Digital Video Recorder

Quick Operation Guide

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:

7200-FH Series, 7200-WH Series, 7200A-WH Series, 7200-HV Series, 7200A-HV Series

7300-FH Series, 7300-WH Series, 7300A--WH Series,

DVR Pre-Installation

This Series DVR is highly advanced surveillance equipment that should be installed with care. Please take into consideration the following precautionary steps before installation of the DVR.

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

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 ℃ ~ 55 ℃, 14 ℉ ~ 131 ℉.
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.
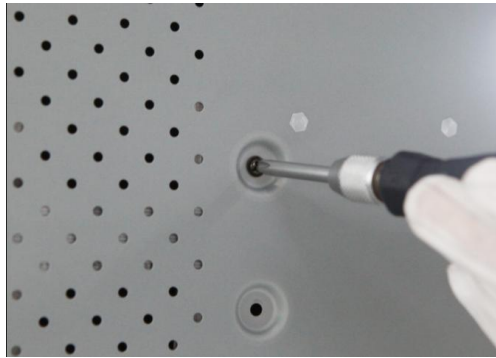
Tools Required: Screwdriver.
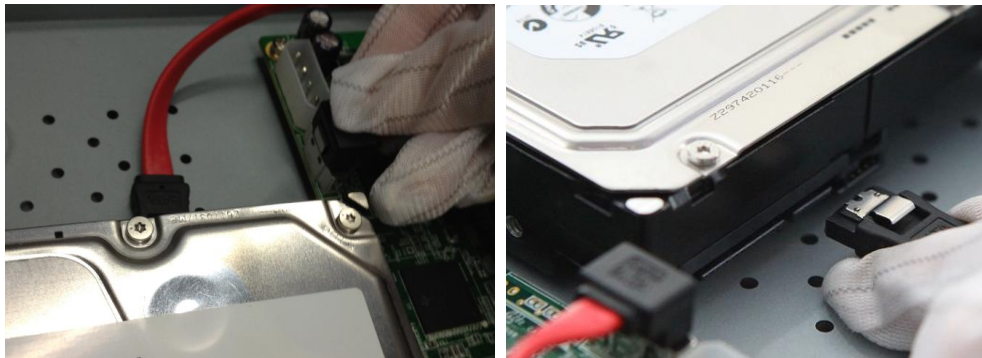
Steps (for 7200-FH/WH/HV and 7300-FH/WH):

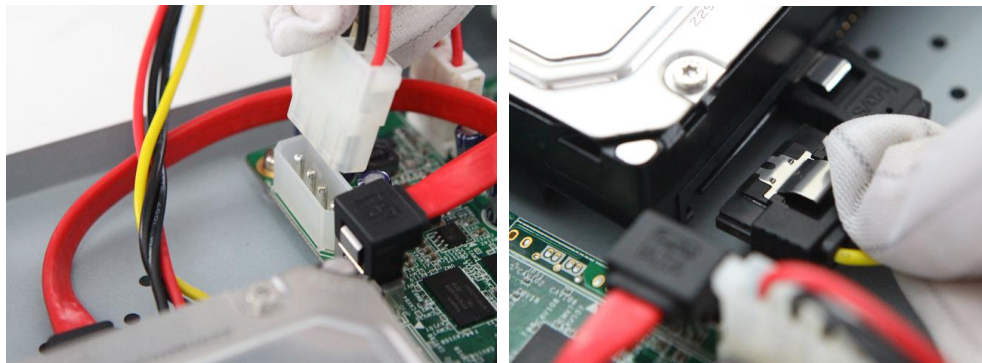1. Remove the cover from the DVR by unfastening the screws on the back and side.

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.
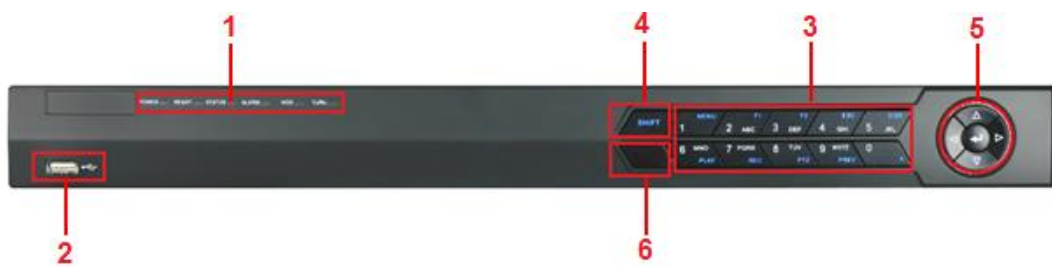

4. Connect the power cable to the HDD.

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

Front Panel

7204-FH/WH:

7208/16-FH/WH:

7204/08/16-HV:

7204/08/16A-HV:

Table 1 Description of Control Panel Buttons

No.	Name		Function Description
1	**Status Indicators**		POWER: the POWER indicator turns green when NVR is powered up.
			READY: The indicator light is green when the device is running normally.
			STATUS: 1.The light is green when the IR remote control is enabled; 2.The light is red when the function of the composite keys (SHIFT) are used; 3. The light is out when none of the above condition is met/
			ALARM: the light is red when there is an alarm occurring.
			HDD: the indicator flickers red when HDD is reading/writing.
			Tx/Rx: TX/RX indicator flickers green when network connection is functioning normally.
2	**USB Interfaces**		Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).
3	**Composite Keys**	**1/MENU:**	Enter numeral "1";
			Access the main menu interface.
		2/ABC/F1:	Enter numeral "2";
			Enter letters "ABC";
			The F1 button when used in a list field will select all items in the list.
			In PTZ Control mode, it will turn on/off PTZ light and when the image is zoomed in, the key is used to zoom out.
		3/DEF/F2:	Enter numeral "3";
			Enter letters "DEF";
			The F2 button is used to change the tab pages.
			In PTZ control mode, it zooms in the image.
		4/GHI/ESC:	Enter numeral "4";
			Enter letters "GHI";
			Exit and back to the previous menu.
		5/JKL/EDIT:	Enter numeral "5";
			Enter letters "JKL";
			Delete characters before cursor;
			Check the checkbox and select the ON/OFF switch;
			Start/stop record clipping in playback.
		6/MNO/PLAY:	Enter numeral "6";
			Enter letters "MNO";
			Playback, for direct access to playback interface.
		7/PQRS/REC:	Enter numeral "7";
			Enter letters "PQRS";
			Open the manual record interface.
		8/TUV/PTZ:	Enter numeral "8";
			Enter letters "TUV";
			Access PTZ control interface.

