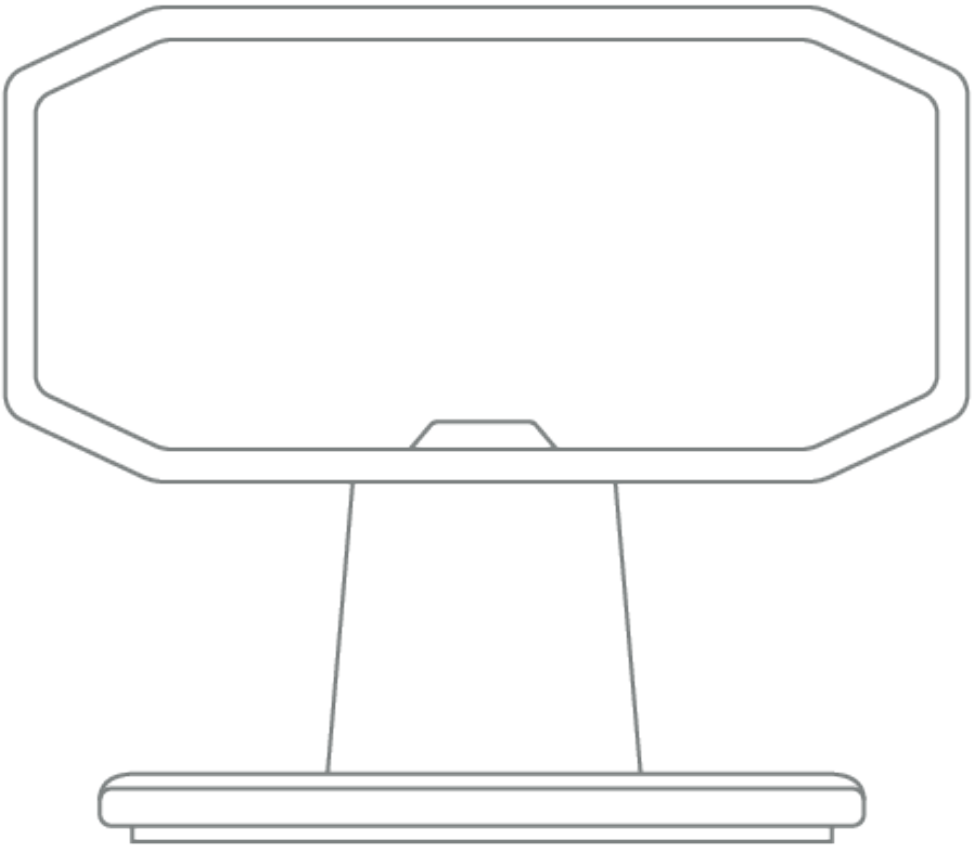
TRAMIGO

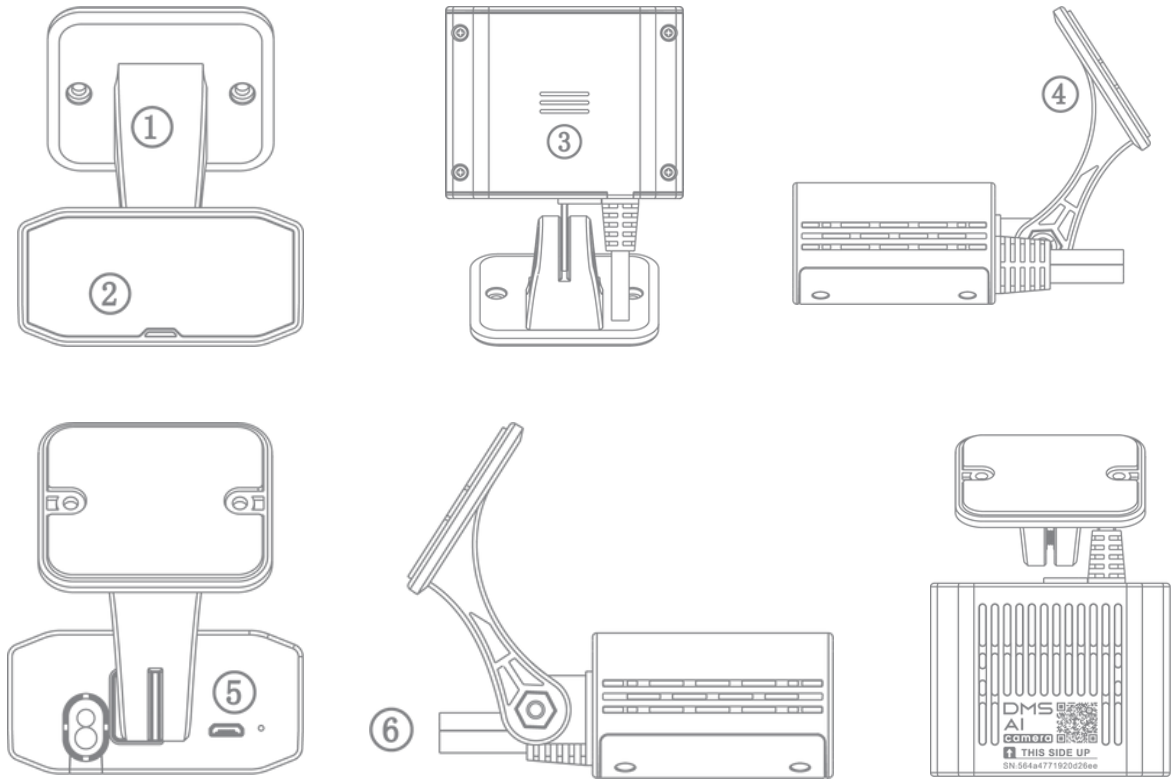
DI01-AI

DMS Camera



Please read this manual thoroughly before use.

01 PRODUCT APPEARANCE



1.1 Description of Appearance

①	Infrared and night vision camera	④	Mounting bracket
②	LED indicator	⑤	USB interface cable
③	Speaker	⑥	Wire harness

1.2 Description of Indicators

Red Light (On)	The device is powered on, but fatigue detection has not started
Green Light (On)	Fatigue detection is active and the device is monitoring the driver.
Blue Light (Flashing)	Driver fatigue has been detected.
Light Off	The device is turned off.

02 PRODUCT PACKAGE LIST

2.1 Standard Part

Camera	x1	Screwdriver for installation	x1
Cover	x1	Screws	x2

03 PRODUCT FUNCTION

The Tramigo DI01-AI is designed to analyze driver fatigue and distraction levels. Equipped with a built-in AI chip, it captures images and evaluates whether the driver is drowsy or distracted. The device provides voice reminders to alert the driver and transmits alarm notifications to external devices. Additionally, it sends data to the monitoring platform, enabling proactive management of driver behavior to help prevent accidents and enhance fleet safety.

3.1 Product Features

