

Network Video Recorder

Quick Operation Guide

<u>UD.6L0202B1935A01</u>

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Quick Start 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 (<u>http://overseas.hikvision.com/en/</u>).

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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.

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



- 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.

			-				
This manual	ic an	nlicable to	h the	models	listed	in the	following table.
1 mo manual	is ap	pheable u	June	moucis	nstou	in the	ionowing table.

Series	Models
	DS-7604NI-E1, DS-7608NI-E1, DS-7616NI-E1
	DS-7604NI-E1/4P
	DS-7604NI-E1/4N
DS-7600NI-E1/E2 series	DS-7608NI-E2, DS-7616NI-E2, DS-7632NI-E2
	DS-7608NI-E2/8P, DS-7616NI-E2/8P, DS-7616NI-E2/16P,
	DS-7632NI-E2/8P
	DS-7608NI-E2/8N, DS-7616NI-E2/8N, DS-7632NI-E2/8N
DS-7700NI-E4 series	DS-7708NI-E4, DS-7716NI-E4, DS-7732NI-E4
	DS-7708NI-E4/8P, DS-7716NI-E4/16P, DS-7732NI-E4/16P
DS-8600NI-E8 series	DS-8608NI-E8, DS-8616NI-E8, DS-8632NI-E8

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 $2 \text{cm} (\approx 0.75 \text{-inch})$ of space between racks mounted devices.
- **6.** Ensure the NVR is grounded.
- 7. Environmental temperature should be within the range of -10 $\,$ C ~ 55 $\,$ C, 14 F ~ 131 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.

Steps (for DS-8600NI-E8):

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



2. Install the HDD in the HDD rack using the provided screws. Fasten the screws on the button to fix the HDD.



 $\ensuremath{\textbf{3.}}$ Connect one end of the data cable to the motherboard of NVR and the other end to the HDD.



4. Connect the power cable to the HDD.



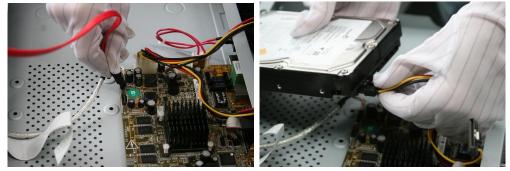
5. Re-install the cover of the NVR and fasten screws.

Steps (for other models):

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.



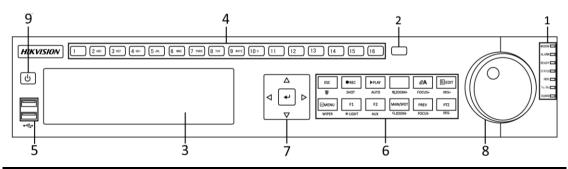
4. Place the HDD on the bottom of the device and then fasten the screws on the bottom to fix the HDD.



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

Front Panel

DS-8600NI-E8



No.	N	ame	Function Description
		ALARM	Turns red when a sensor alarm is detected.
		DEADY	Ready LED is normally blue, indicating that the device is
		READY	functioning properly.
			Turns blue when device is controlled by an IR remote.
		STATUS	Turns red when controlled by a keyboard and purple when IR
			remote and keyboard is used at the same time.
1	Status	HDD	Flashes red when data is being read from or written to HDD.
1	Indicators	MODEM	Reserved for future usage.
		Tx/Rx	Flashes blue when network connection is functioning properly.
			Guard LED turns blue when the device is in armed status; at this
			time, an alarm is enabled when an event is detected.
		GUARD	The LED turns off when the device is unarmed. The arm/disarm
			status can be changed by pressing and holding on the ESC
			button for more than 3 seconds in live view mode.
2	IR Receiver		Receiver for IR remote
3	DVD-R/W		Slot for DVD-R/W.
			Switch to the corresponding channel in Live view or PTZ
			Control mode.
			Input numbers and characters in Edit mode.
4	Alphanun	neric Buttons	Switch between different channels in Playback mode.
			The light of the button is blue when the corresponding channel is
			recording; it is red when the channel is in network transmission
			status; it is pink when the channel is recording and transmitting.
5	USR I	nterfaces	Universal Serial Bus (USB) ports for additional devices such as
	0501		USB mouse and USB Hard Disk Drive (HDD).
		ESC	Back to the previous menu.
			Press for Arming/disarming the device in Live View mode.
	Composite Keys		Enter the Manual Record setting menu.
		REC/SHOT	In PTZ control settings, press the button and then you can call a
6			PTZ preset by pressing Numeric button.
			It is also used to turn audio on/off in the Playback mode.
		PLAY/AUTO	The button is used to enter the Playback mode.
		ZOOM+	Zoom in the PTZ camera in the PTZ Control setting.

No.	Ν	lame	Function Description
			Adjust focus in the PTZ Control menu.
		-	It is also used to switch between input methods (upper and
			lowercase alphabet, symbols and numeric input).
			Edit text fields. When editing text fields, it will also function as
			a Backspace button to delete the character in front of the cursor.
			On checkbox fields, pressing the button will <i>tick</i> the checkbox.
		EDIT/IRIS+	In PTZ Control mode, the button adjusts the iris of the camera.
			In Playback mode, it can be used to generate video clips for
			backup.
			Enter/exit the folder of USB device and eSATA HDD.
		MAIN/SPOT/ZOO	Switch between main and spot output.
		MAILUSI 01/200	In PTZ Control mode, it can be used to zoom out the image.
		171	Select all items on the list when used in a list field.
			In PTZ Control mode, it will turn on/off PTZ light (if
		F1/ LIGHT	applicable).
			In Playback mode, it is used to switch between play and reverse
			play.
			Cycle through tab pages.
		F2/ AUX	In synchronous playback mode, it is used to switch between
			channels.
			Press the button will help you return to the Main menu (after
			successful login).
			Press and hold the button for 5 seconds will turn off audible key
		MENU/WIPER	beep.
			In PTZ Control mode, the MENU/WIPER button will start wiper
			(if applicable).
			In Playback mode, it is used to show/hide the control interface.
			Switch between single screen and multi-screen mode.
		PREV/FOCUS-	In PTZ Control mode, it is used to adjust the focus in
			conjunction with the A/FOCUS+ button.
			Enter the PTZ Control mode.
		PTZ/IRIS-	In the PTZ Control mode, it is used to adjust the iris of the PTZ
			camera.
			The DIRECTION buttons are used to navigate between different
			fields and items in menus.
			In the Playback mode, the Up and Down button is used to speed
			up and slow down recorded video. The Left and Right button
		DIRECTION	will select the next and previous record files.
			In Live View mode, these buttons can be used to cycle through
7	Control Buttons		channels.
7		In PTZ control mode, it can control the movement of the PTZ	
			camera.
			The ENTER button is used to confirm selection in any of the
			menu modes.
		ENTER	It can also be used to <i>tick</i> checkbox fields.
			In Playback mode, it can be used to play or pause the video.
		In single-frame Playback mode, pressing the button will advance	

