Network Video Server

Quick Start Guide

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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 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: *http://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: *http://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
⚠ Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
⚠ Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
🗒 Note	Provides additional information to emphasize or supplement important points of the main text.

Safety Instruction

Please read all the safety information carefully before using.

● 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.
● The socket-outlet shall be installed near the equipment and shall be easily accessible.
● For the device with the sign ⚡ indicating hazardous live, the external wiring connected to the terminals requires installation by an instructed person.
● This equipment is not suitable for use in locations where children are likely to be present.

Warning:
1. Do not ingest battery. Chemical Burn Hazard!
2. This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
3. Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
4. 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.
5. 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.

6. Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.

7. Dispose of used batteries according to the instructions.

- If smoke, odor, or noise arises from the device, immediately turn off the power, unplug the power cable, and contact the service center.
- Use the device in conjunction with an UPS, and use factory recommended HDD if possible.
- For the device with fan blades or motors, keep body parts away from fan blades or motors. Disconnect the power source during servicing.
- Do not touch the bare components (such as the metal contacts of the inlets) and wait for at least 5 minutes, since electricity may still exist after the device is powered off.
- Never place the device in an unstable location. The device may fall, causing serious personal injury or death.
- If the device uses a 3-prong power supply plug, it must be connected to an earthed mains socket-outlet properly.

Preventive and Cautionary Tips

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

- The device shall not be exposed to water dripping or splashing, and no objects filled with liquids, such as vases, shall be placed on the device.
- No naked flame sources should be placed on the device, such as lighted candles.
- For the device with ventilation openings, the ventilation openings should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, and curtains. The openings shall never be blocked by placing the device on a bed, sofa, rug, or other similar surface.
- The USB port of the equipment is used for connecting to a mouse, keyboard, USB flash drive, or Wi-Fi dongle only. The current for the connected device shall be not more than 0.1 A.
- Under high working temperature (40 °C (104 °F) to 55 °C (131 °F)), the power of some power adaptors may decrease.
- If the device needs to be installed on the wall or ceiling,
  1. Install the device according to the instructions in this manual.
  2. To prevent injury, this device must be securely attached to the installation surface in accordance with the installation instructions.
- If a power adapter is provided in the device package, use the provided adapter only.
- If the device needs to be wired by yourself, select the corresponding wire to supply power according to the electric parameters labeled on the device. Strip off wire with a standard wire stripper at corresponding position. To avoid serious consequences, the length of stripped wire shall be appropriate, and conductors shall not be exposed.
- Make sure that the power has been disconnected before you wire, install, or disassemble the device.
- The device should be placed in a dry environment without corrosive gas (refer to the user manual for details about corrosive gas).
- When the device is running above 45 °C (113 °F), or its HDD temperature in S.M.A.R.T. exceeds

the stated value, please ensure the device is running in a cool environment, or replace HDD(s) to make the HDD temperature in S.M.A.R.T. below the stated value.

● Use brackets for rack mounting.
● 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 working temperature.
● Environmental humidity should be within the range of 10% to 90%.

Chapter 1 Indicator and Interface Description

1.1 Front Panel Indicator Description

The indicators at the front panel indicates different working status of your device.

Table 1-1 Common Indicator Description
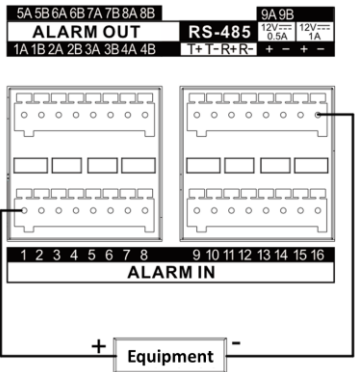
Indicator	Description
POWER	The indicator turns on when device is powered up.
READY	The indicator turns on when the device is functioning properly.
Tx/Rx	The indicator flickers when network connection is functioning properly.

1.2 Interface Description

The panel interfaces vary with different models. Refer to the following table for common interface description.

