



Mobile DVR

User Manual

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User Manual

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About this Manual

This Manual is applicable to Mobile Digital Video Recorder (MDVR).

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.

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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.

Note: This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:


- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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 RE Directive 2014/53/EU, the EMC Directive 2014/30/EU, and 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 (B)/NMB-3(B) standards requirements.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est

autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.




Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

Applicable Models

This manual is applicable to DS-MP3504-SD series MDVR.

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.
- 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 Panel Introduction

1.1 Front Panel

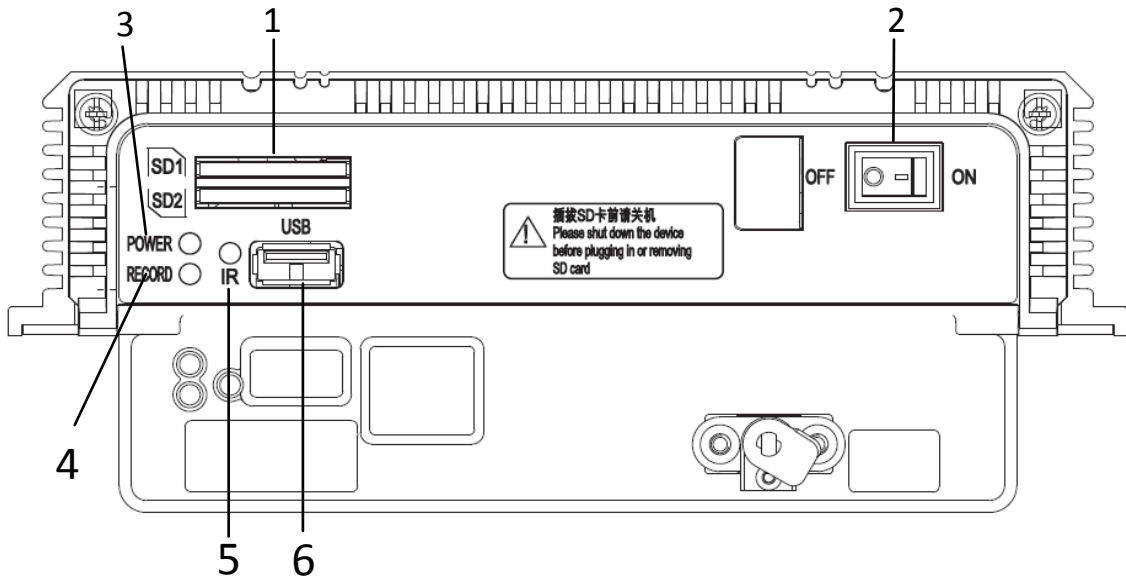


Figure 1-1 Front Panel

Table 1-1 Interface Description

No.	Name	Description
1	SD1&SD2	Two SD card slots.
2	OFF/ON	Power switch.
3	POWER	Power indicator: Light in green after device starts up; light in red when standby mode.
4	RECORD	Record indicator: Light in green during recording process.
5	IR	IR Receiver: Receive IR signal from remote control.
6	USB	USB interface.