No.	Name	Function Description
		the video by a single frame.
		In Auto-switch mode, it can be used to stop /start auto switch.
		Move the active selection in a menu. It will move the selection up and down.
		In Live View mode, it can be used to cycle through different channels.
8	JOG SHUTTLE Contr	In the Playback mode: The outer ring is used to speed up or slow down the record files and the inner ring is used to jump 30s forward/backward in records files.
		In PTZ control mode, it can control the movement of the PTZ camera.
9	POWER ON/OFF	Power on/off switch.

DS-7700NI-E4(/P)

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No.	N	ame	Function Description
		POWER	Turns green when NVR is powered up.
		READY	The LED is green when the device is running normally.
1	Status STATUS Indicators	The light is green when the IR remote control is enabled; The light is red when the function of the composite keys (SHIFT) are used; The light is out when none of the above condition is met.	
		ALARM	The light is red when there is an alarm occurring.
		HDD	Blinks red when HDD is reading/writing.
		Tx/Rx	Blinks green when network connection is functioning normally.
2	2 DVD-R/W		Slot for DVD-R/W.
	3 Control 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
3			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. In auto sequence view mode, the buttons can be used to pause or

No.	Name		Function Description
			resume auto sequence.
			Switch between the numeric or letter input and functions of the
		SHIFT	composite keys. (Input letter or numbers when the light is out;
			Realize functions when the light is red.)
			Enter numeral "1";
		1/MENU	Access the main menu interface.
			Enter numeral "2";
			Enter letters "ABC";
			The F1 button when used in a list field will select all items in the
		2/ABC/F1	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.
			Enter numeral "3";
			Enter letters "DEF";
		3/DEF/F2	The F2 button is used to change the tab pages.
			In PTZ control mode, it zooms in the image.
			Enter numeral "4";
		4/GHI/ESC	Enter letters "GHI";
			Exit and back to the previous menu.
			Enter numeral "5";
4	Composite		Enter letters "JKL";
	Keys	5/JKL/EDIT	Delete characters before cursor;
		5/582/2011	Check the checkbox and select the ON/OFF switch;
		6/MNO/PLAY	Start/stop record clipping in playback. Enter numeral "6";
			Enter letters "MNO";
		0/10110/11241	Playback, for direct access to playback interface.
			Enter numeral "7";
		7/PQRS/REC	Enter letters "PQRS";
			Open the manual record interface.
			Enter numeral "8";
		8/TUV/PTZ	Enter letters "TUV";
			Access PTZ control interface.
			Enter numeral "9";
		9/WXYZ/PRE	Enter letters "WXYZ";
		V	Multi-channel display in live view.
			Enter numeral "0";
			Shift the input methods in the editing text field. (Upper and
		0/A	lowercase, alphabet, symbols or numeric input).
			Double press the button to switch the main and auxiliary output.
			Move the active selection in a menu. It will move the selection up
			and down.
_	IOC CHU		In Live View mode, it can be used to cycle through different
5	JOG SHUTTLE Control		channels.
			In the Playback mode, it can be used to jump 30s
			forward/backward in video files.

No.	Name	Function Description
		In PTZ control mode, it can control the movement of the PTZ
		camera.
6	POWER ON/OFF	Power on/off switch.
7	7 USB Interfaces	Universal Serial Bus (USB) ports for additional devices such as
/		USB mouse and USB Hard Disk Drive (HDD).

DS-7600NI-E1/E2 Series

	1 2
HIKVISION	OPOWER OSTATUS OTV/Rx

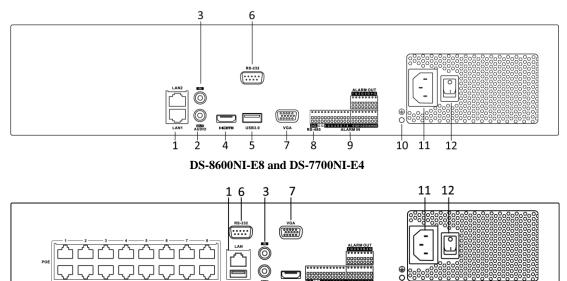
No.	Name		Description
		Power	Power indicator turns yellow when system is running.
	Status	Status	Status indicator blinks red when data is being read from or
1	Indicator		written to HDD.
		Tx/Rx	Tx/Rx indictor blinks yellow when network connection is
		I X/KX	functioning properly.
2			Universal Serial Bus (USB) ports for additional devices such
2	08	B Interface	as USB mouse and USB Hard Disk Drive (HDD).

Rear Panel



The rear panel vaires according to different models.

