



User Manual

INTELLIGENT VIDEO TELEMATICS

PreCise Camera Solutions

*PreCise AI cameras and accessories powered by MiTAC help improve driver behavior and mitigate costly incidents and insurance claims.
Built to support the real-world needs of modern fleets.*

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Introduction

The MiTAC camera product line provides reliable, commercial-grade video solutions designed for fleet management operations. MiTAC cameras capture high-quality video data that supports safety, security, compliance, and operational visibility. We provide both single- and multi-channel cameras to cater to a variety of fleets and their various needs.

This installation guide applies to the K220, K145c/K245c, and K265 camera models.

Attention

Before installing MiTAC cameras, read this user manual carefully and familiarize yourself with the installation instructions, theory of operation, and system specifications and components. Before using this device, you should fully understand the usage scenarios and installation environment. PreCise will not be responsible for any loss caused by using the device incorrectly.

MiTAC Cameras



K145C/K245C



K265



K220

Features

All Cameras

All MiTAC cameras have the following features:

- Compact, durable, and tamper-resistant
- Dual-HD camera system with options for forward-facing and in-cabin views capable of continuous recording.
 - Rear- and side-facing, bed storage, and sand hopper cameras are available as add-ons
- Compatibility with MiTAC recording and telematics web platforms
- Vehicle-powered operation with adjustable trigger inputs
- Built-in 4G LTE Cat. 6 & dual-band Wi-Fi
- 3-axis gyro and G-sensor support
- SD card and Cloud-stored video footage
- Advanced ADAS and DMS functions

K220

The K220 Camera has the following features:

- Qualcomm® Octa-core & Android™ 9.0

K145C/K245C

- Qualcomm® Octa-core & Android™ 9.0
- NFC card reader

K165/265

- Qualcomm® Octa-core & Android™ 10
- Dual SD card recording under multi-channel options
- Expand up to 7 extra cameras
- NFC card reader

Warnings & Cautions

Read and follow all safety rules and instructions before installing or operating this equipment.

- Never operate a vehicle within a closed area. Always ensure proper ventilation before starting the engine.
- Before wiring, disconnect the negative cable from the battery terminal. Failure to do so may result in electric shock or injury due to electrical shorts. Batteries can generate explosive gases. Keep sparks, flames, and smoking materials away from batteries. Always wear eye protection around batteries.
- To avoid property damage, personal injury, or death, park the vehicle on a flat level surface, set the parking brake, turn the engine off, and chock the wheels before beginning installation.
- Arrange the wiring so that it is not crimped or pinched by a sharp edge. Route the cables and wiring away from moving parts (like the seat rails) or sharp or pointed edges. This will prevent crimping and damage to the wiring. If wiring passes through a hole in metal, use a rubber grommet to prevent the wire insulation from being cut by the metal edge of the hole.
- When making connections to the vehicle's electrical system, be aware of the factory-installed components (e.g. on-board computer). Do not tap into these leads to provide power for this unit. When connecting the unit to the fuse box, make sure the fuse for the intended circuit has the appropriate amperage. Failure to do so may result in damage to the unit and/or the vehicle.
- Do not mount the module in a location that could interfere with the proper operation of the vehicle, such as impeding the driver's view of the road.
- Avoid any circuits associated with the airbag system. Inadvertent airbag deployment may cause personal injury or death.
- While the system is in operation, a separation distance of at least 20 centimeters (approximately 8 inches) must be maintained between the antennas and the body of all persons to meet FCC RF exposure guidelines.

Installation Instructions

Before You Start

Before installing your MiTAC camera module, take time to familiarize yourself with the installation instructions, theory of operation, and system components. Check the contents of the shipping package and verify the following items are included:

Included Items

Item
MiTAC Camera (K220, K145C/K245C, or K265)
OBDII Cable Kit
Hex Screws x 2
Hex key

