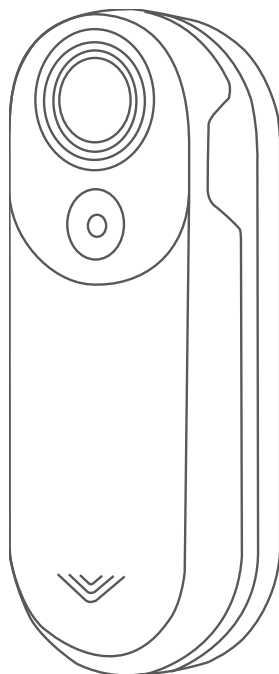


GARMIN®



VARIA™ RCT716

Owner's Manual

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Introduction

⚠ WARNING

See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

The device can improve situational awareness. It is not a replacement for cyclist attentiveness and good judgement. Always maintain awareness of your surroundings, and operate the bicycle in a safe manner. Failure to do so could result in serious injury or death.

Always consult your physician before you begin or modify any exercise program.

Getting Started

You can use the Varia RCT716 with your compatible Garmin® device or a phone. This list provides an overview of the installation and setup tasks.

- Charge the device ([Charging the Device, page 13](#)).
- Install the tail light mount ([Installing the Tail Light Mount, page 2](#)).
- Download the Garmin Varia app to your phone, and pair the devices ([Pairing the Varia RCT716 with Your Phone, page 6](#)).
- If you are using an Edge® series bike computer, pair the devices ([Pairing the Varia RCT716 with a Compatible Edge Bike Computer, page 10](#)).
- If you are using another Garmin device, pair the devices ([Pairing the Device with a Compatible Garmin Watch, page 12](#)).

Tips for Installing the Device

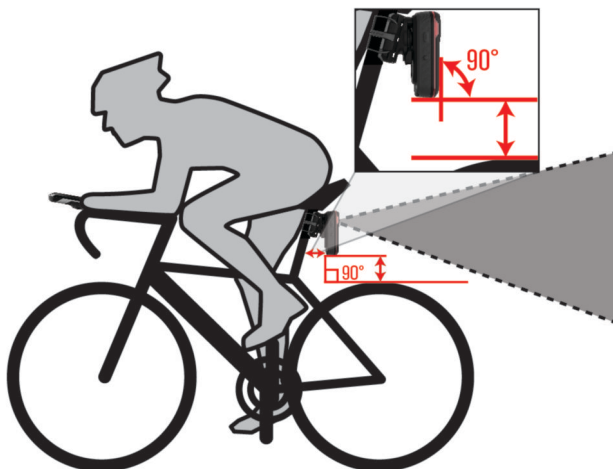
The Varia RCT716 device includes a tail light and micro radar that can detect approaching vehicles up to 140 meters away.

- Select a secure location to mount the device where it does not interfere with the safe operation of your bike.
- Mount the device as high on the seat post as possible for optimal light visibility and radar detection.

NOTE: The mount surface should be vertical. The mounts are designed to accommodate most seat post angles.

- Mount the device on the seat post 250 mm to 1200 mm above the road.
- Mount the Varia RCT716 device parallel to the longitudinal axis of the vehicle.
- Install the device correctly.

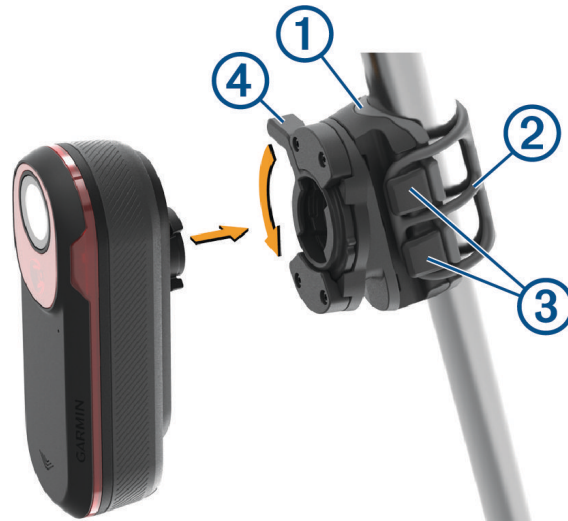
The device faces backward and is perpendicular to the road.



- Make sure there are no obstructions in front of the light.
- Go for a test ride during the day in a safe environment.

Installing the Tail Light Mount

- 1 Select a rubber pad ① based on your seat post shape, and place the rubber pad on the back of the tail light mount.
- 2 Place the tail light mount on the seat post.



