

Dahua Network Video Recorder User's Manual

V 2.4.3



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Welcome

Thank you for purchasing our network video recorder!

This user's manual is designed to be a reference tool for your system.

Please open the accessory bag to check the items one by one in accordance with the list below.

Contact your local retailer ASAP if something is missing or damaged in the bag.



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 electric 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 NVR before completing installation. Do not place objects on the NVR.

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

This series product shall be transported, storage and used in the specified environments. Environment which needs to comply with the following conditions:

- The function of the ITE being investigated to IEC 60950-1 is considered not likely to require connection to an Ethernet network with outside plant routing, including campus environment.
- The installation instructions clearly state that the ITE is to be connected only to PoE networks without routing to the outside plant.

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!

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

Before your operation please read the following instructions carefully.

• Installation environment



- ♦ Keep away from extreme hot places and sources;
- ♦ Avoid direct sunlight;
- ♦ Keep away from extreme humid places;
- Avoid violent vibration;
- Do not put other devices on the top of the NVR;
- ♦ Be installed in well ventilated place; do not block the vent.

• Accessories

Check the following accessories after opening the box:

• Please refer to the packing list in the box *

Standards Approvals

For our Wi-Fi series product such as NVR41HS-W-S2, please refer to the following important notices.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.

RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least



20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

IEEE 802.11b, 802.11g or 802.11n (20MHz) operation of this product in the U.S.A. is firmware-limited to channels 1 through 11. IEEE 802.11n (40MHz) operation of this product in the U.S.A. is firmware-limited to channels 3 through 9.



1 Features and Specifications

1.1 Overview

This series NVR is a high performance network video recorder. This series product support local preview, multiple-window display, recorded file local storage, remote control and mouse shortcut menu operation, and remote management and control function.

This series product supports centre storage, front-end storage and client-end storage. The monitor zone in the front-end can be set in anywhere. Working with other front-end devices such as IPC, NVS, this series product can establish a strong surveillance network via the CMS. In the network system, there is only one network cable from the monitor centre to the monitor zone in the whole network. There is no audio/video cable from the monitor centre to the monitor zone. The whole project is featuring of simple connection, low-cost, low maintenance work.

This series NVR can be widely used in many areas such as public security, water conservancy, transportation and education.

1.2 Features	5
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Real-time Surveillance	 VGA, HDMI port. Connect to monitor to realize real-time surveillance. Some series support TV/VGA/HDMI output at the same time. Short-cut menu when preview. Support popular PTZ decoder control protocols. Support preset, tour and pattern.
Playback	 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 specified zone enlargement.
Management	• Each group has different management powers that can be edited freely. Every user belongs to an exclusive group.
Storage	 Via corresponding setup (such as alarm setup and schedule setup), you can backup related audio/video data in the network video recorder. Support Web record and record local video and storage the file in the client end.
Alarm	 Respond to external alarm simultaneously (within 200MS), based on user's pre-defined relay setup, system can process the alarm input correctly and prompt user by screen and voice (support pre-recorded audio). Support central alarm server setup, so that alarm information can remotely notify user automatically. Alarm input can be derived from various connected peripheral devices. Alert you via email/sms.



	• Through network, sending audio/video data compressed by IPC or NVS to client-ends, then the data will be decompressed and display.
Notwork	 Support max 128 connections at the same time.
Monitor	Transmit audio/video data by HTTP, TCP, UDP, MULTICAST,
	RTP/RTCP and etc.
	 Transmit some alarm data or alarm info by SNMP.
	Support WEB access in WAN/LAN.
	Adopt the video compression and digital process to show several
Window Split	windows in one monitor. Support 1/4/8/9/16/ 25/36-window display when
	preview and 1/4/9/16-window display when playback.
	Support normal/motion detect/alarm record function. Save the recorded
Record	files in the HDD, USB device, client-end PC, or network storage server.
	You can search or playback the saved files at the local-end or via the Web/USB device
	 Support network backup, USB2.0 record backup function, the recorded
Backup	files can be saved in network storage server, peripheral USB2.0
_	device, burner and etc.
Network	 Supervise NVR configuration and control power via Ethernet.
Management	Support management via WEB.
Peripheral	 Support peripheral equipment management such as protocol setup and port connection
Equipment	 Support transparent data transmission such as RS232 (RS-422) RS485
Management	(RS-485).
	Support switch between NTSC and PAL.
	• Support real-time system resources information and running statistics
	display.
Auxiliarv	Support log file.
,	 Local GUI output. Shortcut menu operation via mouse.
	IR control function (For some series product only.). Shortcut menu
	operation via remote control.
	Support IPC or NVS remote video preview and control.

1.3 Specifications

1.3.1 NVR100/100-P Series

Model		100 Series	100-P Series
System	System Resources	4/8-ch series product support 4/8 HD connection respectively. Total bandwidth supports 28/56Mbps respectively.	
	os	Embedded Linux real-time operation system	
	Operation Interface	WEB/Local GUI	
Decode	Video Decode	H.264/MJPEG	



Model		100 Series	100-P Series
	Туре		
	Decode Capability	Max 2-ch 1080P 30fps or 4-ch 720P 3	30fps or 8-ch D1 30fps
Video	Video Input	4/8-ch network compression video input	
	Video Output	1-channel VGA analog video output	
	HDMI	1-ch HDMI output. Version number is 1.4	l .
	Window Split	1/4/8-window	
Audio	Audio Input	N/A	
	Audio Output	N/A	
	Audio Compression Standard	G.711a	
Alarm	Alarm Input	N/A	
	Alarm Output	N/A	
Funciton	Storage	1 built-in 2.5-inch SATA port	
	Multiple-Chann el Playback	Max 8-channel D1 or 4-channel 720P or 2-channel 1080P playback	
Port and Indicator	RS232 Port	N/A	
	RS485 Port	N/A	
	USB Port	2 peripheral USB2.0 ports.	



Model		100 Series		100-P Series
	Network Connection	1 RJ45 10/100Mbps self-adaptive	Etherr	net port.
	PoE	N/A	4	
	Power Port	1 power socket. Power adapter power supplying mode. DC 5V 2A power.	1 po powe 1.25	ower socket. Power adapter er supplying mode. DC 48V A power.
	Power Button	N/A		
	Power On-off Button	N/A		
	IR Receiver Window	N/A		
	Clock	Built-in clock.		
	Indicator Light			
General	Power Consumption	<10W (No HDD)		
	Working Temperature	- 10℃~ + 55℃		
	Working Humidity	10%~90%		
	Air pressure	86kPa∼106kPa 191.8mm×128.2mm×35.8mm 0.32kg∼0.36kg (No HDD)		
	Dimension			
	Weight			
	Installation Mode	Desk installation		

1.3.2 NVR11/11-P Series

Model	11 Series	11-P Series
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Model		11 Series	11-P Series	
System	System Resources	4/8-ch series product support 4/8 HD co bandwidth supports 28/56Mbps respectiv	onnection respectively. Total /ely.	
	OS	Embedded Linux real-time operation sys	tem	
	Operation Interface	WEB/Local GUI		
Decode	Video Decode Type	H.264/MJPEG		
	Decode Capability	Max 2-ch 1080P 30fps or 4-ch 720P 30fps or 8-ch D1 30fps		
Video	Video Input	4/8-ch network compression video input		
	Video Output	1-channel VGA analog video output		
	HDMI	1-ch HDMI output. Version number is 1.4		
	Window Split	1/4/8-window		
Audio	Audio Input	1-ch bidirectional talk input		
	Audio Output	1-ch bidirectional talk output		
	Audio Compression Standard	G.711a		
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
Funciton	Storage	1 built-in SATA port		



Model		11 Series		11-P Series
	Multiple-Chann el Playback	Max 8-channel D1 or 4-channel 72	OP or	2-channel 1080P playback
Port and Indicator	RS232 Port	N/A		
	RS485 Port	N/A		
	USB Port	2 peripheral USB2.0 ports.		
	Network Connection	1 RJ45 10/100Mbps self-adaptive	Ethern	et port.
	ΡοΕ	N/A	4	
	Power Port	1 power socket. Power adapter power supplying mode. DC 12V power.	1 po powe powe	wer socket. Power adapter er supplying mode. DC 48V er.
	Power Button	N/A N/A		
	Power On-off Button			
	IR Receiver Window	N/A		
	Clock	Built-in clock.		
	Indicator Light	One power status indicator light. One network status indicator light. One HDD status indicator light.		
General	Power Consumption	<10W (No HDD)		
	Working Temperature	- 10℃~ + 55℃		
	Working Humidity	10%~90%		
	Air pressure	86kPa∼106kPa		



Model		11 Series	11-P Series
	Dimension	205mm×206.75mm×45.2mm	
	Weight	0.5kg \sim 1kg (No HDD)	
	Installation Mode	Desk installation	

1.3.3 NVR21-S2/NVR21-P-S2/NVR21-8P-S2 Series

Model		21-S2 Series	21-P-S2 Series	21-8P-S2 Series
System	System Resources	4/8-ch series product bandwidth supports 80	support 4/8 HD connect Mbps.	tion respectively. Total
	OS	Embedded Linux real-	ime operation system	
	Operation Interface	WEB/Local GUI		
Decode	Video Decode Type	H.264		
	Decode Capability	Max 4-ch 1080P 30fps or 8-ch 720P 30fps or 8-ch D1 30fps		
Video	Video Input	4/8-ch network compression video input		
	Video Output	1-channel VGA analog video output		
	HDMI	1-ch HDMI output. Version number is 1.4		
	Window Split	1/4/8-window		
Audio	Audio Input	1-ch bidirectional talk input		
	Audio Output	1-ch bidirectional talk o	putput	



Model		21-S2 Series	21-P-S2 Series	21-8P-S2 Series
	Audio Compression Standard	G.711a		
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
Funciton	Storage	1 built-in SATA port		
	Multiple-Chann el Playback	Max 8-channel D1 or 8-channel 720P or 4-channel 1080P playback		
Port and Indicator	RS232 Port	N/A		
	RS485 Port	N/A		
	USB Port	2 peripheral USB2.0 ports.		
	Network Connection	1 RJ45 10/100Mbps self-adaptive Ethernet port.		
	PoE	N/A	4	8
	Power Port	1 power socket. Power adapter power supplying mode. DC 12V power.	1 power socket. Power adapter power supplying mode. DC 48V power.	1 power socket. Power adapter power supplying mode. DC 48V power.
	Power Button	N/A		
	Power On-off Button	N/A		
	IR Receiver Window	N/A		



Model		21-S2 Series	21-P-S2 Series	21-8P-S2 Series	
	Clock	Built-in clock.			
	Indicator Light	One power status indicator light. One network status indicator light. One HDD status indicator light.			
General	Power Consumption	<10W (No HDD)			
	Working Temperature	- 10℃~ + 55℃			
	Working Humidity	10%~90%			
	Air pressure	86kPa~106kPa			
	Dimension	205mm×206.75mm× 45.2mm	205mm×206.75mm× 45.2mm	425mm×95mm×260 mm	
	Weight	0.5kg~2kg (No HDD) Desk installation			
	Installation Mode				

1.3.4 NVR11H/11H-P Series

Model		11H Series	11H-P Series
System	System Resources	4/8-ch series product support 4/8 HD connection respectively. Total bandwidth supports 28/56Mbps respectively.	
	os	Embedded Linux real-time operation system	
	Operation Interface	WEB/Local GUI	
Decode	Video Decode Type	H.264/MJPEG	
	Decode Capability	Max 2-ch 1080P 30fps or 4-ch 720F	2 30fps or 8-ch D1 30fps



Model		11H Series 11H-P Series		
Video	Video Input	4/8-ch network compression video	input	
	Video Output	1-channel VGA analog video output		
	HDMI	1-ch HDMI output. Version number	r is 1.4	
	Window Split	1/4/8-window		
Audio	Audio Input	1-ch bidirectional talk input		
	Audio Output	1-ch bidirectional talk output		
	Audio Compression Standard	G.711a		
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
Funciton	Storage	1 built-in SATA port		
	Multiple-Chann el Playback	Max 8-channel D1 or 4-channel 72	20P or 2-channel 1080P playback	
Port and Indicator	RS232 Port	N/A		
	RS485 Port	N/A		
	USB Port	2 peripheral USB2.0 ports.		
	Network Connection	1 RJ45 10/100Mbps self-adaptive Ethernet port.		
	PoE	N/A	4	



Model		11H Series	11H-P Series			
	Power Port	1 power socket. Power adapter power supplying mode. DC 12V power. power. DC 12V				
	Power Button	N/A				
	Power On-off Button	N/A				
	IR Receiver Window	N/A				
	Clock	Built-in clock.				
	Indicator Light	ht One power status indicator light. One network status indicator light. One HDD status indicator light.				
General	Power Consumption	<10W (No HDD)				
	Working Temperature	- 10℃~ + 55℃				
	Working Humidity	10%~90%				
	Air pressure	86kPa∼106kPa				
	Dimension	325mm×250.58mm×51mm				
Weight 0.5kg~1kg (No HDD)						
	Installation Mode	Desk installation				

1.3.5 NVR11HS Series

Model		11HS Series
System System Resources		4/8-ch series product support 4/8 HD connection respectively. Total bandwidth supports 25/56Mbps respectively.
	OS	Embedded Linux real-time operation system



Model		11HS Series				
	Operation Interface	WEB/Local GUI				
Decode	Video Decode Type	H.264				
Decode Capability		 For 8-channel series product: Max 2-ch 1080P 30fps or 4-ch 720P 30fs or 8-ch D1 30fps. For 4-channel series product: Max 1-ch 1080P 30fps or 4-ch 720P 30fs or 4-ch D1 30fps. 				
Video	Video Input	4/8-ch network compression video input				
	Video Output 1-channel VGA analog video output					
	HDMI	1-ch HDMI output. Version number is 1.4				
	Window Split	1/4/8-window				
Audio	Audio Input	N/A				
	Audio Output	N/A				
	Audio Compression Standard	G.711a				
Alarm	Alarm Input	N/A				
	Alarm Output	N/A				
Funciton	Storage	1 built-in SATA port				
	Multiple-Chann el Playback	 For 8-channel series product: Max 2-ch 1080P 30fps or 4-ch 720P 30fs or 8-channel D1 30fs playback. For 4-channel series product: Max 1-ch 1080P 30fps or 4-ch 720P 30fs or 4-ch D1 30fs playback. 				
Port and	RS232 Port	N/A				
Indicator	RS485 Port	N/A				
	USB Port	2 peripheral USB2.0 ports. One at the front panel and one at the rear panel.				
	Network Connection	1 RJ45 10/100Mbps self-adaptive Ethernet port.				
	PoE Port	N/A				
	Power Port	1 power socket. Power adapter power supplying mode. DC 12V/1.5A power.				
	Power Button	N/A				



Model		11HS Series
	Power On-off Button	N/A
	IR Receiver Window	N/A
	Clock	Built-in clock.
Indicator Light		One power status indicator light. One network status indicator light. One HDD status indicator light.
General Power Consumption Working Temperature		<10W (No HDD)
		- 10℃~ + 55℃
	Working Humidity	10%~90%
	Air pressure	86kPa~106kPa
Dimension(W* D*H)		260mm×220mm×44mm
	Weight	0.7kg~0.8kg (No HDD)
	Installation Mode	Desk installation

1.3.6 NVR21HS-S2/21HS-P-S2/21HS-8P-S2 Series

Model		NVR21HS-S2 Series	NVR21HS-P-S2 Series	NVR21HS-8P-S2 Series				
System	System Resources	4/8-ch series product bandwidth supports 80	support 4/8 HD connec Mbps.	tion respectively. Total				
	OS	Embedded Linux real-time operation system						
	Operation Interface	WEB/Local GUI						
Decode	Video Decode Type	H.264						
	Decode Capability	Max 4-ch 1080P 30fps or 8-ch 720P 30fs or 8-ch D1 30fps						
Video	Video Input	4/8-ch network compression video input						
	Video Output	1-channel VGA analog video output1-ch HDMI output. Version number is 1.4				1-channel VGA analog video output		
	HDMI							



Model		NVR21HS-S2NVR21HS-P-S2NVR21HS-8P-S2SeriesSeriesSeries				
	Window Split	1/4/8-window				
Audio	Audio Input	1-ch bidirectional talk input				
	Audio Output	1-ch bidirectional talk of	output			
	Audio Compression Standard	G.711a				
Alarm	Alarm Input	N/A				
	Alarm Output	N/A				
Funciton	Storage	1 built-in SATA port				
	Multiple-Chann el Playback	Max 4-channel 1080P or 8-channel 720P or 8-channel D1 playback				
Port and	RS232 Port	N/A				
Indicator	RS485 Port	N/A				
	USB Port	2 peripheral USB2.0 ports.				
	Network Connection	1 RJ45 10/100Mbps self-adaptive Ethernet port.				
	PoE Port	N/A	4	8		
	Power Port	1 power socket. Power adapter power supplying mode. DC 12V power.	1 power socket. Power adapter power supplying mode. DC 48V power.	1 power socket. Power adapter power supplying mode. DC 48V power.		
	Power Button	N/A				
	Power On-off Button	N/A				
	IR Receiver Window	N/A				
	Clock	Built-in clock.				
	Indicator Light	One power status indic	cator light.			
		One network status indica	aicator light. ator light			
General	Power					
Contrai	Consumption					



Model		NVR21HS-S2 Series	NVR21HS-P-S2 Series	NVR21HS-8P-S2 Series		
	Working Temperature	- 10℃~ + 55℃				
	Working Humidity	10%~90%				
	Air pressure	86kPa \sim 106kPa				
	Dimension(W× D×H)	260mm×220mm×44mr	n			
	Weight	0.7kg~0.8kg (No HDD)				
	Installation Mode	Desk installation				
1.3.7 NVR	41HS-W-S2 Seri	es				
Model		41HS-W-S2 Series				
System	System Resources	4/8-ch series product support 4/8 HD connection respectively. Total bandwidth supports 80Mbps.				
	os	Embedded Linux real-time operation system				
	Operation Interface	WEB/Local GUI				
Decode	Video Decode Type	H.264/MJPEG/MPEG4				
	Decode Capability	Max 8-ch 1080P or 4-c	h 3M or 2-ch 5M.			
Video	Video Input	4/8-ch network compre	ession video input			
	Video Output	1-channel VGA analog	video output			
	HDMI	1-ch HDMI output. Ver	sion number is 1.4			
	Window Split	1/4/8/9-window				
Audio	Audio Input	N/A				
	Audio Output	t N/A				
	Audio Compression Standard	G.711a				
Alarm	Alarm Input	N/A				
	Alarm Output	N/A				
Funciton	Storage	1 built-in SATA port				



Model		41HS-W-S2 Series			
	Multiple-Chann el Playback	Max 8-ch 1080P playback			
Port and	RS232 Port	N/A			
Indicator	RS485 Port	J/A			
	USB Port	2 peripheral USB2.0 ports. One at the front panel and one at the rear panel.			
	Network Connection	1 RJ45 10/100Mbps self-adaptive Ethernet port.			
	PoE Port	N/A			
	Power Port	1 power socket. Power adapter power supplying mode. DC 12V/2A power.			
	Power Button	N/A			
Power On-off Button IR Receiver Window		N/A			
		N/A			
	Clock	Built-in clock.			
	Indicator Light	One power status indicator light. One network status indicator light. One HDD status indicator light.			
General	Power Consumption	<30W (No HDD)			
	Working Temperature	- 10°C∼ + 55°C			
	Working Humidity	10%~90%			
Air pressure		86kPa~106kPa			
	Dimension(W* D*H)	375mm×287mm×52mm			
	Weight	1.5kg \sim 2.5kg(No HDD)			
	Installation Mode	Desk installation			

1.3.8 NVR41/41-P/41-8P/41-W Series

Model		41 Series	41-P Series	41-8P Series	41-W Series	
System	System Resources	4/8/16-ch series product support 4/8/16 HD connection respectively. Total bandwidth supports 28/56/80Mbps respectively.				
	OS	Embedded Linux real-time operation system				



Model		41 Series	41-P Series	41-8P Series	41-W Series		
	Operation Interface	WEB/Local GUI					
Decode	Video Decode Type	H.264/MJPEG/M	IJPEG4				
	Decode Capability	Max 2-ch 5M 2 or 8-ch 720P 30f	Max 2-ch 5M 25fps or 4-ch 3M 25fps or 4-ch 1080P 30fps or 8-ch 720P 30fs				
Video	Video Input	4/8/16-ch networ	k compression vic	leo input			
	Video Output	1-channel VGA a	analog video outpu	ıt			
	HDMI	1-ch HDMI output. Version number is 1.4					
	Window Split	1/4/8/9/16-window 1/4-window					
Audio	Audio Input	1-ch bidirectional talk input					
	Audio Output	1-ch bidirectional talk output					
	Audio Compression Standard	G.711a					
Alarm	Alarm Input	N/A					
	Alarm Output	N/A					
Funciton	Storage	1 built-in SATA p	oort				
	Multiple-Chann el Playback	Max 4-channel 1	080P playback				
	WIFI AP	N/A			Yes		
Port and	RS232 Port	N/A					
Indicator	RS485 Port	N/A					
	USB Port	2 peripheral USE	32.0 ports.				
	Network Connection	1 RJ45 10/100Mbps self-adaptive Ethernet port.					
	PoE Port	N/A 4 8 N/A					
	Power Port	1 power 1 power socket. Power adapter 1 power socket. Power adapter socket. Power power supplying mode. DC 48V socket. Power adapter adapter power. adapter power. adapter power supplying mode. DC 12V mode. DC 12V power. power. power.			1 power socket. Power adapter power supplying mode. DC 12V power.		



