



# **Network Video Recorder**

**Quick Start Guide**

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## Network Video Recorder Quick Start Guide




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# Symbol Conventions

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

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

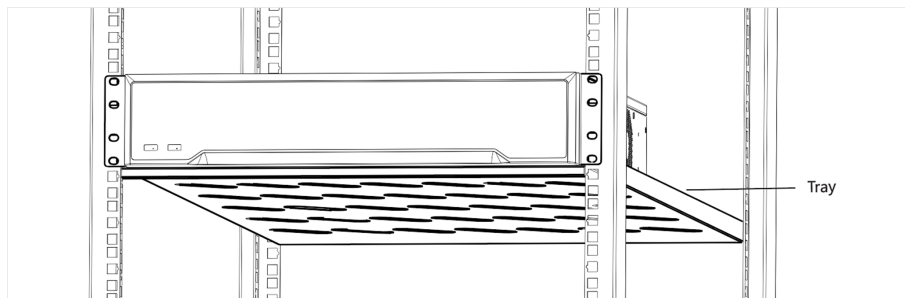
## Safety Instruction

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

# Preventive and Cautionary Tips

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

- Ensure recorder is installed in a well-ventilated, dust-free environment.
- Recorder is designed for indoor use only.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.
- Ensure recorder is properly secured to a rack or shelf. Major shocks or jolts to the recorder as a result of dropping it may cause damage to the sensitive electronics within the recorder.
- Use the device in conjunction with an UPS if possible.
- Power down the recorder before connecting and disconnecting accessories and peripherals.
- A factory recommended HDD should be used for this device.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.
- When installing the device into a cabinet over 2U height, it is suggest to use rack shelf to bear the weight. If the cabinet height is over 4U, it is suggested to use slide rails or rack shelf to bear the weight.




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## Chapter 1 Rear Panel Interfaces Description

The rear panel interfaces vary with different models. Refer to the following table for 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 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.	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.
USIM Card	UIM/SIM card slot.		SMA antenna interface.

## Chapter 2 Installation and Connections

### 2.1 Device Installation

During the device installation:

- 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 ( $\approx 0.75$  inch) of space among racks mounted devices.
- Ensure the device is grounded.
- Environmental temperature should be within the range of  $-10^{\circ}\text{C}$  to  $55^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $131^{\circ}\text{F}$ ).
- Environmental humidity should be within the range of 10% to 90%.

### 2.2 HDD Installation

Disconnect the power from the device before installing a hard disk drive (HDD). A factory recommended HDD should be used for this installation.

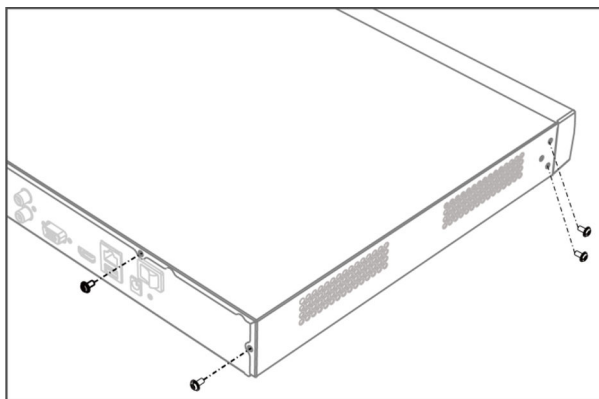
Tools Required: Screwdriver.

#### 2.2.1 Fix-on-Bottom Installation

Fix-on-bottom installation is applicable when you need to install and fix the HDD on the device bottom.

##### Steps

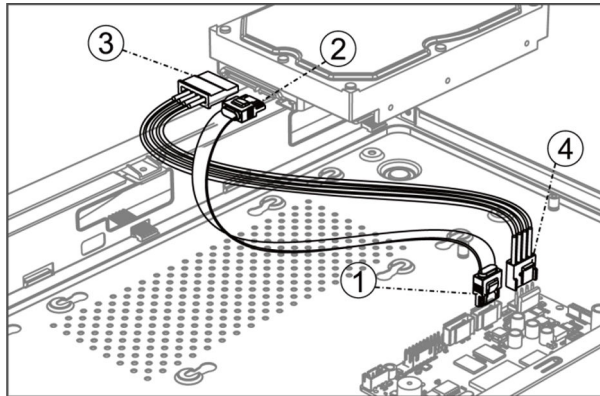
1. Remove the cover from device by unfastening the screws on panels.



