Mobile DVR

Quick Start Guide

CONTENTS

Quick Start Guide

About this Manual

This Manual is applicable to Mobile Digital Video Recorder.

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 (http://overseas.hikvision.com/en/).

Please use this user manual under the guidance of professionals.

Trademarks Acknowledgement

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Legal Disclaimer

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

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.
- 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 9 to 32 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 over-heating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket.
- 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.

Preventive and Cautionary Tips

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

- Ensure unit is installed in a well-ventilated, dust-free environment.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.
- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the device in conjunction with an UPS if possible.
- Power down the unit 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.

Chapter 1 Installation and Connection

1.1 Before You Start

Take out the device from the package. Check the device and accessories status. Please contact us if something is missing or damaged.

1.2 Environment

Consider the following environment conditions when installing the device.

● Anti-vibration

Normal vehicle: Install the device on the part with weak vibration (such as the part behind the driver's seat, the part behind the passenger's seat, etc.) and far away from the engine.

Rail traffic: It is recommended to install the device in the electric cabinet.

● Heat dissipation

Install the device in the position far away from heat and ventilates well for good heat dissipation.

● Enough space

Leave enough space for ventilation, heat dissipation, plugging or unplugging dummy HDD, etc.
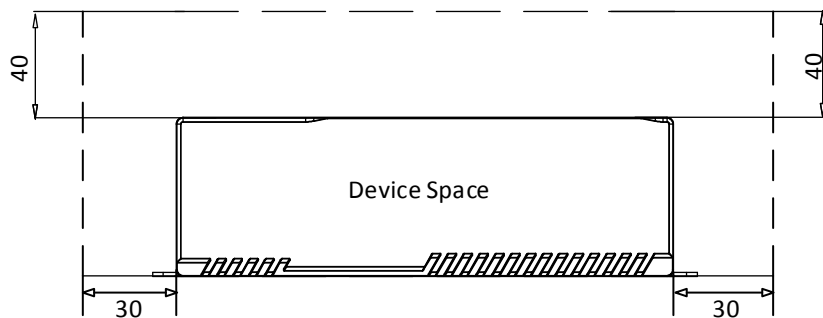
Figure 1-1 Recommended Installation Space

● Placing angle

Place the device horizontally. The other placing angles may damage the device.

● Fixing position

All the screws in the fixing positions must be fastened tightly to avoid device falling during the vibration in driving.

1.3 Install SIM Card

Pluggable 3G/4G wireless communication module is designed for the device and you should install the SIM card to realize the wireless communication function.

Before you start:

Prepare the tools and components for installation:

- SIM card
- Wrench

SIM Card   Wrench
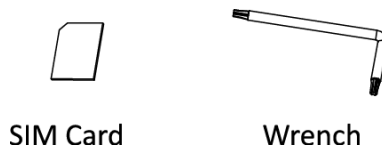
Figure 1-2 Tools

Step 1 Wear antistatic gloves.

Step 2 Use wrench to unfasten and remove the two screws fixing the 3G/4G and Wi-Fi module.
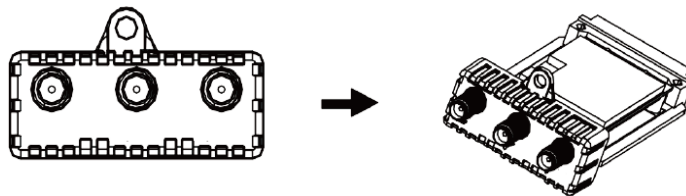
Figure 1-3 Unfasten Screws

Step 3 Pull out the 3G/4G and Wi-Fi module.

Step 4 Press the yellow button on the 3G/4G slot and then pull the SIM card tray out.

Step 5 Place the SIM card on SIM card tray with the metal side facing upwards.

Step 6 Insert the SIM card tray back to SIM card slot.

Step 7 Install the 3G/4G module back to the device and tighten the set screw.

1.4 Install SD Card

SD card is used for temporary video storage in the condition that HDDs are not installed or failed.

Before you start:

Prepare the tools and components for installation:

- Key to dummy HDD (delivered with device)
- SD card

Figure 1-4 Tools

Step 2 Wear antistatic gloves.

