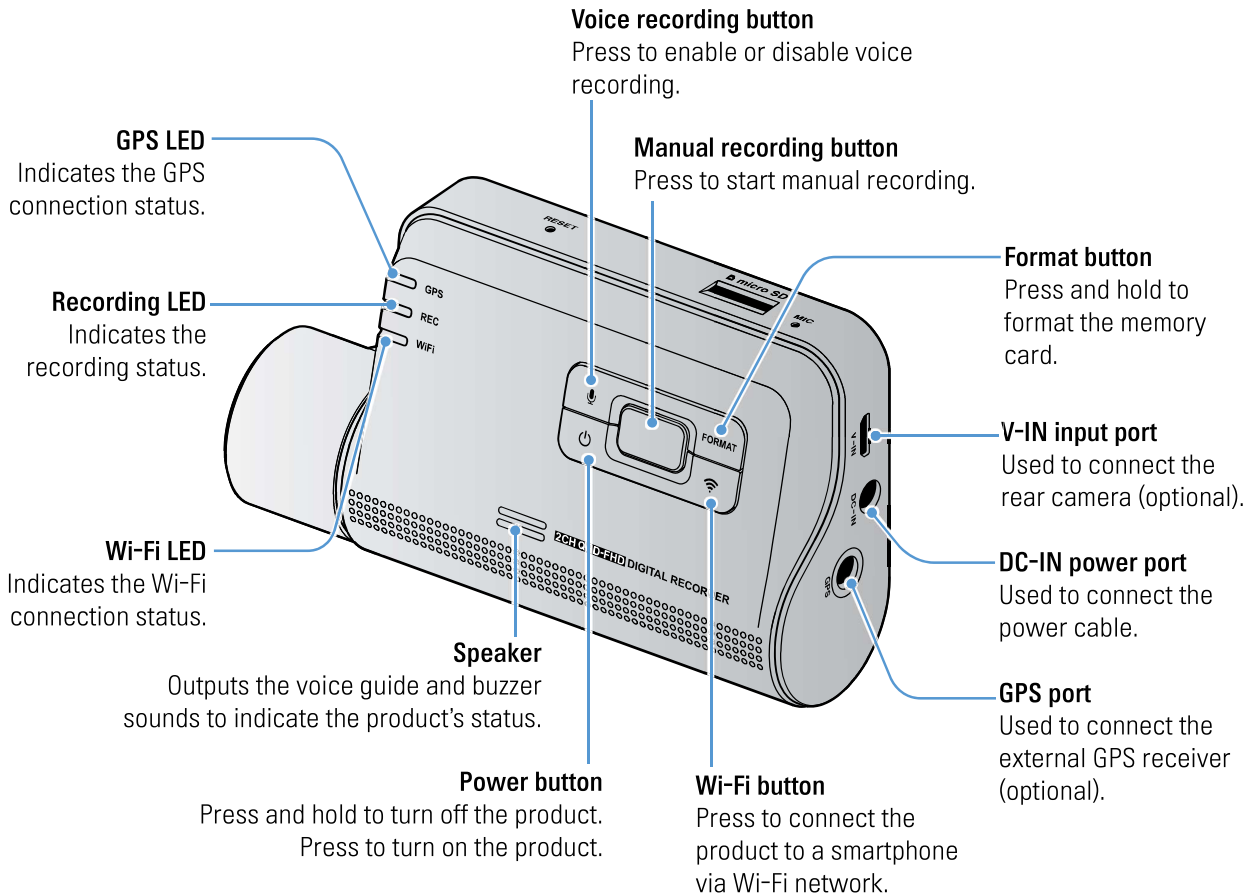


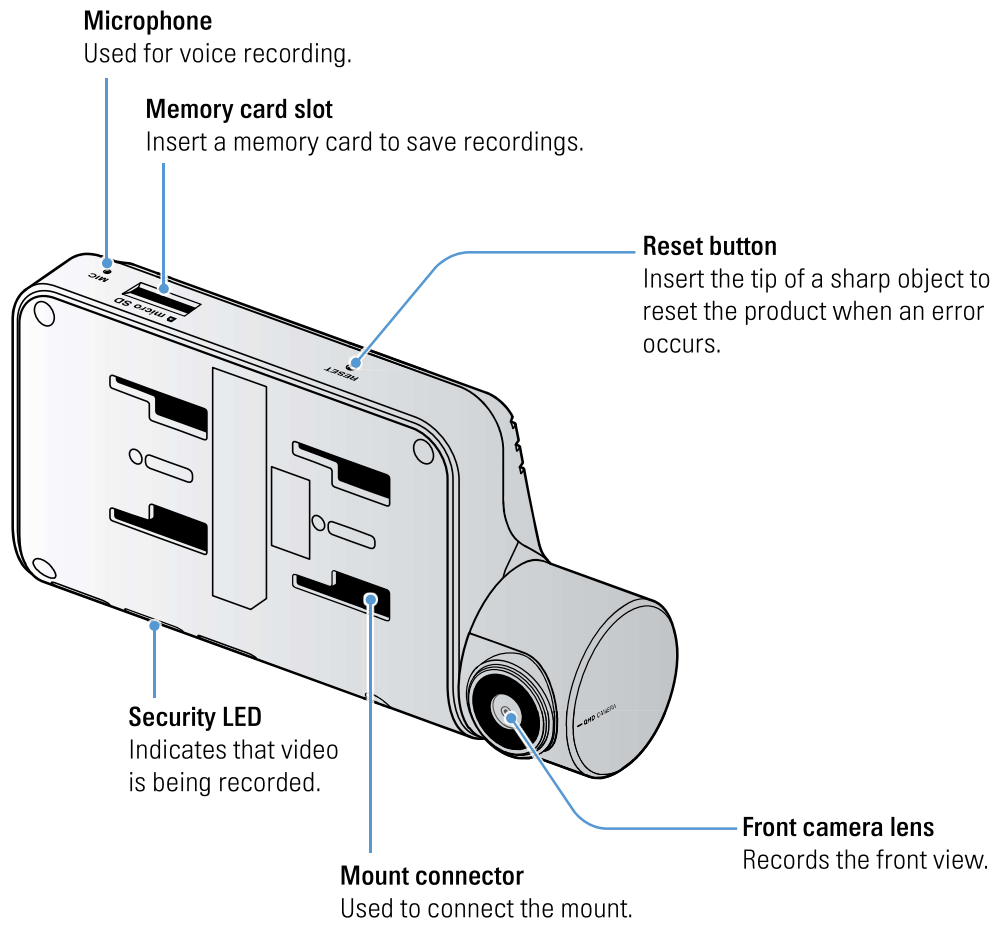
1.2 Part names

1.2.1 Front camera (main unit) - front view