**Figure 2-1 Remove Cover**

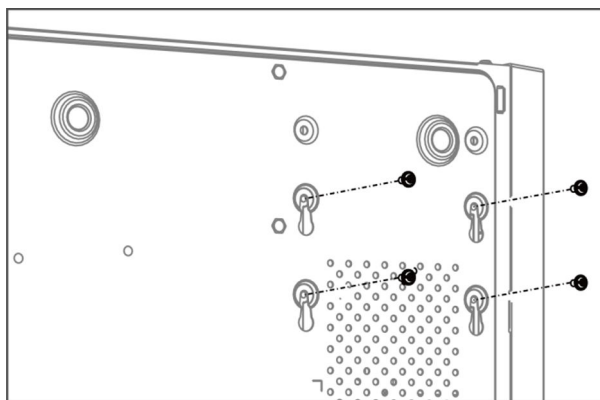
2. Connect the data cable and power cable.

- 1) Connect one end of data cable to the device motherboard.
- 2) Connect the other end of data cable to HDD.
- 3) Connect one end of power cable to HDD.
- 4) Connect the other end of power cable to the device motherboard.



**Figure 2-2 Connect Cables**

3. Set the device up, match HDD screw threads with the reserved holes on the device bottom, and fix HDD with screws.



**Figure 2-3 Fix HDD to Device Bottom**

4. **Optional:** Repeat the steps above to install other HDDs.
5. Reinstall the device cover and fasten screws.

## 2.3 SIM/UIM Card Installation

SIM card is used for wireless data transmission.

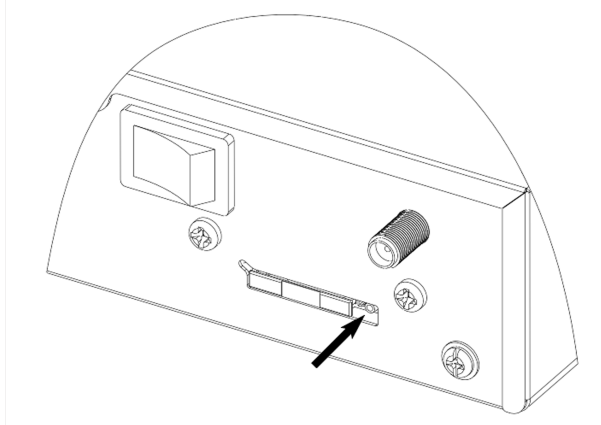
### 2.3.1 External SIM/UIM Card Installation

#### Before You Start

Power off the device during the installation.

