HIKVISION

Digital Video Recorder

Quick Start Guide

CONTENTS

Quick Start Guide

COPYRIGHT ©2018 Hangzhou Hikvision Digital Technology Co., Ltd.

ALL RIGHTS RESERVED.

Any and all information, including, among others, wordings, pictures, graphs are the properties of Hangzhou Hikvision Digital Technology Co., Ltd. or its subsidiaries (hereinafter referred to be "Hikvision"). This user manual (hereinafter referred to be "the Manual") cannot be reproduced, changed, translated, or distributed, partially or wholly, by any means, without the prior written permission of Hikvision. Unless otherwise stipulated, Hikvision does not make any warranties, guarantees or representations, express or implied, regarding to the Manual.

About this Manual

This Manual is applicable to 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

HIKVISION and other Hikvision's trademarks and logos are the properties of Hikvision in various jurisdictions. Other trademarks and logos mentioned below are the properties of their respective owners.

Legal Disclaimer

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, IS PROVIDED "AS IS", WITH ALL FAULTS AND ERRORS, AND HIKVISION MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF THIRD PARTY. IN NO EVENT WILL HIKVISION, ITS DIRECTORS, OFFICERS, EMPLOYEES, OR AGENTS BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, OR LOSS OF DATA OR DOCUMENTATION, IN CONNECTION WITH THE USE OF THIS PRODUCT, EVEN IF HIKVISION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

REGARDING TO THE PRODUCT WITH INTERNET ACCESS, THE USE OF PRODUCT SHALL BE WHOLLY AT YOUR OWN RISKS. HIKVISION SHALL NOT TAKE ANY RESPONSIBILITES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER ATTACK, HACKER ATTACK, VIRUS INSPECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKVISION WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

SURVEILLANCE LAWS VARY BY JURISDICTION. PLEASE CHECK ALL RELEVANT LAWS IN YOUR JURISDICTION BEFORE USING THIS PRODUCT IN ORDER TO ENSURE THAT YOUR USE CONFORMS THE APPLICABLE LAW. HIKVISION SHALL NOT BE LIABLE IN THE EVENT THAT THIS PRODUCT IS USED WITH ILLEGITIMATE PURPOSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

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.
- Ensure the device is well grounded.

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 seat, the part behind the passenger 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. as shown below.
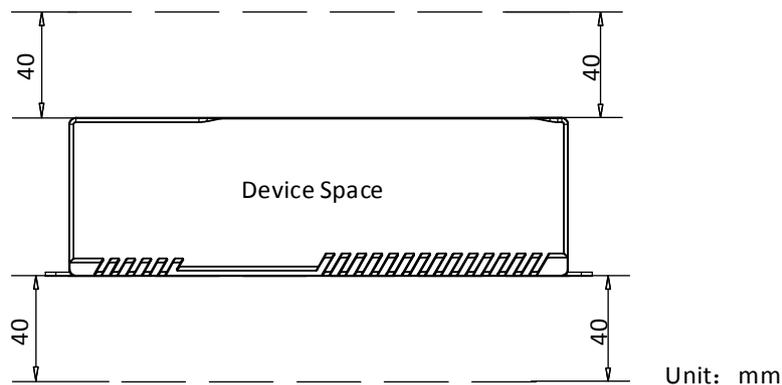
Figure 1-1 Recommended Installation Space

● 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 Positioning Antenna

● Connect positioning antenna to GNSS interface.

● 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.

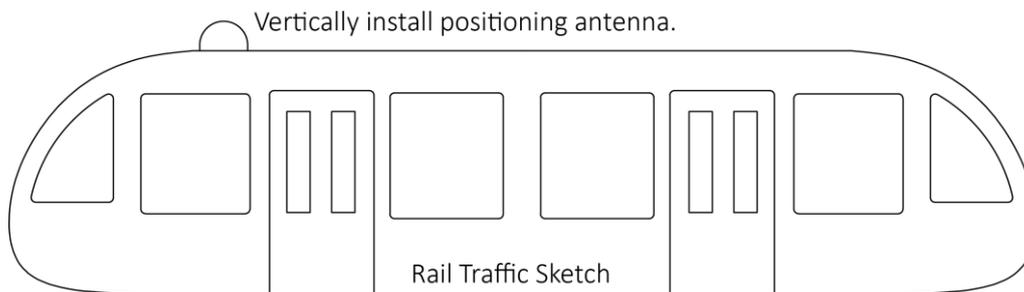● Vertically install positioning antenna on the automobile roof with no shelter.

