THINKWARE DASH CAM™

Q1000 **User Guide**

This product records videos while the vehicle is operating. Read and follow the instructions in this guide to properly use and maintain the product.







Before using the product

About the product

This product records videos while the vehicle is operating. Use this product only for reference when investigating incidents or road accidents. This product is not guaranteed to record for all events. The device may not record accidents with impacts that are too minor to activate the impact sensor or accidents with massive impacts that cause the vehicle's battery voltage to deviate.

Video recording does not begin until the product is completely turned on (booted up). To ensure that all vehicle events are recorded, wait until the product is completely booted up after turning it on, and then begin operating the vehicle.

THINKWARE is not responsible for any loss caused by an accident, nor is it responsible for providing any support regarding the outcome of an accident.

Depending on the vehicle's configuration or operating conditions, such as the installation of remote door lock devices, ECU settings, or TPMS settings, some product features may not be supported, and different firmware versions may influence the product's performance or features.

About the user guide

The information provided in the guide may change when the manufacturer updates its service policy.

This user guide is intended for THINKWARE Q1000 model only, and it may contain technical errors, editorial errors, or missing information.

Copyrights

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Registered trademarks

THINKWARE Q1000 is a registered trademark of THINKWARE.

Other product logos and service names in this guide are trademarks of the relevant companies.

FCC Statement

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.

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 in a residential installation. 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 to 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.
- This appliance and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.
- A minimum separation distance of 20cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

FCC CAUTION: Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

FCC ID: 2ADTG-Q1000

Information to user: RSS-247

This device complies with RSS-247 of the Industry Canada 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.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Please be cautioned the changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice: Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This Class B digital apparatus complies with Canadian ICES-003.

IC: 12594A-Q1000

Antennas Statement

This radio transmitter (identify the device by certification number or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Industry Canada Statement

Ce dispositif est conforme à la norme CNR-247 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non con trôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Antennas Statement

Le present emetteur radio (identifier le dispositif par son numero de certification ou son numero de modele s'il fait partie du materiel de categorie II) a ete approuve par Industrie Canada pour fonctionner avec les types d'antenne enumeres ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est superieur au gain maximal indique, sont strictement interdits pour l'exploitation de l'emetteur.

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Safety information

Read the following safety information to properly use the product.

Safety symbols in this guide



"Warning" - Indicates a potential hazard which, if not avoided, may result in injury or death.



"Caution" - Indicates a potential hazard which, if not avoided, may result in minor injury or property damage.



"Note" - Provides useful information to help users better utilize the product's features.

Safety information for proper use

Driving and product operation



- Do not operate the product while driving a vehicle. Distraction while driving may cause accidents and result in injury or death.
- Install the product in places where the driver's view is not obstructed. Obstruction of the driver's vision may cause accidents and result in injury or death. Check with your state and municipal laws before mounting the product to the windshield.

Power supply



- Do not operate or handle the power cable with wet hands. Doing so may result in electrocution.
- Do not use damaged power cables. Doing so may result in electrical fire or electrocution.
- **Keep the power cable away from all heat sources.** Failure to do so may cause the power cord insulation to melt, resulting in electrical fire or electrocution.
- Use the power cable with the correct connector and make sure the power cable is connected securely and is firmly in place. Failure to do so may result in electrical fire or electrocution.
- Do not modify or cut the power cable. Also, do not place heavy objects on the power cable or pull, insert, or bend the power cable using excessive force. Doing so may result in electrical fire or electrocution.



- Use only genuine accessories from THINKWARE or an authorized THINKWARE dealer. THINKWARE does not guarantee compatibility and normal operation of third-party accessories.
- When connecting the power cable to the product, ensure that the connection between the cable plug and the power cable connector on the product is secure. If the connection is loose, the power cable may become disconnected due to vehicle vibration. Video recording is not available if the power connector is disconnected.

Children and pets



Ensure that the product is out of the reach of children and pets. If the product breaks, it may result in fatal damage.

Other information about the product

Product management and operation



- Do not separate the product and the mount when the product is turned on. Doing so may result in product malfunction.
- Do not expose the product to direct sunlight or intense light. The lens or internal circuitry may fail otherwise.
- Use the product at a temperature between 14°F and 140°F (-10°C to 60°C) and store the product at a temperature between -4°F and 158°F (-20°C to 70°C). The product may not function as designed and some permanent physical damages may result if it is operated or stored out of the specified temperature ranges. Such damages are not covered by the warranty.
- Frequently check the product for the proper installation position. Impact caused by extreme road conditions may alter the installation position. Ensure that the product is positioned as instructed in this guide.
- Do not apply excessive force when pressing the buttons. Doing so may damage the buttons.
- Do not use chemical cleaners or solvents to clean the product. Doing so may damage plastic components of the product. Clean the product using a clean, soft, and dry fabric.
- Do not disassemble the product or subject the product to impact. Doing so may damage the product. Unauthorized disassembly of the product voids the product warranty.
- Handle with care. If you drop, mishandle, or expose the product to external shocks, it may cause damage and/or result in the malfunction of the product.
- Do not attempt to insert foreign objects into the device. Doing so may damage the product.
- Avoid excessive humidity and do not allow any water to enter the product. Electronic components inside the product may fail if exposed to humidity or water.



