Digital Video Recorder

HHRA03 Hybrid DVR User manual

Quick Operation Guide

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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 HHRA03-4, HHRA03-8 and HHRA03-16 series DVR.

The figures shown in this manual are for reference only. The appearance and interface of the device are subject to the actual model.

DVR Pre-Installation

The 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 cable is no less than five times the size of 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 \sim 55 °C, 14°F \sim 131°F.
- **8.** Environmental humidity should be within the range of $10\% \sim 90\%$.

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.

Up to 8 or 16 SATA hard disks can be installed on your DVR.

Tools Required: Screwdriver.

Steps (for HHRA03 Series):

1. Fasten the hard disk mounting handle to the hard disk with screws.



2. Insert the key and turn in clockwise direction to open the panel lock.



3. Press the buttons on the two sides of the front panel to open it.



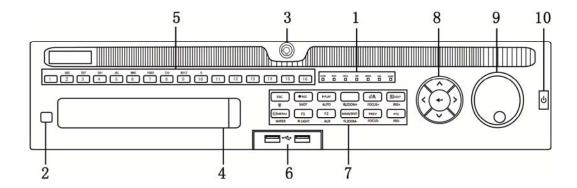
4. Insert the hard disk along the slot until it is placed into position.



5. Repeat the above steps to install other hard disks onto the DVR. After having finished the installation of all hard disks, close the front panel and lock it with the key again.



Front Panel



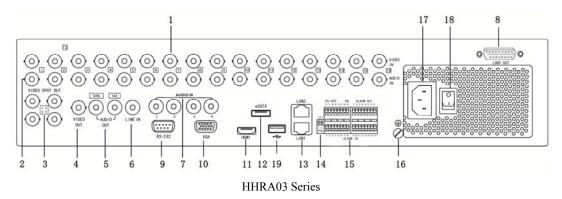
HHRA03 Series

No.	Name	Function Description
	ALARM	Alarm indicator turns red when a sensor alarm is detected.
	READY	Ready indicator is normally blue, indicating that the device is functioning properly.
	STATUS	Status indicator turns blue when device is controlled by an IR remote (if the device ID# is 255, the indicator is off when the device is controlled by an IR remote). Indicator turns red when controlled by a keyboard and purple when IR remote and keyboard is used at the same time.
1	HDD	HDD indicator blinks red when data is being read from or written to HDD.
	MODEM (Not supported by 9100/9000HFI-XT)	Reserved for future usage.
	TX/RX	TX/RX indictor blinks blue when network connection is functioning properly.
		Guard indicator turns blue when the device is in armed status; at this time, an alarm is enabled when an event is detected.
	GUARD	The indicator turns off when the device is unarmed. The arm/disarm status can be changed by pressing and holding on the ESC button for more than 3 seconds in live view mode.
2	IR Receiver	Receiver for IR remote
3	Front Panel Lock (for HHRA04 series)	You can lock or unlock the panel by the key.
4	DVD-R/W	Slot for DVD-R/W. (Optional for HHRA03 Series)
		Switch to the corresponding channel in Live view or PTZ Control mode.
5	Alphanumeric Buttons	Input numbers and characters in Edit mode.
		Switch channels in All-day Playback mode.

