

Network Video Recorder

Quick Start Guide

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About this Manual

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.

Please use this user manual under the guidance of professionals.

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Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 2014/30/EU, the LVD Directive 2014/35/EU, 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.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 NOTE	Provides additional information to emphasize or supplement important points of the main text.
 WARNING	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 DANGER	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

Safety Instructions

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- Firmly connect the plug to the power socket. Do not connect several devices to one power adapter. Power off the device before connecting and disconnecting accessories and peripherals.
- Shock hazard! Disconnect all power sources before maintenance.
- The equipment must be connected to an earthed mains socket-outlet.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- ⚡ indicates hazardous live and the external wiring connected to the terminals requires installation by an instructed person.
- Never place the equipment in an unstable location. The equipment may fall, causing serious personal injury or death.
- Input voltage should meet the SELV (Safety Extra Low Voltage) and the LPS (Limited Power Source) according to the IEC60950-1.
- High touch current! Connect to earth before connecting to the power supply.
- 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.
- Use the device in conjunction with an UPS, and use factory recommended HDD if possible.
- This product contains a coin/button cell battery. If the battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
- This equipment is not suitable for use in locations where children are likely to be present.
- CAUTION: Risk of explosion if the battery is replaced by an incorrect type.
- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.

- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
- Dispose of used batteries according to the instructions
- Keep body parts away from fan blades and motors. Disconnect the power source during servicing.

Preventive and Cautionary Tips

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

- The device is designed for indoor use only. Install it in a well-ventilated, dust-free environment without liquids.
- Ensure recorder is properly secured to a rack or shelf. Major shocks or jolts to the recorder as a result of dropping may cause damage to the sensitive electronics within the recorder.
- The equipment should not be exposed to dripping or splashing and that no objects filled with liquids shall be placed on the equipment, such as vases.
- No naked flame sources, such as lighted candles, should be placed on the equipment.
- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc. The openings shall never be blocked by placing the equipment on a bed, sofa, rug or other similar surface.
- For certain models, ensure correct wiring of the terminals for connection to an AC mains supply.
- For certain models, the equipment has been designed, when required, modified for connection to an IT power distribution system.
- Use only power supplies listed in the user manual or user instruction.

Chapter 1 Rear Panel Interfaces Description

The rear panel interfaces vary with different models. Refer to Table 1-1 for the common interfaces description.

Table 1-1 Common Interfaces Description of Rear Panel

Item	Description	Item	Description
VIDEO IN	BNC interface for Turbo HD and analog video input	VIDEO OUT	BNC connector for video output
AUDIO IN	RCA connector for audio input	AUDIO OUT	RCA connector for audio output
LINE IN	RCA connector for two-way audio input	USB	Universal Serial Bus (USB) interface for mouse, keyboard, or USB flash drive
VGA	DB15 connector for local video output and menu display	HDMI	HDMI interface for video output
RS-485	RS-485 serial interface for pan/tilt unit, speed dome, etc	RS-232	RS-232 interface for parameter configuration, or transparent channel
LAN	RJ-45 self-adaptive Ethernet interface	eSATA	Storage and expansion interface for record or backup
ALARM IN /OUT	Alarm input/output interface	GND	Ground
Power Switch	Switch for turning on/off the device	Power Supply	100 to 240 VAC, 48 VDC, or 12 VDC power supply, different models vary

Chapter 2 Installation and Connections

2.1 Device Installation

During installation of the device:

- Use brackets for rack mounting.
- Ensure ample room for audio and video cables.
- When routing cables, ensure the bend radius of the cables are no less than five times of its diameter.
- Allow at least 2 cm (≈ 0.75 inch) of space among racks mounted devices.
- Ensure the device is grounded.
- Environmental temperature should be within the range of -10 °C to 55 °C (14 °F to 131 °F).
- Environmental humidity should be within the range of 10% to 90%.

2.2 HDD Installation

Before you start

- Ensure power is disconnected.
- Prepare a factory recommended HDD, and cross screwdriver.

2.2.1 Fix-on-Bottom Installation

Fix-on-bottom installation is applicable when it requires to install the HDD at the internal bottom.

Step 1 Unfasten screws on each panel to remove the device cover. Refer to Figure 2-1.

Step 2 Connect the data cable and power cable. Refer to Figure 2-2.

Step 3 Match HDD screw threads with the reserved holes on the device bottom, and fix HDD with screws.

Refer to Figure 2-3.



You can repeat the steps above to install other HDDs.

Step 4 Reinstall the device cover and fasten screws.

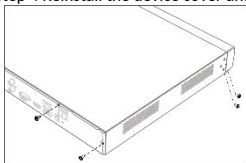


Figure 2-1 Remove Cover

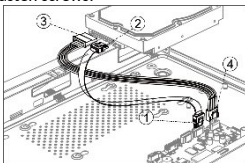


Figure 2-2 Connect Cable

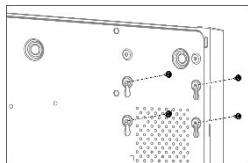


Figure 2-3 Fix HDD

2.2.2 Bracket Installation

Bracket installation is applicable when it requires to remove the device cover and install HDD on the internal bracket.

