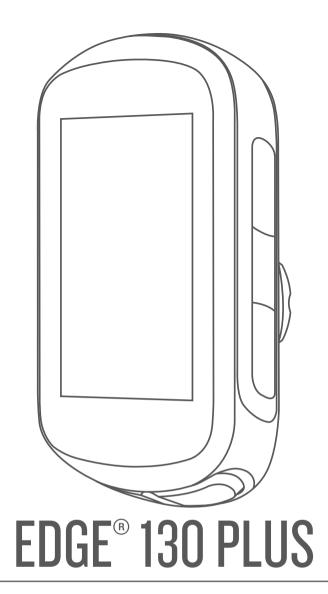
**GARMIN**®



Owner's Manual

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M/N: A03970

# **Table of Contents**

Introduction	1
Device Overview	
Status Icons	
Viewing Widgets	1
Using the Shortcut Menu	1
Pairing Your Smartphone	
Charging the Device	
About the Battery	2
Installing the Standard Mount	2
Releasing the Edge	
Installing the Mountain Bike Mount	
Acquiring Satellite Signals	
Training	
Going for a Ride	
Following a Saved Ride	
Segments	.3
Strava™ Segments	3
Following a Segment From Garmin Connect	
Racing a Segment	
Setting a Segment to Adjust Automatically	
Viewing Segment Details	
Deleting a Segment	
Workouts	
Following a Workout From Garmin Connect	
Starting a WorkoutStopping a Workout	
Deleting Workouts	
About the Training Calendar	
Using Garmin Connect Training Plans	
Training Indoors	
-	
My Stats	
Setting Up Your User Profile	
About VO2 Max. Estimates	
Tips for Cycling VO2 Max. Estimates	
Recovery Advisor	
Viewing Your Recovery Time	
Personal Records	5
Viewing Your Personal Records	5
Reverting a Personal Record	
Deleting a Personal Record	
Navigation	
Locations	
Marking Your Location	
Navigating to a Saved Location	
Navigating Back to Start	
Viewing Saved Locations	
Viewing User Locations on the Map	
Customizing the Map Icons	
Repositioning Your Location	
Deleting a Saved Location	
Courses	
Following a Course From Garmin Connect	6
Tips for Training with Courses	
Viewing Course Details	
Using ClimbPro	
Deleting a Course	
Bluetooth Connected Features	7
Incident Detection and Assistance Features	
Incident Detection	
Assistance	
Adding Contacts	8.
Requesting Assistance	8

Turning incident Detection On and Off	
Cancelling an Automated Message	. 8
Sending a Status Update After an Incident Turning On LiveTrack	٥. و
Connect IQ Downloadable Features	
Downloading Connect IQ Features Using Your Computer	
Wireless Sensors	
Putting On the Heart Rate Monitor	
Tips for Erratic Heart Rate Data	
Fitness Goals	
Installing the Speed Sensor	
Installing the Cadence Sensor	. 9
About the Speed and Cadence Sensors	
Pairing Your Wireless Sensors	
Training with Power Meters	
Calibrating Your Power Meter Pedal-Based Power	
Situational Awareness	
History1	
Viewing Ride Details	
Viewing Data Totals	
Resetting Bike Totals	
Garmin Connect	
Sending Your Ride to Garmin Connect	10
Data Management	
Connecting the Device to Your Computer	
Transferring Files to Your Device	
Deleting Files	
Disconnecting the USB Cable	
Customizing Your Device1	
Ride Settings	
Alerts	
Training Settings	
Marking Laps	
Using Auto Pause®	
Using Auto Scroll	
Changing Data Fields	
Phone Settings	
System Settings	
Changing the Device Language	
Turning the Device Tones On and Off	
Changing the Units of Measure	
Using the Auto Power Off Feature	
Setting Up Extended Display Mode	
Exiting Extended Display Mode	12
Device Information1	13
Specifications	
Edge 130 Plus Specifications	
Heart Rate Monitor Specifications	
Speed Sensor and Cadence Sensor Specifications	
Device Care	
Cleaning the Device	
Caring for the Heart Rate Monitor	
Replacing the Heart Rate Monitor Battery	
Replacing the Cadence Sensor Battery	
Viewing E-label Regulatory and Compliance Information	
Troubleshooting1	
Restarting the Device	
Restoring All Default Settings	
Maximizing Battery Life	

Improving GPS Satellite Reception	14
My Device is in the Wrong Language	14
Replacement O-rings	14
Updating the Software Using the Garmin Connect App	14
Updating the Software Using Garmin Express	14
Product Updates	14
Getting More Information	14
Appendix	14
Data Fields	
VO2 Max. Standard Ratings	
Heart Rate Zone Calculations	
Wheel Size and Circumference	16
Index	17

ii Table of Contents

## Introduction

#### **WARNING**

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

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

## **Device Overview**



1	Select to wake the device. Hold to turn the device on and off.
2	Select to scroll through the data screens, options, and
2	settings. From the home screen, hold to view the device menu.
3 🗸	Select to scroll through the data screens, options, and settings. From the home screen, select to view the widgets.
<b>4 ▶</b>	Select to start and stop the timer. Select to choose an option or to acknowledge a message.
(5) <b>C</b>	Select to mark a new lap. Select to return to the previous screen.

#### **Status Icons**

A solid icon means the signal was found or the sensor is connected.

att	GPS status
•	Bluetooth® status
•	Heart rate status
5	Power status
<b>②</b>	LiveTrack status
	Speed and cadence status
$\Box$	Sync in progress

#### Viewing Widgets

Your device comes preloaded with several widgets. You should pair your device with a smartphone to get the most of out your Edge device.

From the home screen, select ∧ or ∨.



The device scrolls through the widget loop.

 While in an active widget, select ► to view additional options for that widget.

## **Using the Shortcut Menu**

Shortcut menu options are available to quickly access features or perform functions.

## **Pairing Your Smartphone**

To use the connected features of the Edge device, it must be paired directly through the Garmin Connect™ app, instead of from the Bluetooth settings on your smartphone.

- **1** From the app store on your smartphone, install and open the Garmin Connect app.
- 2 Hold  $\rightleftharpoons$  to turn on the device.

The first time you turn on the device, you will select the device language. The next screen prompts you to pair with your smartphone.

TIP: You can hold , and select Phone > Pair Phone to manually enter pairing mode.

- 3 Select an option to add your device to your Garmin Connect account:
  - If this is the first device you have paired with the Garmin Connect app, follow the on-screen instructions.
  - If you have already paired another device with the Garmin Connect app, from the or · · · menu, select Garmin Devices > Add Device, and follow the on-screen instructions.

After you pair successfully, a message appears, and your device syncs automatically with your smartphone.

## **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 will not charge when outside the approved temperature range (*Edge 130 Plus Specifications*, page 13).

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

Introduction 1



- 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. When you connect the device to a power source, the device turns on.
- 5 Charge the device completely.

After you charge the device, close the weather cap.

## **About the Battery**

#### **⚠ WARNING**

This device contains a lithium-ion battery. See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

## **Installing the Standard Mount**

For the best GPS reception, position the bike mount so the front of the device is oriented toward the sky. You can install the bike mount on the stem or the handlebars.

- 1 Select a secure location to mount the device where it does not interfere with the safe operation of your bike.
- 2 Place the rubber disk ① on the back of the bike mount.

  The rubber tabs align with the back of the bike mount so it stays in place.