Step 3 Insert the key and turn counterclockwise to unlock dummy HDD.

Step 4 Unfasten the two screws of dummy HDD and pull dummy HDD out of device.
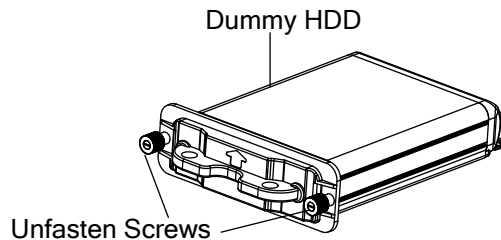
Figure 1-5 Pull Dummy HDD out

Step 5 Open the cover of SD card slot.

Step 6 Insert SD card into SD card slot with gold contacts facing down till you hear a click.

Step 7 Plug the dummy HDD back to the device, close the cover of SD card slot, and then tighten the screws clockwise.

Step 8 Turn the key clockwise to lock dummy HDD.

1.5 Install Antenna

- Connect antennas to corresponding antenna interfaces.

Table 1-1 Antenna Interface

Interface	Corresponding Antenna
M-ANT/	Main 3G/4G antenna
AUX	Aux Wi-Fi antenna
WIFI/	Main Wi-Fi antenna
GNSS/	Positioning antenna

- Place antenna vertically with its signal receiving end facing upward.

- If the cable is too long, you can roll them up to prevent signal receiving from being affected.

- Install 3G/4G antenna in car windshield, seat backrest, or other non-metallic objects. Keep away from metal objects for at least 50 cm.

- Vertically install positioning antenna on the automobile roof with no shelter.
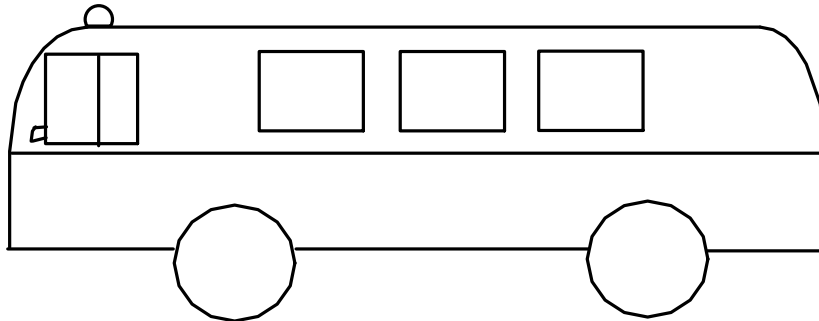
Figure 1-6 Positioning Antenna Installation (on Automobile Roof)

- Follow the instructions below in case that you need to install positioning antenna inside your automobile.

  ➢ Install antenna on platform under the front windshield.
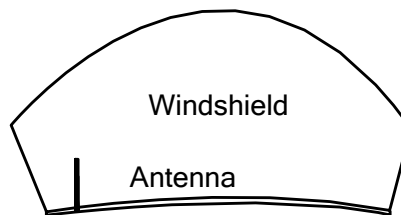
Figure 1-7 Install Positioning Antenna Inside Automobile

  ➢ Fix antenna with neutral silica gel.

  ➢ When adjusting the antenna position, ensure that at least 4 satellites have a signal strength above 35 dB. You can go to **Configuration > Vehicle > Position Settings > Location Status** to view positioning signal status.

Chapter 2 Device Wiring

2.1 Power Cord Wiring

 WARNING

In order to ensure the safety of your automobile and device, a fuse is required for wiring of automobile power and device power.

Do not connect the power cord to the device before all the cables are connected.

2.1.1 Shutdown Delay

Purpose

The device starts up when your automobile ignites and shuts down after automobile is off. Automobile ignition startup and shutdown are realized by positive pole ignition switch (providing high level signal when the switch closes). The wire connection of the device varies with the automobile ignition models.

Ignition switch is connected to the positive pole of +12/24 VDC of automobile batteries. Make sure that the connection is correct, and then perform the following steps:

Step 1 Connect the "DC IN +" of the device to the positive pole of automobile batteries, jumping over the switch of normal automobile power.

Step 2 Connect the "DC IN -" of the device to the negative pole of automobile batteries.

Step 3 Connect the "ACC" of the device to the automobile ignition switch.