Model		41 Series	41-P Series	41-8P Series	41-W Series		
	Power Button	1 button					
	Power On-off Button	N/A	N/A				
	IR Receiver Window	N/A					
	Clock	Built-in clock.					
	Indicator Light	One power status indicator light. One network status indicator light.					
		One HDD status indicator light.					
General	Power	<10W (No HDD)					
	Consumption						
	Working	- 10℃~ + 55℃					
	Temperature						
	Working	10%~90%					
	Humidity						
	Air pressure	86kPa \sim 106kPa					
	Dimension	205mm×206.75mm×45.2mm 270mm×204m 205mm×206.7					
		m×42mm 5mm×45.2mm					
	Weight	0.5kg~1kg (No HDD)					
	Installation Mode	Desk installation					

1.3.9 NVR41H/41H-P/41H-8P Series

Model		41H Series	41H-P Series	41H-8P Series		
System	System Resources	4/8/16-ch series product support 4/8/16 HD connection respectively. Total bandwidth supports 28/56/80Mbps respectively.				
	OS	Embedded Linux real-time operation system				
	Operation Interface	WEB/Local GUI				
Decode	Video Decode Type	H.264/MJPEG/MJPEG4				
	Decode Capability	Max 2-ch 5M 25fps or 4-ch 3M 25fps or 4-ch 1080P 30fps or 8-ch 720P 30fs				
Video	Video Input	4/8/16-ch network compression video input				
	Video Output	1-channel VGA analog video output				
	HDMI	1-ch HDMI output. Ver	sion number is 1.4			



Model		41H Series	41H-P Series	41H-8P Series	
	Window Split	1/4/8/9/16-window			
Audio	Audio Input	1-ch bidirectional talk input			
	Audio Output	1-ch bidirectional talk output			
	Audio Compression Standard	G.711a			
Alarm	Alarm Input	N/A		2-channel	
	Alarm Output	N/A		2-channel	
Funciton	Funciton Storage 1 built-in SATA port				
	Multiple-Chann el Playback	Max 4-channel 1080P playback			
Port and Indicator	RS232 Port	Ν/Α			
	RS485 Port	N/A			
	USB Port	2 peripheral USB2.0 ports.			
	Network Connection	1 RJ45 10/100Mbps self-adaptive Ethernet port.			
	PoE Port	N/A	4	8	
	Power Port	1 power socket. Power adapter power supplying mode. DC 12V power.	ocket. 1 power socket. Power adapter power dapter supplying mode. DC 48V power. plying 12V		
	Power Button	1 button			
	Power On-off Button	N/A			
	IR Receiver Window	iver N/A			
	Clock	Built-in clock.			
	Indicator Light	One power status indicator light. One network status indicator light. One HDD status indicator light.			
General	Power Consumption	<10W (No HDD)			
	Working Temperature	- 10℃~ + 55℃			



Model		41H Series	41H-P Series	41H-8P Series
	Working Humidity	10%~90%		
	Air pressure	86kPa \sim 106kPa		
	Dimension	325mm×250.58mm×5	1mm	
	Weight	0.5kg \sim 1kg (No HDD)		
	Installation Mode	Desk installation		

1.3.10 NVR22-S2/22-P-S2/22-8P-S2 Series

Model		NVR22-S2 Series	NVR22-P-S2 Series	NVR22-8P-S2 Series
System	System Resources	4/8-ch series product support 4/8 HD connection respectively. Total bandwidth supports 80Mbps.		
	os	Embedded Linux real-time operation system		
	Operation Interface	WEB/Local GUI		
Decode	Video Decode Type	H.264		
	Decode Capability	Max 4-ch 1080P 30fps	or 8-ch 720P 30fs or 8-	ch D1 30fps
Video	Video Input	4/8-ch network compression video input		
	Video Output	1-channel VGA analog	video output	
	HDMI	1-ch HDMI output. Ver	sion number is 1.4	
	Window Split	1/4/8-window		
Audio	Audio Input	1-ch bidirectional talk input		
	Audio Output	1-ch bidirectional talk of	output	
	Audio Compression Standard	G.711a		
Alarm	Alarm Input	N/A		
	Alarm Output	N/A		
Funciton	Storage	2 built-in SATA ports		
	Multiple-Chann el Playback	Max 4-channel 1080P	or 8-channel 720P or 8-	channel D1 playback



Model		NVR22-S2 Series	NVR22-P-S2 Series	NVR22-8P-S2 Series	
Port and Indicator	RS232 Port	N/A			
	RS485 Port	N/A			
	USB Port	2 peripheral USB2.0 ports.			
	Network Connection	1 RJ45 10/100Mbps self-adaptive Ethernet port.			
	PoE Port	N/A	4	8	
	Power Port	1 power socket. Power adapter power supplying mode. DC 12V power.	1 power socket. Power adapter power supplying mode. DC 48V power.	1 power socket. Power adapter power supplying mode. DC 48V power.	
	Power Button	N/A			
	Power On-off Button	N/A			
	IR Receiver Window	N/A			
	Clock	Built-in clock.			
	Indicator Light	One power status indicator light. One network status indicator light. One HDD status indicator light.			
General	Power Consumption	<10W (No HDD)			
	Working Temperature	- 10℃~ + 55℃			
	Working Humidity	10%~90%			
	Air pressure	86kPa~106kPa			
	Dimension(W× D×H)	375mm×287mm×52mm			
	Weight	1.5kg \sim 2.5kg (No HDD)			
	Installation Mode	Desk installation			

1.3.11 NVR42N Series

Model	42N Series



System	System	4/8/16/32-channel series product support 4/8/16/32-channel HD connection			
	Resource	respectively. Main stream bandwidth supports 40/80/160/160Mbps			
	s	respectively.			
	Operation	Embedded Linux real-time operation system			
	System				
	Operation	WEB/Local GUI			
	Interface				
Decode	Video	H.264/MJPEG/MPEG4			
	Compres				
	sion				
	Decode	Max supports 16-channel D1, or 8-channel 720P, or 4-channel 1080P, or			
	Capacity	4*3M or 2*5M decode.			
Video	Video	4/8/16/32-ch network compression video input			
	Input				
	Video	1-channel VGA analog video output.			
	Output				
	HDMI	1-ch HDMI output. Version number is 1.4			
	Window	1/4/8/9/16-window			
	Split				
Audio	Audio	1-ch bidirectional talk input			
	Input				
	Audio	1-ch bidirectional talk output			
	Output				
	Audio	G.711a			
	Compres				
	sion				
Alarm	Alarm	N/A			
	Input				
	Alarm	N/A			
	Output				
Function	Storage	2 built-in SATA ports.			
	Multiple-c	Max 8-channel 720P/4-channel 1080P playback at the same time.			
	hannel				
	Playback				
Port and	RS232	One RS232 port to debug transparent COM data.			
Indicator	Port				
	RS485	One RS485 port to control PTZ. Support various protocols.			
	port				
	USB2.0	Three peripheral USB2.0 ports.			
	Port				
	Network	1 RJ45 10/100/1000Mbps self-adaptive Ethernet port.			
	Connecti				
	on				


	Power	One power port, power adapter. Input DC 12V.
	Port	
	Power	One button. At the rear panel.
	Button	
	Power	One button. At the front-panel.
	On-off	
	Button	
	IR	Support IR remote control
	Receiver	
	Window	
	Clock	Built-in clock.
	Indicator	One power status indicator light.
	Light	One network status indicator light.
		One HDD status indicator light.
General	Power	<30W(No HDD)
	Consump	
	tion	
	Working	-10℃~+55℃
	Temperat	
	ure	
	Working	10%-90%
	Humidity	
	Air	86kpa-106kpa
	pressure	
	Dimensio	375mm×287mm×52mm
	n	
	Weight	1.5kg~2.5kg (No HDD)
	Installatio	Desk installation
	n	

1.3.12 NVR42/42-P/42-8P Series

Model		42 Series	42-P Series	42-8P Series
System	System	4/8/16/32-channel series product support 4/8/16/32-channel HD connection		
	Resource	respectively. Main str	eam bandwidth suppo	rts 40/80/160/160Mbps
	s	respectively.		
	Operation	Embedded Linux real-tin	ne operation system	
	System			
	Operation	WEB/Local GUI		
	Interface			
Decode	Video	H.264/MJPEG/MPEG4		
	Compres			
	sion			



	Decode	Max supports 16-channe	el D1, or 8-channel 720P,	or 4-channel 1080P, or
	Capacity	4*3M or 2*5M decode.		
	Video	1/9/16/22 ch notwork con	mprocesion video input	
Video	Input	4/0/10/32-ch network con	npression video input	
	Video	1 channel VCA analog vi		
	Output		deo oulpul.	
		1 oh HDMI output Marcia	on number is 1.4	
	וואשח			
	Window	1/4/8/9/16-window		
	Split			
Audio	Audio	1-ch bidirectional talk inp	ut	
	Input			
	Audio	1-ch bidirectional talk out	put	
	Output			
	Audio	G.711a		
	Compres			
	sion			
Alarm	Alarm	4-ch alarm input		
	Input			
	Alarm	2-ch alarm output		
	Output			
Function	Storage	2 built-in SATA ports.		
	Multiple-c	Max 8-channel 720P/4-ch	hannel 1080P playback at	the same time.
	hannel			
	Playback			
Port and	RS232	One RS232 port to debug	g transparent COM data.	
Indicator	Port			
	RS485	One RS485 port to contro	ol PTZ. Support various pro	otocols.
	port			
	USB2.0	Three peripheral USB2.0) ports.	
	Port			
	Network	1 RJ45 10/100/1000Mbps	s self-adaptive Ethernet po	ort.
	Connecti			
	on			
	Power	One power port,	Two power ports. Input	One power ports.
	Port	power adapter. Input	DC 12V/DC 48V.	Input 100-240V ,
		DC 12V.		47~63Hz.
	Power	One button. At the rear pa	anel.	
	Button			
	Power	One button. At the front-p	banel.	
	On-off			
	Button			
	IR	Support IR remote contro		
	Receiver			



	Window			
	Clock	Built-in clock.		
	Indicator	One power status indica	ator light.	
	Light	One network status indi	cator light.	
		One HDD status indicate	or light.	
General	Power	<30W(No HDD)		
	Consump			
	tion			
	Working	-10℃~+55℃		
	Temperat			
	ure			
	Working	10%-90%		
	Humidity			
	Air	86kpa-106kpa		
	pressure			
	Dimensio	375mm×287mm×52m	375mm×287mm×52mm	295mm×275mm×47m
	n	m		m
	Weight	1.5kg \sim 2.5kg(No HDD)	
	Installatio	Desk installation		
	n			

1.3.13 NVR42-16P Series

Model		42-16P Series
System	System	16/32-channel series product support 4/8/16/32-channel HD connection
	Resource	respectively. Main stream/sub stream bandwidth supports 200Mbps.
	S	
	Operation	Embedded Linux real-time operation system
	System	
	Operation	WEB/Local GUI
	Interface	
Decode	Video	H.264/MJPEG/MPEG4
	Compres	
	sion	
	Decode	Max supports 32-channel D1, or 16-channel 720P, or 8-channel 1080P, or
	Capacity	4*3M or 2*5M decode.
Video	Video	4/8/16/32-ch network compression video input
	Input	
	Video	1-channel VGA analog video output.
	Output	
	HDMI	1-ch HDMI output. Version number is 1.4
	Window	1/4/8/9/16-window
	Split	



Audio	Audio	1-ch bidirectional talk input
	Input	
	Audio	1-ch bidirectional talk output
	Output	
	Audio	G.711a
	Compres	
	sion	
Alarm	Alarm	4-ch alarm input
	Input	
	Alarm	2-ch alarm output
	Output	
Function	Storage	2 built-in SATA ports.
	Multiple-c	Max 16-channel 720P/8-channel 1080P playback at the same time.
	hannel	
	Playback	
Port and	RS232	One RS232 port to debug transparent COM data.
Indicator	Port	
	RS485	One RS485 port to control PTZ. Support various protocols.
	port	
	USB2.0	One peripheral USB2 0 port
	Port	One peripheral USB3 0 port
	Network	1 R I45 10/100/1000Mbps self-adaptive Ethernet port
	Connecti	
	on	
	Power	One power ports, Input 100-240V, 47~63Hz
	Port	
	Power	One button. At the rear panel.
	Button	
	Power	N/A
	On-off	
	Button	
	IR	N/A
	Receiver	
	Window	
	Clock	Built-in clock.
	Indicator	One power status indicator light.
	Light	One network status indicator light.
	-	One HDD status indicator light.
General	Power	<30W(No HDD)
	Consump	
	tion	
	Working	-10℃~+55℃
	Temperat	



ure	
Working	10%-90%
Humidity	
Air	86kpa—106kpa
pressure	
Dimensio	375mm×287mm×52mm
n	
Weight	1.5kg~2.5kg(No HDD)
Installatio	Desk installation
n	

1.3.14 NVR42-4K/42-8P-4K Series

Model		NVR42-4K Series	NVR42-8P-4K Series	
	System	8/16/32-channel series product supp	port 8/16/32-channel HD connection	
System	Resource	respectively. The main stream bandw	idth supports 48/96/192Mbps.	
	S			
	Operation	Embedded Linux real-time operation	system	
	System			
	Operation	WEB/Local GUI		
	Interface			
	Video	H.264/MJPEG/MPEG4		
Decode	Compres			
	sion			
	Decode	H.264: Max supports 16-channel D1,	or 8-channel 720P, 4-channel 1080P	
	Capacity	or 1-channel 4K decode.		
		H.265: Max supports 16-channel D1,	or 8-channel 720P, 4-channel 1080P	
		or 1-channel 4K decode.		
	Video	8/16/32-ch network compression vide	8/16/32-ch network compression video input	
Video	Input			
	Video	1-channel VGA analog video output.		
	Output			
	HDMI	1-ch HDMI output. Version number is	1.4	
	Window	1/4/8/9/16-window		
	Split			
	Audio	1-ch bidirectional talk input		
Audio	Input			
	Audio	1-ch bidirectional talk output		
	Output			
	Audio	G.711a, G.711u, PCM, G726		
	Compres			
	sion			
	Alarm	8-ch alarm input		
Alarm	Input			
	Alarm	3-ch alarm output		



	Output	Relay output. Relay (DC 30V /1A,	AC 125V/0.5A (Activation output))
		Including one controllable DC +12V o	utput.
Function	Storage	2 built-in SATA ports.	
	Multiple-c	Max 8-channel 720P/4-channel 1080	P/1-channel 4K playback at the same
	hannel	time.	
	Playback		
Port and	RS232	One RS232 port to debug transparent	t COM data.
Indicator	Port		
	RS485	One RS485 port to control PTZ. Supp	ort various protocols.
	port		
	USB Port	2 peripheral USB ports: One USB2.0	at the front panel and one USB3.0 at
		the rear panel.	
	Network	One RJ45 10/100/1000Mbps self-ada	ptive Ethernet port.
	Connecti		
	on		
	Power	One power socket. Power adapter	One power port. Input 100-240V,
	Port	power supplying. Input DC 12V	47~63HZ.
	Power	One button At the rear panel	
	Button	One button. At the real panel.	
	Bowor	N/A	
	On-off	N/A	
	Button		
	IR	N/A	
	Receiver		
	Window		
	Clock	Built-in clock.	
General	Indicator	One power status indicator light.	
	Light	One network status indicator light.	
		One HDD status indicator light.	abt
	Power		gni.
	Consump		
	tion		
	Working	-10℃~+55℃	
	Temperat		
	ure		
	Working	10%-90%	
	Humidity		
	Air	86kpa—106kpa	
	pressure		
	Dimensio	1U, 375mm(W) × 49.8mm(H) × 250m	m(D)
	n		
	Weight	1.65kg(No HDD)	



Installatio	Desk/rack installation
n	

1.3.15 NVR52-4KS2/52-8P-4KS2/52-16P-4KS2 Series

Model		NVR52-4KS2/52-8P-4KS2/52-16P-4KS2 Series	
System	System	8/16/32/64-channel series product support 8/16/32/64-channel HD	
System	Resource	connection respectively. The main stream bandwidth supports 80/160/320/320Mbps	
	Operation	Embedded Linux real-time operation system	
	System		
	Operation Interface	WEB/Local GUI	
Decede	Video	MPEG4, MJPG, H.264, H.265	
Decode	Compres		
	Sion	H 264/H 265: Max supports 64-channel D1 or 32-channel 720P	
	Capacity	16-channel 1080P or 4-channel 4K decode.	
Video	Video	8/16/32/64-ch network compression video input	
	Video	1-channel VGA analog video output.	
	Output		
	HDMI	1-ch HDMI output. Version number is 1.4	
	Window	1/4/8/9/16/25/36-window	
	Split		
Audio	Audio	1-ch bidirectional talk input	
Audio	Input	1 ab bidiractional talk output	
	Output		
	Audio	G.711a, G.711u, PCM, G726 (The bidirectional talk function supports	
	Compres	G.711a, G.711u, PCM only.)	
	sion		
Δlarm	Alarm	4-ch alarm input	
		3-ch relay output	
	Output		
Function	Storage	2 built-in SATA ports.	
	Multiple-c hannel Playback	Max 64-channel D1/32-channel 720P/16-channel 1080P/4-channel 4K playback at the same time.	
	Record Mode	Overwrite	
	Backup Mode	Flash disk, DVD burner.	