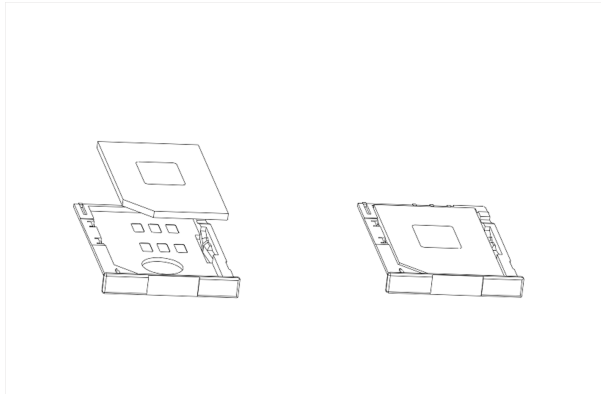
### Steps

1. Press the button to take out the card slot.



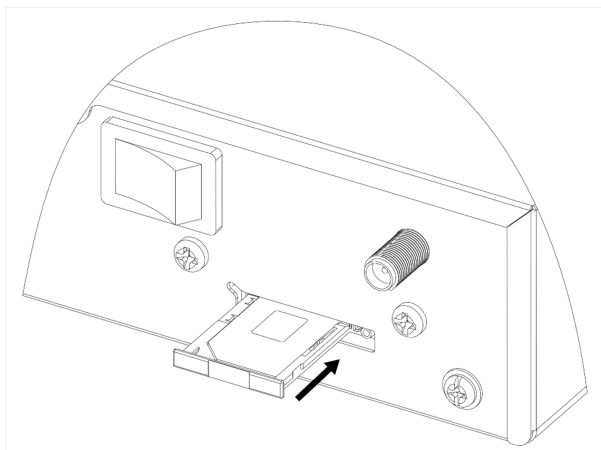
**Figure 2-4 Take Out Card Slot**

2. Install the SIM/UIM card.



**Figure 2-5 Install the SIM/UIM Card**

3. Install the card slot back to the device.



**Figure 2-6 Install Card Slot**

## What to do next

Power on your device.

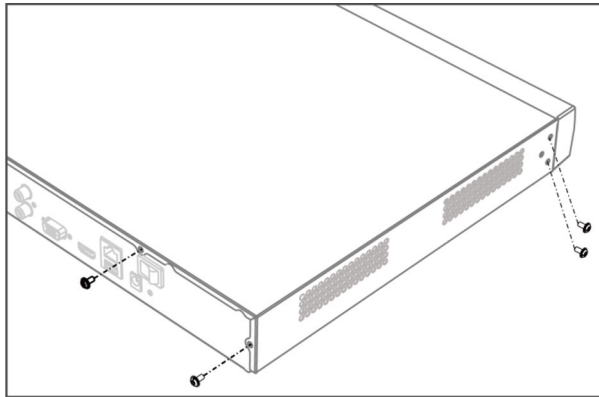
## 2.3.2 Build-in SIM/UIM Card Installation

### Before You Start

Power off the device during the installation.