		The light of the house is him the other control of the light		
6	USB Interfaces			
		mouse and USB Hard Disk Drive (HDD).		
	FSC	Back to the previous menu.		
	ESC	Press for arming/disarming the device in Live View mode.		
		Enter the Manual Record setting menu.		
	DEC/SHOT	In PTZ control settings, press the button and then you can call a PTZ		
	REC/SHOT	preset by pressing Numeric button.		
		It is also used to turn audio on/off in the Playback mode.		
	DI AV/AT/EO	The button is used to enter the Playback mode.		
	PLAY/AUTO	It is also used to auto scan in the PTZ Control menu.		
	ZOOM+	mouse and USB Hard Disk Drive (HDD). Back to the previous menu. Press for arming/disarming the device in Live View mode. Enter the Manual Record setting menu. In PTZ control settings, press the button and then you can call a PTZ preset by pressing Numeric button. It is also used to turn audio on/off in the Playback mode. The button is used to enter the Playback mode. It is also used to auto scan in the PTZ Control menu. ZOOM+ ZOOM in the PTZ camera in the PTZ Control setting. Adjust focus in the PTZ Control menu. It is also used to switch input methods (upper and lowercase alphabet, symbols and numeric input). Edit text fields. When editing text fields, it will also function as a Backspace button to delete the character in front of the cursor. On checkbox fields, pressing the button will tick 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. Enter/exit the folder of USB device and eSATA HDD. Switch main and spot output. In PTZ Control mode, it can be used to zoom out the image. Select all items on the list when used in a list field. In PTZ Control mode, it is used to switch play and reverse play. Cycle through tab pages. In synchronous playback mode, it is used to switch channels. Press the button will help you return to the Main menu (after successful login). Press and hold the button for 5 seconds will turn off audible key beep. In PTZ Control mode, the MENU/WIPER button will start wiper (if applicable). In Playback mode, it is used to show/hide the control toolbar. Switch single screen and multi-screen mode. In PTZ Control mode, it is used to adjust the focus in conjunction with the A/FOCUS+ button.		
		Adjust focus in the PTZ Control menu.		
	A/FOCUS+	It is also used to switch input methods (upper and lowercase alphabet,		
	121 0 000			
		Edit text fields. When editing text fields, it will also function as a		
		On checkbox fields, pressing the button will tick the checkbox.		
	EDIT/IRIS+			
		<u> </u>		
7				
	MAIN/SPOT/ZOOM-			
	F1/ LIGHT			
	F2/ AUX			
		1		
	MENU/WIPER			
		It is also used to auto scan in the PTZ Control menu. Zoom in the PTZ camera in the PTZ Control setting. Adjust focus in the PTZ Control menu. It is also used to switch input methods (upper and lowercase alphal symbols and numeric input). Edit text fields. When editing text fields, it will also function as a Backspace button to delete the character in front of the cursor. On checkbox fields, pressing the button will tick 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 Enter/exit the folder of USB device and eSATA HDD. Switch main and spot output. In PTZ Control mode, it can be used to zoom out the image. Select all items on the list when used in a list field. In PTZ Control mode, it will turn on/off PTZ light (if applicable). In Playback mode, it is used to switch play and reverse play. Cycle through tab pages. In synchronous playback mode, it is used to switch channels. Press the button will help you return to the Main menu (after succe login). Press and hold the button for 5 seconds will turn off audible key be In PTZ Control mode, the MENU/WIPER button will start wiper (in applicable). In Playback mode, it is used to show/hide the control toolbar. Switch single screen and multi-screen mode. In PTZ Control mode, it is used to adjust the focus in conjunction the A/FOCUS+ button. Enter the PTZ Control mode. In the PTZ Control mode, it is used to adjust the iris of the PTZ can the DIRECTION buttons are used to navigate between different and items in menus. In the Playback mode, the Up and Down button is used to speed		
		Switch single screen and multi-screen mode.		
	PREV/FOCUS-	In PTZ Control mode, it is used to adjust the focus in conjunction with		
		the A/FOCUS+ button.		
	PTZ/IRIS-	Enter the PTZ Control mode.		
	I LIIII	In the PTZ Control mode, it is used to adjust the iris of the PTZ camera.		
		The DIRECTION buttons are used to navigate between different fields		
8	DIRECTION	and items in menus.		
		In the Playback mode, the Up and Down button is used to speed up and		
		slow down recorded video. The Left and Right button will select the next		
		and previous record files.		

		In PTZ control mode, it can control the movement of the PTZ camera.
		The ENTER button is used to confirm selection in any of the menu
		modes.
		It can also be used to tick checkbox fields.
	ENTER	In Playback mode, it can be used to play or pause the video.
		In single-frame Playback mode, pressing the button will advance the video by a single frame
		In Auto-switch mode, it can be used to stop /start auto switch.
		Move the active selection in a menu. It will move the selection up and down.
		In Live View mode, it can be used to cycle through different channels.
9	JOG SHUTTLE Control	In the Playback mode: For HHRA03 series, the ring is used to jump 30s forward/backward in video files.
		In PTZ control mode, it can control the movement of the PTZ camera.
10	POWER ON/OFF	Power on/off switch.

