



HIKVISION

Digital Video Recorder

Quick Start Guide

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Quick Start Guide

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About this Manual

This Manual is applicable to Digital Video Recorder (DVR).

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

Please use this user manual under the guidance of professionals.

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Regulatory Information

FCC Information

FCC compliance: This equipment has been tested and found to comply with the limits for a Class 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 LVD Directive 2006/95/EC and 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 (A)/NMB-3(A) standards requirements.



Safety Instruction

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

The precaution measure is divided into “Warnings” and “Cautions”.

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

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

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



Warnings

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 100~240 VAC or 12 VDC according to the IEC60950-1 standard. Please refer to technical specifications for detailed information.
- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

Preventive and Cautionary Tips

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

- Ensure unit is installed in a well-ventilated, dust-free environment.
- Unit is designed for indoor use only.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.
- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the device in conjunction with an UPS if possible.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- A factory recommended HDD should be used for this device.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

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

This manual is applicable to the following models:

Type	Model
Network HDVR	DS-7204HFI-SH, DS-7208HFI-SH, DS-7216HFI-SH
	DS-7204HWI-SH, DS-7208HWI-SH, DS-7216HWI-SH
	DS-7204HVI-SV, DS-7208HVI-SV, DS-7216HVI-SV
	DS-7208HWI-SL, DS-7216HWI-SL
	DS-7304HFI-SH, DS-7308HFI-SH, DS-7316HFI-SH
	DS-7304HWI-SH, DS-7308HWI-SH, DS-7316HWI-SH
Network DVR	DS-7204HVI-SH, DS-7208HVI-SH, DS-7216HVI-SH
	DS-7204HWI-SV
	DS-7224HVI-SH, DS-7232HVI-SH
	DS-7224HWI-SH, DS-7232HWI-SH
	DS-7324HFI-SH, DS-7332HFI-SH
	DS-7324HWI-SH, DS-7332HWI-SH
	DS-7324HI-SH, DS-7332HI-SH
	DS-8124HCI-SH, DS-8132HCI-SH
	DS-8124HFSI-SH, DS-8132HFSI-SH
	DS-8124HWSI-SH, DS-8132HWSI-SH
Smart HDVR	DS-7204HWI-E1, DS-7208HWI-E1, DS-7216HWI-E1
	DS-7208HWI-E2, DS-7216HWI-E2
	DS-7304HWI-SH, DS-7308HWI-SH, DS-7316HWI-SH
Smart DVR	DS-7224HWI-E2
	DS-7324HWI-SH, DS-7332HWI-SH
	DS-8124HWSI-SH, DS-8132HWSI-SH
Smart HDVR (Coaxitron)	DS-7204HWI-E1/C, DS-7208HWI-E2/C, DS-7216HWI-E2/C
	DS-7304HWI-E4/C, DS-7308HWI-E4/C, DS-7316HWI-E4/C
	DS-8104HWI-E4/C, DS-8108HWI-E8/C, DS-8116HWI-E8/C
Smart DVR (Coaxitron)	DS-7204HWI-E1/C/F, DS-7208HWI-E2/C/F, DS-7216HWI-E2/C/F

DVR Installation

During the installation of the DVR:

1. Use brackets for rack mounting.
2. Ensure there is ample room for audio and video cables.
3. When installing cables, ensure that the bend radius of the cables are no less than five times than its diameter.
4. Connect both the alarm and RS-485 cable.
5. Allow at least 2cm (≈0.75-inch) of space between racks mounted devices.
6. Ensure the DVR 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% ~ 90%.

Hard Disk Installation

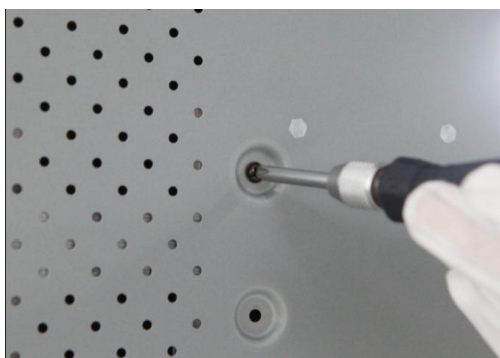
Before you start:

Before installing a hard disk drive (HDD), please make sure the power is disconnected from the DVR. A factory recommended HDD should be used for this installation.

Tools Required: Screwdriver.

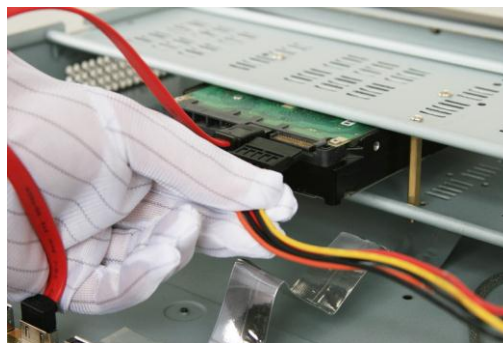
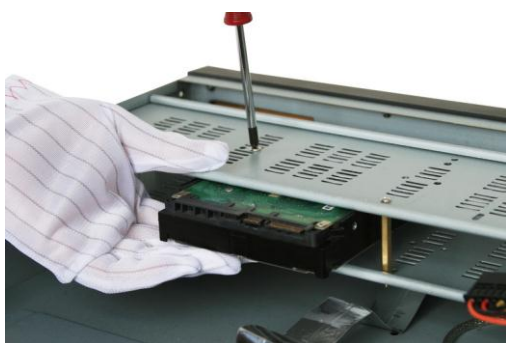
Steps (for DS-7200 and DS-7300 series):

1. Remove the cover from the DVR 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 bottom to fix the HDD.
3. Connect the HDD to the motherboard of the DVR with the included data cable.
4. Connect the power cable to the HDD.
5. Re-install the cover of the DVR and fasten screws.



Steps (for DS-8100 series):

1. Remove the cover from the DVR by unfastening the screws on the back and side.
2. Install the HDD to the HDD rack using the provided screws, and then fasten the screws to fix the HDD.
3. Connect one end of the data cable to the motherboard of DVR and the other end to the HDD.
4. Connect the power cable to the HDD.
5. Re-install the cover of the DVR and fasten screws.



Front Panel

DS-7200

The front panel of DS-7200 series DVR is shown below:

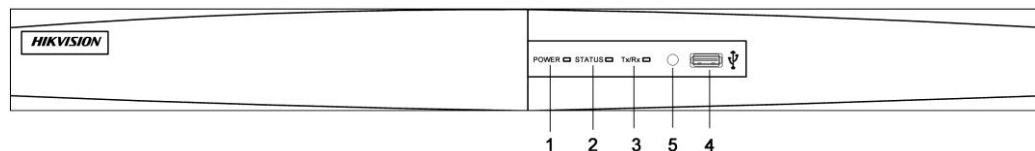


Table 1 Description of Control Panel Buttons

No.	Name	Function Description
1	POWER	POWER indicator turns green when DVR is powered up.
2	STATUS	STATUS indicator lights in red when data is being read from or written to HDD.
3	Tx/Rx	Tx/Rx indicator blinks green when network connection is functioning properly.
4	USB Interface	Connects USB mouse or USB flash memory devices.
5	IR Receiver	Receiver for IR remote.

DS-7300

The front panel of DS-7300-SH is shown below:

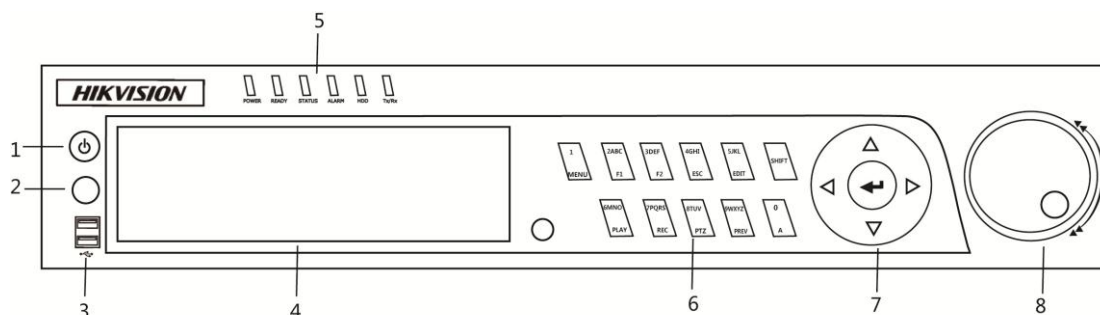


Table 2 Description of Control Panel Buttons

No.	Name	Function Description
1	POWER ON/OFF	Power on/off switch.
2	IR Receiver	Receiver for IR remote control.
3	USB	Connect to USB mouse or USB flash memory devices.
4	DVD-R/W	Slot for DVD-R/W.
5	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;
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 indicator blinks in green when network connection is functioning properly.	

6	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.
	SHIFT	Switch of compound keys between the numeric/letter input and functional control.
	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.
7	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.
8	JOG SHUTTLE Control	Move the active selection in a menu. The inner ring will move the selection up and down; the outer ring will move it left and right. In Playback mode, the inner ring is used to jump 30s forward/backward in video files. The outer ring can be used to speed up/slow down the video. In Live View mode, it can be used to cycle through different channels. In PTZ control mode, it can control the movement of the PTZ camera.

