data amount exceeds backup device capacity. It may result in burner error.
- Backup device is not compatible.
- Backup device is damaged.

17. Keyboard can not control DVR.

There are following possibilities:

- DVR serial port setup is not correct
- Address is not correct
- When there are several switchers, power supply is not enough.
- Transmission distance is too far.

18. Alarm signal can not been disarmed.

There are following possibilities:

- Alarm setup is not correct.
- Alarm output has been open manually.
- Input device error or connection is not correct.
- Some program versions may have this problem. Please upgrade your system.

19. Alarm function is null.

There are following possibilities:

- Alarm setup is not correct.
- Alarm cable connection is not correct.
- Alarm input signal is not correct.
- There are two loops connect to one alarm device.

20. Remote control does not work.

There are following possibilities:

- Remote control address is not correct.
- Distance is too far or control angle is too small.
- Remote control battery power is low.
- Remote control is damaged or DVR front panel is damaged.

21. Record storage period is not enough.

There are following possibilities:

- Camera quality is too low. Lens is dirty. Camera is installed against the light. Camera aperture setup is not correct.
- HDD capacity is not enough.
- HDD is damaged.

22. Can not playback the downloaded file.

There are following possibilities:

- There is no media player.
- No DXB8.1 or higher graphic acceleration software.
- There is no DivX503Bundle.exe control when you play the file transformed to AVI via media player.
- No DivX503Bundle.exe or ffdshow-2004 1012 .exe in Windows XP OS.

23. Forget local menu operation password or network password

Please contact your local service engineer or our sales person for help. We can guide you to solve this problem.

24. When I login via HTTPS, a dialogue says the certificate for this website is for other address.

Please follow chapter 5.8.2.16.1 to create server certificate.

25. When I login via HTTPS, a dialogue says the certificate is not trusted.

Please follow chapter 5.8.2.16.2 to download root certificate.

26. When I login via HTTPS, a dialogue says the certificate has expired or is not valid yet.

Please make sure your PC time is the same as the device time.

27. I connect the general analog camera to the device, there is no video output.

There are following possibilities:

- Check camera power supplying, data cable connection and etc.
- This series device does not support the analog camera of all brands. Please make sure the device supports general standard definition analog camera.

28. I connect the standard definition analog camera or the HDCVI camera to the device, there is no video output.

There are following possibilities:

- Check camera power supplying, or camera data cable connection.
- For the product supports analog standard definition camera/HD camera, you need to go to the main menu->Setting->Camera->Channel type to select corresponding channel type and then restart the DVR.

29. I can not connect to the IP channel.

There are following possibilities:

- Check the camera is online or not.
- Check IP channel setup is right or not (such as IP address, user name, password, connection protocol, port number.).
- The camera has set the whitelist (Only the specified devices can connect to the camera).

30. After I connected to the IP channel, there one-window output is OK, but there is no multiple-window output.

There are following possibilities:

- Check the sub stream of the camera has been enabled or not.
- Check the sub stream type of the camera is H.264 or not.
- Check the device supports camera sub stream resolution or not (such as 960H, D1, HD1 and etc.).

31. After I connected to the IP channel, there multiple-window output is OK, but there is no one-window output.

There are following possibilities:

- Check there is video from the IP channel or not. Please go to the main menu->info->System->BPS to view bit stream real-time information.
- Check the main stream of the camera has been enabled or not.
- Check the main stream type of the camera is H.264 or not.
- Check the device supports camera main stream resolution or not (such as 960H, D1, HD1 and etc.).
- Check camera network transmission has reached the threshold or not. Please check the online user of the camera.

32. After I connected to the IP channel, there is no video output in the one-window or the multiple-window mode. But I can see there is bit stream.

There are following possibilities:

- Check the main stream/sub stream type of the camera is H.264 or not.
- Check the device supports camera main stream/sub stream resolution or not (such as 1080P, 720P, 960H, D1, HD1 and etc.).
- Check the camera setup. Please make sure It supports the products of other manufacturers.