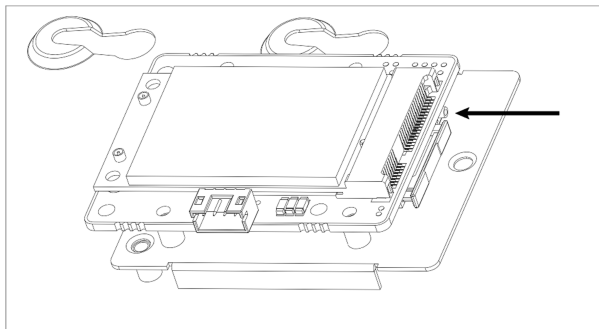
### Steps

1. Unfasten screws on panels to remove the cover.



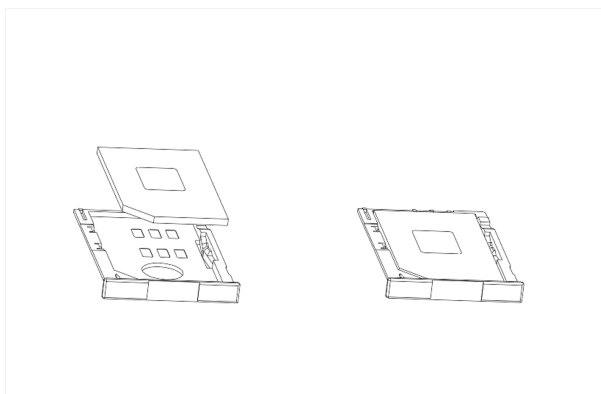
**Figure 2-7 Remove Cover**

2. Find the build-in SIM/UIM card module, and press the button to take out the card slot.



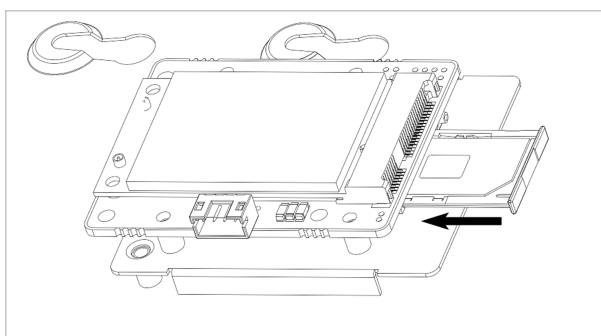
**Figure 2-8 Take Out the Card Slot**

3. Install the SIM/UIM card.



**Figure 2-9 Install the SIM/UIM Card**

4. Install the card slot back to the module.



**Figure 2-10 Install Card Slot**

5. Reinstall the device cover and fasten screws.

### **What to do next**

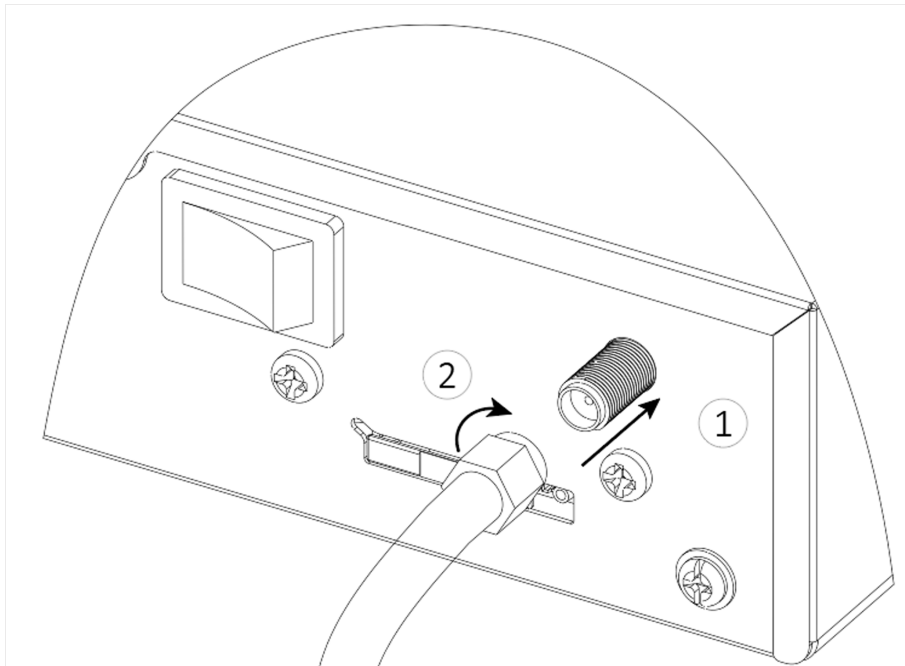
Power on your device.

## **2.4 Antenna Installation**

The antenna is used for sending and receive wireless data.

### **Steps**

1. Connect the antenna to the antenna interface in the rear panel.
2. Rotate the nut clockwise to tight it.



**Figure 2-11 Antenna Installation**

3. Put the antenna to a magnetic place with good signal. The antenna has magnet at the bottom.

## Chapter 3 Menu Operation

### 3.1 Startup, Shutdown and Reboot

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

#### Startup Your Device

Ensure the voltage of the extra power supply satisfies the requirement, and the ground connection is working properly.

Plug the power supply into an electrical outlet. It is HIGHLY recommended that an Uninterruptible Power Supply (UPS) is used in conjunction with the device.

Press the power button on the panel. The power indicator LED would be lighted up which indicating the device begins to start up.

#### Shut Down Your Device

Go to **Menu → Shutdown** . Click **Shutdown**, and click **Yes**.

If your device has a power button on the front panel, you can also hold the power button for 3 seconds, and then enter the admin user name and password to shut down your device.



#### Note

Do not press the POWER button again when the system is shutting down.

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#### Reboot Your Device

Go to **Menu → Shutdown** . Click **Reboot**, and your device will restart.

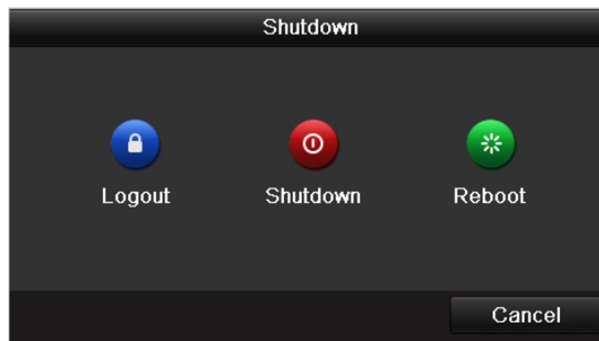


Figure 3-1 Startup, Shutdown and Reboot

### 3.2 Activate Your Device

For the first-time access, you need to activate the device by setting an admin password. No operation is allowed before activation. You can also activate the device via Web Browser, SADP or Client Software.