DS-8600NI-E8, DS-7700NI-E4 and DS-7700NI-E4/P



DS-7700NI-E4/P

2 Δ 8 10

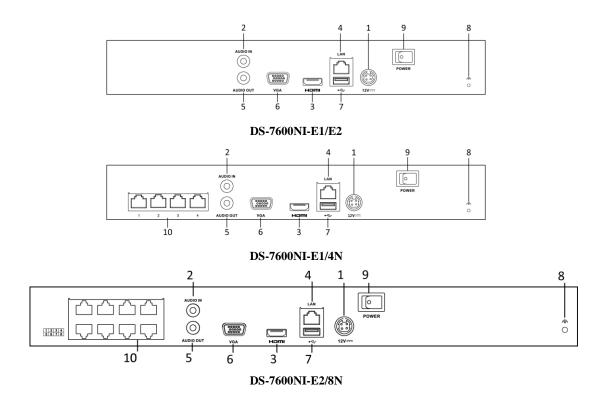
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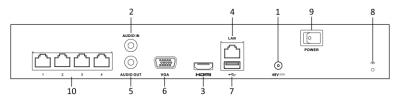
No.	Item	Description	
1	LAN Interface	1 network interface provided for DS-7700NI-E4/P and 2 network interfaces for DS-7700NI-E4 and DS-8600NI-E8.	
2	AUDIO OUT	RCA connector for audio output.	
3	LINE IN	RCA connector for audio input.	
4	HDMI	HDMI video output connector.	
5	USB 3.0 interface	Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).	
6	RS-232 Interface	Connector for RS-232 devices.	
7	VGA	DB9 connector for VGA output. Display local video output and menu.	
8	RS-485 Interface	Half-duplex connector for RS-485 devices.	
9	ALARM IN	Connector for alarm input.	
	ALARM OUT	Connector for alarm output.	
10	GROUND	Ground (needs to be connected when NVR starts up).	
11	AC 100V ~ 240V	100V ~ 240V AC power supply.	
12	Power Switch	Switch for turning on/off the device.	
13	Network Interfaces with PoE function (supported by DS-7700NI-E4/P)	Network interfaces for the cameras and to provide power over Ethernet.	



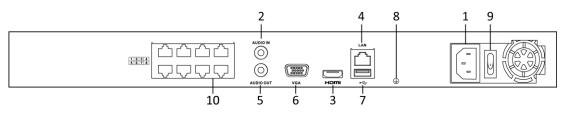


No.	Item	Description	
1	Power Supply	DC 12V power supply.	
2	Audio In	RCA connector for audio input.	
3	HDMI Interface	HDMI video output connector.	
4	LAN Network Interface	1 10 /100 /1000 Mbps self-adaptive Ethernet interface	
5	Audio Out	RCA connector for audio output.	
6	VGA Interface	DB9 connector 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	Built-in switch network interfaces for the cameras. (Supported by	
	built-in switch function	DS-7600NI-E1/4N, DS-7600NI-E2/8N and DS-7600NI-SN/N).	

DS-7600NI-E1/4P and DS-7600NI-E2/8P



DS-7600NI-E1/4P



DS-7600NI-E2/8P

No.	Item	Description		
1	Power Supply	48V DC power supply for DS-7600NI-E1/4P and AC 100~240V for		
		DS-7600NI-E2/8P.		
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.		

Peripheral Connections



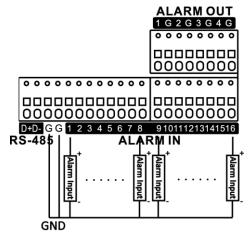
This section is applicable for the DS-8600NI-E8, DS-7700NI-E4 and DS-7700NI-E4/P series only.

Wiring of Alarm Input

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

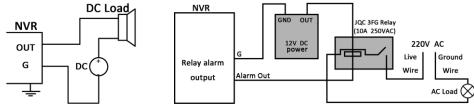


If the alarm input is not an open/close relay, please connect an external relay between the alarm input and the device.



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.

Specifications

Specifications of DS-8600NI-E8

Model		DS-8608NI-E8	DS-8616NI-E8	DS-8632NI-E8	
Video/Audio	IP video input	8-ch	16-ch	32-ch	
input	Two-way audio	1-ch, RCA (2.0 Vp-p, 1K	·		
	Incoming bandwidth	80Mbps	160Mbps	160Mbps	
Network	Outgoing bandwidth	80Mbps			
	Remote connection	128			
	Recording resolution	6MP/5MP/3MP/1080P/U	JXGA/720P/VGA/4CIF/D	CIF/2CIF/CIF/QCIF	
	Frame rate	Main stream: 50 fps (P) /	60 fps (N)		
Video/Audio	Frame rate	Sub-stream: 50 fps (P) / 6	50 fps (N)		
output	HDMI/VGA output	1-ch, resolution: 1920 ×1080 /60Hz, 1600 /60Hz, 1024 ×768 /60Hz	0 × 1200 /60Hz, 1280 × 10	24 /60Hz, 1280 ×720	
	Audio output	1-ch, RCA (Linear, 1KΩ)		
	Live view / Playback resolution	6MP/5MP/3MP/1080P/U	JXGA/720P/VGA/4CIF/D	CIF/2CIF/CIF/QCIF	
Decoding	Capability 8-ch@720P, 6-ch@1080P 16-ch@4CIF, 12-ch@72		20P, 6-ch@1080P		
	SATA	8 SATA interfaces for 4 HDDs + 1 DVD-R/W (default), or 8HDDs			
Hard disk	eSATA (Optional)	1 eSATA interface			
	Capacity	Up to 6TB capacity for each HDD			
	Network interface	2 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interfaces			
External	Serial interface	RS-232 and RS-485			
interface	USB interface	$2 \times \text{USB} 2.0 + 1 \times \text{USB} 3.0$			
	Alarm in / out	16/4 (optionally can be expanded to 16/8)			
	Power supply	100 ~ 240 VAC			
	Consumption (without hard disk or DVD-R/W)	$\leq 20 \text{ W}$	$\leq 20 \text{ W}$	$\leq 20 \text{ W}$	
	Working temperature	-10 °C ~ +55 °C (14 °F ~ 131 °F)			
Others	Working humidity	10 % ~ 90 %			
	Chassis	19-inch rack-mounted 2U	J chassis		
	Dimensions (W ×D ×H)	445 ×470 ×70 mm (17.5	5"×18.5" ×2.8")		
	Weight (without hard disk or DVD-R/W)	$\leq 8 \text{ kg} (17.6 \text{ lb})$			