Port and	Network	IPv4/IPv6/HTTP/UPnP/NTP/SADP/SNMP/PPPoE/DNS/FTP/ONVIF(Versio
Indicator	Protocol	n 2.4)/PSIA
	RS232	One RS232 port to debug transparent COM data.
	Port	
	RS485	One RS485 port to control PTZ. Support various protocols.
	port	
	USB Port	2 peripheral USB ports: One USB2.0 at the front panel and one USB3.0 at
		the rear panel.
	Network	One RJ45 10/100/1000Mbps self-adaptive Ethernet port.
	Connecti	
	on	
	Power	One power socket. Power adapter power supplying. Input DC 12V-4A
	Port	power.
	Power	One button. At the rear panel.
	Button	
	Power	N/A
	On-off	
	Button	
	IR	N/A
	Receiver	
	Window	
General	Indicator	One power status indicator light.
General	Indicator Light	One power status indicator light. One network status indicator light.
General	Light	One power status indicator light. One network status indicator light. One HDD status indicator light.
General	Light	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light.
General	Indicator Light Power	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V
General	Indicator Light Power Power	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD)
General	Indicator Light Power Power Consump	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD)
General	Indicator Light Power Power Consump tion	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD)
General	Indicator Light Power Power Consump tion Working	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) $-10^{\circ}C \sim +55^{\circ}C$
General	Indicator Light Power Power Consump tion Working Temperat	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) $-10^{\circ}C \sim +55^{\circ}C$
General	Indicator Light Power Power Consump tion Working Temperat ure	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) $-10^{\circ}C \sim +55^{\circ}C$
General	Indicator Light Power Power Consump tion Working Temperat ure Working	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) $-10^{\circ}C \sim +55^{\circ}C$ 10% -90%
General	Indicator Light Power Power Consump tion Working Temperat ure Working Humidity	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) $-10^{\circ}C \sim +55^{\circ}C$ 10% - 90%
General	Indicator Light Power Power Consump tion Working Temperat ure Working Humidity Air	One power status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) -10°C ~+55°C 86kpa−106kpa
General	Indicator Light Power Power Consump tion Working Temperat ure Working Humidity Air pressure	One power status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) -10°C ~+55°C 10%-90% 86kpa-106kpa
General	Indicator Light Power Power Consump tion Working Temperat ure Working Humidity Air pressure Dimensio	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: $9.5W(No HDD)$ 8 PoE series: $15.2W(No HDD)$ 16 PoE series: $14.5W(No HDD)$ $-10^{\circ}C \sim +55^{\circ}C$ 10% - 90% 86kpa -106 kpa General series: 375 mm(W) × 56mm(H) × 281.4mm(D)
General	Indicator Light Power Power Consump tion Working Temperat ure Working Humidity Air pressure Dimensio n	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) $-10^{\circ}C \sim +55^{\circ}C$ 10% - 90% 86kpa - 106kpa General series: 375mm(W) × 56mm(H) × 281.4mm(D) PoE series: 375mm(W) × 53mm(H) × 327.3mm(D)
General	Indicator Light Power Power Consump tion Working Temperat ure Working Humidity Air pressure Dimensio n Weight	One power status indicator light. One network status indicator light. One HDD status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) $-10^{\circ}C \sim +55^{\circ}C$ 10% - 90% 86kpa - 106kpa General series: 375mm(W) × 56mm(H) × 281.4mm(D) PoE series: 375mm(W) × 53mm(H) × 327.3mm(D) General series: : 1.60Kg
General	Indicator Light Power Power Consump tion Working Temperat ure Working Humidity Air pressure Dimensio n Weight (No HDD)	One power status indicator light. One network status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) -10°C ~+55°C 10%-90% 86kpa-106kpa General series: 375mm(W) × 56mm(H) × 281.4mm(D) PoE series: 375mm(W) × 53mm(H) × 327.3mm(D) General series: 1.60Kg 8 PoE series: 2.60Kg
General	Indicator Light Power Power Consump tion Working Temperat ure Working Humidity Air pressure Dimensio n Weight (No HDD)	One power status indicator light. One network status indicator light. One device running status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) -10°C~+55°C 10%-90% 86kpa-106kpa General series: 375mm(W) × 56mm(H) × 281.4mm(D) PoE series: 375mm(W) × 53mm(H) × 327.3mm(D) General series: 2.60Kg 16 PoE series: 2.70Kg
General	Indicator Light Power Power Consump tion Working Temperat ure Working Humidity Air pressure Dimensio n Weight (No HDD) Installatio	One power status indicator light. One network status indicator light. One HDD status indicator light. DC 12V General series: 9.5W(No HDD) 8 PoE series: 15.2W(No HDD) 16 PoE series: 14.5W(No HDD) $-10^{\circ}C \sim +55^{\circ}C$ 10% - 90% 86kpa - 106kpa General series: 375mm(W) × 56mm(H) × 281.4mm(D) PoE series: 375mm(W) × 53mm(H) × 327.3mm(D) General series: : 1.60Kg 8 PoE series: 2.60Kg 16 PoE series: 2.70Kg Desk/rack installation



Model		NVR44 Series	NVR44-8P Series	NVR44-16P Series
System	System Resource s	8/16/32-channel series product support 8/16/32-channel HD connection respectively. The main stream bandwidth supports 200Mbps.		
	Operation System	Embedded Linux real-time operation system		
	Operation Interface	WEB/Local GUI		
Decode	Video Compres sion	H.264/MJPEG/MPEG4		
	Decode Capacity	Max supports 16-channe decode.	el D1, or 8-channel 720P, o	or 4-channel 3M or 2*5M
Video	Video Input	8/16/32-ch network com	pression video input	
	Video Output	1-channel VGA analog v	ideo output.	
	HDMI	1-ch HDMI output. Versio		
	Window Split	1/4/8/9/16-window		
Audio	Audio Input	1-ch bidirectional talk input		
	Audio Output	1-ch bidirectional talk output G.711a		
	Audio Compres sion			
Alarm	Alarm Input	16-ch alarm input		
	Alarm	4-ch alarm output		
	Output	Relay output. Relay (DC 30V /1A, AC 125V/0.5A (Activation output) Including one controllable DC +12V output.		
Function	Storage	4 built-in SATA ports. 1 external eSATA port.		
	Multiple-c hannel Playback	Max 8-channel 720P/4-channel 1080P playback at the same time.		
Port and Indicator	RS232 Port	One RS232 port to debu	g transparent COM data.	
RS485 One RS485 port to control port			ol PTZ. Support various p	rotocols.
	USB2.0 Port	32.0 2 peripheral USB2.0 ports. One at the front panel and one at t		



	Network	One RJ45 10/100/1000Mbps self-adaptive Ethernet port.	
	Connecti		
	on		
	Power	One power port. Input 100-240V, 50~60Hz.	
	Port		
	Power	One button. At the rear panel.	
	Button		
	Power One button. At the front-panel. On-off One button. At the front-panel.		
	Button		
	IR	Support IR remote control	
	Receiver		
	Window		
	Clock	Built-in clock.	
General Indicator One power status indicator		One power status indicator light.	
	Light	One network status indicator light.	
	-	One HDD status indicator light.	
	Power	<30W(No HDD)	
Consump tion Working -10℃~+55℃			
		-10℃~+55℃	
	Temperat		
ureWorking10%-90%			
		10%-90%	
	Humidity		
Air 86kpa—106kpa pressure		86kpa—106kpa	
	Dimensio 1.5U, 440mm × 460mm × 68mm		
	n		
	Weight	5kg~6kg(No HDD)	
	Installatio	Desk installation	
	n		

1.3.17 NVR44-4K Series

Specifications		NVR44-4K
	Main Processor	Industrial embedded micro processor
	Operation System	Embedded LINUX system
System	System	Max 8-channel×1080P connection,
	Resources	
	User Interface	WEB, local GUI
Audio	Audio Input	1-ch MIC bidirectional talk audio input
Parameters	Audio Output	1-ch MIC bidirectional talk audio output



	Audio	G.711a, G.711u, PCM, G726
	Compression	
	Standard	
	Video Input	8/16/32-ch network compression video input
	Video Output	1-channel VGA
Video		2-channel HDMI.
Parameters	Video	
	Compression	H.264
	Standard	
	Window Split	The 1st screen: 1/4/8/9/16-screen.
	Mode	The 2nd screen: 1/4-screen.
Alarm	Alarm Input	16-channel
Parameters	Alarm Output	8-channel relay output
D I.	Decode Type	MPEG4, H.264, H.265
Decode	Deserte Osmalsiliter	16-channel×D1;8-channel×720P, 4-channel 1080P;1-channel
Parameters		4K
	Record Mode	Manual recording, motion detection recording, schedule
		recording and alarm recording.
		Priority: Manual recording>card number recording-> alarm
		recording>motion detection recording>schedule recording.
	Multi-Channel	Max support 64M (H265&H264 1:1) playback at the same
Functions	Playback	time.
	Motion Detect	Each screen supports 396/330((PAL 22×18, NTSC 22×15)
		detection zones. Various sensitivity levels.
	Privacy Mask	Each channel supports 4 privacy mask zones.
	Record Mode	Overwrite
	Backup Mode	Flash disk, eSATA, DVD burner.
	Network Protocol	IPv4/IPv6/HTTP/UPnP/NTP/SADP/SNMP/PPPoE/DNS/FTP/ON VIF/PSIA
	SATA Port	4 SATA Ports
Network	eSATA Port	1 eSATA port
Function	RS232 Port	1 RS232 port. To debug and transmit COM data.
	DC495 Dert	1 RS485 port. To control peripheral PTZ and etc. Support
	K3403 FUIL	various protocols.
	USB Port	1 USB 2.0 port at the front panel and 2 USB3.0 ports at the rear panel.
	HDMI Port	2 HDMI ports
	Network Port	2 RJ45 10/100/1000Mbps self-adaptive Ethernetet ports+2 1000Mbps self-adaptive fiber ports



		4 indicator lights.	
	Indicator Light	 1 system running status indicator light 	
		 1 HDD indicator light 	
		 1 network status indicator light 	
		 1 power status indicator light 	
	Power	AC100~240V	
	Power	General series: <17W (No HDD),	
	Consumption	PoE series: <26.5W (No HDD),	
	Working	∩ഀഀഀ⊂∽50ഀഀ	
Gonoral	Temperature		
Baramotors	Working Humidity	10%~90% (No condensation)	
r arameters	Dimensions (W $ imes$	$440 \times 76 \times 405$ mm	
	H×D)	440 ~ 78 ~ 40511111	
	Weight	General series:4.35 kg(No HDD),	
		PoE series: 4.65kg (No HDD),	
	Installation Mode	Rack/desktop	

1.3.18 NVR54-4KS2/54-16P-4KS2 Series

Specifications		NVR54-4KS2/54-16P-4KS2 Series
	Main Processor	Industrial embedded micro processor
	Operation System	Embedded LINUX system
System	System	8/16/32/64-channel main stream connection: max supports
	Resources	80/160/320/320Mbps
	User Interface	WEB, local GUI
	Audio Input	1-ch MIC bidirectional talk audio input
Audio	Audio Output	1-ch MIC bidirectional talk audio output
Parameters	Audio Compression Standard	G.711a, G.711u, PCM, G726 (The bidirectional talk supports G.711a, G.711u, PCM only.)
Video Parameters	Video Input	8/16/32/64-ch network compression video input
	Video Output	1-channel VGA
		2-channel HDMI.
	Video Compression Standard	H.264
	Window Split Mode	1/4/8/9/16/25/36/64-screen.
Alarm	Alarm Input	16-channel
Parameters	Alarm Output	6-channel relay output
Decede	Decode Type	MPEG4, MJPG, H.264, H.265
Parameters	Decode Capability	H.264/H.265: 64-channel×D1, 32-channel×720P, 16-channel 1080P; 4-channel 4K.



	Record Mode	Manual recording, motion detection recording, schedule recording and alarm recording. Priority: Manual recording>card number recording-> alarm
		recording>motion detection recording>schedule recording.
Functions	Multi-Channel Playback	Max support 16-channel 1080P playback at the same time.
	Motion Detect	Each screen supports 396/330((PAL 22×18, NTSC 22×15) detection zones. Various sensitivity levels.
	Privacy Mask	Each channel supports 4 privacy mask zones.
	Record Mode	Overwrite
	Backup Mode	Flash disk, eSATA, DVD burner.
	Network Protocol	IPv4/IPv6/HTTP/UPnP/NTP/SADP/SNMP/PPPoE/DNS/FTP/ ONVIF(Version 2.4)/PSIA
	SATA Port	4 SATA Ports
Network	eSATA Port	1 eSATA port
Function	RS232 Port	1 RS232 port. To debug and transmit COM data.
	RS485 Port	1 RS485 port. To control peripheral PTZ and etc. Support various protocols.
	USB Port	1 USB 2.0 port at the front panel and 2 USB3.0 ports at the rear panel.
	HDMI Port	2 HDMI ports
	Network Port	2 RJ45 10/100/1000Mbps self-adaptive Ethernet ports
	Power Port	One power socket. Power adapter power supplying. Input AC 100V~240V, 50Hz~60Hz.
	Power On-off Button	One at the rear panel.
	Indicator Light	 4 indicator lights. 1 system running status indicator light 1 HDD indicator light 1 network status indicator light 1 power status indicator light
	Power	AC90~264V
	Power	General series: 16.7W (No HDD)
	Consumption	16 PoE series: 17.5W (No HDD)
General Parameters	Working Temperature	-10℃~55℃
	Working Humidity	10%~90% (No condensation)
	Dimensions (W× H×D)	440×76×411mm
	Weight(No HDD)	General series:4.30Kg,
		PoE series: 4.65Kg,
	Installation Mode	Rack/desktop

1.3.19 NVR48-4K Series



Specifications		NVR48-4K
	Main Processor	Industrial embedded micro processor
	Operation System	Embedded LINUX system
System	System	Max 8-channel×1080P connection,
	Resources	
	User Interface	WEB, local GUI
	Audio Input	1-ch MIC bidirectional talk audio input
Audio	Audio Output	1-ch MIC bidirectional talk audio output
Parameters	Audio	G.711a, G.711u, PCM, G726
	Compression	
	Standard	
	Video Input	8/16/32-ch network compression video input
	Video Output	1-channel VGA
Video		2-channel HDMI.
Parameters	Video	
	Compression	H.264
	Standard	
	Window Split	The 1st screen: 1/4/8/9/16-screen.
	Mode	The 2nd screen: 1/4-screen.
Alarm	Alarm Input	16-channel
Parameters	Alarm Output	6-channel relay output
Decode	Decode Type	MPEG4, H.264, H.265
Parameters	Decode Capability	16-channel×D1;8-channel×720P, 4-channel 1080P;1-channel
	Description	4K
	Record Mode	Manual recording, motion detection recording, schedule
		Priority: Manual recording.card number recording.
		recording>motion detection recording>schedule recording
	Multi-Channel	Max support 64M (H265&H264 1:1) playback at the same
Functions	Playback	time.
	Motion Detect	Each screen supports 396/330((PAL 22×18, NTSC 22×15)
		detection zones. Various sensitivity levels.
	Privacy Mask	Each channel supports 4 privacy mask zones.
	Record Mode	Overwrite
	Backup Mode	Flash disk, eSATA, DVD burner.
	Network Protocol	IPv4/IPv6/HTTP/UPnP/NTP/SADP/SNMP/PPPoE/DNS/FTP/
		ONVIF/PSIA
	SATA Port	8 SATA Ports
Network	eSATA Port	1 eSATA port
Function	RS232 Port	1 RS232 port. To debug and transmit COM data.
	RS485 Port	1 RS485 port. To control peripheral PTZ and etc. Support various protocols.