### Steps

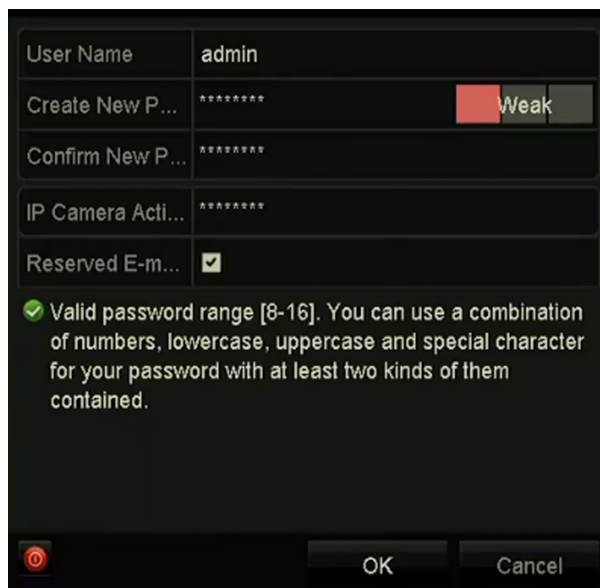
1. Enter the password in **Create New Password** and **Confirm New Password**.



### Warning

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.

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**Figure 3-2 Set Admin Password**

2. Enter the password in **IP Camera Activation** to activate the IP camera(s) connected to the device.
3. **Optional:** Check **Reserved E-mail** for future password resetting.

### What to do next

- Export the GUID file to the USB flash driver for the future password resetting.
- If you have enabled **Reserved E-mail**, continue to set the reserved email for the future password resetting.

## 3.3 Set Unlock Pattern

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

### Steps

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

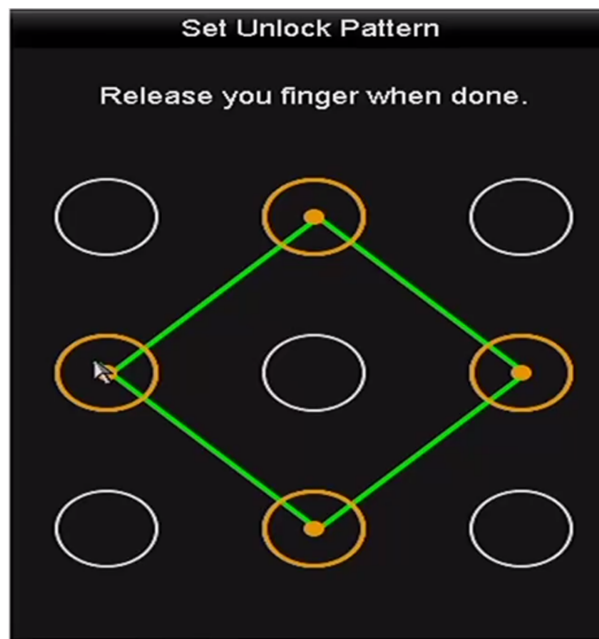


Figure 3-3 Set Unlock Pattern




### Note

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

- 
2. Draw the same pattern again to confirm it.



### Note

You can go to **Menu → Configuration → User** , and click  to edit or disable the unlock pattern.

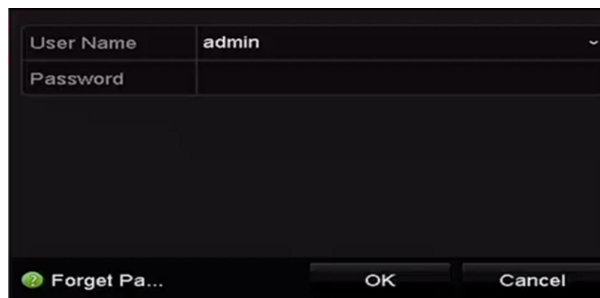
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## 3.4 User Login

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

### Steps

1. Select a user account.
2. Enter the password for the selected user.
3. Click **Login**.

A login dialog box with a dark background. It contains two input fields: 'User Name' with the value 'admin' and a dropdown arrow, and 'Password' which is empty. At the bottom, there are three buttons: 'Forget Pa...' (with a green question mark icon), 'OK', and 'Cancel'.