Specifications of	of DS-7700NI-E4
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Model		DS-7708NI-E4	DS-7716NI-E4	DS-7732NI-E4		
Video/Audio	IP video input	8-ch	16-ch	32-ch		
input	Two-way audio	1-ch, RCA (2.0 Vp-p, 1kΩ)				
	Incoming bandwidth	80Mbps	160Mbps	160Mbps		
Network	Outgoing bandwidth	80Mbps		•		
	Remote connection	128				
	Recording resolution	6MP/5MP/3MP/1080P/	UXGA/720P/VGA/4CIF/I	DCIF/2CIF/CIF/QCIF		
	Eromo roto	Main stream: 50 fps (P)	/ 60 fps (N)			
Video/Audio	Frame rate	Sub-stream: 50 fps (P) /	60 fps (N)			
output	HDMI/VGA output	1-ch, resolution: 1920 ×1080 /60Hz, 160 /60Hz, 1024 ×768 /60H	00 ×1200 /60Hz, 1280 ×1 Iz	024 /60Hz, 1280 ×720		
	Audio output	1-ch, RCA (Linear, 1KΩ)				
	Live view / Playback resolution	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF				
Decoding	Capability	8-ch@720P, 6-ch@1080P	16-ch@4CIF, 12-ch@720P, 6-ch@1080P			
	SATA	4 SATA interfaces for 2 HDDs + 1 DVD-R/W (default), or 4HDDs				
Hard disk	eSATA (Optional)	1 eSATA interface				
	Capacity	Up to 6TB capacity for each HDD				
	Network interface	2 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interfaces				
External	Serial interface	RS-232 and RS-485				
interface	USB interface	$2 \times \text{USB} 2.0 + 1 \times \text{USB} 3.0$				
	Alarm in / out	16/4 (optionally can be expanded to 16/8)				
	Power supply	100 ~ 240 VAC				
	Consumption (without hard disk or DVD-R/W)	$\leq 20 \text{ W}$	$\leq 20 \text{ W}$	$\leq 20 \text{ W}$		
	Working temperature	-10 °C ~ +55 °C (14 °F ~ 131 °F)				
Others	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)	$\leq 4 \text{ kg} (8.82 \text{ lb})$				

Model		DS-7708NI-E4/8P	DS-7716NI-E4/16P	DS-7732NI-E4/16P			
Video/Audio	IP video input	8-ch	16-ch	32-ch			
input	Two-way audio	1-ch, RCA (2.0 Vp-p, 11	(Ω)				
	Incoming bandwidth	80Mbps	160Mbps 160Mbps				
Network	Outgoing bandwidth	80Mbps	·				
	Remote connection	128					
	Recording resolution	6MP/5MP/3MP/1080P/	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF				
	Frame rate	Main stream: 50 fps (P)	/ 60 fps (N)				
Video/Audio	Frame rate	Sub-stream: 50 fps (P) /	60 fps (N)				
output	HDMI/VGA output	1-ch, resolution: 1920 ×1080 /60Hz, 160 /60Hz, 1024 ×768 /60H	0 ×1200 /60Hz, 1280 ×10 z	024 /60Hz, 1280 ×720			
	Audio output	1-ch, RCA (Linear, 1KG	2)				
	Live view / Playback resolution	6MP/5MP/3MP/1080P/	UXGA/720P/VGA/4CIF/D	CIF/2CIF/CIF/QCIF			
Decoding	Capability	8-ch@720P, 6-ch@1080P	16-ch@4CIF, 12-ch@72	20P, 6-ch@1080P			
	SATA	4 SATA interfaces for 2	HDDs + 1 DVD-R/W (de	fault), or 4HDDs			
Hard disk	eSATA (Optional)	1 eSATA interface					
	Capacity	Up to 6TB capacity for e	each HDD				
	Network interface	1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface					
External	Serial interface	RS-232 and RS-485					
interface	USB interface	$2 \times \text{USB} 2.0 + 1 \times \text{USB} 3.0$					
	Alarm in / out	16 / 4 (optionally can be expanded to 16 / 8)					
	Interface	8 independent 100 Mbps PoE network	16 independent 100 Mbps PoE network interfaces				
PoE		interfaces					
	Max. Power	200W					
	Supported standard	AF and AT					
	Power supply	100 ~ 240 VAC					
	Consumption (without hard disk, DVD-R/W or PoE)	\leq 20 W					
	Working temperature	-10 °C ~ +55 °C (14 °F ~ 131 °F)					
Others	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)	$\leq 4 \text{ kg} (8.82 \text{ lb})$					