		2 USB 2.0 ports at the front panel and 2 USB3.0 ports at the
	USB Port	rear panel.
	HDMI Port	2 HDMI ports
	Network Port	2 RJ45 10/100/1000Mbps self-adaptive Ethernetet ports+2 1000Mbps self-adaptive fiber ports
	Power On-off Button	One at the rear panel.
		4 indicator lights.
		 1 system running status indicator light
	Indicator Light	 1 HDD indicator light
		 1 network status indicator light
		 1 power status indicator light
	Power	AC100~240V
General Parameters	Power	General series: <18.8W (No HDD),
	Consumption	PoE series: <27.9W (No HDD),
	Working Temperature	0℃~50℃
	Working Humidity	10%~90% (No condensation)
	Dimensions (W \times H \times D)	440×95×445mm
	Weight	General series:6.6 kg (No HDD),
		PoE series: 6.75kg (No HDD),
	Installation Mode	Rack/desktop

1.3.20 NVR58-4KS2/58-16P-4KS2 Series

Specifications		NVR58-4KS2/58-16P-4KS2 Series
	Main Processor	Industrial embedded micro processor
	Operation System	Embedded LINUX system
System	System	8/16/32/64-channel main stream max supports
	Resources	80/160/320/320Mbps
	User Interface	WEB, local GUI
	Audio Input	1-ch MIC bidirectional talk audio input
Audio	Audio Output	1-ch MIC bidirectional talk audio output
Parameters	Audio Compression Standard	G.711a, G.711u, PCM, G726 (The bidirectional talk supports G.711a, G.711u, PCM only.)
	Video Input	8/16/32/64-ch network compression video input
Video	Video Output	1-channel VGA
Parameters		2-channel HDMI.
	Video	
	Compression	H.264
	Standard	



	Window Split	1/4/8/9/16/25/36/64-screen.	
	Mode		
Alarm	Alarm Input	16-channel	
Parameters	Alarm Output 6-channel relay output		
	Decode Type	MPEG4, MJPG, H.264, H.265	
Decode	3 1	H.264/H.265: 64-channel×D1:32-channel×720P, 16-channel	
Parameters	Decode Capability	1080P;4-channel 4K	
	Record Mode	Manual recording, motion detection recording, schedule	
		recording and alarm recording.	
		Priority: Manual recording>card number recording-> alarm	
		recording>motion detection recording>schedule recording.	
	Multi-Channel	Max support 16-channel 1080P playback at the same time	
Functions	Playback	Max support to-channel tooor playback at the same time.	
	Motion Detect	Each screen supports 396/330((PAL 22×18, NTSC 22×15)	
		detection zones. Various sensitivity levels.	
	Privacy Mask	Each channel supports 4 privacy mask zones.	
	Record Mode	Overwrite	
	Backup Mode	Flash disk, eSATA, DVD burner.	
	Network Protocol	IPv4/IPv6/HTTP/UPnP/NTP/SADP/SNMP/PPPoE/DNS/FTP/	
		ONVIF(Version 2.4)/PSIA	
	SATA Port	8 SATA Ports	
Network	eSATA Port	1 eSATA port	
Function	RS232 Port	1 RS232 port. To debug and transmit COM data.	
	RS485 Port	1 RS485 port. To control peripheral PTZ and etc. Support	
		Various protocols.	
	USB Port	2 USB 2.0 ports at the front panel and 2 USB3.0 ports at the	
		2 HDMI ports	
	Network Port	2 RJ45 10/100/1000Mbps self-adaptive Ethernet ports	
	Power Port	One power socket. Power adapter power supplying. Input AC	
		100V~240V,50Hz~60Hz.	
	Power On-off	One at the rear name	
	Button		
		4 indicator lights.	
		 1 system running status indicator light 	
	Indicator Light	1 HDD indicator light	
		1 network status indicator light	
	Demer	T power status indicator light	
	Power		
General	Consumption	16 DoE sories: 17 5W (No HDD)	
Parameters	Working		
	Temperature	-10℃~55℃	
	Working Humidity	10%~90% (No condensation)	



Dimensions (W \times H \times D)	439.7×95×450.8mm
Weight (No HDD)	General series:6.55Kg,
	PoE series: 7Kg.
Installation Mode	Rack/desktop

1.3.21 NVR48/48-16P Series

Model		NVR48 Series	NVR48-16P Series		
	System	8/16/32-channel series product sup	port 8/16/32-channel HD connection		
System	Resource	respectively. The main stream bandwidth supports 200Mbps.			
	S				
	Operation	Embedded Linux real-time operation	system		
	System				
	Operation				
Decode	Video	H.264/MJPEG/MPEG4			
Decoue	Compres				
	Docodo	Max supports 16 chapped D1 or 8 ch	annol 720P or 4 channol 3M or 2*5M		
	Canacity	decode			
	Capacity				
	Video	8/16/32-ch network compression video input			
Video	Input				
	Video	1-channel VGA analog video output.			
	Output				
	HDMI	1-ch HDMI output. Version number is 1.4			
	Window	1/4/8/9/16-window			
	Split				
Andle	Audio	1-ch bidirectional talk input			
Audio	Input				
	Audio	1-ch bidirectional talk output			
	Output				
	Audio	G.711a			
	Compres				
	Alarm	16 ch alarm input			
Alarm	Innut				
	Alarm	4-ch alarm output			
	Output	Relay output Relay (DC 30V /1A.	AC 125 $1/0.5A$ (Activation output))		
		Including one controllable DC +12V o	utput.		
Function	Storage	4 built-in SATA ports. 1 external eSAT	A port.		
	Multiple-c	i Max 8-channel 720P/4-channel 1080	- playdack at the same time.		



	Playback				
Port and	RS232	One RS232 port to debug transparent COM data.			
Indicator	Port				
	RS485	One RS485 port to control PTZ. Support various protocols.			
	port				
	USB2.0	3 peripheral USB2.0 ports. Two at the front panel and one at the rear panel.			
	Port				
	Network	Two RJ45 10/100/1000Mbps	One RJ45 10/100/1000Mbps		
	Connecti	self-adaptive Ethernet ports.	self-adaptive Ethernet port.		
	on				
	Power	One power port. Input 100-240V, 50-	~60Hz.		
	Port				
	Power	One button. At the rear panel.			
	Button				
	Power	One button. At the front-panel.			
	On-off				
	Button				
	IR	Support IR remote control Built-in clock.			
	Receiver				
	Window				
	Clock				
General	Indicator	One power status indicator light.			
	Light	One network status indicator light.			
		One HDD status indicator light.			
	Power	<30W(No HDD)			
	Consump				
	tion				
	Working	-10℃~+55℃			
	Temperat				
	ure				
	Working	10%-90%			
	Humidity	86kpa-106kpa			
	Air				
	pressure	440			
	Dimensio	440mm × 460mm × 89mm			
	Installatio	Dook installation			
	installatio				
	1				

1.3.22 NVR72/72-8P Series

Model	NVR72	Series	NVR72-8P Series



System	System	8/16/32/64-channel series product support 8/16/32/64-channel HD			
	Resource	connection respectively. The main stream bandwidth supports			
	S	48/96/192/192Mbps.			
	Operation	Embedded Linux real-time operation system			
	System				
	Operation	WEB/Local GUI			
	Interface				
Decede	Video	H.264/MJPEG			
Decode	Compres				
	sion				
	Decode	Max supports 32-channel D1 or 16-channel 720P or 8-channel 1080P			
	Canacity	decode			
	Capacity				
Video	Video	8/16/32/64-ch network compression video input			
	Input				
	Video	1-channel VGA analog video output.			
	Output				
	HDMI	1-ch HDMI output. Version number is 1.4			
	Window	1/4/8/9/16/25/36-window			
	Split				
Andle	Audio	1-ch hidirectional talk input			
Audio	Input				
	Audio	1-ch hidirectional talk output			
	Audio	G711a			
	Audio	0.7 Ha			
	Compres				
	sion				
Alarm	Alarm	סיטו ממווו טעוטע			
	Input				
	Alarm	3-ch alarm output			
	Output	Relay output. Relay (DC 30V/1A, AC 125V/0.5A (Activation output))			
		Including one controllable DC +12V output.			
Function	Storage	2 built-in SATA ports.			
	Multiple-c	Max 16-channel 720P/8-channel 1080P playback at the same time.			
	hannel				
	Playback				
Port and	RS232	One RS232 port to debug transparent COM data.			
Indicator	Port				
	RS485	One RS485 port to control PTZ. Support various protocols.			
	port				
	USB2.0	2 peripheral USB2.0 ports. One at the front panel and one at the rear panel.			
	Port				
	Network	1 RJ45 10/100Mbps self-adaptive Ethernet port.			
	Connecti				
	on				



	Power Port	One power port, power adapter. Input DC 12V.	One power port. Input 100-240V, 47~63Hz.			
	Power One button. At the rear panel. Button					
	Power	One button. At the front-panel.				
	On-off					
	Button					
	IR	Support IR remote control				
	Receiver					
	Window					
	Clock	Built-in clock.				
General	Indicator	One power status indicator light.				
	Light	One network status indicator light. One HDD status indicator light.				
	Power	<30W(No HDD)				
	Consump					
	tion					
	Working	-10℃~+55℃				
	Temperat					
	ure					
	Working	10%—90%				
	Humidity					
	Air	86kpa—106kpa				
	pressure					
	Dimensio	1U case. 295mm×275mm×47mm				
	n					
	Weight	1.5kg~2.5kg (No HDD)				
	Installatio	Desk installation				
	n					

1.3.23 NVR74/74-8P/74-16P Series

Model		NVR74 Series	NVR74-8P Series	NVR74-16P Series	
System	System	8/16/32/64-channel se	ries product support 8	3/16/32/64-channel HD	
	Resource	connection respectivel	ly. The main stream	bandwidth supports	
	s	48/96/192/192Mbps.			
	Operation	Embedded Linux real-time operation system			
	System				
	Operation	WEB/Local GUI			
	Interface				
Decode	Video	H.264/MJPEG			
	Compres				
	sion				



	Decode	Max supports 32-channel D1, or 16-channel 720P, or 8-channel 1080P			
	Capacity	decode.			
Video	Video Input	8/16/32/64-ch network compression	video input		
	Video Output	1-channel VGA analog video output.			
	HDMI	1-ch HDMI output. Version number is	s 1.4		
	Window Split	1/4/8/9/16/25/36-window			
Audio	Audio Input	1-ch bidirectional talk input			
	Audio Output	1-ch bidirectional talk output			
	Audio Compres sion	G.711a			
Alarm	Alarm Input	16-ch alarm input			
	Alarm	6-ch alarm output			
	Output	Relay output. Relay (DC 30V /1A, AC 125V/0.5A (Activation output))			
		Including one controllable DC +12V output.			
Function	Storage	4 bulit-in SATA ports. 1 external eSATA port.			
	Multiple-c	Max 16-channel 720P/8-channel 1080P playback at the same time.			
	hannel				
	Playback				
Port and Indicator	RS232 Port	One RS232 port to debug transparer	nt COM data.		
	RS485	One RS485 port to control PTZ. Sup	port various protocols.		
	port				
	USB2.0 Port	3 peripheral USB2.0 ports. One at th	e front panel and two at the rear panel.		
	Network	Two RJ45 10/100Mbps One RJ45	5 10/100Mbps self-adaptive Ethernet		
	Connecti	self-adaptive Ethernet port.			
	on	ports.			
	Power Port	One power port. Input 100-240V, 50~60Hz.			
	Power Button	One button. At the rear panel.			
	Power On-off Button	One button. At the front-panel.			
	IR Receiver	Support IR remote control			
	Neceivei				



	Window	
	Clock	Built-in clock.
General	Indicator	One power status indicator light.
	Light	One network status indicator light.
		One HDD status indicator light.
	Power	<30W(No HDD)
	Consump	
	tion	
Working -10℃~+55℃		-10℃~+55℃
	Temperat	
ure Working 10%-90%		
		10%-90%
	Humidity	
	Air	86kpa—106kpa
	pressure	
	Dimensio	1.5U, 440mm × 460mm × 68mm
	n	
	Weight	5kg~6kg(No HDD)
	Installatio	Desk installation
	n	

1.3.24 NVR78/78-16P/78-RH Series

Model		NVR78 Series	NVR78-16P Series	NVR78-RH Series	
System	System	8/16/32/64-channel series product support 8/16/32/64-channel HD			
	Resource	connection respectivel	y. The main stream	bandwidth supports	
	S	48/96/192/192Mbps.			
	Operation	Embedded Linux real-tin	ne operation system		
	System				
	Operation	WEB/Local GUI			
	Interface				
Decode	Video	H.264/MJPEG			
	Compres				
	sion				
	Decode	Max supports 32-channel D1, or 16-channel 720P, or 8-channel 1080P			
	Capacity	decode.			
Video	Video	8/16/32/64-ch network compression video input			
	Input				
	Video	1-channel VGA analog video output.			
	Output				
	HDMI	1-ch HDMI output. Version	on number is 1.4	2-ch HDMI output	
				(from different video	



				sources)		
	Window	1/4/8/9/16/25/36-window				
	Split					
Audio	Audio	1-ch bidirectional talk input				
	Input					
	Audio	1-ch bidirectional talk output				
	Output	0.74				
	Audio	G./11a				
	compres					
Alerm	Alarm	16-ch alarm input				
Alarm	Input					
	Alarm	6-ch alarm output				
	Output	Relay output. Relay (D	C 30V/1A,AC 125V/0.5A	(Activation output))		
		Including one controllable	e DC +12V output.			
Function	Storage	8 built-in SATA ports.		8 built-in SATA ports at		
		1 external eSATA port.		the front panel.		
				Support hot swap,		
				Raid0, Raid1, Raid5,		
				Raido. 1 external eSATA port		
	Multiple-c	May 16 channel 720P/8 channel 1080P playback at the same time				
	hannel					
	Playback					
Port and	RS232	One RS232 port to debug transparent COM data.				
Indicator	Port					
	RS485	One RS485 port to control PTZ. Support various protocols.				
	port					
	USB2.0	4 peripheral USB2.0 ports. Two at the front panel and two at the rear panel.				
	Port					
	Network	Two RJ45 10/100/1000	One RJ45 10/100/1000	Two RJ45 10/100/1000		
	Connecti	Mbps self-adaptive	Mbps self-adaptive	Mbps self-adaptive		
	Dower	One nower port Input 10	Cinemer port.	Ethemet ports.		
	Port		0-240V, 50~00Hz.			
	Power	One button At the rear n	anal			
	Button					
	Power	One button At the front-panel				
	On-off					
	Button					
	IR	Support IR remote contro	bl			
	Receiver					
	Window					
	Clock	Built-in clock.				



General	Indicator	One power status indicator light.	
	Light	One network status indicator light.	
		One HDD status indicator light.	
	Power	<35W(No HDD)	
	Consump		
	tion		
	Working	-10℃~+55℃	
	Temperat		
	ure		
	Working	10%-90%	
	Humidity		
	Air	86kpa-106kpa	
	pressure		
	Dimensio	440mm×460mm×89mm	444mm×430mm×89m
	n		m
	Weight	5.5kg~6.5kg (No HDD)	8.5kg \sim 9.5kg (No
			HDD)
	Installatio	Desk installation	
	n		

1.3.25 NVR70/70-R Series

Model		NVR70 Series	NVR70-R Series	
System	System	8/16/32/64-channel series product support 8/16/32/64-channel HD		
	Resource	connection respectively. The main stream bandwidth su		
	S	48/96/192/192Mbps.		
	Operation	Embedded Linux real-time operation system		
	System			
	Operation	WEB/Local GUI		
	Interface			
Decode	Video	H.264/MJPEG Max supports 32-channel D1, or 16-channel 720P, or 8-channel 1080P decode.		
	Compres			
	sion			
	Decode			
	Capacity			
Video	Video	8/16/32/64-ch network compression video input		
	Input			
	Video	1-channel VGA analog video output.		
	Output			
	HDMI	1-ch HDMI output.	2-ch HDMI output (from different	
			video sources)	
	Window Split	1/4/8/9/16/25/36-window		



Audio	Audio	1-ch bidirectional talk input		
	Input			
	Audio	1-ch bidirectional talk output		
	Output			
	Audio	G.711a		
	Compres			
	sion			
Alarm	Alarm	16-ch alarm input		
	Input			
	Alarm	6-ch alarm output		
	Output	Relay output. Relay (DC 30V/1A, AC 125V/0.5A (Activation out		
		Including one controllable DC +12V o	utput.	
Function	Storage	16 built-in SATA ports at the front	16 built-in SATA ports at the front	
		panel. Support removable HDD	panel. Support hot swap, Raid0,	
		installation mode.	Raid1, Raid5, Raid6.	
		1 external eSATA port.	1 external eSATA port.	
	Multiple-c	Max 16-channel 720P/8-channel 1080	P playback at the same time.	
	hannel			
	Playback			
Port and	RS232	One RS232 port to debug transparent	t COM data.	
Indicator	Port			
	RS485	One RS485 port to control PTZ. Supp	ort various protocols.	
	port			
USB2.0 4 peripheral USB2.0 ports. Two at the front panel and two a Port Network Two RJ45 10/100Mbps self-adaptive Ethernet ports.		4 peripheral USB2.0 ports. Two at the	front panel and two at the rear panel.	
		Two RJ45 10/100Mbps self-adaptive	Ethernet ports.	
	Connecti	ecti		
	on			
	Power	One power port. Input 100V \sim 240V,	50~60Hz.	
	Port			
	Power	One button. At the rear panel.		
	Button			
	Power	One button. At the front-panel.		
	On-off	·		
	Button			
	IR	Support IR remote control		
	Receiver			
	Window			
	Clock	Built-in clock.		
General	Indicator	One power status indicator light.		
	Light	One network status indicator light.		
		One HDD status indicator light.		
	Power	<35W(No HDD)		



Consump	
tion	
Working	-10℃~+55℃
Temperat	
ure	
Working	10%-90%
Humidity	
Air	86kpa—106kpa
pressure	
Dimensio	3U case: 448mm×490mm×133.2mm
n	
Weight	10.5kg~11.5kg(No HDD)
Installatio	Desk installation
n	

1.3.26 NVR42V-8P Series

Model		NVR42V-8P
System	System	8/16/32-channel series product support 8/16/32-channel HD connection
	Resources	respectively. Main stream bandwidth supports 80/160/160Mbps
	Operation	Embedded Linux real-time operation system
	System	
	Operation	WEB/Local GUI
-	Interface	
Decode	Video	H.264/MJPEG/MPEG4
	Compression	
	Decode	Max supports 16-channel D1, or 8-channel 720P, or 4-channel 1080P,
	Capacity	or 4*3M or 2*5M decode.
Video	Video Input	8/16/32-ch network compression video input
	Video Output	1-channel VGA analog video output.
	HDMI	1-ch HDMI output. Version number is 1.4
	Window Split	1/4/8/9/16-window
Audio	Audio Input	1-ch bidirectional talk input
	Audio Output	1-ch bidirectional talk output
	Audio	G.711a
	Compression	
Alarm	Alarm Input	2-ch alarm input
	Alarm Output	1-ch alarm output
Functio	Storage	2 built-in SATA ports.
n	Multiple-chann	Max 8-channel 720P/4-channel 1080P playback at the same time.



	el Playback	
Port	RS232 Port	N/A
and		
Indicato	RS485 port	N/A
r		
	USB Port	Two USB2.0 ports at the front panel and one USB3.0 port at the rear
		panel
	Network	1 RJ45 10/100/1000Mbps self-adaptive Ethernet port and 8 PoE ports.
	Connection	
	Power Port	One power port. Input DC 53V2.3A
	Power Button	One button. At the rear panel.
	Power On-off	N/A
	Button	
	IR Receiver	Support IR remote control
	Window	
	Clock	Built-in clock.
	Indicator Light	One power status indicator light.
		One network status indicator light.
		One HDD status indicator light.
		One alarm status indicator light.
General	Power	<30W(No HDD)
	Consumption	
	Working	-10℃~+55℃
	Temperature	
	Working	10%-90%
	Humidity	
	Air pressure	86kpa—106kpa
	Dimension	100mm×220mm×146mm
	Weight	1.5kg~2.5kg (No HDD)
	Installation	Desk installation



2 Front Panel and Rear Panel

2.1 Front Panel

2.1.1 NVR11/11-P/41/41-P/41-W/21-S2/21-P-S2/21-8P-S2 Series

The front panel is shown as in Figure 2-1.



Figure 2-1

Please refer to the following sheet for detailed 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 NVR11H/11H-P/41H/41H-P/41H-8P Series

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





Please refer to the following sheet for detailed information.



lcon	Name	Function
	Network status	The red light becomes on when the network
INE I	indicator light	connection is abnormal.
	Power indicator	The red light becomes on when the power
	light	connection is OK.
חחח	HDD status	The red light becomes on when HDD is observed
HUU	indictor light	The red light becomes on when HDD is abhornal.
IR	Remote control	It is to reactive signal from the remote control
	receiver	

2.1.3 NVR11HS Series

The front panel is shown as below. See Figure 2-3.