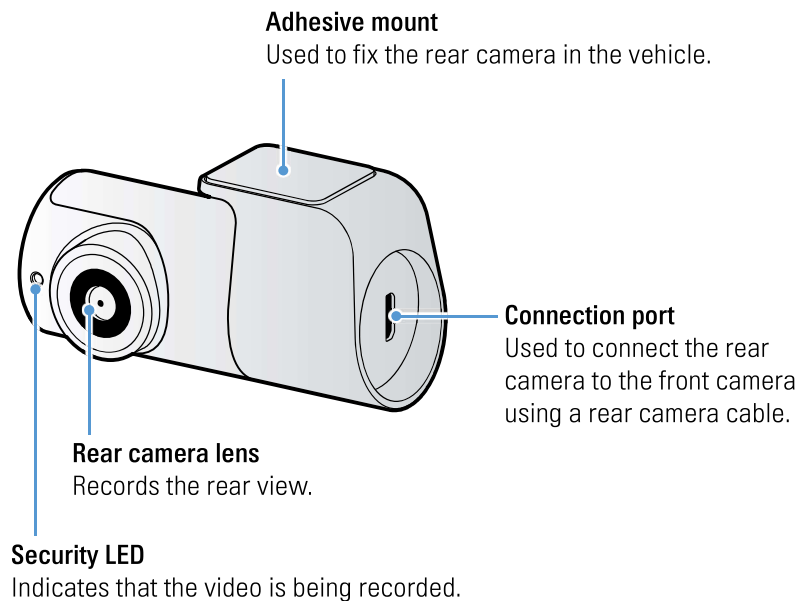


To reset the product, press and hold the voice recording (🎤) and manual recording (□) buttons simultaneously until you hear beeps.