33. DDNS registration failed or can not access the device domain name.

There are following possibilities:

- Check the device is connected to the WAN. Please check the device has got the IP address if the PPPoE can dial. If there is a router, please check the router to make sure the device IP is online.
- Check the corresponding protocol of the DDNS is enabled. Check the DDNS function is OK or not.

• Check DNS setup is right or not. Default Google DNS server is 8.8.8.8, 8.8.5.5. You can use different DNS provided by your ISP.

34. I can not use the P2P function on my cell phone or the WEB.

There are following possibilities:

- Check the device P2P function is enabled or not. (Main menu->Setting->Network->P2P)
- Check the device is in the WAN or not.
- Check cell phone P2P login mode is right or not.
- It is the specified device P2P login port or not when you are using P2P client.
- Check user name or password is right or not.
- Check P2P SN is right or not. You can use the cell phone to scan the QR code on the device P2P interface (Main menu->Setting->Network->P2P), or you can use the version information of the WEB to confirm. (For some previous series products, the device SN is the main board SN, it may result in error.)

35. I connect the standard definition camera to the device, there is no video output.

There are following possibilities:

- Check the DVR supports standard definition signal or not. Only some series product supports analog standard definition signal, HDCVI signal input.
- Check channel type is right or not. For the product supports analog standard definition camera/HD camera, you need to go to the main menu->Setting->Camera->Channel type to select corresponding channel type (such as analog) and then restart the DVR. In this way, the DVR can recognize the analog standard definition.
- Check camera power supplying, or camera data cable connection.

36. I can not connect to the IP camera.

There are following possibilities:

- Check DVR supports IP channel or not. Only some series products support A/D switch function, it can switch analog channel to the IP channel to connect to the IP camera. From Setting->Camera->Channel Type, select the last channel to switch to the IP channel. Some series product products support IP channel extension, it supports N+N mode.
- Check the IPC and the DVR is connected or not. Please go to the main menu->Setting->Camera->Remote to search to view the IP camera is online or not. Or you can go to the main menu->Info->Network->Test, you can input IP camera IP address and then click the Test button to check you can connect to the IP camera or not.
- Check IP channel setup is right or not (such as IP address, manufacturer, port, user name, password, remote channel number and etc.).

Daily Maintenance

- Please use the brush to clean the board, socket connector and the chassis regularly.
- The device shall be soundly earthed in case there is audio/video disturbance. Keep the device away from the static voltage or induced voltage.
- Please unplug the power cable before you remove the audio/video signal cable, RS232 or RS485 cable.
- Do not connect the TV to the local video output port (VOUT). It may result in video output circuit.
- Always shut down the device properly. Please use the shutdown function in the menu, or you can press the power button in the front panel for at least three seconds to shut down the device. Otherwise it may result in HDD malfunction.
- Please make sure the device is away from the direct sunlight or other heating sources. Please keep the sound ventilation.
- Please check and maintain the device regularly.

Appendix A HDD Capacity Calculation

Calculate total capacity needed by each DVR according to video recording (video recording type and video file storage time).

Step 1: According to Formula (1) to calculate storage capacity q_i that is the capacity of each channel needed for each hour, unit Mbyte.

$$q_i = d_i \div 8 \times 3600 \div 1024 \tag{1}$$

In the formula: d_i means the bit rate, unit Kbit/s

Step 2: After video time requirement is confirmed, according to Formula (2) to calculate the storage capacity m_i , which is storage of each channel needed unit Mbyte.

$$m_i = q_i \times h_i \times D_i \tag{2}$$

In the formula:

 h_i means the recording time for each day (hour)

 D_i means number of days for which the video shall be

kept

Step 3: According to Formula (3) to calculate total capacity (accumulation) q_T that is needed for all channels in the DVR during **scheduled video recording**.

$$q_T = \sum_{i=1}^{c} m_i \tag{3}$$

In the formula: c means total number of channels in one DVR

Step 4: According to Formula (4) to calculate total capacity (accumulation) q_T that is needed for all channels in DVR during **alarm video recording (including motion detection)**.

$$q_T = \sum_{i=1}^{c} m_i \, \star a\% \tag{4}$$

In the formula: a% means alarm occurrence rate

You can refer to the following sheet for the file size in one hour per channel. (All the data listed below are for reference only.)