- 3 Attach the tail light mount securely using one band ②.
- 4 Align the tabs on the back of the device with the tail light mount notches ③.
- 5 Press the locking lever down ④ until it locks into place.

Device Overview



① Device button	Hold for 1 second to turn the device on and enter active mode. When the device is off, hold for 2 seconds to enter pairing mode (Pairing the Varia RCT716 with Your Phone, page 6). Hold for 2 seconds to turn the device off.
② Device status LED	Changes color based on the battery level, pairing status, device modes, and charging status (Varia RCT716 Device Status LED, page 3).
③ Camera status LED	Changes color based on the camera status (Camera Status LED, page 4).
④ Camera button	Hold for 1 second to save a video or take a picture. Hold for 4 seconds to turn the camera on.
⑤ Microphone	Captures audio.

Varia RCT716 Device Status LED

LED State	Status
	The device is in active pairing mode.
	The device is in smart mode and can be controlled by a paired compatible Garmin device.
Flashing 	The device is charging.
Solid 	The device is fully charged.
Flashing 	The device is in lock mode.
Flashing 	The device has approximately 60 or fewer minutes of battery life remaining. NOTE: You must charge the device as soon as possible.
Solid 	An error occurred. You may need to restart the device.

Camera Status LED

LED State	Status
Solid 	The device is recording video to the video loop.
Flashing 	The device is saving a video or photo.
Alternating 	The memory card is underperforming or low on space.
Flashing 	There is a problem with the memory card.
Solid 	The memory card is being formatted. The device is in mass storage mode.
Slowly flashing 	The device is powering on. The device is accessing the memory card.
Flashing 	The device is in Wi-Fi® sharing mode.

Tail Light Modes and Intensity

You can switch the Varia RCT716 tail light modes by pressing the device button ([Device Overview, page 2](#)).

Mode	Light Intensity	Radar Behavior when Vehicle Approaches
Solid (default)	High	The device detects vehicles.
Standby	Off	The device does not detect vehicles.

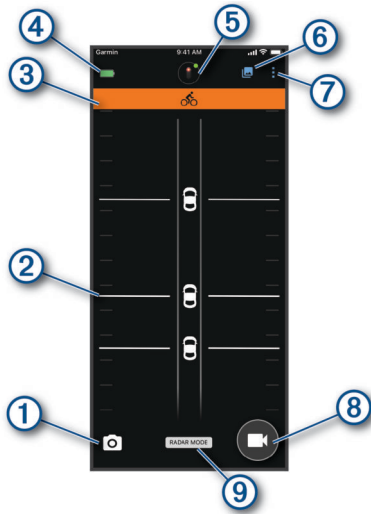
Turning Off the Device

Hold the device button for 2 seconds ([Device Overview, page 2](#)).

NOTE: You can also hold both buttons for 4 seconds to lock the device, preventing it from turning on.

The Varia RCT716 and the Varia App

The Varia app connects to your Varia RCT716 device using Bluetooth® technology. The app displays radar information, settings, videos, and photos.



①	Select to take a photo.
②	Displays radar information (Viewing Radar on the Varia App, page 6).
③	Displays a colored banner indicating the threat level posed by approaching vehicles.
④	Displays battery status of the paired Varia device.
⑤	Select to change the device and camera settings (Varia App Device Settings, page 8).
⑥	Select to open the video and photo gallery (Viewing Videos and Photos on the Varia App, page 7).
⑦	Select to update the sounds and alerts on your phone. (Customizing the Varia App Sounds and Alerts Settings, page 9).
⑧	Select to record video or save a video clip.
⑨	Displays your recording mode (Changing Your Recording Mode, page 9).

You can download the Varia app from the app store on your phone.

Pairing the Varia RCT716 with Your Phone

The first time you connect the Varia RCT716 to the Varia app on your phone, you must pair both devices. After the initial pairing, the Varia app automatically connects to the Varia RCT716 when you open the app and the radar device is active and within range.

- 1 Bring your phone within range (0.3 m) of the Varia RCT716.

NOTE: Stay 10 m away from other Bluetooth sensors while pairing.