- 3 Place the bike mount on the bike stem.
- **4** Attach the bike mount securely using the two bands ②.
- **5** Align the tabs on the back of the device with the bike mount notches ③.
- **6** Press down slightly and turn the device clockwise until it locks into place.



## Releasing the Edge

- 1 Turn the Edge clockwise to unlock the device.
- 2 Lift the Edge off the mount.

## **Installing the Mountain Bike Mount**

NOTE: If you do not have this mount, you can skip this task.

- 1 Select a secure location to mount the Edge device where it does not interfere with the safe operation of your bike.
- 2 Use the 3 mm hex key to remove the screw ① from the handlebar connector ②.



- 3 Select an option:
  - If the handlebar diameter is 25.4 mm, place the thicker pad around the handlebar.
  - If the handlebar diameter is 31.8 mm, place the thinner pad around the handlebar.
  - If the handlebar diameter is 35 mm, do not use a rubber pad.
- **4** Place the handlebar connector around the handlebar, so that the mount arm is above the bike stem.
- **5** Use the 3 mm hex key to loosen the screw ③ on the mount arm, position the mount arm, and tighten the screw.

**NOTE:** Garmin® recommends tightening the screw so the mount arm is secure, with a maximum torque specification of 20 lbf-in. (2.26 N-m). You should check the tightness of the screw periodically.



2 Introduction

- **6** If necessary, use the 2 mm hex key to remove the two screws on the back side of the mount ④, remove and rotate the connector, and replace the screws to change the orientation of the mount.
- 7 Replace and tighten the screw on the handlebar connector. NOTE: Garmin recommends tightening the screw so the mount is secure, with a maximum torque specification of 7 lbf-in. (0.8 N-m). You should check the tightness of the screw periodically.
- 8 Align the tabs on the back of the Edge device with the bike mount notches (5).



9 Press down slightly and turn the Edge device clockwise until it locks into place.

## **Acquiring Satellite Signals**

The device may need a clear view of the sky to acquire satellite signals. The time and date are set automatically based on the GPS position.

**TIP:** For more information about GPS, go to www.garmin.com /aboutGPS.

1 Go outdoors to an open area.

The front of the device should be oriented toward the sky.

2 Wait while the device locates satellites.

It may take 30-60 seconds to locate satellite signals.

# **Training**

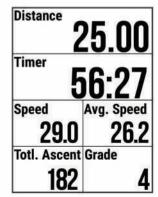
## Going for a Ride

If your device was packaged with an ANT+® sensor, they are already paired and can be activated during initial setup.

- 1 Hold to turn on the device.
- **2** Go outside, and wait while the device locates satellites. appears solid when the device is ready.
- 3 From the home screen, select ▶.
- 4 Select the ride type.

**TIP:** Accurate ride type data is important for creating bike friendly courses on your Garmin Connect account.

5 Select ▶ to start the activity timer.



**NOTE:** History is recorded only while the activity timer is running.

- 6 Select ► to stop the activity timer.
- 7 Select an option:
  - · Select Resume to resume your ride.
  - · Select Save Ride to stop your ride and save it.
  - Select **Discard Ride** to stop your ride and delete it from your device.
  - Select Back to Start to navigate back to your starting location.
  - · Select Mark Location to mark your location and save it.
  - Select Main Menu to return to the main menu.

## Following a Saved Ride

- Hold <u>■</u>.
- 2 Select Navigation > Ride an Activity.
- 3 Select a ride.

**TIP:** You can select ✓ to view more detailed information about your ride, such as a summary, map location, lap details, or to delete this ride.

- 4 Select Ride.
- 5 Select ▶ to start the activity timer.

## Segments

**Following a segment**: You can send segments from your Garmin Connect account to your device. After a segment is saved to your device, you can follow the segment.

**NOTE:** When you download a course from your Garmin Connect account, all segments in the course are downloaded automatically.

Racing a segment: You can race a segment, trying to match or exceed your personal record or other cyclists who have ridden the segment.

#### Strava™ Segments

You can download Strava segments to your Edge 130 Plus device. Follow Strava segments to compare your performance with your past rides, friends, and pros who have ridden the same segment.

To sign up for a Strava membership, go to the segments widget in your Garmin Connect account. For more information, go to www.strava.com.

The information in this manual applies to both Garmin Connect segments and Strava segments.

## **Following a Segment From Garmin Connect**

Before you can download and follow a segment from Garmin Connect, you must have a Garmin Connect account (*Garmin Connect*, page 10).

**NOTE:** If you are using Strava segments, your favorite segments are transferred automatically to your device when it is connected to the Garmin Connect app or your computer.

- 1 Select an option:
  - Open the Garmin Connect app.
  - Go to connect.garmin.com.
- **2** Create a new segment, or select an existing segment.
- 3 Select 1 or Send to Device.
- 4 Follow the on-screen instructions.
- 5 On the Edge device, select ▶ to start the activity timer, and go for a ride.

When your path crosses an enabled segment, you can race the segment.

Training 3

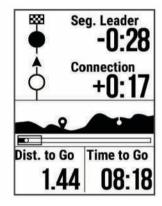
## Racing a Segment

Segments are virtual race courses. You can race a segment, and compare your performance to past activities, other riders' performance, connections in your Garmin Connect account, or other members of the cycling community. You can upload your activity data to your Garmin Connect account to view your segment position.

**NOTE:** If your Garmin Connect account and Strava account are linked, your activity is automatically sent to your Strava account so you can review the segment position.

- 1 Select ▶ to start the activity timer, and go for a ride. When your path crosses an enabled segment, you can race the segment.
- 2 Start racing the segment.

The segment data screen appears automatically.



3 If necessary, hold =, and select Main Menu > Navigation > Segments to change your goal during your race.

You can race against the segment leader, your past performance, or other riders (if applicable). The goal automatically adjusts based on your current performance.

A message appears when the segment is complete.

## **Setting a Segment to Adjust Automatically**

You can set your device to automatically adjust the target race time of a segment based on your performance during the segment.

NOTE: This setting is enabled for all segments by default.

- **1** Hold **=**.
- 2 Select Navigation > Segments > Auto Effort.

## **Viewing Segment Details**

- Hold <u>■</u>.
- 2 Select Navigation > Segments.
- 3 Select a segment.
- 4 Select an option:
  - Select Race Time to view the ride time for the segment leader.
  - Select Map to view the segment on the map.
  - · Select **Elevation** to view an elevation plot of the segment.

#### **Deleting a Segment**

- **1** Hold **=**.
- 2 Select Navigation > Segments.
- 3 Select a segment.
- 4 Select Delete > Yes.

## **Workouts**

You can create custom workouts that include goals for each workout step and for varied distances, times, and calories. You can create and find more workouts using Garmin Connect or

select a training plan that has built-in workouts, and transfer them to your device.

You can schedule workouts using Garmin Connect. You can plan workouts in advance and store them on your device.

#### **Following a Workout From Garmin Connect**

Before you can download a workout from Garmin Connect, you must have a Garmin Connect account (*Garmin Connect*, page 10).

- 1 Select an option:
  - · Open the Garmin Connect app.
  - · Go to connect.garmin.com.
- 2 Select Training > Workouts.
- 3 Find a workout, or create and save a new workout.
- 4 Select 1 or Send to Device.
- 5 Follow the on-screen instructions.

## Starting a Workout

Before you can start a workout, you must download a workout from your Garmin Connect account.