Bit stream size (max)	File size	Bit stream size (max)	File size
96K	42M	128K	56M
160K	70M	192K	84M
224K	98M	256K	112M
320K	140M	384K	168M

448K	196M	512K	225M
640K	281M	768K	337M
896K	393M	1024K	450M
1280K	562M	1536K	675M
1792K	787M	2048K	900M

Appendix B Compatible backup devices

Manu factor	Model	Capacity
Sandisk	Cruzer Micro	512M
Sandisk	Cruzer Micro	1G
Sandisk	Cruzer Micro	2G
Sandisk	Cruzer Freedom	256M
Sandisk	Cruzer Freedom	512M
Sandisk	Cruzer Freedom	1G
Sandisk	Cruzer Freedom	2G
Kingston	DataTraveler II	1G
Kingston	DataTraveler II	2G
Kingston	DataTraveler	1G
Kingston	DataTraveler	2G
Maxell	USB Flash Stick	128M
Maxell	USB Flash Stick	256M
Maxell	USB Flash Stick	512M
Maxell	USB Flash Stick	1G
Maxell	USB Flash Stick	2G
Kingax	Super Stick	128M
Kingax	Super Stick	256M
Kingax	Super Stick	512M
Kingax	Super Stick	1G
Kingax	Super Stick	2G
Netac	U210	128M
Netac	U210	256M
Netac	U210	512M
Netac	U210	1G
Netac	U210	2G
Netac	U208	4G
Teclast	Ti Cool	128M
Teclast	Ti Cool	256M
Teclast	Ti Cool	512M
Teclast	Ti Cool	1G
SanDisk	cruzer mirco	2G
SanDisk	cruzer mirco	8G
SanDisk	Ti Cool	2G
SanDisk	Hongjiao	4G
Lexar	Lexar	256MB
Kingston	Data Traveler	1G
Kingston	Data Traveler	16GB

Appendix B-1 Compatible USB list

Kingston	Data Traveler	32GB
Aigo	L8315	16GB
Sandisk	250	16GB
Kingston	Data Traveler Locker+	32GB
Netac	U228	8GB

Appendix B-2 Compatible SD Card list

Brand	Standard	Capacity	Card type
Transcend	SDHC6	16GB	Big
Kingston	SDHC4	4GB	Big
Kingston	SD	2GB	Big
Kingston	SD	1GB	Big
Sandisk	SDHC2	8GB	Small
Sandisk	SD	1GB	Small

Appendix B-3 Compatible Portable HDD list

Brand	Model	Capacity
YDStar	YDstar HDD box	40G
Netac	Netac	80G
lomega	lomega RPHD-CG" RNAJ50U287	250GB
WD Elements	WCAVY1205901	1.5TB
Newsmy	Liangjian	320GB
WD Elements	WDBAAR5000ABK-00	500GB
WD Elements	WDBAAU0015HBK-00	1.5TB
Seagate	FreeAgent Go(ST905003F)	500GB
Aigo	H8169	500GB

Appendix B-4 Compatible USB DVD List

Brand	Model
Samsung	SE-S084
BenQ	LD2000-2K4

Appendix B-5 Compatible SATA DVD List

Brand	Model
LG	GH22NS30
Samsung	TS-H653 Ver.A

Samsung	TS-H653 Ver.F
Samsung	SH-224BB/CHXH
SONY	DRU-V200S
SONY	DRU-845S
SONY	AW-G170S
Pioneer	DVR-217CH

Appendix B-6 Compatible SATA HDD List

NOTE: Please upgrade the DVR firmware to latest version to ensure the accuracy of the table below. Here we recommend HDD of 500G to 4T capacity.