Figure 2-3

Please refer to the following sheet for detailed information.

lcon	Name	Function
A	Network status indicator	The red light becomes on when the network
86	light	connection is abnormal.
	Power status indicator	The red light becomes on when the power
V	light	connection is OK.
0	HDD status indicator light	The red light becomes on when the HDD is
		abnormal.
	USB port	Connect to USB mouse, USB devices and etc.

2.1.4 NVR41HS-W-S2 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.

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

2.1.5 NVR41-8P Series

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





Please refer to the following sheet for detailed information.

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

2.1.6 NVR42/42-P/42-8P/72/72-8P Series

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



Figure 2-6

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

Name	Icon	Function
Power button	С	Power button, press this button for three seconds to boot up or shut down NVR.
Shift	Shift	In textbox, click this button to switch between numeral, English(Small/Capitalized),donation and etc.
11-14		Activate current control, modify setup, and then move up and down.
Up/1	▲、▼	Increase/decrease numeral.
DOWI/4		Assistant function such as PTZ menu.
		In text mode, input number 1/4 (English character G/H/I)
	< ►	Shift current activated control,
Left/2		When playback, click these buttons to control playback bar.
Right/3		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		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	ŀ	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/Pau se/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	~ C	To connect USB storage device, USB mouse.
Network abnormal indicator light	Net	Network error occurs or there is no network connection, the light becomes red to alert you.
HDD abnormal indicator 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

2.1.7 NVR21HS-S2/21HS-P-S2/21HS-8P-S2/22-S2/22-P-S2/22-8P-S2 Series

The NVR21HS-S2/21HS-P-S2/21HS-8P-S2 series front panel is shown as below. See Figure 2-7.



Figure 2-7

The NVR22-S2/22-P-S2/22-8P-S2 series front panel is shown as in Figure 2-8.



Figure 2-8

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 malfunction.
		Note
		NVR21HS-S2 series product does not support
		STATUS indicator light.
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.
~ *	USB port	Connect to peripheral USB storage device, mouse
		and etc.

2.1.8 NVR42-16P/42N/42-4K/42-8P-4K/44-4K/48-4K/52-4KS2/52-8P-4KS2/52-16P-4KS2 /54-4KS2/58-4KS2 Series

The NVR42-16P/42N/42-4K/42-8P-4K/52-4KS2/52-8P-4KS2/52-16P-4KS2 series front panel is shown as in Figure 2-9.



Figure 2-9

The NVR44-4K/54-4KS2/54-16P-4KS2 series front panel is shown as in Figure 2-10.





Figure 2-10

The NVR48-4K/58-4K/58-16P-4KS2 series front panel is shown as in Figure 2-11.



Figure 2-11

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 malfunction.
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.
۰ .	USB2.0 port	Connect to peripheral USB 2.0 storage device, mouse, burner and etc.

2.1.9 NVR44/44-8P/44-16P/74/74-8P/74-16P Series

The front panel is shown as in Figure 2-12.



Figure 2-12

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

Name	lcon	Function
Power button	Ċ	Power button, press this button for three seconds to boot up or shut down NVR.



Shift	Shift	In textbox, click this button to switch between numeral, 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 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.
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/Pau se/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	ţ	To connect USB storage device, USB mouse.
Network abnormal indicator light	Net	Network error occurs or there is no network connection, the light becomes red to alert you.
HDD abnormal indicator 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.

2.1.10 NVR48/48-16P/78/78-16P Series

The Front panel is shown as follows. See Figure 2-13.





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

Name	lcon	Function
Power button	ባ	Power button, press this button for three seconds to boot up or shut down NVR.
Number button	0-9	Input Arabic number
		Switch channel
Input number	,	If you want to input a number more than 10, please click this
more than 10	-/	button and then input.
Shift	↑	In textbox, click this button to switch between numeral,
		English(Small/Capitalized),donation and etc.
		Enable or disable tour.
Up/		Activate current control, modify setup, and then move up and
Down		down.


		Increase/decrease numeral.	
		Assistant function such as PTZ menu.	
Left/	4	Shift current activated control, and then move left and right.	
Right		When playback, click these buttons to control playback bar.	
500	500	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	
Record	REC	Manually stop/start recording, working with direction keys or numeral keys to select the recording channel.	
Slow play	Þ	Multiple slow play speeds or normal playback.	
	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 cursor.	
Assistant		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.	
		In HDD management interface, you can click it to switch HDD record information and other information (Menu prompt)	
		Realize other special functions.	
Fast play	**	Various fast speeds and normal playback.	
Play previous	◀	In playback mode, playback the previous video	
Reverse/Pause	◄	In normal playback or pause mode, click this button to reverse playback In reverse playback, click this button to pause playback.	
Play Next	•	In playback mode, playback the next video In menu setup, go to down ward of the dropdown list.	
Play/Pause	► II	In normal playback click this button to pause playback In pause mode, click this button to resume playback.	



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	~ ~ ;-	To connect USB storage device, USB mouse.	
Remote control indicator light	ACT	Remote control indicator light	
Status indicator light	Status	If there is Fn indicator light, current status indicator light is null.	
Power indicator light	PWR	Power indicator light	
Channel indictor light	1-32	 For 4/8/16-channel series product. The corresponding channel light becomes on when system is recording. For 32/64-channel series product: When the light flashes slowly, it means the corresponding channel of 1-16 channel is recording now (Such as channel 1). When the light flashes fast, it means the corresponding channel of 17-32 channel is recording now (Such as channel 17) When the light becomes on, It means the corresponding 2 channels are recoding now (Such as channel 1 and channel 17.). 	
IR Receiver	IR	It is to receive the signal from the remote control.	

2.1.11 NVR78-RH Series

The front panel is shown as below. See Figure 2-14.



Figure 2-14

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



Name	lcon	Function	
Power button	С	Power button, press this button for three seconds to boot up or shut down NVR.	
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 numeral, English(Small/Capitalized),donation and etc. Enable or disable tour.	
Up/		Activate current control, modify setup, and then move up and down.	
Down	▲、▼	Increase/decrease numeral.	
		Assistant function such as PTZ menu.	
Left/	• •	Shift current activated control, and then move left and right.	
Right		When playback, click these buttons to control playback bar.	
	ESC	Go to previous menu, or cancel current operation.	
ESC		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	ŀ	Multiple slow play speeds or normal playback.	
	Fn	One-window monitor mode, click this button to display assistant function: PTZ control and image color.	
Assistant		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.	
		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.	



Fast play	••	Various fast speeds and normal playback.	
Play previous	◀	In playback mode, playback the previous video	
Reverse/Pause	■	In normal playback or pause mode, click this button to reverse playback In reverse playback, click this button to pause playback.	
Play Next	►	In playback mode, playback the next video In menu setup, go to down ward of the dropdown list.	
Play/Pause	▶	In normal playback click this button to pause playback In pause mode, click this button to resume playback.	
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 fram playback. (Only applies to some special versions.)	
USB port	، ت ې	To connect USB storage device, USB mouse.	
Remote control receiver	IR	It is to receive signal from the remote control.	
Remote control indicator light	ACT	Remote control indicator light	
Status indicator light	Status	The light is on if device operates properly.	
Power indicator light	POWER	Power indicator light	
Record light	1-16	It becomes on when system is recording.	
HDD abnormal status indictor light	HDD	It becomes on when there is no HDD, HDD error occurs, or HDD is full.	

2.1.12 NVR70/70-R Series

The front panel is shown as in Figure 2-15.





Figure 2-15

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

SN	Name	lcon	Function
1	Power button		Press it once to turn on the device.
			Press it for a long time to turn off the device (Usually
		Ċ	we do not recommend).
			Press power button for a long time or pull out the
			power cable may result in device auto restart.
2	System HDD		The blue light flashes when system is reading or
	Indicator light	2222	writing the system HDD.
		8	In the system HDD, there are device important
			configuration file, factory default configuration file,
			device initial boot up data.
3	Alarm indicator light		The alarm indicator light becomes on once an alarm
			occurred. It becomes on via the software detection.
			The alarm includes local alarm, no disk and etc.
4	Network indicator		The network indicator light is blue and it flashes when
	light	66	you connect the device to the network.
5	USB2.0 port	~	Connect to USB2.0 storage device, mouse, USB
		j,	burner and etc.
6	16 HDD slot	-	1

After you remove the front panel, you can see there are 16 HDDs. From the left to the right and from the top to the bottom, it ranges from $1\sim4$, $5\sim8$, $6\sim12$, $13\sim16$. See Figure 2-16.

You can see there are two indicator light $\ensuremath{\mathsf{s}}$ on the HDD bracket.

- The power indicator light is at the top. The light is yellow after you connected the device to the power.
- The read-write indicator light is at the bottom. The blue light flashes when system is reading or writing the data.





Figure 2-16

2.1.13 NVR42V-8P Series

The front panel is shown as below. See Figure 2-17



Figure 2-17

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

Name	Icon	Function	
Power button	С U	Power button, press this button for three seconds to boot up or	
		shut down NVR.	
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 1.5 seconds 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. In HDD management interface, you can click it to switch HDD record information and other information (Menu prompt)
		Realize other special functions.
USB2.0 port	.	To connect USB2.0 storage device, USB2.0 mouse, burner and etc.
IR receive window	F	It is to receive the IR signal from the remote control.
Power indicator light	Ϋ́	Power indicator light.
HDD abnormal	8	HDD error occurs or HDD capacity is below specified threshold
indicator light		value, the light becomes red to alert you.
Network	Da	Network error occurs or there is no network connection, the light
abnormal		becomes red to alert you.
indicator light		
Alarm indicator	\land	The light becomes on when an alarm occurred.
light		

2.2 Rear Panel

2.2.1 NVR100/100-P Series

The NVR100 rear panel is shown as below. See Figure 2-18.



Figure 2-18

The NVR100-P rear panel is shown as below. See Figure 2-19.



Figure 2-19

Port Name	Connection	Function
€	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.



Port Name	Connection	Function
	Network port	10M/100Mbps self-adaptive Ethernet port. Connect to the network cable.
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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
DC 12V 	Power input port	 Power socket. For NVR100 series, input DC 5V/2A. For NVR100-P series, input DC 48V/1.25A.
PoE PORT	PoE port	Built-in switch. Support PoE function. For PoE series product, you can use this port to provide power to the network camera.

2.2.2 NVR11/11-P Series

The NVR11 rear panel is shown as below. See Figure 2-20.



Figure 2-20

The NVR11-P rear panel is shown as below. See Figure 2-21.



Figure 2-21



Port Name	Connection	Function
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
	Network port	10M/100Mbps self-adaptive Ethernet port. Connect to the network cable.
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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
Ŧ	GND	Ground end
DC 12V =C=	Power input port	 Power socket. For NVR11 series, input DC 12V/2A. For NVR11-P series, input DC 48V/1.25A.
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.
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.
PoE PORT	PoE port	Built-in switch. Support PoE function. For PoE series product, you can use this port to provide power to the network camera.

2.2.3 NVR41/41-P/41-8P/41-W Series

The NVR41 rear panel is shown as below. See Figure 2-22.



Figure 2-22

The NVR41-P rear panel is shown as below. See Figure 2-23.





Figure 2-23

The NVR41-8P rear panel is shown as below. See Figure 2-24.



Figure 2-24

The NVR41-W rear panel is shown as below. See Figure 2-25.



Figure 2-25

Port Name	Connection	Function
¢	USB2.0 port	USB2.0 port. Connect to mouse, USB storage
	•	device, USB burner and etc.



Port Name	Connection	Function
	Network port	10M/100Mbps self-adaptive Ethernet port. Connect to the network cable.
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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
Ŧ	GND	Ground end
DC 12V DC 48V =G= / =G=	Power input port	 Power socket. For NVR41 series, input DC 12V/2A. For NVR41-P series, input DC 48V/1.5A. For NVR41-8P series, input DC 48V/2A.
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.
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.
PoE PORT	PoE port	Built-in switch. Support PoE function. For PoE series product, you can use this port to provide power to the network camera.
Wireless AP		Support wireless hotspot function. Use WIFI to connect to the network camera when there is a hotspot. For 41-W series only.

2.2.4 NVR21-S2/21-P-S2/21-8P-S2 Series

The NVR21-S2 is shown as in Figure 2-26.



Figure 2-26

The NVR21-P-S2 is shown as in Figure 2-27.





Figure 2-27

The NVR21-8P-S2 is shown as in Figure 2-28.



Figure 2-28

Port Name	Connection	Function
DC 12V =G=	Power input port	 Power socket For NVR21-S2, input DC 12V/2A. For NVR21-P-S2, input DC 48V/1.25A. For NVR21-8P-S2, input DC 48V/2A.
<u>0</u>	Network port	10M/100Mbps self-adaptive Ethernet port. Connect to the network cable.
•4	USB port	USB port. Connect to mouse, USB storage device and etc.
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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
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.
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.
느	GND	Ground end



Port Name	Connection	Function
PoE PORTS	PoE port	Built-in switch. Support PoE function. For PoE series product, you can use this port to provide power to the network camera.

2.2.5 NVR11H/11H-P/41H/41H-P/41H-8P Series

The NVR11H/41H rear panel is shown as in Figure 2-29.





The NVR11H-P/41H-P rear panel is shown as in Figure 2-30.



Figure 2-30

The NVR41H-8P rear panel is shown as in Figure 2-31.





Port Name	Connection	Function
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
	Network port	10M/100Mbps self-adaptive Ethernet port. Connect to the network cable.
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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.



Port Name	Connection	Function
Ŧ	GND	Ground end
DC 12V DC 48V =G= / =G=	Power input port	 Power socket. For NVR41 series, input DC 12V/2A. For NVR41H-P series, input DC 48V/1.5A. For NVR11H-P series, input DC 48V/1.25A. For NVR41H-8P series, input DC 48V/2A.
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.
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.
PoE PORT	PoE port	Built-in switch. Support PoE function. For PoE series product, you can use this port to provide power to the network camera.

2.2.6 NVR11HS Series

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





lcon	Name	Function
DC 12V =-C=	Power input	Power socket. Input DC12V/1.5A.
_	SOCKET.	
	Network port	10M/100Mbps self-adaptive Ethernet port. Connect to
	notwork port	the network cable.
•	LISB2 0 port	USB2.0 port. Connect to mouse, USB storage device,
• •	0002.0 pon	and etc.
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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.



lcon	Name	Function
1	GND	Ground end

2.2.7 NVR21HS-S2/21HS-P-S2/21HS-8P-S2 Series

The NVR21HS-S2 series rear panel is shown as below. See Figure 2-33.



Figure 2-33

The NVR21HS-P-S2 series rear panel is shown as below. See Figure 2-34.



Figure 2-34

The NVR21HS-8P-S2 series rear panel is shown as below. See Figure 2-35.





Port Name	Connection	Function
DC 12V =G=	Power input port	 Power socket. For NVR21HS-S2, input DC 12V/2A. For NVR21HS-P-S2, input DC 48V/1.25A. For NVR21HS-8P-S2, input DC 48V/2A.
6 6	Network port	10M/100Mbps self-adaptive Ethernet port. Connect to the network cable.
•	USB port	USB port. Connect to mouse, USB storage device and etc.
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. HDMI version is 1.4.



Port Name	Connection	Function
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
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.
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.
1	GND	Ground end
PoE PORTS	PoE port	Built-in switch. Support PoE function. For PoE series product, you can use this port to provide power to the network camera.

2.2.8 NVR41HS-W-S2 Series

The NVR41HS-W-S2 rear panel is shown as below. See Figure 2-36.



Figure 2-36

 	5	
lcon	Name	Function



lcon	Name	Function
DC 12V =-C=	Power input socket.	Power socket. Input DC12V/2A.
	Network port	10M/100Mbps self-adaptive Ethernet port. Connect to the network cable.
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, and etc.
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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
Ŧ	GND	Ground end
Wireless AP		Support wireless hotspot function. Use WIFI to connect to the network camera when there is a hotspot.

2.2.9 NVR22-S2/22-P-S2/22-8P-S2 Series

The NVR22-S2 series rear panel is shown as below. See Figure 2-37.



Figure 2-37

The NVR22-P-S2 series rear panel is shown as below. See Figure 2-38.



Figure 2-38

The NVR22-8P-S2 series rear panel is shown as below. See Figure 2-39.



Figure 2-39



Please refer to the following sheet for detailed information.

Port Name	Connection	Function
DC 12V =G=	Power input port	 Power socket. For NVR22-S2, input DC 12V/4A. For NVR22-P-S2, input DC 48V/1.5A. For NVR22-8P-S2, input DC 53V 120W.
- -	Network port	10M/100Mbps self-adaptive Ethernet port. Connect to the network cable.
ور	USB port	USB port. Connect to mouse, USB storage device and etc.
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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
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.
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.
1	GND	Ground end
PoE PORTS	PoE port	Built-in switch. Support PoE function. For PoE series product, you can use this port to provide power to the network camera.

2.2.10 NVR42/42N/42-P/42-8P/42-16P Series

The NVR42 series rear panel is shown as below. See Figure 2-40.





The NVR42N series rear panel is shown as below. See Figure 2-41.





Figure 2-41

The NVR42-P series rear panel is shown as below. See Figure 2-42.



Figure 2-42

The NVR42-8P series rear panel is shown as below. See Figure 2-43.



Figure 2-43

The NVR42-16P series rear panel is shown as below. See Figure 2-44.



Figure 2-44

Name		Function
	Power switch	Power on/off button.
DC 12V		Input DC 12V/5A.
		For NVR42 series product only.
DC 48V ∸G± Power		Switch power port. Input DC 48//1.04A.
	Power input port	For NVR42-P series product only.
		Input AC 100~240V. For NVR42-8P/42-16P series product only.



Name		Function
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.
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.
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 NVR have the same ground.
÷	GND	Alarm input ground port.
N1, N2 C1, C2	Alarm output port 1~2	 2 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. NO: Normal open alarm output port.
A	RS-485	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
В	port	RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
ه-تيه	•€ USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
НДМІ	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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.



Name		Function
PoE PORTS	/	Bult-in Switch. Support PoE.
		The 4 PoE series product supports total 48V 50W.
		The 8 PoE series product supports total 48V 120W.
		The 16 PoE series product supports total 120W. One
		PoE port max supports 15W.

2.2.11 NVR42-4K/52-4KS2/52-8P-4KS2/52-16P-4KS2 Series

The NVR42-4K/52-4KS2 series rear panel is shown as below. See Figure 2-45.



Figure 2-45

The NVR52-8P-4KS2 series rear panel is shown as below. See Figure 2-46.



Figure 2-46

The NVR52-16P-4KS2 series rear panel is shown as below. See Figure 2-47.