Step 1 Unfasten screws on the back, and push the cover backwards to remove the cover. Refer to Figure 2-4.

Step 2 Fix the HDD on the bracket with screws. Refer to Figure 2-5.



Please uninstall the upper layer bracket first before installing HDD on the lower layer bracket.

Step 3 Connect the data cable and power cable. Refer to Figure 2-6.



You can repeat the steps above to install other HDDs.

Step 4 Reinstall the device cover and fasten screws.

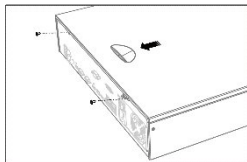


Figure 2-4 Remove Cover

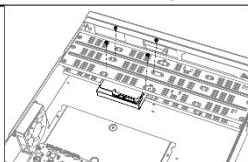


Figure 2-5 Fix HDD

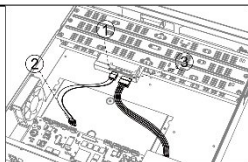


Figure 2-6 Connect Cable

2.2.3 Front Panel Plug-Pull Installation

Front panel plug-pull installation is applicable when it requires to open the device front panel with key.

Step 1 Fix mounting ears to HDD with screws. Refer to Figure 2-7.

Step 2 Use attached key to unlock the front panel, and press buttons on both sides to open the front panel.

Refer to Figure 2-8.

Step 3 Insert the HDD until it is firmly fixed. Refer to Figure 2-9



You can repeat the steps above to install other HDDs.

Step 4 Close the front panel and lock it with key.

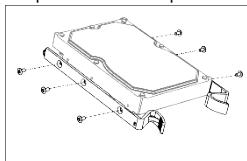


Figure 2-7 Fix Mounting Ear

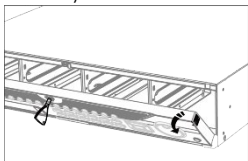


Figure 2-8 Open Front Panel

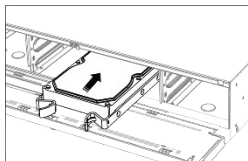


Figure 2-9 Insert HDD

Chapter 3 Menu Operation

3.1 Startup

Proper startup is crucial to expand the life of your device. It is HIGHLY recommended to use an Uninterruptible Power Supply (UPS) with the device.

Step 1 Plug power supply into an electrical outlet.

Step 2 Press the power button (certain models may have power button on the front or rear panel). The device begins to start.

3.2 Activate Your Device

No operation is allowed before activation. For the first-time access, it requires to set an admin password for device activation. You can also activate the device via web browser, SADP or client software.

Step 1 Select a language.

Step 2 Click **Apply**.

Step 3 Enter the same password in **Password** and **Confirm Password**.



STRONG PASSWORD RECOMMENDED—We highly recommend you create a strong password of your own choosing (Using a minimum of 8 characters, including at least three of the following categories: 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.

Step 4 Activate network camera(s) connected to the device.

- Check **Use Device Password** to use the device password to activate the inactive network cameras(s).

- Enter a password to activate network camera(s).

Step 5 Click **Activate**.

What to do next:

Follow the wizard to set basic parameters. There are three methods to reset your password when you forget it. You have to configure at least one password resetting method.

*User Name admin

*Password

*Confirm Password

*Camera Activation Password

☒ Use the Device Password

Figure 3-1 Set Admin Password

3.3 Login Unlock Pattern

For the Admin user, you can set the unlock pattern for device login after it is activated.

Step 1 Use mouse to draw a pattern among the 9 dots on the screen. Release the mouse when the pattern is done.



- The pattern shall have at least 4 dots.
- Each dot can be connected once only.

Step 2 Draw the same pattern again to confirm it.



Figure 3-2 Set Unlock Pattern

3.4 User Login

You have to log in to the device before operating the menu and other functions.

Step 1 Select user account.

Step 2 Enter password for the selected user.

Step 3 Click **Login**.



For the admin, if you have entered the wrong password 7 times, the account will be locked for 60 seconds. For the operator, if you have entered the wrong password 5 times, the account will be locked for 60 seconds.

3.5 User Logout, Shutdown, and Reboot

You can log out of the system, shut down, or reboot the device.

Step 1 Click  at the upper-right corner.

Step 2 Click **Logout**, **Shutdown**, or **Reboot** as your desire.

3.6 Add Network Cameras

Before you can get live video or record the video files, you should add network cameras to the device.

Before you start

Ensure the network connection is valid and correct, and the network camera has already been activated.