Manufacturer	Series	Model	Capacity	Port Mode
Seagate	Seagate SV35.1	ST3250824SV	250G	SATA
Seagate	Seagate SV35.1	ST3500641SV	500G	SATA
Seagate	Seagate SV35.2	ST3250820SV	250G	SATA
Seagate	Seagate SV35.2	ST3320620SV	320G	SATA
Seagate	Seagate SV35.2	ST3500630SV	500G	SATA
Seagate	Seagate SV35.2	ST3750640SV	750G	SATA
Seagate	Seagate SV35.3	ST3250310SV	250G	SATA
Seagate	Seagate SV35.3	ST3500320SV	500G	SATA
Seagate	Seagate SV35.3	ST3750330SV	750G	SATA
Seagate	Seagate SV35.3	ST31000340SV	1T	SATA
Seagate	Seagate SV35.4	ST3320410SV	320G	SATA
Seagate	Seagate SV35.4	ST3250311SV	250G	SATA
Seagate	Seagate SV35.5	ST3500410SV	500G	SATA
Seagate	Seagate SV35.5	ST3500411SV	500G	SATA
Seagate	Seagate SV35.5	ST31000525SV	1T	SATA
Seagate	Seagate SV35.5	ST31000526SV	1T	SATA
Seagate	Seagate SV35.5	ST1000VX000	1T	SATA
Seagate	Seagate SV35.5	ST2000VX003	2T	SATA
Seagate	Seagate SV35.5	ST2000VX002	2T	SATA
Seagate	Seagate SV35.5	ST2000VX000	2T	SATA
Seagate	Seagate SV35.5	ST3000VX000	3T	SATA
Seagate	Seagate Pipeline HD	ST3320410CS	320G	SATA
Seagate	Seagate Pipeline HD	ST3320310CS	320G	SATA
Seagate	Seagate Pipeline HD	ST3500422CS	500G	SATA
Seagate	Seagate Pipeline HD	ST3500321CS	500G	SATA
Seagate	Seagate Pipeline HD2	ST3250412CS	250G	SATA
Seagate	Seagate Pipeline HD2	ST3320311CS	250G	SATA
Seagate	Seagate Pipeline HD2	ST3500414CS	500G	SATA
Seagate	Seagate Pipeline HD2	ST3500312CS	500G	SATA
Seagate	Seagate Pipeline HD2	ST31000424CS	1T	SATA

Seagate	Seagate Pipeline HD2	ST31000322CS	1T	SATA
Seagate	Seagate Pipeline HD2	ST1000VM002	1T	SATA
Seagate	Seagate Pipeline HD2	ST1500VM002	1T	SATA
Seagate	Seagate Pipeline HD2	ST2000VM002	2T	SATA
Seagate	Seagate Pipeline HD2	ST2000VM003	2T	SATA
Seagate	Seagate Constellation	ST3500514NS	500G	SATA
Seagate	ES Seagate Constellation ES	ST31000524NS	1T	SATA
Seagate	Seagate Constellation ES	ST32000644NS	2T	SATA
Seagate	Seagate Constellation ES	ST2000NM0011	2T	SATA
Seagate	Seagate Constellation ES	ST1000NM0011	1T	SATA
Seagate	Seagate Constellation ES	ST500NM0011	500G	SATA
Seagate	Seagate Constellation ES	ST2000NM0031	2T	SATA
Seagate	Seagate Constellation ES	ST1000NM0031	1T	SATA
Seagate	Seagate Constellation ES	ST500NM0031	500G	SATA
Seagate	Seagate Constellation ES	ST2000NM0051	2T	SATA
Seagate	Seagate Constellation ES	ST1000NM0051	1T	SATA
Seagate	Seagate Constellation ES	ST500NM0051	500G	SATA
Seagate	Seagate Constellation ES.2	ST33000650NS	3T	SATA
Seagate	Seagate Constellation ES.2	ST32000645NS	2T	SATA
Seagate	Seagate Constellation ES.2	ST33000651NS	ЗТ	SATA
Seagate	Seagate Constellation ES.2	ST32000646NS	2T	SATA
Seagate	Seagate Constellation ES.2	ST33000652NS	3T	SATA
Seagate	Seagate Constellation ES.2	ST32000647NS	2T	SATA
Westem Digital	Cariar SE	WD3200JD	320G	SATA
Westem Digital	Cariar SE	WD3000JD	300G	SATA