- Depending on the make and model of your car, the power may be constantly supplied to the dash cam even when the ignition is turned off. Installation of the device to a continuously powered 12V outlet could result in vehicle battery drainage.
- This device is designed to record video while the vehicle is in operation. The quality of the video might be affected by weather conditions and the road environment, such as whether it is day or night, presence of street lighting, entering/exiting tunnels, and the surrounding temperature.
- THINKWARE is NOT responsible for the loss of any recorded video during operation.
- Although the device was designed to withstand high-impact car collisions, THINKWARE does not guarantee the recording of accidents when the device is damaged as a result of the accident.
- Keep the windshield and camera lens clean for optimal video quality. Particles and substances on the camera lens or windshield may reduce the quality of the recorded videos.
- This device is intended to be used inside the vehicle only.

1. Product overview

1.1 Included items

Ensure that all the items are included when you open the product box.

1.1.1 Standard items



Front camera (main unit)



Mount



Shield film



Car charger



Adhesive cable holder



MicroSD memory card with adapter (consumable)



Warranty / CS information



The standard items may change without prior notice.

1.1.2 Accessories (sold separately)



Rear camera



Rear camera cable



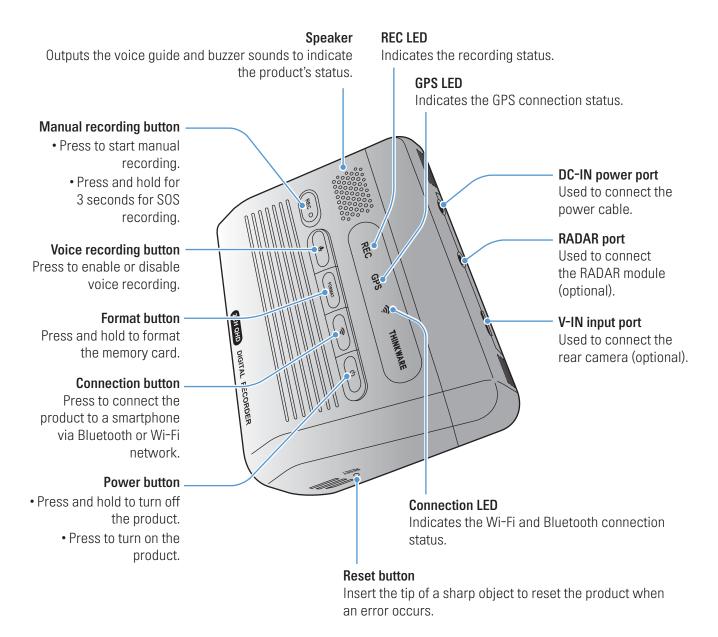
Hardwiring cable



RADAR module

1.2 Part names

1.2.1 Front camera (main unit) - front view





- To reset the product, press and hold the voice recording (\P) and manual recording (**REC**) buttons simultaneously until you hear beeps.
- Refer to the following table to check the status of the product using the LED indicators.

LED	LED STATUS	Operation description
Front Security LED	(light on)	The product is turned on.
	(light on)	Bluetooth connected
	(flickers)	Bluetooth pairing
	(light on)	Wi-Fi connected
Connection LED	(flickers)	Internet Mode pairing (not connected)
	(light on) Internet Mode connected	
	(flickers quickly)	SOS recording
	(flickers)	Bluetooth/Wi-Fi reset
	(light on)	Continuous Recording/Parking Recording (Time Lapse)
REC LED	(flickers)	Manual recording/Event recording/Parking recording (Motion Detection)
	OFF	Parking recording (Energy Saving)
	(flickers quickly)	SOS recording
GPS LED	(light on)	GPS activated

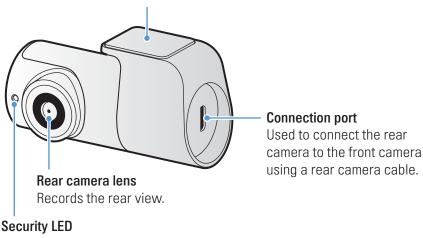
1.2.2 Front camera (main unit) - rear view

Adhesive mount Used to fix the front camera in the vehicle. Security LED Indicates that video is being recorded. Front camera lens Records the front view.

