

Prime Series NVR - User's Manual NVR-PRE16C-P



PTZ
Control



Motion
Activated
Recording

2^{yr}
Warranty

View From
Anywhere



1080p
Resolution



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NVR Pre-Installation

These series NVR are highly advanced surveillance equipment that should be installed with care. Please take into consideration the following precautionary steps before installation of the NVR.

1. Keep all liquids away from the NVR.
2. Install the NVR in a well-ventilated and dust-free area.
3. Ensure environmental conditions meet factory specifications.
4. Install a manufacturer recommended HDD.

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 ($\approx$ 0.75-inch) of space between racks mounted devices.
6. Ensure the NVR is grounded.
7. Environmental temperature should be within the range of $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$, $14^{\circ}\text{F} \sim 131^{\circ}\text{F}$.
8. Environmental humidity should be within the range of 10% $\sim$ 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.

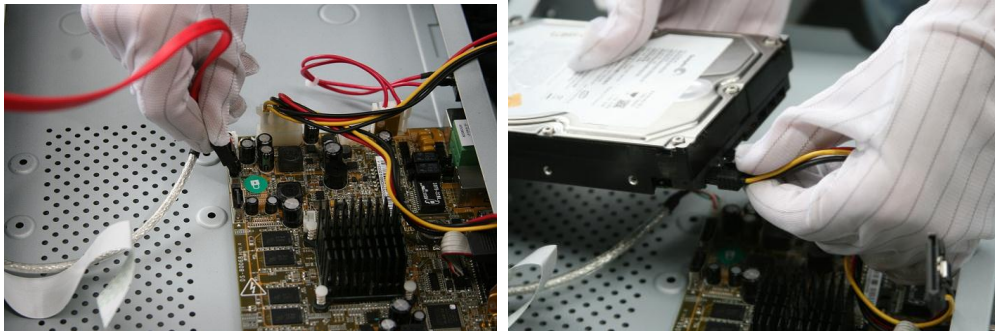
Up to 8 SATA hard disks can be installed on your NVR.

Tools Required: Screwdriver.

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.



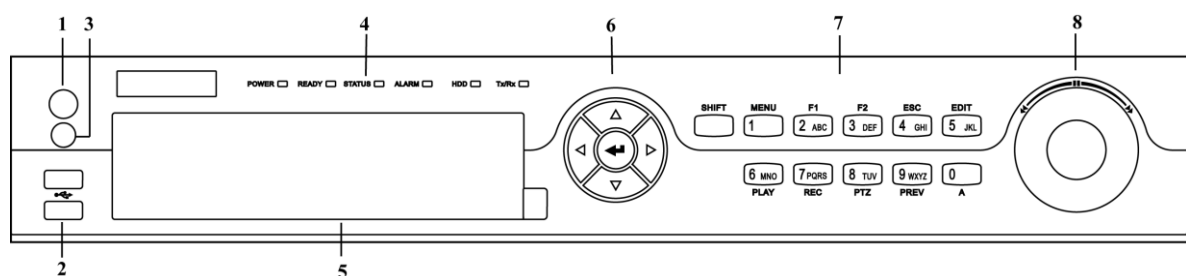
3. Connect the power cable to the HDD.



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



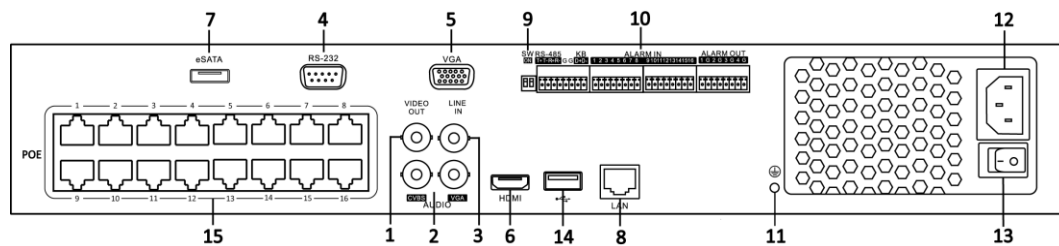
1. Remove the cover from the NVR by unfastening the screws on the rear and side panel.