Westem Digital	Cariar SE	WD2500JS	250G	SATA
Westem Digital	Cariar SE16	WD7500KS	750G	SATA
Westem Digital	Cariar SE16	WD5000KS	500G	SATA
Westem Digital	Cariar SE16	WD4000KD	400G	SATA
Westem Digital	Cariar SE16	WD3200KS	320G	SATA
Westem Digital	Cariar SE16	WD2500KS	250G	SATA
Westem Digital	WD Caviar SE16	WD2500YS-01SHB0	250G	SATA
Westem Digital	WD Caviar RE16	WD3200YS-01PGB0	320G	SATA
Westem Digital	WD Caviar RE2	WD5000YS-01MPB0	500G	SATA
Westem Digital	WD AV—AVJS	WD2500AVJS-63WDA0	500G	SATA
Westem Digital	WD AV—AVJS	WD3200AVJS-63WDA0	320G	SATA
Westem Digital	WD AV—AVJS	WD5000AVJS-63YJA0	500G	SATA
Westem Digital	WDAV-GP—AVCS	WD5000AVCS-63H1B1	500G	SATA
Westem Digital	WDAV-GP—AVCS	WD7500AVCS-63ZLB0	750G	SATA
Westem Digital	WDAV-GP—AVCS	WD3200AVCS	320G	SATA
Westem Digital	WDAV-GP—AVCS	WD2500AVCS	250G	SATA
Westem Digital	WDAV-GP-EVCS	WD10EVCS-63ZLB0	1T	SATA
Westem Digital	WDAV-GP-EVCS	WD20EVCS-63ZLB0	2T	SATA
Westem Digital	WDAV-GP—AVVS	WD3200AVVS-63L2B0	320G	SATA
Westem Digital	WDAV-GP—AVVS	WD5000AVVS-63ZWB0	500G	SATA
Westem Digital	WDAV-GP—AVVS	WD7500AVVS-63E1B1	750G	SATA
Westem Digital	WDAV-GP—AVVS	WD7500AVVS-63E1B1	750G	SATA
Westem Digital	WDAV-GP-EVVS	WD10EVVS-63E1B1	1T	SATA
Westem Digital	WDAV-GP-EVDS	WD10EVDS-63N5B1	1T	SATA
Westem Digital	WDAV-GP-EVDS	WD15EVDS-63V9B0	1.5T	SATA
Westem Digital	WDAV-GP—EVDS	WD20EVDS-63T3B0	2T	SATA
Westem Digital	WDAV-GP—AVDS	WD5000AVDS-63U7B0	500G	SATA
Westem Digital	WD AV-GP	WD30EURS	3T	SATA
Westem Digital	WD AV-GP	WD25EURS	2.5T	SATA
Westem Digital	WD AV-GP	WD20EURS	2T	SATA
Westem Digital	WD AV-GP	WD15EURS	1.5T	SATA
Westem Digital	WD AV-GP	WD10EURS	1T	SATA
Westem Digital	WD AV-GP	WD10EURX	1T	SATA
Westem Digital	WD AV-GP	WD7500AURS	750G	SATA
Westem Digital	WD AV-GP	WD7500AVDS	500G	SATA
Westem Digital	WD AV-GP	WD500AVDS	500G	SATA
Westem Digital	WD AV-GP	WD10EUCX	1T	SATA
Samsung	Samsung—HA	HA500LJ/CE	500G	SATA
Samsung	Samsung—HA	HA751LJ	750G	SATA
Samsung	Samsung—HA	HA101UJ/CE	1T	SATA
Samsung	Samsung—HD	HD502HI/CEC	500G	SATA
Samsung	Samsung—HD	HD103SI/CEC	1T	SATA
Samsung	Samsung—HD	HD154UI/CE	1.5T	SATA