DS-8100

The front panel of DS-8100 is shown below:

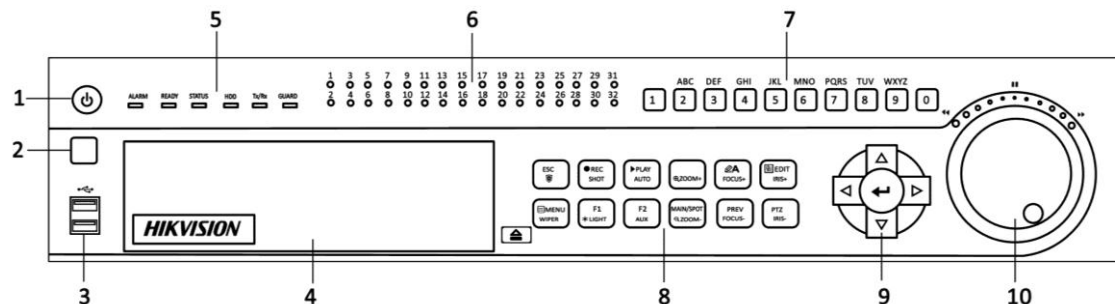


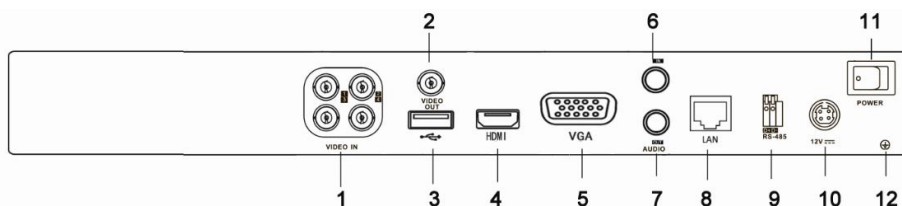
Table 3 Description of Control Panel Buttons

No.	Name	Function Description
1	POWER ON/OFF	Power on/off switch.
2	IR Receiver	Receiver for IR remote control.
3	USB	Connect to USB mouse or USB flash memory devices.
4	DVD-R/W	Slot for DVD-R/W.
5	ALARM	Alarm indicator turns red when a sensor alarm is detected.
	READY	Ready indicator is normally blue, indicating that the DVR is functioning properly.
	STATUS	Indicator turns blue when DVR is controlled by an IR remote. Indicator turns red when controlled by a keyboard and orange when IR remote and keyboard is used at the same time. Indicator does not light when the DVR is controlled by the IR remote control with the address of 255.
	HDD	HDD indicator blinks in red when data is being read from or written to HDD.
	Tx/Rx	Tx/Rx indicator blinks in blue when network connection is functioning properly.
	GUARD	Indicator turns blue when the device is armed; Indicator does not light when the device is disarmed; The arm/disarm state can be initiated by pressing and holding on the ESC button for more than 3 seconds in live view mode.
6	Channel Status LED Indicators	The button lights in 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.
7	Alphanumeric Buttons	Switch to the corresponding channel in Live View or PTZ Control mode. Input numbers and characters in Edit mode. Switch between different channels in All-day Playback mode.
8	ESC	Exit and back to the previous menu. Arm/disarm the DVR in live view mode.
	REC/SHOT	Enter the Manual Record interface. Turn audio on/off in Playback mode; In PTZ control mode, pressing the REC/SHOT button and a Numeric button will call a PTZ preset.
	PLAY/AUTO	Enter the Playback menu; Auto scan in the PTZ Control mode.
	ZOOM+ Button	In PTZ control mode, the ZOOM+ button is used to zoom in the PTZ camera.
	A/FOCUS+	Adjust focus in the PTZ Control mode. Switch between input methods (upper and lowercase alphabet, symbols and numeric input).
	EDIT/IRIS+	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. 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.

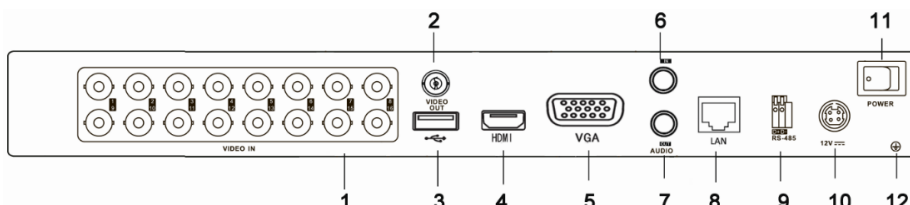
	MENU/WIPER	Return to the Main menu (after successful login); Turn off audible key beeper by pressing and holding the button for 5 seconds; Start wiper (if applicable) in PTZ Control mode.
	F1/LIGHT	The F1/LIGHT button when used in a list field will select all items on the list. In PTZ Control mode, it will turn on/off PTZ light.
	F2/AUX	The F2/AUX button is used to cycle through tab pages.
	MAIN/SPOT/ZOOM-	Switch to the control of spot output; In PTZ Control mode, it can be used to zoom out the PTZ camera.
	PREV/FOCUS-	Switch between single screen and multi-screen mode. In PTZ Control mode, it is used to adjust the focus in conjunction with the A/FOCUS+ button.
	PTZ/IRIS-	Enter the PTZ Control mode. In PTZ Control mode, it is used to close the iris of the PTZ camera.
9	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.
10	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, it can control the movement of the PTZ camera.

Rear Panel

DS-7204



DS-7216

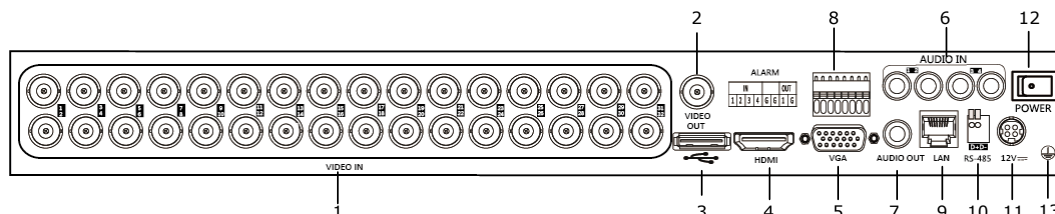


The rear panel of DS-7208 series provides 8 video input interfaces.

Table 4 Description of Rear Panel

No.	Item	Description
1	VIDEO IN	BNC connector for analog video input.
2	VIDEO OUT	BNC connector for video output.
3	USB Interface	Connects USB mouse or USB flash memory devices.
4	HDMI	HDMI video output.
5	VGA	DB15 connector for VGA output. Display local video output and menu.
6	AUDIO IN	RCA connector for audio input.
7	AUDIO OUT	RCA connector for audio output.
8	LAN Interface	RJ45 10M / 100M Ethernet interface.
9	RS-485 Interface	Connector for RS-485 devices. Connect the D+ and D- terminals to R+ and R- terminals of PTZ receiver respectively.
10	12V	12VDC power supply.
11	POWER	Switch for turning on/off the device.
12	GND	Ground(needs to be connected when DVR starts up)

DS-7232

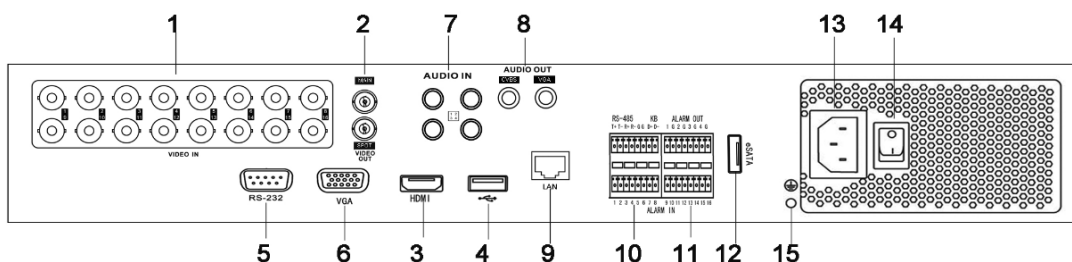


The rear panel of DS-7224 series provides 24 video input interfaces.

Table 5 Description of Rear Panel

No.	Item	Description
1	VIDEO IN	BNC connector for analog video input.
2	VIDEO OUT	BNC connector for video output.
3	USB Interface	Connects USB mouse or USB flash memory devices.
4	HDMI	HDMI video output.
5	VGA	DB15 connector for VGA output. Display local video output and menu.
6	AUDIO IN	RCA connector for audio input.
7	AUDIO OUT	RCA connector for audio output.
8	Alarm In/Out	Connector for alarm input/output.
9	LAN Interface	RJ45 10M / 100M / 1000M Ethernet interface.
10	RS-485 Interface	Connector for RS-485 devices. Connect the D+ and D- terminals to R+ and R- terminals of PTZ receiver respectively.
11	12V	12VDC power supply.
12	POWER	Switch for turning on/off the device.
13	GND	Ground(needs to be connected when DVR starts up)

DS-7316



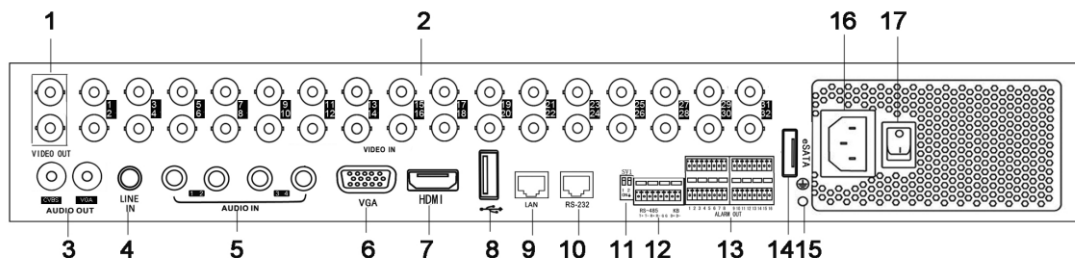
The rear panel of DS-7304 provides 4 video input interfaces, and the rear panel of DS-7308 provides 8 video input interfaces.

Table 6 Description of Rear Panel

No.	Item	Description
1	VIDEO IN	BNC connector for analog video input.
2	MAIN VIDEO OUT	BNC connector for video output.
	SPOT VIDEO OUT	BNC connector for spot video output.
3	HDMI	HDMI video output.
4	USB Interface	Connects USB mouse or USB flash memory devices.
5	RS-232	Connector for RS-232 devices.
6	VGA	DB15 connector for VGA output. Display local video output and menu.
7	AUDIO IN	RCA connector for audio input.
8	AUDIO OUT	RCA connector for audio output.
9	LAN Interface	RJ45 10M / 100M / 1000M Ethernet interface.
10	RS-485 Interface	Connector for RS-485 devices. Connect the D+ and D- terminals to R+ and R- terminals of PTZ receiver respectively.
	KB	Connect the D+ and D- terminals to Ta and Tb terminals of the controller. For cascading devices, the first DVR's D+ and D- terminals should be connected with the D+ and D- terminals of the next DVR.
11	Alarm In/Out	Connector for alarm input/output.
12	eSATA	Connects external SATA HDD, DVD-R/W.
13	100~240VAC	100~240VAC power supply.