Table 1-2 Common Interface Description
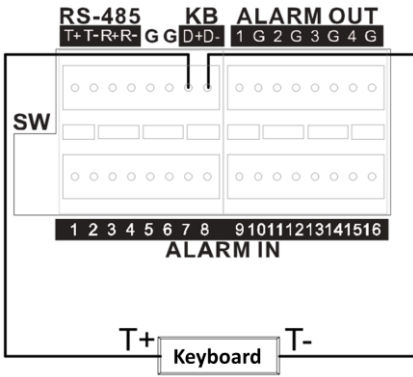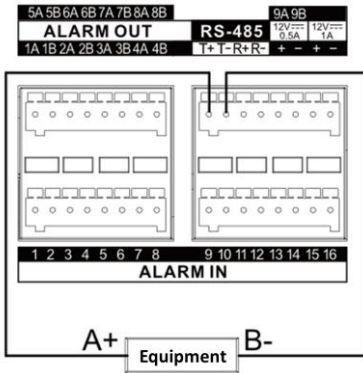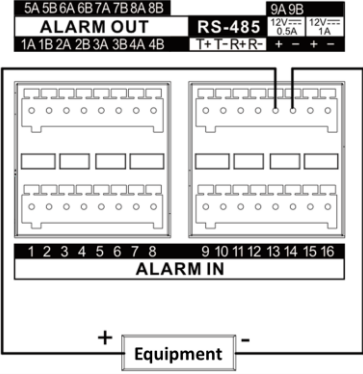
Item	Description
VIDEO IN	BNC interface for Turbo HD and analog video input.
VIDEO OUT	BNC connector for video output.
AUDIO IN	RCA connector for audio input.
AUDIO OUT	RCA connector for audio output.
LINE IN	RCA connector for two-way audio input.
USB	Universal Serial Bus (USB) interface for additional device.
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.

Item	Description
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.
GND	Ground.
Power Switch	Switch for turning on/off the device.
Power Supply	100 to 240 VAC, 48 VDC, or 12 VDC power supply.
USIM Card	UIM/SIM card slot.
$\Y$	SMA antenna interface.
ALARM IN	The alarm input receives alarm input signal. The equipment positive terminal (+) should connect to a number, and the equipment negative terminal (-) should connect to "-" or "G". Use the following diagram as a connection example for alarm input.
ALARM OUT	The alarm output sends out alarm signal. When an equipment uses DC power supply, its positive terminal (+) should connect to a number with "A", and its negative terminal (-) should both connect to the corresponding number with "B", and then connect to "-" or "G". Use the following diagram as an alarm output connection example for DC equipment.

Item	Description
	When an equipment uses AC power supply, its positive terminal (+) should connect to a number with "A", and its negative terminal (-) should connect to the corresponding number with "B". Use the following diagram as an alarm output connection example for AC equipment. ⓘ**Note** For the reason that the AC load voltage could be high, please use an external relay for safety. Use the following diagram for reference.
KB	KB represents keyboard. Connect "D+" and "D-" to "T+" and "T-" respectively.

Item	Description
	Use the following diagram for reference.
RS-485	RS-485 is an electrical specification of a two-wire, half-duplex, multipoint serial connection. Connect "T+" and "T-" to "A+" and "B-" respectively. Use the following diagram for reference.
Ctrl 12V/$^{12V}_{0.5A}$	Controllable 12 VDC and 0.5/1 A power output for external alarm device. The power will be turned on when the corresponding alarm output is triggered. Use the following diagram for reference.
DC 12V/$^{12V}_{1A}$	It provides 12 VDC and 1 A power output. Use the following diagram for reference.

Item	Description

Chapter 2 Menu Operation

2.1 Startup

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

Steps

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

2.2 Activate via Web Browser

For the first-time access, you need to activate the device by setting an admin password. No operation is allowed before activation. You may use one of the following web browsers: Internet Explorer 6.0 and above, Apple Safari, Mozilla Firefox, and Google Chrome. The supported resolutions include 1024 × 768 and above.