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.
	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, it can be used to cycle through different channels. In PTZ control mode, it can control the movement of the PTZ camera. In Live View mode, the directional buttons can be used to cycle through channels.
	ENTER	In PTZ control mode, it can control the movement of the PTZ camera. 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.

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.
8	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.
	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.



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 provided for NR500/NR50P and 2 network interfaces for NRA00/NRA0R.
9	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 (supported by NR50P)	Network interfaces for the cameras and to provide power over Ethernet.

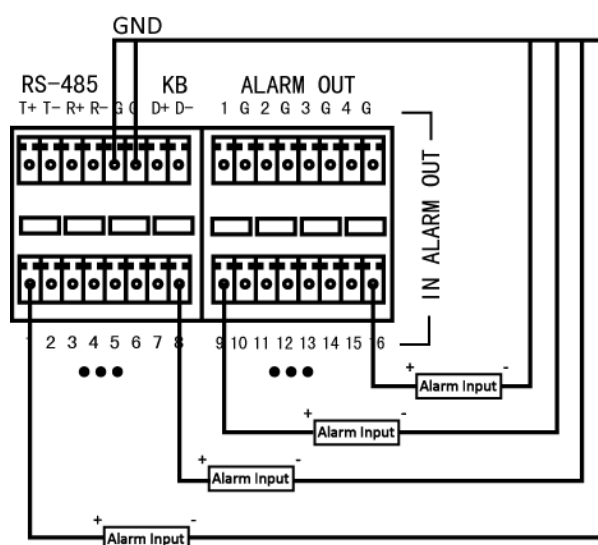
Peripheral Connections

Wiring of Alarm Input

The alarm input is an open/closed relay. To connect the alarm input to the device, use the following diagram.

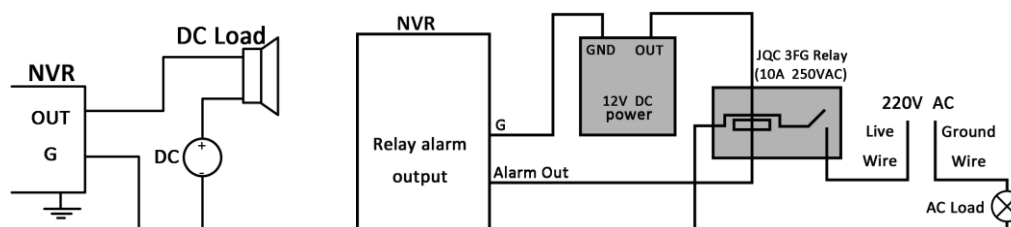


If the alarm input is not an open/close relay, please connect an external relay between the alarm input and the device.



Wiring of Alarm Output

To connect to an alarm output (AC or DC load), use the following diagram:



DC Load Connection Diagram

AC Load Connection Diagram

For DC load, the jumpers can be used within the limit of 12V/1A safely.

To connect an AC load, jumpers should be left open (you must remove the jumper on the motherboard in the NVR). Use an external relay for safety (as shown in the figure above).

There are 4 jumpers (JP1, JP2, JP3, and JP4) on the motherboard, each corresponding with one alarm output. By default, jumpers are connected. To connect an AC load, jumpers should be removed.

Example:

If you connect an AC load to the alarm output 3 of the NVR, then you must remove the JP 3.