Figure 2-47

lcon	Port Name	Function
<u>-</u> 	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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. HDMI version is 1.4.
ss∻	USB3.0 port	USB3.0 port. Connect to mouse, USB storage device, USB burner and etc.



lcon	Port Name	Function
RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
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.
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.
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.
Ŧ	GND	Alarm input ground port.
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.
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.
DC 12V 	Power input port	Input DC 12V/4A.
Power switch	/	Power on/off button.
PoE PORTS	/	Bult-in Switch. Support PoE The 8 PoE series product supports total 130W. The 16 PoE series product supports total 130W.

2.2.12 NVR42-8P-4K Series



The NVR42-8P-4K series rear panel is shown as below. See Figure 2-48.



Figure 2-48

lcon	Port Name	Function
Power socket	1	Input AC 220V.
Power switch	/	Power on/off button.
PoE PORTS	PoE port	Built-in Switch, support PoE. The PoE PORTS can provide power to the network camera. The 8 PoE ports series product can support 48V 120W.
	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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. HDMI version is 1.4.
SS<₽	USB3.0 port	USB3.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
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.
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.
1~4	Alarm input port 1~4	 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.



lcon	Port Name	Function
Ŧ	GND	Alarm input ground port.
N1,N2 C1~C2	Alarm output port 1∼2	 2 groups of alarm output ports. (group 1: port NO1~C1, group 2: port NO2~C2). 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 opd
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.

2.2.13 NVR44/44-8P/44-16P Series

The NVR44 series rear panel is shown as below. See Figure 2-49.



Figure 2-49

The NVR44-8P series rear panel is shown as below. See Figure 2-50.



Figure 2-50

The NVR44-16P series rear panel is shown as below. See Figure 2-51.



Figure 2-51

Name		Function
Power switch	/	Power on-off button
Power input port	1	Input AC 100~240V.



Name		Function
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.
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.
VIEDEO OUT	Video output port	CVBS output
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.
Ŧ	Video output port	CVBS output
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	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.
CTRL 12V	1	Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector.
+12V	/	+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.
- -	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.



Name		Function
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.
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
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. HDMI version is 1.3
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
PoE PORTS	8 PoE ports	Built-in Switch. Support PoE. The 8 PoE ports series products supports total 48V 120W power. One PoE port max supports 15W.
PoE PORTS	16 PoE ports	Built-in Switch. Support PoE. The 16 PoE ports series products supports total 150W power. One PoE port max supports 15W.

2.2.14 NVR44-4K/48-4K/54-4KS2/58-4KS2/54-16P-4KS2/58-16P-4KS2 Series

The NVR44-4K/NVR48-4K/ NVR54-4KS2/NVR58-4KS2 series rear panel is shown as below. See Figure 2-52.



Figure 2-52

The NVR54-16P-4KS2/NVR58-16P-4KS2 series rear panel is shown as below. See Figure 2-53.



Figure 2-53

Name	Function
------	----------



Name		Function
	Power switch	Power on-off button
	Power input port	Input AC 100~240V.
с С	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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.
SS∕€	USB3.0 port	USB3.0 port. Connect to mouse, USB storage device, USB burner and etc.
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. HDMI version is 1.4b.
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.
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.
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.
Ŧ	Ground	Alarm input ground end.
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.



Name		Function
A	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.
CTRL 12V	/	Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector.
+12V	/	+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.
RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
PoE PORTS	/	Bult-in Switch. Support PoE. The 16 PoE series product supports total 150W.

2.2.15 NVR48/48-16P Series

The NVR48 series rear panel is shown as below. See Figure 2-54.



Figure 2-54

The NVR48-16P series rear panel is shown as below. See Figure 2-55.



Figure 2-55

Please refer to the following sheet for detailed information.

Name

Function



Name		Function
Power switch	1	Power on-off button
Power input port	/	Input AC 100~240V.
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.
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.
VIEDEO OUT	Video output port	CVBS output.
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.
Ŧ	GND	Alarm input ground port.
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	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
В	port	RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
CTRL 12V	/	Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector.



Name		Function
+12V	/	+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.
	Network port	One 10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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.
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
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. HDMI version is 1.3
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
PoE PORTS	16 PoE ports	Built-in Switch. Support PoE. The 16 PoE ports series products supports total 150W power. One PoE port max supports 15W.

2.2.16 NVR72 Series

The NVR72 series rear panel is shown as below. See Figure 2-56.



Figure 2-56

Name		Function
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
<u> </u>	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.



Name		Function
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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
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.
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.
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.
Ŧ	GND	Alarm input ground port.
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.
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.
В		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
DC 12V 	Power input port	Input DC 12V/5A.
Power switch	1	Power on/off button.

2.2.17 NVR72-8P Series

The NVR72-8P series rear panel is shown as below. See Figure 2-57.





Figure 2-57

Name		Function
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
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. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
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.
÷	GND	Alarm input ground port.
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.
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.



Name		Function
	Power input port	Input AC 100~240V.
Power switch	/	Power on-off button.
PoE PORTS	/	Bult-in Switch. Support PoE. The 8 PoE series product supports total 48V 120W. One PoE port max supports 15W.
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.
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.

2.2.18 NVR74 Series

The NVR74 series rear panel is shown as below. See Figure 2-58.



Figure 2-58

lcon	Name	Function
	Power switch	Power on/off button.
	Power input port	Input AC 100~240V.
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.
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.



VIEDEO OUT	Video output port	CVBS output.
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. HDMI version is 1.3.
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 NVR have the same ground.
Ŧ	GND	Alarm input ground port.
NO1~NO5	Alarm output port	• 5 groups of alarm output ports. (Group 1:
C1~C5	1~5	3:port NO3 \sim C3, Group 4: port NO4 \sim C4,
NC5		 Group 5: port NOS, CS, NCS). 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	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
В	port	RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
CTRL 12V	/	Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector.
+12V	/	+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.
	Network port	One 10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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.
•€	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.



RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.

2.2.19 NVR74-8P/74-16P Series

The NVR74-8P series rear panel is shown as below. See Figure 2-59.



Figure 2-59

The NVR74-16P series rear panel is shown as below. See Figure 2-60.



Figure 2-60

Port Name		Function
Power switch	1	Power on-off button
Power input port	/	Input AC 100~240V.
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.
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.
VIEDEO OUT	Video output port	CVBS output



Port Name		Function
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.
Ŧ	GND	Alarm input ground port.
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 NO4~C4, Group 5:
NC5		 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	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.
CTRL 12V	/	Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector.
+12V	/	+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.
	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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.
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.


Port Name		Function
НДМІ	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. HDMI version is 1.3
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
PoE PORTS	8 PoE ports	Built-in Switch. Support PoE. The 8 PoE ports series products supports total 48V 120W power. One PoE port max supports 15W.
PoE PORTS	16 PoE ports	Built-in Switch. Support PoE. The 16 PoE ports series products supports total 150W power. One PoE port max supports 15W.

2.2.20 NVR78 Series

The NVR78 series rear panel is shown as below. See Figure 2-61.



Figure 2-61

Port Name		Function
Power switch	/	Power on-off button
Power input port	/	Input AC 100~240V.
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.
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.
VIEDEO OUT	Video output port	CVBS output



Port Name		Function
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.
Ŧ	GND	Alarm input ground port.
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.
В		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
CTRL 12V	1	Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector.
+12V	1	+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.
	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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.
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.



Port Name		Function
НДМІ	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. HDMI version is 1.3.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.

2.2.21 NVR78-16P Series

The NVR78-16P series rear panel is shown as below. See Figure 2-62.



Figure 2-62

Po	rt Name	Function
Power switch	/	Power on-off button
Power input port	/	Input AC 100~240V.
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.
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.
VIEDEO OUT	Video output port	CVBS output
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.



Port Name		Function
Ŧ	GND	Alarm input ground port.
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	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.
CTRL 12V	/	Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector.
+12V	/	+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.
- -	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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.
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
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. HDMI version is 1.3
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
PoE PORTS	16 PoE ports	Built-in Switch. Support PoE. The 16 PoE ports series products supports total 150W power. One PoE port max supports 15W.



2.2.22 NVR78-RH Series

The NVR78-RH series rear panel is shown as below. See Figure 2-63.



Figure 2-63

Por	rt Name	Function
Power switch	/	Power on-off button
Power input port	/	Input AC 100~240V.
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.
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.
VIEDEO OUT	Video output port	CVBS output
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.
Ŧ	GND	Alarm input ground port.
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



Port Name		Function
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	port	RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
CTRL 12V	/	Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector.
+12V	/	+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.
<u>0</u> 0	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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.
÷	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
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. HDMI version is 1.3. The two HDMI ports to output video from different video sources.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.

2.2.23 NVR70 Series

The NVR70 series rear panel is shown as below. See Figure 2-64.





Figure	2-64
i igaio	201

Po	rt Name	Function
Power switch	/	Power on-off button
Power input port	/	Input AC 100~240V.
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.
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.
VIEDEO OUT	Video output port	CVBS output
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
1	GND	NVR have the same ground.
= NO1~NO5 C1~C5	Alarm output port $1\sim5$	 5 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~C2,Group 3:port



Port Name		Function
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.
A	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.
CTRL 12V	/	Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector.
+12V	/	+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.
- -	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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.
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
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. HDMI version is 1.3
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.

2.2.24 NVR70-R Series

The NVR70-R series rear panel is shown as below. See Figure 2-65.





Figure 2-65

Po	rt Name	Function	
Power switch	/	Power on-off button	
Power input port	/	Input AC 100~240V.	
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.	
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. 	
VIEDEO OUT	Video output port	CVBS output	
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 N/D here the summer of the summer	
1	GND	Alarm input ground port.	
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 	



Port Name		Function
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	RS485_B.It is the cable B. You can connect to the
	ροπ	control devices such as speed dome PTZ.
CTRL 12V	/	Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector.
+12V	/	+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.
<u>а</u> а	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
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.
•	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
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. HDMI version is 1.3. The two HDMI ports to output video from different video sources.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.

2.2.25 NVR42V-8P Series

The interface is shown as in Figure 2-66.





Figure 2-66

Name		Function	
Power switch	1	Power on/off button.	
=03 =03	Power input port	Input DC 53V2.3A	
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.	
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. 	
1~2	Alarm input port 1~2	 When your alarm input device is using external power, please make sure the device and the NVR have the same ground. 	
Ŧ	GND	Alarm input ground port.	
С	Alarm output public port	Alarm output public end.	



Name		Function	
NO	Normal open	Normal open alarm output port.	
 	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.	
ŝ	USB3.0 port	USB3.0 port. Connect to mouse, USB storage device, USB burner and etc.	
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. HDMI version is 1.4.	
VGA	VGA video output port	> VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.	
PoE PORT	/	Bult-in Switch. Support PoE. The 8 PoE series product supports total 48V 120W. One PoE port max supports 15W.	

2.3 Alarm Connection

2.3.1 Alarm Port

The alarm port is shown as below. See Figure 2-67. The following figure is based on the 78 series.



Figure 2-67

lcon	Function
1~16	ALARM1~ALARM16. The alarm becomes activated in the
	low level.
NO1 C1, NO2 C2, NO3 C3, NO4	Four NO activation output groups. (On-off button).
C4	
NO5 C5 NC5	One NO/NC activation output group. (On-off button).
CTRL 12V	Control power output. Disable power output when alarm is
	canceled. Current is 500mA.
+12V	Rated current output. Current is 500mA.



Ŧ	GND
A/B	485 communication port. They are used to control devices
	such as PTZ. Please parallel connect $120T\Omega$ between A/B
	cables if there are too many PTZ decoders.

Note

- Different models support different alarm input ports. Please refer to the specifications sheet for detailed information.
- Slight difference may be found on the alarm port layout.

2.3.2 Alarm input port

Connect the positive end (+) of the alarm input device to the alarm input port (ALARM IN 1~16) of the

NVR. Connect the negative end (-) of the alarm input device to the ground end (**) of the NVR.



Figure 2-68

Note

- There are two alarm input types: NO/NC.
- When connect the ground port of the alarm device to the NVR, you can use any of the GND ports



- Connect the NC port of the alarm device to the alarm input port (ALARM) of the NVR.
- When there is peripheral power supplying for the alarm device, please make sure it is earthed with the NVR.

2.3.3 Alarm input and output port

- There is peripheral power supplying for the external alarm device.
- In case overload may result in NVR damage, please refer to the following relay specifications for detailed information.



• A/B cable of the RS485 is for the A/B cable connection of the speed PTZ.

Model:	JRC-27F	
Material of the	Silver	
touch		
Rating	Rated switch capacity	30VDC 2A, 125VAC 1A
Resistance	Maximum switch power	125VA 160W
Load)	Maximum switch voltage	250VAC, 220VDC
	Maximum switch currency	1A
Insulation	Between touches with same	1000VAC 1minute
	polarity	
	Between touches with different	1000VAC 1minute
	polarity	
	Between touch and winding	1000VAC 1minute
Surge voltage	Between touches with same	$1500V(10\times 160us)$
Surge voltage	polarity	13000 (10×10003)
Length of open	3ms max	
time		
Length of close	3ms max	
time		
Longevity	Mechanical	50×106 MIN (3Hz)
	Electrical	200×103 MIN (0.5Hz)
Temperature	-40℃ ~+70℃	

2.3.4 Alarm relay specifications

2.4 Bidirectional talk

2.4.1 Device-end to PC-end

Device Connection

Please connect the speaker or the pickup to the first audio input port in the device rear panel. Then connect the earphone or the sound box to the audio output port in the PC.

Login the Web and then enable the corresponding channel real-time monitor.

Please refer to the following interface to enable bidirectional talk. See Figure 2-69.



Figure 2-69

Listening Operation

At the device end, speak via the speaker or the pickup, and then you can get the audio from the earphone or sound box at the pc-end. See Figure 2-70.





Figure 2-70

2.4.2 PC-end to the device-end

Device Connection

Connect the speaker or the pickup to the audio output port in the PC and then connect the earphone or the sound box to the first audio input port in the device rear panel.

Login the Web and then enable the corresponding channel real-time monitor.

Please refer to the above interface (Figure 2-69) to enable bidirectional talk.

Listening Operation

At the PC-end, speak via the speaker or the pickup, and then you can get the audio from the earphone or sound box at the device-end. See Figure 2-71.





2.5 Mouse Operation

Please refer to the following sheet for mouse operation instruction.

Left	click	When you have selected one menu item, left click mouse to view menu content.
mouse		Modify checkbox or motion detection status.
		Click combo box to pop up dropdown 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 ← stands for backspace button stands for space button. In English input mode:stands for input a backspace icon and ← stands for deleting the previous character. 		
	!?@#\$% = + * ← 1 2 3 qwertyuiop/ 4 5 6 asdfghjkl:Enter 7 8 9 z × c v b n m, . Shift □ 0 &		
	!?@#\$% = + * \leftarrow 1 2 3 QWERTYUIOP/ 4 5 6 ASDFGHJKL: Enter 7 8 9 ZXCVBNM, . Shift \cup 0 &		
	In numeral input mode: _ stands for clear and \leftarrow stands for deleting the		
	previous numeral.		
Double left	Implement special control operation such as double click one item in the file list		
click mouse	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.		
Right click	In real-time monitor mode, pops up shortcut menu.		
mouse	Exit current menu without saving the modification.		
Press middle	In numeral input box: Increase or decrease numeral value.		
button	Switch the items in the check box.		
	Page up or page down		
Move mouse	Select current control or move control		
Drag mouse Select motion detection zone			
	Select privacy mask zone.		

2.6 Remote Control

The remote control interface is shown as in Figure 2-72.

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





Figure 2-72

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.
	Esc.	Go back to previous menu or
9		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
	1	Lowitch chonnel
		Switch channel.
		Shift is the button to switch the



3 Device Installation

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

3.1 Check Unpacked NVR

When you receive the NVR from the forwarding agent, please check whether there is any visible damage. The protective materials used for the package of the NVR 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 NVR.

3.2 About Front Panel and Rear Panel

The model number in the stick on the bottom of NVR 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

Important:

Please turn off the power before you replace the HDD.

The pictures listed below for reference only.

For the first time install, please be aware that whether the HDDs have been installed. You can refer to the Appendix for HDD space information and recommended HDD brand. Please use HDD of 7200rpm or higher. **Usually we do not recommend the PC HDD.** Please follow the instructions below to install hard disk.

3.3.1 NVR100/100-P Series

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

Please follow the instructions below to install HDD.



(1) Draw out the HDD bracket







(3) Put the HDD into the device



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 NVR11/11-P/41/41-P/41-8P/41-W/21-S2/21-P-S2/21-8P-S2 Series



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



O Fix four screws in the HDD

(Turn just three rounds).





accordance with the four holes in the bottom.





④ Turn the device upside down and ⑤ Fix the HDD firmly.then turn the screws in firmly.



(6) Connect the HDD cable and power cable.







⑦ Put the cover in accordance with

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

the clip and then place the upper cover back.

3.3.3 NVR11H/11H-P/41H/41H-P/41H-8P/11HS/21HS-S2/21HS-P-S2/21HS-8P-S2/ 41HS-W-S2 Series





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

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









- 6 Connect the HDD cable and power cable.





 \bigodot Put the cover in accordance with

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

the clip and then place the upper cover back.



3.3.4 NVR42/42N/42-P/42-8P/42-16P/72/72-8P/42-4K/42-8P-4K/52-4KS2/52-8P-4KS2/52 -16P-4KS2/22-S2/22-P-S2/22-8P-S2 Series

The following figures are based on the NVR 72-8P series.





 Loosen the screws of the upper cover and side panel.

②Fix four screws in the HDD (Turn just three rounds).



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



(4) Turn the device upside down and (5) Fix the HDD firmly. then turn the screws in firmly.





6 Connect the HDD cable and power cable.





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

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

3.3.5 NVR44/44-8P/44-16P/74/74-8P/74-16P/44-4K/54-4KS2/54-16P-4KS2 Series





① Use the screwdriver to loose the screws of the rear panel and then remove the front cover.



③ Connect to the HDD data cable to the main board and the HDD port respectively. Loosen the power cable of the chassis and connect another end of the power cable to the HDD port.



② Put the HDD to the HDD bracket in the chassis and then line up the four screws to the four holes in the HDD. Use the screwdriver to fix the screws firmly to secure HDD on the HDD bracket



(4) After connect the cable, put the front cover back to the device and then fix screws of the rear panel.

3.3.6 NVR48/48-16P/NVR78/78-16P/48-4K/58-4KS2/58-16P-4KS2 Series The following figures are based on the NVR78 series.



① ①Use the screwdriver to loose the screws of the rear panel and then remove the front cover.



② 2Put the HDD to the HDD bracket in the chassis and then line up the four screws to the four holes in the HDD. Use the screwdriver to fix the screws firmly to secure HDD on the HDD bracket





3 Connect to the HDD data cable to the main board and the HDD port respectively. Loosen the power cable of the chassis and connect another end of the power cable to the HDD port.



④After connect the cable, put the front cover back to the device and then fix screws of the rear panel.

3.3.7 **NVR78-RH Series**





①Turn the key into the hole in the front ②Open the front panel. panel.





③ Put the HDD to the slot and adjust the handle to secure it.



④Put the front panel back and use the key to fix firmly.

