Network Video Recorder

Quick Operation Guide

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About this Manual

This Manual is applicable to Network Video Recorder (NVR).

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website

Please use this user manual under the guidance of professionals.

Legal Disclaimer

REGARDING TO THE PRODUCT WITH INTERNET ACCESS, THE USE OF PRODUCT SHALL BE WHOLLY AT YOUR OWN RISKS. OUR COMPANY SHALL NOT TAKE ANY RESPONSIBILITES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER ATTACK, HACKER ATTACK, VIRUS INSPECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, OUR COMPANY WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

SURVEILLANCE LAWS VARY BY JURISDICTION. PLEASE CHECK ALL RELEVANT LAWS IN YOUR JURISDICTION BEFORE USING THIS PRODUCT IN ORDER TO ENSURE THAT YOUR USE CONFORMS THE APPLICABLE LAW. OUR COMPANY SHALL NOT BE LIABLE IN THE EVENT THAT THIS PRODUCT IS USED WITH ILLEGITIMATE PURPOSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

Regulatory Information

FCC Information

FCC compliance: This equipment has been tested and found to comply with the limits for a digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Conditions

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.

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

EU Conformity Statement

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2004/108/EC, the RoHS Directive 2011/65/EU.

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info

2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (B)/NMB-3(B) standards requirements.

Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into "Warnings" and "Cautions"

Warnings: Serious injury or death may occur if any of the warnings are neglected.

Cautions: Injury or equipment damage may occur if any of the cautions are neglected.

⚡	⚠
Warnings Follow these safeguards to prevent serious injury or death.	**Cautions** Follow these precautions to prevent potential injury or material damage.

⚡ Warnings

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.

- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 100~240 VAC or 12 VDC according to the IEC60950-1 standard. Please refer to technical specifications for detailed information.

- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.

- Please make sure that the plug is firmly connected to the power socket.

If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

Preventive and Cautionary Tips

Before connecting and operating your device, please be advised of the following tips:

- Ensure unit is installed in a well-ventilated, dust-free environment.

- Unit is designed for indoor use only.

- Keep all liquids away from the device.

- Ensure environmental conditions meet factory specifications.

- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.

- Use the device in conjunction with an UPS if possible.

- Power down the unit before connecting and disconnecting accessories and peripherals.

- A factory recommended HDD should be used for this device.

- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

Thank you for purchasing our product. If there is any question or request, please do not hesitate to contact dealer.

NVR Installation

During the installation of the NVR:

1. Use brackets for rack mounting.
2. Ensure there is ample room for audio and video cables.
3. When routing cables, ensure that the bend radius of the cables are no less than five times than its diameter.
4. Connect both the alarm and RS-485 cable.
5. Allow at least 2cm (≈0.75-inch) of space between racks mounted devices.
6. Ensure the NVR is grounded.
7. Environmental temperature should be within the range of -10 ºC ~ 55 ºC, 14ºF ~ 131ºF.
8. Environmental humidity should be within the range of 10% ~ 90%.

Hard Disk Installation

Before you start:

Disconnect the power from the NVR before installing a hard disk drive (HDD). A factory recommended HDD should be used for this installation.

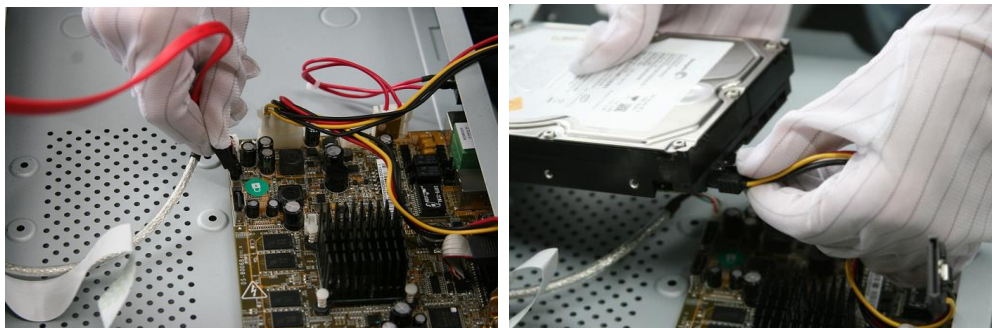Up to 2 SATA hard disks can be installed on your NVR.

Tools Required: Screwdriver.

Steps:

1. Remove the cover from the NVR by unfastening the screws on the rear and side panel.

2. Connect one end of the data cable to the motherboard of NVR and the other end to the HDD.

3. Connect the power cable to the HDD.

4. Place the HDD on the bottom of the device and then fasten the screws on the bottom to fix the HDD.

5. Re-install the cover of the NVR and fasten screws.

Front Panel

Front Panel of 4ch/8ch NVR

Description of Front Panel

No.	Name		Function Description
1	Status Indicators		POWER: the POWER indicator turns green when NVR is powered up.
			READY: The indicator light is green when the device is running normally.
			STATUS: 1.The light is green when the IR remote control is enabled; 2.The light is red when the function of the composite keys (SHIFT) are used; 3. The light is out when none of the above condition is met/
			ALARM: the light is red when there is an alarm occurring.
			HDD: the indicator flickers red when HDD is reading/writing.
			Tx/Rx: TX/RX indicator flickers green when network connection is functioning normally.
2	USB Interfaces		Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).
3	Composite Keys	1/MENU:	Enter numeral "1";
			Access the main menu interface.
		2/ABC/F1:	Enter numeral "2";
			Enter letters "ABC";
			The F1 button when used in a list field will select all items in the list.
			In PTZ Control mode, it will turn on/off PTZ light and when the image is zoomed in, the key is used to zoom out.
		3/DEF/F2:	Enter numeral "3";
			Enter letters "DEF";
			The F2 button is used to change the tab pages.
			In PTZ control mode, it zooms in the image.
		4/GHI/ESC:	Enter numeral "4";
			Enter letters "GHI";
			Exit and back to the previous menu.
		5/JKL/EDIT:	Enter numeral "5";
			Enter letters "JKL";
			Delete characters before cursor;
			Check the checkbox and select the ON/OFF switch;
			Start/stop record clipping in playback.
		6/MNO/PLAY:	Enter numeral "6";