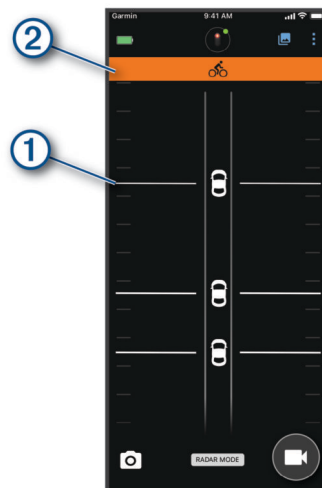
- 2 On your compatible phone, enable Bluetooth technology.
- 3 From the app store on your phone, install and open the Varia app.
- 4 Select **Add New Device**.
- 5 While the Varia RCT716 is turned off, hold the device button for 4 seconds to enter pairing mode.
The device status LED flashes , and the tail light turns on. The device is in pairing mode for 5 minutes or until you hold the device button for 2 seconds to exit pairing mode.
- 6 Select **Pair**.

When the Varia RCT716 is paired with your phone, the app displays the current radar status.

Viewing Radar on the Varia App

Go for a ride.

The radar information appears on the active data screen.



The vehicle position ① moves up the screen as a vehicle gets closer to your bike. The threat level banner ② changes color based on the potential level of threat. Green indicates no vehicle is detected. Amber indicates a vehicle is approaching. Red indicates a vehicle is advancing at a high rate of speed.

TIP: The line next to the vehicle also indicates the threat level. A straight line changes to jagged with a red threat level.

Video Recording

NOTICE

Some jurisdictions may prohibit or regulate the recording of video, audio, or photographs, or may require that all parties have knowledge of the recording and provide consent. It is your responsibility to know and follow all laws, regulations, and any other restrictions in jurisdictions where you plan to use this device.

The Varia RCT716 records video to the memory card ([Replacing the Memory Card, page 15](#)). By default, the camera is disabled when you turn the device on. To enable the camera, hold the camera button for 4 seconds. The camera continues recording until it is turned off. If the memory card is full, the device automatically overwrites the oldest unsaved video with new video.

You can save a video recording to prevent it from being overwritten or deleted. ([Saving Videos and Photos Manually, page 8](#))

TIP: After you save a video recording, you should download the recording to your phone ([Downloading Videos and Photos on the Varia App, page 7](#)) or transfer the recording to your computer or other external storage location for permanent storage ([Connecting the Device to Your Computer, page 14](#)).

Viewing Videos and Photos on the Varia App

Before you can view videos and photos on the Varia app, you must download the app and pair it with your Varia RCT716 device ([Pairing the Varia RCT716 with Your Phone, page 6](#)).

NOTE: The device stops recording while you are viewing the gallery.

- 1 From the Varia app, select .
- The app opens to the Downloaded folder ([Downloading Videos and Photos on the Varia App, page 7](#)).
- 2 To view other folders, select an option:
 - To view a saved video or photo, select **Locked**.
 - To view recent, unsaved video footage, select **Unlocked**.
- 3 Select **Join Varia Wi-Fi Network**.
- 4 Follow the on-screen instructions.

Downloading Videos and Photos on the Varia App

Before you can download videos and photos on the Varia app, you must download the app, and pair it with your Varia RCT716 device ([Pairing the Varia RCT716 with Your Phone, page 6](#)).

NOTE: The device stops recording while you are viewing the gallery.

- 1 From the Varia app, select the device icon at the top of the home screen.
- 2 Select **Gallery & Storage > Gallery**.
- 3 Follow the on-screen instructions.
- 4 Select the **Locked** or **Unlocked** folder.
- 5 Select a video or photo from the thumbnail gallery.
- 6 Select **•••**, and select an option:
 - To download the video or photo and delete it from its current folder, select **Download & Delete**.
 - To download the video or photo and keep a copy in its current folder, select **Download**.
- 7 Select **Downloaded** to view the downloaded video or photo.

TIP: Select **Add to Vault** and following the on-screen instructions to upload your video or photo to your Garmin Vault account (optional) ([Vault Storage, page 9](#)).

Deleting a Video or Photo on the Varia App

Before you can delete a video or photo on the Varia app, you must download the app and pair it with your Varia RCT716 device ([Pairing the Varia RCT716 with Your Phone, page 6](#)).

NOTE: The device stops recording while you are viewing the gallery.

- 1 From the Varia app on your phone, select  > **Join Varia Wi-Fi Network**, and follow the on-screen instructions.
- 2 Select the **Locked** or **Unlocked** folder.
- 3 Select a video or photo from the thumbnail gallery.
- 4 Select **•••** on the video or photo.
- 5 Select **Delete**.