Steps

1. Enter the IP address in web browser, and then press **Enter**. The default IP address is 192.168.1.64.
2. Enter the admin password twice.

⚠ **Caution**

We highly recommend you to create a strong password of your own choosing (using a minimum of 8 characters, including at least three kinds of 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 change your password regularly, especially in the high security system, changing the password monthly or weekly can better protect your product.

Figure 2-1 Activate via Web Browser

4. Click **OK**.

> 📖**Note**
> ● After the device is activated, you should properly keep the password.
> ● You may have to close the web browser to finish the installation of the plug-in.

2.4 Login/Logout

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

Steps

1. Enter the IP address in web browser, and then press **Enter**.
2. Enter the user name and password.
3. Click **Log In**.

> 📖**Note**
> ● If you have entered the wrong password for several times, the device would be locked.
> ● You may have to close the web browser to finish the installation of the plug-in, and log in again.

4. You can click the account name at the upper-right corner to log out.

2.6 Network Settings

2.6.1 Configure TCP/IP Settings

TCP/IP settings must be properly configured before you can operate the device over network.

Steps
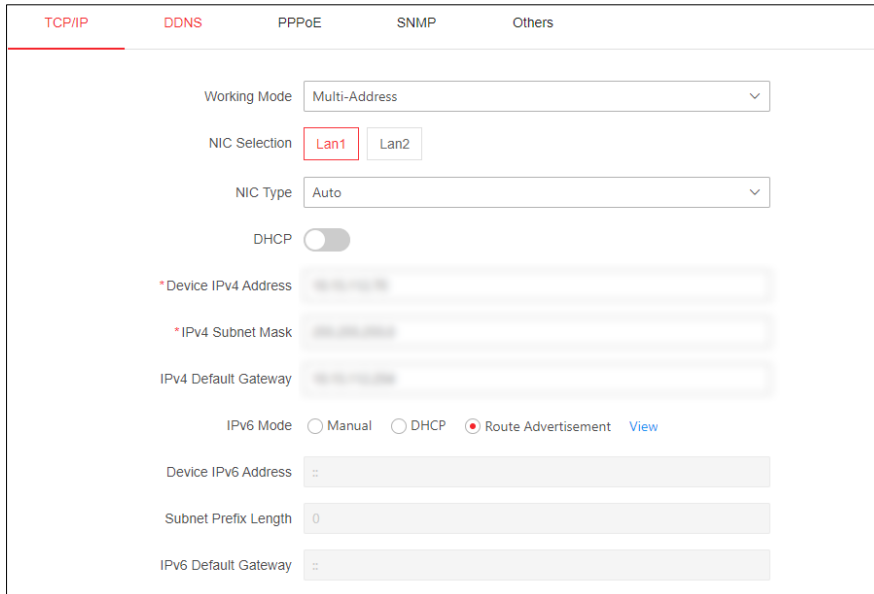
1. Go to **System Configuration** → **Network Configuration** → **Network Parameter** → **TCP/IP**.

2. Configure network parameters as needed.

> **Note**
> ● Turn on **DHCP** to obtain IP settings automatically if a DHCP server is available on the network.
> ● Valid MTU value range is from 500 to 1500.

3. Click **Save**.

Figure 2-3 TCP/IP Settings

2.6.2 Configure Hik-Connect

Hik-Connect provides mobile phone application and platform service to access and manage your connected devices, which enables you to get a convenient remote access to the surveillance system.

Steps

1. Go to **System Configuration → Network Configuration → Hik-Connect**.
2. If you accept the service terms and privacy policy, turn on **Enable** to activate the function.
3. Turn on **Stream Encryption.**
4. Edit **Verification Code**. Verification code would be required during remote access and live view.
5. Optional: Turn on **Custom**, and edit **Server IP Address**.
6. Use Hik-Connect app to scan the device QR code on the device tag, and bind your device.
7. Click **Save**.