- **Drowsy driving analysis:** The device uses advanced visual algorithms to detect signs of driver fatigue, such as yawning or eye closure.
- **Distracted driving analysis:** It identifies distracted driving behaviors through visual algorithms, including actions like looking away, turning the head, or lowering the head while driving.
- **Risky behavior analysis:** It can detect risky behaviors such as smoking, using a phone, or drinking water while driving.
- **Voice Reminder:** The device alerts the driver through its built-in speaker when it detects potentially unsafe driving behaviors.
- **Alarm Reporting:** The device transmits hazard monitoring results via its serial port to external communication devices and reports them to the platform for further action.

3.2 Product Specifications

Specifications	Parameters	Specifications	Parameters
Processor	AI Core	Camera	1280x720
RAM	256MB	Night vision	Full-time IR LED
ROM	16MB	Speaker	Built-in
Weight	150g	Size	66x55x31 (mm)
Key	U-boot	Data interface	TTL

3.3 Product Performance

Performance	Parameters	Performance	Parameters
Working voltage	9~30V	Undervoltage protection	9V
Working temperature	-20°C~70°C	Overvoltage protection	36V
Storage temperature	-30°C~85°C	Reverse polarity protection	Support
ESD protection	Air± 14kV contact ± 7kv	Flame Retardant	UL94 V-0