Hitachi	HitachiCinemaStar™	HCP725050GLA380	500G	SATA
	5K500			
Hitachi	HitachiCinemaStar™	HCT721050SLA360	500G	SATA
	7K1000.B			
Hitachi	HitachiCinemaStar™	HCT721075SLA360	750G	SATA
	7K1000.B			
Hitachi	HitachiCinemaStar™	HCT721010SLA360	1T	SATA
	7K1000.B			
Maxtor	DiamondMax 20	STM3320820AS	320G	SATA
Maxtor	DiamondMax 20	STM3250820AS	250G	SATA

Appendix C Compatible CD/DVD Burner List

NOTE: Please upgrade the DVR firmware to latest version to ensure the accuracy of the table below. And you can use the USB cable with the model recommended to set USB burner.

Manufacturer	Model	Port Type	Туре
Sony	DRX-S50U	USB	DVD-RW
Sony	DRX-S70U	USB	DVD-RW
Sony	AW-G170S	SATA	DVD-RW
Samsung	TS-H653A	SATA	DVD-RW
Panasonic	SW-9588-C	SATA	DVD-RW
Sony	DRX-S50U	USB	DVD-RW
BenQ	5232WI	USB	DVD-RW

Appendix D Compatible Displayer List

Brand	Model	Dimension (Unit: inch)
BENQ (LCD)	ET-0007-TA	19-inch (wide screen)
DELL (LCD)	E178FPc	17-inch
BENQ (LCD)	Q7T4	17-inch
BENQ (LCD)	Q7T3	17-inch
HFNOVO (LCD)	LXB-L17C	17-inch
SANGSUNG (LCD)	225BW	22 寸(wide screen)
HFNOVO(CRT)	LXB-FD17069HB	17 -inch
HFNOVO(CRT)	LXB-HF769A	17-inch
HFNOVO(CRT)	LX-GJ556D	17-inch
Samsung (LCD)	2494HS	24-inch
Samsung (LCD)	P2350	23-inch
Samsung (LCD)	P2250	22-inch
Samsung (LCD)	P2370G	23-inch
Samsung (LCD)	2043	20-inch
Samsung (LCD)	2243EW	22-inch
Samsung (LCD)	SMT-1922P	19-inch
Samsung (LCD)	T190	19-inch
Samsung (LCD)	T240	24-inch
LG (LCD)	W1942SP	19-inch
LG (LCD)	W2243S	22-inch
LG (LCD)	W2343T	23-inch
BENQ (LCD)	G900HD	18.5-inch
BENQ(LCD)	G2220HD	22-inch
PHILIPS (LCD)	230E	23-inch
PHILIPS (LCD)	220CW9	23-inch
PHILIPS (LCD)	220BW9	24-inch
PHILIPS (LCD)	220EW9	25-inch

Please refer to the following sheet form compatible displayer list.

Brand	Model	network working mode
D-LinK	DES-1016D	10/100M self-adaptive
D-LinK	DES-1008D	10/100M self-adaptive
		Five network modes
		1. AUTO
Ruijie	RG-S1926S	2. HALF-10M
Kujie	KU-519205	3. FULL-10M
		4 .HALF-100M
		5. FULL-100M
НЗС	H3C-S1024	10/100M self-adaptive
TP-LINK	TL-SF1016	10/100M self-adaptive
TP-LINK	TL-SF1008+	10/100M self-adaptive

Appendix F Compatible Wireless Mouse List

Brand	Model
SINT illita	V80
Rapoo	3500
Logitech	M215
Shuangfeiyan	Tianyao G7-630

Please refer to the following sheet for compatible SD card brand.

Appendix G Earthing

1. What is the surge?

Surge is a short current or voltage change during a very short time. In the circuit, it lasts for microsecond. In a 220V circuit, the 5KV or 10KV voltage change during a very short time (about microseconds) can be called a surge. The surge comes from two ways: external surge and internal surge.