**Figure 3-4 Login**

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

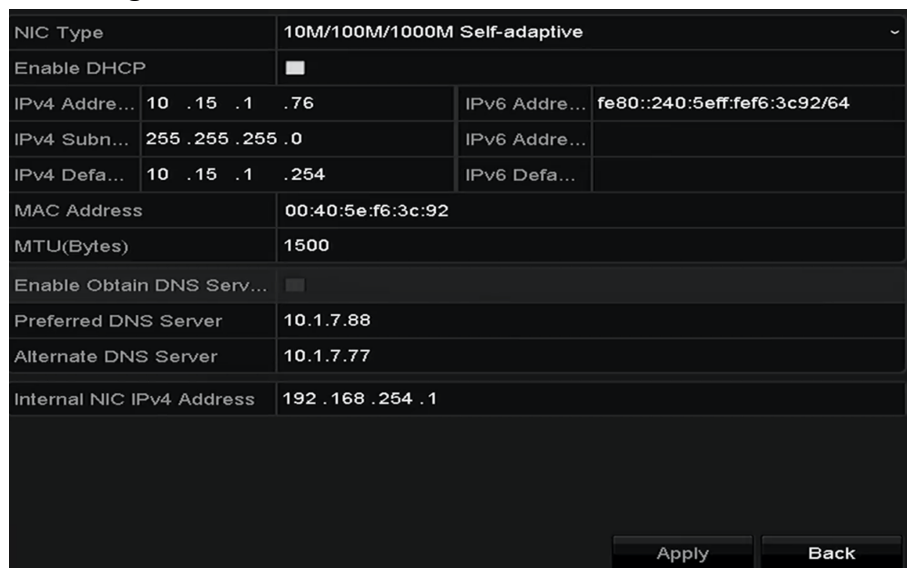
## 3.5 Network Settings

### 3.5.1 Configure General Settings

You shall properly configure the network settings before operating the device over network.

#### Steps

1. Go to **Menu → Configuration → Network → General** .

A network settings configuration window with a dark background. It contains several rows of settings:

NIC Type	10M/100M/1000M Self-adaptive		
Enable DHCP	<input type="checkbox"/>		
IPv4 Address	10 .15 .1 .76	IPv6 Address	fe80::240:5eff:fe6:3c92/64
IPv4 Subnet	255 .255 .255 .0	IPv6 Address	
IPv4 Default	10 .15 .1 .254	IPv6 Default	
MAC Address	00:40:5e:f6:3c:92		
MTU(Bytes)	1500		
Enable Obtain DNS Serv...	<input type="checkbox"/>		
Preferred DNS Server	10.1.7.88		
Alternate DNS Server	10.1.7.77		
Internal NIC IPv4 Address	192 .168 .254 .1		

At the bottom right, there are two buttons: 'Apply' and 'Back'.

**Figure 3-5 Network Settings**

2. Set the general network parameters.
3. Click **Apply**.

### 3.5.2 Configure Wireless Dial

Access to 3G or 4G wireless network via wireless dial.

#### Before You Start

- Install the SIM/UIM card and antenna to the device properly. Refer to *Quick Start Guide* for details.
- Ensure your SIM/UIM card is valid.