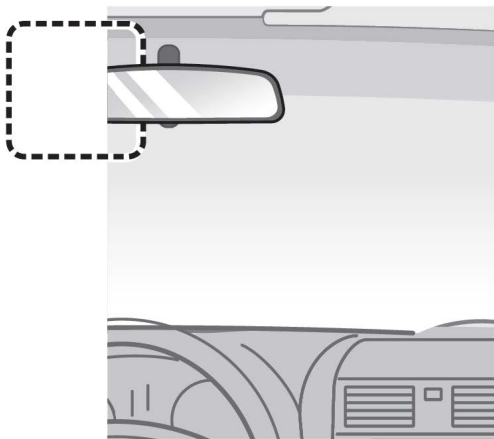
Alternate Cables & Adapters

Item
J1708
J1939 (Type I) Black
J1939 adapter (Type II) Green
RP1226

Mounting Instructions

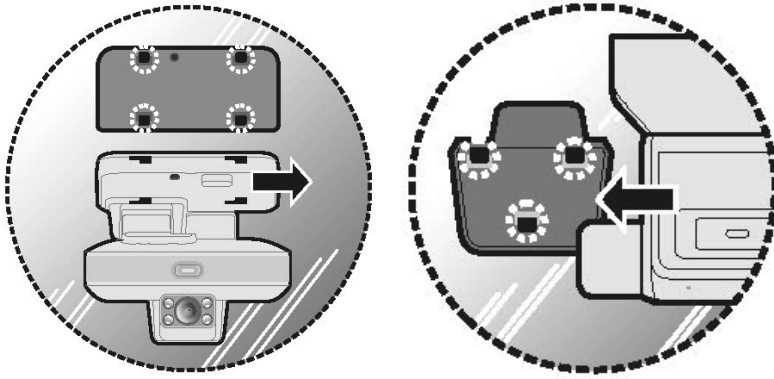
Determine the placement of the camera on the front windshield. Dry-fit the cable and camera to test placement and ensure the cable length fits well. Ensure that the camera is placed according to the following criteria:

- High on the windshield, next to the rearview mirror, right of center.
- Avoiding any overhanging exterior sun visor or other materials on the glass, including rock chips or cracks.



Once you have determined the placement of the camera, use the following steps to install your fleet camera on the windshield:

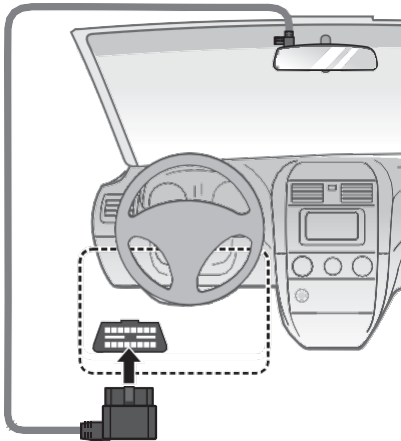
- Clean the windshield with an alcohol wipe before mounting the fleet camera. The windshield's surface must be dry and free of condensation.
- Peel the film off the back of the mounting plate and affix the plate securely onto the windshield. Press firmly on the plate and apply even pressure for approximately 30 seconds.
- Wait at least one hour (we recommend a wait period of 24 hours) before attaching the fleet camera to the mounting plate. This allows the adhesive to form a strong bond between surfaces.
- Match the positions of the mounting holes on the back of the camera with the hooks on the rear plate to attach the fleet camera to the mounting plate. Slide the fleet camera sideways until it clicks, indicating it is securely in place.
- Secure the camera onto the mounting pane using the set screws.



Cabling Instructions: Diagnostic Cable

To power the fleet camera using the OBDII cable, first find the vehicle's OBDII location. This is usually under the dash on the driver's side. Then, use the following instructions:

- Route the main cable inside the vehicle to the fleet camera. Connect the cable's main connector to the fleet camera.
- Insert the OBDII cable end into the OBDII port.
- Attach the tamper-proof cover to the fleet camera and tighten the screw with the hex key.
- Secure any loose cabling to prevent tampering.



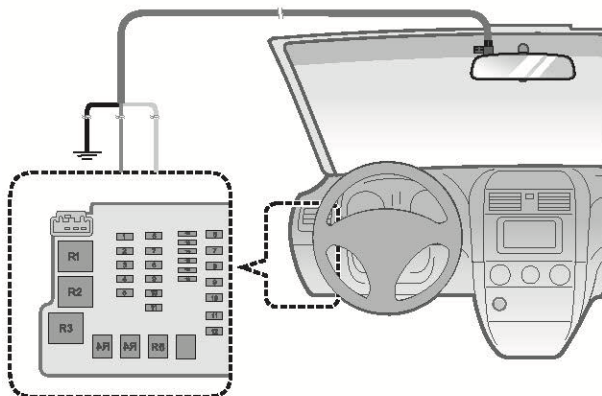
Note: Any adjustments made to the device from the installation position must be made on the VisionAgent App. This allows you to see and adjust the lens position.