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

7300-FH/WH:

The front panel of 7300-FH/WH 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-ROM**	Slot for DVD-ROM.
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; Indicator turns orange : (a) when the DVR is controlled by IR remote control (with the address from 1~254) and keyboard at the same time and the SHIFT button is used as well; (b) when the DVR is controlled by IR remote control (with the address from 1~254) and the SHIFT button is used.
	ALARM	Alarm indicator turns red when a sensor alarm is detected.
	HDD	HDD indicator blinks in red when data is being read from or written to HDD.
	Tx/Rx	TX/RX indictor blinks in green when network connection is functioning properly.
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, in can control the movement of the PTZ camera.

Rear Panel

7204-FH/HV:

7204-WH :

7216-HV

Note: The rear panels of 7208-HV provide 8 video input interfaces.
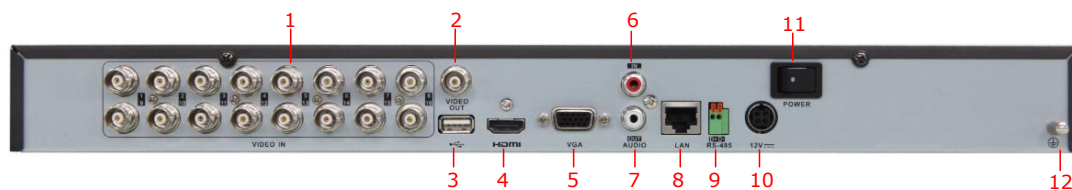
7216A-HV:

Note: The rear panels of 7204A-HV and 7208A-HV provide 4, 8 video input interfaces.

7216B-HV:

Note: The rear panels of 7204B/7208B-HV provide 4, 8 video/audio input interfaces.

7216-FH

Note: The rear panels of 7208-FH provide 8 video input interfaces.

7216-WH

Note: The rear panels of 7208-WH provide 8 video/alarm input interfaces.

7216A-WH :

*Note:* The rear panels of 7204A-WH and 7208A-WH provide 4/8 video/Audio input interfaces.

Table 3 Description of Rear Panel

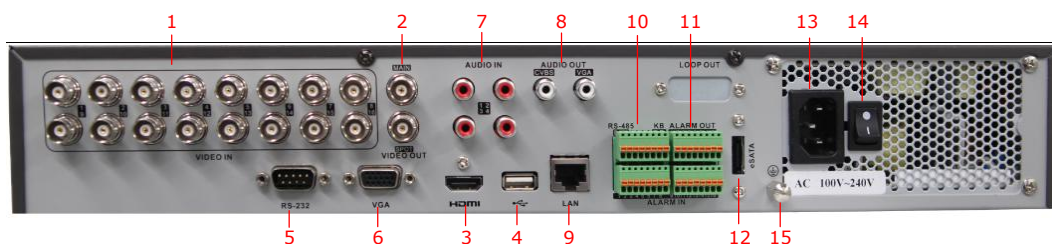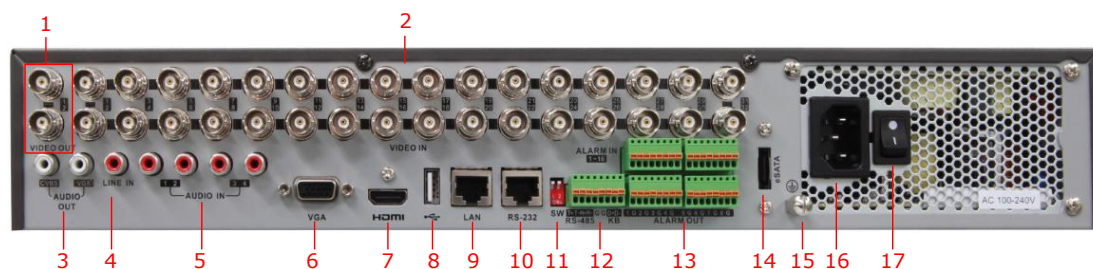| No.	Item	Description
1	VIDEO IN	BNC connector for analog video input.
2	VIDEO OUT	BNC connector for video output.
3	USB Interface	Connects USB mouse or USB flash memory devices.
4	HDMI	HDMI video output.
5	VGA	DB15 connector for VGA output. Display local video output and menu.
6	AUDIO IN	RCA connector 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)
13	Alarm In/Out	Connector for alarm input/output.