Figure 1-2 Install Positioning Antenna 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.
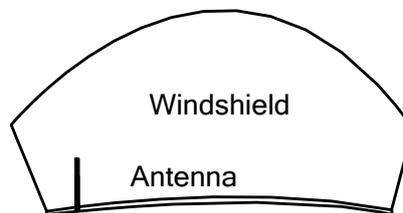
Figure 1-3 Install Positioning Antenna Inside Automobile

➢ 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.

1.4 Fix Device

Purpose

The device is recommended to fix in the cabinet.

Before you start

Prepare the cabinet which is designed according to the device dimensions and reserved space.

Step 1 Punch holes on the appropriate positions of the cabinet according to the positions of bracket holes in the package.

Step 2 Align the holes on the bracket with those on the device panel, and tighten screws to fix the bracket on the device panel.

Step 3 Push the device into the cabinet slowly to align the holes on the bracket with those on the cabinet.

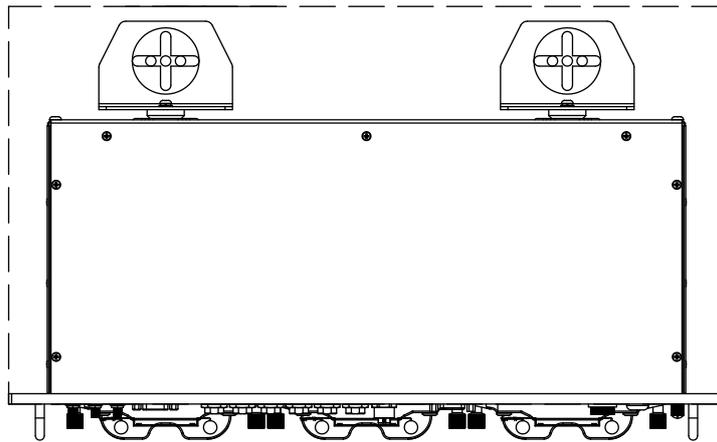Step 4 Tighten screws to fix the device on the cabinet.

Result

Figure 1-4 Fix Device

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.

Purpose

The device starts up when your automobile ignites and shuts down after automobile is off. Automobile ignition startup and shutdown are realized by automobile 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 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 Place the fuse into the fuse holder.

DC+   Connect to positive pole of automobile batteries.