| No.	Name		Function Description
			Enter letters "MNO";
			Playback, for direct access to playback interface.
		7/PQRS/REC:	Enter numeral "7";
			Enter letters "PQRS";
			Open the manual record interface.
		8/TUV/PTZ:	Enter numeral "8";
			Enter letters "TUV";
			Access PTZ control interface.
		9/WXYZ/PREV:	Enter numeral "9";
			Enter letters "WXYZ";
			Multi-channel display in live view.
		0/A:	Enter numeral "0";
			Shift the input methods in the editing text field. (Upper and lowercase, alphabet, symbols or numeric input).
			Double press the button to switch the main and auxiliary output.
4	SHIFT		Switch between the numeric or letter input and functions of the composite keys. (Input letter or numbers when the light is out; Realize functions when the light is red.)
5	Control Buttons		Directional buttons: In menu mode, the direction buttons are used to navigate between different fields and items and select setting parameters. In playback mode, the Up and Down buttons are used to speed up and slow down record playing, and the Left and Right buttons are used to move the recording 30s forwards or backwards. In the image setting interface, the up and down button can adjust the level bar of the image parameters. In live view mode, these buttons can be used to switch channels.
			Enter: The Enter button is used to confirm selection in menu mode; or used to check checkbox fields and ON/OFF switch. In playback mode, it can be used to play or pause the video. In single-frame play mode, pressing the Enter button will play the video by a single frame. And in auto sequence view mode, the buttons can be used to pause or resume auto sequence.
6	IR Receiver		Receiver for IR remote.

Front Panel of 16/32ch NVR

No.	Name	Function Description
1	POWER ON/OFF	Power on/off switch.
2	USB Interface	Connect to USB mouse or USB flash memory.
3	IR Receiver	Receiver for IR remote control. devices.
4	POWER	Power indicator lights in green when DVR is powered up.
	READY	Ready indicator is normally green, indicating that the DVR is functioning properly.
	STATUS	Indicator turns green when DVR is controlled by an IR remote control with the address from 1~254; Indicator turns red when the SHIFT button is used; Indicator does not light when the DVR is controlled by a keyboard or by the IR remote control with the address of 255; Indicator turns green when the DVR is controlled by IR remote control (with the address from 1~254) and keyboard at the same time , and the SHIFT button is not used; Indicator turns orange : (a) when the DVR is controlled by IR remote control (with the address from 1~254) and keyboard at the same time and the SHIFT button is used as well; (b) when the DVR is controlled by IR remote control (with the address from 1~254) and the SHIFT button is used.
	ALARM	Alarm indicator turns red when a sensor alarm is detected.
	HDD	HDD indicator blinks in red when data is being read from or written to HDD.
	Tx/Rx	TX/RX indictor blinks in green when network connection is functioning properly.
5	DVD-ROM	Slot for DVD-ROM.
6	DIRECTION	The DIRECTION buttons are used to navigate between different fields and items in menus. In Playback mode, the Up and Down button is used to speed up and slow down recorded video. In All-day Playback mode, the Left/Right button can be used to select the recorded video of next/previous day; in Playback by Normal Video Search, the Left/Right button can be used to select the next/previous recorded file. In Live View mode, the directional buttons can be used to cycle through channels. In PTZ control mode, it can control the movement of the PTZ camera.
	ENTER	Confirm selection in any of the menu modes. It can also be used to tick checkbox fields. In Playback mode, it can be used to play or pause the video. In Single-frame Playback mode, pressing the ENTER button will advance the video by a single frame. In Auto-switch mode, it can be used to stop /start auto switch.
7	SHIFT	Switch of compound keys between the numeric/letter input and functional control.
	1/MENU	Enter numeral "1"; Access the main menu interface.
	2ABC/F1	Enter numeral "2"; Enter letters "ABC"; The F1 button can be used to select all items on the list;

|		
		In PTZ Control mode, the F1 button can be used to zoom out (zoom-) the PTZ camera; In live view or playback mode, the F1 button can be used to switch between main and spot video output.
	3DEF/F2	Enter numeral "3"; Enter letters "DEF"; In PTZ Control mode, the F1 button can be used to zoom in (zoom+) the PTZ camera; The F2 button can be used to cycle through tab pages.
	4GHI/ESC	Enter numeral "4"; Enter letters "GHI"; Exit and back to the previous menu.
	5JKL/EDIT	Enter numeral "5"; Enter letters "JKL"; Delete characters before cursor; Select the checkbox and ON/OFF switch; Start/stop record clipping in playback.
	6MNO/PLAY	Enter numeral "6"; Enter letters "MNO"; In Playback mode, it is used for direct access to playback interface.
	7PQRS/REC	Enter numeral "7"; Enter letters "PQRS"; Manual record, for direct access to manual record interface; manually enable/disable record.
	8TUV/PTZ	Enter numeral "8"; Enter letters "TUV"; Access PTZ control interface.
	9WXYZ/PREV	Enter numeral "9"; Enter letters "WXYZ"; Multi-camera display in live view; In Playback mode or Menu→Playback→Tag playback interface, this button can be used to delete the selected tag.
	0/A	Enter numeral "0"; Switch between input methods (upper and lowercase alphabet, symbols and numeric input). In Playback mode, this button can be used to add the default tag.
8	**JOG SHUTTLE Control**	Move the active selection in a menu. The inner ring will move the selection up and down; the outer ring will move it left and right. In Playback mode, the inner ring is used to jump 30s forward/backward in video files. The outer ring can be used to speed up/slow down the video. In Live View mode, it can be used to cycle through different channels. In PTZ control mode, in can control the movement of the PTZ camera.