14	POWER	Switch for turning on/off the device.
15	GND	Ground(needs to be connected when DVR starts up)

DS-7332

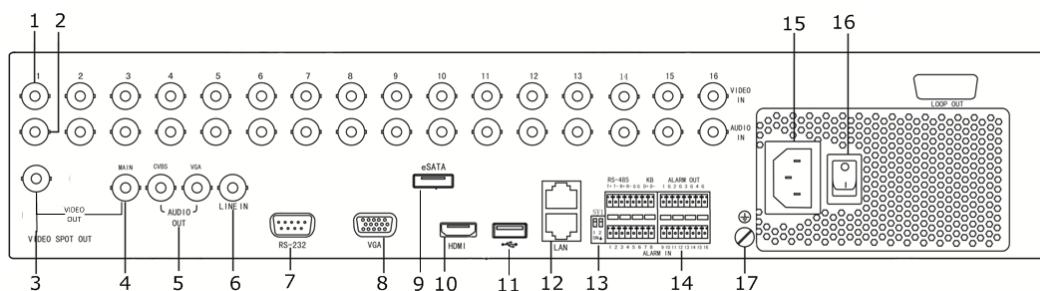


The rear panel of DS-7324 provides 24 video input interfaces.

Table 7 Description of Rear Panel

No.	Item	Description
1	MAIN VIDEO OUT	BNC connector for video output.
	SPOT VIDEO OUT	BNC connector for spot video output.
2	VIDEO IN	BNC connector for analog video input.
3	CVBS AUDIO OUT	RCA connector for audio output. This connector is synchronized with CVBS video output.
	VGA AUDIO OUT	RCA connector for audio output. This connector is synchronized with VGA video output.
4	LINE IN	RCA connector for two-way audio input.
5	AUDIO IN	RCA connector for audio input.
6	VGA	DB15 connector for VGA output. Display local video output and menu.
7	HDMI	HDMI video output.
8	USB Interface	Connects USB mouse or USB flash memory devices.
9	LAN Interface	RJ45 10M / 100M / 1000M Ethernet interface.
10	RS-232	Connector for RS-232 devices.
11	Termination Switch	RS-485 termination switch. Up position is not terminated. Down is terminated with 120Ω resistance.
12	RS-485 Interface	Connector for RS-485 devices. Connect the T+ and T- terminals to the R+ and R- terminals of PTZ receiver respectively.
	KB	Connect the D+ and D- terminals to Ta and Tb terminals of the controller. For cascading devices, the first DVR's D+ and D- terminals should be connected with the D+ and D- terminals of the next DVR.
13	Alarm In/Out	Connector for alarm input/output.
14	eSATA	Connects external SATA HDD, DVD-R/W.
15	GND	Ground(needs to be connected when DVR starts up)
16	100~240VAC	100~240VAC power supply.
17	POWER	Switch for turning on/off the device.

DS-8116

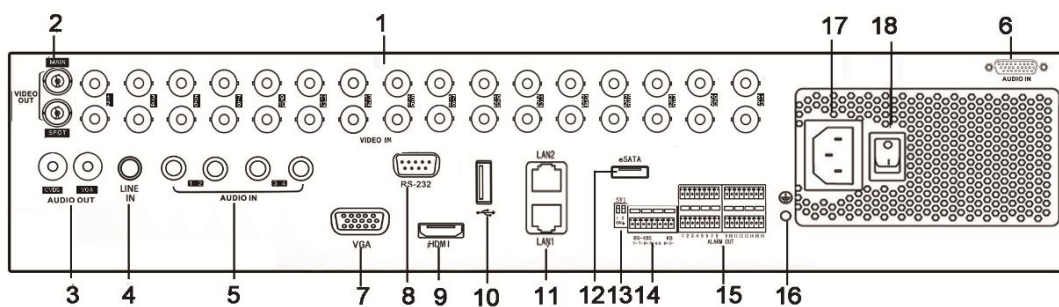


DS-8104/DS-8108 model provides 4/8 video and audio input interfaces on the rear panel and one LAN network interface.

Table 8 Description of Rear Panel

No.	Item	Description
1	VIDEO IN	BNC connector for analog video input.
2	AUDIO IN	BNC connector for audio input.
3	SPOT VIDEO OUT	BNC connector for spot video output.
4	MAIN VIDEO OUT	BNC connector for main video output.
5	CVBS AUDIO OUT	RCA connector for audio output. This connector is synchronized with CVBS video output.
	VGA AUDIO OUT	RCA connector for audio output. This connector is synchronized with VGA video output.
6	LINE IN	RCA connector for two-way audio input.
7	RS-232	Connector for RS-232 devices.
8	VGA	DB15 connector for VGA output. Display local video output and menu.
9	eSATA	Connects external SATA HDD, DVD-R/W.
10	HDMI	HDMI video output.
11	USB Interface	Connects USB mouse or USB flash memory devices.
12	LAN1/LAN2 Interface	2 RJ45 10M/100M/1000M Ethernet interfaces.
13	Termination Switch	RS-485 termination switch. Up position is not terminated. Down is terminated with 120Ω resistance.
14	RS-485 Interface	Connector for RS-485 devices. Connect the T+ and T- terminals to the R+ and R- terminals of PTZ receiver respectively.
	KB	Connect the D+ and D- terminals to Ta and Tb terminals of the controller. For cascading devices, the first DVR's D+ and D- terminals should be connected with the D+ and D- terminals of the next DVR.
	Alarm In/Out	Connector for alarm input/output.
15	100~240VAC	100~240VAC power supply.
16	POWER	Switch for turning on/off the device.
17	GND	Ground(needs to be connected when DVR starts up)

DS-8132



The rear panel of DS-8124 series provides 24 video input interfaces.

Table 9 Description of Rear Panel

No.	Item	Description
1	VIDEO IN	BNC connector for analog video input.
2	MAIN VIDEO OUT	BNC connector for video output.
	SPOT VIDEO OUT	BNC connector for spot video output.
3	CVBS AUDIO OUT	RCA connector for audio output. This connector is synchronized with CVBS video output.
	VGA AUDIO OUT	RCA connector for audio output. This connector is synchronized with VGA video output.
4	LINE IN	RCA connector for two-way audio input.
5	AUDIO IN (1-4)	RCA connector for audio input.
6	AUDIO IN (5-16)	DB26 connector for audio input.
7	VGA	DB15 connector for VGA output. Display local video output and menu.
8	RS-232	Connector for RS-232 devices.
9	HDMI	HDMI video output.
10	USB Interface	Connects USB mouse or USB flash memory devices.
11	LAN1/LAN2 Interface	2 RJ45 10M / 100M / 1000M Ethernet interfaces.
12	eSATA	Connects external SATA HDD, DVD-R/W.
13	Termination Switch	RS-485 termination switch. Up position is not terminated. Down is terminated with 120Ω resistance.
14	RS-485 Interface	Connector for RS-485 devices. Connect the T+ and T- terminals to the R+ and R- terminals of PTZ receiver respectively.
	KB	Connect the D+ and D- terminals to Ta and Tb terminals of the controller. For cascading devices, the first DVR's D+ and D- terminals should be connected with the D+ and D- terminals of the next DVR.
15	Alarm In/Out	Connector for alarm input/output.
16	GND	Ground(needs to be connected when DVR starts up)
17	100~240VAC	100~240VAC power supply.
18	POWER	Switch for turning on/off the device.

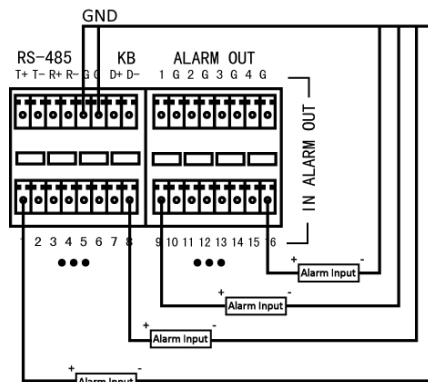
Peripheral Connections



Alarm input/output connections are for DS-7224/7232, DS-7300 and DS-8100 models only.

Wiring of Alarm Input

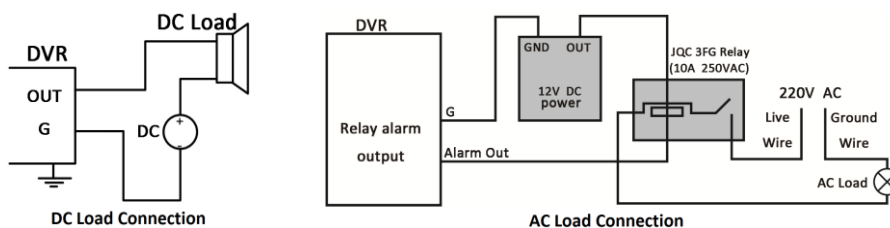
The alarm input/output interface of the DVR is shown as below:



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

Wiring of Alarm Output

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



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

For AC load, the jumpers should be left open. 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 device, you must remove the JP3.

Alarm Connection

To connect alarm devices to the DVR:

1. Disconnect *pluggable block* from the ALARM IN /ALARM OUT terminal block.
2. Press and hold the orange part of the *pluggable block*; insert signal cables into slots and release the orange part. Ensure signal cables are in tight.
3. Connect *pluggable block* back into terminal block.

RS-485 Connections

To connect RS-485 devices (e.g., pan/tilt unit) to the DVR:

Press and hold the orange part of the *pluggable block*; insert signal cables into slots and release the orange part.

Ensure signal cables are in tight.



Make sure the pan/tilt receiver unit is connected to the D+ and D- of the RS-485 terminal of DS-7200 and DS-7304/7308/7316 DVR, or to the T+ and T- of the RS-485 terminal of DS-7324/7332 and DS-8124/8132 DVR.