- 1 Select **=** > **Training** > **Workouts**.
- 2 Select a workout.
- 3 Select Do Workout.
- 4 Select ▶ to start the timer.

After you begin a workout, the device displays each step of the workout, the target (if any), and current workout data.

## Stopping a Workout

- At any time, select to end a workout step and begin the next step.
- At any time, select l> to stop the activity timer.
- At any time, select ∧ or ∨ to view the data screens.
- At any time, select > Save Ride to stop the timer and end the workout.

**TIP:** When you save your ride, your workout ends automatically.

#### **Deleting Workouts**

- 1 Select = > Training > Workouts.
- 2 Select a workout.
- 3 Select Delete > Yes.

# **About the Training Calendar**

The training calendar on your device is an extension of the training calendar or schedule you set up in Garmin Connect. After you have added a few workouts to the Garmin Connect calendar, you can send them to your device. All scheduled workouts sent to the device appear in the training calendar list by date. When you select a day in the training calendar, you can view or do the workout. The scheduled workout stays on your device whether you complete it or skip it. When you send scheduled workouts from Garmin Connect, they overwrite the existing training calendar.

#### **Using Garmin Connect Training Plans**

Before you can download and use a training plan from Garmin Connect, you must have a Garmin Connect account (*Garmin Connect*, page 10).

You can browse Garmin Connect to find a training plan, and schedule workouts and courses.

- 1 Connect the device to your computer.
- 2 Go to connect.garmin.com.
- 3 Select and schedule a training plan.
- 4 Review the training plan in your calendar.

4 Training

- 5 Select an option:
  - Sync your device with the Garmin Express<sup>™</sup> application on your computer.
  - Sync your device with the Garmin Connect app on your smartphone.

## **Training Indoors**

The device includes an indoor activity profile where GPS is turned off. When GPS is turned off, speed and distance are not available unless you have a compatible sensor or indoor trainer that sends speed and distance data to the device.

# My Stats

The Edge 130 Plus device can track your personal statistics and calculate performance measurements. Performance measurements require a compatible heart rate monitor or power meter.

## **Setting Up Your User Profile**

You can update your gender, age, weight, height, and maximum heart rate settings. The device uses this information to calculate accurate ride data.

- 1 Hold **=**.
- 2 Select My Stats > User Profile.
- 3 Select an option.

## **About VO2 Max. Estimates**

VO2 max. is the maximum volume of oxygen (in milliliters) you can consume per minute per kilogram of body weight at your maximum performance. In simple terms, VO2 max. is an indication of athletic performance and should increase as your level of fitness improves. VO2 max. estimates are provided and supported by Firstbeat. You can use your Garmin device paired with a compatible heart rate monitor and power meter to display your cycling VO2 max. estimate.

## **Getting Your VO2 Max. Estimate**

Before you can view your VO2 max. estimate, you must put on the heart rate monitor, install the power meter, and pair them with your device (*Pairing Your Wireless Sensors*, page 9). If your device was packaged with a heart rate monitor, the device and sensor are already paired. For the most accurate estimate, complete the user profile setup, and set your maximum heart rate (*Setting Up Your User Profile*, page 5).

**NOTE:** The estimate may seem inaccurate at first. The device requires a few rides to learn about your cycling performance.

- 1 Ride at a steady, high intensity for at least 20 minutes outdoors.
- 2 After your ride, select Save Ride.
- 3 Hold ■.
- 4 Select My Stats > VO2 Max.

Your VO2 max. estimate appears as a number and position on the gauge.



VO2 max. data and analysis is provided with permission from The Cooper Institute®. For more information, see the appendix (VO2 Max. Standard Ratings, page 15), and go to www.CooperInstitute.org.

## **Tips for Cycling VO2 Max. Estimates**

The success and accuracy of the VO2 max. calculation improves when your ride is a sustained and moderately hard effort, and where heart rate and power are not highly variable.

- Before your ride, check that your device, heart rate monitor, and power meter are functioning properly, paired, and have good battery life.
- During your 20 minute ride, maintain your heart rate at greater than 70% of your maximum heart rate.
- During your 20 minute ride, maintain a fairly constant power output.
- · Avoid rolling terrain.
- Avoid riding in groups where there is a lot of drafting.

## **Recovery Advisor**

You can use your Garmin device with a heart rate monitor to display how much time remains before you are fully recovered and ready for the next hard workout.

**Recovery time**: The recovery time appears immediately following an activity. The time counts down until it is optimal for you to attempt another hard workout.

#### Viewing Your Recovery Time

Before you can use the recovery time feature, you must put on the heart rate monitor, and pair it with your device (*Pairing Your Wireless Sensors*, page 9). If your device was packaged with a heart rate monitor, the device and sensor are already paired. For the most accurate estimate, complete the user profile setup, and set your maximum heart rate (*Setting Up Your User Profile*, page 5).

- **1** Hold **=**.
- 2 Select My Stats > Recovery Advisor.
- 3 Go for a ride.
- 4 After your ride, select Save Ride.

The recovery time appears. The maximum time is 4 days, and the minimum time is 6 hours.

#### Personal Records

When you complete a ride, the device displays any new personal records you achieved during that ride. Personal records include your fastest time over a standard distance, longest ride, and most ascent gained during a ride. When paired with a compatible power meter, the device displays the maximum power reading recorded during a 20-minute period.

## Viewing Your Personal Records

- 1 Hold 

  ■
- 2 Select My Stats > Personal Records.

My Stats 5

## Reverting a Personal Record

You can set each personal record back to the one previously recorded

- 1 Hold =
- 2 Select My Stats > Personal Records.
- 3 Select a record to revert.
- 4 Select Options > Use Previous > Yes.

NOTE: This does not delete any saved activities.

## **Deleting a Personal Record**

- 1 Hold **=**.
- 2 Select My Stats > Personal Records.
- 3 Select a personal record.
- 4 Select Options > Clear Record > Yes.

# **Navigation**

Navigation features and settings also apply to navigating courses (*Courses*, page 6) and segments (*Segments*, page 3).

- Locations (Locations, page 6)
- Map settings (Viewing User Locations on the Map, page 6)

#### Locations

You can record and store locations in the device.

#### **Marking Your Location**

Before you can mark a location, you must locate satellites.

A location is a point that you record and store in the device. If you want to remember landmarks or return to a certain spot, you can mark a location.

- 1 Go for a ride (Going for a Ride, page 3).
- 2 Hold **=**.
- 3 Select Mark Location.

A message appears. The default icon for each location is a flag (*Customizing the Map Icons*, page 6).

## **Navigating to a Saved Location**

Before you can navigate to a saved location, you must locate satellites.

- **1** Hold **=**
- 2 Select Navigation > Saved Locations.
- 3 Select a location.
- 4 Select Go To.
- 5 Select ▶ to start your ride.

## **Navigating Back to Start**

At any point during your ride, you can return to the starting point.

- 1 Go for a ride (Going for a Ride, page 3).
- 2 Select ► to pause the ride.
- 3 Select Back to Start.
- 4 Select Along Same Route or Straight Line.
- 5 Select ▶ to resume your ride.

The device navigates you back to the starting point of your ride.

## **Viewing Saved Locations**

You can view details about saved locations, such as the elevation and map coordinates.

- 1 Hold
- 2 Select Navigation > Saved Locations.
- 3 Select a saved location.

4 Select Details.

## Viewing User Locations on the Map

- 1 Hold
- 2 Select Map > User Locations.
- 3 Select Show.