Cabling Instructions: Type-II Cable Kit

Determine and connect the type-II cable kit using the following instructions:

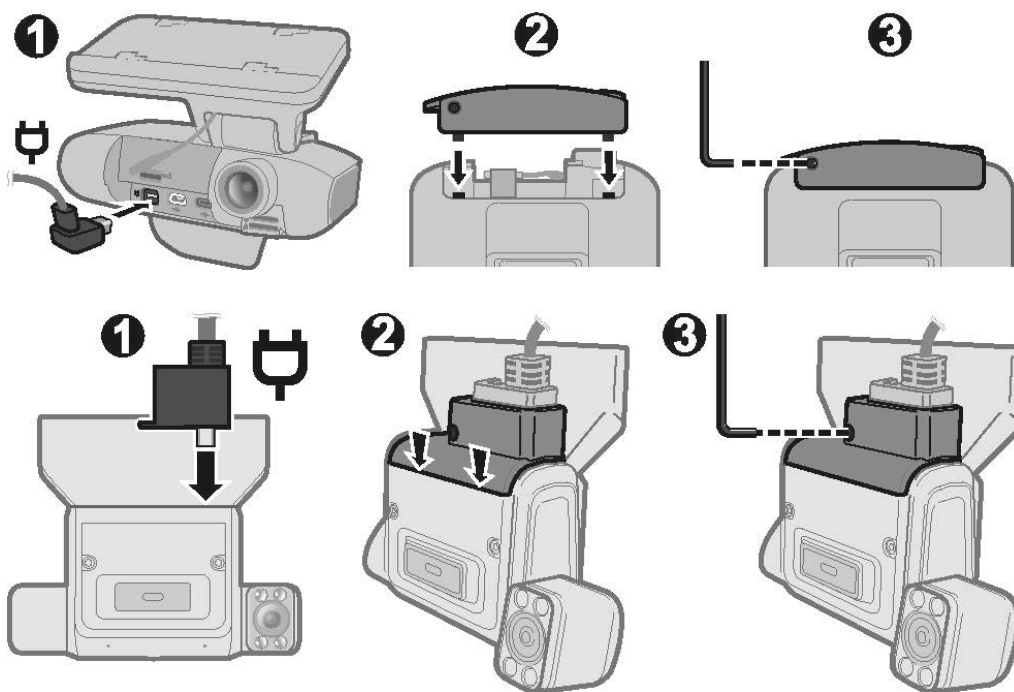
- Use a multimeter to locate a fuse that supplies power, even when the vehicle is turned off (e.g. emergency hazard lights or interior/door lights) and connect the yellow wire (B+) to the fuse.
- Use the multimeter to locate a fuse that does not supply power when the vehicle is turned off (e.g. indicator lights) and connect the red wire (ACC) to the fuse.

- The black wire (GND) must be connected to the vehicle's ground point. If this does not happen, the camera may not work properly.



Once your camera is affixed to the windshield and you have your cable wired, use the following steps to connect your cable:

- Route the main cable inside the vehicle to the fleet camera. Connect the cable's main connector to the fleet camera.
- Attach the tamper-proof cover to the fleet camera and tighten the screw with the hex key.
- Secure any loose cables to prevent tampering.