1.2.3 Rear camera (optional)

Adhesive mount

Used to fix the rear camera in the vehicle.



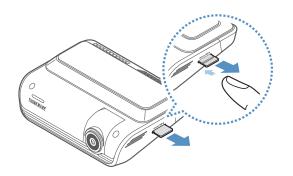
Indicates that the video is being recorded.



Depending on the laws and regulations of the country, the security LED specifications may be different.

Removing and inserting the memory card 1.3

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



Before removing the memory card, ensure that the product is turned off. Gently push the bottom of the memory card with your fingernail to release it, and then remove it from the product.

To insert the memory card into the memory card slot, ensure that the metal contacts on the memory card are facing toward the product's buttons, and insert it into the slot until you hear a click.



- 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 the compatibility and normal operation of third-party memory cards.



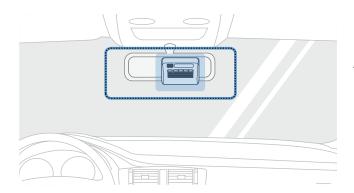
To prevent loss of recorded video files, periodically back up the video files on a separate storage device.

2. Installing the product

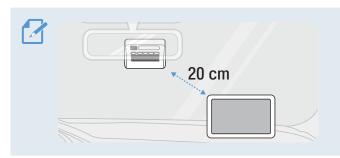
2.1 Installing the front camera (main unit)

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.

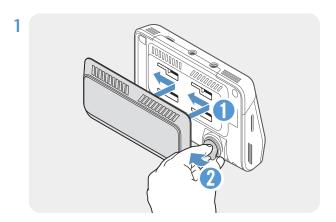


If a GPS navigating device is installed on the dashboard, its GPS reception may be affected depending on the dashboard camera's installation location.

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).

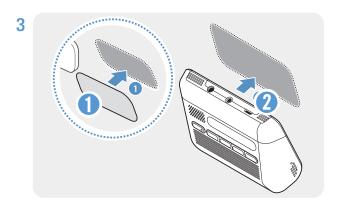
2.1.2 Securing the product

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

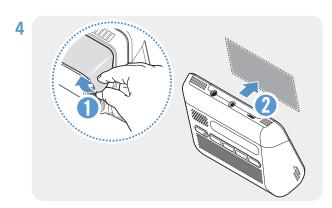


Align the mount to the mount rail on the product, and then slide it until you hear a click (1). Then, carefully remove the protective film (2).

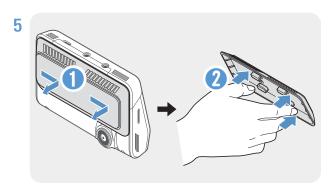
2 After determining the installation location, wipe the installation location on the windshield with a dry cloth.



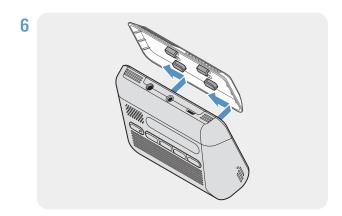
Attach the shield film to the installation location.



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



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

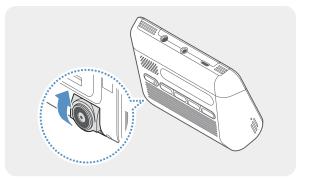


Align the product to the mount, and then slide it into the locking position until you hear a click.



- 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.

7



Set the vertical angle of the camera appropriately.



If the product and mount are not fully connected, the red part of the slide lock will show.



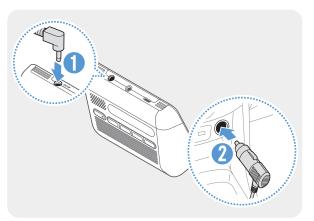
To confirm the camera angle, record a video after installation and check the video using the mobile viewer or the PC viewer. If necessary, adjust the camera angle again. For more information about the mobile viewer or the PC viewer, refer to "4. Using the mobile viewer" on page 24 or "6. Using the PC viewer" on page 26.

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.



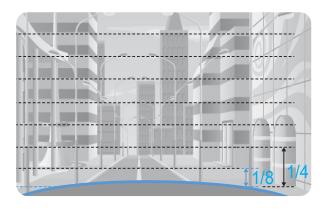
Connect the car charger to the product's DC-IN power port and insert the cigar jack into the vehicle's power socket.



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.