## **Customizing the Map Icons**

You can customize map icons to identify different types of saved locations. For example, your home location, or locations where you can eat or drink.

- **1** Hold **=**.
- 2 Select Navigation > Saved Locations.
- 3 Select a saved location.
- 4 Select Change Icon.
- 5 Select an option.

## **Repositioning Your Location**

- 1 Hold =
- 2 Select Navigation > Saved Locations.
- 3 Select a saved location.
- 4 Select Reposition Here > Yes.
  The location changes to your current position.

## **Deleting a Saved Location**

- 1 Hold
- 2 Select Navigation > Saved Locations.
- 3 Select a location.
- 4 Select Delete > Yes.

## Courses

Following a previously recorded activity: You can follow a saved course simply because it is a good route. For example, you can save and follow a bike friendly commute to work.

Racing against a previously recorded activity: You can also follow a saved course, trying to match or exceed previously set performance goals. For example, if the original course was completed in 30 minutes, you can race against a Virtual Partner® trying to complete the course in under 30 minutes.

Following an existing ride from Garmin Connect: You can send a course from Garmin Connect to your device. Once it is saved to your device, you can follow the course or race against the course.

### **Following a Course From Garmin Connect**

Before you can download a course from Garmin Connect, you must have a Garmin Connect account (*Garmin Connect*, page 10).

- **1** Select an option:
  - · Open the Garmin Connect app.
  - · Go to connect.garmin.com.
- 2 Create a new course, or select an existing course.
- 3 Select ★ or Send to Device.
- 4 Follow the on-screen instructions.
- 5 On the Edge device, hold =
- 6 Select Navigation > Courses.
- 7 Select the course.
- 8 Select Ride.

## **Tips for Training with Courses**

 If you include a warmup, select ► to begin the course, and warm up as normal.

- Stay away from your course path as you warm up. When you are ready to begin, head toward your course. When you are on any part of the course path, a message appears.
  - **NOTE:** As soon as you select **I**▶, your Virtual Partner starts the course and does not wait for you to warm up.
- Scroll to the map to view the course map.
   If you stray from the course, the device displays a message.

## **Viewing Course Details**

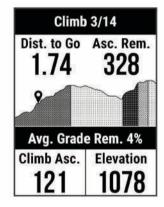
- 1 Hold
- 2 Select Navigation > Courses.
- 3 Select a course.
- 4 Select an option:
  - · Select Ride to ride the course.
  - · Select **Summary** to view details about the course.
  - · Select Map to view the course on the map.
  - Select Elevation to view an elevation plot of the course.

## **Using ClimbPro**

The ClimbPro feature helps you manage your effort for the upcoming climbs on a course. Before your ride, you can view details about the climbs, including when they occur, average gradient, and total ascent. The climb categories, based on length and gradient, are indicated by patterns.

- 1 Select = > Navigation > Courses.
- 2 Select a course.
- 3 Review the climbs and course details for the course (Viewing Course Details, page 7).
- **4** Start following a saved course (*Following a Course From Garmin Connect*, page 6).

At the start of a climb, the ClimbPro screen appears automatically.



## **Deleting a Course**

- **1** Hold **=**
- 2 Select Navigation > Courses.
- 3 Select a course.
- 4 Select Delete > Yes.

## **Bluetooth Connected Features**

The Edge device has several Bluetooth connected features for your compatible smartphone using the Garmin Connect and Connect  $IQ^{\mathbb{T}}$  apps. Go to www.garmin.com/apps for more information.

**Activity uploads to Garmin Connect**: Automatically sends your activity to Garmin Connect as soon as you finish recording the activity.

- **Assistance**: Allows you to send an automated text message with your name and GPS location to your emergency contacts using the Garmin Connect app.
- **Connect IQ downloadable features**: Allows you to download Connect IQ features from the Connect IQ app.
- Course, segment, and workout downloads from Garmin Connect: Allows you to search for activities on Garmin Connect using your smartphone and send them to your device
- **Incident detection**: Allows the Garmin Connect app to send a message to your emergency contacts when the Edge device detects an incident.
- **LiveTrack**: Allows friends and family to follow your races and training activities in real time. You can invite followers using email or social media, allowing them to view your live data on a Garmin Connect tracking page.
- **Notifications**: Displays phone notifications and messages on your device.
- **Social media interactions**: Allows you to post an update to your favorite social media website when you upload an activity to Garmin Connect.
- **Weather updates**: Sends real-time weather conditions and alerts to your device.

## **Incident Detection and Assistance Features**

#### Incident Detection

#### **⚠** CAUTION

Incident detection is a supplemental feature primarily designed for road use. Incident detection should not be relied on as a primary method to obtain emergency assistance. The Garmin Connect app does not contact emergency services on your behalf.

When an incident is detected by your Edge device with GPS enabled, the Garmin Connect app can send an automated text message and email with your name and GPS location to your emergency contacts.

A message appears on your device and paired smartphone indicating your contacts will be informed after 30 seconds have elapsed. If assistance is not needed, you can cancel the automated emergency message.

Before you can enable incident detection on your device, you must set up emergency contact information in the Garmin Connect app. Your paired smartphone must be equipped with a data plan and be in an area of network coverage where data is available. Your emergency contacts must be able to receive text messages (standard text messaging rates may apply).

#### **Assistance**

## **⚠ CAUTION**

Assistance is a supplemental feature and should not be relied on as a primary method to obtain emergency assistance. The Garmin Connect app does not contact emergency services on your behalf.

When your Edge device with GPS enabled is connected to the Garmin Connect app, you can send an automated text message with your name and GPS location to your emergency contacts.

Before you can enable the assistance feature on your device, you must set up emergency contact information in the Garmin Connect app. Your Bluetooth paired smartphone must be equipped with a data plan and be in an area of network coverage where data is available. Your emergency contacts must be able to receive text messages (standard text messaging rates may apply).

Bluetooth Connected Features

A message appears on your device indicating your contacts will be informed after a countdown has elapsed. If assistance is not needed, you can cancel the message.

## **Adding Contacts**

You can add up to 50 contacts to the Garmin Connect app. Contact emails can be used with the LiveTrack feature. Three of these contacts can be used as emergency contacts (*Adding Emergency Contacts*, page 8).

- 1 From the Garmin Connect app, select = or •••.
- 2 Select Contacts.
- 3 Follow the on-screen instructions.

After you add contacts, you must sync your data to apply the changes to your Edge 130 Plus device.

#### **Adding Emergency Contacts**

Emergency contact phone numbers are used for the incident detection and assistance features.

- 1 From the Garmin Connect app, select = or •••.
- 2 Select Safety & Tracking > Incident Detection & Assistance > Add Emergency Contact.
- 3 Follow the on-screen instructions.

#### Viewing Your Emergency Contacts

Before you can view your emergency contacts on your device, you must set up your rider information and emergency contacts in the Garmin Connect app.

Select = > Safety & Tracking > Emergency Contacts.

Your emergency contacts' names and phone numbers appear.

#### Requesting Assistance

Before you can request assistance, you must enable GPS on your Edge device.

- 1 Hold for five seconds to activate the assistance feature. The device beeps, and sends the message after the five-second countdown is complete.
  - **TIP:** You can select  $\bigcirc$  before the countdown is complete to cancel the message.
- **2** If necessary, select ▶ to send the message immediately.

## **Turning Incident Detection On and Off**

Select = > Safety & Tracking > Incident Detection.