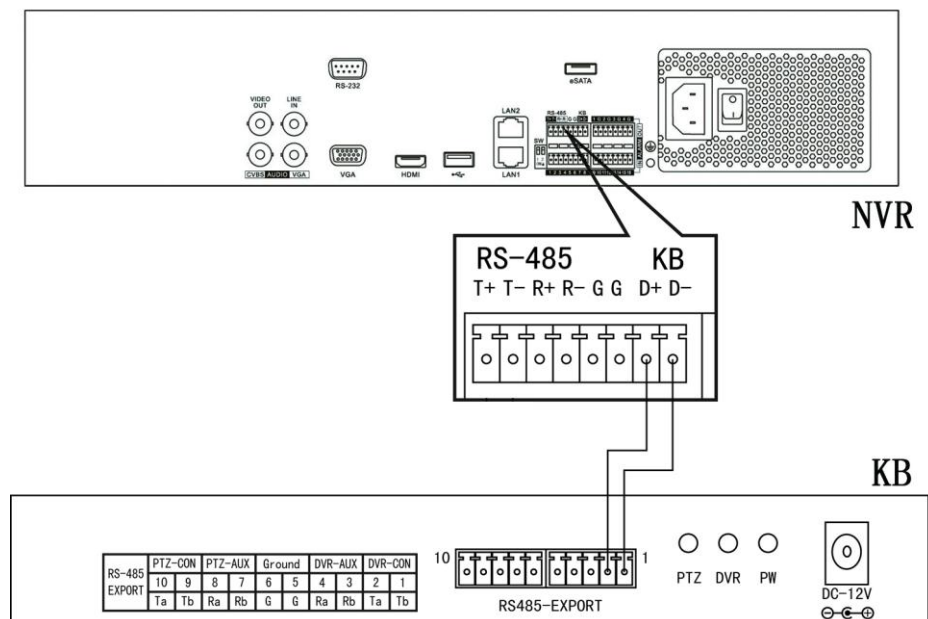
Using of Alarm Connectors

To connect alarm devices to the NVR:

1. Disconnect *pluggable block* from the ALARM IN /ALARM OUT terminal block.
2. Unfasten stop screws from the *pluggable block*, insert signal cables into slots and fasten stop screws. Ensure signal cables are in tight.

3. Connect *pluggable block* back into terminal block.

Controller Connection



To connect a controller to the NVR:

1. Disconnect pluggable block from the KB terminal block.
2. Unfasten stop screws from the KB D+, D- *pluggable block*, insert signal cables into slots and fasten stop screws. Ensure signal cables are in tight.
3. Connect Ta on controller to D+ on terminal block and Tb on controller to D- on terminal block. Fasten stop screws.
4. Connect *pluggable block* back into terminal block.



Make sure both the controller and NVR are grounded.

Specifications

Model		
Video/Audio input	IP video input	64-ch
	Two-way audio	1-ch, BNC (2.0 Vp-p, 1kΩ)
Network	Incoming bandwidth	160Mbps
	Outgoing bandwidth	160Mbps
	Remote Connection	128
Video/Audio output	Recording resolution	5MP /3MP /1080P /UXGA /720P /VGA /4CIF /DCIF /2CIF /CIF /QCIF
	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, 8-ch@1080P
Hard disk	SATA	8 SATA interfaces for 4 HDDs + 1 DVD-R/W (default), or 8HDDs
	eSATA	1 eSATA interface
	Capacity	Up to 4TB capacity for each HDD
External interface	Network interface	2 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interfaces
	Serial interface	RS-232; RS-485; Keyboard;
	USB interface	3 × USB 2.0
	Alarm in/out	16/4
Others	Power supply	100 ~ 240 VAC, 6.3 A, 50 ~ 60 Hz
	Consumption (without hard disk or DVD-R/W)	≤ 45 W
	Working temperature	-10 ℃ ~ +55 ℃ (14 F ~ 131 F)
	Working humidity	10 % ~ 90 %
	Chassis	19-inch rack-mounted 2U chassis
	Dimensions (W × D × H)	445 × 470 × 90 mm (17.5" × 18.5" × 3.5")
	Weight (without hard disk or DVD-R/W)	≤ 8 Kg (17.64 lb)

Model				
Video/Audio input	IP video input	8-ch	16-ch	32-ch
	Two-way audio	1-ch, BNC (2.0 Vp-p, 1kΩ)		
Network	Incoming bandwidth	40Mbps	80Mbps	160Mbps
	Outgoing bandwidth	240Mbps	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	8-ch@720P, 4-ch@1080P	16-ch@720P, 8-ch@1080P	16-ch@720P, 8-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 4TB 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	8 independent 100 Mbps PoE network interfaces	16 independent 100 Mbps PoE network interfaces	
	Max. Power	180W	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)	≤ 35W	≤ 40W	≤ 45W
	Working temperature	-10 ℃ ~ +55 ℃ (14 F ~ 131 F)		
	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	1800M
8192K	3600M
16384K	7200M

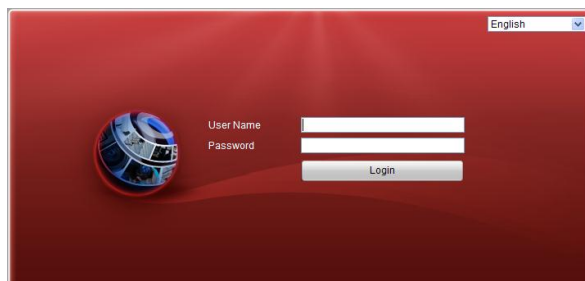


Please note that supplied values for storage space used is just for reference. The storage values in the chart are estimated by formulas and may have some deviation from actual value.