Specifications of DS-7700NI-E4/P

Model		DS-7608NI-E2	DS-7616NI-E2	DS-7632NI-E2	
Video/Audio	IP video input	8-ch	16-ch	32-ch	
input	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1KΩ)			
	Incoming bandwidth	80Mbps	160Mbps	160Mbps	
Network	Outgoing bandwidth	80Mbps			
	Remote connection	128			
	Recording resolution	6MP/5MP/3MP/1080P/U2	XGA/720P/VGA/4CIF/D	CIF/2CIF/CIF/QCIF	
	E	Main stream: 50 fps (P) /	60 fps (N)		
Video/Audio	Frame rate	Sub-stream: 50 fps (P) / 6	0 fps (N)		
output	HDMI/VGA output	1-ch, resolution: 1920 ×1080 /60Hz, 1600 ×1200 /60Hz, 1280 ×1024 /60Hz, 1280 ×720 /60Hz, 1024 ×768 /60Hz			
	Audio output	1-ch, RCA (Linear, 1kΩ)			
Described	Live view / Playback resolution	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF			
Decoding	Capability	8-ch@720P, 6-ch@1080P 16-ch@4CIF, 12-ch@720P, 6-ch@1080P			
TT. 1 1.1	SATA	2 SATA interfaces for 2 HDDs			
Hard disk	Capacity	Up to 6TB for each disk			
	Network interface	1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface			
External	USB interface	1 × USB 2.0 and 1 × USB 3.0			
interface	Alarm in/out (Optional)	4 / 1			
	Power supply	12V DC			
	Consumption (without hard disk)	$\leq 10W$			
	Working temperature	-10 °C ~ +55 °C (+14 °F~ + 131 °F)			
Others	Working humidity	10 % ~ 90 %			
	Chassis	380 chassis			
	Dimensions (W × D × H)	380 × 290 × 48mm (15.0" ×11.4" × 1.9")			
	Weight (without hard disk)	$\leq 1 \text{ kg } (2.2 \text{ lb})$			

Specifications of DS-7600NI-E2

Model		DS-7604NI-E1	DS-7608NI-E1	DS-7616NI-E1		
Video/Audio	IP video input	4-ch	8-ch	16-ch		
input	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1KΩ)				
	Incoming bandwidth	40Mbps	80Mbps	160Mbps		
Network	Outgoing bandwidth	80Mbps				
	Remote connection	32	128	128		
	Recording resolution	6MP/5MP/3MP/1080P/U	XGA/720P/VGA/4CIF/DO	CIF/2CIF/CIF/QCIF		
	Energy and a	Main stream: 50 fps (P) /	60 fps (N)			
Video/Audio	Frame rate	Sub-stream: 50 fps (P) / 6	0 fps (N)			
output	HDMI/VGA output	1-ch, resolution: 1920 ×1080 /60Hz, 1600 ×1200 /60Hz, 1280 ×1024 /60Hz, 1280 ×720 /60Hz, 1024 ×768 /60Hz				
	Audio output	1-ch, RCA (Linear, 1kΩ)				
	Live view / Playback resolution	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF				
Decoding	Capability	4-ch@1080P	8-ch@720P, 6-ch@1080P	16-ch@4CIF, 12-ch@720P, 6-ch@1080P		
** • • •	SATA	1 SATA interface for 1 HDD				
Hard disk	Capacity	Up to 6TB for each disk				
	Network interface	1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface				
External	USB interface	1 × USB 2.0 and 1 × USB 3.0				
interface	Alarm in/out (Optional)	4 / 1				
	Power supply	12V DC				
	Consumption (without hard disk)	$\leq 10W$				
	Working temperature	-10 °C ~ +55 °C (+14 °F~ + 131 °F)				
Others	Working humidity	10 % ~ 90 %				
	Chassis	Standalone 1U chassis				
	Dimensions (W × D × H)	315 ×230 ×45 mm (12.4" ×9.0" ×1.8")				
	Weight (without hard disk)	$\leq 1 \text{ kg } (2.2 \text{ lb})$				

Specifications of DS-7600NI-E1

Model		DS-7604NI-E1/4N	DS-7608NI-E2/8N	
Video/Audio	IP video input	4-ch	8-ch	
input	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1kΩ)		
	Incoming bandwidth	40Mbps	80Mbps	
Network	Outgoing bandwidth	80Mbps		
	Remote connection	32	128	
	Recording resolution	6MP/5MP/3MP/1080P/UXGA/720P/V	GA/4CIF/DCIF/2CIF/CIF/QCIF	
	Energy and	Main stream: 50 fps (P) / 60 fps (N)		
Video/Audio	Frame rate	Sub-stream: 50 fps (P) / 60 fps (N)		
output	HDMI/VGA output	1-ch, resolution: 1920 ×1080 /60Hz, 1600 ×1200 /60Hz /60Hz, 1024 ×768 /60Hz	z, 1280 ×1024 /60Hz, 1280 ×720	
	Audio output	1-ch, RCA (Linear, 1kΩ)		
Decoding	Live view / Playback resolution	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF		
Decoding	Capability	4-ch@1080P	8-ch@720P, 6-ch@1080P	
T 1 . P. 1	SATA	1 SATA interface for 1 HDD	2 SATA interfaces for 2 HDDs	
Hard disk	Capacity	Up to 4TB for each disk		
		1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface		
External	Network interface	4 independent 100 Mbps built-in switch network interfaces	8 independent 100 Mbps built-in switch network interfaces	
interface	USB interface	$1 \times \text{USB} \ 2.0 \ \text{and} \ 1 \times \text{USB} \ 3.0$		
	Alarm in/out (Optional)	4 / 1		
	Power supply	12V DC		
	Consumption (without hard disk)	≤10W		
	Working temperature	-10 °C ~ +55 °C (+14 °F~ + 131 °F)		
Others	Working humidity	10 % ~ 90 %		
	Chassis	Standalone 1U chassis	380 chassis	
	Dimensions (W × D × H)	315×230×45mm (12.4"×9.1"×1.8")	380 × 290 × 48mm (15.0" × 11.4" × 1.9")	
	Weight (without hard disk)	$\leq 1 \text{ kg} (2.2 \text{ lb})$		