#### **Cancelling an Automated Message**

When an incident is detected by your device, you can cancel the automated emergency message on your device or your paired smartphone before it is sent to your emergency contacts.

Select **Cancel** > **Yes** before the end of the thirty-second countdown.

## Sending a Status Update After an Incident

Before you can send a status update to your emergency contacts, your device must detect an incident and send an automated emergency message to your emergency contacts.

You can send a status update to your emergency contacts informing them you are not in need of assistance.

From the status page, select Incident Detected > End and Send "I'm OK".

A message is sent to all emergency contacts.

## Turning On LiveTrack

Before you can start your first LiveTrack session, you must set up contacts in the Garmin Connect app (*Adding Contacts*, page 8).

- 1 Hold **=**.
- 2 Select Safety & Tracking > LiveTrack.

- **3** Select an option:
  - Select Auto Start to start a LiveTrack session each time you start this type of activity.
  - Select Course Sharing to enable your recipients to view your course.
  - Select Start LiveTrack to start a LiveTrack session.
- 4 From the home screen, select ▶, and go for a ride.

Recipients can view your live data on a Garmin Connect tracking page.

## **Connect IQ Downloadable Features**

You can add Connect IQ features to your device from Garmin and other providers using the Connect IQ app.

**Data Fields**: Allow you to download new data fields that present sensor, activity, and history data in new ways. You can add Connect IQ data fields to built-in features and pages.

# Downloading Connect IQ Features Using Your Computer

- 1 Connect the device to your computer using a USB cable.
- 2 Go to apps.garmin.com, and sign in.
- 3 Select a Connect IQ feature, and download it.
- 4 Follow the on-screen instructions.

## Wireless Sensors

Your device can be used with wireless ANT+ or Bluetooth sensors. For more information about compatibility and purchasing optional sensors, go to buy garmin.com.

## **Putting On the Heart Rate Monitor**

You should wear the heart rate monitor directly on your skin, just below your sternum. It should be snug enough to stay in place during your activity.

1 Snap the heart rate monitor module 1 onto the strap.

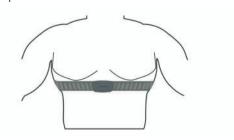


The Garmin logos (on the module and the strap) should be right-side up.

2 Wet the electrodes ② and the contact patches ③ on the back of the strap to create a strong connection between your chest and the transmitter.



3 Wear the heart rate monitor with the Garmin logos facing right-side up.



The hook ④ and loop ⑤ connection should be on your right side.

8 Wireless Sensors

**4** Wrap the strap around your chest, and connect the strap hook to the loop.

NOTE: Make sure the care tag does not fold over.

After you put on the heart rate monitor, it is active and sending data.

#### **Tips for Erratic Heart Rate Data**

If the heart rate data is erratic or does not appear, you can try these tips.

- Reapply water to the electrodes and contact patches (if applicable).
- · Tighten the strap on your chest.
- · Warm up for 5 to 10 minutes.
- Follow the care instructions (Caring for the Heart Rate Monitor, page 13).
- Wear a cotton shirt or thoroughly wet both sides of the strap.
   Synthetic fabrics that rub or flap against the heart rate monitor can create static electricity that interferes with heart rate signals.
- Move away from sources that can interfere with your heart rate monitor.

Sources of interference may include strong electromagnetic fields, some 2.4 GHz wireless sensors, high-voltage power lines, electric motors, ovens, microwave ovens, 2.4 GHz cordless phones, and wireless LAN access points.

#### **Fitness Goals**

Knowing your heart rate zones can help you measure and improve your fitness by understanding and applying these principles.

- · Your heart rate is a good measure of exercise intensity.
- Training in certain heart rate zones can help you improve cardiovascular capacity and strength.

If you know your maximum heart rate, you can use the table (*Heart Rate Zone Calculations*, page 16) to determine the best heart rate zone for your fitness objectives.

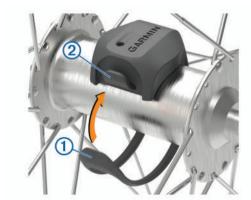
If you do not know your maximum heart rate, use one of the calculators available on the Internet. Some gyms and health centers can provide a test that measures maximum heart rate. The default maximum heart rate is 220 minus your age.

## **Installing the Speed Sensor**

NOTE: If you do not have this sensor, you can skip this task.

**TIP:** Garmin recommends you secure your bike on a stand while installing the sensor.

- 1 Place and hold the speed sensor on top of the wheel hub.
- 2 Pull the strap ① around the wheel hub, and attach it to the hook ② on the sensor.



The sensor may be tilted when installed on an asymmetrical hub. This does not affect operation.

3 Rotate the wheel to check for clearance.

The sensor should not contact other parts of your bike.

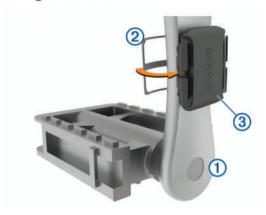
**NOTE:** The LED flashes green for five seconds to indicate activity after two revolutions.

## **Installing the Cadence Sensor**

NOTE: If you do not have this sensor, you can skip this task.

**TIP:** Garmin recommends you secure your bike on a stand while installing the sensor.

- 1 Select the band size that fits your crank arm ① securely. The band you select should be the smallest one that stretches across the crank arm.
- 2 On the non-drive side, place and hold the flat side of the cadence sensor on the inside of the crank arm.
- 3 Pull the bands ② around the crank arm, and attach them to the hooks ③ on the sensor.



4 Rotate the crank arm to check for clearance.

The sensor and bands should not contact any part of your bike or shoe.

**NOTE:** The LED flashes green for five seconds to indicate activity after two revolutions.

**5** Take a 15 minute test ride and inspect the sensor and bands to ensure there is no evidence of damage.

## **About the Speed and Cadence Sensors**

Cadence data from the cadence sensor is always recorded. If no speed and cadence sensors are paired with the device, GPS data is used to calculate the speed and distance.

Cadence is your rate of pedaling or "spinning" measured by the number of revolutions of the crank arm per minute (rpm).

## **Pairing Your Wireless Sensors**

Before you can pair, you must put on the heart rate monitor or install the sensor.

Pairing is the connecting of ANT+ or Bluetooth wireless sensors. For example, connecting a heart rate monitor with your Garmin device.

- Bring the device within 3 m (10 ft.) of the sensor.
  NOTE: Stay 10 m (33 ft.) away from other riders' sensors while pairing.
- 2 Hold **=**.
- 3 Select Sensors > Add Sensor.

A list of available sensors appears.

4 Select one or more sensors to pair with your device.

When the sensor is paired with your device, the sensor status is Connected. You can customize a data field to display sensor data.

Wireless Sensors 9

## **Training with Power Meters**

- Go to www.garmin.com/intosports for a list of ANT+ sensors that are compatible with your device (such as Vector™).
- For more information, see the owner's manual for your power meter

## **Calibrating Your Power Meter**

Before you can calibrate your power meter, you must install it, pair it with your device, and begin actively recording data with it. For calibration instructions specific to your power meter, see the manufacturer's instructions.

- 1 Hold **=**.
- 2 Select Sensors.
- 3 Select your power meter.
- 4 Select Options > Calibrate.
- 5 Keep your power meter active by pedaling until the message appears.
- 6 Follow the on-screen instructions.

#### **Pedal-Based Power**

Vector measures pedal-based power.