Rear Panel

NOTE

The rear panel vaires according to different models.
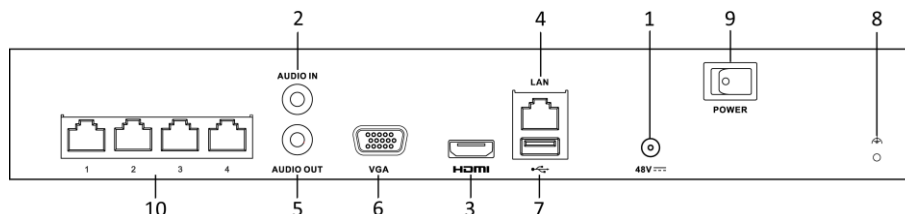
Rear Panel of 4ch NVR
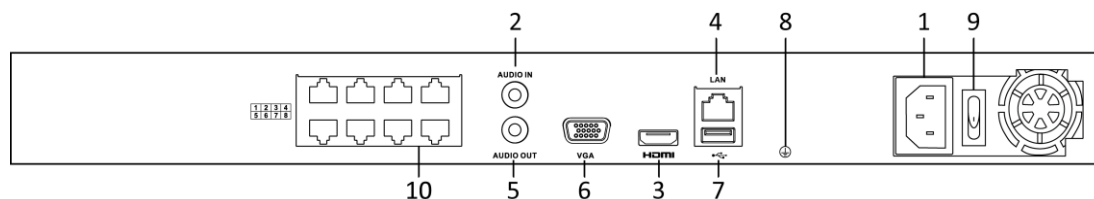
Rear Panel of 8ch NVR

No.	Item	Description
1	Power Supply	48V DC power supply for 4ch NVR and AC 100~240V for 8ch and 16ch NVR
2	Audio In	RCA connector for audio input.
3	HDMI Interface	HDMI video output connector.
4	LAN Network Interface	1 10 /100 /1000 Mbps self-adaptive Ethernet interface
5	Audio Out	RCA connector for audio output.
6	VGA Interface	DB9 connector for VGA output. Display local video output and menu.
7	USB Interface	Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).
8	Ground	Ground (needs to be connected when NVR starts up).
9	Power Switch	Switch for turning on/off the device.
10	Network Interfaces with PoE function	Network interfaces for the cameras and to provide power over Ethernet.

Rear Panel of 16/32ch NVR
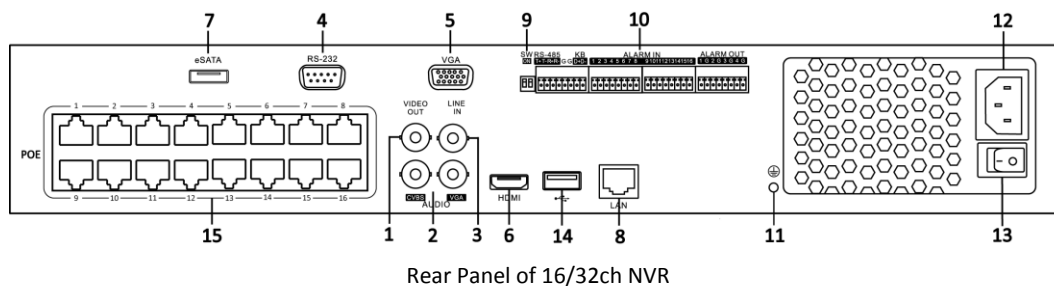
No.	Item	Description
1	VIDEO OUT	BNC connector for video output.
2	CVBS AUDIO OUT	BNC connector for audio output. This connector is synchronized with CVBS video output.
	VGA AUDIO OUT	BNC connector for audio output. This connector is synchronized with VGA video output.
3	LINE IN	BNC connector for audio input.
4	RS-232 Interface	Connector for RS-232 devices.
5	VGA	DB9 connector for VGA output. Display local video output and menu.
6	HDMI	HDMI video output connector.
7	eSATA (Optional)	Connects external SATA HDD, CD/DVD-RM.
8	LAN Interface	1 network interface
9	Termination Switch	RS-485 termination switch. Up position is not terminated. Down position is terminated with 120Ω resistance.
10	RS-485 Interface	Connector for RS-485 devices. T+ and T- pins connect to R+ and R- pins of PTZ receiver respectively.
	Controller Port	D+, D- pin connects to Ta, Tb pin of controller. For cascading devices, the first NVR's D+, D- pin should be connected with the D+, D- pin of the next NVR.
	ALARM IN	Connector for alarm input.
	ALARM OUT	Connector for alarm output.
11	GROUND	Ground(needs to be connected when NVR starts up).
12	AC 100V ~ 240V	AC 100V ~ 240V power supply.
13	POWER	Switch for turning on/off the device.
14	USB interface	Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).
15	Network Interfaces with PoE function	Network interfaces for the cameras and to provide power over Ethernet.

Specifications

Specifications of 4ch & 8ch NVR

Model		4CH NVR	8CH NVR
Video/Audio input	**IP video input**	4-ch	8-ch
	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1kΩ)	
Network	**Incoming bandwidth**	25Mbps	50Mbps
	Outgoing bandwidth	80Mbps	
	Remote connection	32	128
Video/Audio output	**Recording resolution**	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF	
	Frame rate	Main stream: 50 fps (P) / 60 fps (N)	
		Sub-stream: 50 fps (P) / 60 fps (N)	
	HDMI/VGA output	1-ch, resolution: 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
	Audio output	1-ch, RCA (Linear, 1kΩ)	
Decoding	**Live view / Playback resolution**	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF	
	Capability	4-ch@1080P	8-ch@720P, 8-ch@1080P
Hard disk	**SATA**	1 SATA interface for 1 HDD	2 SATA interfaces for 2 HDDs
	Capacity	Up to 6TB for each disk	
External interface	**Network interface**	1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface	
	USB interface	1 × USB 2.0 and 1 × USB 3.0	
	Alarm in/out (Optional)	4 / 1	
PoE	**Interface**	4 independent 100 Mbps PoE network interfaces	8 independent 100 Mbps PoE network interfaces
	Max. Power	50W	120W
	Supported standard	AF and AT	
Others	**Power supply**	48V DC	220V AC
	Consumption (without hard disk and PoE)	≤ 10W	
	Working temperature	-10 ºC ~ +55 ºC (+14 ºF~ + 131 ºF)	
	Working humidity	10 % ~ 90 %	
	Chassis	1U chassis	19-inch rack-mounted 1U chassis
	Dimensions (W × D × H)	315 × 230 × 45mm (12.4"×9.1"×1.8")	445 × 290 × 45mm (17.5" × 11.4" × 1.8")
	Weight (without hard disk)	≤ 1 kg (2.2 lb)	