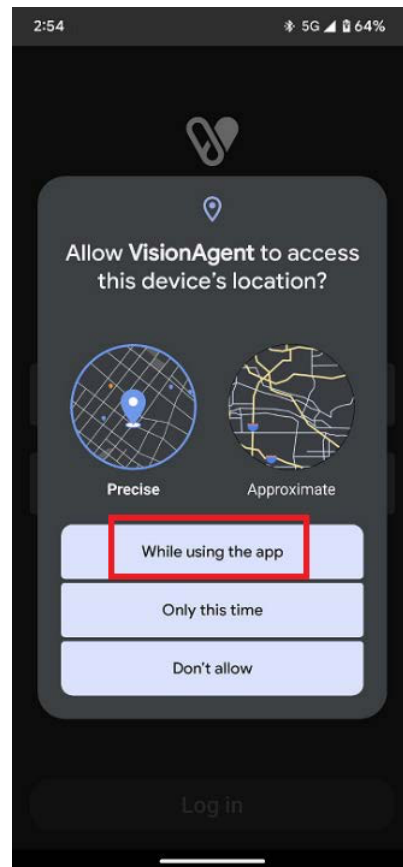
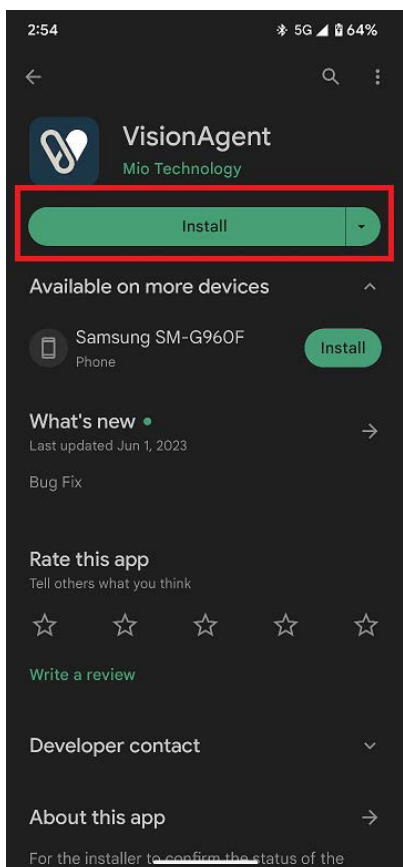


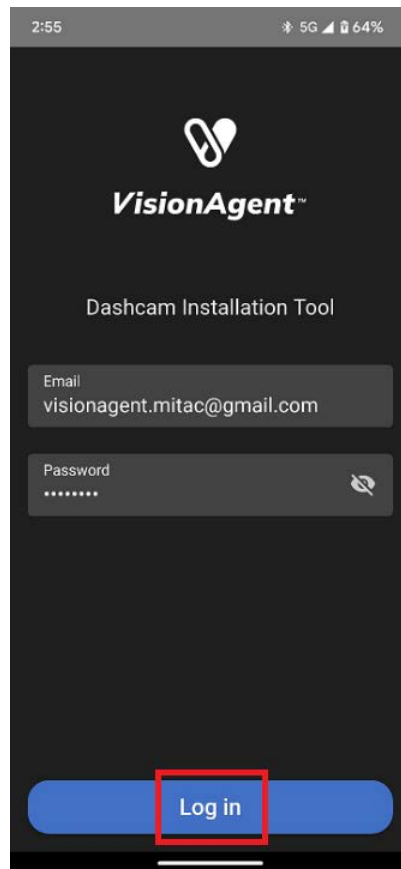
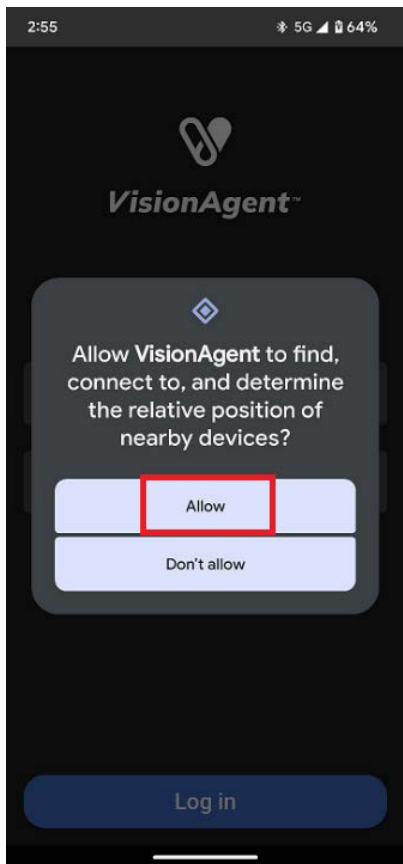
VisionAgent App Installation and Launch

All cameras must be calibrated via the VisionAgent app after initial installation.