Rear Panel



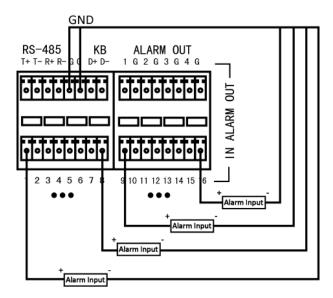
No.	Item	Description	
1	VIDEO IN	BNC connector for analog video input.	
2	LOOP OUT (for HHRA03 series)	BNC connector for video loop output.	
3	VIDEO SPOT OUT	BNC connector for video output.	
4	VIDEO OUT	BNC connector for video output.	
5	AUDIO OUT	RCA (for HHRA03 series) connector for audio output. This connector	
		is synchronized with VIDEO OUT.	
6	LINE IN	RCA (for HHRA03 series) connector for two-way audio.	
7	AUDIO IN	RCA (for HHRA03 series) connector for audio input.	
8	AUDIO IN (for HHRA03 series)	DB26 connector for audio input.	
9	RS-232 Interface	Connector for RS-232 devices.	
10	VGA	DB9 connector for VGA output. Display local video output and menu.	

11	HDMI	HDMI video output connector.		
12	eSATA (Optional)	Connects external SATA HDD, DVD-R/W.		
13	LAN Interface	Network interface.		
14	Termination Switch	RS-485 termination switch.		
		Up position is not terminated.		
		Down position is terminated with 120Ω resistance.		
	RS-485 Interface	Connector for RS-485 devices. T+ and T- pin connects to R+ and R-		
		pin of PTZ receiver respectively.		
		D+, D- pin connects to Ta, Tb pin of controller. For cascading devices,		
15	Controller Port	the first DVR's D+, D- pin should be connected with the D+, D- pin of		
		the next DVR.		
	ALARM IN	Connector for alarm input.		
	ALARM OUT	Connector for alarm output.		
16	GROUND	Ground (needs to be connected when DVR starts up).		
17	AC 100V ~ 240V	AC 100V ~ 240V power supply.		
18	POWER	Switch for turning on/off the device.		
10	LICD	Universal Serial Bus (USB) ports for additional devices such as USB		
19	USB	Hard Disk Drive (HDD).		

Peripheral Connections

Wiring of Alarm Input

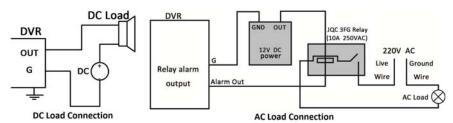
The alarm input/output interface of the DVR is shown as below:



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, then you must remove the JP3.

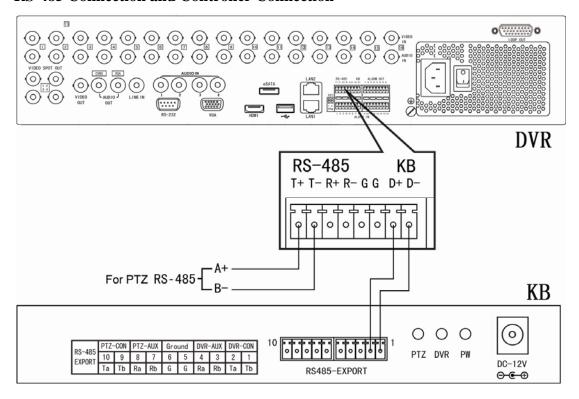
Alarm Connection

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 Connection and Controller Connection



To connect RS-485 devices to the DVR:

- 1. Disconnect pluggable block from the RS-485 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.

Notes:

• Make sure the pan/tilt receiver unit is connected to the T+ and T- of the DVR. Here we take the RS-485 connection of the HHRA03 series as an example.

To connect a controller to the DVR:

- 1. Disconnect *pluggable block* from the KB 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 Ta on controller to D+ on terminal block and Tb on controller to D- on terminal block. Fasten stop screws.
- **4.** Connect *pluggable block* back into terminal block.

Note: Make sure both the controller and DVR are grounded. Here we take the controller connection of the HHRA03 series as an example.