7304-FH and 7304-WH:
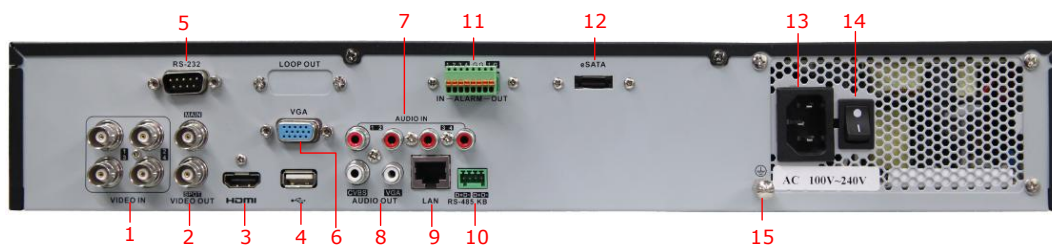
7308-FH and 7308-WH:
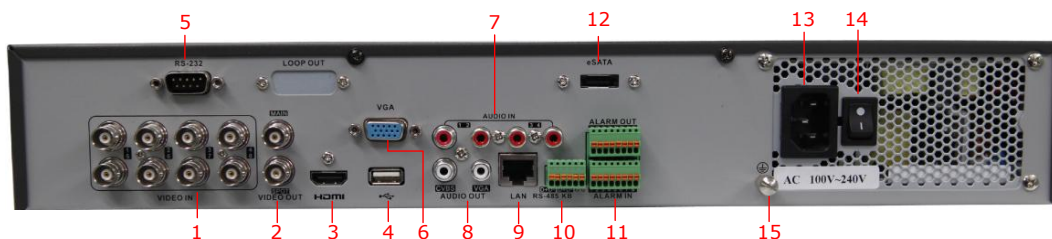
7316-FH and 7316-WH:

Table 4 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	**110~240VAC**	12VDC power supply.
14	**POWER**	Switch for turning on/off the device.
15	**GND**	Ground(needs to be connected when DVR starts up)

7332-FH, 7332-WH:

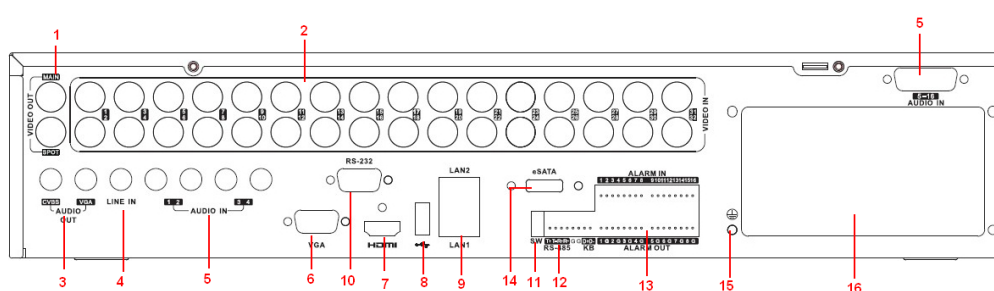*Note:* 7324-FH/WH/HH models provide 24 video input interfaces on the rear panel.

7332A-WH

Table 5 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 interfaces.
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	110~240VAC	110~240VAC power supply.
17	POWER	Switch for turning on/off the device.

Peripheral Connections

Note: Alarm input/output connections are valid for the 7300 and 8100 models only.

Connecting to Alarm Input / Output Device

The alarm input is an open/closed relay. If the input is not an open/closed relay, follow the connection diagram below:
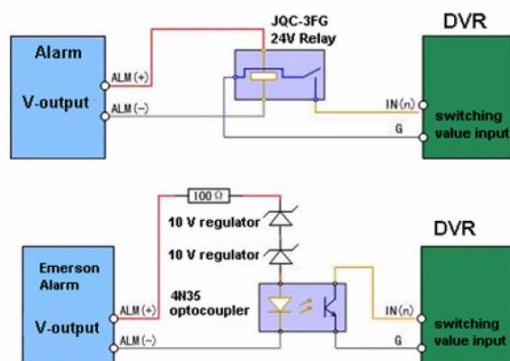
To connect to an AC/DC load, use the following diagram:
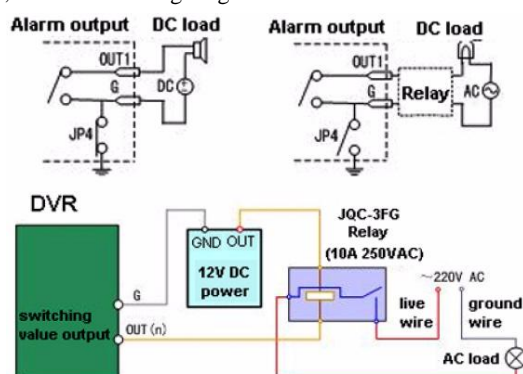
For DC load, JP4 can be used within the limit of 12V/1A safely. If the interface is connected to an AC load, JP4 should be left open. Use an external relay for safety (as shown in the figure above).

There are 4 jumpers (JP4, JP5, JP6, and JP7) on the motherboard, each corresponding with one alarm output. By default, jumpers are connected. To connect an AC load, jumpers should be removed.

Note: An external relay is needed to prevent electric shock when connecting to an AC load.

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.

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

Specifications

Table 6 Specifications for 7200-FH

Model		4CH	8CH	16CH
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.711		
	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	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 7 Specifications for 7200-HV

Model		4CH	8CH	16CH
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.711		
	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 8 Specifications for 7200A-HV

Model		4CH	8CH	16CH
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.711		
	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		
	Alarm in	4		
	Alarm out	1		
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 9 Specifications for 7200B-HV

Model		4CH	8CH	16CH
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.711		
	Audio input	4-ch, RCA	8-ch, RCA	16-ch, RCA
	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		
	Alarm in	4		
	Alarm out	1		
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 10 Specifications for 7200-WH

Model		4CH	8CH	16CH
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.711		
	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		
	Alarm in	4	8	16
	Alarm out	1	4	4
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 11 Specifications for 7200A-WH

Model		4CH	8CH	16CH
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.711		
	Audio input	4-ch, RCA	8-ch, RCA	16-ch, RCA
	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		
	Alarm in	4	8	16
	Alarm out	1	4	4
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 12 Specifications for 7300-FH