Before calibrating your camera, install the VisionAgent app on your iOS or Android phone. To install and setup the VisionAgent app, use the following instructions:

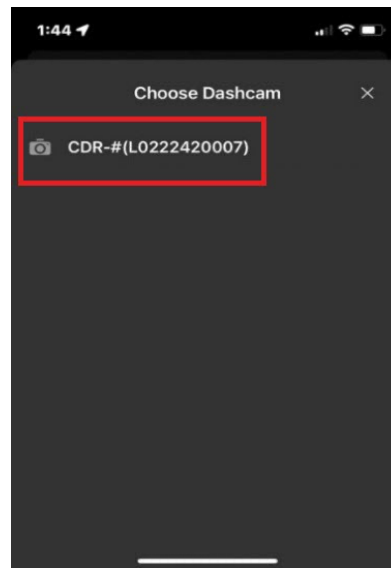
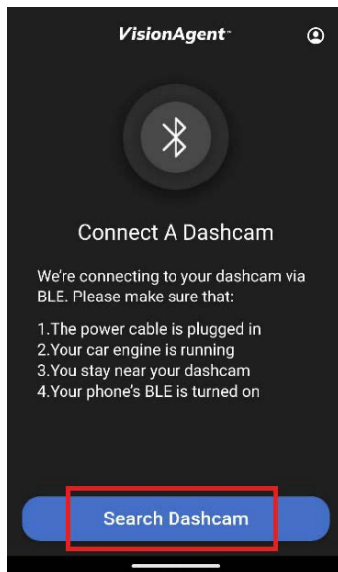
- For iOS and AOS, search “visionagent” in the app store.
- Select the app for installation.
- Once the download is complete, open the VisionAgent app.
- Allow VisionAgent to access the device’s location.
- Allow VisionAgent to find, connect to, and determine the relative position of nearby devices.
- Log in by entering the same account and password as your allocated VisionMax™ account and password.



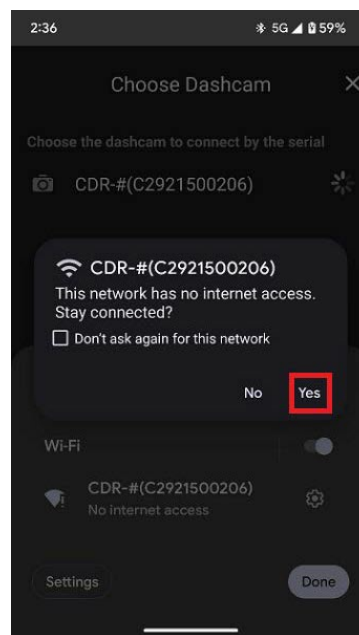
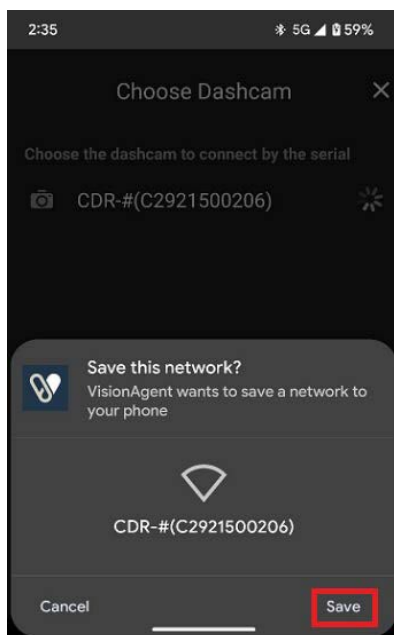


Ensure the camera is powered on (vehicle ignition may need to be on). Use the following instructions to calibrate your fleet camera:

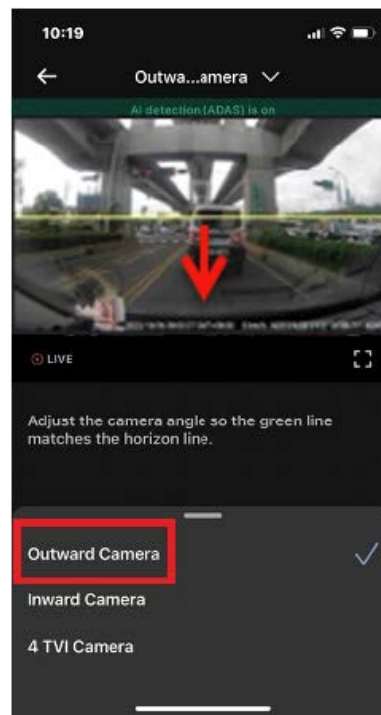
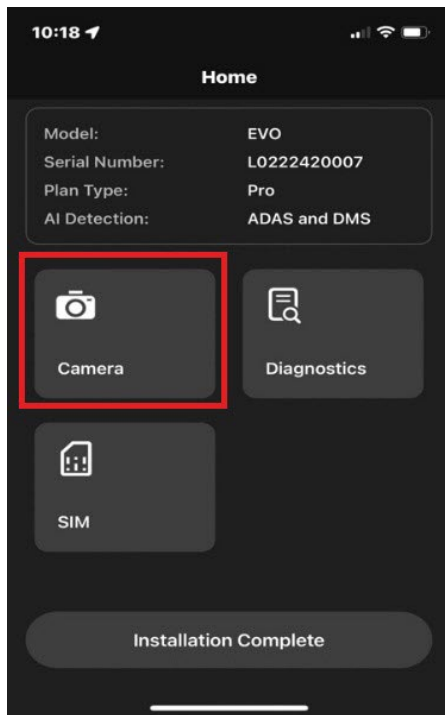
- In the VisionAgent app, select “Search Dashcam.”
- Select the dashcam from the list and confirm the CDR number matches the CDR number of the device.
- If you do not see your camera listed, you may have to start the vehicle to power the camera.