Specifications

Table 10 Specifications for DS-7204/7208/7216HFI-SH

Model		DS-7204HFI-SH	DS-7208HFI-SH	DS-7216HFI-SH
Video/Audio input	Video compression	H.264		
	Analog video input	4-ch	8-ch	16-ch
	IP video input	1-ch	2-ch	2-ch
		Up to 720P resolution	Up to 1080P resolution	
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL/NTSC self-adaptive		
	Audio compression	G.711u		
	Audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ)		
Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ) (using the audio input)			
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz		
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480		
	Encoding resolution	4CIF / 2CIF / CIF / QCIF		
	Frame rate	25 fps (P) / 30 fps (N)		
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)		
	Audio output	1-ch, RCA (Linear, 1 kΩ)		
	Audio bit rate	64 Kbps		
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N)		
	Stream type	Video, Video & Audio		
	Synchronous playback	4-ch	8-ch	16-ch
Hard disk	SATA	1 SATA interface	2 SATA interfaces	2 SATA interfaces
	Capacity	Up to 4TB capacity		
External interface	Network interface	1, RJ45 10M / 100M Ethernet interface		
	Serial interface	1 RS-485 interface, half-duplex		
	USB interface	2, USB 2.0		
General	Power supply	12 VDC		
	Consumption (without HDD or DVD-R/W)	≤ 10 W	≤ 15 W	≤ 20 W
	Working temperature	-10 ℃ ~ +55 ℃		
	Working humidity	10% ~ 90%		
	Chassis	Standalone 1U chassis	19-inch rack-mounted 1U chassis	19-inch rack-mounted 1U chassis
	Dimensions (W × D × H)	315 × 230 × 45 mm	445 × 290 × 45 mm	445 × 290 × 45 mm
	Weight (without HDD or DVD-R/W)	≤ 2 kg	≤ 4 kg	≤ 4 kg

Table 11 Specifications for DS-7204/7208/7216HVI-SH

Model		DS-7204HVI-SH	DS-7208HVI-SH	DS-7216HVI-SH
Video/Audio input	Video compression	H.264		
	Analog video input	4-ch	8-ch	16-ch
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL /NTSC self-adaptive		
	Audio compression	G.711u		
	Audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ)		
	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ) (using the audio input)		
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, UXGA: 1600×1200/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz		
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480		
	Encoding resolution	4CIF / 2CIF / CIF / QCIF		
	Frame rate	Mode1: 4CIF / 2CIF @ 15 fps or CIF / QCIF @ 25 fps (P) / 30 fps (N) Mode2: Channel 1: 4CIF / 2CIF / CIF / QCIF @ 25 fps (P) / 30 fps (N), Channel 2~4: CIF / QCIF @ 25 fps (P) / 30 fps (N)	Mode1: 4CIF / 2CIF @ 15 fps or CIF / QCIF @ 25 fps (P) / 30 fps (N) Mode2: Channel 1 & Channel 5: 4CIF / 2CIF / CIF / QCIF @ 25 fps (P) / 30 fps (N), Other Channels: CIF / QCIF @ 25 fps (P) / 30 fps (N)	Mode1: 4CIF / 2CIF @ 6fps or CIF / QCIF @ 25 fps (P) / 30 fps (N) Mode2: Channel 1: 4CIF / 2CIF / CIF / QCIF @ 25 fps (P) / 30 fps (N), Channel 2~16: CIF / QCIF @ 25 fps (P) / 30 fps (N)
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)		
	Audio output	1-ch, RCA (Linear, 1 kΩ)		
	Audio bit rate	64 Kbps		
	Dual-stream	Support; Sub-stream: CIF @ 6 fps, QCIF @ 25 fps (P) / 30 fps (N)		
	Stream type	Video, Video & Audio		
	Synchronous playback	4-ch	8-ch	16-ch
Hard disk	SATA	1 SATA interface		
	Capacity	Up to 4TB capacity		
External interface	Network interface	1, RJ45 10M / 100M Ethernet interface		
	Serial interface	1 RS-485 interface, half-duplex		
	USB interface	2, USB 2.0		
General	Power supply	12 VDC		
	Consumption (without HDD or DVD-R/W)	≤ 10 W	≤ 10 W	≤ 15 W
	Working temperature	-10 ℃ ~+55 ℃		
	Working humidity	10% ~ 90%		
	Chassis	Standalone 1U chassis		
	Dimensions (W × D × H)	315 × 230 × 45 mm		
	Weight (without HDD or DVD-R/W)	≤ 2 kg	≤ 4 kg	≤ 4 kg

Table 12 Specifications for DS-7224/7232HVI-SH

Model		DS-7224HVI-SH	DS-7232HVI-SH
Video/Audio input	Video compression	H.264	
	Video input	24-ch	32-ch
	Video input interface	BNC (1.0 V _{p-p} , 75 Ω), PAL /NTSC self-adaptive	
	Audio compression	G.711u	
	Audio input	4-ch, RCA (2.0 V _{p-p} , 1 kΩ)	
	Two-way audio input	1-ch, RCA (2.0 V _{p-p} , 1 kΩ) (using the audio input)	
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080P/60Hz, SXGA: 1280×1024/60 Hz, 720P: 1280×720/60 Hz, XGA: 1024×768/60 Hz	
	CVBS output	1-ch, BNC (1.0 V _{p-p} , 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480	
	Encoding resolution	WD1/ 4CIF / 2CIF / CIF / QCIF	
	Frame rate	WD1 / 4CIF @ 15 fps or 2CIF / CIF / QCIF @ 25 fps (P) / 30 fps (N)	
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)	
	Audio output	1-ch, RCA (Linear, 1 kΩ)	
	Audio bit rate	64 Kbps	
	Dual-stream	Support; Sub-stream: CIF / QCIF	
	Stream type	Video, Video & Audio	
Hard disk	Synchronous playback	16-ch	
	SATA	2 SATA interface	
External interface	Capacity	Up to 4TB capacity	
	Network interface	1, RJ45 10M /100M /1000M Ethernet interface	
	Serial interface	1 RS-485 interface, half-duplex	
	USB interface	2, USB 2.0	
	Alarm in	4	
General	Alarm out	1	
	Power supply	12 VDC	
	Consumption (without hard disk or DVD-R/W)	≤ 25 W	
	Working temperature	-10 °C ~+55 °C	
	Working humidity	10% ~ 90%	
	Chassis	19-inch rack-mounted 1U chassis	
	Dimensions (W × D × H)	445 × 290 × 45 mm	
Weight (without hard disk or DVD-R/W)	≤ 4 kg		

Table 13 Specifications for DS-7200HVI-SV

Model		DS-7204HVI-SV	DS-7208HVI-SV	DS-7216HVI-SV
Video/Audio input	Video compression	H.264		
	Analog video input	4-ch	8-ch	16-ch
	IP video input	1-ch	2-ch	2-ch
		Up to 720P resolution	Up to 1080P resolution	
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL /NTSC self-adaptive		
	Audio compression	G.711u		
	Audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ)		
Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ) (using the audio input)			
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz		
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480		
	Encoding resolution	WD1 / 4CIF / 2CIF / CIF / QCIF		
	Frame rate	WD1 / 4CIF / 2CIF @ 15 fps; CIF / QCIF @ 25 fps (P) / 30 fps (N)	WD1 / 4CIF / 2CIF @ 15 fps; CIF / QCIF @ 25 fps (P) / 30 fps (N)	WD1 @ 8 fps; 4CIF / 2CIF @ 10 fps; CIF / QCIF @ 25 fps (P) / 30 fps (N)
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)		
	Audio output	1-ch, RCA (Linear, 1 kΩ)		
	Audio bit rate	64 Kbps		
	Dual-stream	Support; sub-stream @ CIF / QCIF		
	Stream type	Video, Video & Audio		
	Synchronous playback	4-ch	8-ch	16-ch
Hard disk	SATA	1 SATA interface		
	Capacity	Up to 4TB capacity		
External interface	Network interface	1, RJ45 10M / 100M Ethernet interface		
	Serial interface	1 RS-485 interface, half-duplex		
	USB interface	2, USB 2.0		
General	Power supply	12 VDC		
	Consumption (without HDD or DVD-R/W)	≤ 10 W	≤ 10 W	≤ 15 W
	Working temperature	-10 ℃ ~+55 ℃		
	Working humidity	10% ~ 90%		
	Chassis	Standalone 1U chassis		
	Dimensions (W × D × H)	315 × 230 × 45 mm		
Weight (without HDD or DVD-R/W)	≤ 2 kg			

Table 14 Specifications for DS-7204/7208/7216HWI-SH

Model		DS-7204HWI-SH	DS-7208HWI-SH	DS-7216HWI-SH
Video/Audio input	Video compression	H.264		
	Analog video input	4-ch	8-ch	16-ch
	IP video input	1-ch	2-ch	2-ch
		Up to 720P resolution	Up to 1080P resolution	
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL /NTSC self-adaptive		
	Audio compression	G.711u		
	Audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ)		
Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ) (using the audio input)			
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz		
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480		
	Encoding resolution	WD1 / 4CIF / 2CIF / CIF / QCIF		
	Frame rate	25 fps (P) / 30 fps (N)		
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)		
	Audio output	1-ch, RCA (Linear, 1 kΩ)		
	Audio bit rate	64 Kbps		
	Dual-stream	Support; sub-stream @ CIF/ QCIF		
	Stream type	Video, Video & Audio		
	Synchronous playback	4-ch	8-ch	16-ch
Hard disk	SATA	1 SATA interface	2 SATA interfaces	
	Capacity	Up to 4TB capacity for each disk		
External interface	Network interface	1, RJ45 10M / 100M Ethernet interface		
	Serial interface	1, RS-485 interface, half-duplex		
	USB interface	2, USB 2.0		
General	Power supply	12 VDC		
	Consumption (without hard disk or DVD-R/W)	≤ 10 W	≤ 15 W	≤ 20 W
	Working temperature	-10 ℃ ~+55 ℃		
	Working humidity	10% ~ 90%		
	Chassis	Standalone 1U chassis	19-inch rack-mounted 1U chassis	
	Dimensions (W × D × H)	315 × 230 × 45 mm	445 × 290 × 45mm	
	Weight (without hard disk or DVD-R/W)	≤ 2 kg	≤ 4 kg	≤ 4 kg