#### Steps

1. Go to **Menu → Configuration → Wireless → Dial Settings**.

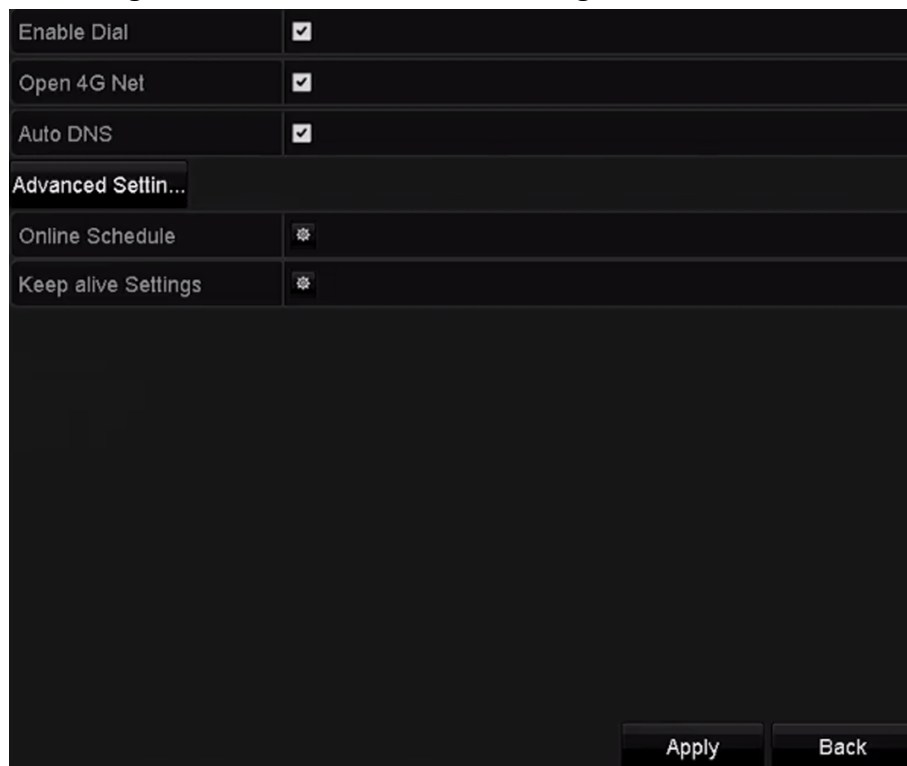




Figure 3-6 Wireless Dial

2. Check **Enable Dial**.
3. **Optional:** Check **Open 4G Net** to enable 4G network. The device will use 3G/2G if **Open 4G Net** is unchecked.
4. **Optional:** Check **Auto DNS**.
5. **Optional:** Click **Advanced Settings** to set specified APN (Access Point Name) network parameters, including **Access Number**, **User Name**, **Password**, etc.
6. Set the online schedule for wireless dial.
  - 1) Click  of **Online Schedule**.
  - 2) Select a day of the week.
  - 3) Set the online period for the day. Up to 8 periods are allowed for a day.
  - 4) Set the online period for other days. You can click **Copy** to copy the period to other days.

- 5) Click **OK**.
7. Set keep alive parameters. A keep alive (KA) is a message sent by one device to another to check that the link between the two is operating, or to prevent the link from being broken.
  - 1) Click  of **Keep alive Settings**.
  - 2) Check **Enable keep alive**.
  - 3) Set **Test interval(min)**. The interval is the duration between two successive keep alive retransmissions, if acknowledgment to the previous keep alive transmission is not received.
  - 4) Enter server IP address in **Server**.
  - 5) Click **Test** to test if the settings is valid.
  - 6) Click **OK**.
8. Click **Apply**.

### 3.5.3 Configure Guarding Vision

Guarding Vision 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 **Menu → Configuration → Network → Platform Access**.
2. Check **Enable**. The service terms will pop up.
  - 1) Enter the verification code in **Verification Code**.
  - 2) Scan the QR code to read the service terms and privacy statement.
  - 3) Check **The Guarding Vision service will require internet access. Please read Service Terms and Privacy Statement before enabling the service** if you agree the service terms and privacy statement.
  - 4) Click **OK** to save the settings.

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#### **Note**

- Guarding Vision is disabled by default.
  - The verification code is empty by default. It must contain 6 to 12 letters or numbers, and it is case sensitive.
- 

3. **Optional:** Check **Custom** to enter the server address as your desire.
  4. **Optional:** Check **Enable Stream Encryption**, verification code is required for remote access and live view.
  5. **Optional:** Check **Cloud Server Time Sync** to sync the system time via cloud server.
- 

#### **Note**

Enabling cloud server time sync will disable NTP.