Step 4 Place the fuse into the fuse holder.

What to do next: For detailed time settings of time-delay shutdown, see Chapter Configure Delayed Shutdown in user manual.
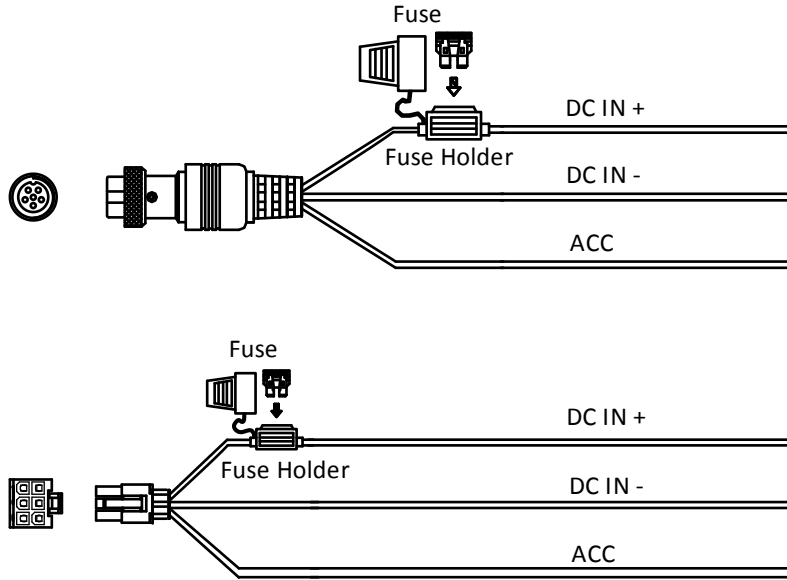
Figure 2-1 Install Fuse for Two Types of Power Supply
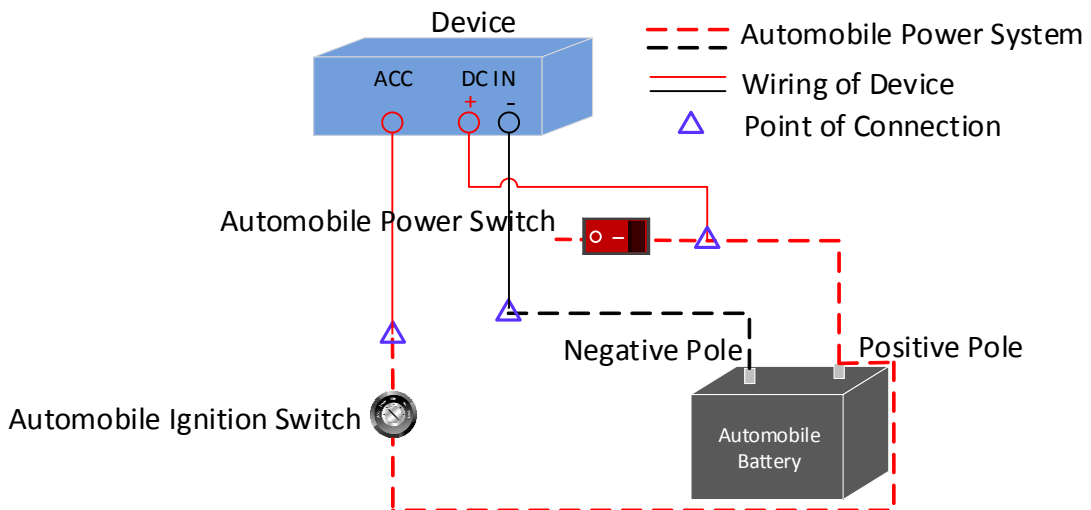
Figure 2-2 Shutdown Delay

📖 **NOTE**

- Please contact the automobile manufacturer for the connection information of starting switch.
- The automobile ignition switch, also called car key, controls the startup and shutdown of your automobile. Most of automobiles adopt positive pole ignition switch currently.
- The normal automobile power refers to the main power of the automobile power supply system. After the automobile is off, the normal automobile power still provides direct-current source for the other devices inside and generally a main switch is used to turn on/off it.

2.1.2 Scheduled Shutdown

Step 1 Connect the "DC IN +" and "ACC" of the device to the positive pole of automobile batteries.