Specifications of 16ch & 32ch NVR

Model		16CH NVR	32CH NVR
Video/Audio input	IP video input	16-ch	32-ch
	Two-way audio	1-ch, BNC (2.0 Vp-p, 1kΩ)	
Network	Incoming bandwidth	100Mbps	200Mbps
	Outgoing bandwidth	240Mbps	160Mbps
	Remote Connection	128	
Video/Audio output	Record resolution	5MP /3MP /1080P /UXGA /720P /VGA /4CIF /DCIF /2CIF /CIF /QCIF	
	Frame rate	Main stream: 25 fps (P) / 30 fps (N)	
		Sub-stream: 25 fps (P) / 30 fps (N)	
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω) Resolution: 704 × 576 (PAL); 704 × 480 (NTSC)	
	HDMI output	1-ch, resolution: 1920 × 1080P /60Hz, 1920 × 1080P /50Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
	VGA output	1-ch, resolution: 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
	Audio output	2-ch, BNC (Linear, 600Ω)	
Decoding	Live view / Playback resolution	5MP /3MP /1080P /UXGA /720P /VGA /4CIF /DCIF /2CIF /CIF /QCIF	
	Capability	16-ch@720P, 16-ch@1080P	
Hard disk	SATA	4 SATA interfaces for 2 HDDs + 1 DVD-R/W (default), or 4HDDs	
	eSATA	1 eSATA interface	
	Capacity	Up to 6TB capacity for each HDD	
External interface	Network interface	1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface	
	Serial interface	RS-232; RS-485; Keyboard	
	USB interface	3 × USB 2.0	
	Alarm in	16	
	Alarm out	4	
PoE	Interface	16 independent 100 Mbps PoE network interfaces	
	Max. Power	200W	
	Supported standard	AT and AF	
Others	Power supply	100 ~ 240 VAC, 6.3 A, 50 ~ 60 Hz	
	Consumption (without hard disk, DVD-R/W or PoE)	≤ 40W	≤ 45W
	Working temperature	-10 ºC ~ +55 ºC (14ºF ~ 131ºF)	
	Working humidity	10 % ~ 90 %	
	Chassis	19-inch rack-mounted 1.5U chassis	
	Dimensions (W × D × H)	445 × 390 ×70 mm (17.5" × 15.3" × 2.8")	
	Weight (without hard disk or DVD-R/W)	≤ 4 Kg (8.8 lb)	

HDD Storage Calculation Chart

The following chart shows an estimation of storage space used based on recording at one channel for an hour at a fixed bit rate.

Bit Rate	Storage Used
96K	42M
128K	56M
160K	70M
192K	84M
224K	98M
256K	112M
320K	140M
384K	168M
448K	196M
512K	225M
640K	281M
768K	337M
896K	393M
1024K	450M
1280K	562M
1536K	675M
1792K	787M
2048K	900M
4096K	1.8G
8192K	3.6G
16384K	7.2G

NOTE

Please note that supplied values for storage space used is just for reference. The storage values in the chart are estimated by formulas and may have some deviation from actual value.

Menu Operation

Menu Structure

The menu structure is shown as follows. It vaires according to different models.
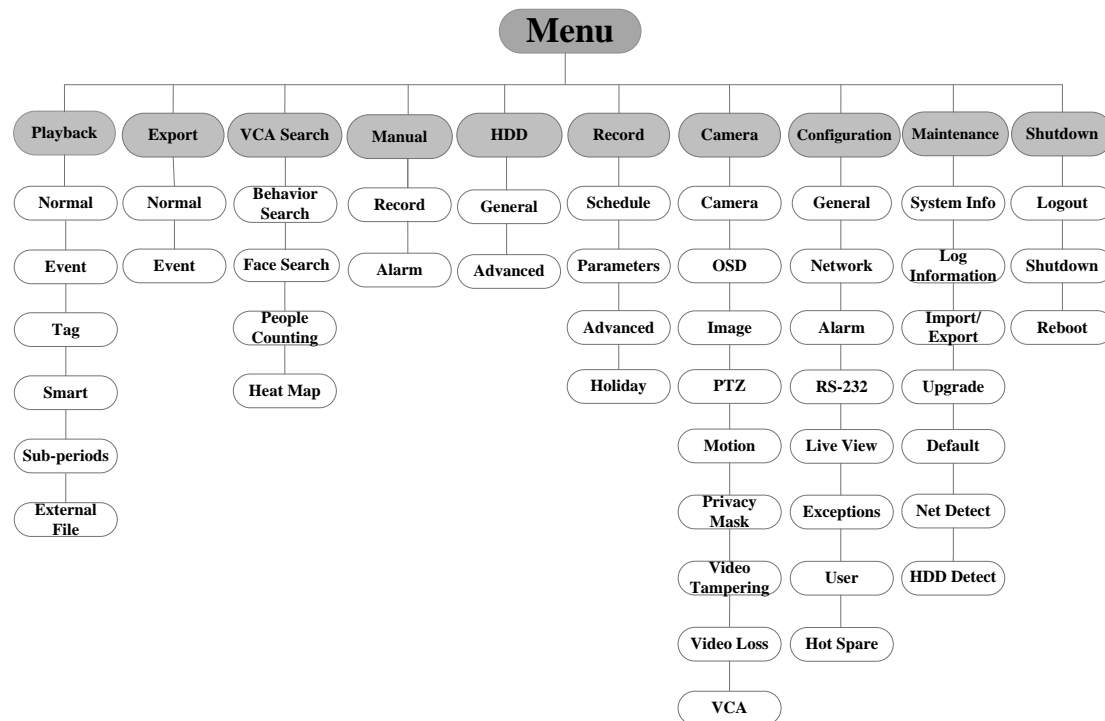
The RS-232 and Hot Spare are not available for this series.

