



## Vehicle-Mounted Camera

User Manual



See Far, Go Further

UD13133B

## User Manual

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## Regulatory Information

### FCC Information

**FCC compliance:** This equipment has been tested and found to comply with the limits for 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 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](http://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](http://www.recyclethis.info).

### Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

## Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into “Warnings” and “Cautions”

**Warnings:** Serious injury or death may occur if any of the warnings are neglected.

**Cautions:** Injury or equipment damage may occur if any of the cautions are neglected.



### WARNING

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- Refer to technical specifications for detailed information.
- 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.
- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Make sure that the plug is firmly connected to the power socket.
- When the product is mounted on wall or ceiling, the device shall be firmly fixed.
- 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.
- 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.)



### WARNING




- Make sure the power supply voltage is correct before using the camera.
- 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.
- 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.
- To avoid heat accumulation, good ventilation is required for operating environment.
- Keep the camera away from liquid while in use.
- While in delivery, the camera shall be packed in its original packing, or packing of the same texture.

## 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.

# 1 Introduction

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## 1.1 Product 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., which makes it suitable for surveillance system and image processing system.

The main features are as follows:

- High performance CMOS sensor
- High resolution image
- Low illumination, 0.1 lux @ (F1.2, AGC ON)
- Supports auto electronic day & night switch
- Supports auto white balance
- Adapts shock-proof design and 4-pin din connector

## 1.2 Overview

### 1.2.1 Overview of Vehicle-Mounted Camera

The overview of the camera is shown below.

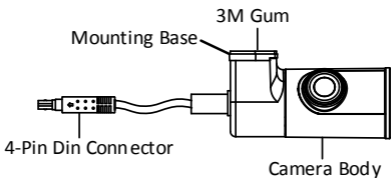


Figure 1-1 Overview

### 1.2.2 4-Pin Din Connector Interface

The connector interface is shown in below.

#### 4-Pin Din Connector

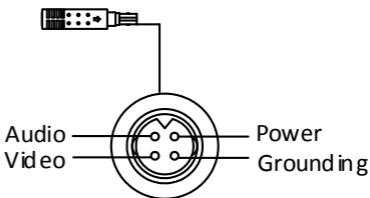


Figure 1-2 Interfaces of 4-Pin Din Connector

## 2 Installation

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### 2.1 Installation

You can paste the camera with 3M gum or fix it with screws. Choose the installation method according to the mounting place.

#### **Before you start:**

- Please make sure that the device in the package is in good condition and all the assembly parts are included.
- Make sure that all the related equipment is power-off during the installation.
- Check the specification of the products for the installation environment.
- Check whether the power supply is matched with your power output to avoid damage.
- Be sure that there is enough space to install the camera and accessories.
- Make sure the part, which is used to install the camera, is strong enough to withstand four times the weight of the camera and the mounting.
- If the product does not function properly, please contact your dealer or the nearest service center. Do not disassemble the camera for repair or maintenance by yourself.
- Do not pull and drag the camera cables hard.

### 3M Gum Mounting

#### **Steps:**

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



Figure 2-1 Clean Mounting Surface

2. Paste the electrostatic film (in the package) onto the mounting surface.

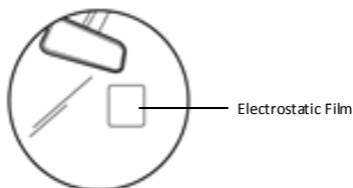


Figure 2-2 Paste the Electrostatic Film

3. Peel the paster of the 3M gum.

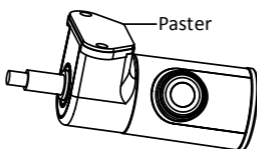


Figure 2-3 Peel the Paster

4. Paste the camera onto the electrostatic film.
5. Let the camera stand for 12 h to make sure it's secured.

## Screw Mounting

### Steps:

1. Drill according to the hole position on the paster.
2. Align the camera to the screw holes and fix it with two screws (in the package).

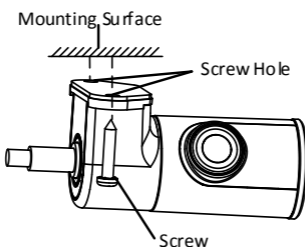


Figure 2-4 Fix the Camera

## 2.2 Adjust Angle

### Steps:

1. Connect the camera to specific device for preview.

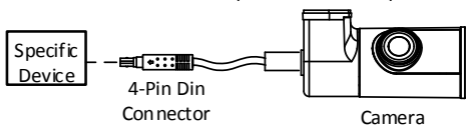


Figure 2-5 Connect to Specific Device

### NOTE

- Obtain detailed information for specific device from the dealer.
2. Thread the cable through the anti-rotating lock. Turn the camera to the target angle.
3. Clip the anti-rotating lock into the mounting base.



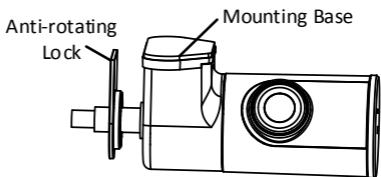


Figure 2-6 Install Anti-Rotating Lock

**i** NOTE

Adjust the angle slightly if it can't aim to the target direction.

4. Re-check the camera angle, repeat the steps above if it's not placed properly. Peel the paster of the anti-rotating lock and clip it to the mounting base.

**!** WARNING

If you need to remove the camera after installed the anti-rotating lock, please contact professional staff for help to avoid damaging the camera.