Specifications for HHRA03 Series

Model	HHRA03-4	HHRA03-8	HHRA03-16
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	Video compression	H.264	H.264				
	P - 000	4-ch	8-ch	16-ch			
	Analog video	BNC (1.0 Vp-p, 75 Ω),					
	input	PAL /NTSC self-adapti	ive				
	IP video input	8-ch	8-ch 16-ch				
Video/Audio	Composite video input	Up to 8-ch (Analog video + IP video)					
input	Audio compression	OggVorbis					
	Audio input	4-ch, RCA (2.0 Vp-p, 1 KΩ)	8-ch, Audio 1-4: RCA (2.0 Vp-p, 1 KΩ) Audio 5-8: DB26 connector	16-ch, Audio 1-4: RCA (2.0 Vp-p, 1 KΩ) Audio 5-16: DB26 connector			
	Two-way audio	1-ch, RCA (2.0 Vp-p, 1	ΚΩ)				
	HDMI / VGA output	1920 × 1080 / 60 Hz (1080P), 1600 × 1200 / 60 Hz, 1280 × 1024 / 60 Hz, 1280 × 720 / 60 Hz, 1024 × 768 / 60 Hz					
	CVBS output	2-ch (1 Main output + 5-ch (1 Main output + 5-ch (1 Main output) 4 Spot outputs) 4 Spot outputs BNC (1.0 Vp-p, 75 Ω),					
		resolution: PAL: 704 ×	576, NTSC: 704 × 480	16-ch			
	Video loop out		0-CII	10-01			
₹7° d o o / A o o d° o	Encoding	BNC (1.0 Vp-p, 75 Ω) Main stream: WD1 / 4CIF / 2CIF / CIF / QCIF					
Video/Audio	resolution	Sub-stream: CIF / QCIF					
output	Frame rate	Main stream: 25 fps (P) / 30 fps (N) Sub-stream: 25 fps (P) / 30 fps (N)					
	Video bitrate	32 Kbps ~ 8 Mbps	* * * /				
	Audio output	2-ch, RCA (2.0 Vp-p, 1	ΚΩ)				
	Audio bitrate	16 Kbps					
	Dual-stream	Support					
	Stream type	Video, Video & Audio					
	Playback	5 Megapixels /3 Megap	oixels / 1080P / UXGA / 7	20P / WD1/ 4CIF /			
	resolution	VGA / DCIF / 2CIF / C	CIF / QCIF				
	Synchronous playback	8-ch 16-ch 16-ch		16-ch			
Hard disk	SATA	8 SATA interfaces for 4 HDDs + 1 DVD-R/W (default), or 8HDDs					

	G A TO A	1 6454 : 4 6				
	eSATA	1 eSATA interface				
	Capacity	Up to 4TB capacity for each disk				
	Network interface	2; 10M /100M /1000M self-adaptive Ethernet interface				
	Serial interface	RS-232; RS-485; Keyboard				
External interface	USB port	3 × USB2.0				
	Alarm in / out	4/2	16 / 4	16 / 4		
	Power supply	100 ~ 240 VAC, 6.3 A,	$50\sim 60\;Hz$			
	Consumption					
	(without hard	Max. 35 W	Max. 40 W	Max. 45 W		
	disk or			IVIAX. 43 VV		
	DVD-R/W)					
	Working	10 °C +55 °C (14 °F .				
General	temperature	-10 °C ~ +55 °C (14 °F ~ 131 °F)				
	Working	10% ~ 90%				
	humidity					
	Chassis	19-inch rack-mounted 2U chassis				
	Dimensions	445 × 470 × 90 mm (17.5 × 18.5 × 3.5 in)				
	$(\mathbf{W} \times \mathbf{D} \times \mathbf{H})$					
	Weight	Approx. 8 kg / 17.6lb (v	without hard disk or D	VD-R/W)		

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
3072K	1.32G
4096K	1.76G
6144K	2.64G
8192K	3.52G