Startup and Shutdown

Proper startup and shutdown procedures are crucial to expanding the life of the NVR.

To start your NVR:

Steps:

1. Check the power supply is plugged into an electrical outlet. It is HIGHLY recommended that an Uninterruptible Power Supply (UPS) be used in conjunction with the device. The Power indicator LED on the front panel should be red, indicating the device gets the power supply

2. Turn on the power switch on the rear panel if the device starts up for the first time. The Power indicator LED should turn green indicating that the unit begins to start up.

    After the device starting up, the wizard will guide you through the initial settings, including modifying password, date and time settings, network settings, HDD initializing, and recording.

To shut down the NVR:

Steps:

1. Enter the Shutdown menu.

    Menu > Shutdown
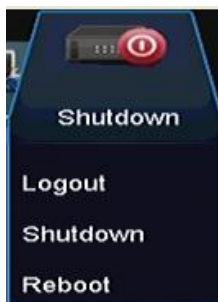
2.   Select the **Shutdown** button.

3.   Click the **Yes** button.

4.   Turn off the power switch on the rear panel when the attention pops up.
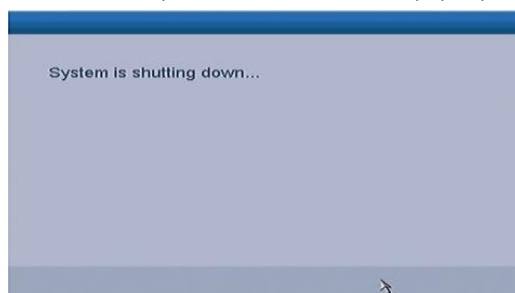
Setting the Admin Password

Purpose:

For the first-time access, you need to activate the device by setting an admin password. No operation is allowed before activation. You can also activate the device via Web Browser, SADP or Client Software.

Steps:

1.   Input the same password in the text field of **Create New Password** and **Confirm New Password**.
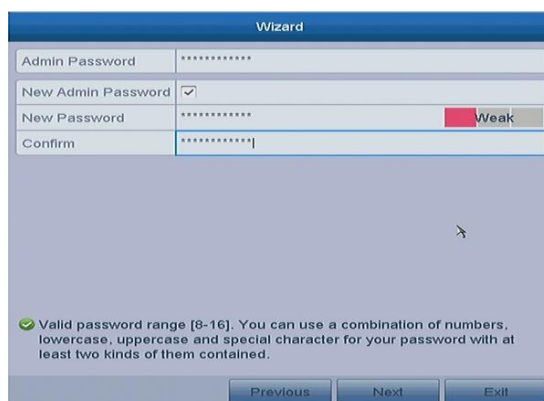
⚠ **STRONG PASSWORD RECOMMENDED**– *We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.*

2.   Click **OK** to save the password and activate the device.

Login and Logout

User Login

Purpose:
If NVR has logged out, you must login the device before operating the menu and other functions.

Steps:

1. Select the **User Name** in the dropdown list.
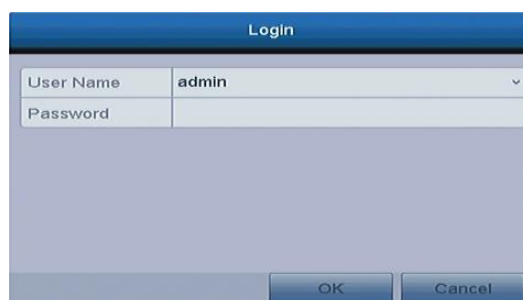
2. Input **Password**.
3. Click **OK** to log in.

The device gets locked for if the admin user performs 7 failed password attempts (5 attempts for the guest/operator).

User Logout

Purpose:
After logging out, the monitor turns to the live view mode and if you want to do some operation, you need to enter user name and password tog in again.

Steps:

1. Enter the Shutdown menu.

   Menu > Shutdown
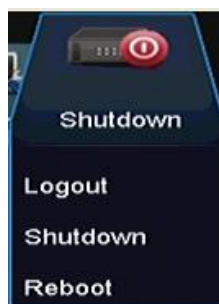
2. Click **Logout**.

After you have logged out the system, menu operation on the screen is invalid. It is required to input a user name and password to unlock the system.

Live View

Some icons are provided on screen in Live View mode to indicate different camera status. These icons include:

Live View Icons

In the live view mode, there are icons at the upper-right corner of the screen for each channel, showing the status of the record and alarm in the channel, so that you can find problems as soon as possible.

Alarm (video loss, tampering, motion detection, VCA or sensor alarm)

Record (manual record, continuous record, motion detection, VCA and alarm triggered record)

Alarm & Record

Event/Exception (event and exception information, appears at the lower-left corner of the screen.)

Adding IP Cameras

Purpose:

Before you can get a live view or record of the video, you should add the network cameras to the connection list of the device.

Before you start:

Ensure the network connection is valid and correct, and the IP camera to add has already been activated. Please refer to the User Manual for activating the inactive IP camera.

You can select one of the following three options to add the IP camera.