1.2.2 Front camera (main unit) - rear view

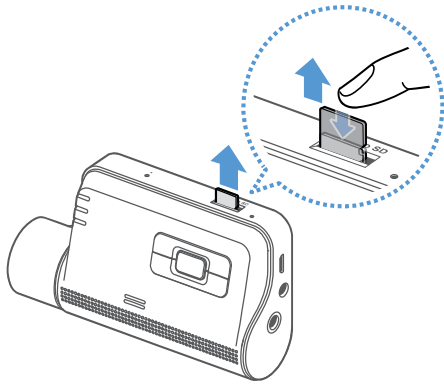


1.2.3 Rear camera (optional)



1.3 Removing and inserting the memory card

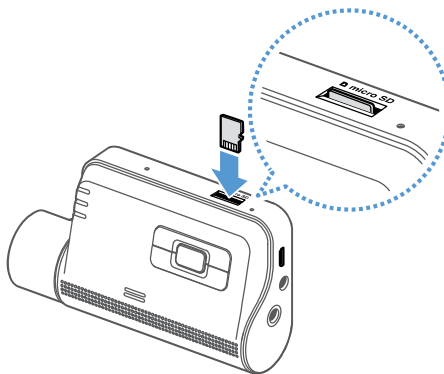
Follow the instructions to remove the memory card from the product or to insert the memory card into the product.



Removing the memory card

Ensure that the product is turned off, and then gently push the bottom of the memory card with your fingernail. The lower part of the memory card will be exposed.

Remove it from the product.



Inserting the memory card

Insert the memory card into the memory card slot, paying attention to the direction of the memory card, and then push the memory card into the slot until you hear a click.

Before inserting the memory card, ensure that the metal contacts on the memory card are facing toward the buttons of the product.



- Ensure that the product is turned off before removing the memory card. The recorded video files may be corrupted or lost if you remove the memory card while the product is on.
- Ensure that the memory card is in the correct direction before inserting it into the product. The memory card slot or the memory card may be damaged if it is inserted incorrectly.
- Use only authentic memory cards from THINKWARE. THINKWARE does not guarantee compatibility and normal operation of third-party memory cards.



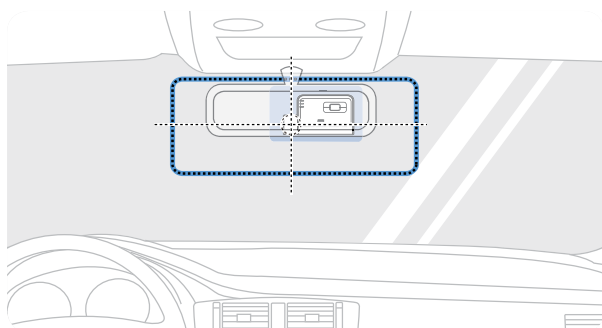
To prevent loss of recorded video files, periodically back up the video files on a separate storage device.

2. Installing the product

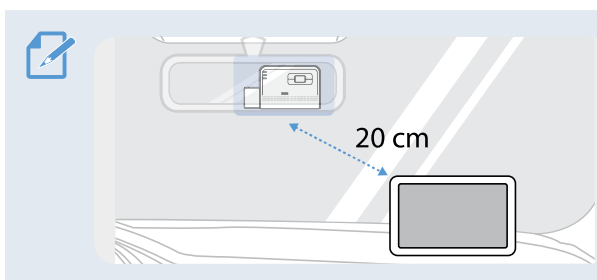
2.1 Installing the front camera (main unit)

Follow the instructions to properly install the product.