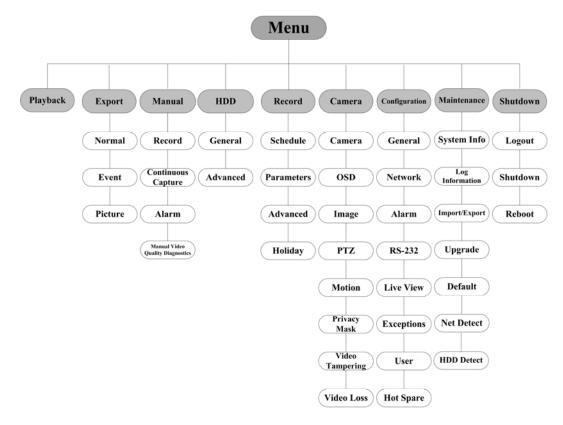
Note: Please note that supplied values for storage space used is just for reference. Storage space used is estimated by formulas and may have some deviation from actual value.

Menu Operation

Menu Structure

The menu structure of the device is shown as below:

HHRA03 Series



Startup and Shutdown

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

To start your device:

For 7200 series:

- 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 device begins to start up.

For other series:

- 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. Turn on the Power Switch on the rear panel and press the **POWER** button on the front panel. The Power indicator LED should turn blue indicating that the device begins to start up.

To shut down the device:

1. Enter the Shutdown menu.

Menu > Shutdown



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

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

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 recording, continuous recording, motion detection or sensor alarm triggered recording).



Alarm & Record



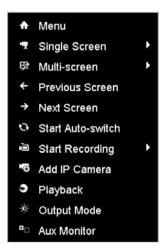
Event / Exception (event and exception information)

Adding IP Cameras

Note: This section is only applicable to HHRA03 series DVR.

Steps:

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



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



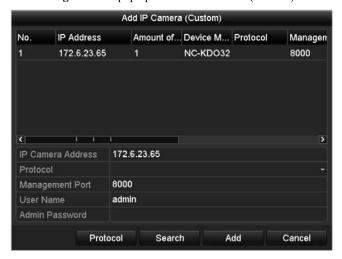
3. The online cameras with same network segment will be displayed in the camera list. Click the button to add the camera.

Note: The added camera is marked in white while the camera has not been added is marked in yellow. Explanation of the icons

Icon	Explanation	Icon	Explanation
	Edit basic parameters of the camera	①	Add the detected IP camera.
	The camera is connected.	_	The camera is disconnected; you can click the icon to get the exception information of camera.
	Delete the IP camera	63	Advanced settings of the camera.

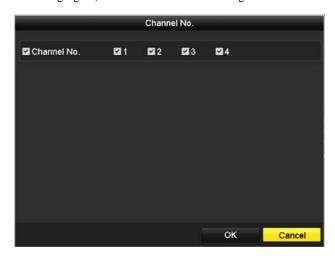
4. To add other IP cameras:

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



- 2) You can edit the IP address, protocol, management port, and other information of the IP camera to be added.
- 3) Click **Add** to add the camera.
- 4) (For the encoders with multiple channels only) check the checkbox of Channel No. in the pop-up window,

as shown in the following figure, and click \mathbf{OK} to finish adding.



One-touch RAID Configuration

Purpose:

For the HHRA03 HFI-RT series DVR, the disk array must be configured to save record files and log files locally. You can quickly create the disk array through one-touch configuration, and the raid level is sett as RAID 5 by default.

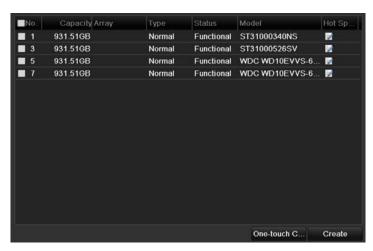
Before you start:

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

Steps:

1. Enter the Physical Disk Settings interface.

Menu > HDD > RAID



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



- 3. Edit the array name in the Array Name text filed and click OK button to start the array configuration.
 Note: If you install 4 HDDs or above for one-touch configuration, a hot spare disk will be set by default. It is recommended to set a hot spare disk, to rebuild the array automatically when the array is abnormal.
- 4. Click **OK** button in the pop-up message box to finish the settings after the array configuration is complete.

Record

Before you start:

Make sure that the HDD or network disk has already been connected and initialized for storage. For detailed information, see the user manual.

Purpose:

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

Note: After rebooting all the instant recording enabled will be cancelled.