- **OPTION 1:**

Steps:

1. Click to select an idle window in the live view mode.

2. Click the [icon] icon in the center of the windw to pop up the adding IP camera interface.
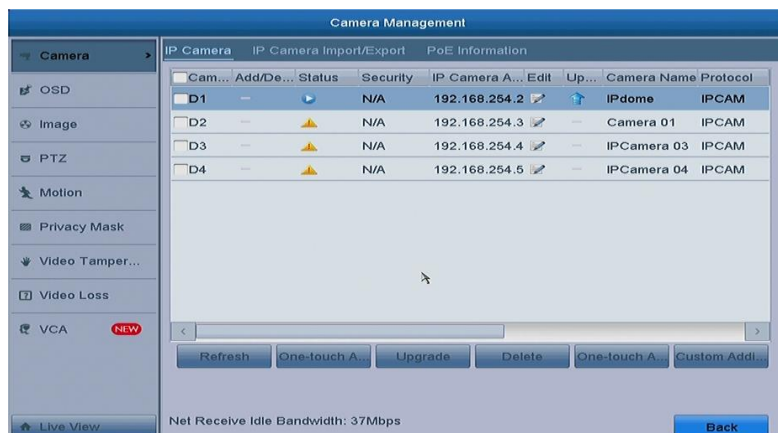
3. Select the detected IP camera and click the **Add** button to add it directly, and you can click the **Search** button to refresh the online IP camera manually.

   Or you can choose to custom add the IP camera by editing the parameters in the corresponding

textfiled and then click the **Add** button to add it.

- **OPTION 2:**

Steps:

1. Select the **Add IP Camera** option from the right-click menu in live view mode or click Menu> Camera> Camera to enter the IP camera management interface.


2. The online cameras with same network segment will be detected and displayed in the camera list.

3. Select the IP camera from the list and click the [icon] button to add the camera. Or you can click the **One-touch Adding** button to add all cameras from the list.

- **OPTION 3:**

  Steps:

  1) On the IP Camera Management interface, click the **Custom Adding** button to pop up the Add IP Camera (Custom) interface.
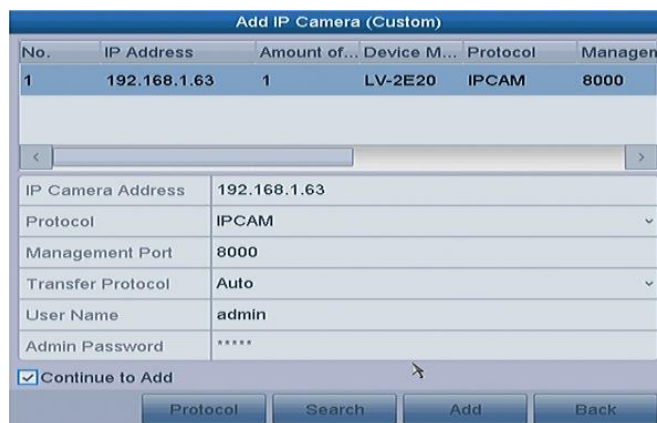
  2) You can edit the IP address, protocol, management port, and other information of the IP camera to be added.

  3) Click **Add** to add the camera.

  For the successfull**y** added IP cameras, the Security status shows the security level of the password of camera: strong password, weak password and risk password.

Explanation of the icons

Icon	Explanation	Icon	Explanation
	Edit basic parameters of the camera		Add the detected IP camera.
	The camera is disconnected; you can click the icon to get the exception information of camera.		Delete the IP camera
	Play the live video of the connected camera.		Advanced settings of the camera.
	Upgrade the connected IP camera.	**Security**	Show the security status of the camera to be active/inactive or the password strength (strong/medium/weak/risk)

Recording

Before you start:

Make sure that the HDD has already been installed. If not, please install a HDD and initialize it. You can refer to the user manual for detailed information.

Purpose:

Two kinds of record types are introduced in the following section, including Instant Record and All-day Record. And for other record types, you may refer to the user manual for detailed information.

After rebooting all the manual records enabled are canceled.

Instant Recording

On the live view window of each channel, there is a quick setting toolbar which shows on the bottom of the window when you click on it.

Click the [icon] icon to enable the record, and the icon turns to [icon]. And click [icon] icon to disable the record, then the icon turns to [icon].

All-day Recording

Steps:

1. On the live view window, right lick the window and move the cursor to the **Start Recording** option, and select **Continuous Record** or **Motion Detection Record** on your demand.
2. And click the **Yes** button in the popup Attention message box to confirm the settings.
   Then all the channels will start to record in the selected mode.

Playback

Play back the record files of a specific channel in the live view menu. Channel switch is supported.

- **Option 1:**

Choose a channel under live view using the mouse and click the [icon] button in the shortcut operation menu.

Only record files recorded during the past five minutes on this channel will be played back.

- **Option 2:**

Steps:

1. Enter the Playback menu.
   Mouse: right click a channel in live view mode and select Playback from the menu.
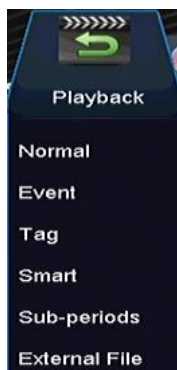
   Under multi-screen live view, record files of the selected channel will be played back.

2. Playback management.

The toolbar in the bottom part of Playback interface can be used to control playing process.
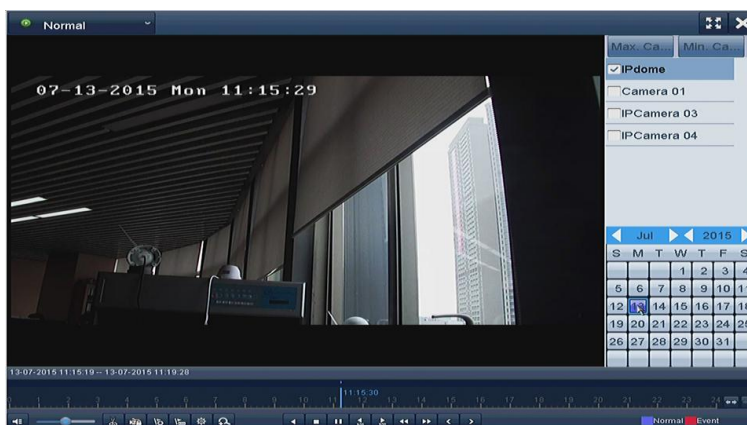
Just check the channel or channels if you want to switch playback to another channel or execute simultaneous playback of multiple channels.