Saving Videos and Photos Manually

When the camera is enabled, the device is always recording and saving video to the memory card, overwriting the oldest video footage with new footage. You can also save video files and photos manually at any time to prevent the camera from overwriting them.

- On the device, press the camera button ([Device Overview, page 2](#)).
- From the Varia app, select  or  ([The Varia RCT716 and the Varia App, page 5](#)).
- On your compatible Edge bike computer, select an option :
 - To take a photo, select **Take Photo**.
 - To save a 2-minute segment of video, select **Save Clip**.
 - To manually save video, select **Film Ride**

TIP: To stop saving video, hold the camera button for 2 seconds.

The memory card has limited storage. After you manually save a video recording, you should download the recording to your phone, or transfer the recording to your computer or other external storage location for permanent storage ([Downloading Videos and Photos on the Varia App, page 7](#), [Connecting the Device to Your Computer, page 14](#)). Saved recordings are automatically displayed in the **Locked** folder when your paired phone is connected to a Wi-Fi network ([Viewing Videos and Photos on the Varia App, page 7](#)).

About Incident Recording

By default, the device uses a sensor to detect possible incidents and saves video footage automatically before, during, and after the detected event ([Camera Settings, page 9](#)). The video footage is stamped with the time, date, and location (if available) of the event.

Varia App Device Settings

On the Varia app, select the device icon at the top of the home screen ([Device Overview, page 2](#)).

Camera Configuration: Allows you to set up the camera, change recording mode, customize the video options, and enable incident recording ([Camera Settings, page 9](#)).

Gallery & Storage: Allows you to delete videos and photos in the gallery and format your memory card ([Deleting a Video or Photo on the Varia App, page 8](#)).

Software Updates: Displays the software version and device information.

Camera Settings

NOTICE

The accuracy of the speed overlay depends on a number of factors, including GPS accuracy of the connected display, rider speed, and wireless connectivity between the display and the device.

From the Varia app, select the device icon at the top of the home screen, and select **Camera Configuration**.

NOTE: Not all settings are available for all Edge bike computers.

Recording Mode: Sets the recording mode for the video camera, or turns off video recording ([Changing Your Recording Mode, page 9](#)).

Video Quality & Audio: Allows you to select the video resolution, and turn on and off audio recording ([Turning Audio Recording Off, page 9](#)).

Live Camera Preview: Allows you to see the camera view for optimal placement on your bike.

Incident Recording: Turns on and off incident recording ([About Incident Recording, page 8](#)).

Data Overlays: Sets the type of data that appears on videos and photos.

NOTE: GPS and speed overlays require an open connection between the Varia RCT716 and the display. An open connection between a sensor and display is not encrypted or authenticated.

Changing Your Recording Mode

- 1 From the Varia app, select the device icon at the top of the home screen.
- 2 Select **Camera Configuration > Recording Mode**.
- 3 Select an option:
 - Select **Continuous** to turn on camera recording when the device turns on.
 - Select **On Radar Activity** to record video only when a compatible radar device radar that is connected to the app detects a vehicle.
 - Select **Off** to disable camera recording. The device continues to transmit radar data.

Turning Audio Recording Off

The device records audio using the integrated microphone while recording video. You can turn off audio recording at any time.

- 1 From the Varia app, select the device icon at the top of the home screen.
- 2 Select **Camera Configuration > Video Quality & Audio**.
- 3 Select the **Record Audio During Ride** toggle switch.

Customizing the Varia App Sounds and Alerts Settings

- 1 From the Varia app, select **⋮ > Sounds & Alerts**.
- 2 Select an option.

Vault Storage

NOTE: This feature requires an active, paid Vault subscription. Vault features are not available for all countries.

You can upload, manage, and share videos on a secure, online storage drive using Garmin Vault. With a paid subscription, you can transfer downloaded videos from your Varia RCT716 device to your Garmin Vault account using your phone ([Downloading Videos and Photos on the Varia App, page 7](#)).

You can purchase a Vault subscription from the Varia app on your phone ([Subscribing to Vault, page 9](#)).

NOTE: Your Varia device must be connected to a Wi-Fi network to use this feature.

Subscribing to Vault

You can purchase a Vault subscription to store your videos in a secure online storage server.

- 1 From the Varia app, select **⋮ > Vault Settings > Vault Subscription**.
- 2 Follow the on-screen instructions.

Edge Bike Computer Settings

You can remotely control your radar device and customize settings using your compatible Edge bike computer.