Instant Recording

Option 1:

Click on the live view window, a quick setting toolbar will be shown on the bottom as follows:



Option 2:

Steps:

1. Enter the Manual settings interface.

Menu > Manual



2. Enable manual recording.

Click the status icon before camera number. The icon turns to on turns to or click the status icon before **Analog** to enable the manual recording of all cameras.

3. Disable the manual recording.

Click the status icon to change it to

Or click the status icon before **Analog** to disable the manual recording of all channels.

All-day Recording

Perform the following steps to set the all-day recording.

Option 1:

Right-click on the live view window, click **Start Recording**, and then select **Continuous Record** or **Motion Detection Record** to start the all-day recording.

All the channels will start to record in the selected mode.

Option 2:

Steps:

1. Enter the Manual settings interface.

Menu> Manual

2. Click the icon to set the corresponding all-day recording. Continuous and Motion Detection are selectable.

Playback

Before you start:

The video files need to be recorded on the storage devices, such as the HDDs and network disks, for playback.

Instant playback

The record files can be played back instantly on the Live View interface. Select a channel in live view and click the icon in the quick setting toolbar.

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

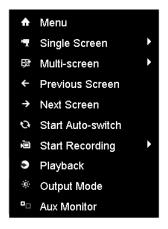


Playback by channel

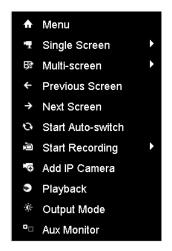
1. Enter the Playback interface.

Menu > Playback;

or right-click on the live view window, and click Playback.



DDRA03 Series



HHRA03 Series

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

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



HHRA03

Note: Playback of **IP Camera** is supported by HHRA03 series DVR.

Backup

Record files can be backed up to various devices, such as USB flash drives, USB HDDs or a DVD-R/W. To export record files:

1. Enter Video Export (Menu > Export) interface.

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



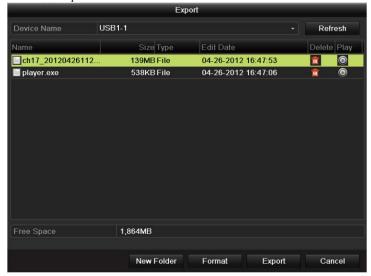
HHRA03 Series

Note: Record files backup of **IP Camera** is supported by HHRA03 series.

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



Check backup result.
 Select the record file on Export interface and click button to check it.



Accessing via Web Browser

The device can also be accessed via web browsing. It provides the functionalities of live view, recording, playback, log management, etc.

Login

Steps:

- 1. Open the web browser, input the IP address of the device in the address bar, and then press the Enter key. The login interface appears.
- 2. Input the user name and password of the device.
- 3. Click Login.

Notes:

- You can set the language as Chinese or English in the upper-right corner of the login interface.
- The user name and password are admin and 12345 by default.



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

Click the Live View tab to open the Live View page.

On the Live View page, you can view the live video of the added cameras and do some basic operations, including picture capturing, manual recording, PTZ control, etc.



Live View Page:

	Channal Liet	Dienlaye the	list of channels	and the playing and	d recording status	of anch channal
ш	Chamiel List.	Displays me	list of chamiles	and the blaving and	a recording status	oi each chaimei.

Live View Window: Displays the image of channel, and multi-window division is supported.

☐ Live View Toolbar: Play control operations are supported.

□ PTZ Control: Pan, tilt, zoom operations are supported, as well as preset editing and calling (only available for PTZ cameras).

□ Video Parameters Configuration: Brightness, contrast, saturation and hue of the image can be modified.

On the Live View page, the following toolbar buttons are available:

Button	Description	Button	Description
-	Select the window-division mode		Open/Close audio
	Start/Stop all live view	4	Start/Stop two-way Audio
0	Capture pictures in the live view mode		Adjust volume
NE NE	Start/Stop all recording	• •	Enable/Disable digital zoom
	Previous page	-	Next page

Starting the Live View

Steps:

- 1. Click to select a live view window on the Live View page.
- 2. Double-click the camera on the channel list to start the live view; or you can also click the icon on the toolbar to start the live view of all cameras on the channel list.
- 3. To stop the live view, double-click the camera on the channel list again; or click the icon on the toolbar.