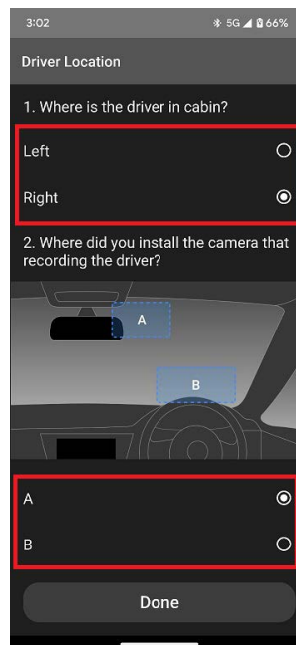
- Select 'Save' and 'Yes' when prompted to connect the device to Wi-Fi. If there is no Wi-Fi connect prompt, the device has automatically connected.



- On the Home screen, select 'Camera' to enter the settings screen.
- Select 'Outward Camera' and follow the calibration instructions.
 - **Note:** When adjusting the outward camera's viewing angle, make sure the vehicle is parked on level ground and the camera's view is parallel to the ground. The ground-to-sky ratio should be close to a 50/50 split. The area enclosed by the rectangle indicated by the green and yellow lines is processed by the ADAS engines. Please ensure this region has an unobstructed view of the road.

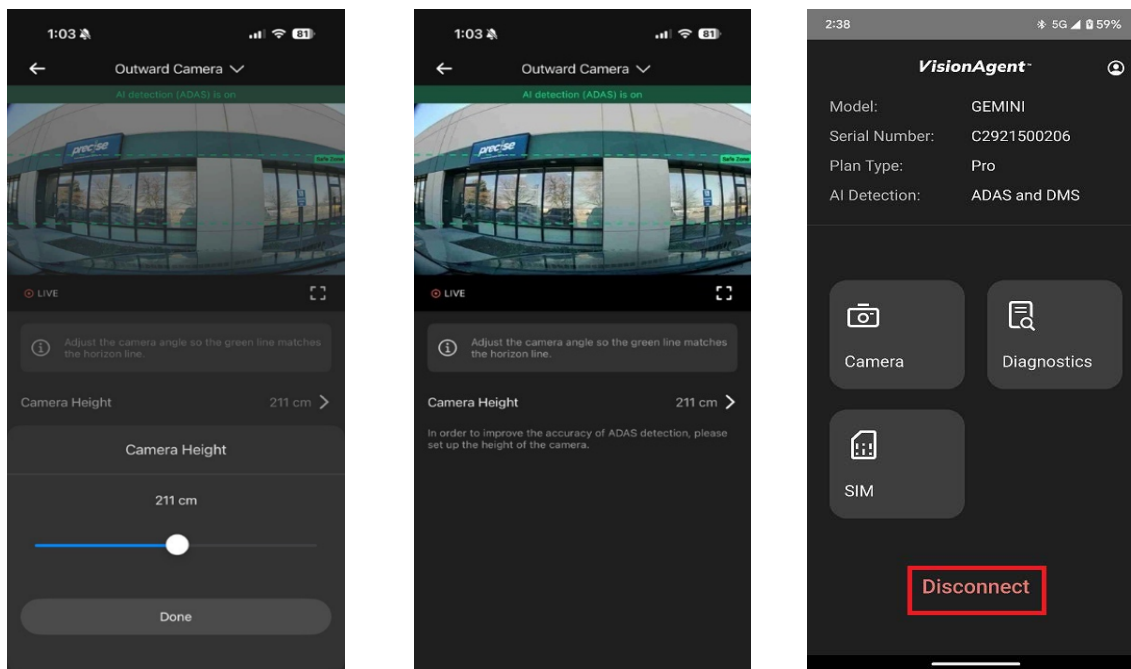


- Select 'Inward Camera.'
- Select 'Driver Location.'
- Select 'Right' for RHD and 'A' for camera location.