Step 2 Connect the "DC IN -" of the device to the negative pole of automobile batteries.

Step 3 Place the fuse into the fuse holder.

What to do next: For detailed time settings of time-delay shutdown, see Chapter Enable Scheduled Startup/Shutdown in user manual.
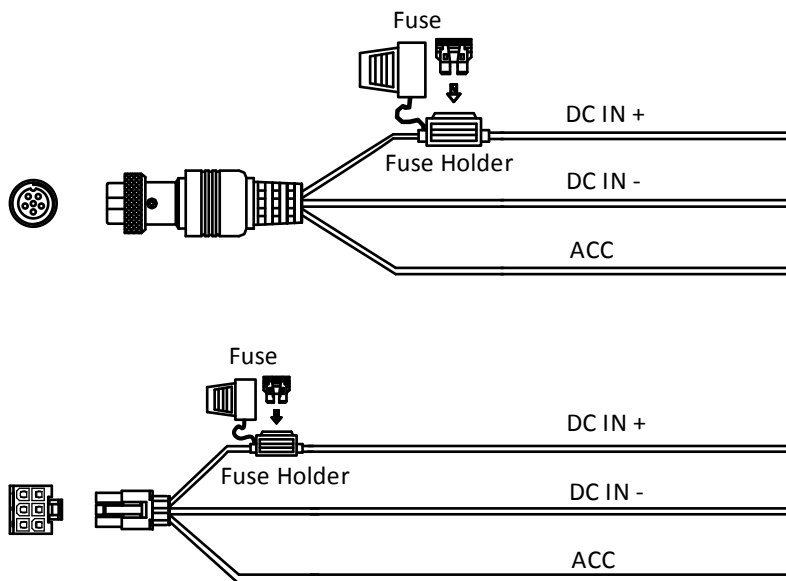
Figure 2-3 Install Fuse for Two Types of Power Supply
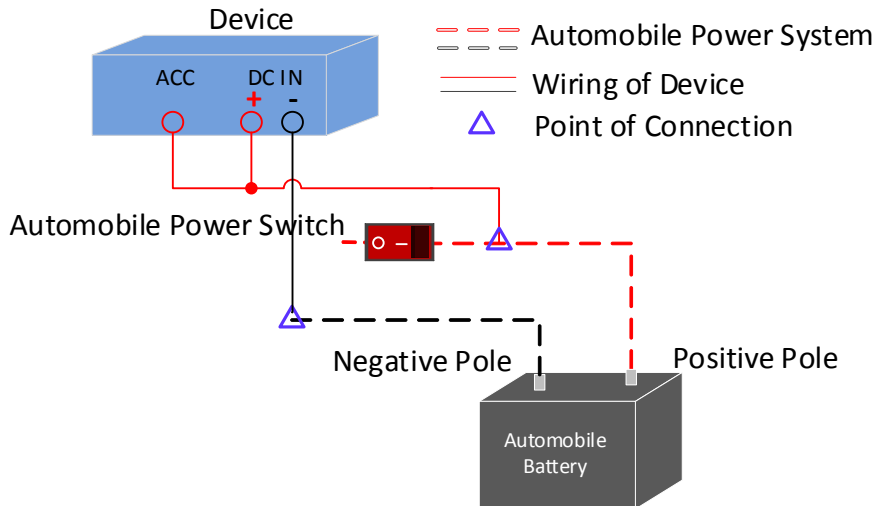
Figure 2-4 Scheduled Shutdown

2.2 Alarm Input Connection

The device adopts the high/low-level electrical signals triggering (high level: 6 to 36 VDC; low level: 0 to 5 VDC) to realize alarm input. And in order to avoid error report caused by voltage fluctuation, no alarm will be triggered by voltage ranging of 5 to 6 VDC.
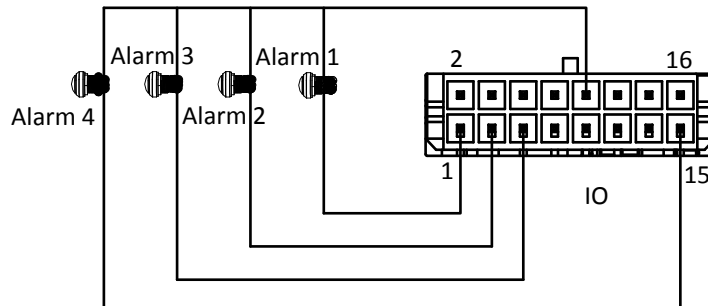
Figure 2-5 Alarm Input Connection

2.3 Sensor-In Wiring

Step 1 Connect the delivered extension cable to I/O interface.