DC-   Connect to negative pole of automobile batteries.
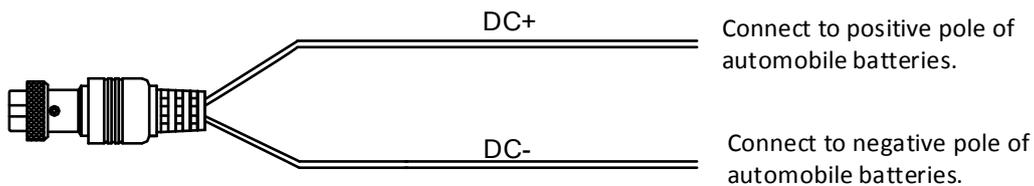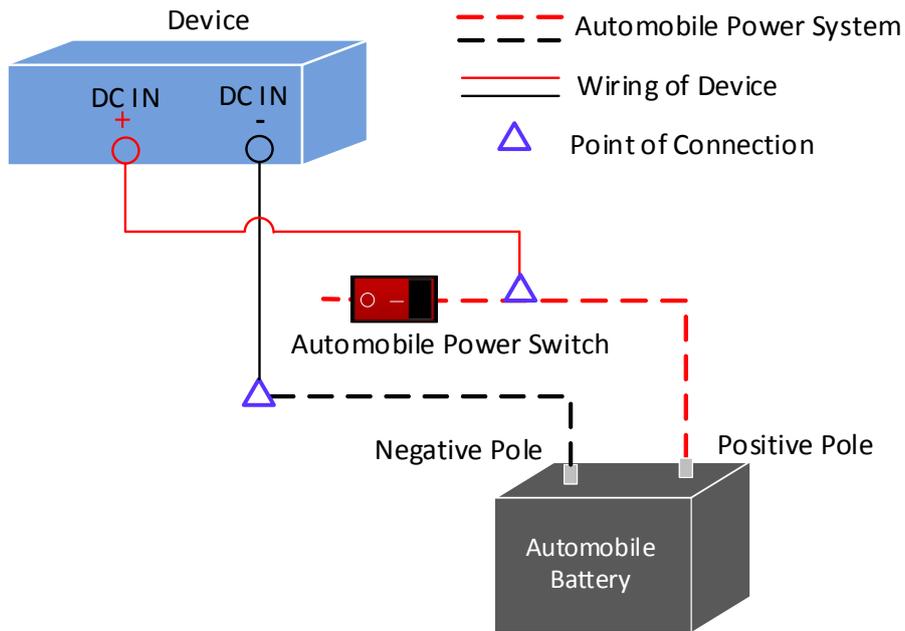
Figure 2-1 Power Cord

Figure 2-2 Wiring

📖 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.

2.2 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.
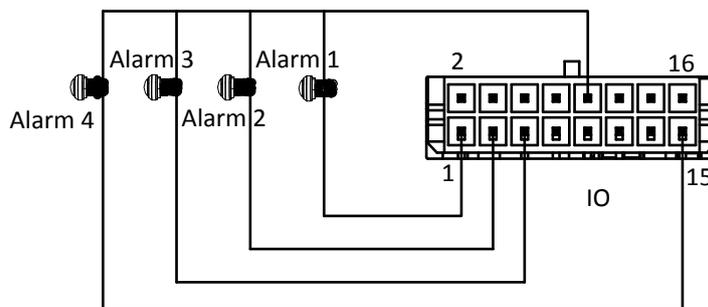
Figure 2-3 Alarm Input Connection

2.3 Alarm Output Connection

Follow the figure bellow to wire alarm output.

n and n# are a pair of alarm output. You can connect them with a relay alarm device. When the voltage of connected alarm device exceeds the valid alarm output range, you need to connect a relay to protect alarm output.
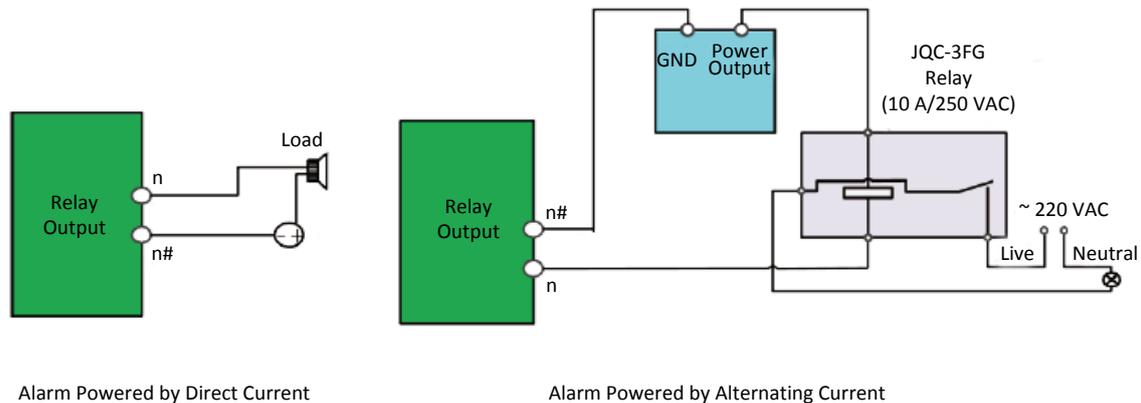

Alarm Powered by Direct Current   Alarm Powered by Alternating Current

Figure 2-4 Alarm Output Connection

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.