Specifications of DS-7604NI-E1/N and DS-7608NI-E2/N

		DS-7616NI-E2/	DS-7632NI-E2/	DS-7616NI-E2/	DS-7632NI-E2/		
Model		8N	8N	16N	16N		
Video/Audio	IP video input	16-ch	32-ch	16-ch	32-ch		
input	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1kΩ)					
	Incoming bandwidth	160Mbps	160Mbps				
Network	Outgoing bandwidth	80Mbps					
	Remote connection	128					
	Recording resolution	6MP/5MP/3MP/108	0P/UXGA/720P/VGA	4CIF/DCIF/2CIF/C	IF/QCIF		
	F	Main stream: 50 fps	(P) / 60 fps (N)				
Video/Audio	Frame rate	Sub-stream: 50 fps (P) / 60 fps (N)				
output	HDMI/VGA output	1-ch, resolution: 1920 ×1080 /60Hz, 1024 ×768 /60Hz	1600 × 1200 /60Hz, 1	280 ×1024 /60Hz, 12	280 ×720 /60Hz,		
	Audio output	1-ch, RCA (Linear, $1k\Omega$)					
Decoding	Live view / Playback resolution	6MP/5MP/3MP/108	MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF				
	Capability	16-ch@4CIF, 12-ch@720P, 6-ch@1080P					
Hard disk	SATA	2 SATA interfaces for 2 HDDs					
riaru uisk	Capacity	Up to 6TB for each	disk				
		1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface					
External	Network interface	8 independent 100 M network interfaces	Ibps built-in switch	16 independent 100 switch network inte			
interface	USB interface	1 × USB 2.0 and 1 >	USB 3.0				
	Alarm in/out (Optional)	4 / 1					
	Power supply	12V DC					
	Consumption (without hard disk)	≤10W					
	Working temperature	-10 °C ~ +55 °C (+14 °F~ + 131 °F)					
Others	Working humidity	10 % ~ 90 %					
	Chassis	Standalone 1U chassis	380 chassis				
	Dimensions (W × D × H)	315×230×45mm (12.4"×9.1"×1.8") 380×290×48mm (15.0"×11.4"×1.9"))		
	Weight (without hard disk)	$\leq 1 \text{ kg} (2.2 \text{ lb})$					

Specifications of DS-7616&7632NI-E2/N

Model		DS-7604NI-E1/4P	DS-7608NI-E2/8P	
Video/Audio	IP video input	4-ch	8-ch	
input	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1kΩ)		
	Incoming bandwidth	40Mbps	80Mbps	
Network	Outgoing bandwidth	80Mbps		
	Remote connection	32	128	
	Recording resolution	6MP/5MP/3MP/1080P/UXGA/720P/VC	GA/4CIF/DCIF/2CIF/CIF/QCIF	
	T	Main stream: 50 fps (P) / 60 fps (N)		
Video/Audio	Frame rate	Sub-stream: 50 fps (P) / 60 fps (N)		
output	HDMI/VGA output	1-ch, resolution: 1920 ×1080 /60Hz, 1600 ×1200 /60Hz, 1024 ×768 /60Hz	, 1280 ×1024 /60Hz, 1280 ×720 /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		
Decouning	Capability	4-ch@1080P	8-ch@720P, 6-ch@1080P	
Hard disk	SATA	1 SATA interface for 1 HDD	2 SATA interfaces for 2 HDDs	
	Capacity	Up to 6TB for each disk		
	Network interface	1 RJ-45 10 /100 Mbps self-adaptive Ethernet interface	1 RJ-45 10 /1000 Mbps self-adaptive Ethernet interface	
External	USB interface	$1 \times \text{USB } 2.0 \text{ and } 1 \times \text{USB } 3.0$		
interface	Alarm in/out (Optional)	4 / 1		
	Interface	4 independent 100 Mbps PoE network interfaces	8 independent 100 Mbps PoE network interfaces	
РоЕ	Max. Power	50W	120W	
	Supported standard	AF and AT		
	Power supply	12V DC		
	Consumption (without hard disk and PoE)	≤10W		
	Working temperature	-10 °C ~ +55 °C (+14 °F~ + 131 °F)		
Others	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)	$\leq 1 \text{ kg } (2.2 \text{ lb})$		

Specifications of DS-7604NI-E1/P and DS-7608NI-E2/P

		DS-7616NI-E2/	DS-7632NI-E2/	DS-7616NI-E2/	DS-7632NI-E2/			
Model		8P	8P	16P	16P			
Video/Audio	IP video input	16-ch	32-ch	16-ch	32-ch			
input	Two-way audio input	1-ch, RCA (2.0 Vp-p	, 1kΩ)					
	Incoming bandwidth	160Mbps						
Network	Outgoing bandwidth	80Mbps						
	Remote connection	128						
	Recording resolution	6MP/5MP/3MP/1080)P/UXGA/720P/VGA	/4CIF/DCIF/2CIF/CI	IF/QCIF			
	Frame rate	Main stream: 50 fps	(P) / 60 fps (N)					
Video/Audio	Frame rate	Sub-stream: 50 fps (I	P) / 60 fps (N)					
output	HDMI/VGA output	1-ch, resolution: 1920 ×1080 /60Hz, 1024 ×768 /60Hz	1600 × 1200 /60Hz, 1	280 ×1024 /60Hz, 12	280 ×720 /60Hz,			
	Audio output	1-ch, RCA (Linear, 1	kΩ)					
Decoding	Live view / Playback resolution	6MP/5MP/3MP/1080)P/UXGA/720P/VGA	/4CIF/DCIF/2CIF/Cl	F/QCIF			
	Capability	16-ch@4CIF, 12-ch@720P, 6-ch@1080P						
Hand diale	SATA	2 SATA interfaces for	or 2 HDDs					
Hard disk	Capacity	Up to 6TB for each d	lisk					
	Network interface	1 RJ-45 10/100/100	0 Mbps self-adaptive	Ethernet interface				
External	USB interface	1 $\times \text{USB}$ 2.0 and 1 \times	USB 3.0					
interface	Alarm in/out (Optional)	4 / 1		-				
	Interface	8 independent 100 M interfaces	lbps PoE network	16 independent 100 interfaces) Mbps PoE network			
PoE	Max. Power	120W		200W				
	Supported standard	AF and AT						
	Power supply	100~240V AC						
	Consumption (without hard disk and PoE)	≤10W		≤15W				
	Working temperature	-10 °C ~ +55 °C (+14	F~+131 F)					
Others	Working humidity	10 % ~ 90 %						
	Chassis	380 chassis						
	Dimensions (W × D × H)	380 × 290 × 48mm (15.0" ×11.4" ×1.9")					
	Weight (without hard disk)	\leq 1 kg (2.2 lb)						