Step 2 Connect the automobile braking, reversing, left-turn, and right-turn signals to sensor-in interface.
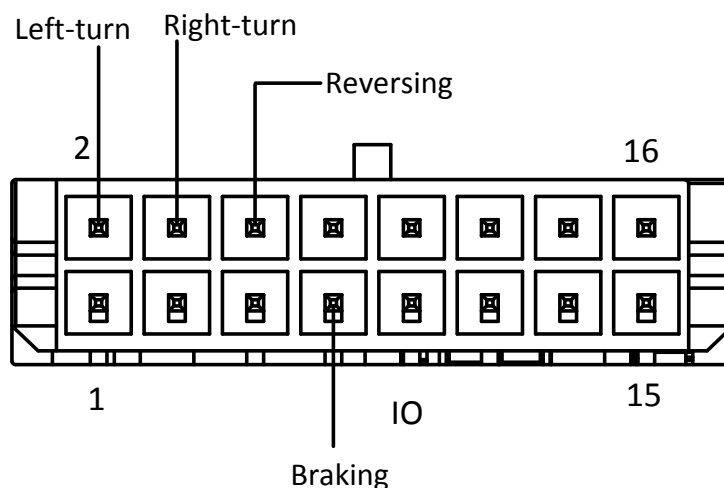
Figure 2-6 Sensor-In Wiring

2.4 Power on Device

Connect to power supply after all the above installations are finished.

You can view the indicators to get knowledge about the device status.

![NOTE]

The indicator types vary with different models. Here the most comprehensive indicators are introduced.

- Power indicator (PWR):
    - ➢ Solid green: Device is powered on.
    - ➢ Solid red: Device is standby.
- Ready indicator (RDY):

    Solid green: Device starts up normally.
- Recording indicator (REC):

    Solid green: Device is recording normally.
- GNSS indicator (GNSS):
    - ➢ Unlit: Positioning module is abnormal.
    - ➢ Solid green: Device is positioning.
    - ➢ Flashing green: Positioning succeeded.
- ANT indicator (ANT):
    - ➢ Unlit: Dialing module is abnormal.
    - ➢ Solid green: Device is dialing.
    - ➢ Flashing green: Dialing up succeeded.
- Alarm indicator (ALM):

Red: Alarm occurs.

Chapter 3 Activation

For the first-time access, you need to activate the device by setting an admin password. No operation is allowed before activation.

3.1 Default Settings

Device default IP address and user name are as follows:

- Default IP address: 192.168.1.64.
- Default user name: admin.

3.2 Activate Your Device

Activation via local menu operation, activation via web browser, activation via SADP, and activation via client software are all supported. In this section, we introduce activation via web browser.

Before you start:

Ensure your device and computer are in the same network segment.

Step 1 Set the IP address of your computer to the same network segment with the device.

Step 2 Visit device IP address via web browser. The default IP address of the camera is 192.168.1.64.

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

Figure 3-1 Activation

Step 4 Click **OK**.

Chapter 4 Basic Operation

4.1 Login

Purpose:

You can get access to the device via web browser.

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

Step 2 Enter the user name and password in the login interface and click **Login**.
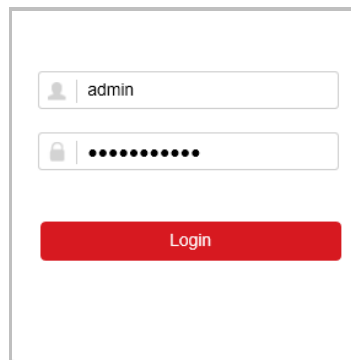

Figure 4-1 Login

Step 3 Install the plug-in before viewing the live video and managing the camera. Please follow the installation prompts to install the plug-in.