Pairing the Varia RCT716 with a Compatible Edge Bike Computer

You can pair your Varia device with a compatible Edge bike computer through an open connection using ANT+® technology. After the initial pairing, the Edge bike computer automatically connects to the Varia device when you start your activity and the device is active and within range. When paired, the device controls appear on the compatible bike computer. You can also control the camera on the compatible bike computer. For more information about connection types, go to garmin.com/connectiontypes.

TIP: To check if your bike computer is compatible, go to garmin.com/cycling, select Radars & Lights, select your Varia device, and select the **Compatible Devices** tab.

- 1 Bring the Edge bike computer within range (3 m) of the Varia RCT716.

NOTE: Stay 10 m away from other sensors that use ANT+ technology while pairing.

- 2 Turn on the Edge bike computer.

- 3 Select  > **Sensors** > **Add Sensor** > **Search All**.

- 4 While the Varia RCT716 device is turned off, hold the device button for 2 seconds to enter pairing mode.

The status LED flashes , and the radar tail light turns on. The radar tail light is in pairing mode for 5 minutes or until you press the device button to exit pairing mode.

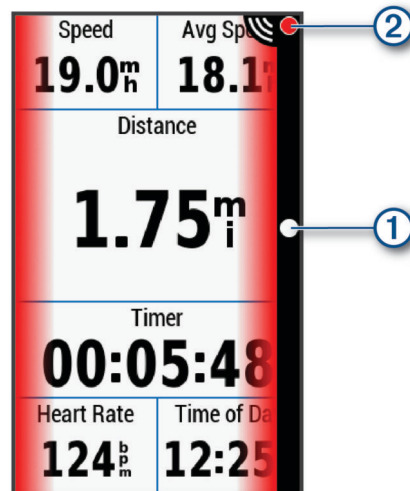
- 5 Select your sensor.

When the radar device is paired with your Edge bike computer, the sensor status is Connected. The  (radar) and  (bike light) status icons appear solid on the top banner of the home screen.

Viewing Radar on Your Edge Bike Computer

Go for a ride.

The radar information appears on the active data screen.



The vehicle position LED ① moves up the column as a vehicle gets closer to your bike. The threat level LED ② changes color based on the potential level of threat. Green indicates no vehicle is detected. Amber indicates a vehicle is approaching. Red indicates a vehicle is advancing at a high rate of speed.

Tone Alerts for Approaching Vehicles

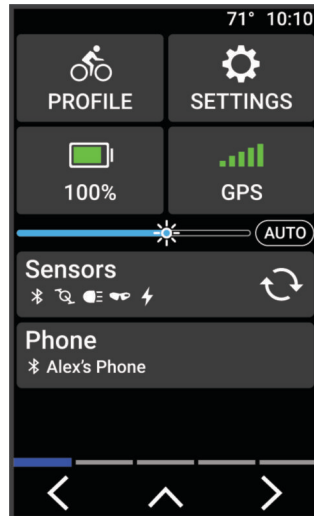
The Edge device beeps if audible tones are turned on in the settings. Your device has alert tones for several features. The alert tone for approaching vehicles has a unique sound. The device beeps one time when the first vehicle is detected. After the threat is cleared, the device beeps again when another vehicle is detected.

Viewing the Status Widget

The status widget on your Edge bike computer displays the status of the GPS, sensors, and wireless connections. See your Edge owner's manual for more information.

Select an option:

- If your Edge bike computer uses a touchscreen, swipe down from the top of the home screen or a data screen.
- If your Edge bike computer uses device buttons, press  or  from the widgets screen.



The status widget appears. A flashing icon means the device is searching. A solid icon means the signal was found or the sensor is connected.

Customizing Device Settings with Your Edge Bike Computer

WARNING

The tail light can be programmed to emit light at varying degrees of brightness and flash at various intervals. Consult your physician if you have epilepsy or are sensitive to bright or flashing lights.

Before you can customize Varia RCT716 settings with your Edge bike computer, you must pair the devices ([Pairing the Varia RCT716 with a Compatible Edge Bike Computer, page 10](#)).

- 1 Select  > **Sensors** > **Lights**.
- 2 Select an option:
 - Select **Enable** to enable the light network.
 - Select **Network Options** > **Test Lights** to verify that each light in your network is set up correctly ([Testing the Light Network, page 11](#)).
 - Select a light to view device information and customize each light in your network ([Light Network Settings, page 12](#)).

Testing the Light Network

- 1 From the **Sensors** menu, select **Lights** > **Network Options** > **Test Lights**.
- 2 Select a light to test.