HDD Handle Installation







①Line up the handle to the HDD side (without ②Use the screwdriver to fix the handle on the the interface)

HDD.

3.3.8 NVR70/70-R Series



1 Use four screws to secure the HDD.



2 Put the HDD to the HDD box at the front panel of the device. .



inputing the HDD box in case the the handle panel of the device. .



③Please pull the handle up when you are ④Put the HDD to the HDD box at the front



collides with the front panel

3.3.9 **NVR42V-8P Series**



①Use 4 screws to secure the HDD



③Pull the HDD knob up when you put the HDD into the box in case the knob buckle may strike the front panel.



2 Put the HDD to the HDD box at the front.



④Put the knob back after you insert the HDD

to the SATA board.

.

3.4 CD-ROM Installation

Please follow the steps listed below.



HDD bracket



① Open top cover and then remove the ② Take off the bottom of the HDD bracket and CD-ROM bracket.



bracket.



⑤ Install SATA burner. Line up the SATA burner to the hole positions.



⑦ Put the bracket back. Please adjust the CD-ROM to the proper position so that the button of the front panel is directly facing the pop-up button of the CD-ROM.



③ Fix the CD-ROM bracket at the HDD ④ Install a pair of the CD-ROM bracket. Please make sure the reverse side is secure too.



6 User screwdriver to fix the screws.



8 Connect the SATA cable and power wire.



(9) Secure the HDD bracket and put the top cover back.

3.5 Connection Sample

3.5.1 NVR100/NVR100-P Series

Please refer to Figure 3-1 for connection sample. Here we take NVR100-P as an example.



Figure 3-1

3.5.2 NVR11/11-P/41/41-P/41-8P/41-W/21-S2/21-P-S2/21-8P-S2 Series



Please refer to Figure 3-2 for connection sample. Here we take NVR41 as an example.



Figure 3-2

3.5.3 NVR11H/11H-P/41H/41H-P/41H-8P Series

Please refer to Figure 3-3 for connection sample. Here we take NVR41H as an example.





Figure 3-3

3.5.4 NVR11HS//41HS-W-S2 Series

Please refer to Figure 3-4 for connection sample.





3.5.5 NVR41HS-W-S2 Series

Please refer to Figure 3-5 for connection sample.





Figure 3-5

3.5.6 NVR21HS-S2/21HS-P-S2/21HS-8P-S2 Series

Please refer to Figure 3-6 for connection sample.

Please note the following figure is based on the NVR21HS-8P-S2.





Figure 3-6

3.5.7 NVR22-S2/22-P-S2/22-8P-S2 Series

Please refer to Figure 3-7 for connection sample.

Please note the following figure is based on the NVR22-8P-S2.





Figure 3-7

3.5.8 NVR42N Series

Please refer to Figure 3-8 for connection sample.



Figure 3-8



3.5.9 NVR42/42-P/42-8P/42-16P/52-4KS2/52-8P-4KS2/52-16P-4KS2 Series

Please refer to Figure 3-9 for connection sample.

The following figure is based on our 42-8P series product.



Figure 3-9

3.5.10 NVR42-4K Series

Please refer to Figure 3-10 for connection sample.





Figure 3-10

3.5.11 NVR42-8P-4K Series

Please refer to Figure 3-11 for connection sample.



Figure 3-11

3.5.12 NVR44-4K/48-4K/54-4KS2/54-16P-4KS2/58-4KS2/58-16P-4KS2 Series


Please refer to Figure 3-11 for connection sample.

The following interface is based on the 44-4K series product.



Figure 3-12

3.5.13 NVR44/44-8P/44-16P Series

Please refer to Figure 3-13 for connection sample. The following interface is based on the 44-8P series product.





3.5.14 NVR48/48-16P Series

Please refer to Figure 3-14 for connection sample.

The following interface is based on the 48-16P series product.



Figure 3-14



3.5.15 NVR72 Series

Please refer to Figure 3-15 for connection sample.



Figure 3-15

3.5.16 NVR72-8P Series

Please refer to Figure 3-16 for connection sample.





Figure 3-16

3.5.17 NVR74 Series

Please refer to Figure 3-17 for connection sample. The following figure is based on the 74 series product.





Figure 3-17

3.5.18 NVR74-8P/74-16P Series

Please refer to Figure 3-18 for connection sample. The following figure is based on the NVR74-8P series product.





Figure 3-18

3.5.19 NVR78 Series

Please refer to Figure 3-19 for connection sample.





Figure 3-19

3.5.20 NVR78-16P Series

Please refer to Figure 3-20 for connection sample.





Figure 3-20

3.5.21 NVR78-RH Series

Please refer to Figure 3-21 for connection sample.





Figure 3-21

3.5.22 NVR70 Series

Please refer to Figure 3-22 for connection sample.





Figure 3-22

3.5.23 NVR70-R Series

Please refer to Figure 3-23 for connection sample.





Figure 3-23

3.5.24 NVR42V-8P Series

Please refer to Figure 3-24 for connection sample.





Figure 3-24



4 Local Basic Operation

4.1 Boot up and Shutdown

4.1.1 Boot up



Before the boot up, please make sure:

- For device security, please connect the NVR to the power adapter first and then connect the device to the power socket.
- 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 NVR front panel or remote control for more than 3 seconds to shutdown the device.

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

4.2 Change/Reset Password

4.2.1 Change Password

For your own safety, please change your administrator default password after your first login.

After system booted up, you can see the following interface if it is your first login or you have restored default setup. See Figure 4-1. Please input old password and then input new password twice to confirm the change.

- The default administrator user name is **admin** and the password is **admin**.
- 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.



• For reset information, please refer to chapter 4.2.2.

	ADMIN SECURITY
User Name	(admin)
Old Password	
New Password	
Confirm Password	
Secure Question_	
Question 1	(What's your favorite pet?
Answer	
Question 2	(What's your first car model?
Answer	
	OK Cancel

Figure 4-1

Click Cancel button, system pops up the following interface for you to confirm. See Figure 4-2. Check the box here, system will not pop up the change password interface the next time.



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. See Figure 4-3.



.

	SYSTEM LOGIN	
User Name Password	(admin	
	OK Cancel	

Figure 4-3

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 Password	
	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.



Startup Wizard	
Startup Wizard The startup wizard includes General,	
Network,Remote Device,Record Control.	
Smart Add Next Cancel	



Click Smart add, Cancel button or Next 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 (8888888 - Password (
OK Cancel

Figure 4-6

Note:

For security reason, please modify password after you first login.

Within 30 minutes, three times login failure will result in system alarm and five times login failure will result in account lock!

For detailed smart add information, please refer to chapter 4.5. Click OK button, you can go to General interface. See Figure 4-7. For detailed information, please refer to chapter 4.16.1.



	GENERAL
General Date&Time	Holiday
Device ID (NVR	
Device No. 8	
Language (ENGLISH	
Video Standard (PAL	
HDD Full (Overwrite	
Pack Duration 60	Minute
Realtime Play (5	Minute
Auto Logout (10	Minute
IPC Time Sync (24	Hours
Navigation Bar	
Mouse Sensitivity Slow	Fast
	Back Next Cancel

Figure 4-7

Click Next button, you can go to network interface. See Figure 4-8. For detailed information, please refer to chapter 4.14.

	тсряр
MTU D	(1500 LAN Download
IP Version MAC Address IP Address Subnet Mask Default Gateway Preferred DNS Alternate DNS	IPv4 90:20:84:ed:22:52 172 4 1 128 255 255 0 1 8 8 8 8
Default	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 chapter 4.14.1.16.





Figure 4-9

Click Next button, you can go to remote device interface. See Figure 4-10. For detailed information, please refer to chapter 4.5.

REMOTE							
0	Modify IP	Address	Port	Device ID		Manufacturer	Тур
•							
Device S	earch)	Add		Displa	ay Filter 🌔	Null	\neg
Added De	evice						
	el Modi	ify Delete	Status	IP Address	Port	Device ID	
		x		172.12.3.107	80	Device iD	
2	/	×	ĕ	172.4.4.31	80		
3	1	×	ē	172.11.2.133	37777	HDVR	
4	/	×	0	172.4.4.6	80		
5	/	×	0	172.4.4.9	80		
6	/	×	•	172.11.1.179	37777	DVR	
7	/	×		172.11.1.108	37777	HDVR	-
•							
Delete (Manual Add)							
				Back	Next	Cape	
				Dack	HUEX	Carree	

Figure 4-10



Click Next button, you can go to Schedule interface. See Figure 4-11. For detailed information, please refer to chapter 4.10.2.





Click Finish button, system pops up a dialogue box. Click the OK button, the startup wizard is complete. See Figure 4-12.



Figure 4-12

4.4 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 4-13.





4.4.1 Main Menu

Click button

to go to the main menu interface.

4.4.2 Dual-screen operation

Important

This function is for some series only.

Click to select screen 2, you can view an interface shown as below. See Figure 4-14. It is a navigation bar for screen 2.

Figure 4-14

Click any screen split mode; HDMI2 screen can display corresponding screens. Now you can control two screens. See Figure 4-15.



Figure 4-15

Note

- Screen 2 function is null if tour is in process. Please disable tour function first,
- Right now, the screen 2 operation can only be realized on the navigation bard. The operations on the right-click menu are for screen 1 only.

4.4.3 Output Screen

Select corresponding window-split mode and output channels.

4.4.4 Tour





s 🖳 , you can see the tour is in process.

4.4.5 PTZ

Click system goes to the PTZ control interface. Please refer to chapter 4.9.2.

4.4.6 Color

Click button System goes to the color interface. Please refer to chapter 4.7.4.1.

Please make sure system is in one-channel mode.

4.4.7 Search

Click button system goes to search interface. Please refer to chapter 4.11.2

4.4.8 Alarm Status



Click button A, system goes to alarm status interface. It is to view device status and channel status. Please refer to chapter 4.17.1.4.

4.4.9 Channel Info

Click button even goes to the channel information setup interface. It is to view information of the corresponding channel. See Figure 4-16.

		0	Q. 1		Manual	960'576	25	55
1			101		Regular	960'676	25	23
1					Regular	960,916	25	25
					Regular	960'576	25	69
5			101		Regular	960°576	25	23
6	10 C		192 -		Regular	960'676	25	70
		1.4			Regular	960*576	25	68
1			10 A		Regular	960 676	25	70
9		- 1 4 1		<u>.</u>	Regular	9601576	题	70
10	10 C	- 6			Regular	960*676	25	120
11			101		Regular	960*676	25	69
12.	10	- -	101		Regular	960'576	25	71
13			101		Regular	960'576	25	71
- 14					Regular	960°576	25	70
16		- 1 - 1 - 1	10) I		Regular	960*676	26	70
16		1. A A A A A A A A A A A A A A A A A A A	0		Regular	960'576	25	71
17	10				Regular	192011080	25	807
18			101		Regular	12801960	25	405
19	-		-		Regular	1280*720	30	
			_		_	_		1



4.4.10 Registration

Click system goes to the registration interface. Please refer to chapter 4.5.

4.4.11 Network

Click , system goes to the network interface. It is to set network IP address, default gateway and etc. Please refer to chapter 4.14.

4.4.12 HDD Manager

Click System goes to the HDD manager interface. It is to view and manage HDD information. Please refer to chapter 4.15.1.

4.4.13 USB Manager

Click System goes to the USB Manager interface. It is to view USB information, backup and update. Please refer to chapter 4.12.1 file backup, chapter 4.12.3 backup log, chapter 4.12.2 import/export, and chapter 4.17.5 upgrade for detailed information.

4.5 Smart Add



When the network camera(s) and the NVR are in the same router or switch, you can use smart add function to add all network cameras to the NVR at the same time.

There are two ways for you to go to the smart add interface.

• From the startup wizard, click Smart add button. See Figure 4-17.

	Startup Wizard			
Startup Wiz	ard			
The startup wizard includes General,				
Network,Remote Device,Record Control.				
Startup				
Smart Add	Next Cancel			



• On the preview interface, right click mouse and then select Smart add. See Figure 4-18.

	View 1	•
	View 4	•
	View 8	•
	View 9	•
	View 16	•
25	View 25	•
36	View 36	
∎	PTZ	
5-3	Auto Focus	
æ	Image	
୍	Search	
् (Search Manual	F
् ♦ इ	Search Manual Smart Add	•
(` ● •••••••••••••••••••••••••••••••••••	Search Manual Smart Add Remote	•



Now you can go to the smart add interface. See Figure 4-19.





Figure 4-19

Click smart add button, you can see device enables DHCP function. See Figure 4-20.



Figure 4-20



System pops up the following interface for you to confirm IP information if there are several IP segments. See Figure 4-21.

	Smart Add	
TO .	Prompt	
	DHCP failed! For the multiple-IP seg environment. Please set NVR netwo information. The NVR can change the NVR detects several IP segments he Example 172.11.0.0,192.168.1.0, IP Address 172 11 1 Subnet Mask 255 255 0 Default Gateway 172 11 0	iment ork he IPC IP ere.
	ОК	Cancel
Smart Add		

Figure 4-21

Now you can see system is auto adding IPC to the corresponding channels. See Figure 4-22.



Figure 4-22



You can see the following dialog box after system successfully added network cameras. See Figure 4-23.



Figure 4-23

4.6 Camera

4.6.1 Registration

From Main menu->Setting->Camera->Registration, you can see the following interface. See Figure 4-24.

- Device search: Click the button; you can search all network cameras in the same network segment.
- Channel: It is the device channel number. If you have not added the network camera, the channel number is shown as -.
- Status: Red circle () means current channel has no video, green circle () means current channel has video.
- IP address: It is to display network camera IP address.
- Type: There are two connection types. You can use the network to connect to the camera or use the

WIFI. The 🗐 means current network camera connection mode is general; the 🖾 means current

network camera mode is hotspot.

- Add/Delete: Click 🛛 to delete the device, click 🚹 to add the device to the NVR.
- Manual Add: Click Manual Add button, you can set the corresponding network camera information and then select the channel you want to add. The interface is similar to Figure 4-25.



CAMERA	RETWORK	EVENT	🌏 sro	RAGE	ه 🛃	SYSTEM	
REGISTRATION		(Arrest and a second and a se					
MAGE	Camera:42	Device Search					3/4
NICODE	CH Status	Name	IP Address	Add Del	Type	Modify	-
INCODE	1 🧕	P	11.1.1112	×		1	ï
	2 6	IP-w	11.1.158			1	
	3 6	IPC	11.1.1.199	×		1	
			11.1.1.142	+			
			172.11.1.102	+			
			172.11.1.103	+			
			172.11.1.104	+		1	
			172.11.1.13	-			
			172.11.1.14	+			
			172.11.1.169	+			
			172.11.1.220	+		I	
			172.11.1.24	140			
			172.11.1.27				
			172.11.1.34				
			172.11.1.86	+			
			172.11.1.98				
			172.11.12.100	4			
			172.11.195.11	200 C			
			172.11.195.12	+		-	
			172.11.195.21	+			

Figure 4-24

- Modify: Click Modify button, you can see the following interface. See Figure 4-25.
- ♦ Name: Change current channel name.
- ♦ Protocol: Select protocol from the dropdown list.
- ♦ IP Address: Input IP address here.
- ♦ TCP port: Input TCP port value.
- ♦ User name/Password: Input user name and password. The default user name is **admin** and the default password is **admin**.
- ♦ Decoder butter: There are three options: realtime/fluent/default. Please select from the dropdown list.
- ♦ Channel: Current channel number.



	Manual Add
Name Protocol	(Private -
IP Adress TCP Port Username Password Decoder Butter Channel	192.158.0.0 37777 admin ••••• Oetault •
	Cancel

Figure 4-25

4.6.2 Short-Cut Menu

In the preview interface, for the channel of no IPC connection, you can click the icon "+" in the centre of the interface to quickly go to the registration interface (Figure 4-24.). See Figure 4-26.





4.6.3 Image

From main menu->setting->camera->image, you can see the image interface is shown as below. See Figure 4-27.

- Channel: Select a channel from the dropdown list.
- 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.
- Auto Iris: It is for the device of the auto lens. You can check the box before ON to enable this function. The auto iris may change if the light becomes different. When you disable this function, the iris is at the max. System does not add the auto iris function in the exposure control. This function is on by default.
- 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.)
- \diamond B/W: The device outputs the black and white video.
- ♦ Sensor: It is to set when there is peripheral connected IR light.

Please note some non-IR series product support sensor input function.



		SETTING			
CAMERA	RETWORK	To EVENT	STORAGE	SYSTEM	
REMOTE					
IMAGE ENCODE	Channel	(2			
CAM NAME	Ring Mirror	 Enable O Disable Enable O Disable 	Saturation Brightness Contrast	50 50 50 50	
	Fip	(No Flip		-	
	Light Scene Mode	(Slop 🔹			
	DayLight	Schedule			
	Default R	elresh_)	Save	Cancel Apply	Ð

Figure 4-27

4.6.4 Channel Name

From main menu->Setting->Camera-Channel name, you can see an interface shown as in Figure 4-28. It is to modify channel name. It max supports 31-character.

Please note you can only modify the channel name of the connected network camera.

0 CHANEDA	ENEL WORK	EVENI	a ronade	STOLEM.
EMOTE				
IAGE	Channel Name			
NCODE	Channel 1	hannel 1	Channel 2 🧕	hannel 2
AM NAME	Channel 3	thannel 2	Channel 4 (C	hannel 2
	Channel 5	Thannel 2	Channel 6 (C	hannel 2
	Channel 7	hannel 2	Channel II (C	hannel 2
	Channel 9	PC	Channel 10 (IP	c
	Crannel 11	Ihannel 11	Channel 12 (IP	c
	Channel 13	PC .	Channel 14 (e	hannel 14
	Channel 15	Ihannel 15	Channel 16 C	hannel 16
			┥ 12 🕨	

Figure 4-28



4.6.5 Upgrade

Note

Right now, the NVR can upgrade the IPC via the USB device or WEB. You can upgrade 8 network cameras of the same model (or the NVR supported) at the same time.

It is to update the network camera.

From main menu->setting->camera->remote, the interface is shown as below. See Figure 4-29.

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 Begin button to upgrade. You can see the corresponding dialogue once the upgrade is finish.