Accessing by Web Browser

Logging In

You can get access to the device via web browser. Open web browser, input the IP address of the device and then press Enter. The login interface appears.



Input the user name and password, and click the **Login** button.

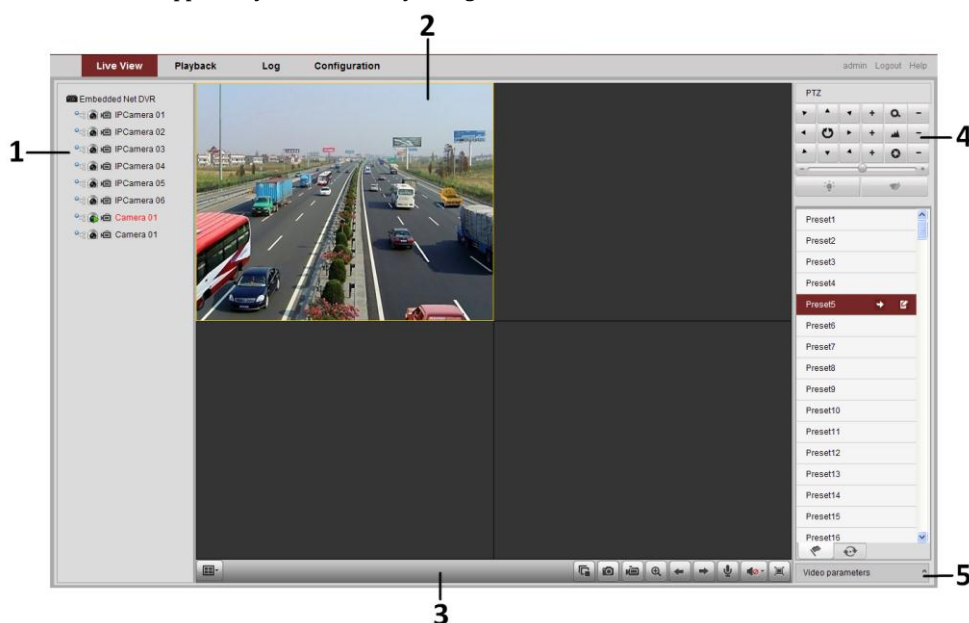


- The default IP address is 192.0.0.64.
- The default user name is admin, and password is 12345.
- You may use one of the following listed web browsers: Internet Explorer 6.0, Internet Explorer 7.0, Internet Explorer 8.0, Internet Explorer 9.0, Internet Explorer 10.0, Apple Safari, Mozilla Firefox, and Google Chrome.
- The supported resolutions include 1024*768 and above.

When you log in for the first time, the system will remind you to install the Plug-in control. After the installation, you can configure and manage the device remotely.

Live View

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



Interface Introduction

No.	Name	Description
1	Channel List	Displays the list of channels and the playing and recording status of each channel.  The stream type can be switched by clicking the icon before the channel name:  stands for main stream and  for sub-stream.
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 and patrol editing and calling.  PTZ function can only be realized if the connected camera supports PTZ control.
5	Video Parameters Configuration	Brightness, contrast, saturation and hue of the image can be edited.

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

Recording**Before you start**

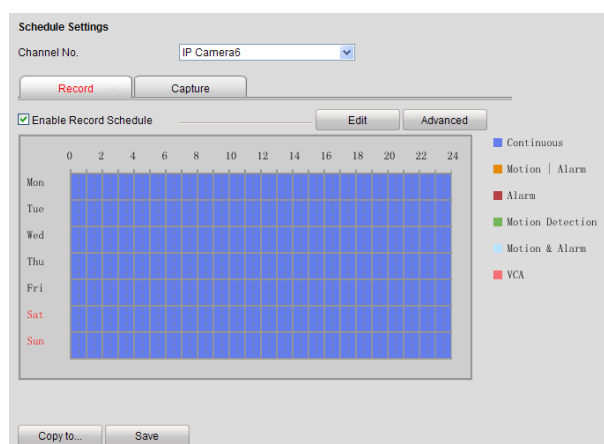
Make sure the device is connected with HDD or network disk, and the HDD or network disk has been initialized for the first time to use.