Table 15 Specifications for DS-7224/7232HWI-SH, DS-7224HWI-E2

Model		DS-7224HWI-SH DS-7224HWI-E2	DS-7232HWI-SH
Video/Audio input	Video compression	H.264	
	Video input	24-ch	32-ch
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL /NTSC self-adaptive	
	Audio compression	G.711u	
	Audio input	4-ch, RCA (2.0 Vp-p, 1 kΩ)	
	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ) (using the audio input)	
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080P/60 Hz, SXGA: 1280×1024/60 Hz, 720P, 1280×720/60 Hz, XGA: 1024×768/60 Hz	
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 ×576, NTSC: 704 ×480	
	Encoding resolution	WD1/ 4CIF / 2CIF / CIF / QCIF	
	Frame rate	25 fps (P) / 30 fps (N)	
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)	
	Audio output	1-ch, RCA (Linear, 1 kΩ)	
	Audio bit rate	64 Kbps	
	Dual-stream	Support; Sub-stream: CIF / QCIF	
	Stream type	Video, Video & Audio	
	Synchronous playback	16-ch	
Hard disk	SATA	2 SATA interface	
	Capacity	Up to 4TB capacity for each disk	
External interface	Network interface	1, RJ45 10M /100M /1000M Ethernet interface	
	Serial interface	1, RS-485 interface, half-duplex	
	USB interface	2, USB 2.0	
	Alarm in	4	
	Alarm out	1	
General	Power supply	12 VDC	
	Consumption (without hard disk or DVD-R/W)	≤ 25 W	
	Working temperature	-10 °C ~+55 °C	
	Working humidity	10% ~ 90%	
	Chassis	19-inch rack-mounted 1U chassis	
	Dimensions (W ×D ×H)	445 ×290 ×45 mm	
	Weight (without hard disk or DVD-R/W)	≤ 4 kg	

Table 16 Specifications for DS-7204HWI-SV

Model	DS-7204HWI-SV	
Video/ Audio input	Video compression	H.264
	Analog video input	4-ch
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL /NTSC self-adaptive
	Audio compression	G.711u
	Audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ)
	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ) (using the audio input)
Video/ Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, UXGA: 1600×1200/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480
	Encoding resolution	WD1/4CIF/2CIF/CIF/QCIF
	Frame rate	25 fps (P) / 30 fps (N)
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)
	Audio output	1-ch, RCA (Linear, 1 kΩ)
	Audio bit rate	64 Kbps
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N)
	Stream type	Video, Video & Audio
	Synchronous playback	4-ch
Hard disk	SATA	1 SATA interface
	Capacity	Up to 4TB capacity
External interface	Network interface	1, RJ45 10M / 100M Ethernet interface
	Serial interface	1, RS-485 interface, half-duplex
	USB interface	2, USB 2.0
General	Power supply	12 VDC
	Consumption (without hard disk or DVD-R/W)	≤ 10 W
	Working temperature	-10 ℃ ~+55 ℃
	Working humidity	10% ~ 90%
	Chassis	Standalone 1U chassis
	Dimensions (W × D × H)	315 × 230 × 45 mm
	Weight (without hard disk or DVD-R/W)	≤ 2 kg

Table 17 Specifications for DS-7200HWI-SL and DS-7200HWI-E1

Model		DS-7208HWI-SL DS-7208HWI-E1	DS-7216HWI-SL DS-7216HWI-E1	
Video/Audio input	Video compression	H.264		
	Analog video input	8-ch	16-ch	
	IP video input	2-ch	2-ch	
		Up to 1080P resolution		
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL /NTSC self-adaptive		
	Audio compression	G.711u		
	Audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ)		
Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ) (using the audio input)			
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz		
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480		
	Encoding resolution	WD1/4CIF/2CIF/CIF/QCIF		
	Frame rate	25 fps (P) / 30 fps (N)		
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)		
	Audio output	1-ch, RCA (Linear, 1 kΩ)		
	Audio bit rate	64 Kbps		
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N)		
	Stream type	Video, Video & Audio		
	Synchronous playback	8-ch	16-ch	
Hard disk	SATA	1 SATA interface		
	Capacity	Up to 4TB capacity		
External interface	Network interface	1, RJ45 10M / 100M Ethernet interface		
	Serial interface	1, RS-485 interface, half-duplex		
	USB interface	2, USB 2.0		
General	Power supply	12 VDC		
	Consumption (without hard disk or DVD-R/W)	≤ 10 W	≤ 15 W	
	Working temperature	-10 °C ~+55 °C		
	Working humidity	10% ~ 90%		
	Dimensions (W × D × H)	315 × 242 × 45 mm		
	Weight (without hard disk or DVD-R/W)	≤ 2 kg		

Table 18 Specifications for DS-7200HWI-E1(2)/C and DS-7200HWI-E1(2)/C/F

Model		DS-7204HWI-E1 DS-7204HWI-E1/C DS-7204HWI-E1/C/F	DS-7208HWI-E2 DS-7208HWI-E2/C DS-7208HWI-E2/C/ F	DS-7216HWI-E2 DS-7216HWI-E2/C DS-7216HWI-E2/C/ F
Video/Audio input	Video compression	H.264		
	Analog video input	4-ch	8-ch	16-ch
	IP video input	1-ch	2-ch	2-ch
		Up to 720P resolution	Up to 1080P resolution	
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL /NTSC self-adaptive		
	Audio compression	G.711u		
	Audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ)		
Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ) (using the audio input)			
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz		
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480		
	Encoding resolution	WD1 / 4CIF / 2CIF / CIF / QCIF		
	Frame rate	25 fps (P) / 30 fps (N)		
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)		
	Audio output	1-ch, RCA (Linear, 1 kΩ)		
	Audio bit rate	64 Kbps		
	Dual-stream	Support; sub-stream @ CIF/ QCIF		
	Stream type	Video, Video & Audio		
Synchronous playback	4-ch	8-ch	16-ch	
Hard disk	SATA	DS-7204HWI-E1, DS-7200HWI-E1/C: 1 SATA interface DS-7200HWI-E2, DS-7200HWI-E2/C: 2 SATA interface		
	Capacity	Up to 4TB capacity for each disk		
External interface	Network interface	1, RJ45 10M / 100M Ethernet interface		
	Serial interface	1, RS-485 interface, half-duplex		
	USB interface	2, USB 2.0		
General	Power supply	12 VDC		
	Consumption (without hard disk or DVD-R/W)	≤ 10 W	≤ 15 W	≤ 20 W
	Working temperature	-10 ℃ ~+55 ℃		
	Working humidity	10% ~ 90%		
	Dimensions (W × D × H)	315 × 242 × 45 mm	380 × 290 × 48 mm	
	Weight (without hard disk or DVD-R/W)	≤ 2 kg	≤ 4 kg	

Table 19 Specifications for DS-7300HFI-SH

Model		DS-7304 HFI-SH	DS-7308 HFI-SH	DS-7316 HFI-SH	DS-7324 HFI-SH	DS-7332 HFI-SH
Video/Audio input	Video compression	H.264				
	Analog video input	4-ch	8-ch	16-ch	24-ch	32-ch
	IP video input	1-ch	2-ch	2-ch	--	--
		Up to 720P resolution	Up to 1080P resolution			
	Video input interface	BNC (1.0 V _{p-p} , 75 Ω), PAL /NTSC self-adaptive				
	Audio compression	G.711u				
	Audio input	4-ch, RCA (2.0 V _{p-p} , 1 kΩ)				
Two-way audio input	1-ch, RCA (2.0 V _{p-p} , 1 kΩ) (using the audio input)					
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz				
	CVBS output	1-ch, BNC (1.0 V _{p-p} , 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480				
	Video spot out	1-ch, BNC (1.0 V _{p-p} , 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480				
	Encoding resolution	4CIF / 2CIF / CIF / QCIF				
	Frame rate	25 fps (P) / 30 fps (N)				
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)				
	Audio output	2-ch, RCA (Linear, 600 Ω)				
	Audio bit rate	64 Kbps				
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N)				
	Stream type	Video, Video & Audio	Channel 1-4: Video, Video & Audio; Other channels: Video			
Hard disk	SATA	4 SATA interfaces for 2HDDs + 1 DVD-R/W (default), or 4 HDDs				
	eSATA	1 eSATA interface				
	Capacity	Up to 4TB capacity				
External interface	Network interface	1, RJ45 10M / 100M / 1000M Ethernet interface				
	Serial interface	RS-232, RS-485(half-duplex), Keyboard			1 RS-232, RS-485(full-duplex), Keyboard	
	USB interface	3 × USB 2.0				
	Alarm in	4	8	16	16	
	Alarm out	1	4	4	8	
General	Power supply	100~240VAC, 50~60Hz				
	Consumption (without HDD or DVD-R/W)	≤ 25 W	≤ 30 W	≤ 35 W	≤ 40 W	
	Working temperature	-10 ℃ ~+55 ℃				
	Working humidity	10% ~ 90%				
	Chassis	19-inch rack-mounted 1.5U chassis				
	Dimensions (W × D × H)	445 × 390 × 70 mm				
Weight (without HDD or DVD-R/W)	≤ 5 kg					

Table 20 Specifications for DS-7300HWI-SH and DS-7300HWI-E4/C

Model		DS-7304 HWI-SH, DS-7304HWI -E4/C	DS-7308 HWI-SH, DS-7308HWI -E4/C	DS-7316 HWI-SH, DS-7316H WI-E4/C	DS-7324 HWI-SH	DS-7332 HWI-SH
Video/Audio input	Video compression	H.264				
	Video input	4-ch	8-ch	16-ch	24-ch	32-ch
	IP video input	1-ch	2-ch	2-ch	--	--
		Up to 720P resolution	Up to 1080P resolution			
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL /NTSC self-adaptive				
	Audio compression	G.711u				
	Audio input	4-ch, RCA (2.0 Vp-p, 1 kΩ)				
Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ) (using the audio input)					
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz				
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480				
	Video spot out	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480				
	Encoding resolution	WD1 / 4CIF / 2CIF / CIF / QCIF				
	Frame rate	25 fps (P) / 30 fps (N)				
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)				
	Audio output	2-ch, RCA (Linear, 600 Ω)				
	Audio bit rate	64 Kbps				
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N)				
	Stream type	Video, Video & Audio	Channel 1-4: Video, Video & Audio; Other channels: Video			
	Synchronous playback	4-ch	8-ch	16-ch		
Hard disk	SATA	DS-7300HWI-E4/C: 4 SATA interfaces for 4HDDs Other models: 4 SATA interfaces for 2HDDs + 1 DVD-R/W (default), or 4 HDDs				
	eSATA	1 eSATA interface				
	Capacity	Up to 4TB capacity for each disk				
External interface	Network interface	1, RJ45 10M / 100M / 1000M Ethernet interface				
	Serial interface	RS-232, RS-485(half-duplex), Keyboard			1RS-232,RS-485(full-duplex)Keyboard	
	USB interface	3 × USB 2.0				
	Alarm in	4	8	16	16	
	Alarm out	1	4	4	8	
General	Power supply	100~240VAC, 50~60Hz				
	Consumption (without HDD or DVD-R/W)	≤ 25 W	≤ 30 W	≤ 35 W	≤ 40 W	
	Working temperature	-10 °C ~+55 °C				
	Working humidity	10% ~ 90%				
	Chassis	19-inch rack-mounted 1.5U chassis				
	Dimensions (W × D × H)	445 × 390 × 70 mm				
	Weight (without HDD or DVD-R/W)	≤ 5 kg				