2.1.1 Selecting an installation location



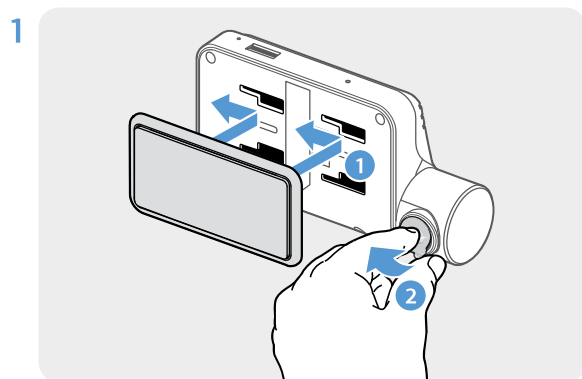
Select an installation location that can record the entire view in front of the vehicle without obstructing the driver's vision. Ensure that the front camera lens is located in the center of the windshield.



If a GPS navigating device is installed on the dashboard, its GPS reception may be affected depending on the dashboard camera's installation location. Adjust the installation location of the GPS navigating device to ensure that the two devices are separated by at least 20 centimeters (approximately 8 inches).

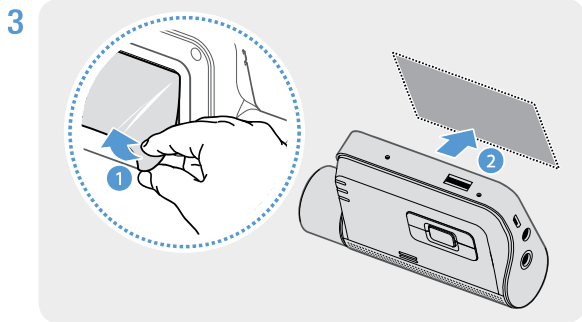
2.1.2 Securing the product

Follow the instructions to secure the product at the installation location.

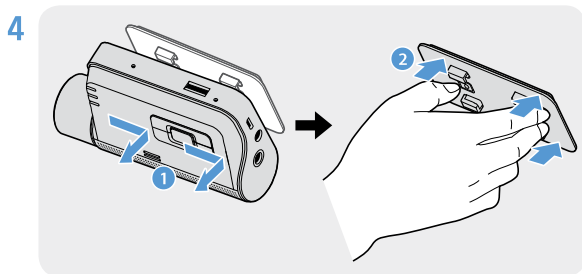


Align the mount to the mount rail on the product, and then slide it until you hear a click (1). Then, carefully remove the protective film (2).

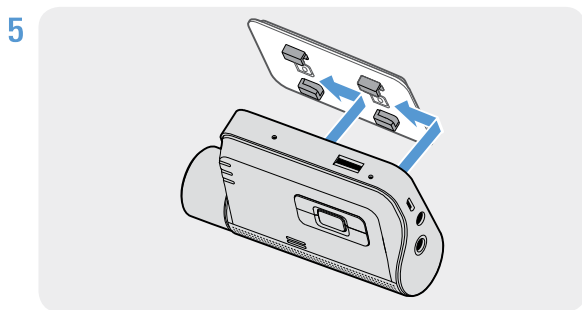
- 2 After determining the installation location, wipe the installation location on the windshield with a dry cloth.



Remove the protective film from the adhesive mount, and then press the mount to the installation location.



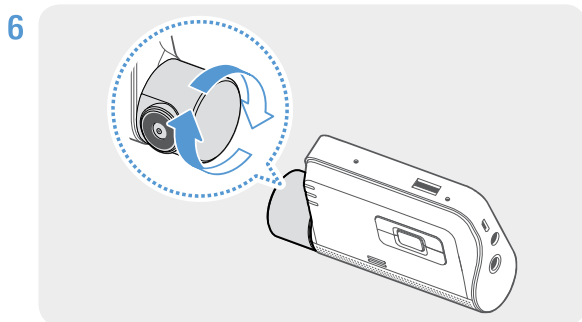
Remove the product from the mount and push the mount against the windshield to ensure that the mount is firmly fixed.



Align the product to the mount, and then slide it into the locking position until you hear a click.



- The product may fall and be damaged during vehicle operation if it is not firmly fixed to the mount.
- If you need to remove the mount from the windshield to alter the installation location, be careful not to damage the windshield's film coat.



Set the vertical angle of the camera appropriately.