What to do next

You can access and manage your devices through Hik-Connect.
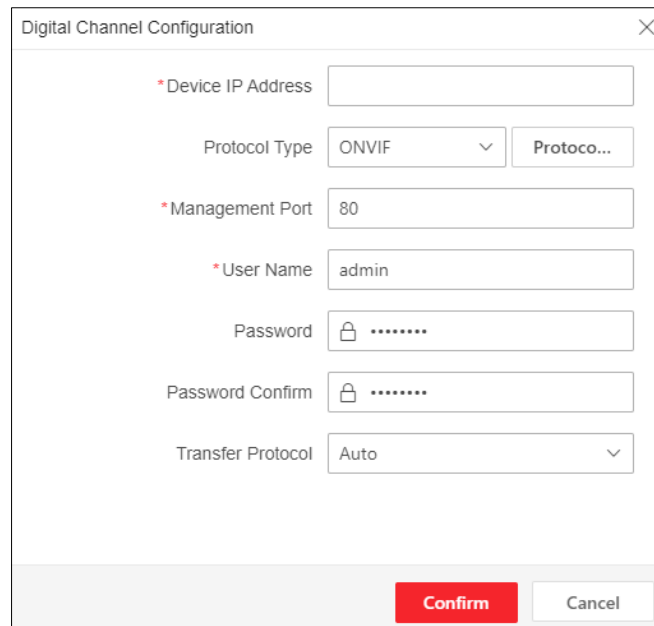
2.7 Add Network Camera

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

Before You Start

● Ensure your network camera is on the same network segment with your device.
● Ensure the network connection is valid and correct.
● Ensure the network camera is activated.

Steps

1. Go to **Device Management → Channel Management → IP Channel**.
2. Click **Add**.
3. Enter network camera parameters.
4. Click **Confirm**.

Figure 2-4 Add IP Camera

2.8 Live View

Click **Live View** at the left side to enter live view interface, and then click of a channel or double click a channel name to display its live image.
You can use the toolbar at the playing window bottom to achieve functions of video recording, stream switching, full screen, etc.
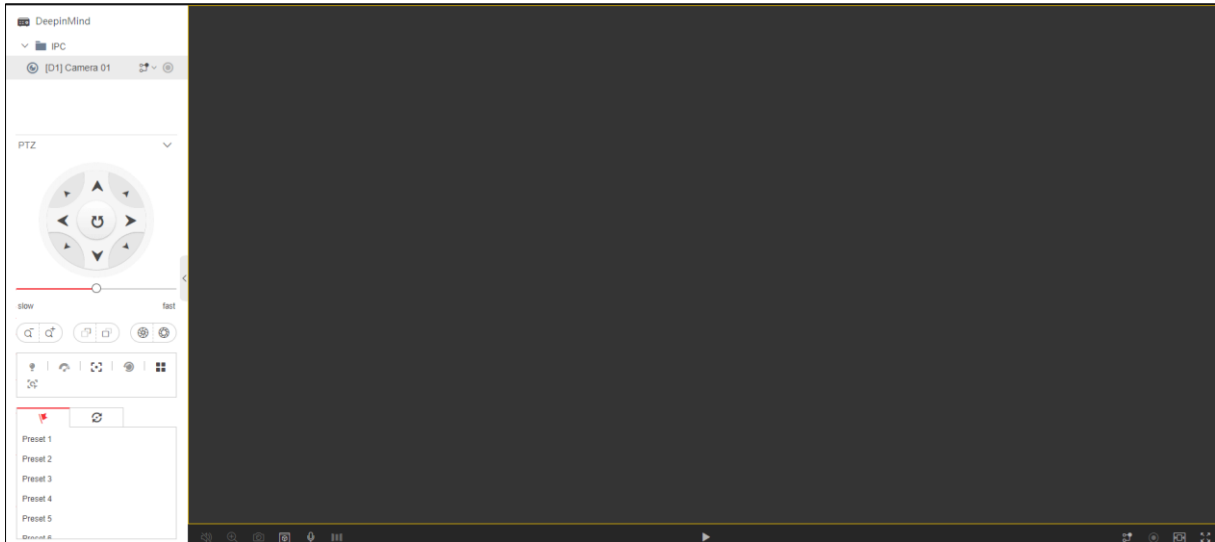If the channel is a PTZ camera, click **PTZ** at the lower-left corner to perform PTZ operations.