Model		4CH	8CH	16CH	24CH	32CH
Video/Audio input	**Video compression**	H.264				
	Video input	4-ch	8-ch	16-ch	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: 1920×1080/60Hz, 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, 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**	4 SATA interfaces				
	eSATA	1 eSATA interface				
	Capacity	Up to 4TB capacity				
External interface	**Network interface**	1, RJ45 10M / 100M / 1000M Ethernet interface				
	Serial interface	1 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, 5A, 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 13 Specifications for 7300-WH

Model		4CH	8CH	16CH	24CH	32CH
Video/Audio input	**Video compression**	H.264				
	Video input	4-ch	8-ch	16-ch	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: 1920×1080/60Hz, 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**	4 SATA interfaces				
	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	1 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, 5A, 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 14 Specifications for 7332A-WH

Model		32CH	
Video/Audio input	**Video compression**	H.264	
	Video input	32-ch	
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL /NTSC self-adaptive	
	Audio compression	G.711u	
	Audio input	16-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	
	Synchronous playback		16-ch
Hard disk	**SATA**	4 SATA interfaces	
	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	1 RS-232, RS-485(half-duplex), Keyboard	1 RS-232, RS-485(full-duplex), Keyboard
	USB interface	3 ×USB 2.0	
	Alarm in	16	
	Alarm out	8	
General	**Power supply**	100~240VAC, 5A, 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	

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
3072Kbps	1350M

Note: 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 of the 7200-FH/WH series DVR is shown as below:

```
                                    ┌──────────┐
                                    │   Menu   │
                                    └──────────┘
  ┌───────┬───────┬───────┬───────┬───────┬───────┬───────────┬───────────┬──────────┐
Playback Export  Manual   HDD    Record  Camera  Configuration Maintenance Shutdown
  │       │       │       │       │       │       │           │           │
Normal  Normal  Record  General Schedule  OSD    General     System Info  Logout
  │       │               │       │       │       │           │           │
Event   Event           Advanced Encoding Image  Network    Log Information Shutdown
  │                       │       │       │       │           │           │
Tag                     HDD Detect Advanced PTZ   Live View  Import/Export Reboot
                                  │       │       │           │
                                Holiday  Motion  Exceptions  Upgrade
                                          │       │           │
                                      Privacy Mask User      Default
                                          │                   │
                                      Tamper-proof          Net Detect
                                          │
                                      Video Loss
```
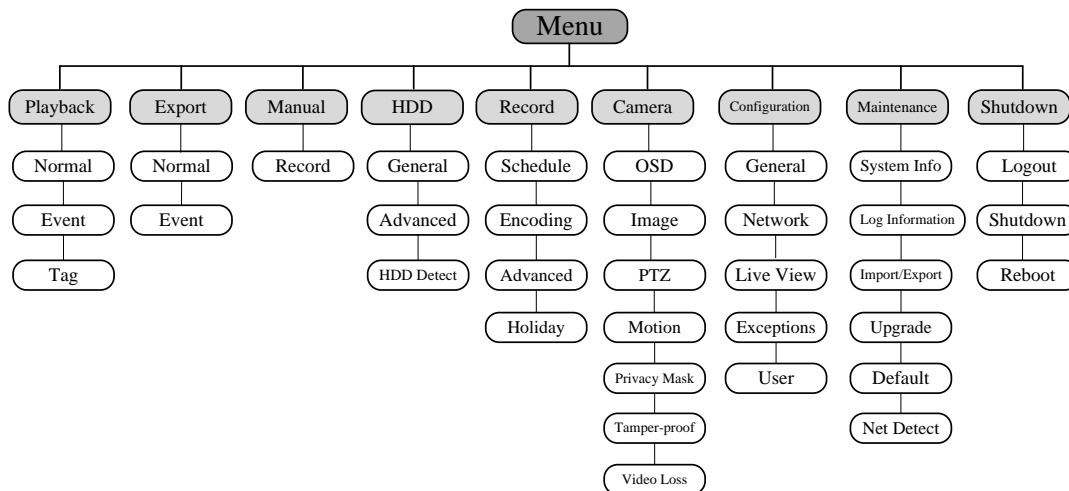
The menu structure of the 7300-FH/WH series DVR is shown as below:

```
                                    ┌──────────┐
                                    │   Menu   │
                                    └──────────┘
  ┌───────┬───────┬───────┬───────┬───────┬───────┬───────────┬───────────┬──────────┐
Playback Export  Manual   HDD    Record  Camera  Configuration Maintenance Shutdown
  │       │       │       │       │       │       │           │           │
Normal  Normal  Record  General Schedule  OSD    General     System Info  Logout
  │       │       │       │       │       │       │           │           │
Event   Event   Alarm   Advanced Encoding Image  Network    Log Information Shutdown
  │                       │       │       │       │           │           │
Tag                     HDD Detect Advanced PTZ   Alarm      Import/Export Reboot
                                  │       │       │           │
                                Holiday  Motion  RS-232      Upgrade
                                          │       │           │
                                      Privacy Mask Live View  Default
                                          │       │           │
                                      Tamper-proof Exceptions Net Detect
                                          │       │
                                      Video Loss  User
```

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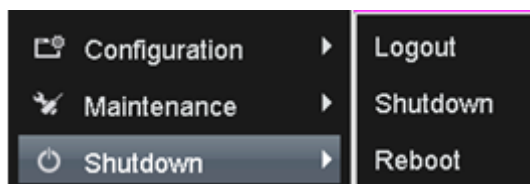
2. Click the **Shutdown** button to enter the following dialog box:

3. Click the **Yes** button. The following message box pops up:
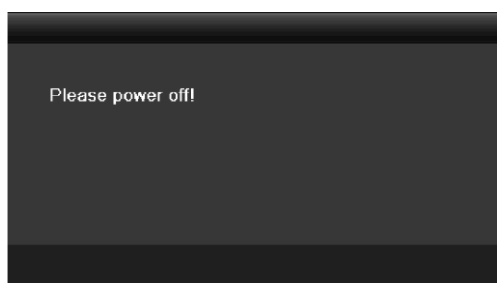
4. Turn off the power switch on the rear panel of DVR.