				SETTING				
CAMERA	WNET	IWORK		EVENT		STORAGE	L 🛃 SYS	TEM
EMOTE	Ber	mate	Status	Firmwar	STAL DE	oorade		
MAGE	Upon	ade File	G				5	Selart
NCODE	2.640		6					Contract in
AM NAME	Upgr	ade(0/14					Device Type (None
	CC	hannel	Status	IP Address	Port	anutactur	Device Type	System Versio
		1		10.15.9.136	37777	Private		
	6	2	6	10.15.6.86	40006	Private	IPC-HFW3101C	2.211
		3	6	10.15.6.86	40005	Private	IPC-HFW3101C	2.211
		4		10,15.6.86	40006	Private	IPC-HFW3101C	2.211
		5	100	10.15.6.86	40005	Private	IPC-HFW3101C	2.211
		6		10.15.6.86	40005	Private	IPC-HFW3101C	2.211
		7	6	10.15,6.86	40005	Private	IPC-HFW3101C	2.211
		8	1 G	10.15.6.86	40005	Private	IPC-HFW3101C	2.211
	6	9		10.15.5.82	40003	Private	IPC-HFW3200S	2.211
	6	10	100	10.15.5.82	40003	Private	IPC-HFW3200S	2.211
	6	11		10.15.5.233	37777	Private		
		12		10.15.5.82	40003	Private	IPC-HFW3200S	2.211
		13		10.15.6.99	37777	Private	IPC-HFW5100	2.210
		14		10.15.7.144	37777	Private		

Figure 4-29

4.6.6 UPNP

Important

Do not connect the switch to the PoE port, otherwise the connection may fail!

Please connect the IPC to the PoE port of the device rear panel (Figure 4-30), system can auto connect to the network camera. Please note the following figure is for reference only.



Figure 4-30



4.6.7 Built-in Switch Setup

The built-in switch function is for product of PoE port.

From Main menu->Setting->Network->Switch, you can set switch IP address, subnet mask, gateway and etc. See Figure 4-31.

1		SETTING		
	NETWORK		STORAGE	SYSTEM
TCP/IP CONNECTION WIFI 3G PPPOE DDNS UPNP IP FILTER EMAIL FTP SNIMP MULTICAST ALARM CENTER AUTO REGISTER SWITCH	IP Address Subnet Mask Default Gateway	15 12 1 (255 255 255 15 12 1		
	Default		ОК	Cancel Apply

Figure 4-31

4.7 Preview

After device booted up, the system is in multiple-channel display mode. See Figure 4-32.Please note the displayed window amount may vary. The following figure is for reference only. Please refer to chapter 1.3 Specifications for the window-amount your product supported.



Figure 4-32



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)

Please refer to the following sheet for detailed information.

1	0	Recording status	3	?	Video loss
2	*	Motion detection	4	6	Camera lock

<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.

4.7.2 Preview control interface

Move you mouse to the top centre of the video of current channel, you can see system pops up the preview control interface. See Figure 4-33. If your mouse stays in this area for more than 6 seconds and has no operation, the control bar automatically hides.



Figure 4-33 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 , the button is shown as

There are two ways for you to zoom in.

• Drag the mouse to select a zone, you can view an interface show as Figure 4-34.





Figure 4-34



• Put the middle button at the centre of the zone you want to zoom in, and move the mouse, you can view an interface shown as in Figure 4-35.



Figure 4-35

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 recoridng. You can find the record file on the flash disk.

4) Manual Snapshot

Click **I** to snapshot 1-5 times. The snapshot file is saved on the USB device or HDD. You can go to the Search interface (chapter 4.11) to view.

5) Bidirectional talk

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

button 💟 to start bidirectional talk function the icon now is shown as 🖳 . 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

6) Registration

Shortcut menu. Click it to go to the registration interface to add/delete remote device or view its corresponding information. Please refer to chapter 4.6.2 for detailed information.

4.7.3 Right Click Menu

After you logged in the device, right click mouse, you can see the short cut menu. Please see Figure 4-36.

- Window split mode: You can select window amount and then select channels.
- PTZ: Click it to go to PTZ interface.
- Fish eye(optional): It is to realize fish eye operation.
- Auto focus: It is to set auto focus function. Please make sure the 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.
- Alarm output: It is to set alarm output mode.
- Camera registration: Search and add a remote device.
- Alarm output: Generate alarm output signal manually.
- Main menu: Go to system main menu interface.

Tips:

Right click mouse to go back to the previous interface.



Figure 4-36

4.7.4 Preview Display Effect Setup

4.7.4.1 Video Color

Here you can set hue, brightness, contrast, saturation, gain, white level, color mode and etc. See Figure 4-37.



Figure 4-37



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 and 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, 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, 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 corresponding setup.



4.7.4.2 Display

From Main Menu->Setting->System->Display, you can go to the following interface. See Figure 4-38. Here you can set menu and video preview effect. All you operation here does not affect the record file and playback effect.

		SETTING		
CAMERA	ETWORK	EVENT	STORAGE	SYSTEM
GENERAL DISPLAY RS232 PTZ ACCOUNT AUTO MAINTAIN IMP/EXP DEFAULT UPGRADE	Display Resolution VGA+HDMI2 Transparency Time Display Channel Display Image Enhance Original Scale	TV Adjust Tour (1250×1024 *) 8+4 * 0 0 0 0 0 0		
CAMERA				Cancel Apply
GENERAL DISPLAY RS232 PTZ ACCOUNT AUTO MAINTAIN MPIEXP DEFAULT UPGRADE	Display Display the intel Resolution Color Mode Transparency Time Display Channel Display Image Enhance Original Scale	Tour igent rules 2 Standard 200x1024 Standard 2 2 2 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3		
	Default		(Save) (Cancel Apply

Figure 4-38

Now you can set corresponding information.

- Display the intelligent rule(s): Check the box to enable IVS function, system can display IVS rule on the preview interface. Please note this function is for some series only.
- Resolution: There are five options: 1280×1024 (Default), 1280×720, 1920×1080, 1024×768 and 3840×2160. Please note the system needs to reboot to activate current setup. Please note 3840×2160 is for some series only.


- VGA+HDMI2: It is for dual-screen operation. Please select from the dropdown list according to your actual situation. Click Apply button, system needs to restart to activate new setup. For example, 32+4 means for VGA, system max supports 32-window split and for HDMI2, system max supports 4-window split. Please note this function is for some series only.
- Color mode: Please select from the dropdown list. It is to set video color mode.
- Transparency: Here is for you to adjust menu transparency. The higher the value is, the better transparent the menu is.
- Channel name: Here is for you to modify channel name. System max support 25-digit (The value may vary due to different series). Please note all your modification here only applies to NVR local end. You need to open web or client end to refresh channel name.
- 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 enhance: Check the box; you can optimize the margin of the preview video.
- Original scale: Check the box here to select a corresponding channel; it can restore video original scale.

Click OK button to save current setup.

4.7.4.3 TV adjust

Note

Some series product supports TV adjust function. This function is disabled by default.

From Main Menu->Setting->System->Display->TV adjust; you can go to the following interface. See Figure 4-38. Here you can set margins and brightness.

SETTING					
CAMERA	TWORK		π		SYSTEM
GENERAL DISPLAY	Display	TV Adjust	Tour		
RS232 PTZ ACCOUNT AUTO MAINTAIN	Top Margin Bottom Margin Left Margin Right Margin		0 0 0		
IMP/EXP DEFAULT UPGRADE	Brightness		128		
	Delault			<u>(</u>	Cancel Apply

Figure 4-39

4.7.5 **Preview Tour Parameters**

Set preview display mode, channel display sequence and tour setup.



- Set preview display mode: On the preview interface, right click mouse, you can view right-click menu. Now you can select preview window amount and channel.
- Set channel display mode: On the preview interface, if you want to change channel 1 and channel 16 position, please right click channel 1 video window and then drag to the channel 16 video window, release button, you can change channel 1 and channel 16 position.
- Tour setup: Here you can set preview window channel display mode and interval. Please follow the steps listed below.

From Main menu->Setting->System->Display->Tour, you can see an interface shown as in Figure 4-40. Here you can set tour parameter.

- Enable tour: Check the box here to enable tour function. The general tour supports all types of window split mode.
- Interval: Input proper interval value here. The value ranges from 1-120 seconds.
- Motion tour type: System support 1/8-window tour. Please note you need to go to the main menu->Setting->Event->Video detect->Motion detect to enable tour function.
- Alarm tour type: System support 1/8-window tour. Please note you need to go to the main menu->Setting->Event->Alarm to enable tour function.
- Window split: It is to set window split mode.



Figure 4-40

Tips

On the navigation bar, click is to enable/disable tour.

Click Save button to save current setup.

4.8 Fish eye (Optional)

Please note this function is for some series only.

4.8.1 Fish eye de-warp during preview interface

On the preview interface, select fish eye channel and then right click mouse, you can select fish eye. See





Figure 4-41

Now you can see an interface shown as in Figure 4-42. You can set fish eye installation mode and display mode.

Note:

- For the non-fish eye channel, system pops up dialogue box to remind you it is not a fish eye channel and does not support de-warp function.
- If system resources are insufficient, system pops up the corresponding dialogue box too.



Figure 4-42



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	Icon	Note
(Ceiling mount)	O	360°panorama original view
		1 de-warp window+1 panorama stretching
(Ground mount)	11	2 panorama stretching view
	C	1 360° panorama view+3 de-warp windows
	Q	1 360°panorama view+4 de-warp windows
		4 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



Figure 4-43

In Figure 4-43, 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.



4.8.2 Fish eye de-warp during playback

On the main menu, click search button.

Select 1-window playback mode and corresponding fish eye channel, click 🕨 to play.

Right click the , you can go to the de-warp playback interface. For detailed information, please refer to chapter 4.8.1.

4.9 PTZ

Note:

Before you control the PTZ, please make sure the PTZ decoder and the NVR network connection is OK and the corresponding settings are right.

4.9.1 PTZ Settings

Cable Connection

Please follow the procedures below to go on cable connection

- Connect the dome RS485 port to NVR RS485 port.
- Connect dome video output cable to NVR video input port.
- Connect power adapter to the dome.

In the main menu, from Setting->System->PTZ, you can see an interface is shown as in Figure 4-44. Here you can set the following items:

- Channel: Select the current camera 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.
- Protocol: Select corresponding PTZ protocol(such as PELCOD)
- Address: Default address is 1.
- Baud rate: Select corresponding baud rate. Default value is 9600.
- Data bit: Select corresponding data bits. Default value is 8.
- Stop bit: Select corresponding stop bits. Default value is 1.
- Parity: There are three options: odd/even/none. Default setup is none.



Ĵ.		SETTIN			
	RETWORK	T EVENT		SYSTEM	
GENERAL DISPLAY RS232 PTZ ACCOUNT AUTO MAINTAIN MP.EXP DEFAULT UPDATE	Channel 1 PTZ Type Loca Protocol (PEL) Address 1 Baud Rate (9600 Data Bit (8 Stop Bit (1 Parity (None				
	Default Co	ру	Save	Cancel Ap	Ρlγ

Figure 4-44

If you are connecting to network PTZ, the PTZ type shall be remote. See Figure 4-45.

1		SETTING		
CAMERA	NETWORK	TT EVENT	STORAGE	SYSTEM
GENERAL DISPLAY RS232 PTZ ACCOUNT AUTO MAINTAIN IMP.EXP DEFAULT UPDATE	Channel (3 PTZ Type (Rem	iote		
1 3	(Default) (Cc	97	Save	Cancel Apply

Figure 4-45

4.9.2 PTZ Control

After completing all the setting please click save button. Right click mouse (click "Fn" Button in the front panel or click "Fn" key in the remote control). The interface is shown as in Figure 4-46. Please note you can only go to the PTZ control interface when you are in 1-window display mode.





Figure 4-46

The PTZ setup is shown as in See Figure 4-47.

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 of 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.





In the middle of the eight direction arrows, there is a 3D intelligent positioning key. See Figure 4-48. 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	•	Near	ŀ	•	Far	••
Focus	•	Near	•	•	Far	►
Iris	•	close	◀	•	Open	▶ II

In Figure 4-47, click to open the menu, you can set preset, tour, pattern, scan and etc. See Figure 4-49.



Figure 4-49

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 4-47.

lcon	Function	lcon	Function
•	Preset	(\mathbf{i})	Flip
	Tour	0	Reset
~	Pattern		Aux
	Scan		Aux on-off button
•	Rotate	0	Go to menu

4.9.2.1 PTZ Function Setup



you can go to the following interface to set preset, tour, pattern, and scan. See Figure 4-50.



Figure 4-50

Preset Setup

In Figure 4-50, click preset button and use eight direction arrows to adjust camera to the proper position. The interface is shown as in Figure 4-51.

Click Set button and then input preset number.

Click Set button to save current preset.

	P	TZ	
Preset	Tour	Pattern	Border
		Preset	1
		Del F	et Preset

Figure 4-51

Tour Setup

In Figure 4-50, click tour button.

Input tour value and preset No. Click Add preset button to add current preset to the tour. See Figure 4-52. **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.





Figure 4-52

Pattern Setup

In Figure 4-50, click Pattern button and input pattern number.

Click Begin button to start direction operation. Or you can go back to Figure 4-47 to operate zoom/focus/iris/direction operation.

In Figure 4-50, click End button.



Figure 4-53

Scan Setup

In Figure 4-50, 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.





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

Click system goes to the following interface. The options here are defined by the protocol. The aux number is corresponding to the aux on-off button of the decoder. See Figure 4-55.





Figure 4-55

4.10 Record and Snapshot

The record/snapshot priority is: Alarm->Motion detect->Schedule.

4.10.1 Encode

4.10.1.1 Encode

Encode setting is to set IPC encode mode, resolution, bit stream type and etc

From Main menu->Setting->System->Encode, you can see the following interface. See Figure 4-56.

- Channel: Select the channel you want.
- 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.264, MPEG4, MJPEG and etc.
- Resolution: The mainstream resolution type is IPC's encoding config. Generally there is D1/720P/1080P. For NVR42-4K, NVR42-8P-4K series product, the main stream supports 2048× 1536(3M),1920×1080(1080P), 1280×1024(S×GA), 1280×960(1.3M),1280×720(720P),704 ×576 (D1) and the sub stream supports 704×576 (D1),352×288 (CIF).
- 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. Please note, once you enable audio function for one channel, system may enable audio function of the rest channels by default.
- 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 4-59. 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 4-59 and Figure 4-57 respectively to complete the setup. Please note, once you check the All box, you set same encode setup for all channels. Audio/video enable box, overlay button and the copy button is shield.

Please highlight icon 🔳 to select the corresponding function.



		SETTING		
CAMERA	NETWORK			SYSTEM
REMOTE IMAGE ENCODE CAM NAME	Encode Ov Channel Code-Stream Type Compression Resolution Frame Rate(FPS) Bit Rate Type Bit Rate (Kb/S) Reference Bit Rate Audio/Video	eerlay Snapshot 2 • • • • • • • • • • • • • • • • • •	(Sub Stream1 + (H.264 - (CIF - 6 - (CBR - (CBR - (160 - 48-255Kb/S 20 20	
	Default C	Сору	(Save)	Cancel Apply



4.10.1.2 Overlay

Click overlay button, you can see an interface is shown in Figure 4-57.

- Cover area: Here is for you to cover area section. You can drag you mouse to set proper section size. In one channel video, system max supports 4 zones in one channel. You can set with Fn button or direction buttons.
- Preview/monitor: The cover area 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.



		SETTING		
CAMERA	WALLAND			SYSTEM
REMOTE IMAGE ENCODE CAM NAME	Encode Channel Time Display Channel Display Cover-Area	Dverlay Snapshot	Setup Setup	
	Delault	Сору	Save	Cancel Apply

Figure 4-57

4.10.1.3 Snapshot

Here you can set snapshot mode, picture size, quality and frequency. See Figure 4-58.

- Snapshot mode: There are two modes: regular and trigger. If you set regular 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.





Figure 4-58



Figure 4-59

4.10.2 Schedule

The record type priority is: Alarm>Motion detect>Regular.

4.10.2.1 Schedule Record

Set record time, record plan and etc. Please note system is in 24-hour record by default after its first boot up.

In the main menu, from Main menu->Setting->Storage->Schedule, you can go to schedule menu. See Figure 4-63. There are total six periods.



- 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 or

together. Now the icon is shown as



- \diamond **Matrix**: 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->Setting->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. It allows you backup recorded file in two disks. 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.
- ANR: It is to save video to the SD card of the network camera in case the network connection fails. The value ranges from 0s~43200s. After the network connection resumed, the system can get the video from the SD card and there is no risk of record loss.
- Period setup: Click button after one date or a holiday, you can see an interface shown as in Figure 4-64. There are four record types: regular, motion detection (MD), Alarm, MD & alarm.

Please following the steps listed below to draw the period manually.

a) Select a channel you want to set. See Figure 4-60.



Figure 4-60

b) Set record type. See Figure 4-61.





c) Please draw manually to set record period. There are six periods in one day. See Figure 4-62.





Figure 4-62

Please check the box I 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 4-63



Ferend 2	00 10	- 24 - 00	Citingular	Ow:		OMDANA OMDANA
Penod 3	00 00	241:00	Reput	CI MD	D Alam	MD&AW
Penut 4	00:00	- 24: 80	Regular	D NO	DAlim	MD&Ala
Period 5	03-10	- 24 .00	Clinetic	E MP	C - Herm	DMD44ar
04	82	m 🖾 Man 🖾 Ti	e 🛛 Wed 🖾 The (2≈ ()≤=		
					•	

Figure 4-64

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 4-65. 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.

Please note, if you select ALL in Figure 4-65, the record setup of all channels are the same and the Copy button becomes hidden.



Figure 4-65

Click OK button to save current setup.

4.10.2.2 Schedule Snapshot

From Main menu->Setting->Storage->Record or on the preview interface, right click mouse and then select record item, you can see Figure 4-66.

Select snapshot channel and enable snapshot function. Click Save button.



SETTING					
	WINETWORK		EVENT		SYSTEM
SCHEDULE HDD MANAGER RECORD ADVANCE RAID MANAGER	Main Stream Schedule Manuai Of Sub Stream Schedule Manual Of Snapshot Enable Disable				
				Save	Cancel Apply

Figure 4-66

From Main menu->Setting->Camera->Encode->Snapshot, you can go to snapshot interface. See Figure 4-67.

Select the snapshot channel from the dropdown list and then select snapshot mode as Timing (Schedule) from the dropdown list and then set picture size, quality and snapshot frequency.

SETTING				
CAMERA	TNETWORK To EVENT	RAGE 🛃 SYSTEM		
REMOTE IMAGE ENCODE	Encode Overlay Snapshot Mannal Snap (5 -) /Time			
CAMINAME	Channel 6 • Mode Timing • Image Size 1080P • Quality 6 • Snapshot Frequency 1 SPL			
		Save Cancel Apply		

Figure 4-67



In the main menu, from Main menu->Setting->Storage->Schedule, you can go to schedule menu. See Figure 4-63. Here you can set snapshot period. There are total six periods in one day. Please refer to chapter 4.10.2.1 for detailed setup information. The setup steps are general the same.





Note

- Please note the trigger snapshot has the higher priority than regular snapshot. If you have enabled these two types at the same time, system can activate the trigger snapshot when an alarm occurs, and otherwise system just operates the regular snapshot.
- Only the trigger snapshot supports this function. The regular snapshot function can not send out picture via the email. But you can upload the picture to a FTP.

4.10.3 Motion detect record/snapshot

- 4.10.3.1 Motion detect record
 - a) From Main menu->Setting->Event->Detect, you can go to the following interface. See Figure 4-69.