Figure 2-5 Live View

2.9 Recording Settings

Steps

1. Go to **Storage Management → Storage Schedule → Video Recording**.
2. Select a camera.
3. Turn on **Enable**.
4. Select a recording schedule type. The record type includes **All-Day Continuous Schedule**, **All-Day Event Schedule**, and **Custom**.

> **ⓘNote**
> ● The default recording schedule type is **All-Day Event Schedule.**
> ● If recording schedule type is **Custom**, choose **Continuous** or **Event**, and drag the cursor on the time bar to draw the recording schedule.
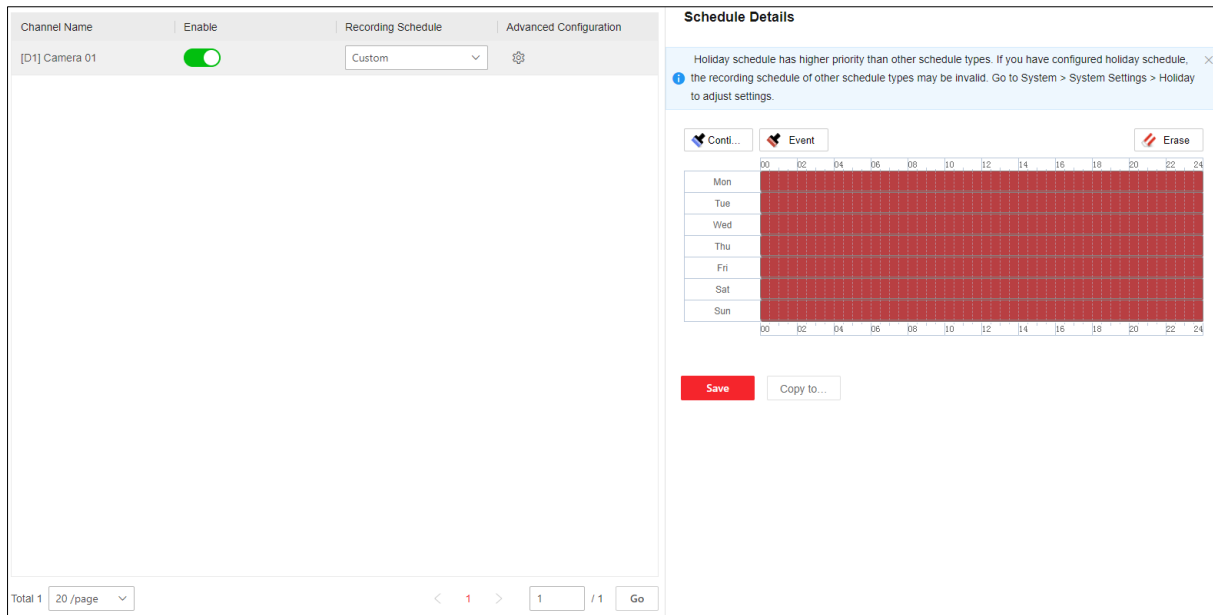
5. Click **Save**.

Figure 2-6 Recording Settings

2.10 Playback

The recorded video files and pictures on HDD can be played back.

Steps

1. Go to **Playback**.

Figure 2-7 Playback

2. Select a camera in the list.
3. Select a date on the calendar.
4. Use the toolbar at the bottom to control the playing progress.

See Far, Go Further

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