04 PRODUCT INSTALLATION

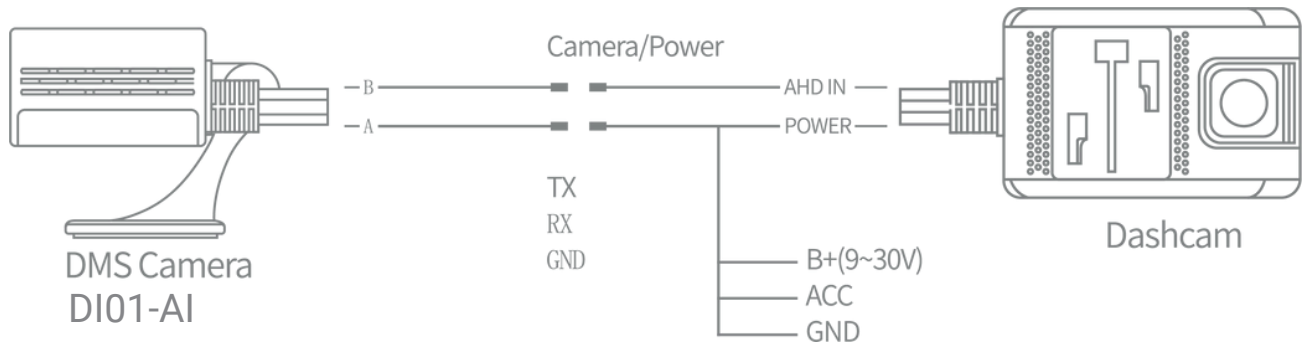
4.1 Product Installation

- This product is not suitable for battery electric vehicles or hybrid electric vehicles.
- Only use manufacturer-specified accessories for installation to ensure proper functionality and safety.
- The device operates on a 9-30V power supply. Use the original power cable and ensure that the positive and negative cables are not connected incorrectly during installation.
- After completing the installation, remove the protective film from the camera lens to ensure optimal visual performance.
- It is recommended to seek assistance from authorized dealers, designated professionals, or qualified personnel for installation and testing. Follow the instructions provided in this manual for proper setup.

4.2 Installation preparation

- Ensure that the items received match the product packaging list and are in good condition.
- Have the necessary tools ready, including insulating tape, a screwdriver, and a wire cutter.
- Confirm that the original functions of the vehicle to be installed are operating normally.
- Perform any necessary cleaning and take protective measures to safeguard the interior of the vehicle during installation.

4.3 Product Wiring Diagram

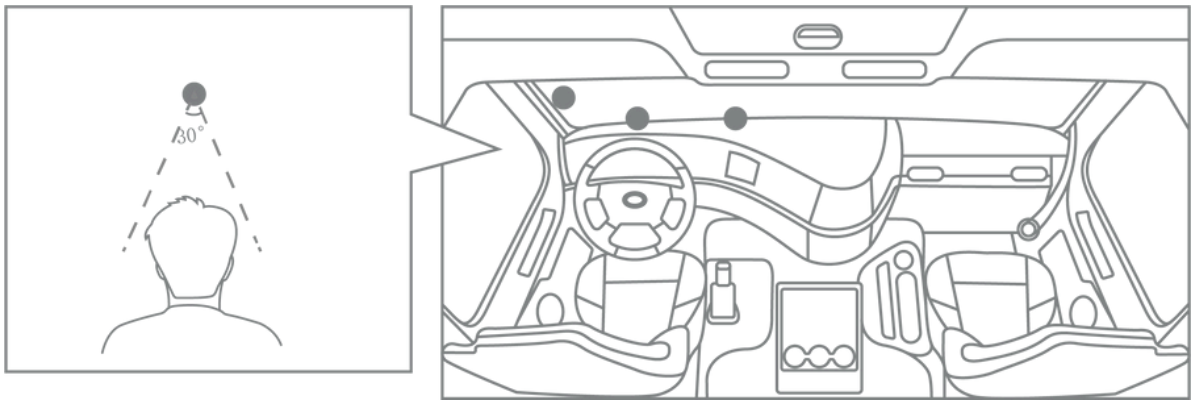


Installation instructions:
Simply connect the connector to the Dashcam device, ensuring a pin-to-pin alignment for proper installation.