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

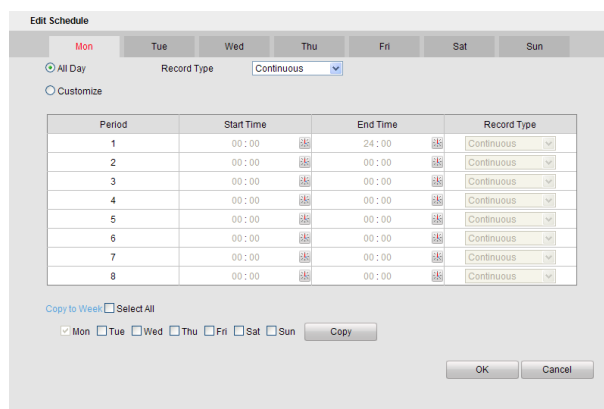
Steps:

1. Click Remote Configuration> Camera Settings> Record Schedule to enter Record Schedule settings interface.
2. Select the camera to configure the record schedule.

3. Check the checkbox of Enable Schedule to enable recording schedule.



4. Choose the day in a week to configure scheduled recording.
5. Click **Edit** to edit record schedule.



- 1) Configure All Day or Customize Record:

- If you want to configure the all-day recording, please check the **All Day** checkbox.
- If you want to record in different time sections, check the **Customize** checkbox. Set the **Start Time** and **End Time**.



Up to 8 segments can be configured and each segment cannot be overlapped.

- 2) Select a **Record Type**. The record type can be Continuous, Motion, Alarm, Motion & Alarm, Motion | Alarm and VCA.
- 3) Check the checkbox of **Select All** and click **Copy** to copy settings of this day to the whole week. You can also check any of the checkboxes before the date and click **Copy**.
- 4) Click **OK** to save the settings and exit the **Edit Schedule** interface.
6. Click **Advanced** to configure advanced record parameters.
7. Click **Save** to validate the above settings.
8. (Optional) You can click the **Copy to...** button to copy the same setting to other cameras.

Playback



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  button to play the searched video file on the current date.
5. Use the buttons on the toolbar to operate in playback mode.

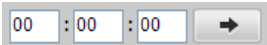


Playback Control Buttons Description

Area	Description	Area	Description
	Play/Pause		Stop
	Slow down		Speed up
	Play by single frame		Capture
	Stop all playback		Download
	Video clip		Open/Close audio

Area	Description	Area	Description
	Full screen		Transcoded playback
	Reverse playback		Window division

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  and click  button to locate the playback point.

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

 Command  Schedule Recording  Alarm Recording  Manual Recording



To play back recording files from different channel, you may set the window division mode by clicking the  button and choose a window, and then repeat the above steps 2-4.

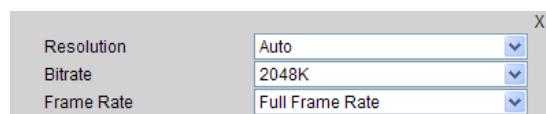
Transcoded Playback

Purpose:

To save the bandwidth cost, the transcoded playback can be adopted.

Steps:

1. Make sure the playback of current channel is stopped.
2. Move the mouse to the  icon and edit the required parameters for transcoded playback, including Resolution, Bitrate, and Frame Rate.



3. Click the  button, if it turns to , then the transcoding process is completed.
4. Click the  button to start transcoded playback.

Log

You can view and export the log files at any time, including operation, alarm, exception and information of device.

Before you start:

The Log function can be realized only when the device is connected with HDD or network disk.

Steps:

2. Click **Log** on the menu bar to enter the Log interface.
3. Set the log search conditions to refine your search, including the Major Type, Minor Type, Start Time and End Time.
4. Click the **Search** button to start searching log files.
5. The matched log files will be displayed on the list.