1.2 Rear Panel

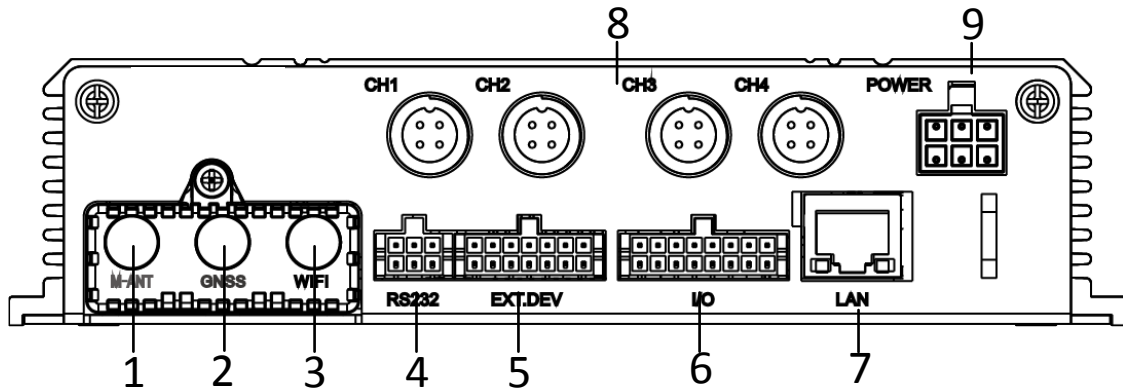


Figure 1-2 Rear Panel

Table 1-2 Interface Description

No.	Name	Description
1	M-ANT	Reserved.
2	GNSS	Reserved.
3	WIFI	Reserved.
4	RS-232	RS-232 interface.
5	EXT.DEV	RS-422 communication interface, two-way audio, CVBS video output.
6	I/O	7-ch high / low level signal trigger including 3-ch alarm inputs, 4-ch sensor in; 1-ch pulse signal input.
7	LAN	10M/100M self-adaptive Ethernet interface
8	CH1~CH4	4-pin aviation plug, audio & video input of channel 1~4.
9	POWER	6-pin aviation plug for power supply and start control.

Chapter 2 Installation and Connections



Product pictures in following chapters are for reference only. In the event of any conflicts between this manual and the product, the later prevails.

2.1 Install SIM Card

Purpose:

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



The chapter is only available for device with 3G/4G module.

Before You Start

Prepare the tools and components for installation:

- SIM card
- Wrench

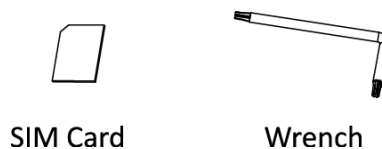


Figure 2-1 Tools

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

Step 2 Pull out the 3G/4G and Wi-Fi module.

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

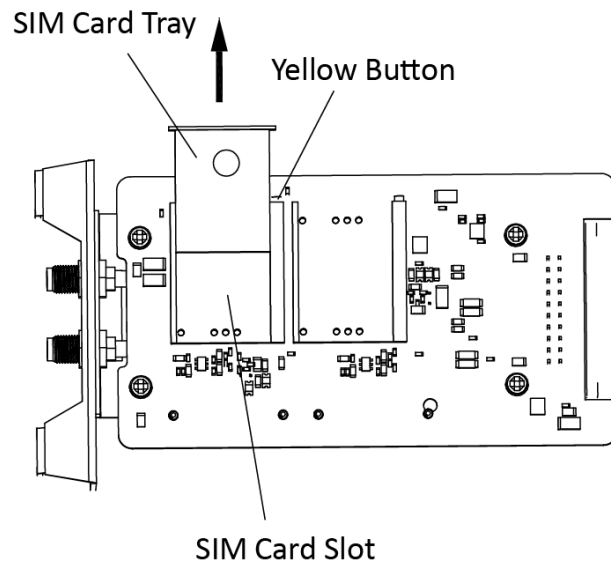


Figure 2-2 Pull out SIM Card Tray

Step 4 Place the SIM card on SIM card tray.

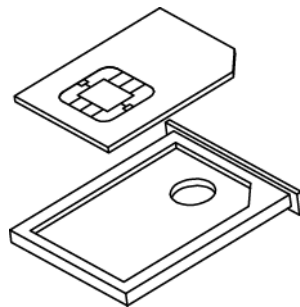


Figure 2-3 Place SIM card on SIM Card Tray

Step 5 Insert the SIM card tray back to SIM card slot.

