

GARMIN.

A04986



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.

The A04986 radar tail light contains a micro radar that can detect vehicles behind your bike and estimate the vehicle size.

You must pair the tail light with a mobile device with the app, or a Garmin® watch or bike computer to use the radar features (page 2).

Device Overview



① Device Button	Hold for 1 second to turn the device on. Hold for 2 seconds to turn the device off. When the device is off, hold for 2 seconds to enter pairing mode. When the device is on, press to turn the tail light on or off.
② Status LED	Indicates device pairing status and battery level (page 19).

Pairing

Pairing with the App

You can pair the A04986 radar tail light with the app on your phone. The app allows you to view the radar screen, change settings, and update the device software.

- 1 Go to **garmin.com/** or scan the QR code to download and install the app on your phone.



- 2 Bring your phone within range (0.3 m) of the tail light.

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

- 3 While the A04986 radar tail light is turned off, hold the device button for 2 seconds to enter pairing mode.

The device status LED flashes .

- 4 Open the app on your phone.
- 5 Follow the on-screen instructions to pair the radar tail light.

If you already use the Varia app with another device, select  > **Devices** > **Add Device**.

While the A04986 radar tail light is connected to your phone, the app displays the radar screen (page 7).

Pairing with a Watch or Bike Computer

TIP: You can go to garmin.com/ compatible to make sure your device is compatible with the A04986 radar tail light.

- 1 Make sure there are no other sensors within range that may interfere with pairing the A04986 device.
- 2 While the A04986 device is turned off, hold the device button for 2 seconds to enter pairing mode.

The status LED flashes .

- 3 Select an option:
 - On a Garmin® bike computer, select  > **Sensors** > **Add Sensor** > **Search All**.

- On a Garmin watch, from the menu, select **Sensors & Accessories > Add New > Search All**.

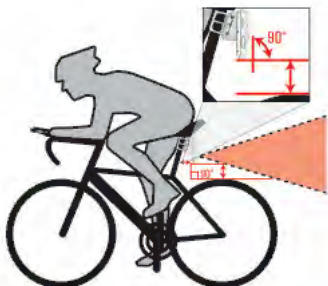
4 Select the A04986 device.

Your compatible Garmin device screen shows a sidebar and emits alert tones when it detects a vehicle approaching behind you. Additional options are available on compatible Edge® bike computers (page 10).

Installing the Device

To ensure maximum tail light visibility and radar detection range, you should install the mount according to these considerations.

- Make sure the device does not interfere with the safe operation of your bike.
- Install the mount as high as possible on the bike.
- Mount the device 250 to 1200 mm above the road.
- Mount the A04986 device parallel to the longitudinal axis of the vehicle.
- Make sure there are no obstructions in front of the light.
- Make sure the mount surface is perpendicular to the road.



You should go for a test ride during the day, in a safe environment, and adjust the mount, if necessary, before using the tail light at night.

Installing the Seat Post Mount

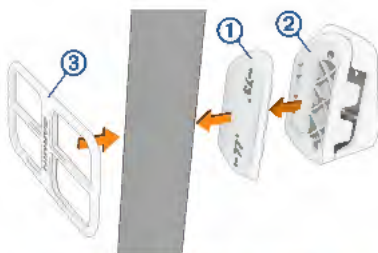
NOTICE

You must install the mount surface perpendicular to the ground, to make sure the radar beam is horizontal. If the seat post mount directs the radar beam up or down, the effective range of the radar is reduced.

NOTE: The mount is packaged with bands to fit round seat posts between 25.4 mm (1 in.) and 35 mm (1 ³/₈ in.) in diameter, and most D-shaped and aero seat posts. Seat post compatibility may vary depending on your bike model.

The mount is packaged with rubber pads to fit round, D-shaped, or aero seat posts.

- 1 Select the rubber pad ① that best fits the shape of your seat post.



2 Select an option to place the pad on the mount (2):

- If one of the numbers marked on the pad matches the angle of your seat post, place the pad on the mount with the correct angle number up.
- If neither of the numbers on the pad matches the angle of your seat post, or if you don't know the angle of your seat post, test both pad orientations, and select the best one.

The combined mount and pad must result in the device being perpendicular to the road surface, to maximize your radar range and tail light visibility.

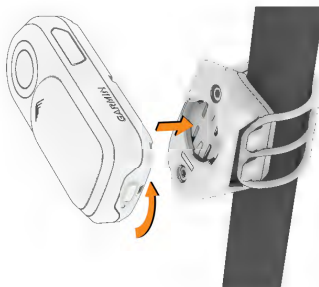
3 Place the mount on the seat post.

4 Secure the mount to the seat post using one of the included bands (3).

Installing the Device on the Mount

NOTE: You can install the device on the mount vertically in either orientation. The device automatically detects the mounting orientation.

- 1 Align the tabs on the back of the device with the seat post mount notches.