Table 21 Specifications for DS-7300HI-SH

Model		DS-7324HI-SH	DS-7332HI-SH
Video/Audio input	Video compression	H.264	
	Video input	24-ch	32-ch
	Video input interface	BNC (1.0 V _{p-p} , 75 Ω), PAL /NTSC self-adaptive	
	Audio compression	G.711u	
	Audio input	4-ch, RCA (2.0 V _{p-p} , 1 kΩ)	
	Two-way audio input	1-ch, RCA (2.0 V _{p-p} , 1 kΩ)	
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz	
	CVBS output	1-ch, BNC (1.0 V _{p-p} , 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480	
	Video spot out	1-ch, BNC (1.0 V _{p-p} , 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480	
	Encoding resolution	WD1 / 4CIF / 2CIF / CIF / QCIF	
	Frame rate	WD1 / 4CIF: 15 fps 2CIF / CIF / QCIF: 25 fps (P) / 30 fps (N)	
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)	
	Audio output	2-ch, RCA (Linear, 600 Ω)	
	Audio bit rate	64 Kbps	
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N)	
	Stream type	Channel 1-4: Video, Video & Audio; Other channels: Video	
	Synchronous playback	16-ch	
Hard disk	SATA	4 SATA interfaces for 2HDDs + 1 DVD-R/W (default), or 4 HDDs	
	eSATA	1 eSATA interface	
	Capacity	Up to 4TB capacity	
External interface	Network interface	1, RJ45 10M / 100M / 1000M Ethernet interface	
	Serial interface	RS-232, RS-485 (full-duplex), Keyboard	
	USB interface	3 × USB 2.0	
	Alarm in	16	
	Alarm out	8	
General	Power supply	100~240VAC, 50~60Hz	
	Consumption (without HDD or DVD-R/W)	≤ 40 W	
	Working temperature	-10 ℃ ~+55 ℃	
	Working humidity	10% ~ 90%	
	Chassis	19-inch rack-mounted 1.5U chassis	
	Dimensions (W × D × H)	445 × 390 × 70 mm	
	Weight (without HDD or DVD-R/W)	≤ 5 kg	

Table 22 Specifications for DS-8124/8132HCI-SH

Model		DS-8124HCI-SH	DS-8132HCI-SH
Video/Audio input	Video compression	H.264	
	Video input	24-ch	32-ch
	Video input interface	BNC (1.0 V _{p-p} , 75 Ω), PAL / NTSC self-adaptive	
	Audio compression	G.711u	
	Audio input	16-ch, Audio 1-4: RCA (2.0 V _{p-p} , 1 kΩ) Audio 5-16: DB26 connector	
	Two-way audio input	1-ch, RCA (2.0 V _{p-p} , 1 kΩ)	
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz	
	CVBS output	1-ch, BNC (1.0 V _{p-p} , 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480	
	Video spot out	1-ch, BNC (1.0 V _{p-p} , 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480	
	Encoding resolution	WD1 / 4CIF / 2CIF / CIF / QCIF	
	Frame rate	WD1 / 4CIF: 15fps 2CIF / CIF / QCIF: 25 fps (P) / 30 fps (N)	
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)	
	Audio output	2-ch, RCA (Linear, 1 kΩ)	
	Audio bit rate	64 Kbps	
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N)	
	Stream type	Channel 1-16: Video, Video & Audio; Other channels: Video	
	Synchronous playback	16-ch	
Hard disk	SATA	8 SATA interfaces for 4HDDs + 1 DVD-R/W (default), or 8 HDDs	
	eSATA	1 eSATA interface	
	Capacity	Up to 4TB capacity	
External interface	Network interface	2, RJ45 10M / 100M / 1000M Ethernet interface	
	Serial interface	RS-232, RS-485(full-duplex), Keyboard	
	USB interface	3 × USB 2.0	
	Alarm in	16	
	Alarm out	8	
General	Power supply	100~240VAC, 50~60Hz	
	Consumption (without HDD or DVD-R/W)	≤ 40 W	
	Working temperature	-10 °C ~+55 °C	
	Working humidity	10% ~ 90%	
	Chassis	19-inch rack-mounted 2U chassis	
	Dimensions (W × D × H)	445 × 470 × 95 mm	
	Weight (without HDD or DVD-R/W)	≤ 8 kg	

Table 23 Specifications for DS-8124/8132HFSI-SH

Model		DS-8124HFSI-SH	DS-8132HFSI-SH
Video/Audio input	Video compression	H.264	
	Video input	24-ch	32-ch
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL / NTSC self-adaptive	
	Audio compression	G.711u	
	Audio input	16-ch, Audio 1-4: RCA (2.0 Vp-p, 1 kΩ) Audio 5-16: DB26 connector	
	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ)	
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz	
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480	
	Video spot out	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480	
	Encoding resolution	4CIF / 2CIF / CIF / QCIF	
	Frame rate	25 fps (P) / 30 fps (N)	
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)	
	Audio output	2-ch, RCA (Linear, 1 kΩ)	
	Audio bit rate	64 Kbps	
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N)	
	Stream type	Channel 1-16: Video, Video & Audio; Other channels: Video	
	Synchronous playback	16-ch	
Hard disk	SATA	8 SATA interfaces for 4HDDs + 1 DVD-R/W (default), or 8 HDDs	
	eSATA	1 eSATA interface	
	Capacity	Up to 4TB capacity	
External interface	Network interface	2, RJ45 10M / 100M / 1000M Ethernet interface	
	Serial interface	RS-232, RS-485(full-duplex), Keyboard	
	USB interface	3 × USB 2.0	
	Alarm in	16	
	Alarm out	8	
General	Power supply	100~240VAC, 50~60Hz	
	Consumption (without HDD or DVD-R/W)	≤ 40 W	
	Working temperature	-10 °C ~ +55 °C	
	Working humidity	10% ~ 90%	
	Chassis	19-inch rack-mounted 2U chassis	
	Dimensions (W × D × H)	445 × 470 × 95 mm	
	Weight (without HDD or DVD-R/W)	≤ 8 kg	

Table 24 Specifications for DS-8124/8132HWSI-SH

Model		DS-8124HWSI-SH	DS-8132HWSI-SH
Video/Audio input	Video compression	H.264	
	Video input	24-ch	32-ch
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL / NTSC self-adaptive	
	Audio compression	G.711u	
	Audio input	16-ch, Audio 1-4: RCA (2.0 Vp-p, 1 kΩ); Audio 5-16: DB26 connector	
	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ)	
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz	
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480	
	Video spot out	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480	
	Encoding resolution	WD1 / 4CIF / 2CIF / CIF / QCIF	
	Frame rate	25 fps (P) / 30 fps (N)	
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)	
	Audio output	2-ch, RCA (Linear, 1 kΩ)	
	Audio bit rate	64 Kbps	
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N)	
	Stream type	Channel 1-16: Video, Video & Audio; Other channels: Video	
Synchronous playback	16-ch		
Hard disk	SATA	8 SATA interfaces for 4HDDs + 1 DVD-R/W (default), or 8 HDDs	
	eSATA	1 eSATA interface	
	Capacity	Up to 4TB capacity	
External interface	Network interface	2, RJ45 10M / 100M / 1000M Ethernet interface	
	Serial interface	RS-232, RS-485(full-duplex), Keyboard	
	USB interface	3 × USB 2.0	
	Alarm in	16	
	Alarm out	8	
General	Power supply	100~240VAC, 50~60Hz	
	Consumption (without HDD or DVD-R/W)	≤ 40 W	
	Working temperature	-10 °C ~+55 °C	
	Working humidity	10% ~ 90%	
	Chassis	19-inch rack-mounted 2U chassis	
	Dimensions (W × D × H)	445 × 470 × 95 mm	
	Weight (without HDD or DVD-R/W)	≤ 8 kg	

Table 25 Specifications for DS-8104/8108/8116HWI-E/C

Model		DS-8104HWI-E4/C	DS-8108HWI-E8/C	DS-8116HWI-E8/C
Video/Audio input	Video compression	H.264		
	Video input	4-ch	8-ch	16-ch
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL / NTSC self-adaptive		
	Audio compression	G.711u		
	Audio input	4-ch	8-ch	16-ch
	Two-way audio input	BNC (2.0 Vp-p, 75 Ω)		
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz		
	CVBS output	2-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480		
	Encoding resolution	WD1 / 4CIF / 2CIF / CIF / QCIF		
	Frame rate	25 fps (P) / 30 fps (N)		
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)		
	Audio output	2-ch, BNC (Linear, 1 kΩ)		
	Audio bit rate	64 Kbps		
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N)		
	Stream type	Video, Video & Audio;		
	Synchronous playback	4-ch	8-ch	16-ch
Hard disk	SATA	4 SATA interfaces	8 SATA interfaces	
	eSATA	1 eSATA interface		
	Capacity	Up to 4TB capacity		
External interface	Network interface	1	1	2
		RJ45 10M / 100M / 1000M Ethernet interface		
	Serial interface	RS-232, RS-485(full-duplex), Keyboard		
	USB interface	3 × USB 2.0		
	Alarm in	4	8	16
Alarm out	2	4	4	
General	Power supply	100~240VAC, 50~60Hz		
	Consumption (without HDD or DVD-R/W)	≤ 30 W	≤ 35 W	≤ 40 W
	Working temperature	-10 ℃ ~ +55 ℃		
	Working humidity	10% ~ 90%		
	Chassis	19-inch rack-mounted 2U chassis		
	Dimensions (W × D × H)	445 × 470 × 90 mm		
	Weight (without HDD or DVD-R/W)	≤ 8 kg		

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.