Recording

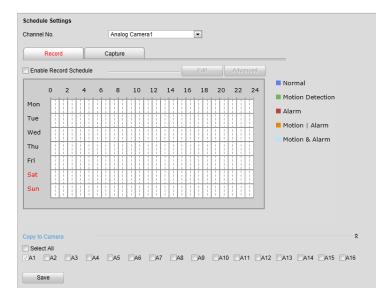
Before you start

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.

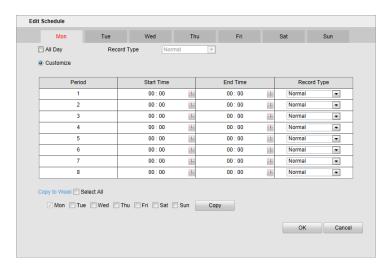
Two recording types can be configured: Manual and Scheduled. The following section introduces the configuration of scheduled recording.

Steps:

- 1. Click the **Configuration** tab to open the Configuration page.
- 2. Click Remote Configuration> Camera Settings> Schedule Settings to enter Record Schedule settings interface.
- 3. Select the camera from the drop-down list.
- **4.** Click the **Record** tab to enter the record schedule settings tab page.
- 5. Check the checkbox of Enable Record Schedule to enable scheduled recording.



6. Click **Edit** to edit the record schedule.



- 1) Choose the day in a week to configure scheduled recording.
- 2) Check the checkbox of **All Day** to enable the all-day continuous recording; or check the checkbox of **Customize**, and click the icon to set the start time and end time for the continuous recording.
- 3) Select the record type from the drop-down list. The record type can be Normal, Motion, Alarm, Motion & Alarm, and Motion | Alarm.
- 4) Optionally, you can check the checkboxes of other days in the week and click **Copy** to copy the settings to the selected days.
- 5) Click **OK** to save the new settings, and exit from the record schedule settings interface.

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

- 7. Click **Advanced**, you can configure the advanced record parameters, including pre-record time, post-record time, etc.
- **8.** Optionally, check the checkboxes of other channels to copy the settings to.
- 9. Click **Save** to save the settings.

Playback

Click the Playback tab to open the Playback page

The record files stored on the HDDs of the device can be searched and played back remotely via the web browser.



Playback Page:

- ☐ Channel List: Displays the list of channels and the playing status of each channel.
- ☐ Playback Window: Displays the image of channel.
- ☐ Playback Toolbar: Play control operations are supported.
- ☐ Time Line: Displays the time bar and the records marked with different colors.
- ☐ Playback Status: Displays the playback status, including channel number and playback speed.

On the Playback page, the following toolbar buttons are available:

Button	Description	Button	Description
► II	Play/Pause	1	Stop
*	Slow down	*	Speed up
1	Play by single frame		Capture
	Stop all playback	₹	Download
**	Video clip	40 -	Open/Close audio

Starting the Playback

Steps:

- 1. Select a camera from the channel list on the Playback page.
- 2. Select the day on the calendar.
- **3.** Click **Search**. The record files of the selected camera will be indicated on the time line, and record files of different types are color coded.
- **4.** Click the icon on the toolbar to start the playback.
- 5. You can click on the time line to specify the time for playback; or input the specified time in the text field 00:00:00, and then click the icon
- **6.** To stop the playback, click the icon on the toolbar.

Note: If there are record files for that camera in that day, on the calendar, the icon for that day is displayed as

Otherwise it is displayed as

Log Management

The log files of the device can be viewed and exported if needed. Multiple types of logs are supported, including operation, alarm, exception and information of device.

Before you start:

Log Management function is available only when the device is connected with HDD or network disk. And make sure the HDD or network disk has been initialized for storage.

Steps:

- 1. Click the **Log** tab to Open the Log page.
- 2. Select the major type and minor type of logs from the drop-down list.
- 3. Click the icon to specify the start time and end time for search.
- **4.** Click **Search**. The logs between the start time and end time will be displayed on a list, and you can view the type, channel No., and other information of the logs.
- 5. Click the icon Save Log, and you can save the logs to the local directory.

Note: Up to 100 items of logs can be displayed on each page.