- The external surge: The external surge mainly comes from the thunder lightning. Or it comes from the voltage change during the on/off operation in the electric power cable.
- The internal surge: The research finds 88% of the surge from the low voltage comes from the internal of the building such as the air conditioning, elevator, electric welding, air compressor, water pump, power button, duplicating machine and other device of inductive load.

The lightning surge is far above the load level the PC or the micro devices can support. In most cases, the surge can result in electric device chip damage, PC error code, accelerating the part aging, data loss and etc. Even when a small 20 horsepower inductive engine boots up or stops, the surge can reach 3000V to 50000V, which can adversely affect the electronic devices that use the same distribution box.

To protect the device, you need to evaluate its environment, the lighting affection degree objectively. Because surge has close relationship with the voltage amplitude, frequency, network structure, device voltage-resistance, protection level, ground and etc. The thunder proof work shall be a systematic project, emphasizing the all-round protection (including building, transmission cable, device, ground and etc.). There shall be comprehensive management and the measures shall be scientific, reliable, practical and economic. Considering the high voltage during the inductive thundering, the International Electrotechnical Committee (IEC) standard on the energy absorbing step by step theory and magnitude classification in the protection zone, you need to prepare multiple precaution levels.

You can use the lightning rod, lightning strap or the lightning net to reduce the damage to the building, personal injury or the property,

• The lightning protection device can be divided into three types:

Power lightning arrester: There are 220V single-phrase lightning arrester and 380V three-phrase lightening arrester (mainly in parallel connection, sometimes use series connection) You can parallel connect the power lightning arrester in the electric cable to reduce the short-time voltage change and release the surge current. From the BUS to the device, there are usually three levels so that system can reduce the voltage and release the current step by step to remove the thunderstorm energy and guarantee the device safety. You can select the replaceable module type, the terminal connection type and portable socket according to your requirement.

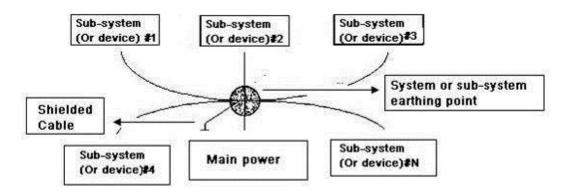
- Signal lightning arrester: This device is mainly used in the PC network, communication system. The connection type is serial connection. Once you connected the signal lightning arrestor with the signal port, it can cut the channel of the thunderstorm to the device, and on the other hand, it can discharge the current to the ground to guarantee the device proper work. The signal lightning arrester has many specifications, and widely used in many devices such as telephone, network, analog communication, digital communication, cable TV and satellite antenna. For all the input port, especially those from the outdoor, you need to install the signal lightning arrester.
- Antenna feed cable lightning arrester: It is suitable for antenna system of the transmitter or the device system to receive the wireless signal. It uses the serial connection too.

Please note, when you select the lighting arrester, please pay attention to the port type and the earthing reliability. In some important environment, you need to use special shielded cable. Do not parallel connect the thunder proof ground cable with the ground cable of the lightning rod. Please make sure they are far enough and grounded respectively.

2. The earthing modes

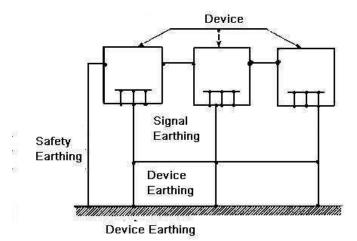
We all know the earthing is the most complicated technology in the electromagnetism compatibility design since there is no systematic theory or module. The earthing has many modes, but the selection depends on the system structure and performance. The following are some successfully experience from our past work.

One-point ground: In the following figure you can see there is a one-point ground. This connection provides common port to allow signal to be transmitted in many circuits. If there is no common port, the error signal transmission occurred. In the one-point ground mode, each circuit is just grounded only and they are connected at the same port. Since there is only one common port, there is no circuit and so, there is no interference.