- 2 Press down slightly and turn the device clockwise until it locks into place.

App

When connected to the A04986 radar tail light, the app home screen shows a graphical representation of the road behind you, as you are riding.

NOTE: You must pair the A04986 radar tail light with your phone using the app (page 2).



①	Radar tail light battery level
②	Device settings (page 9)
③	App settings (page 9) Select to turn
④	the tail light on or off. Mid-level
⚠	threat
⚠	High-level threat
🚗	Small vehicle
🚗	Mid-size vehicle
🚗	Large vehicle

The vehicle icon moves up and across the screen as the vehicle approaches you.

The radar calculates the threat level based on vehicle size, speed, and lateral distance from your path.

The app emits audible tones when a threat is detected and when all threats are cleared (page 10).

Device Settings

On the app, select the device icon at the top of the home screen, and select Device Settings.

Speed Indicator: Shows or hides the speed indicator on the app home screen.

Device Orientation: Sets the orientation in which the device is installed on the mount.

App Settings

On the app, select at the top-right corner of the home screen (page 7).

Devices: Allows you to add or remove devices from the app.

Sounds & Alerts: Allows you to configure the vehicle proximity alerts for the app.

Location Permission: Allows you to manage your phone permissions to support geolocation and connectivity (applicable only to devices equipped with a camera).

Help: Opens the product support page for the app with help topics, videos, and more.

Diagnostic Report: Allows you to enter a code from product support to view a diagnostic report for the app.

Vault Settings: Allows you to access the saved videos in your vault, update your vault settings, review your vault subscription information, and update your Wi-Fi® connections (applicable only to devices equipped with a camera).

Version: Displays the software version number.

User Warnings: Displays safety warnings and information.

Privacy Policy: Displays the full privacy policy and how Garmin® protects your data.

Copyright: Displays the license agreement information.

Customizing the App Sounds and Alerts Settings

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

Edge® Bike Computer

When connected to the A04986 radar tail light, your compatible Edge bike computer shows the vehicle column on the side of the screen when a vehicle is approaching you from behind.

An icon ① along the side of the screen represents a vehicle behind you. The size of the icon represents the size of the vehicle, as detected by the radar.



The vehicle icon moves up the screen as the vehicle approaches you, representing the vehicle's position relative to you.

The radar calculates a threat level based on vehicle size, speed, and lateral distance from your path. A  icon over the vehicle icon indicates that the vehicle is a mid-level threat. A  icon over the vehicle icon indicates that the vehicle is a high-level threat.

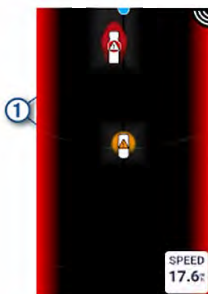
When the radar detects a threat, the bike computer emits an audible tone and the screen shows a red or orange overlay on the sides of the screen, depending on the calculated threat level. When all threats are cleared, the bike computer emits another tone and the screen shows a green overlay on the sides of the screen.

You can configure the threat alerts within the Sensors menu on your Edge bike computer (page 12).

Radar Data Screen

NOTE: The radar data screen is supported by Edge® bike computer models 540/840/1040 or newer. Some devices may need a software update to enable the radar data screen.

The radar data screen shows a graphical representation of the road behind you, as you are riding. An icon  represents an approaching vehicle. The size of the icon represents the size of the vehicle, as detected by the radar.



The vehicle icon moves up and across the screen as the vehicle approaches you, representing the vehicle's position relative to you.

The radar calculates a threat level based on vehicle size, speed, and lateral distance from your path. A  icon over the vehicle icon indicates that the vehicle is a mid-level threat.

A  icon over the vehicle icon indicates that the vehicle is a high-level threat.

TIP: You can add five data fields to this screen. For more information on customizing data fields, see the owner's manual for the bike computer.

Alert Settings

From the **Sensors** menu, select the A04986 device, and select **Alert Settings**.

Color Overlay: Enables the orange, red, and green overlays shown on the sides of the bike computer screen when a threat is detected or cleared.

Vehicle Column: Sets the placement and size of the vehicle column shown on the bike computer screen (page 10).

Tones: Allows you to customize the audible tones emitted by the bike computer when a threat is detected.

Green Threat Level Tone: Enables the audible tone emitted by the bike computer when all threats are cleared.

Light Network

The Edge® bike computer can control your connected bike lights while you ride.

Viewing the Light Widget

You can control your connected lights from the Light widget.

- 1 On the Edge® bike computer, swipe down from the top of the screen.
- 2 Swipe left or right until you see the **Light** widget.

Configuring the Light Network

- 1 Select  > **Sensors** > **Lights**.
- 2 Select an option:
 - Select **Enable** to enable the light network.
 - Select **Network Options** to configure your light network (page 13).
 - Select a bike light to configure it individually (page 14).