Vector measures the force you apply a few hundred times every second. Vector also measures your cadence or rotational pedaling speed. By measuring the force, the direction of force, the rotation of the crank arm, and time, Vector can determine power (watts).

## **Situational Awareness**

Your Edge device can be used with Varia<sup>™</sup> smart bike lights and rearview radar to improve situational awareness. See the owner's manual for your Varia device for more information.

**NOTE:** You may need to update the Edge software before pairing Varia devices (*Updating the Software Using Garmin Express*, page 14).

# **History**

History includes time, distance, calories, speed, lap data, elevation, and optional ANT+ sensor information.

**NOTE:** History is not recorded while the timer is stopped or paused.

When the device memory is full, a message appears. The device does not automatically delete or overwrite your history. Upload your history to Garmin Connect periodically to keep track of all your ride data.

## **Viewing Ride Details**

- **1** Hold **=**.
- 2 Select History > Rides.
- 3 Select a ride.
- 4 Select an option.

## **Deleting a Ride**

- **1** Hold **=**
- 2 Select History > Rides.
- 3 Select a ride to delete.
- 4 Select Delete > Yes.

## Viewing Data Totals

You can view the accumulated data you have saved to the device, including the number of rides, time, distance, and calories.

**1** Hold **=**.

2 Select History > Totals.

## **Resetting Bike Totals**

Select = > History > Totals > Reset Totals > Yes.

**NOTE:** This does not delete any saved activities.

#### **Garmin Connect**

You can connect with your friends on Garmin Connect. Garmin Connect gives you the tools to track, analyze, share, and encourage each other. Record the events of your active lifestyle including runs, walks, rides, swims, hikes, triathlons, and more.

You can create your free Garmin Connect account when you pair your device with your phone using the Garmin Connect app, or you can go to connect.garmin.com.

Store your activities: After you complete and save an activity with your device, you can upload that activity to Garmin Connect and keep it as long as you want.

Analyze your data: You can view more detailed information about your activity, including time, distance, elevation, heart rate, calories burned, cadence, an overhead map view, pace and speed charts, and customizable reports.

**NOTE:** Some data requires an optional accessory such as a heart rate monitor.



**Plan your training**: You can choose a fitness goal and load one of the day-by-day training plans.

**Share your activities**: You can connect with friends to follow each other's activities or post links to your activities on your favorite social networking sites.

#### **Sending Your Ride to Garmin Connect**

- Sync your Edge device with the Garmin Connect app on your smartphone.
- Use the USB cable that came with your Edge device to send ride data to your Garmin Connect account on your computer.

## **Data Management**

**NOTE:** The device is not compatible with Windows® 95, 98, Me, Windows NT®, and Mac® OS 10.3 and earlier.

#### **Connecting the Device to Your Computer**

## NOTICE

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

- 1 Pull up the weather cap from the USB port.
- 2 Plug the small end of the USB cable into the USB port.
- 3 Plug the large end of the USB cable into a computer USB port.

Your device appears as a removable drive in My Computer on Windows computers and as a mounted volume on Mac computers.

## **Transferring Files to Your Device**

1 Connect the device to your computer.

On Windows computers, the device appears as a removable drive or a portable device. On Mac computers, the device appears as a mounted volume.

**NOTE:** Some computers with multiple network drives may not display device drives properly. See your operating system documentation to learn how to map the drive.

- 2 On your computer, open the file browser.
- 3 Select a file.
- 4 Select Edit > Copy.
- 5 Open the portable device, drive, or volume for the device.
- 6 Browse to a folder.
- 7 Select Edit > Paste.

The file appears in the list of files in the device memory.

## **Deleting Files**

#### NOTICE

If you do not know the purpose of a file, do not delete it. Your device memory contains important system files that should not be deleted.

- 1 Open the **Garmin** drive or volume.
- 2 If necessary, open a folder or volume.
- 3 Select a file.
- 4 Press the **Delete** key on your keyboard.

**NOTE:** If you are using an Apple® computer, you must empty the Trash folder to completely remove the files.

## **Disconnecting the USB Cable**

If your device is connected to your computer as a removable drive or volume, you must safely disconnect your device from your computer to avoid data loss. If your device is connected to your Windows computer as a portable device, it is not necessary to safely disconnect the device.

- 1 Complete an action:
  - For Windows computers, select the Safely Remove Hardware icon in the system tray, and select your device.
  - For Apple computers, select the device, and select File > Eject.
- 2 Disconnect the cable from your computer.

# **Customizing Your Device**

## **Ride Settings**

Hold **≡**, and select Ride Settings.

**Data Pages**: Enables you to customize data screens and add new data screens for your ride (*Changing Data Fields*, page 12).

Alerts: Sets the training alerts for your ride (Alerts, page 11).

**Laps**: Sets the options for the Auto Lap® feature (*Marking Laps*, page 12).

Auto Pause: Sets the device to stop recording data when you stop moving (*Using Auto Pause*®, page 12).

**Auto Scroll**: Enables you to move through all of the data screens automatically while the timer is running (*Using Auto Scroll*, page 12).

**Segment Alerts**: Enables prompts that alert you to approaching segments (*Segments*, page 3).

**Nav. Prompts**: Enables or disables turn-by-turn navigation prompts and off course warnings.

**GPS**: Allows you to turn off GPS (*Training Indoors*, page 5), or change the satellite setting (*Changing the Satellite Setting*, page 11).

#### **Alerts**

You can use alerts to train toward specific time, distance, calories, and heart rate goals.

#### Setting a Recurring Alert

A recurring alert notifies you each time the device records a specified value or interval. For example, you can set the device to alert you every 30 minutes.

- **1** Hold **=**.
- 2 Select Ride Settings > Alerts.
- 3 Select an alert type.
- 4 Turn on the alert.
- 5 Enter a value.
- 6 Select I▶

Each time you reach the alert value, a message appears. The device also beeps if audible tones are turned on (*Turning the Device Tones On and Off*, page 12).

## Setting Heart Rate Alerts

If you have an optional heart rate monitor, you can set the device to alert you when your heart rate is above or below a target zone or a custom range. For example, you can set the device to alert you when your heart rate is below 150 beats per minute (bpm).

- 1 Hold
- 2 Select Ride Settings > Alerts > HR Alert.
- 3 Select an option:
  - To use the range of an existing heart rate zone, select a heart rate zone.
  - To customize the maximum value, select Custom > High, and enter a value.
  - To customize the minimum value, select Custom > Low, and enter a value.

Each time you exceed or drop below the specified range or custom value, a message appears. The device also beeps if audible tones are turned on (*Turning the Device Tones On and Off*, page 12).

#### Setting Eat and Drink Alerts

You can set an alert to eat or drink at timed intervals.

- 1 Hold =
- 2 Select Ride Settings > Alerts.
- 3 Select Eat or Drink.
- 4 Turn on the alert.
- 5 Select Alert at, and enter a value.

Each time you reach the estimated alert value, a message appears. The device also beeps if audible tones are turned on (*Turning the Device Tones On and Off*, page 12).

#### Changing the Satellite Setting

For increased performance in challenging environments and faster GPS position location, you can enable GPS + GLONASS or GPS + GALILEO. Using GPS and another satellite together reduces battery life more quickly than using only GPS.

- 1 Hold 

  ■
- 2 Select Ride Settings > GPS.
- 3 Select an option.

## **Training Settings**

The following options and settings allow you to customize your device based on your training needs.