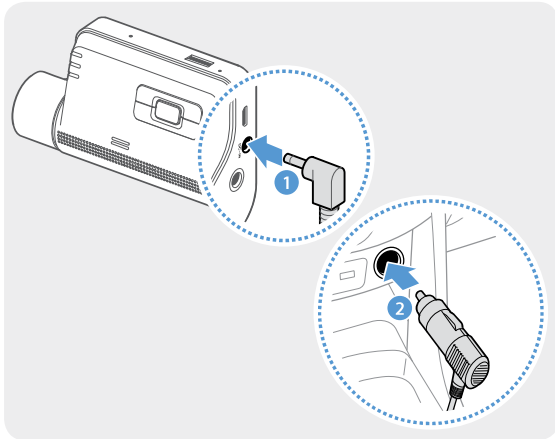
To confirm the camera angle, record a video after installation and check the video using the mobile viewer or the PC viewer. If necessary, adjust the camera angle again.
For more information about the mobile viewer or the PC viewer, refer to "4. Using the mobile viewer" on page 22 or "5. Using the PC viewer" on page 33.

2.1.3 Connecting the power cable

When the engine and electrical accessories are turned off, connect the car charger.



The hardwiring cable (optional) must be professionally installed to the vehicle by a trained mechanic.



Connect the car charger to the product's DC-IN power port and insert the cigar jack into the vehicle's power socket.



The location and specifications of the power socket may differ by vehicle make and model.

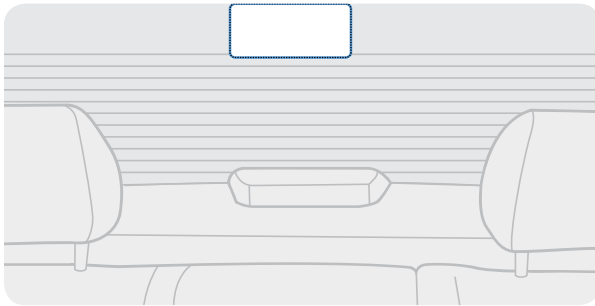


- Use the authentic THINKWARE car charger. Use of third party power cables may damage the product and result in electrical fire or electrocution due to the voltage difference.
- Do not cut or modify the power cable yourself. Doing so may damage the product or the vehicle.
- For safe driving, arrange the cables to prevent the driver's vision from being obstructed or interfering with driving. For more information about arranging cables, visit www.thinkware.com.

2.2 Installing the rear camera (optional)

Refer to the following instructions to properly install the rear camera.

2.2.1 Selecting an installation location



Select a location on the rear windshield where there is no defrost grid wire and the camera can record the entire rear view.



- For vehicles with a sunshade attached to the rear windshield, you must select a location where using the sunshade will not interfere with camera operation.
- The adhesive part of the rear camera should not touch the defrost grid.

2.2.2 Securing the rear camera

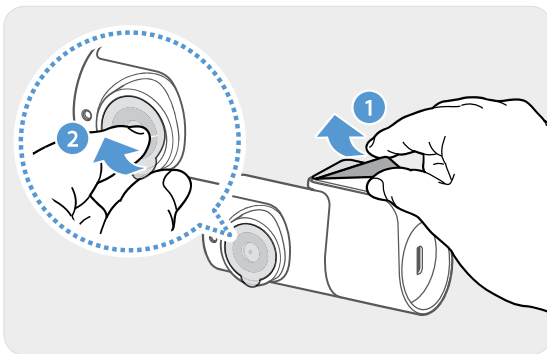
Refer to the following instructions to secure the product to the installation location.

- 1 After determining the installation location, wipe the installation surface of the windshield with a dry cloth.



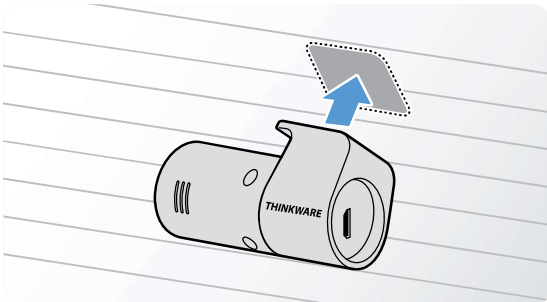
Check the installation location before you secure the rear camera to the rear windshield. After securing the rear camera to the windshield, it is hard to remove the camera or change the installation location due to the strong adhesive.