Backup

Recorded files can be backed up to various devices, such as USB flash drives, USB HDDs or a DVD writer.

Steps:

1. Enter Video Export interface.

Choose the channel(s) you want to back up and click on the **Quick Export** button.

2. Enter Export interface, choose backup device and click **Export** button to start exporting.

3. Check backup result.

VCA Detection

Purpose:

The NVR supports the VCA detection alarm (*face detection, line crossing detection* and *intrusion detection, region entrance detection, region exiting detection, loitering detection, people gathering detection, fast moving detection, parking detection, unattended baggage detection, object removal detection, audio loss exception detection, sudden change of sound intensity detection,* and *defocus detection*) sent by IP camera. The VCA detection must be enabled and configured on the IP camera settings interface first.

Steps:

1. Enter VCA Alarm interface of Camera Management and select a camera you want to detect VCA alarm.
   Menu > Camera > VCA
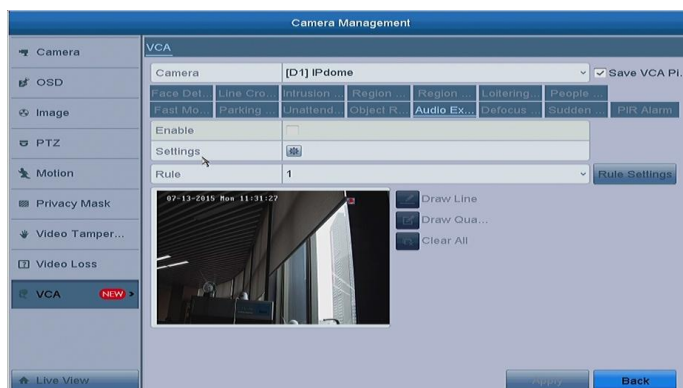
2. Enable the VCA detection and configure the rule settings. Please refer to the *User Manual* for detailed instructions.

Accessing by Web Browser

NOTE

You shall acknowledge that the use of the product with Internet access might be under network security risks. For avoidance of any network attacks and information leakage, please strengthen your own protection. If the product does not work properly, please contact with your dealer or the nearest service center.

Logging In

You can get access to the device via web browser. You may use one of the following listed web browsers: Internet Explorer 6.0, Internet Explorer 7.0, Internet Explorer 8.0, Internet Explorer 9.0, Internet Explorer 10.0, Apple Safari, Mozilla Firefox, and Google Chrome. The supported resolutions include 1024*768 and above.

Steps:

1. Open web browser, input the IP address of the device and then press Enter.
2. Login to the device.
    *   If the device has not been activated, you need to activate the device first before login.

    1) Set the password for the admin user account.
    2) Click **OK** to login to the device.

> ⚠ **STRONG PASSWORD RECOMMENDED**– *We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.*

    *   If the device is already activated, enter the user name and password in the login interface, and click the **Login** button.
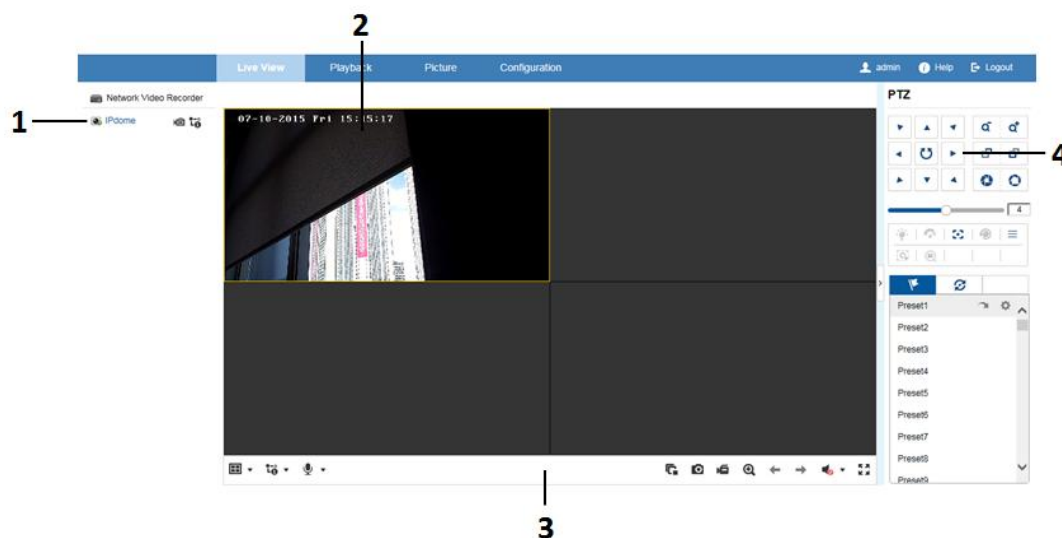

3. Install the plug-in before viewing the live video and managing the camera. Please follow the installation prompts to install the plug-in.

NOTE

You may have to close the web browser to finish the installation of the plug-in.

Live View

The live view interface appears by default when you log in the device.

The live view interface may differ according to different models.

Interface Introduction

No.	Name	Description
1	Channel List	Displays the list of channels and the playing and recording status of each channel.
2	Live View Window	Displays the image of channel, and multi-window division is supported.
3	Play Control Bar	Play control operations are supported.
4	PTZ Control	Pan, tilt, zoom operations are supported, as well as preset editing and calling. PTZ function can only be realized if the connected camera supports PTZ control.

The PTZ control is supported by certain series NVR.