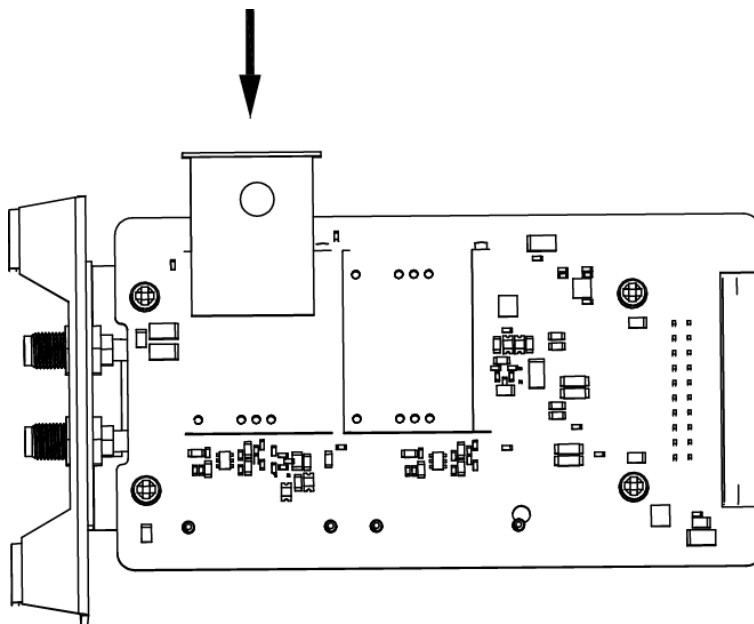


Figure 2-4 Insert SIM Card Tray back to SIM Card Slot

Step 6 Install the 3G/4G module back to the device and tighten the set screw.

2.2 Install SD Card

Before You Start

Prepare the tools and components for installation:

- Key to front panel (delivered with device)
- SD card. Use the factory recommended SD card, thus to ensure data security.

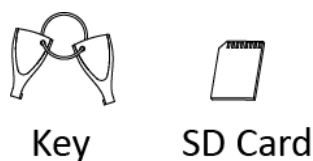


Figure 2-5 Tools

Step 1 Shut down the device before plugging in or removing SD card.

Step 2 Insert the key and turn clockwise to unlock front panel.

Step 3 Insert SD card into SD card slot till you hear a click.

Step 4 Repeat step 3 to install the other SD card.

Step 5 Turn the key to lock front panel.

2.3 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.

2.3.1 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 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 +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.