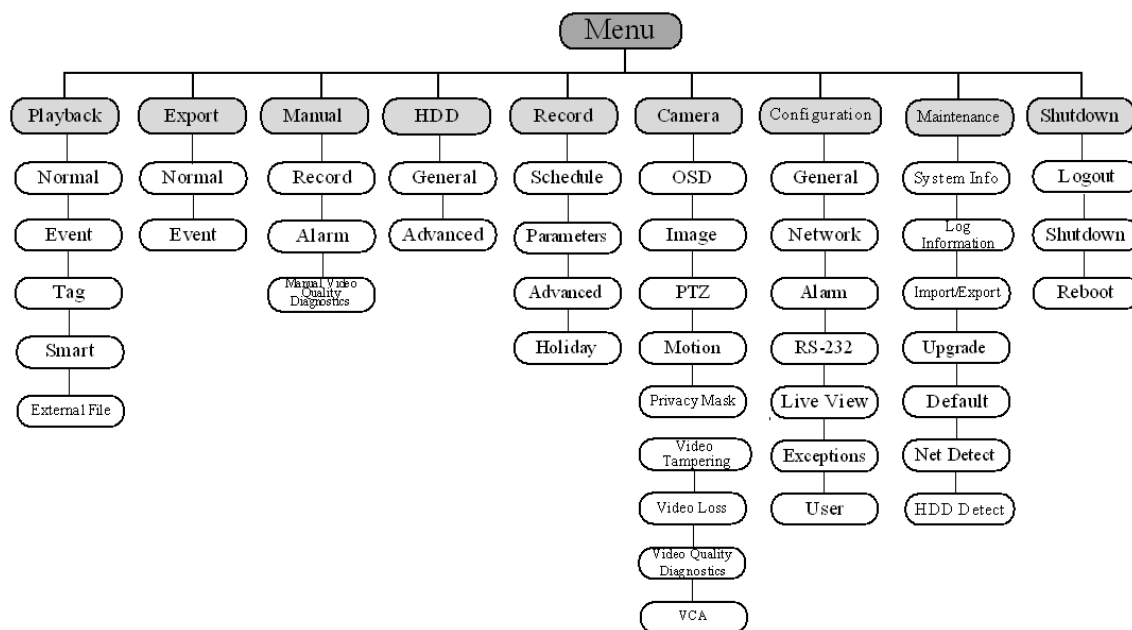
Bit Rate (Kbps)	Storage Used (MB)
96	42
128	56
160	70
192	84
224	98
256	112
320	140
384	168
448	196
512	225
640	281
768	337
896	393
1024	450
1280	562
1536	675
1792	787
2048	900
3072	1350



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

Menu Operation

Menu Structure



The menu structure varies according to different models.

Startup and Shutdown

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

Before you start:

Check that the voltage of the extra power supply is the same with the device’s requirement, and the ground connection is working properly.

Starting up the device:

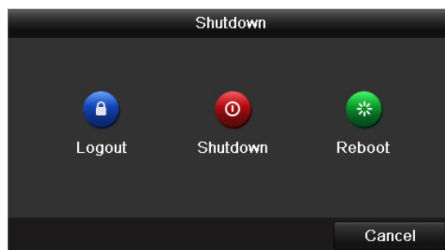
Steps:

1. Check the power supply is plugged into an electrical outlet. It is **HIGHLY** recommended that an Uninterruptible Power Supply (UPS) be used in conjunction with the device.
2. Press the **POWER** button on the rear panel. The Power indicator LED should turn green indicating that the unit begins to start up.

Shutting down the device:

Steps:

1. Enter the Shutdown menu.
Menu > Shutdown



2. Click the **Shutdown** button to enter the following dialog box:



3. Click the **Yes** button.
4. Turn off the power switch on the rear panel of DVR.

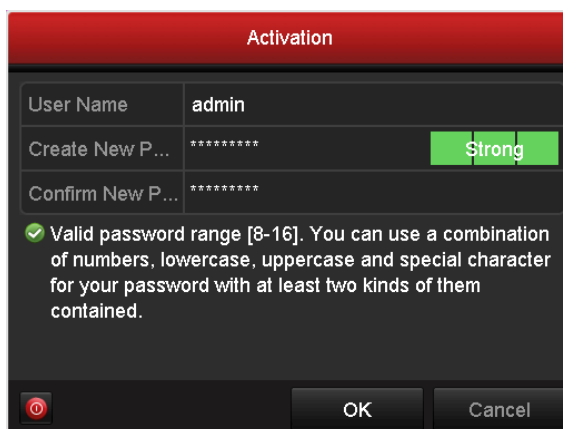
Setting the Admin Password


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**.

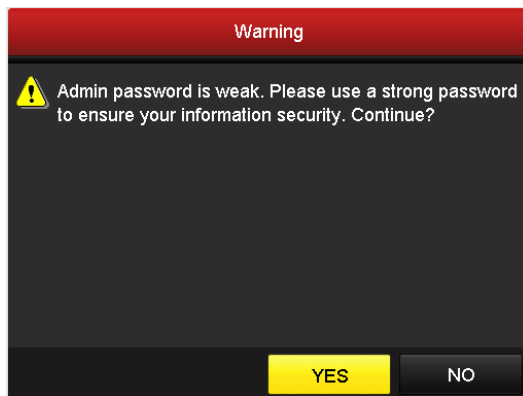


 **STRONG PASSWORD RECOMMENDED**– *We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your 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

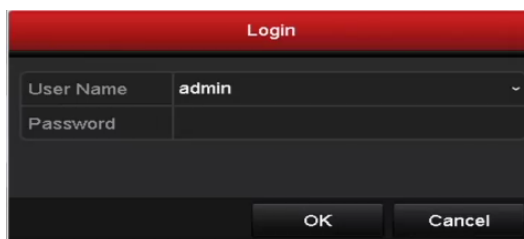
User Login

Purpose:

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

Steps:

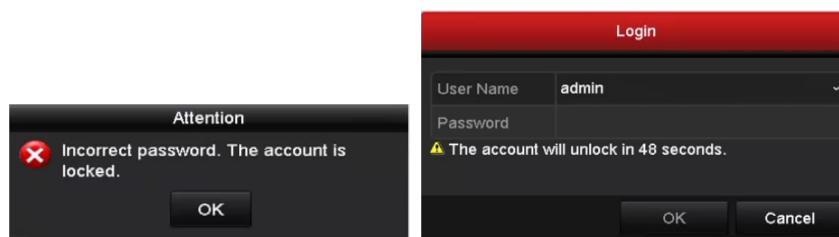
1. Select the **User Name** in the dropdown list.



2. Input **Password**.
3. Click **OK** to log in.



In the Login dialog box, if you have entered the wrong password for 7 times, the current user account will be locked for 60 seconds.



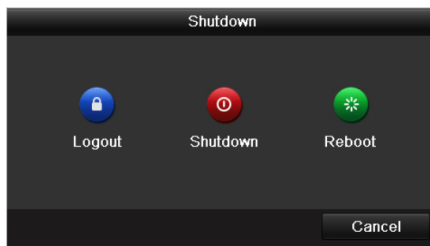
User Logout

Purpose:

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

Steps:

1. Enter the Shutdown menu.
Menu > Shutdown



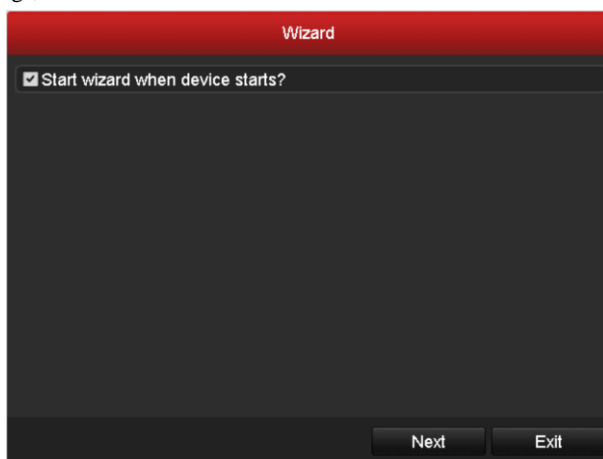
2. Click **Logout**.

Using the Setup Wizard

The Setup Wizard can walk you through some important settings of the device. By default, the Setup Wizard starts once the device has loaded.

Operating the Setup Wizard:

Check the checkbox to enable Setup Wizard when device starts. Click **Next** to continue the setup wizard. Follow the guide of the Setup Wizard to configure the system resolution, system date/time, network settings, HDD management, record settings, etc.



Live View

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

Live View Icons

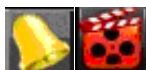
In the live view mode, there are icons at the right top of the screen for each channel, showing the status of the record and alarm in the channel, so that you can find problems as soon as possible.



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



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



Alarm & Record



The sensor alarm and alarm triggered record are supported by DS-7224/7232, DS-7224/7232, DS-7300 and DS-8100 models only.