Light Network Options

From the **Sensors** menu, select **Lights** > **Network Options**.

Light Mode: Sets the light mode for your light network.

NOTE: Light modes apply only if a headlight is connected. Tail lights operate the same way under all light modes.

Light Beam Activated: Sets whether your bike lights activate when you turn on the bike computer or when you start an activity timer.

Test Lights: Allows you to test each connected bike light.

Auto Beam Adjustment: Allows a connected headlight to increase its brightness level when you increase your speed (applicable only with a compatible headlight).

Bike Light Settings

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

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.

Alert Settings: Allows you to configure how the bike computer alerts you about approaching vehicles (page 12).

Light Mode: Turns the light on or off.

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

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 can operate normally while charging. If you use the device while charging, Garmin® recommends using a cable with a right-angle connector (not included) to avoid strain on the device charging port.

NOTE: Garmin recommends charging the device using a USB-C* port or AC adapter (not included) rated for 8.85 to 12.6 Watts of power.

- 1 Pull up the weather cap ① and plug the USB cable into the charging port ② on the device.



- 2 Connect the other end of the USB-C cable to a power supply, such as a charging port or AC adapter (not included).

After charging for 15 minutes, the device has at least 3 hours of battery life. It takes up to 3 hours to complete a full charge.

The status LED flashes  to indicate the charging status.

Charging Status LED

NOTE: The status LED flashes to indicate the current charge status when the device

is charging and turned off. If the device is charging and turned on, the normal operating status LED patterns apply (page 19).



Flashing  rapidly	Below 20% charged.
Flashing 	Between 20% and 100% charged.
Solid 	Fully charged.

Software Updates

Checking for Software Updates Using the App

Before you can check for software updates using the app, you must pair the device with the app (page 2).

The app alerts you automatically when a software update is available. You can manually check for updates to make sure you have the latest version.

- 1 In the **Varia app**, select the device icon at the top of the home screen.
- 2 Select **Software Updates**.

- 3 If a software update is available, follow the on-screen instructions to install it.

The status LED flashes   while updating the software. When the update is complete, the LED flashes  20 times.

Updating the Software Using the Garmin Express™ Application

Before you can update your device software, you must download the Garmin Express application (garmin.com/software/express).

- 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   to indicate the device is updating. When the update is complete, the LED flashes  20 times.

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.

Specifications

Battery type	Rechargeable, built-in, lithium-ion polymer battery
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Battery life	Up to 16 hr. with tail light on Up to 30 hr. with tail light off
Operating temperature range	-15° to 50° C (5 to 122° F)
Charging temperature range	0° to 45° C (32 to 113° F)
Water rating	IEC 60529 IPX7 ¹

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.

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.

Status LED

The status LED ① is located next to the device button.



Slowly flashing 	The battery level is good, and the device is in active mode.
Slowly flashing 	The battery level is critical. Approximately 60 minutes of battery use remains. NOTE: You must charge the device as soon as possible.
Flashing 	The device is in standby mode. The device automatically goes into standby mode a few seconds after you turn off your connected bike computer. You can press the device button to reactivate the device.
Flashing 	The device is in pairing mode.
Flashes 	The device is in demo mode (page 23).
Solid 	An error has occurred. Restart the device.

Flashing  	The device is updating the software.
Flashing  20 times rapidly	The software update is complete.
Flashing  20 times rapidly	The software update failed.

Troubleshooting

Resetting the Device

You can reset the device if it stops responding. Resetting the device deletes the pairing connections from the device.

Hold the device button for 8 seconds.

The LED flashes    continuously, until the reset is complete.

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 (page 3).
The A04986 sends light and radar data to the Edge bike computer. The Edge bike computer displays  and  when connected.

The radar device disconnects from the 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 A04986 sends light and radar data to the app. The app displays  when connected.

The radar device is not responding

WARNING

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 (page 17).
- 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 app.
- Move away from potential sources of radar interference, such as other bike radars or radar antennas.

The radar device does not turn on

- Make sure the device is within the approved operating or charging temperature range (page 17).

- Charge the device for 4 hours (page 14).
If the device does not turn on, disconnect the charger, and charge for another 4 hours.

The device turns on but the tail light does not turn on

CAUTION

The tail light turns off automatically if one of the tail light LEDs fails. Before you start an activity, always check to make sure the tail light is functioning properly.

- Turn the device off, and turn it back on.
- If the device is connected to an Edge® bike computer, start a ride on the bike computer.

TIP: By default, the Edge bike computer turns on the tail light when you start an activity timer (page 13).

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 (page 17).

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 (page 17).

The status LED is flashing yellow

If the device status LED flashes  in a fast, continuous pattern while the device is on, the radar is in demo mode. When in demo mode, the radar generates artificial data.

To exit demo mode, turn the device off, and turn it back on.

support.garmin.com

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