Customizing Your Device 11

## **Marking Laps**

You can use the Auto Lap feature to mark a lap at a specific distance automatically, and you can mark laps manually. This feature is helpful for comparing your performance over different parts of an activity.

- 1 Hold
- 2 Select Ride Settings > Laps.
- 3 Select an option:
  - Select Auto Lap to use the Auto Lap feature.

The device automatically marks a lap every 5 miles or 5 kilometers, depending on your system settings (*System Settings*, page 12).

Select Lap Key to use to mark a lap during an activity.

## Using Auto Pause®

You can use the Auto Pause feature to pause the timer automatically when you stop moving. This feature is helpful if your activity includes stop lights or other places where you need to stop.

NOTE: The paused time is not saved with your history data.

- 1 Hold
- 2 Select Ride Settings > Auto Pause.

## **Using Auto Scroll**

You can use the Auto Scroll feature to cycle through the training data pages automatically while the timer is running.

- 1 Hold **=**.
- 2 Select Ride Settings > Auto Scroll.
- 3 Select a display speed.

## **Changing Data Fields**

You can change the data field combinations for the pages that appear while the timer is running (*Data Fields*, page 14).

- 1 Hold 

  ■
- 2 Select Ride Settings > Data Pages.
- 3 Select ► > Layout.
- **4** Select **∨** or **∧** to change the layout.
- 5 Select ▶ to enable the layout.
- 6 Select ∨ or ∧ to edit the data fields.

## **Phone Settings**

Hold **≡**, and select Phone.

Status: Enables Bluetooth wireless technology.

**NOTE:** Other Bluetooth settings appear only when Bluetooth wireless technology is enabled.

**Notifications**: Allows you to enable phone notifications from your compatible smartphone.

Pair Phone: Connects your device with a compatible Bluetooth enabled smartphone. This setting allows you to use Bluetooth connected features, including LiveTrack and activity uploads to Garmin Connect.

## System Settings

Hold **≡**, and select System.

**Language**: Sets the language displayed on the device (*Changing the Device Language*, page 12).

**Backlight**: Sets the backlight timeout, brightness, and behavior (*Using the Backlight*, page 12).

**Sounds**: Turns audible tones on or off for keys and alert messages (*Turning the Device Tones On and Off*, page 12).

Units: Sets the units of measure used on the device.

**Time**: Sets the device to display time in a 12-hour or 24-hour format.

**Position Format**: Allows you to set the format for viewing geographical coordinate position details.

**Auto Power Off:** Allows you to set the device to automatically power down after 10 minutes of inactivity.

**Reset**: Allows you to reset the system settings or delete all user data (*Restoring All Default Settings*, page 14).

**About**: Displays the software version and unit ID, and allows you to check for software updates (*Viewing E-label Regulatory and Compliance Information*, page 14).

## **Changing the Device Language**

- 1 Hold **=**.
- 2 Select System > Language.

## **Using the Backlight**

You can select any key to turn on the backlight.

- 1 Hold
- 2 Select System > Backlight.
- 3 Select an option:
  - To adjust the timeout, select Timeout.
  - To adjust the brightness, select Brightness.
  - To set the backlight to turn on for key presses and alerts, select Keys and Alerts.
- 4 Use ∧ and ∨ to select an option.
- 5 Select ▶.

#### **Turning the Device Tones On and Off**

- 1 Hold **=**.
- 2 Select System > Sounds.

## **Changing the Units of Measure**

You can customize units of measure for distance and speed.

- 1 Hold
- 2 Select System > Units.

## **Using the Auto Power Off Feature**

This feature automatically turns off the device after 10 minutes of inactivity.

- 1 Hold **=**.
- 2 Select System > Auto Power Off.

## **Setting Up Extended Display Mode**

You can use your Edge 130 Plus device as an extended display to view data screens from a compatible Garmin multisport watch. For example, you can pair a compatible Forerunner® device to display its data screens on your Edge device during a triathlon.

- 1 From your Edge device, hold =.
- 2 Select Extended Display > ▶.
- 3 From your compatible Garmin watch, select Settings > Sensors & Accessories > Add New > Extended Display.
- **4** Follow the on-screen instructions on your Edge device and Garmin watch to complete the pairing process.

The data screens from your paired watch appear on the Edge device when the devices are paired.

**NOTE:** Normal Edge device functions are disabled while using Extended Display mode.

After pairing your compatible Garmin watch with your Edge device, they connect automatically the next time you use Extended Display mode.

## **Exiting Extended Display Mode**

- 1 While the device is in Extended Display mode, hold =
- 2 Select Exit Extended Display > Yes.

## **Device Information**

## **Specifications**

## **Edge 130 Plus Specifications**

Battery type	Rechargeable, built-in lithium-ion battery
Battery life	Up to 12 hr.
Operating temperature range	From -20° to 60°C (from -4° to 140°F)
Charging temperature range	From 0° to 45°C (from 32° to 113°F)
Wireless frequency	2.4 GHz @ 5.6 dBm nominal
Water rating	IEC 60529 IPX7 <sup>1</sup>

## **Heart Rate Monitor Specifications**

Battery type	User-replaceable CR2032, 3 V
Battery life	Up to 3.5 yr. at 1 hr./day
Water resistance	1 ATM <sup>2</sup>
	<b>NOTE:</b> This product does not transmit heart rate data while swimming.
Operating temperature range	From -5° to 50°C (from 23° to 122°F)
Wireless frequency/ protocol	2.4 GHz @ 2 dBm nominal

## **Speed Sensor and Cadence Sensor Specifications**

Battery type	User-replaceable CR2032, 3 V
Battery life	Approximately 12 mo. at 1 hr./day
Speed sensor storage	Up to 300 hr. of activity data
Operating temperature range	From -20° to 60°C (from -4° to 140°F)
Wireless frequency/protocol	2.4 GHz @ 4 dBm nominal
Water rating	IEC 60529 IPX7 <sup>1</sup>

#### **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, 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

- Wipe the device using a cloth dampened with a mild detergent solution.
- 2 Wipe it dry.

After cleaning, allow the device to dry completely.

## **Caring for the Heart Rate Monitor**

#### NOTICE

You must unsnap and remove the module before washing the strap.

A build up of sweat and salt on the strap can decrease the ability of the heart rate monitor to report accurate data.

- Go to www.garmin.com/HRMcare for detailed washing instructions.
- · Rinse the strap after every use.

<sup>2</sup> The device withstands pressure equivalent to a depth of 10 m. For more information, go to www.garmin.com/waterrating.

- Machine wash the strap after every seven uses.
- · Do not put the strap in a dryer.
- · When drying the strap, hang it up or lay it flat.
- To prolong the life of your heart rate monitor, unsnap the module when not in use.

## **User Replaceable Batteries**

#### *∧* WARNING

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

## Replacing the Heart Rate Monitor Battery

- 1 Use a small Phillips screwdriver to remove the four screws on the back of the module.
- 2 Remove the cover and battery.



- 3 Wait 30 seconds.
- 4 Insert the new battery with the positive side facing up.

NOTE: Do not damage or lose the O-ring gasket.

**5** Replace the back cover and the four screws.

NOTE: Do not overtighten.

After you replace the heart rate monitor battery, you may need to pair it with the device again.

## Replacing the Cadence Sensor Battery

The device uses one CR2032 battery. The LED flashes red to indicate a low battery level after two revolutions.