Using the Mouse in Live View

In the live view mode, use the mouse to right-click on the window to access the following menu:

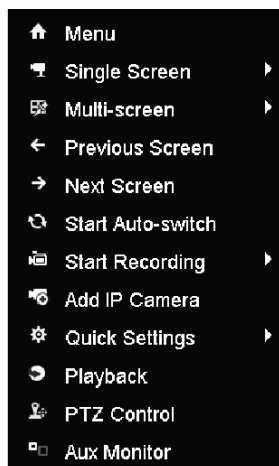




Table 26 Mouse Operation in Live View

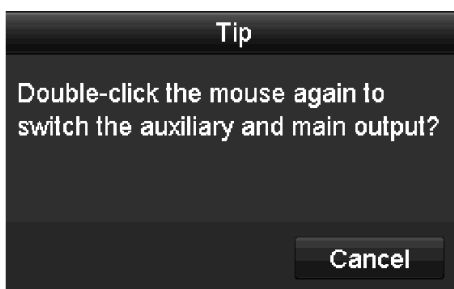
Name	Description
Menu	Enter the main menu of the system by right-clicking the mouse.
Single Screen	Switch to the single full screen by choosing channel number from the dropdown list.
Multi-screen	Adjust the screen layout by choosing from the dropdown list.
Previous Screen	Switch to the previous screen.
Next Screen	Switch to the next screen.
Start/Stop Auto-switch	Enable/disable the auto-switch of the screens.  NOTE The <i>dwell time</i> of the live view configuration must be set before using Start Auto-switch .
Start Recording	Start all-day normal recording or motion detection recording for all channels.
Add IP Camera	Enter the IP Camera Management interface to add the locally searched online IP camera quickly.
Quick Settings	Set the video output mode to Standard, Bright, Gentle or Vivid.
Playback	Play back the video of the selected channel.
PTZ Control	Enter the PTZ control panel.
Aux Monitor	Switch to the auxiliary output mode and the operation for the main output is disabled.  NOTE If you enter Aux monitor mode and the Aux monitor is not connected, the mouse operation is disabled; you need to use the mouse double click for twice to back to the Main output.

Main/Aux Output Switching

When the HDMI/VGA output is configured as the main output, you can perform the following operation to switch to CVBS output as the main output.

Steps:

1. Use the mouse wheel to double-click on the HDMI/VGA output screen, and the following message box pops up:



2. Use the mouse wheel to double-click on the screen again to switch to the Aux output, or click **Cancel** to cancel the operation.
3. On the aux output monitor, you can do some basic operation on the live view mode for the Aux output, including recording, live view, image settings, switch to main monitor, and no operation is allowed for the main output.
4. To switch to the main vide output, select the **Main Monitor** from the right-click menu or use the mouse wheel to double-click on the screen and then click **Yes** on the pop-up message box.



You can select the Menu Output Mode under Menu>Configuration>More Settings to Auto or HDMI/VGA and then restart the device to switch the main output back to HDMI/VGA output.

Adding IP Cameras

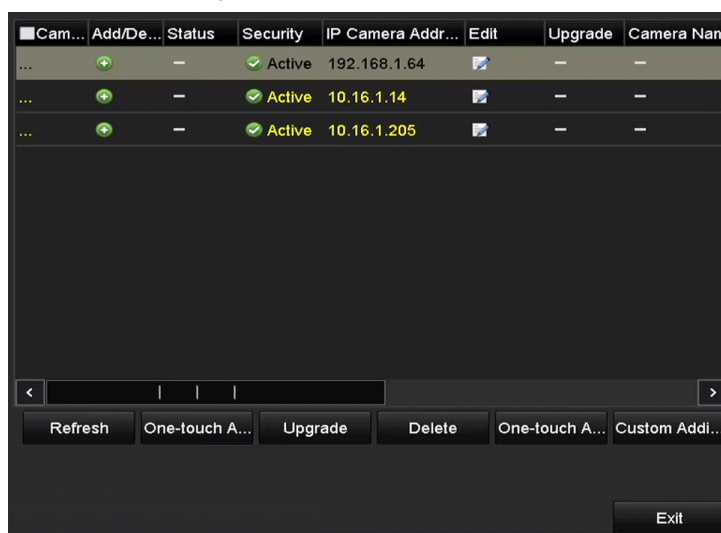


The connection of IP cameras is not supported by the DS-7100 series.

- **OPTION 1:**

Steps:

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

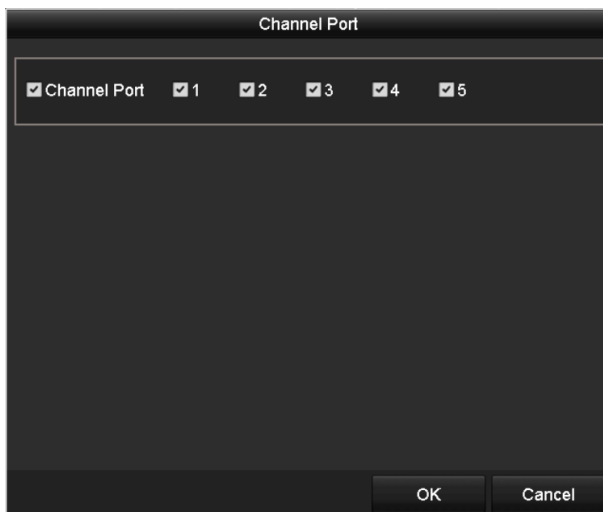


2. The online cameras with same network segment will be detected and displayed in the camera list.
3. Select the IP camera from the list and click the button to add the camera (with the same admin password of the DVR's). Or you can click the **One-touch Adding** button to add all cameras (with the same admin password) from the list.



Make sure the camera to add has already been activated by setting the admin password, and the admin password of the camera is the same with the DVR's.

4. (For the encoders with multiple channels only) check the checkbox of Channel Port in the pop-up window, as shown in the following figure, and click **OK** to add multiple channels.



- **OPTION 2:**

Steps:

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



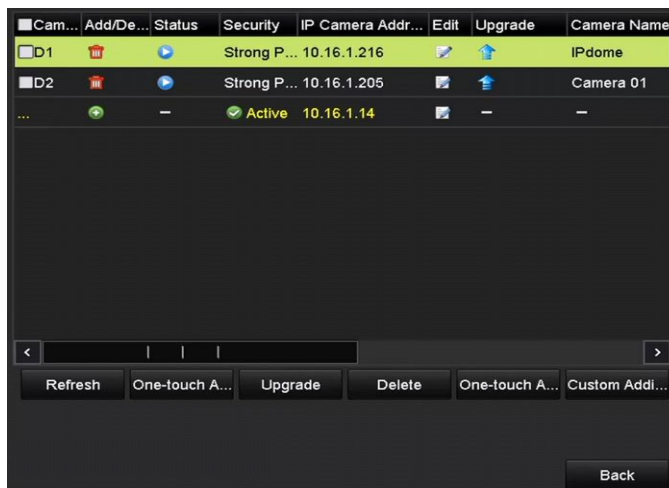
- 2) You can edit the IP address, protocol, management port, and other information of the IP camera to be added.



If the IP camera to add has not been activated, you can activate it from the IP camera list on the camera management interface.

- 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.



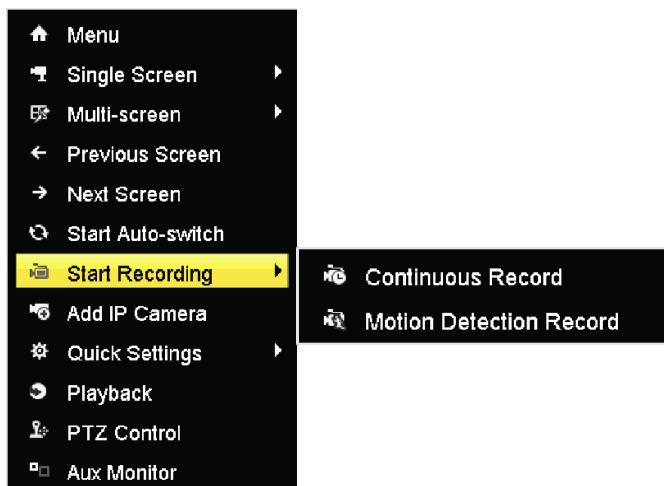
Explanation of the icons

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

Record

You can use the right-click menu in live view mode to configure recording for all channels.

1. In the live view mode, use the mouse to right-click on the window to access the following menu:



2. Click the **Start Recording** submenu and select the recording mode to **Continuous Record** or **Motion Detection Record**.
3. In the pop-up message box, click **Yes** to finish the quick recording settings for all channels.




The full-screen motion detection triggered recording is configured by default in this mode.

Playback

Play back the record files of a specific channel in the live view menu.

Instant playback by channel

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.



All-day Playback by Channel

1. Enter the All-day Playback menu.
 Mouse: right-click a channel in live view mode and select Playback from the menu.
 Or press **PLAY** button on the front panel (for DS-7300 and DS-8100) or IR remote control to play back record files of the channel under single-screen live view.
 Under multi-screen live view, record files of the top left channel (not masked) will be played back.
2. Playback management.
 The toolbar in the bottom part of Playback interface can be used to control playing process.
 The channel and time selection menu will display by moving the mouse to the right of the playback interface.

Tick 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.

To export recorded files:


1. Click Menu>Export to enter Video Export interface.

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



The IP Camera is supported by the HDVR series only.

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

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

Access by EZVIZ Cloud P2P

EZVIZ Cloud P2P provides the mobile phone application and as well the service platform page to access and manage your connected DVR, which enables you to get a convenient remotely access to the surveillance system. You can choose the access to the DVR by EZVIZ Cloud P2P or by DDNS through the settings on the Extranet Access menu.


Steps:

1. Enter the Network Settings interface.
Menu > Configuration > Network
2. Select the **Extranet Access** tab to enter the EZVIZ Cloud P2P Settings interface.
3. The default server address is *dev.ezviz7.com*. If you want to customize the server, you can enable the **Custom** and enter the server address in the text field.
4. Check the **Enable EZVIZ Cloud P2P** checkbox to activate this feature.
5. If required, check the **Enable Stream Encryption** checkbox to encrypt the video stream.
6. Enter the verification code of the device.



The verification code consists of 6 capital letters and is located at the bottom of the DVR. You can also use the scanning tool of your phone to quickly get the code by scanning the QR code below.

Enable EZVIZ Cloud P2P	<input checked="" type="checkbox"/>
Custom	<input type="checkbox"/>
Server Address	dev.ezviz7.com
Enable Stream Encryption	<input type="checkbox"/>
Verification Code	ABCDEF
Status	Offline
Enable DDNS	<input type="checkbox"/>
DDNS Type	HIDDNS
Continent	Custom
Country	
Server Address	www.hik-online.com
Device Domain Name	
User Name	
Password	



7. Click the **Apply** button to save and exit the interface.

After configuration, you can access and manage the DVR by your mobile phone on which the EZVIZ Cloud P2P application is installed or by the EZVIZ Cloud P2P website (<http://www.ezviz7.com>).



For more operation instructions, please refer to the help file on the EZVIZ Cloud P2P official website (<http://www.ezviz7.com>).



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