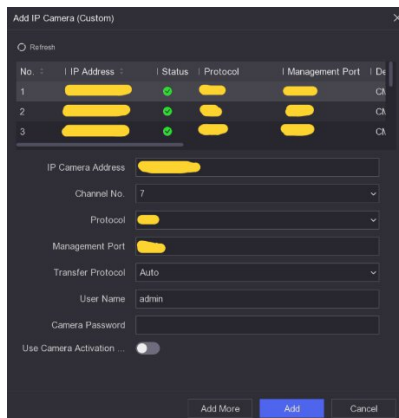
Step 1 Go to **Configuration > Camera > IP Camera**.

Step 2 Click  **Add**.

Step 3 Set the IP camera parameters, including IP address, protocol, management port, etc. You can enable **Use Camera Activation Password** to use the device password to add the IP camera.

Step 4 (Optional) Click **Add More** to add other IP cameras.

Step 5 Click **OK**.



Add IP Camera (Custom)

☐ Refresh

No.	IP Address	Status	Protocol	Management Port	De
1		✓			CA
2		✓			CA
3		✓			CA

IP Camera Address

Channel No. 7

Protocol

Management Port

Transfer Protocol Auto

User Name admin

Camera Password

Use Camera Activation ... ☐

Add More Add Cancel

Figure 3-3 Add IP Camera

3.7 Network Settings

3.7.1 Configure General Settings

You shall properly configure the network settings before you operate your device over network.

Step 1 Go to **Configuration > Network > General**.

Step 2 Set the general network parameters.

Step 3 Click **Apply**.

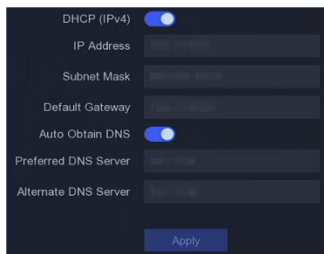


Figure 3-4 Network Settings


3.7.2 Configure PT Cloud

PT Cloud provides mobile phone applications and platform service to access and manage your connected devices, which enables you to get convenient remote access to the surveillance system.

Step 1 Go to **Configuration > Network > PT Cloud**.

Step 2 Turn on **Enable** to activate the function and accept service terms. The service terms will pop up.

- 1) Scan the QR code to read the service terms and privacy statement.
- 2) Check **I have read and agree to Service Terms and Privacy Statement** if you agree the service terms and privacy statement.
- 3) Click **OK** to save the settings.

Step 3 Click  to set verification code.

Step 4 Enable **PT Cloud Server Time Sync**, the device will sync time with the PT Cloud server instead of NTP server.


Step 5 (Optional) Check **Stream Encryption**. It requires to enter verification code in remote access and live view after this function is enabled.

Step 6 (Optional) Edit **LTS PT Cloud Server IP**.

Step 7 Bind your device with an LTS Connect account.

- 1) Use a smart phone to scan the QR code, and download LTS Connect app.
- 2) Use LTS Connect to scan the device QR, and bind the device.



- If the device is already bound with an account, you can click **Unbind** to unbind with the current account.
- You can also use the QR code in  at the upper-right corner to download LTS Connect and bind your device.

Step 8 Click **Apply**.

What to do next:

After configuration, you can access and manage your devices via app or website.




3.8 Live View and Record Settings

Live view shows you the video image getting from each camera in real time. The device will automatically enter live mode when powered on. In the live mode, there are icons at the right top of the screen to indicate the status of record and alarm for each channel.

Live View Icons

In the live view mode, there are icons on the screen to indicate the record and alarm status of each channel.

Table 3-1 Description of Live View Icons

Item	Description	Item	Description
	Alarm (video loss, tampering, motion detection, VCA or sensor alarm)		Alarm and Record
	Record (manual record, continuous record, motion detection, VCA or alarm triggered record)		

3.9 Playback

The recorded files on HDD can be played back. Refer to the user manual for details of each playback mode.

Step 1 Go to **Playback**.

Step 2 Check the channel(s) in the channel list for playback.

Step 3 Double click a date on the calendar.

Step 4 (Optional) Use the toolbar in the bottom to control the playing progress.

Step 5 (Optional) Select the channel(s) to execute simultaneous playback of multiple channels.



Figure 3-6 Playback

Chapter 4 Access by Web Browser



The use of the product with Internet access might be under network security risks. For avoidance of any network attacks and information leakage, please strengthen your own protection. If the product does not work properly, please contact your dealer or the nearest service center.

You can get access to the device via web browser. The following web browsers are supported: Internet Explorer 6.0, Internet Explorer 7.0, Internet Explorer 8.0, Internet Explorer 9.0, Internet Explorer 10.0, Apple Safari, Mozilla Firefox, and Google Chrome. The supported resolutions include 1024*768 and above.

Step 1 Open web browser, enter the IP address of the device and then press **Enter**.

Step 2 Log in to the device.

- If the device has not been activated, activate the device first by setting the password for the admin user account.

If the device is already activated, enter the **user name** and **password** to log in.

Step 3 Follow the installation prompts to install the plug-in before viewing the live video and managing the device.



- You may have to close the web browser to finish the installation of the plug-in.
- After login, you can perform the operation and configuration of the device, including the live view, play back, configuration, etc.