The light turns on when it is connected.

Light Network Settings

From the **Sensors** menu, select **Lights**, and select a paired light.

NOTE: Not all settings are available for all Edge bike computers.

Sensor ID: Displays the sensor's identification number.

Connection Type: Displays the technology that is used to connect to the sensor.

About: Displays device and software information.

Camera Settings: Sets the video resolution and recording mode, turns off audio recording, turns on image stabilization, and more.

Light Mode: Sets the light intensity mode, or turns off the light.

NOTE: This setting is available when you select the Individual light mode setting.

Remove: Allows you to delete a paired light from the network.

Customizing the Radar Alert Settings with Your Edge Bike Computer

Before you can customize the radar alert settings with your Edge bike computer, you must pair the devices.

You can customize how the radar alerts sound and display on your Edge bike computer.

- 1 From your Edge bike computer, select  > **Sensors**.
- 2 Select your Varia RCT716.
- 3 Select **Sensor Details** > **Alert Settings**.
- 4 Select an option.

Other Compatible Devices

Pairing the Device with a Compatible Garmin Watch

You can pair your Varia device with a compatible Garmin watch, such as a Forerunner® watch. When paired, the device controls appear on the compatible watch. You can also control the camera on the compatible watch.

TIP: To check if your watch is compatible, go to garmin.com/cycling, select Radars & Lights, select your Varia device, and select the **Compatible Devices** tab.

NOTE: Not all Varia RCT716 features are available on all compatible watches. See the owner's manual for your watch.

- 1 Bring the watch within range (3 m) of the Varia RCT716.
NOTE: Stay 10 m away from other sensors that use ANT+ technology while pairing.
- 2 Turn on the Garmin watch.
- 3 From the **Settings** menu, select **Connectivity** > **Sensors & Accessories** > **Add New** > **Search All**.
- 4 While the Varia RCT716 device is turned off, hold the device button for 2 seconds to enter pairing mode.
The status LED flashes , and the tail light turns on. The device is in pairing mode for 5 minutes or until you press the device button to exit pairing mode.
- 5 Select your sensor.

When the radar device is paired with your Garmin watch, the radar and bike light status icons appear solid.

Device Information

Charging the Device

NOTICE

To prevent corrosion, thoroughly dry the USB port, the weather cap, and the surrounding area before charging or connecting to a computer.

The device is powered by a built-in lithium-ion battery that you can charge using a standard wall outlet or a USB port on your computer.

NOTE: The device does not charge when outside the approved temperature range ([Varia RCT716 Specifications, page 16](#)).

- 1 Pull up the weather cap ① from the USB port ②.



- 2 Plug the small end of the USB cable into the USB port on the device.
- 3 Plug the large end of the USB cable into an AC adapter or a computer USB port.
- 4 Plug the AC adapter into a standard wall outlet.
- 5 Charge the device completely.
The status LED flashes green while charging. The status LED is solid green when charging is complete.
- 6 Remove the USB cable, and close the weather cap.

Tips for Charging the Device

- Connect the charger securely to the device.
You can charge the device by plugging the USB cable in to a Garmin approved AC adapter with a standard wall outlet or a USB port on your computer. Charging a fully depleted battery takes about 5 hours using a computer and 3 hours using an AC power source.
- Remove the charger from the device when the status LED is solid ■.
- View the remaining battery life ■■■■ on the Edge status widget ([Viewing the Status Widget, page 11](#)) or Varia app ([The Varia RCT716 and the Varia App, page 5](#)).

Connecting the Device to Your Computer

You can connect the device to your computer to install software updates or transfer videos and photos to your computer.

- 1 Pull up the weather cap ① from the USB port ②.



- 2 Plug the small end of the USB cable into the USB port on the device.
 - 3 Plug the large end of the USB cable into a USB port on your computer.
- Depending on your computer operating system, the device appears as either a removable drive or a removable volume on your computer ([Videos and Photos on Your Computer, page 14](#)).

Videos and Photos on Your Computer

NOTE: Some media players might not support high-resolution playback.

Videos and photos are stored in the DCIM directory on the memory card. Videos are stored in MP4 file format, and photos are stored in JPG format. You can view and transfer videos and photos by inserting the memory card into your computer or connecting the device to your computer ([Connecting the Device to Your Computer, page 14](#)).

The videos and photos are sorted into folders.