Specifications of DS-7616&7632NI-E2/P

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

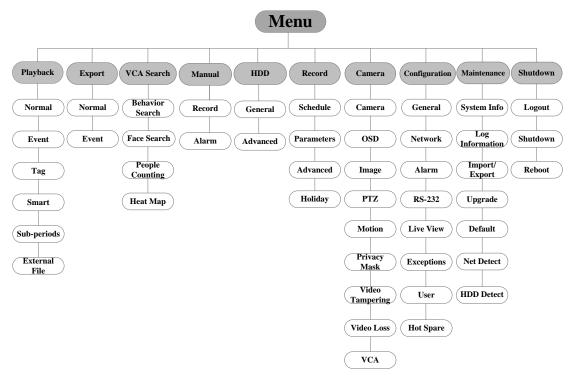


Please note that supplied values for storage space used is just for reference. The storage values in the chart are estimated by formulas and may have some deviation from actual value.

Menu Operation

Menu Structure

The menu structure is shown as follows:





The RS-232 is not available by the menu of DS-7600NI-E1/E2 series NVR.

Startup and Shutdown

Proper startup and shutdown procedures are crucial to expanding the life of the NVR. **To start your NVR:**

Steps:

- 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 DS-8600 series NVR) on the front panel should be red, indicating the device gets the power supply.
- Press the POWER button on the front panel. The Power LED should turn blue (for the DS-8600-E8 series NVR) or green (for the DS-7700NI-E4(P) and DS-7600NI-E1/E2 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:

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.

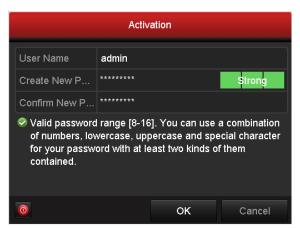


Setting the Admin Password

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.



For the old version device, if you update it to the new version, the following dialog box will pop up once the device starts up. You can click **YES** and follow the wizard to set a strong password.



Login and Logout

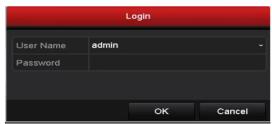
User Login

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.

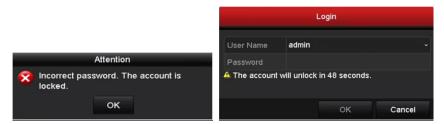


2. Input Password.

3. Click OK to log in.



The device gets locked for 60 seconds 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 in the center of the windw to pop up the adding IP camera interface.

			Add IP Ca	mera		
No.	IP Address	A	mount of	Device T	y Protoco	Managem
1	10.16.1.62	1		IPC	HIKVISI	ON 8000
2	10.16.1.199	1		IP Dome	HIKVISI	ON 8000
<		l				>
IP Cam	era Address	10.16.1	.62			
Protoco	bl	HIKVIS	ION			
Manage	ement Port	8000				
Channe	el Port	1				
Transfe	er Protocol	Auto				
User Na	ame	admin				
Admin F	assword					
			Searc	h	Add	Cancel

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:

 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.

			IP Camera	Management			
Cam	Add/E	e Status	Security	IP Camera A	Edit	Upgrade	Camera Name
■D1	T	<u> </u>	Risk Password	10.16.1.93		-	IPCamera 01
	\odot	-	Active	10.16.1.93		1 -	-
	•	-	Active	10.16.1.14		1	-
	۲		Active	10.16.1.205		-	-
	۲	-	Active	10.16.1.216	2	-	-
<		1					>
Re	fresh	One-touch	A Upgrade	Delete	01	ne-touch A	Custom Addi
Net Rec	eive Idle	Bandwidth:	320Mbps				Exit

- 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 solution to add the camera. Or you can click the **One-touch Adding** button to add all cameras from the list.
- OPTION 3:

Steps:

 On the IP Camera Management interface, click the Custom Adding button to pop up the Add IP Camera (Custom) interface.

		Add	IP Camera	a (Custom)				
No.	IP Address	A	mount of	Device M	Protoco	Manager		
<		I				>		
IP Car	nera Address	10.16.	1.64					
Protoc	ol	ONVIF						
Manag	gement Port	80						
Trans	fer Protocol	Auto	Auto ~					
User N	Name	admin	min					
Admin	Password	******						
Con	tinue to Add							
	Pro	locol	Searc	h A	dd	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.

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

Cam	Add/De	Status	Security	IP Camera A	Edit	Up	Camera Nam	e Protocol
D2	m	0	Strong P	10.16.1.205		1	Camera 01	HIKVISION
D3	Î	۲	Weak P	10.16.1.216		1	IPdome	HIKVISION
	\odot	-	Active	10.16.1.93		-	2 	HIKVISION
	(-	Active	10.16.1.14	2	-	-	HIKVISION
<		1 1						>
< Refre	esh Or	 ne-touch #	l A Upgr	ade Del	lete	One	e-touch A C	
Refre	esh Or	ne-touch A		ade Del	ete	One	e-touch A C	

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.	Ħ	Delete the IP camera
	Play the live video of the connected camera.	職	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 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 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 📓 button in the shortcut operation menu.



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

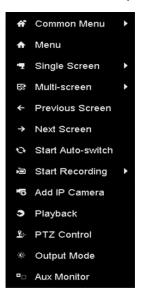


• Option 2:

Steps:

1. Enter the Playback menu.

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



Front Panel (not applicable for the DS-7600NI-E1/E2 series): 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.