4.4 Installation

The camera should be installed either above the center console or on the windshield near the A-pillar. The preferred position is near the A-pillar on the windshield for optimal performance.

The installation involves mounting the camera and connecting the necessary wires.The following steps outline how to install the device on the A-pillar windshield:



Step 1: Prepare and mount the camera

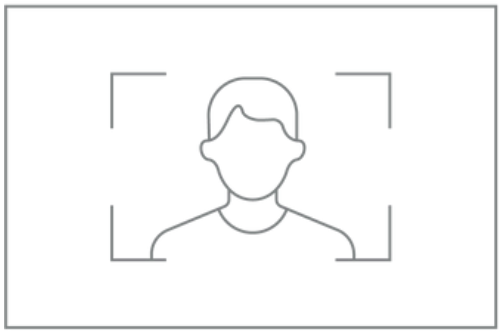
Start by cleaning the installation area on the windshield, then peel off the 3M adhesive backing from the camera base. Position the camera to face the driver, ensuring the angle between the camera and the driver remains within 30 degrees. Finally, securely stick the camera base to the chosen location on the windshield.

Step 2: Install the power cord

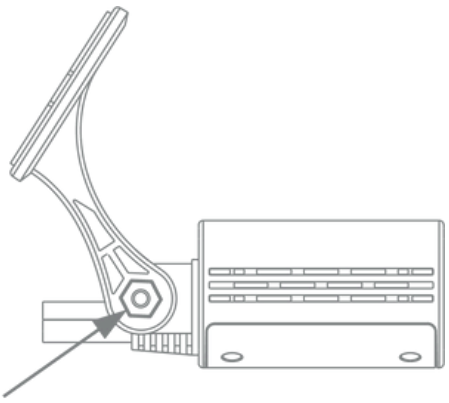
Route the power cord along the A-pillar of the vehicle and connect it to the external devices for both power supply and data communication.

Step 3: Adjust and secure the camera

Turn on the camera and use the video input from the external device to adjust the camera's position. Ensure the driver's face is centered in the camera's view (Fig. 1). Once properly aligned, lock the fixing screw on the bracket (Fig. 2) to secure the camera and prevent any shaking.



(Fig. 1)



(Fig. 2)

Step 4: Tidy up and test

Neatly organize and hide the harness within the panel, then test the relevant functions to ensure the installation is complete and everything is working properly.

Note: If you want to install the device on the center console, please pay attention to replacing the screw fittings to ensure that the device is facing up.

4.5 Device test

1. **Check power supply:** Ensure the device's red LED light is on when the vehicle's ACC is ON, and off when the ACC is OFF. This indicates the power supply is correctly connected.
2. **Check camera image:** Open the external video input device to verify the camera image. The image should be stable without shaking or water ripples. Note that the camera operates in infrared night vision mode, so the image will appear in black and white, which is normal.

4.6 Installation Tips

If no monitor is available to display the camera's captured images, you can check the camera's mirror. If your eyes are reflected in the mirror, it means the camera's capture angle is properly aligned.

05 FAQ

1. The device cannot be started

- Ensure the vehicle is in the ACC ON state; the device will start automatically, and the LED light will turn on.
- If the LED light is off, check whether the power wire is correctly connected.

2. Slow response during fatigue detection

- By default, the device will broadcast the result 3 seconds after detecting an abnormal state. Users can adjust the sensitivity for quicker responses.

3. Inaccurate fatigue condition monitoring and detection

- Ensure the installation is correct. The LED light should be properly installed at the bottom; reverse installation will cause the image to be flipped.
- Adjust the device's angle to ensure it faces the driver's face, avoiding an upward angle.
- The device should be installed centrally in front of the driver, and the angle between the camera and the driver should be within 30 degrees. Installing it on the far side may reduce effectiveness.

4. The device is not firmly installed and will easily fall off

- If installing on glass, clean the area thoroughly to remove dust or grease for better adhesion.
- If installing on the center console, select a flat surface for sticking or reinforce the installation with screws.

06 WARRANTY INSTRUCTIONS

For more details, please refer to our Warranty Policy at the following link:
https://tramigo.com/warranty-policy/