- Select 'Done.'
- For the K265, select the '4TVI Camera' and click the box to set the TVI and other cameras.

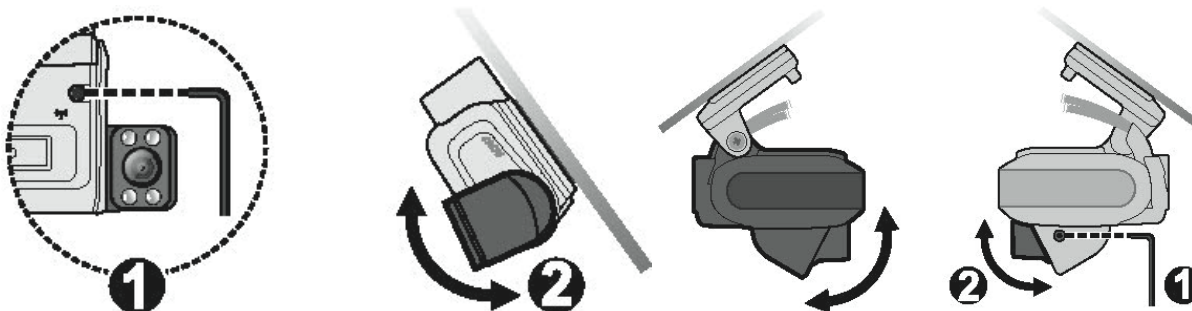
- **Note:** To ensure the Driver Monitoring System (DMS) functions correctly, the driver-facing camera must capture a clear view of the driver.
- Once all camera adjustments are made, including adjusting the camera viewing angle, return to the home page and select 'Disconnect' to complete. If you have not made any adjustments to the camera viewing angle, proceed to the Adjusting the Camera Viewing Angle section before disconnecting.



Adjusting the Camera Viewing Angle

To adjust the camera viewing angle, you must first:

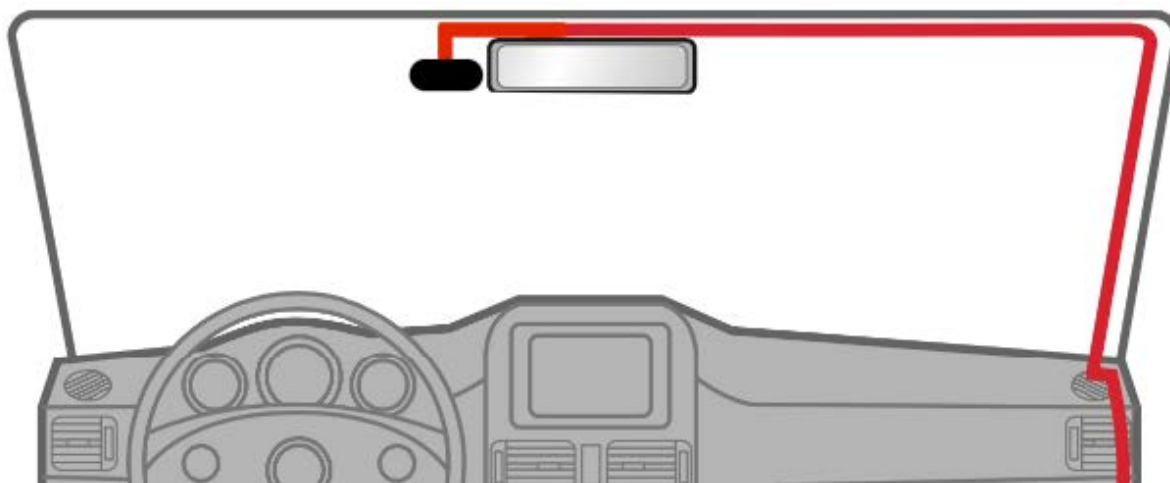
- Loosen the camera locking screw(s).
- Adjust each camera's viewing angle using the corresponding live view displayed by the app.
- Tighten the locking screw(s) to lock each camera's position once the new angle is set.