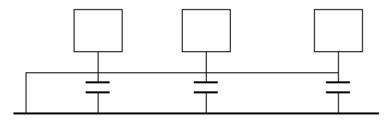


Multiple-point ground: In the following figure, you can see the internal circuit uses the chassis as the common point. While at the same time, all devices chassis use the earthing as the common port. In this connection, the ground structure can provide the lower ground resistance because when there are multiple-point grounds; each ground cable is as short as possible. And the parallel cable connection can reduce the total

conductance of the ground conductor. In the high-frequency circuit, you need to use the multiple-point ground mode and each cable needs to connect to the ground. The length shall be less than the 1/20 of the signal wavelength.



Mixed ground: The mix ground consists of the feature of the one-point ground and multiple-point ground. For example, the power in the system needs to use the one-point ground mode while the radio frequency signal requires the multiple-point ground. So, you can use the following figure to earth. For the direct current (DC), the capacitance is open circuit and the circuit is one-point ground. For the radio frequency signal, the capacitance is conducive and the circuit adopts multiple-point ground.



When connecting devices of huge size (the device physical dimension and connection cable is big comparing with the wave path of existed interference), then there are possibility of interference when the current goes through the chassis and cable. In this situation, the interference circuit path usually lies in the system ground circuit.

When considering the earthing, you need to think about two aspects: The first is the system compatibility, and the other is the external interference coupling into the earth circuit, which results in system error. For the external interference is not regular, it is not easy to resolve.

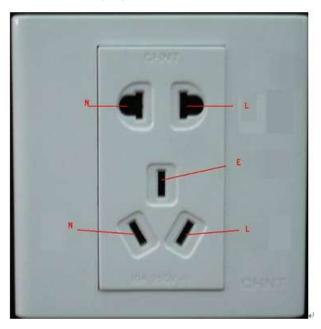
3. Thunder proof ground method in the monitor system

- The monitor system shall have sound thunder proof earthing to guarantee personnel safety and device safety.
- The monitor system working ground resistance shall be less than 1Ω .

- The thunder proof ground shall adopt the special ground cable from the monitor control room to the ground object. The ground cable adopts copper insulation cable or wire and its ground section shall be more than 20mm2.
- The ground cable of the monitor system can not short circuit or mixed connected with the strong alternative current cable.
- For all the ground cables from the control room to the monitor system or ground cable of other monitor devices, please use the copper resistance soft cable and its section shall be more than 4mm2.
- The monitor system usually can adopt the one-point ground.
- Please connect the ground end of 3-pin socket in the monitor system to the ground port of the system (protection ground cable)

4. The shortcut way to check the electric system using the digital multimeter

For 220V AC socket, from the top to the bottom, E (ground cable), N (neutral cable), L(live cable). Please refer to the following figure.



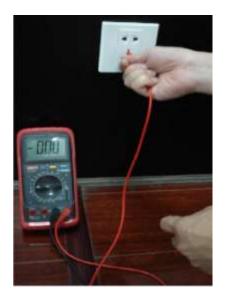
There is a shortcut way to check these thee cables connection are standard or not (not the accurate check).

Importance

In the following operations, the multimeter range shall be at 750V!

For E (earth cable)

Turn the digital multimeter to 750V AC, use your one hand to hold the metal end, and then the other hand insert the pen to the E port of the socket. See the following figure. If the multimeter shows 0, then you can see current earth cable connection is standard. If the value is more than 10, then you can see there is inductive current and the earth cable connection is not proper.



For L (live cable)

Turn the digital multimeter to 750V AC, use your one hand to hold the metal end, and then the other hand insert the pen to the L port of the socket. See the following figure. If the multimeter shows 120, then you can see current live cable connection is standard. If the value is less than 60, then you can see current live cable connection is not proper or it is not the live cable at all.



For N (Neutral cable)

Turn the digital multimeter to 750V AC, use your one hand to hold the metal end, and then the other hand insert the pen to the N port of the socket. See the following figure. If the multimeter shows 0, then you can see current N cable connection is standard. If the value is more than 10, then you can see there is inductive current and the neutral cable connection is not proper. If the value is 120, then you can know misconnected the neutral cable to the live cable.



Note:

- This manual is for reference only. Slight difference may be found in the user interface.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks mentioned are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
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