Start Live View

Steps:

1. In the live view window, select a playing window by clicking the mouse.

2. Double click a camera from the device list to start the live view.

3. You can click the button on the toolbar to start the live view of all cameras on the device list.

Refer to the following table for the description of buttons on the live view window:

Icon	Description	Icon	Description
	Select the window-division mode		Open/Close audio
	Start/Stop all live view		Start/Stop two-way Audio

|			
📷	Capture pictures in the live view mode	🔊 ━●━	Adjust volume
🎥 / 🎥	Start/Stop all recording	🔍 / 🔍	Enable/Disable digital zoom
← / →	Previous/Next page	⛶	Full screen
📶	Select different stream type for live view by clicking the icon 📶 : live view in main stream; 📶 : live view in sub stream;		

Recording

Before you start

Make sure the device is connected with HDD or network disk, and the HDD or network disk has been initialized for the first time to use.

Two recording types can be configured: Manual and Scheduled. The following section introduces the configuration of scheduled recording.

Steps:

1. Click **Configuration > Storage > Schedule Settings** to enter Schedule Settings interface.

2. Select the camera to configure the record schedule.

3. Check the checkbox of **Enable** to enable recording schedule.
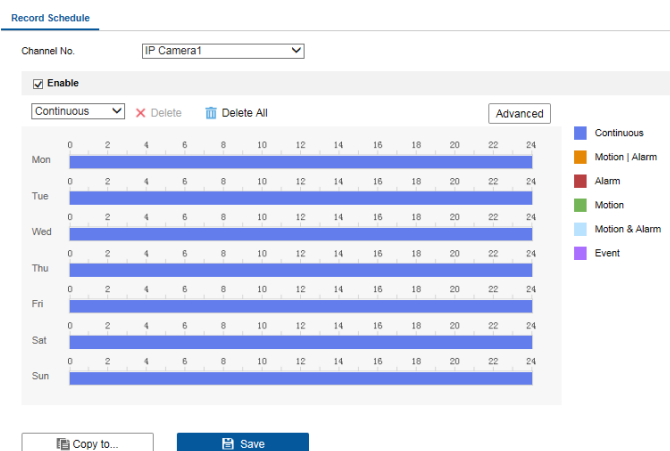
4. Choose the day in a week configure the recording schedule.

    1) Click a day to set the start time and end time for recording.
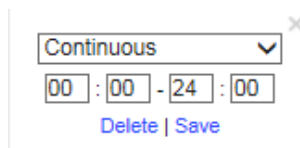
    2) Select the **Record Type** for the period. The record type can be Motion, Alarm, Motion & Alarm, Motion | Alarm and Event.

    3) Click **Save** to save the settings.

    4) Click the 📋 icon of the day to copy the settings of current day to other days of the week if required.

5) Click **OK** to save the settings.

5. Click **Advanced** to configure advanced record parameters, and click the **OK** button to save the settings**.**
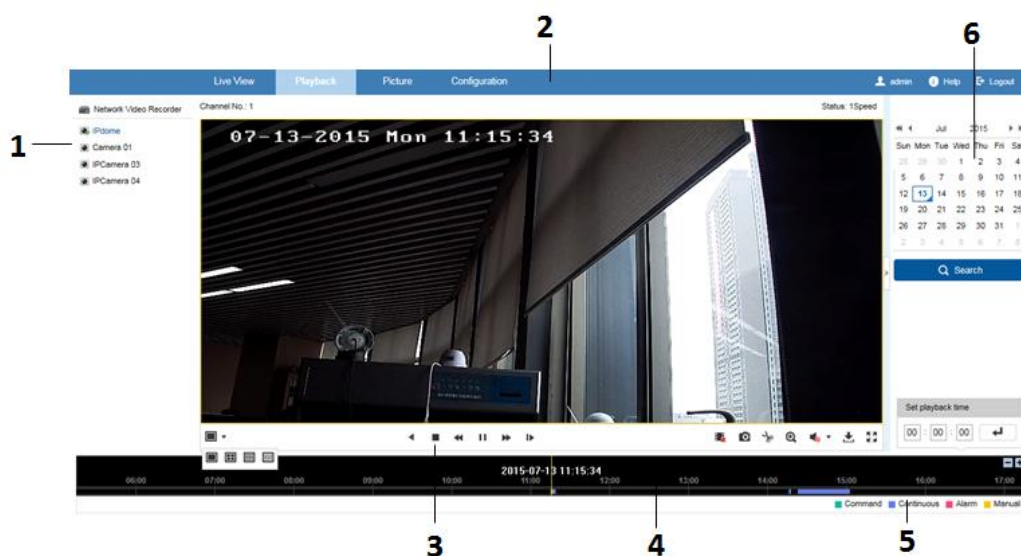

6. You can click to configure advanced record parameters to copy the schedule of current

camera to other cameras.

7. Click **Save** to activate the above settings.

Playback

The playback interface may differ according to different models.

Interface Introduction

No.	Name	Description
1	Channel List	Displays the list of channels and the playing status of each channel.
2	Playback Window	Displays the image of channel.
3	Play Control Bar	Play control operations are supported.

4	Time Line	Displays the time bar and the records marked with different colors.
5	Playback Status	Displays the playback status, including channel number and playback speed.
6	Calendar	You can select the date to play.

Start Playback

Steps:

1. Click **Playback** on the menu bar to enter playback interface.
2. Click the camera from the device list for playback.
3. Select the date from the calendar and click **Search**.
4. Click the **Play** button to play the video file searched on the current date.
5. Use the buttons on the toolbar to operate in playback mode.

Button	Description	Button	Description
▶ / ❚❚	Play/Pause	■	Stop
◀◀	Speed down	▶▶	Speed up
❙▶	Play by single frame	🖸	Capture
🎬	Stop all playback	⬇	Download
✂ / ✂	Start/Stop video clipping	🔇 / 🔊	Open/Close audio
⛶	Full screen	◀	Reverse playback

6. You can drag the progress bar with the mouse to locate the exact playback point. You can also input

the time in the textbox $\boxed{00 : 00 : 00}$ and click $\boxed{↵}$ button to locate the playback point.

The color of the video on the progress bar stands for the different video types.

🟩 Command 🟦 Continuous 🟥 Alarm 🟨 Manual