Ensure that the camera angle is adjusted according to the following criteria:

- The camera should be mounted as high on the windscreen as possible.
- The camera should be mounted off-center towards the driver—closer is better.

- The camera position should not obstruct the driver's direct line of sight to the road or traffic signs, and its position should comply with local regulations.
- DMS functionality is severely compromised if the camera is mounted on the passenger side.
- The camera wire should be routed around the windshield and should not obstruct the view of the driver.



Film Removal

Before using the fleet camera to record videos, peel off the protective films covering both the road-facing and driver-facing camera lenses. The fleet camera will automatically turn on when the vehicle engine is started, and the system will automatically begin continuous loop recording after a few seconds.

Events

During continuous loop recording, if a sudden event (such as harsh driving or vehicle collision) is detected, the G-sensor prompts the fleet camera to record. You can also press the emergency recording button to record a video manually while continuous loop recording is in progress.

ACC On

If there is an incoming call:

- Short press: Answer the incoming call.
- Press and hold for more than 2 seconds: Reject the incoming call.

When there is no incoming call:

- Short press: Emergency recording.
- Press and hold for 2 to 6 seconds: Call out to the server.

MANUFACTURER LIMITED WARRANTY AND LIMITATION OF LIABILITY

Manufacturer warrants that on the Date of Purchase, this Product will conform to Manufacturer's published specifications for the product, which are available from Manufacturer on request, and Manufacturer warrants that the product is free from defects in materials and workmanship. This

Limited Warranty extends for twelve (12) months from the date of manufacture. Manufacturer will, at its option, repair or replace any product found by Manufacturer to be defective and subject to this Limited Warranty.

This Limited Warranty does not apply to parts or products that are misused; abused; modified; damaged by accident, fire, or other hazard; improperly installed or operated; or not maintained in accordance with the maintenance procedures set forth in Manufacturer's Installation and Operating Instructions.

To obtain warranty service, you must ship the product(s) to the specified Manufacturer location within thirty (30) days from expiration of the warranty period. Contact customer service to obtain an RMA number and write the number on the shipping container. You must prepay shipping charges and use the original shipping container or equivalent. Return shipping charges within the United States, Canada, and Puerto Rico, will be paid by Manufacturer. This Limited Warranty will apply only to a product purchased and located in the United States, Canada, or Puerto Rico.

EXCLUSION OF OTHER WARRANTIES: MANUFACTURER MAKES NO OTHER WARRANTIES, EXPRESSED, IMPLIED, OR STATUTORY. THE IMPLIED WARRANTIES FOR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY EXCLUDED AND SHALL NOT APPLY TO THE PRODUCT. BUYER'S SOLE AND EXCLUSIVE REMEDY IN CONTRACT, TORT, OR UNDER ANY OTHER THEORY AGAINST MANUFACTURER RESPECTING THE PRODUCT AND ITS USE SHALL BE THE REPLACEMENT OR REPAIR OF THE PRODUCT AS DESCRIBED ABOVE.

LIMITATION OF LIABILITY: IN THE EVENT OF LIABILITY FOR DAMAGES ARISING OUT OF THIS LIMITED WARRANTY OR ANY OTHER CLAIM RELATED TO MANUFACTURER'S PRODUCTS, MANUFACTURER'S LIABILITY FOR DAMAGES SHALL BE LIMITED TO THE AMOUNT PAID FOR THE PRODUCT AT THE TIME OF ORIGINAL PURCHASE. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR LOST PROFITS, THE COST OF SUBSTITUTE EQUIPMENT OR LABOR, PROPERTY DAMAGE, OR OTHER SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES BASED UPON ANY CLAIM FOR BREACH OF CONTRACT, NEGLIGENCE OR OTHER CLAIM, EVEN IF MANUFACTURER OR A MANUFACTURER'S

REPRESENTATIVE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Manufacturer shall have no further obligation or liability with respect to the product or its sale, operation and use, and Manufacturer neither assumes nor authorizes the assumption of any other obligation or liability in connection with such product.

This Limited Warranty gives you specific legal rights, and you may also have other legal rights, which vary, from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

Any oral statements or representations about the product, which may have been made by salesmen or Manufacturer representatives, do not constitute warranties. This Limited Warranty may not be amended, modified, or enlarged, except by a written agreement signed by an authorized official of Manufacturer that expressly refers to this Limited Warranty.

Part 15 Notice:

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.