<u>Normal</u>								
IP Camera	☑ D1 ☑ D9		☑D3 ☑D11	☑ D4 ☑ D12		5 ⊻ D6 13 ⊻ D14	 ☑D8 ☑D16	
Start/End time of reco	rd 09	-09-2013	3 16:02:0	2 02-14	4-201	4 17:41:31		
Record Type	All							
File Type	All							
Start Time	02-	-18-2014			**	00:00:00		٩
End Time	02-	-18-2014			= :	23:59:59		6

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

		Exp	port			
Device Name	USB Fla	ash Disk 1-1		.mp4	Refr	esh
Name		Size Type	Edit Date		Delete	Play
ch09_2014102	916	486.88MB File	10-29-2014	19:10:56	T	۲
ch13_2014091	909	2707.10KB File	09-19-2014	15:42:20	<u>۱</u>	۲
Free Space		1412.00MB				
		New Folder	Format	Export	Can	cel

3. Check backup result.

			Exp	oort			
Device Name	USB FI	ash Disk 1-1			*.mp4	Refr	esh
Name		Size	Туре	Edit Date		Delete	Play
ch01_201412	21009	430.15MB	File	12-25-201	4 14:33:18	Î	۲
ch09_201410	02916	486.88MB	File	10-29-201	4 19:10:56	Î	۲
ch13_201409	91909	2707.10KB	File	09-19-201	4 15:42:20	m	۲
Free Space		981.85ME	3				

VCA Detection

Purpose:

The NVR supports the VCA detection alarm (*face detection, vehicle 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:

 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.



VCA detection is only supported by DS-7700NI/E4(P) and DS-8600NI-E8. For detailed steps, please refer to the *User Manual* for detailed instructions to set the VCA rules.

VCA Search

The NVR supports the VCA search for the behavior analysis, face capture, people counting and heat map. **Face Search:** Search the captured face picture results triggered by face detection.

Behavior Search: Search and view the behavior detection (including the line crossing detection, intrusion detection, unattended baggage detection, etc.) results in pictures and video files.

Plate Search: You can search and view the matched captured vehicle plate picture and related information according to the plate searching conditions including the start time/end time, country and plate No..

People Counting: Calculate the number of people entered or exited from a certain configured area and show in chart of daily/weekly/monthly/annual report.

Heat Map: Analyze the visit times and dwell time of customers in a configured area. The heat map is a graphical representation of data represented by colors.



VCA search is only supported by DS-7700NI/E4(P) and DS-8600NI-E8. For detailed steps, please refer to the *User Manual* for detailed instructions of VCA Search.

A Behavior Sear >	Behavior Search									
Pace Search	IP Camera	☑ D1	☑ D2	☑ D3	⊠ D4	D 5	D 6	☑ D7	🗹 D8	
🖨 Plate Search	Start Time		03-30-2	2015		*	00:00:00			٩
🌆 People Counti	End Time		03-30-2	2015		*	23:59:59			٩
ഹ്പ് Heat Map	Туре		All							
▲ Live View							Sea	irch	Back	

Accessing by Web Browser



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.

Activation		
User Name	admin	
Password	Strong	
	Valid password range [8-16]. You can use a combination of numbers, lowercase, uppercase and special character for your password with at least two kinds of them contained.	
Confirm	•••••	
	С	Ж

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.

admin
••••••
Login

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.
60		

NOTE

The PTZ control is supported by the DS-8600NI-E8 and DS-7700NI-E4(P) series NVR only.

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
G / G	Start/Stop all live view	<u>*</u>	Start/Stop two-way Audio
Ø	Capture pictures in the live view mode	–	Adjust volume
بھ / بھ	Start/Stop all recording	()	Enable/Disable digital zoom
← , →	Previous/Next page	к 3	Full screen
ţ	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.

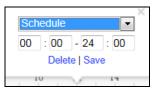
Two recording types can be configured: Manual and Scheduled. The following section introduces the configuration of scheduled recording.

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.

👿 En	able																						
Conti	inuous	•	•	X D	elet	e	Ō	Del	ete .	All								Adv	/ance	ed			
	0	2		4		6		8		10	12	14	16	18		20	2	2	24	L	Ŀ	С	ontinuous
Mon																					1	M	otion Alarm
Tue	0	2		4		6		8		10	12	14	16	18		20	2	2	24	ŀ		A	arm
Tue	0	2		4		6		8		10	12	14	16	18		20	2	2	24	ı	1	Μ	otion
Wed		1		Ì		Ĭ		Ĭ		Ĩ			10					_				М	otion & Alarr
Th	0	2		4		6		8		10	12	14	16	18	. :	20	2	2	24	l	L.	E	vent
Thu	0	2		4		6		8		10	12	14	16	18		20	2	2	24				
Fri		1		Ì		Ĭ		Ĭ		10	**	14	10	18		20	2	-	2				
Sat	0	2		4		6		8		10	12	14	16	18	. :	20	2	2	24	l			
Sat	0	2		4		6		8		10	12	14	16	18		20	2	2	24	ı			
Sun		Ī		i		ī		Ĭ					1										

- 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 Schedule, 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.

Copy to		Select All
J Mon	🔲 Tue	Wed
🔲 Thu	🔲 Fri	Sat
Sun 📃		
	OK	Cancel

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

Advanced		×
Record Audio		
Enable ANR		
Pre-record	5s	•
Post-record	5s	•
Stream Type	Main Stream	•
Expired Time	0	Day(s)
	ОК	Cancel

6. You can click Line Copy to... 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	Displays the image of channel.		
2	Window			
3	Play Control Bar	Play control operations are supported.		
4	Time Line	Displays the time bar and the records marked with different colors.		
-	Displays the playback status, including channel number and p			
5	Playback Status	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.

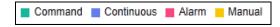
Button	Description	Button	Description
► / II	Play/Pause	-	Stop
*	Speed down	\$	Speed up
Þ	Play by single frame	0	Capture

Button	Description	Button	Description
1	Stop all playback		Download
* *	Start/Stop video clipping	♣ / ♥	Open/Close audio
K 7	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 \checkmark button to locate the playback point.

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



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