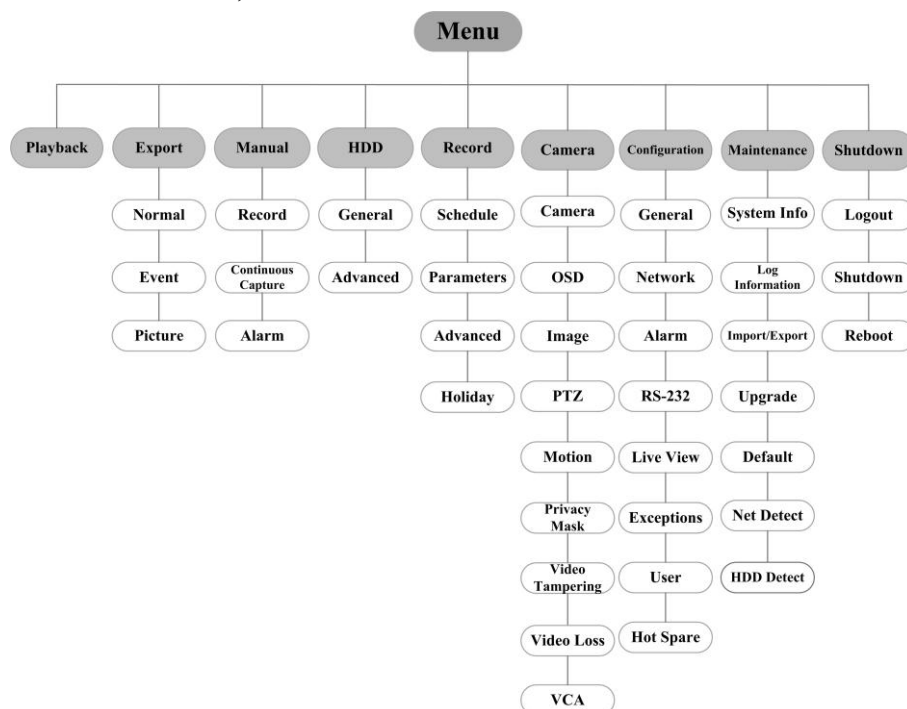
Up to 2000 log files can be found each time, and 100 log files can be displayed on each page.

You can click the  button to save the searched log files to local directory.

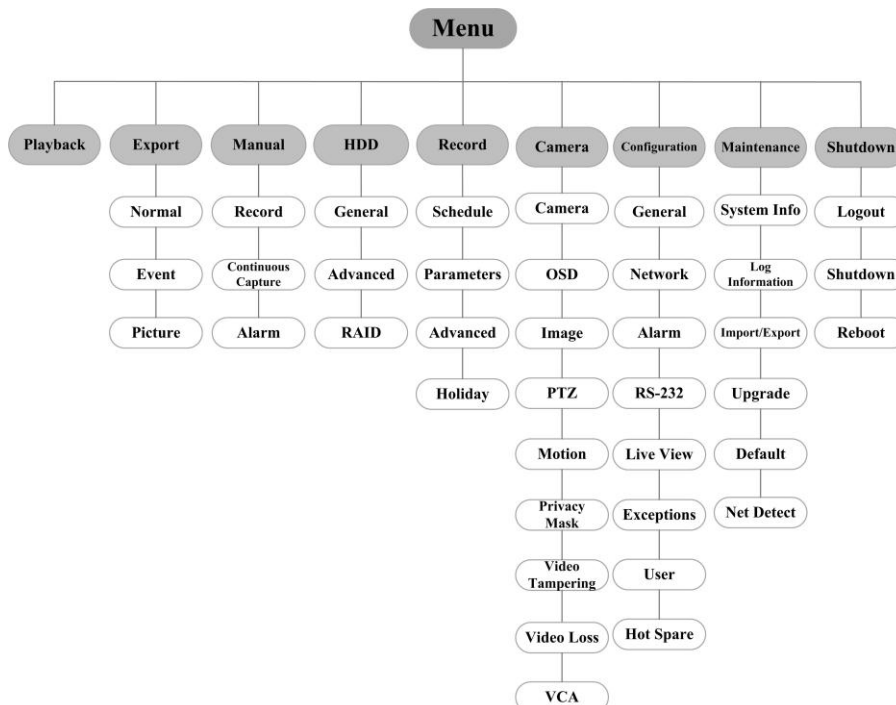
Menu Operation

Menu Structure

The menu structure of the NRA00, NR500 and NR50P Series NVR:



The menu structure of the NRA0R Series NVR:



Startup and Shutdown

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

To start your NVR:

1. Check the power supply is plugged into an electrical outlet. It is **HIGHLY** recommended that an

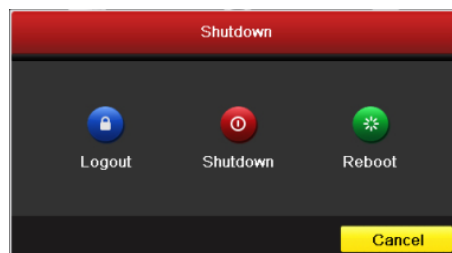
Uninterruptible Power Supply (UPS) be used in conjunction with the device. The Power button (for the NRA00 and NRA0R series NVR) on the front panel should be red, indicating the device gets the power supply.

2. Press the POWER button on the front panel. The Power LED should turn blue (for the NRA00 and NRA0R series NVR) or green (for the NR500 and NR50P series NVR). The unit will begin to start.
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:

1. Enter the Shutdown menu.

Menu > Shutdown



2. Select the **Shutdown** button.
3. Click the **Yes** button.

Live View

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

Live View Icons

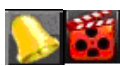
In the live view mode, there are icons at the upper-right corner of the screen for each channel, showing the status of the record and alarm in the channel, so that you can find problems as soon as possible.



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



Record (manual record, schedule record, motion detection or alarm triggered record)



Alarm & Record



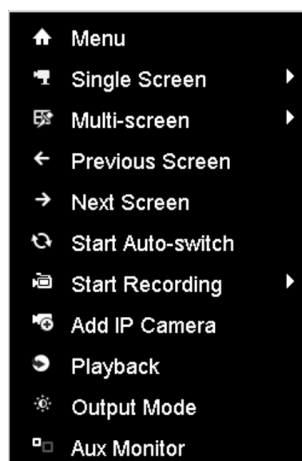
Event/Exception (event and exception information, appears at the lower-left corner of the screen.)

Adding IP Cameras

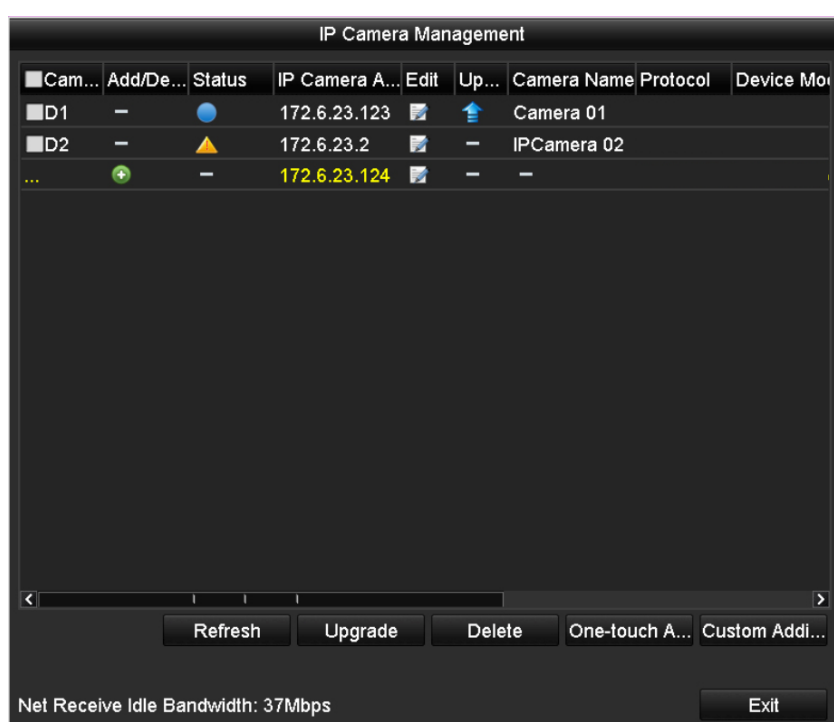
You should add and configure the online IP cameras to enable the live view and recording function.

Steps:

1. Right-click the mouse when you in the live view mode to show the right-click menu.



2. Select **Add IP Camera** in the pop-up menu to enter the IP Camera Management interface.



3. The online cameras with same network segment will be displayed in the camera list. Click the  button to add the camera.