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:

1. Select the system resolution from the dropdown menu. The default resolution is 1280×1024/60Hz.

   Click **Apply** to save the resolution settings.

   Note: For the 7324/7332FH/WH, when the resolution is set to 1024×768 or 1280×720, up to 16-division window display is supported in live view; when the resolution is set to 1280×1024, up to 25-division window display is supported; and when the resolution is set to 1920×1080, up to 36-division window display is supported. By default, the system resolution is set to 1280×1024.

2. Check the checkbox to enable Setup Wizard when device starts. Click **Next** to continue the setup wizard.

   You can also click **Cancel** to exit the Setup Wizard, or use the Setup Wizard next time by leaving the "Start wizard when device starts?" checkbox checked and exit.
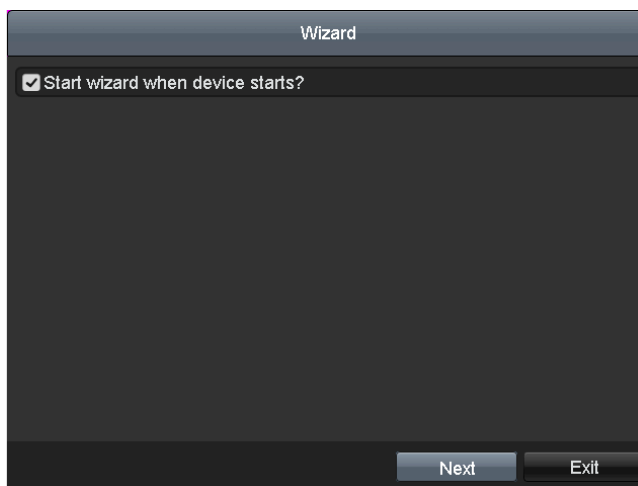
3. Click **Next** button on the Wizard window to enter the Login window.

1) Enter the admin password. By default, the password is 12345.

2) To change the admin password, check the **New Admin Password** checkbox. Enter the new password and confirm the password in the given fields.
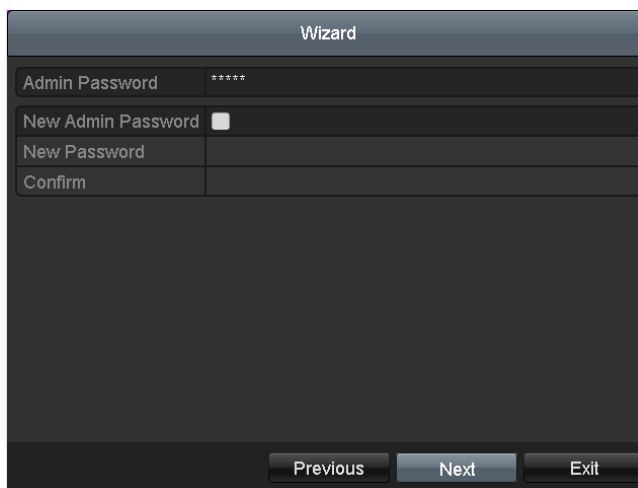
4. Click the **Next** button to enter the Date and Time settings window.

Set the time zone, date format, system date and system time.
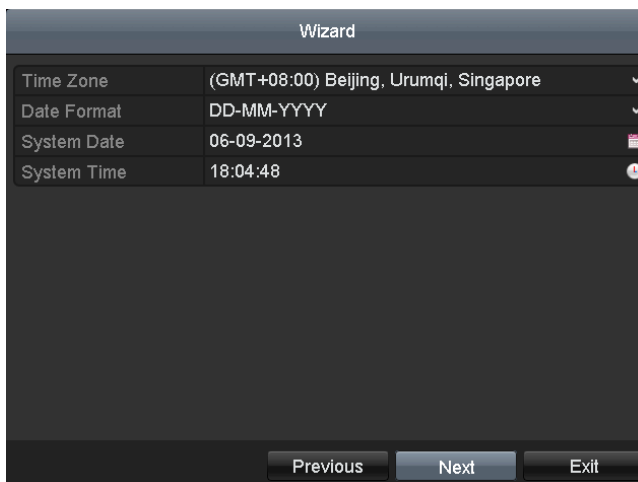
5. Click **Next** button which takes you back to the Network Setup Wizard window.

Set the network parameters, including the NIC type, IPv4 address, IPv4 subnet mask, default gateway, etc.

You can enable the DHCP to automatically obtain an IP address and other network settings from that server.
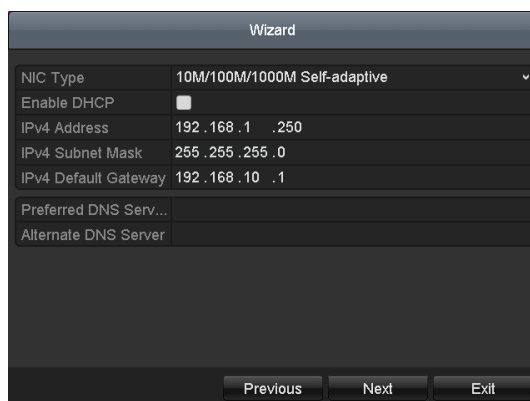
Note: The 7200-FH/WH and 7200-HV models provide one 10M/100Mbps self-adaptive network interface, the 7300-FH/WH models provide one 10M/100M/1000Mbps self-adaptive network interface,

