



Vehicle-Mounted Camera

User Manual



About this Manual

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 of this Manual at the Hikvision website (<http://www.hikvision.com/>).

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Regulatory Information

FCC Information

FCC compliance: This equipment 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 when the equipment is operated in a residential environment. This equipment 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 equipment 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

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

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 Low Voltage Directive 2014/35/EC, the EMC Directive 2014/30/EC.



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.

Foreword

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss. Before using, please read the manual carefully and keep it properly for further reference.

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.
 CAUTION	Indicates important operations or potential hazardous situation that could result in damage or property loss.
 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 Instruction

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with AC 24V or DC 12V according to the IEC60950-1 standard. Refer to technical specifications for detailed information.
- Keep the camera away from liquid while in use.
- Do not drop the camera or subject it to physical shock.
- Do not touch sensor modules with fingers. If cleaning is necessary, use clean cloth with a bit of ethanol and wipe it gently. If the camera will not be used for an extended period, replace the lens cap to protect the sensor from dirt.
- To avoid heat accumulation, good ventilation is required for operating environment.
- Do not aim the camera at the sun or extra bright places. Blooming or smearing may occur otherwise (which is not a malfunction), and affect the endurance of sensor at the same time.
- The sensor may be burned out by a laser beam, so when any laser equipment is in using, make sure that the surface of sensor will not be exposed to the laser beam.
- Do not place the camera in extremely hot, cold, dusty or damp locations, and do not expose it to high electromagnetic radiation.
- While in delivery, the camera shall be packed in its original packing, or packing of the same texture.
- If the product does not work properly, contact your dealer or the nearest service center. Never attempt to disassemble the camera by yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

1 Package Check

1.1 Before You Begin



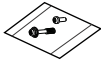


Before unboxing, please check if the package is intact. Unbox and check the list to make sure that all the assembly parts are included.

If there is no problem, the device is ready for installation.

1.2 Packing List

The packing list of the camera is shown below.

Table 1-1 Packing List

No.	Picture for Illustration	Name	Number
1		Front Camera	1
2		Back Camera	1
3		Screw Bag	1
4		Static	1
5		Manual	1

NOTE

The assembly parts may vary according to different camera models. Refer to the actual device for details.

2 Introduction

2.1 Key Features

This series of camera adopts new generation sensor with high sensitivity and advanced circuit design technology. It features high resolution, low image distortion and low noise, etc., making it suitable for monitoring system and image processing system.

The main features are as follows:

- Progressive Scan CMOS for accurate capture of moving subjects
- High quality images
- Low illumination of 0.01 Lux@(F1.2 AGC On), 0 Lux with IR
- Supports automatic switch from colorful to black and white
- Supports two-way lens for more monitor content
- Supports auto electronic shutter
- Supports auto gain control

2.2 Structure and Components

2.2.1 Overview

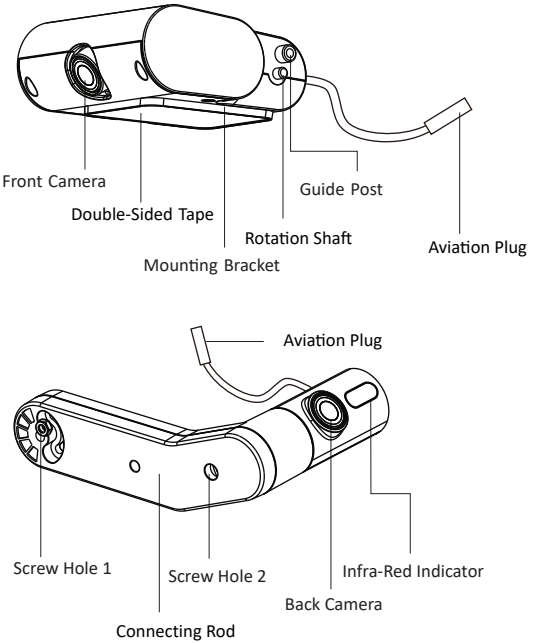


Figure 2-1 Overview

2.2.2 Aviation Plug Cable

The power supply for the camera is 9 V to 16 V wide voltage range mobile DC. The camera adopts aviation plugs, as shown in Figure 2-2. There are two types of pin assignments, as shown in Figure 2-2 and 2-30 Make sure that your cable matches with the plug.

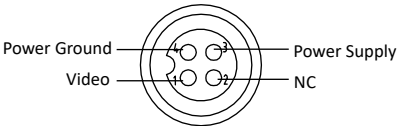


Figure 2-2 Interfaces of Aviation Plug

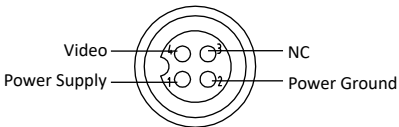


Figure 2-3 Interfaces of Aviation Plug

3 Installation

Before you begin, make sure that the device in the package is in good condition and all the assembly parts are included.



CAUTION

Make sure the mounting part for camera installation is strong enough to hold four times of the weight of the camera and its mounting parts. Choose an even surface for installation.

Step 1 Choose a mounting position according to the visual condition.

Step 2 Clean the mounting surface with a mixture of isopropyl and water.

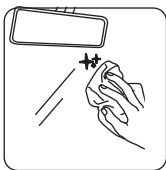


Figure 3-1 Clean the Surface

Step 3 Tag the electrostatic film on the cleaned mounting position.

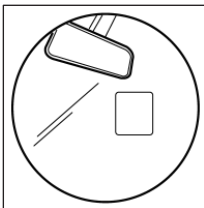


Figure 3-2 Tag the Electrostatic Film

Step 4 Tear off the double-sided tape release sticker to the device and stick the front camera to the electrostatic film.

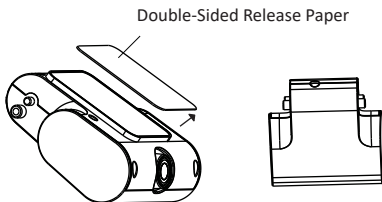


Figure 3-3 Mount Front Camera

- Step 5** Mount the back camera. The back camera can be mounted on the left or right side of front camera according to the mobile setting, as shown in Figure 3-4.

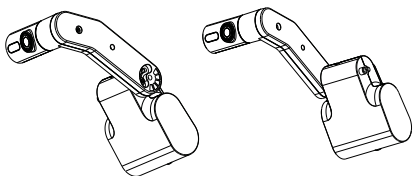


Figure 3-4 Mount Back Camera

- Step 6** Connect cable and adjust the camera to a proper angle according to the camera vision. The angle of the front and back camera are adjustable, as shown in Figure 3-5.

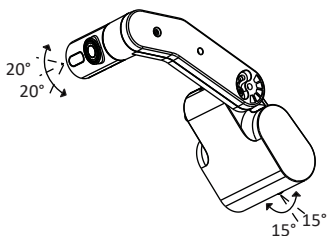


Figure 3-5 Mount Back-Camera

- Step 7** Fix the camera. After adjusting the camera to a proper angle, place the screw 1 into screw hole 1 to connect the front camera to the connecting rod, and place the screw 2 into the screw hole 2 to connect the back camera to the connecting rod.

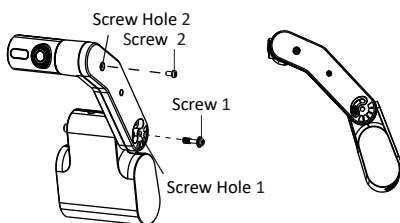


Figure 3-6 Fix the Camera