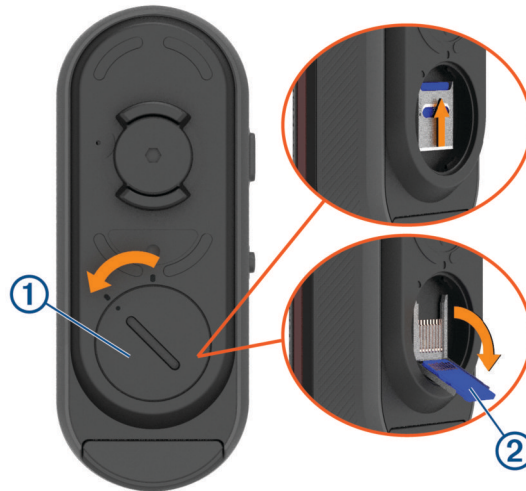
100EVENT	Contains videos saved automatically when the device detects an incident.
101PHOTO	Contains photos.
102SAVED	Contains videos saved manually by the user.
103UNSVD	Contains unsaved video footage. The device overwrites the oldest unsaved video when the storage space for unsaved videos is full.

Replacing the Memory Card

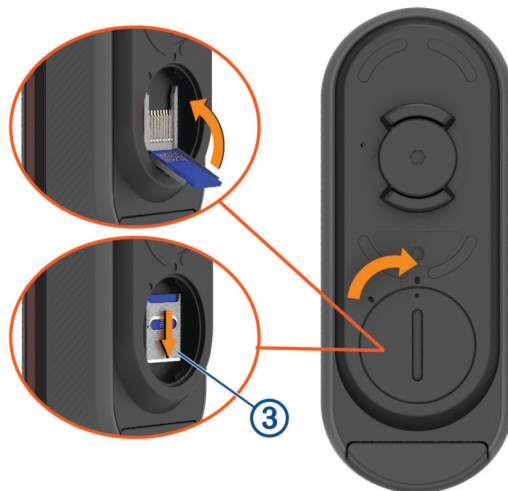
You can replace the memory card to increase the storage capacity or to replace a card that has reached the end of its useful life. The device requires an 8 to 128 GB microSD® memory card with a speed rating of Class 10 or higher.

NOTE: A memory card is included so your device is ready to use out of the box. All memory cards have a limited life and must be replaced periodically.

- 1 Open the cover ①.



- 2 Slide the card holder toward the mount, and lift up.
- 3 Pull open the card holder ②.
- 4 Insert the memory card into the memory card slot with the contacts facing the device.
- 5 Close and latch the card holder ③.



- 6 Close and latch the cover.
- 7 If necessary, connect to the Varia app to reformat the memory card.

Device Care

NOTICE

Do not store the device where prolonged exposure to extreme temperatures can occur, because it can cause permanent damage.

Avoid chemical cleaners, solvents, sunscreen, and insect repellents that can damage plastic components and finishes.

Secure the weather cap tightly to prevent damage to the USB port.

Avoid extreme shock and harsh treatment, because it can degrade the life of the product.

Cleaning the Device

NOTICE

Do not use a cloth or any material that can scratch the optical lens on the front of the device. Scratching the optical lens may cause poor radar performance.

- Clear mud and dirt from the weather cap area.
- While the weather cap is closed, hold the device under running water.

After cleaning, allow the device to dry completely.

Radar Detection

⚠ WARNING

The device can improve situational awareness. It is not a replacement for cyclist attentiveness and good judgement. Always maintain awareness of your surroundings, and operate the bicycle in a safe manner. Failure to do so could result in serious injury or death.

- The radar detects approaching vehicles up to 140 m away.
- The radar detects approaching vehicle speed from 10 to 160 km/h (from 6 to 99 mph).
NOTE: The radar does not detect vehicles traveling at the same speed as your bike.
- The radar beam width is 40 degrees. It provides radar coverage for typical bends in the road.
- The radar can detect up to eight approaching vehicles.

Varia RCT716 Specifications

Battery type	Rechargeable, built-in, lithium-ion polymer battery
Battery life	Up to 5 hr. in solid mode, 1080p recording Up to 8 hr. in solid mode, camera off Up to 6 mo. in standby mode
Operating temperature range	From -15° to 45°C (from 5° to 113°F)
Charging temperature range	From 0° to 45°C (from 32° to 113°F)
Wireless frequencies	2.4 GHz @ 7 dBm maximum 24 GHz @ -11.3 dBm maximum
Water rating	IEC 60529 IPX7 ¹
LED luminous flux	5 lm (solid mode only) Certified for use in Germany

¹ The device withstands incidental exposure to water of up to 1 m for up to 30 min. For more information, go to www.garmin.com/waterrating.