6. Click **Next** button to enter the **HDD Management** window.

To initialize the HDD, click the **Init** button. Initialization removes all the data saved in the HDD.
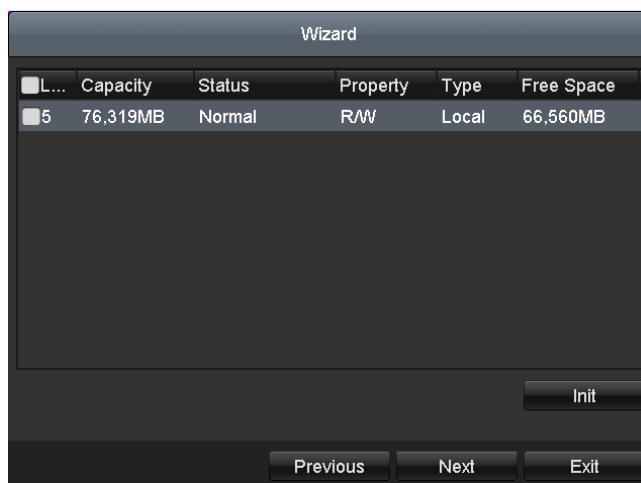
7. Click **Next** button to enter the **Record Settings** window.

   1) Select the camera to configure.
   2) Check the checkbox to enable **Start Recording**.
   3) Select the recording mode to Normal or Motion Detection.

4) Click **Copy** to copy the record settings of the current camera to other camera (s) if needed.

5) Click **OK** to return to the **Record Settings** window.

8. Click **OK** to complete the startup Setup Wizard.

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

Note: The sensor alarm and alarm triggered record are supported by 7300-FH/WH 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 15 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 *dwell time* 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.
Quick Set	Set the video output mode to Standard, Bright, Gentle or Vivid.
All-day Playback	Play back the video of the selected channel.
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 switch back to the Main output with the **F1** button on front panel or **VOIP/MON** button on IR remote control and then press the **Enter** button.

Note:

- The *dwell time* of the live view configuration must be set before using **Start Auto-switch**.
- If you enter Aux monitor mode and the Aux monitor is not connected, the mouse operation is disabled; you need to switch back to the Main output with the MAIN/AUX button on the front panel or remote.
- If the corresponding camera supports intelligent function, the Reboot Intelligence option is included when right-clicking mouse on this camera.

Note:

- Two ways are provided to show the Right-click Menu Bar: right-clicking or moving the mouse to the bottom of the screen.
- You can click on the right side of the menu bar to fix the menu.

Using an Auxiliary Monitor

Certain features of the Live View are also available while in an Aux monitor. These features include:

- **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.
- **Quick Set:** Set the video output mode to Standard, Bright, Gentle or Vivid.
- **Menu Output Mode**: Select the menu output mode to HDMI/VGA, Main CVBS or Auto.
- **Main Monitor:** Switch to the Main Output mode and the operation for the auxiliary output is disabled.

Note: In the live view mode of the main output monitor, the menu operation is not available while Aux output mode is enabled.

PTZ Control

Follow the procedure to set the parameters for PTZ. The configuring of the PTZ parameters should be done before you set the PTZ camera.

Before you start, please check that the PTZ and the DVR are connected properly through RS-485 interface.

In the Live View mode, you can press the PTZ Control button on the IR remote control, or choose the PTZ

Control icon to enter the PTZ toolbar.
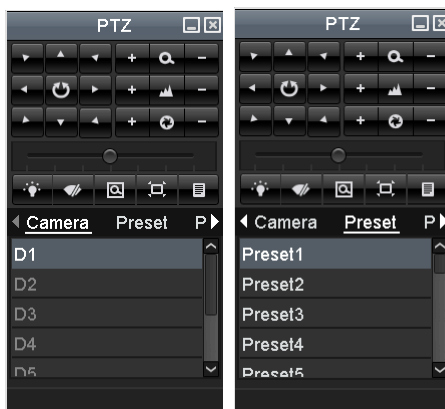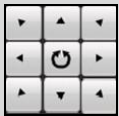
Table 16 Description of the PTZ toolbar icons

Icon	Description	Icon	Description	Icon	Description
Direction buttons	Direction button and the auto-cycle button	+	Zoom+, Focus+, Iris+	−	Zoom-, Focus-, Iris-
Speed slider	The speed of the PTZ movement	Light	Light on/off	Wiper	Wiper on/off
3D-Zoom icon	3D-Zoom	Image Centralization icon	Image Centralization	Preset	Preset
Patrol	Patrol	Pattern	Pattern	Menu icon	Menu
◀	Previous item	▶	Next item	▶	Start pattern/patrol
■	Stop the patrol or pattern movement	▬	Minimize windows	☒	Exit

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:
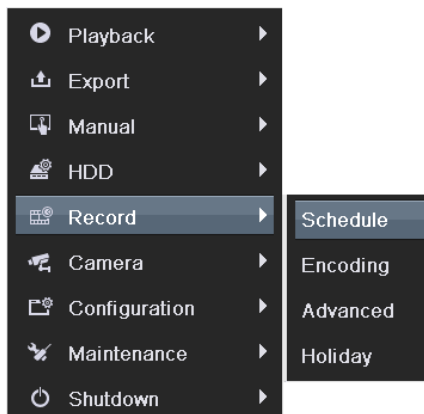
2. Click the **Start Recording** submenu and select the recording mode to **Normal Record** or **Motion Detection Record**.