4.2 3G/4G Dialing

Before you start:

Install SIM card and dialing antenna.

Step 1 Go to **Configuration > Network > Basic Settings > 3G/4G**.

Step 2 Check **Enable**.

Step 3 Click **Dial Parameters**.

Figure 4-2 3G/4G Dialing

Step 4 Click **Save** and reboot the device to activate the new settings.

Step 5 Optionally, go to **Wireless Dial-up Status** tab to view dialing status.

4.3 Mobile Surveillance Platform Connection

Purpose:

The device can be remotely accessed via mobile surveillance platform. For details of platform configuration, you can refer to platform user manual.

When your device and mobile surveillance platform are not in the same network segment, network priority: 3G/4G network > Wi-Fi > wired network.

Before you start:

Create the device ID on the mobile surveillance platform.

Step 1 Go to **Configuration > Network > Advanced Settings > Platform Access**.

Figure 4-3 Platform Settings

Step 2 Check **Enable**.

Step 3 Select **Platform Access Mode** as **Ehome Platform**.

Step 4 Configure the following parameters.

- **Server Address Type**: **IP Address** and **Domain Name** are selectable.
- **Server Address**: Enter the static IP address of iVMS server.
- **Server Port**: The default value for mobile surveillance platform is 7660.
- **Device ID**: The ID of the device registered on the eHome platform. If you leave it empty, device logs in to the platform with serial No.

Step 5 Click **Save** and reboot the device to activate the new settings.

4.4 IP Camera Management

The chapter is only available for device supporting IP camera feature.

4.4.1 Activate IP Camera

Before adding an IP camera, activate it by setting a password for it.

Step 1 Go to **Configuration > System > Camera Management**.

Step 2 Select an inactivated IP camera.

⚠️ **WARNING**

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 reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Step 3 Click **Activation**.

Step 4 Enter the same password in **New Password** and **Confirm**.

Step 5 Click **OK**.

4.4.2 Add IP Camera

You can add the activated IP cameras. Ensure the device and IP cameras are in the same network segment.
Before you start:
The record and the camera to add must be in the same network segment.

Step 1 Go to **Configuration > System > Camera Management**.

Step 2 (Optional) If the recorder and the camera are in different network segment, modify IP camera address.

    1) Check the IP camera and click **Modify**.

    2) Enter **IP Address** and **Password**.

    3) Click **OK**.

Step 3 Select a camera and click **Add**.

[i] NOTE

  If the recorder password is the same with the camera's, click **Quick Add** to add the camera.

Step 4 Enter IP camera information.

Step 5 Click **OK**.

4.4.3 Edit IP Camera

You can visit, delete, and modify the added IP cameras.
Before you start:
If the recorder contains only one network card, you can visit IP camera via the recorder. If the recorder contains dual network cards, you need to enable virtual host function before visiting IP camera via the recorder. Go to **Configuration > Network > Advanced Settings > Other** and check **Enable Virtual Host**.

Step 1 Go to **Configuration > System > Camera Management**.

Step 2 (Optional) Click address of IP camera to visit.

Step 3 (Optional) Check IP cameras and click **Delete** to delete added IP cameras.

Appendix A   FAQ

A1 Why does my device fail to start up after connecting the power?

- Check power supply specification.
- If PWR indicator is unlit, check power supply and fuse installation.
- If PWR indicator is red, lock the dummy HDD.
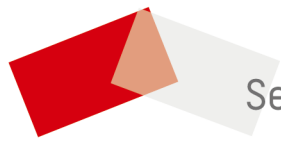
A2 Why does my device dialing fail?

- Check 3G/4G antenna connection.
- Place 3G/4G antenna away from metal objects.
- Check your SIM card balance.
- Ensure 3G/4G dial parameters are correct.

A3 Why does my device positioning fail?

- Vertically install positioning antenna on the automobile roof with no shelter.
- Ensure your vehicle is in a place with good GPS signal. You can go to **Menu > Status > Position** to check GPS signal.

A4 Why does my device make a beeping sound after starts up?

- Install at least one HDD and format it after installation.
- Go to HDD management interface to check HDD status. Replace it with a good one when it is error.
- To cancel the beeping sound and use the device without HDD, go to exception settings interface.

See Far, Go Further

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