Or you can click the **One-couch Adding** button to add all the online IP cameras.



The added camera is marked in white while the camera has not been added is marked in yellow.

Explanation of the icons

Icon	Explanation	Icon	Explanation
	Edit basic parameters of the camera		Add the detected IP camera.
	The camera is connected.		The camera is disconnected; you can click the icon to get the exception information of camera.
	Delete the IP camera		Advanced settings of the camera.

4. To add other IP cameras:

- 1) Click the **Custom Adding** button to pop up the Add IP Camera (Custom) interface.

No.	IP Address	Amount of...	Device M...	Protocol	Management Port
1	172.6.23.124	1			8000

IP Camera Address: 172.6.23.124

Protocol: [dropdown]

Management Port: 8000

Transfer Protocol: Auto [dropdown]

User Name: admin

Admin Password: *****

Buttons: Protocol, Search, Add, Back

- 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.
- 4) (For the encoders with multiple channels only) check the checkbox of Channel No. in the pop-up window, as shown in the following figure, and click **OK** to finish adding.

Channel No.

☒ Channel No. ☒ 1 ☒ 2 ☒ 3 ☒ 4

Buttons: OK, Cancel

One-touch RAID Configuration

Purpose:

For the NRA0R series NVR, the disk array must be configured if you want to save recording and log files locally. Through one-touch configuration, you can quickly create the disk array. By default, the array type to be created is RAID 5.

Before you start:

As the default array type is RAID 5, at least 3 HDDs must be installed in you device.

Steps:

1. Enter the Physical Disk Settings interface.

Menu > HDD > RAID

No.	Capacity	Array	Type	Status	Model	Hot Sp...
1	931.51GB		Normal	Functional	ST31000340NS	
3	931.51GB		Normal	Functional	ST31000526SV	
5	931.51GB		Normal	Functional	WDC WD10EVVS-6...	
7	931.51GB		Normal	Functional	WDC WD10EVVS-6...	

- Click **One-touch Configuration** to enter the One-touch Array Configuration interface.

One-touch Array Configuration

Array Name

OK Cancel

- Edit the array name in the **Array Name** text field and click **OK** button to start configuring array.



If you install 4 HDDs or above for one-touch configuration, a hot spare disk will be set by default. It is recommended to set hot spare disk for automatically rebuilding the array when the array is abnormal.

- When the array configuration is completed, click **OK** button in the pop-up message box to finish the settings.

Recording

Before you start:

Make sure that the HDD has already been installed. If not, please install a HDD and initialize it. You may 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 to enable the record, and the icon turns to . And click  icon to disable the record, then the icon turns to .

All-day Recording

Steps:

1. On the live view window, right click 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  button in the shortcut operation menu.



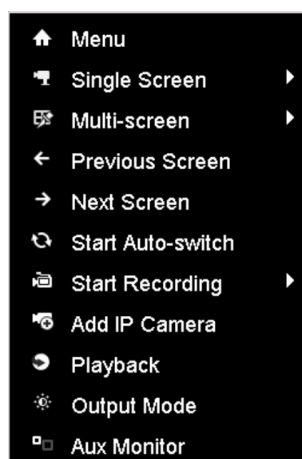
Only record files recorded during the past five minutes on this channel will be played back.



● Option 2:

Steps:

1. Enter the Playback menu.
Mouse: right click a channel in live view mode and select Playback from the menu.



Front Panel: press PLAY button to play back record files of the channel under single-screen live view.
Under multi-screen live view, record files of the selected channel will be played back.



Pressing numerical buttons will switch playback to related channels during playback process.

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.

Normal

☒ IP Camera
 ☒ D1
 ☒ D2
 ☒ D3
 ☒ D4
 ☒ D5
 ☒ D6
 ☒ D7
 ☒ D8

Start/End time of record	09-09-2013 16:02:02 -- 12-25-2013 17:25:47		
Record Type	All		
File Type	All		
Start Time	12-25-2013	 00:00:00	
End Time	12-25-2013	 23:59:59	

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

Export

Device Name

USB1-1

▼

Refresh

Name

Size

Type

Edit Date

Delete

Play

Free Space

2,004MB

New Folder

Format

Export

Cancel

3. Check backup result.

Choose the record file in Export interface and click button to check it.