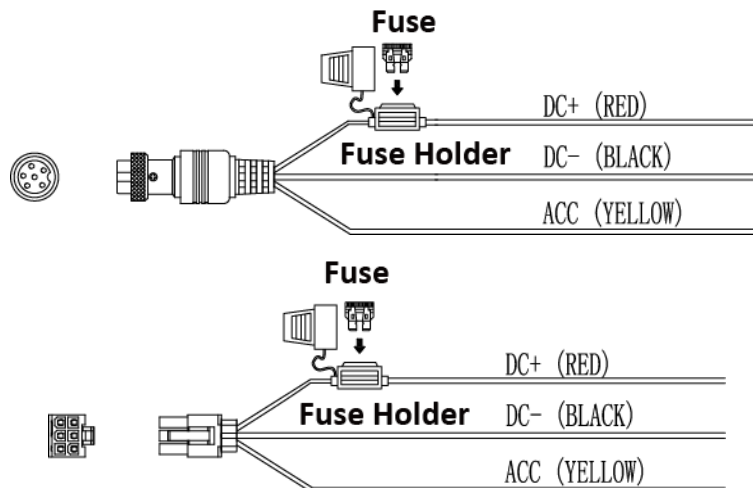


Figure 2-6 Install Fuse for Two Types of Power Supply

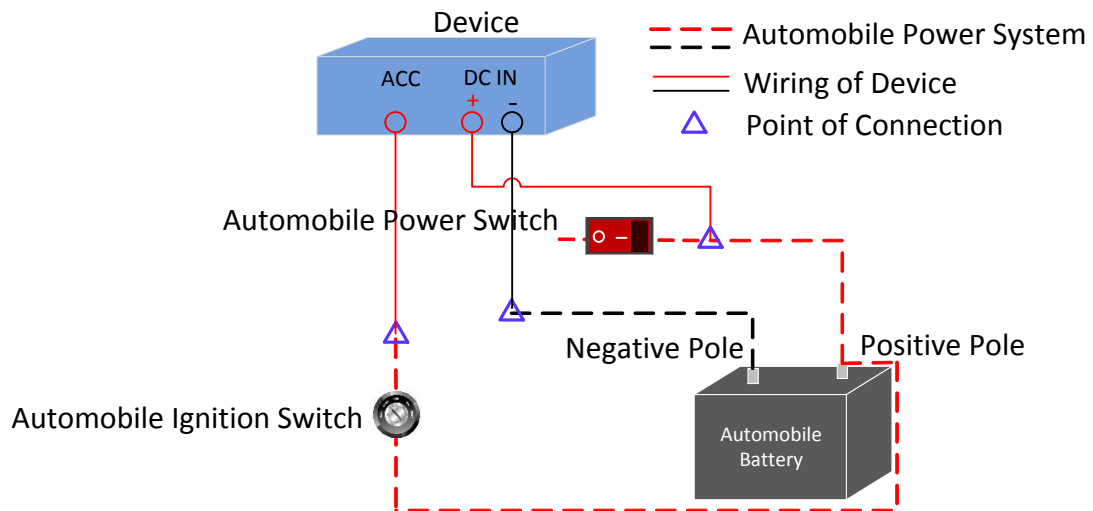


Figure 2-7 Shutdown Delay

 **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.

2.3.2 Scheduled Shutdown

Step 1 Connect the “DC IN +” and “KEY +” of the device to the positive pole of automobile batteries.

Step 2 Connect the “DC IN -” and “KEY -” 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.

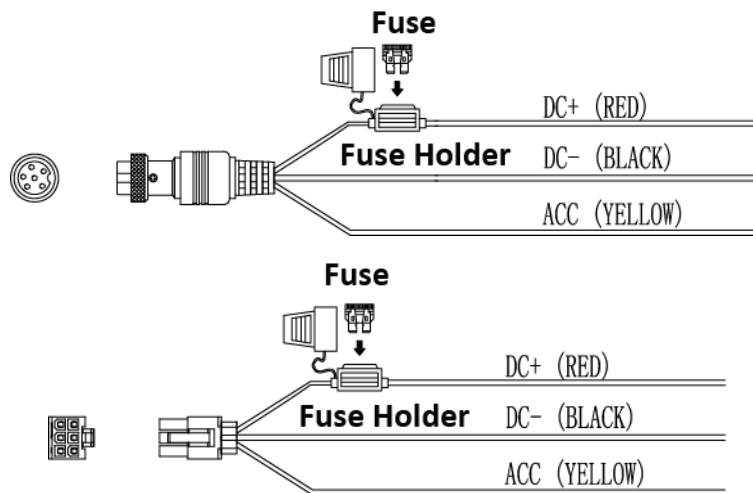


Figure 2-8 Install Fuse for Two Types of Power Supply

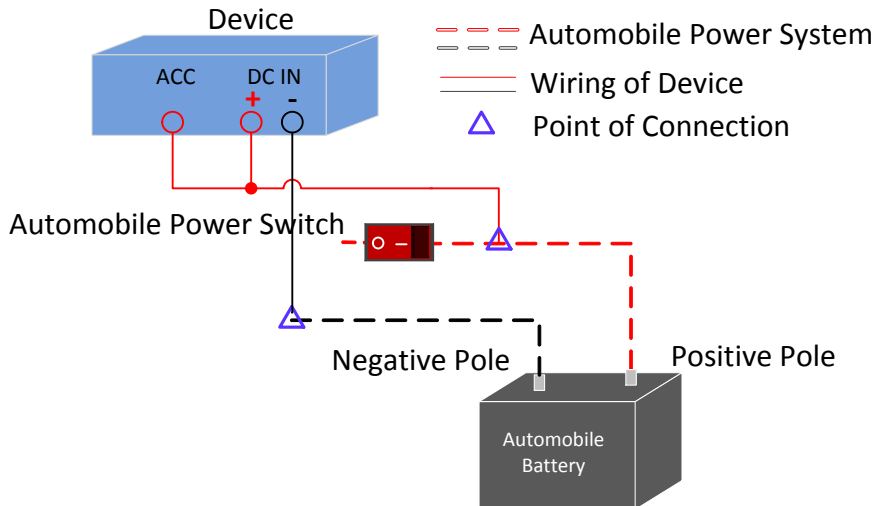


Figure 2-9 Scheduled Shutdown

2.4 Alarm Input/Output Connection

2.4.1 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.