- Power indicator (PWR):
  - Solid green: Device is powered on.
  - Solid red: Device is standby.
- Camera indicator (IPC):
  - Flashing green: Camera is connected and data are transmitted.
  - Unlit: Camera is offline. Check power supply and wiring.
- Recording indicator (REC):
  - Solid green: Device is recording normally.
- Network interface indicator (G):
  - Flashing green: Network transmission is normal.
  - Unlit: No network. Check network cable connection and IP address.
- HDD indicator (HDD):
  - Solid green: HDD is working normally.
  - Unlit: No HDD. Check HDD installation.
- 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 local menu operation and activation via web browser.

3.2.1 Activate Device Remotely

Purpose:

Activate your device via web browser.

[i] **NOTE**

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.

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

Figure 3-1 Activation

Step 4 Click **OK**.

3.2.2 Activate Device Locally

Purpose:

Activate device via local menu operation

Before you start:

Connect device with a display and a mouse.

Step 1 Power on device.

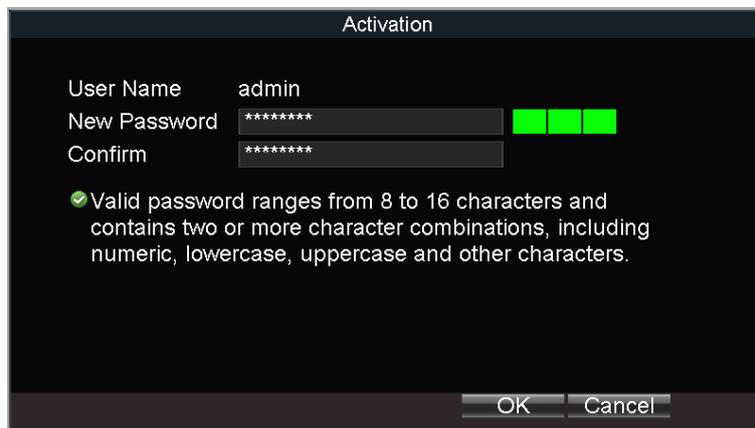Step 2 Enter the same password in New Password and Confirm.

Figure 3-2 Activation Device Locally

Step 3 Click **OK** to save the password and activate the device.

⚠️ **WARNING**

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.

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.

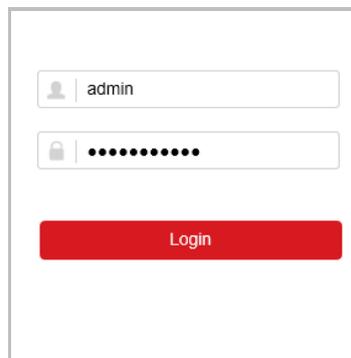Step 2 Enter the user name and password in the login interface and click **Login**.

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 Connect IP Camera

4.2.1 Activate IP Camera

Purpose:

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

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

Figure 4-2 Camera Management

Step 2 Select an inactivated IP camera.

Step 3 Click **Activation**.

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

Step 5 Click **OK**.

⚠ **WARNING**

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.

4.2.2 Add IP Camera

Purpose:

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**.

Figure 4-3 Camera Management

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

Figure 4-4 Modify IP Camera

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**.

17

Figure 4-5 Add IP Camera

![NOTE]

If the device password is the same with that of the camera, click **Quick Add** to add the camera.

Step 4 Enter IP camera information.

Step 5 Click **OK**.

Appendix A   FAQ

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

- 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 fail to position?

- 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 **Configuration > Vehicle > Position Settings > Location Status** to check GPS signal.

A3 Why does my device make a beeping sound after startup?

- Install at least one HDD and format it after installation.
- Go to **Configuration > Storage > Storage Management > HDD Management** to check HDD status. Replace it with a good one when there is error.
- To cancel the beeping sound and use the device without HDD, go to **Configuration > Event > Basic Event > Exception** to uncheck **Audible Warning** for **HDD Error**.

See Far, Go Further

UD11774B