3. In the pop-up message box, click **Yes** to finish the quick recording settings for all channels.
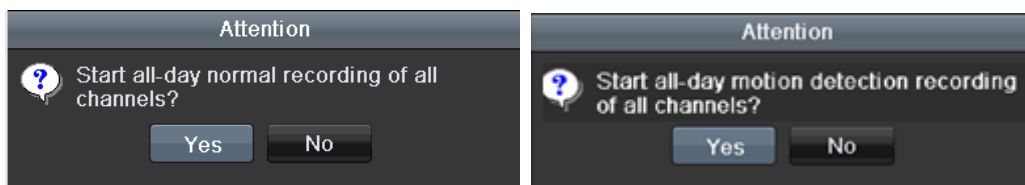
Note: The full-screen motion detection triggered recording is configured by default in this mode.

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

Playback by channel

Steps:

1. Enter the Playback menu.

    Mouse: right click a channel in live view mode and select Playback from the menu.
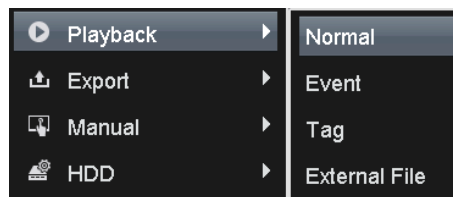
    Right-click Menu under Live View

    Front Panel: press PLAY button to play back record files of the channel under single-screen live view.

    Under multi-screen live view, record files of the top left channel (not masked) will be played back.

    Note: 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.

Playback Interface

Just check the channel or channels if you want to switch playback to another channel or execute
simultaneous playback of multiple channels.

Export

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 **Search** button.
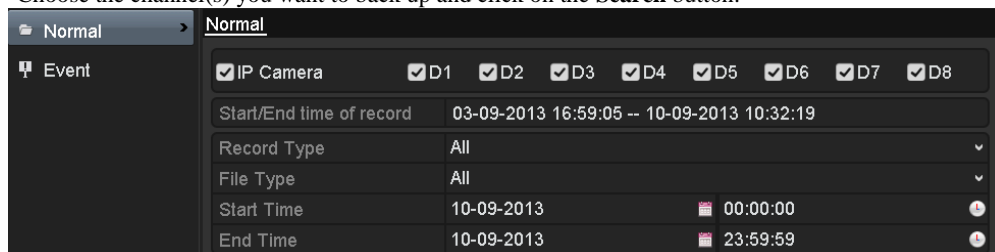
Quick Export Interface

2. Check Search result.

    Choose the record file in Export interface and press button to check it. Then click **Export** button.
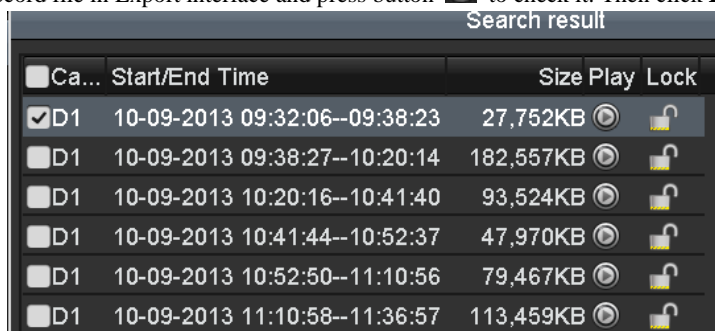
3. Enter Export interface, choose backup device and press **Export** button to start exporting.
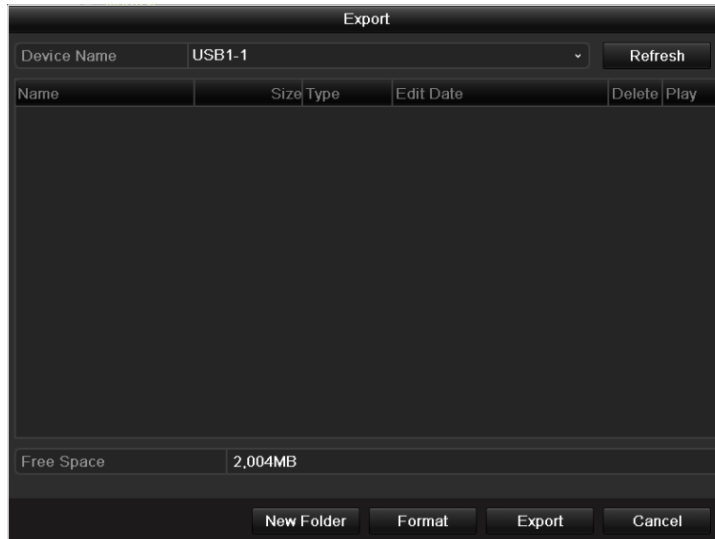
Quick Export using USB1-1
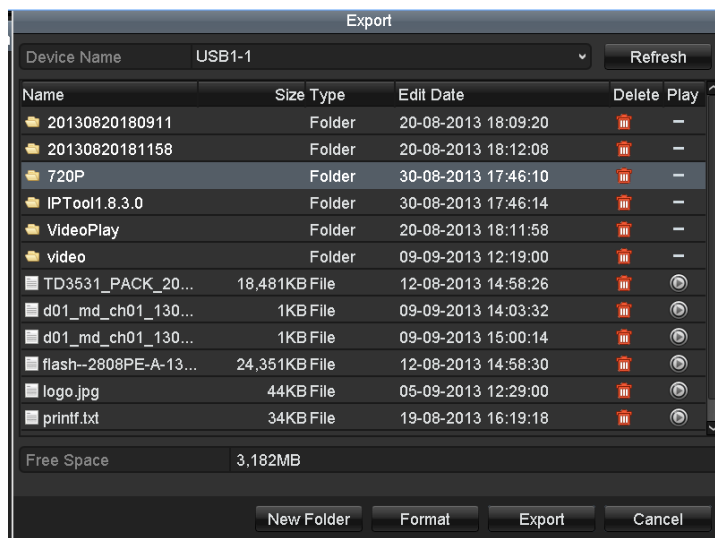
Checkup of Quick Export Result Using USB1-1

Accessing by Web Browser

Logging In

If the device has successfully connected to the network, you can get access to the device via web browser. Open web browser, input the IP address of the device and then press Enter. The login interface appears.