2



Remove the protective film from the adhesive mount and camera lens.

3

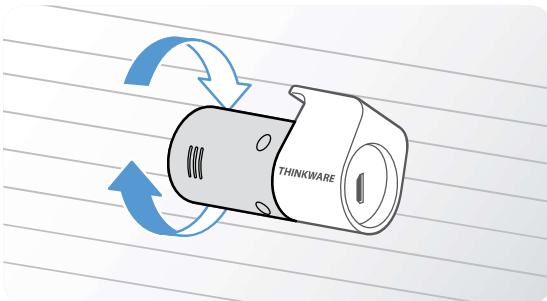


Attach the product with the THINKWARE logo facing indoors and press the adhesive tape firmly to secure the camera.



If the product is fixed in reverse, the rear view will be recorded upside down.

4

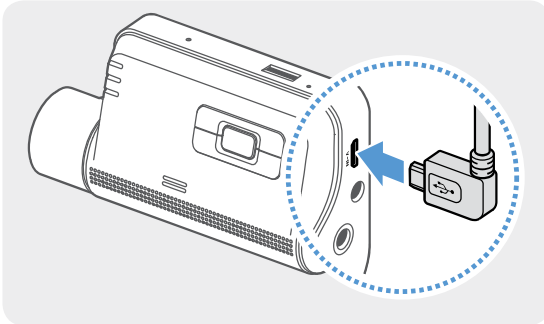


Adjust the camera's vertical angle.

2.2.3 Connecting the rear camera cable

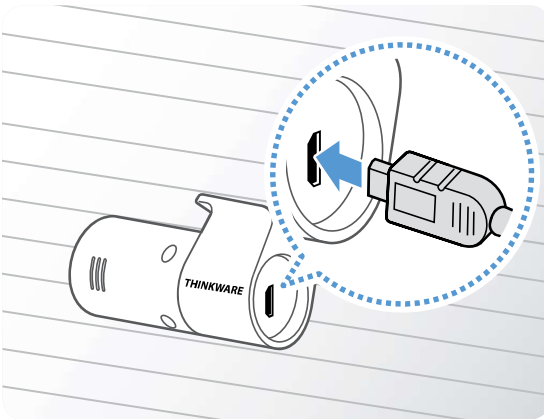
Power off the product and connect the rear camera cable to the front camera (main unit).

1



Connect one end of the rear camera cable to the front camera's V-IN port.

2



Connect the other end of the rear camera cable to the rear camera's connection port.



For safe driving, arrange the cables to prevent the driver's vision from being obstructed or interfering with driving.

- 3 Turn on the ACC or start the engine to check if the product is powered on. After the product is powered on, the Status LED and the voice guidance will be turned on.



The product is powered on when the ACC mode is turned on or when the engine starts.

3. Using recording features

3.1 Turning the product on or off






The product is turned on automatically and continuous recording starts when you turn on the ACC or start the engine.



Wait until the product is completely booted up after turning it on, and then begin operating the vehicle. The video recording does not begin until the product is completely turned on (booted up).

3.2 Learning about file storage locations

Videos are stored in the following folders according to their recording mode.

On the mobile viewer	Continuous	Continuous Incident	Manual Recording	Motion Detection	Parking Incident
In the memory card	 cont_rec	 evt_rec	 manual_rec	 motion_timelaps e_rec	 parking_rec



Play videos on Window/Mac computer or using the Thinkware mobile app. If you play videos by inserting the memory card in devices such as a smartphone or a tablet PC, the video files may be lost.



A file name is composed of the recording start date and time, and the recording option.

REC_YYYY_MM_DD_HH_MM_SS_F.MP4
REC_2018_07_01_10_25_30_F.MP4
REC_2018_07_01_10_25_30_R.MP4

Recording conditions

- F: Front camera
- R: Rear camera (when optional rear camera is equipped)

3.3 Using the continuous recording feature

Connect the power cable to the product's DC-IN power port and then turn on the vehicle's electrical accessories or start the engine. The status LED and the voice guide are turned on, and the continuous recording starts.