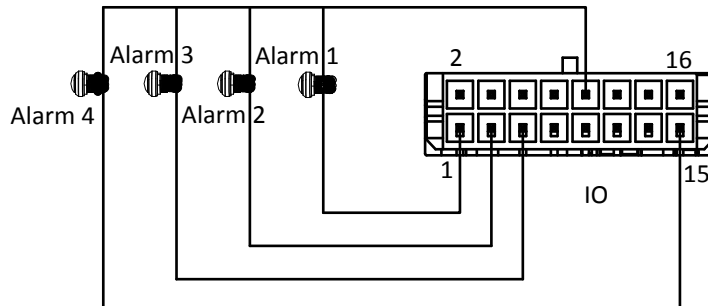


Figure 2-10 Alarm Input Connection



NOTE

The number of alarm input varies with device model.

2.4.2 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.

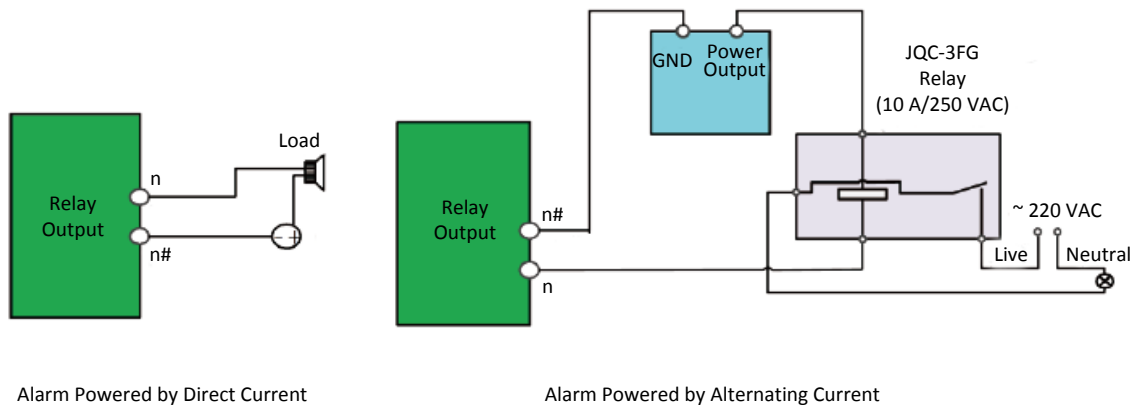


Figure 2-11 Alarm Output Connection

2.5 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.

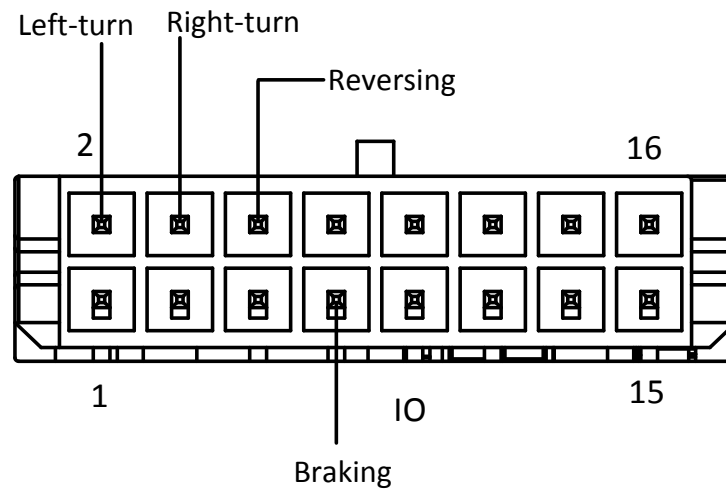


Figure 2-12 Sensor-in Wiring

2.6 Power-on

Turn on the power supply after all the above installations are finished.

You can view the indicators to get knowledge about the device status. For details, refer to Table 1-1.



See Far, Go Further