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

Notes:

1. The default IP address is 192.0.0.64.

2. The default user name is admin, and password is 12345.

3. 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.

4. The supported resolutions include 1024*768 and above.

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

Live View

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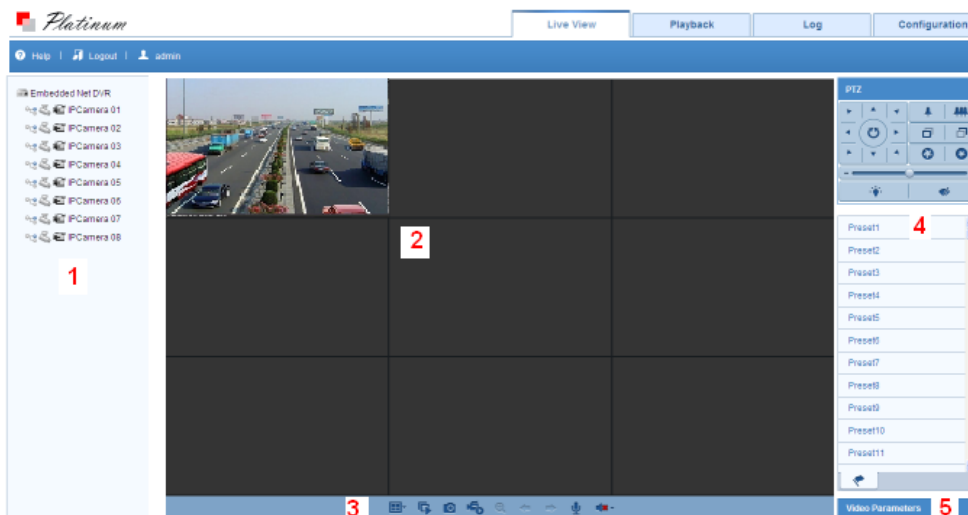
Interface Introduction

① Camera List: Displays the list of cameras and the playing and recording status of each camera.

② Live View Window: Displays the image of camera, 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.

Note: PTZ function can only be realized if the connected camera supports PTZ control.

⑤ Video Parameters Configuration: Brightness, contrast, saturation and other parameters of the image can be

modified.

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 [icon] 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
[icon]	Select the window-division mode	[icon]	Start/Stop all live view
[icon]	Capture pictures in the live view mode	[icon]	Start/Stop all recording
[icon]	Previous page	[icon]	Next page
[icon]	Open/Close audio	[icon]	Start/Stop two-way audio
[icon]	Adjust volume	[icon]	Enable/Disable digital zoom
[icon]	Full-screen		

Recording

Before you start

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

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

Steps:

1. Click Remote Configuration> Camera Settings> Record Schedule to enter Record Schedule settings interface.

2. Select the camera to configure the record schedule.

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

4. Click **Edit** to edit record schedule.

5. Choose the day in a week to configure scheduled recording.

   1) Configure All Day or Customize record:

   ● If you want to configure the all-day recording, please check the **All Day** checkbox.

   ● If you want to record in different time sections, check the **Customize** checkbox. Set the **Start Time** and **End Time.**

   Note: The time of each segment can't be overlapped. Up to 8 segments can be configured.

   2) Select a **Record Type**. The record type can be Normal, Motion, Alarm, Motion & Alarm, and Motion | Alarm.

   3) Check the checkbox of **Select All** and click **Cop**y to copy settings of this day to the whole week. You can also check any of the checkboxes before the date and click **Copy**.

   4) Click **OK** to save the settings and exit the **Edit Schedule** interface.

6. Click **Advanced** to configure advanced record parameters**.**

7. Optionally, check the checkboxes of other cameras to copy the settings to.

8. Click **Save** to validate the above settings.

Playback

Interface Introduction

① Camera List: Displays the list of cameras and the playing status of each camera.

② Playback Window: Displays the video of camera.

③ Play Control Bar: Play control operations are supported.

④ Time Line: Displays the time bar and the records marked with different colors.

⑤ Playback Status: Displays the playback status, including camera No. and playback speed.

⑥ Calendar: You can select the date to play.

Start Playback

Steps:

1. Click **Playback** on the menu bar to enter playback interface.

2. Click the camera from the device list for playback.

3. Select the date from the calendar and click **Search**.
   Note: The day with record will be marked like [9].

4. Click the ► button to play the video file searched on the current date.

5. Use the buttons on the toolbar to operate in playback mode.

Button	Description	Button	Description
► / ‖	Play/Pause	■	Stop
◄◄	Slow down	►►	Speed up
‖►	Play by single frame	📷	Capture
▣	Stop All Playback	⬇	Download
✂ / ✂	Video Clip	🔇 / 🔊	Open/Close audio
▣	Full-screen		

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 `00 : 00 : 00 →` and click `→` button to locate the playback point.

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

🟩 Command 🟦 Schedule Recording 🟥 Alarm Recording 🟨 Manual Recording

Log

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

Before you start

The Log function can be realized only when the device is connected with HDD or network disk. And make sure the HDD or network disk has been initialized for the first time to use.

Steps:

1.   Click Log on the menu bar to enter the Log interface.

2.   Set the log search conditions to refine your search, including the Major Type, Minor Type, Start Time and End Time.

3.   Click the **Search** button to start searching log files.

4.   The matched log files will be displayed on the list shown below.

    *Note***:** Up to 100 log files can be displayed on each page.

    You can click the [Save Log] button to save the searched log files to local directory.