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6. **Optional:** Click **Unbind** if the device requires to unbind with the current Guarding Vision account.
7. Click **Apply**.

### What to do next

After configuration, you can access and manage your devices through Guarding Vision app or website.

## 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 IP camera to add has already been activated.

### Steps

1. Go to **Menu → Camera → Camera → IP Camera**.
2. **Optional:** For devices with PoE function, click **Resource Management** to set the channel resource.
3. Click **Custom Adding**.
4. Set the IP camera parameters. There are two ways to set IP camera parameters.
  - Manually set the IP camera parameters, including IP address, protocol, management port, etc.
  - Select the detected IP camera.
    - a. Select the camera in the list. You can click **Search** to refresh the online IP camera in the list.
    - b. Enter the admin password.
5. **Optional:** Click **Continue to Add** to add other IP cameras.
6. Check **Enable H.265(For Initial Access)**. If the connected IP camera supports H.265, the IP camera will be encoded with H.265.
7. Click **Add**.

No.	IP Address	Amount of...	Device Ty...	Protocol	Managem
1	10.16.1.62	1	IPC	HIKVISION	8000
2	10.16.1.199	1	IP Dome	HIKVISION	8000


  

IP Camera Address	10.16.1.62
Protocol	HIKVISION
Management Port	8000
Channel Port	1
Transfer Protocol	Auto
User Name	admin
Password	

Search Add Cancel





Figure 3-7 Add Network Camera

### 3.7 Live View

Live view shows you the video image getting from each camera in real time. The device will automatically enter Live View mode when powered on. You can click  at the toolbar to start recording.

In the live view mode, there are icons at the right top of the screen to indicate the status of record and alarm for 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).		Event/Exception (event and exception information, appears at the lower-left corner of the screen).

### 3.8 Playback

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

#### Steps

1. Go to **Menu → Playback**.
2. Select the channel(s) in the channel list for playback.
3. Double click a date on the calendar.
4. **Optional:** Use the toolbar at the bottom to control the playing progress.
5. **Optional:** Select the channel(s) to execute simultaneous playback of multiple channels.

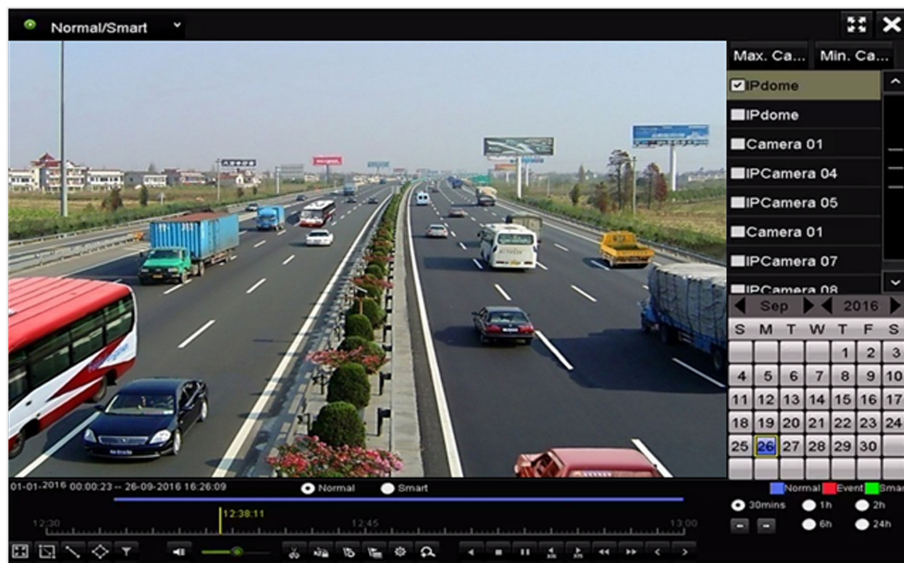


Figure 3-8 Playback

### 3.9 Access via Web Browser

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. 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 with your dealer or the nearest service center.

#### Steps

1. Open web browser, enter the IP address of the device, and press **Enter**.
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.
3. Follow the installation prompts to install the plug-in before viewing the live video and managing the device.

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#### Note

- 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, playback, log search, configuration, etc.
-