Troubleshooting

Resetting the Device

You can reset the device if it stops responding.

Hold both buttons for 10 seconds until both LEDs turn off.

Resetting deletes the pairing connections from the device.

Updating the Device Software With the Varia App

Before you can update the device software, you must pair the device with the Varia app on your phone (*Pairing the Varia RCT716 with Your Phone*, page 6).

1 Bring your phone within range (3 m) of the device.

2 Sync your device with the Varia app.

When new software is available, the app alerts you to update the software.

TIP: You can check for software updates in the app by selecting the device icon at the top of the home screen, and selecting Software Updates.

3 Follow the on-screen instructions.

The device LED flashes   to indicate the device is updating. When the update is complete, the tail light turns on and the LED flashes green 20 times.

Device Status LED for Software Updates

LED Activity	Status
Alternating  	The device is uploading software.
Flashing 	The software update is complete and successful.
Flashing 	The software update failed.

Product Updates

On your computer, install Garmin Express™ (www.garmin.com/express).

This provides easy access to these services for Garmin devices:

- Software updates
- Product registration

Updating the Software Using the Garmin Express Application

Before you can update your device software, you must download the Garmin Express application.

1 Connect the radar device to your computer using the USB cable.

The Garmin Express application looks for software updates automatically and sends them to your device.

2 Follow the on-screen instructions.

3 Disconnect the device, and turn it on.

The radar LED flashes  and  to indicate the device is updating. When the update is complete, the LED flashes  20 times.

The radar device is not responding

During a ride, if the radar device status LED is solid red, the device is in an error state.

- Make sure the device is within the approved operating temperature range ([Varia RCT716 Specifications, page 16](#)).
- Turn the device off, and turn it back on.
You can check the battery level on the **Sensors** menu of your Edge device or on the Varia app.
- Avoid multiple sources of radar interference.

Radar detection does not work indoors

The Varia RCT716 device is tuned to detect vehicles in an outdoor setting. If you turn on the device indoors, a saturation alert can occur. When you take the device outdoors, the device resumes normal operation.

The radar device does not turn on

- Make sure the device is within the approved operating or charging temperature range ([Varia RCT716 Specifications, page 16](#)).
- Charge the device for 4 hours ([Charging the Device, page 13](#)).
If the device does not turn on, disconnect the charger, and charge for another 4 hours.

The status LED is flashing yellow

If the device status LED flashes  in a fast, continuous pattern while the taillight is on, the device is in demo mode. When the device is in demo mode, artificial data is generated for demonstration only.

To exit demo mode, select an option:

- Turn the device off, and turn it back on.
- Hold both buttons for 10 seconds to reset the device.

The status LED flashes red while charging

- Check the USB cable, connectors, and ports for damage.
- Make sure the AC adapter or computer USB port is generating power.
You can check this several ways. For example, you can check whether other devices powered by the source are functioning.
- Charge the device within the approved charging temperature range ([Varia RCT716 Specifications, page 16](#)).

The status LED turns red while updating the software

- Check the USB cable, connectors, and ports for damage.
- Turn both devices off, and turn them back on.
- Make sure the device is within the approved operating temperature range ([Varia RCT716 Specifications, page 16](#)).

The radar device disconnects from the Edge bike computer

WARNING

If the radar device is not connected or sending radar data, Garmin recommends that you stop riding and check the devices in a safe location. Failure to do so could result in serious injury or death.

- Turn both devices off, and turn them back on.
- Pair the devices ([Pairing the Varia RCT716 with a Compatible Edge Bike Computer, page 10](#)).

The Varia RCT716 sends light and radar data to the Edge bike computer. The Edge bike computer displays  and  when connected.

The radar device disconnects from the Varia app

WARNING

If the radar device is not connected or sending radar data, Garmin recommends that you stop riding and check the devices in a safe location. Failure to do so could result in serious injury or death.

- Turn off Bluetooth technology from your phone settings, and turn it back on.
- Turn off both devices, and turn them back on.

The Varia RCT716 sends light and radar data to the Varia app. The Varia app displays  when connected.

Replacement Parts

Replacement parts are available for this device. Contact your Garmin dealer or go to garmin.com for more information.

Getting More Information

- Go to support.garmin.com for additional manuals, articles, and software updates.
- Go to buy.garmin.com, or contact your Garmin dealer for information about optional accessories and replacement parts.