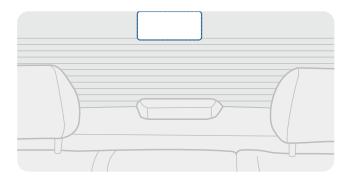
Connect the product to **THINKWARE DASH CAM LINK** on your smartphone and adjust the camera angle so that the hood of the vehicle covers 1/4 - 1/8 of the screen while viewing the live view screen, as shown in the image to the left.

For more information about connecting and using the **THINKWARE DASH CAM LINK**, refer to "4. Using the mobile viewer" on page 24.

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.

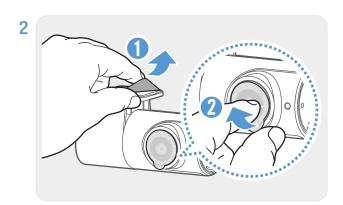
2.2.2 Securing the rear camera

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

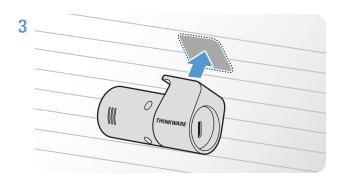
1 After determining the installation location, wipe the installation surface of the windshield with a dry cloth.



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.



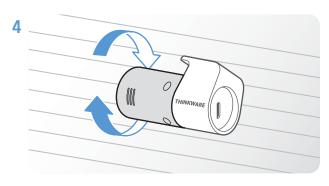
Remove the protective film from the adhesive mount and camera lens.



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.

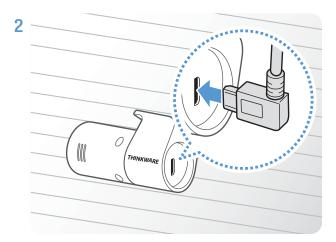


Adjust the camera's vertical angle.

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.



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 voice guidance will be turned on.



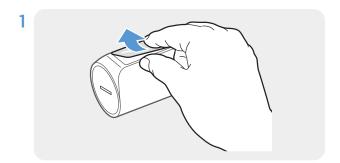
The product is powered on when the ACC mode is turned on or when the engine starts.

2.3 Installing the RADAR module (optional)

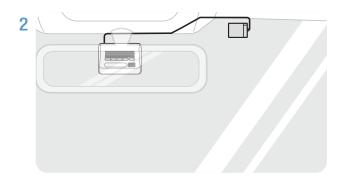
Refer to the following instructions to properly install the RADAR module. Install the RADAR module near the product, taking the module's cable length into account.



- When the RADAR module (optional) detects an object in the radar area, Energy Saving is switched off and the impact detection is set for 30 seconds. (If there is no impact detected, the product does not store the recording and switches back to Energy Saving.)
- If an object and impact are detected in the radar area, a video is recorded for 20 seconds and stored in the "parking_rec" folder. (The buzzer will sound.) When the recording ends, the product switches back to Energy Saving.



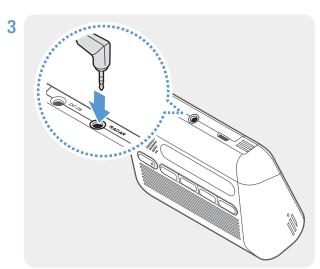
Remove the film on the back of the RADAR module.



Attach the RADAR module's adhesive surface to the upper part of the front windshield and press the adhesive part firmly to secure it.



Before installation, make sure the RADAR module's cable length is sufficient and check the cable routing path.



Connect the RADAR module to the product's RADAR connector.



Check the RADAR connector location again before connecting the module. If you connect the THINKWARE Connected Dongle to the DC-IN power connector, the pins inside the port may be damaged.

4 Turn on the ACC or start the engine to check that the product is powered on. After the product is powered on, the REC LED and the voice guide are turned on.

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 the file storage locations

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

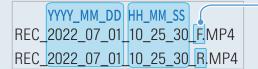
On the mobile viewer	Continuous	Continuous Incident	Manual Recording	Motion Detection	Parking Incident	SOS Recording
In the memory card	cont_rec	evt_rec	manual_rec	motion_ timelapse_rec	parking_rec	SOS_rec



Play videos on Window/Mac computers or using the **THINKWARE DASH CAM LINK**. 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.



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 voice guide will indicate that continuous recording has started.

During continuous recording, the product operates as follows.

Mode	Operation description	REC LED
Continuous recording	During driving, videos are recorded in 1 minute segments and stored in the "cont_rec" folder.	(light on)
Incident continuous recording*	When an impact to the vehicle is detected, a video is recorded for 20 seconds (from 10 seconds before the detection to 10 seconds after the detection) and stored in the "evt_rec" folder.	(flickers)

^{*} When an impact to the vehicle is detected during continuous recording, incident continuous recording starts with a double beep sound.