1 Locate the circular battery cover ① on the back of the sensor



- 2 Twist the cover counter-clockwise until the marker points to unlocked and the cover is loose enough to remove.
- **3** Remove the cover and the battery 2.
- 4 Wait 30 seconds.
- 5 Insert the new battery into the cover, observing polarity.

**NOTE:** Do not damage or lose the O-ring gasket.

6 Twist the cover clockwise until the marker points to locked.

NOTE: The LED flashes red and green for a few seconds after battery replacement. When the LED flashes green and

Device Information 13

<sup>&</sup>lt;sup>1</sup> 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.

then stops flashing, the device is active and ready to send data

# Viewing E-label Regulatory and Compliance Information

The label for this device is provided electronically. The e-label may provide regulatory information, such as identification numbers provided by the FCC or regional compliance markings, as well as applicable product and licensing information.

- 1 Hold **=**.
- 2 Select System > About.
- 3 Select ∨.

# **Troubleshooting**

## **Restarting the Device**

If the device stops responding, you may need to restart it.

NOTE: Restarting the device may erase your data or settings.

Hold for 15 seconds.
 The device turns off.

2 Hold for one second to turn on the device.

## **Restoring All Default Settings**

You can restore all of the device settings to the factory default values.

- 1 Hold to open the main menu.
- 2 Select System > Reset.
- 3 Select an option:
  - To reset only your device and ride settings, select Reset Settings.

**NOTE:** This does not delete your activity history, such as rides, workouts, and courses.

 To reset your device and ride settings, and delete all user history and data, select Delete All.

**NOTE:** This deletes all user-entered information and activity history.

## **Maximizing Battery Life**

- · Shorten the backlight timeout (System Settings, page 12).
- Turn off Bluetooth wireless technology (Phone Settings, page 12).
- Select the GPS setting (Changing the Satellite Setting, page 11).
- · Remove wireless sensors that you no longer use.

# **Improving GPS Satellite Reception**

- · Frequently sync the device to your Garmin Connect account:
  - Connect your device to a computer using the USB cable and the Garmin Express application.

While connected to your Garmin Connect account, the device downloads several days of satellite data, allowing it to quickly locate satellite signals.

- Take your device outside to an open area away from tall buildings and trees.
- · Remain stationary for a few minutes.

## My Device is in the Wrong Language

- 1 Hold **=**.
- 2 Scroll down to the last item in the list, and select it.
- 3 Select the first item in the list.
- 4 Use ∧ and ∨ to select your language.

## **Replacement O-rings**

Replacement bands (O-rings) are available for the mounts.

**NOTE:** Use Ethylene Propylene Diene Monomer (EPDM) replacement bands only. Go to http://buy.garmin.com, or contact your Garmin dealer.

# **Updating the Software Using the Garmin Connect App**

Before you can update your device software using the Garmin Connect app, you must have a Garmin Connect account, and you must pair the device with a compatible smartphone (*Pairing Your Smartphone*, page 1).

Sync your device with the Garmin Connect app.

When new software is available, the Garmin Connect app automatically sends the update to your device.

# **Updating the Software Using Garmin Express**

Before you can update your device software, you must have a Garmin Connect account, and you must download the Garmin Express application.

- 1 Connect the device to your computer using the USB cable. When new software is available, Garmin Express sends it to your device.
- 2 Follow the on-screen instructions.
- 3 Do not disconnect your device from the computer during the update process.

## **Product Updates**

On your computer, install Garmin Express (www.garmin.com/express). On your smartphone, install the Garmin Connect app.

This provides easy access to these services for Garmin devices:

- · Software updates
- · Data uploads to Garmin Connect
- · Product registration

## **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.

# **Appendix**

#### **Data Fields**

Some data fields require optional accessories to display data.

Average HR: The average heart rate for the current activity.

**Avg. Cadence**: Cycling. The average cadence for the current activity.

Avg. Lap Time: The average lap time for the current activity.

**Avg. Speed**: The average speed for the current activity.

Battery: The remaining battery power.

**Battery Status**: The remaining battery power of a bike light accessory.

Beam Ang. Status: The headlight beam mode.

**Cadence**: Cycling. The number of revolutions of the crank arm. Your device must be connected to a cadence accessory for this data to appear.

Calories: The amount of total calories burned.

Distance: The distance traveled for the current track or activity.

14 Troubleshooting

**Distance to Dest.**: The remaining distance to the final destination. You must be navigating for this data to appear.

**Distance to Next**: The remaining distance to the next waypoint on the route. You must be navigating for this data to appear.

**Elapsed Time**: The total time recorded. For example, if you start the timer and run for 10 minutes, then stop the timer for 5 minutes, then start the timer and run for 20 minutes, your elapsed time is 35 minutes.

**Elevation**: The altitude of your current location above or below sea level.

**ETA** at **Dest**.: The estimated time of day when you will reach the final destination (adjusted to the local time of the destination). You must be navigating for this data to appear.

**ETA at Next**: The estimated time of day when you will reach the next waypoint on the route (adjusted to the local time of the waypoint). You must be navigating for this data to appear.

**Flow**: The measurement of how consistently you maintain speed and smoothness through turns in the current activity.

**Grade**: The calculation of rise (elevation) over run (distance). For example, if for every 3 m (10 ft.) you climb you travel 60 m (200 ft.), the grade is 5%.

**Grit**: The measurement of difficulty for the current activity based on elevation, gradient, and rapid changes in direction.

Heading: The direction you are moving.

**Heart Rate**: Your heart rate in beats per minute (bpm). Your device must be connected to a compatible heart rate monitor.

HR %Max.: The percentage of maximum heart rate.

**HR Zone**: The current range of your heart rate (1 to 5). The default zones are based on your user profile and maximum heart rate (220 minus your age).

**Lap Cadence**: Cycling. The average cadence for the current lap.

Lap Distance: The distance traveled for the current lap.

**Lap Flow**: The overall flow score for the current lap.

Lap Grit: The overall grit score for the current lap.

Lap HR: The average heart rate for the current lap.

**Laps**: The number of laps completed for the current activity.

Lap Speed: The average speed for the current lap.

Lap Time: The stopwatch time for the current lap.

Location at Dest.: The last point on the route or course.

Location at Next: The next point on the route or course.

Maximum Speed: The top speed for the current activity.

**Odometer**: A running tally of distance traveled for all trips. This total does not clear when resetting the trip data.

Power - 3s Avg.: The 3-second moving average of power output.

Power - Avg.: The average power output for the current activity.

**Power - kJ**: The accumulated work performed (power output) in kilojoules.

Power - Lap: The average power output for the current lap.

Power - Max.: The top power output for the current activity.

**Power Zone**: The current range of power output (1 to 7) based on your custom settings.

Speed: The current rate of travel.

Sunrise: The time of sunrise based on your GPS position.

Sunset: The time of sunset based on your GPS position.

Time: The stopwatch time for the current activity.

Time of Day: The time of day based on your current location and time settings (format, time zone, daylight saving time).

**Time to Dest.**: The estimated time remaining before you reach the destination. You must be navigating for this data to appear.

**Time to Next**: The estimated time remaining before you reach the next waypoint in the route. You must be navigating for this data to appear.

**Total Ascent**: The total elevation distance ascended since the last reset.

**Total Descent**: The total elevation distance descended since the last reset.

## **VO2 Max. Standard Ratings**

These tables include standardized classifications for VO2 max. estimates by age and gender.

					-		
Males	Percentile	20–29	30–39	40–49	50-59	60–69	70–79
Superior	95	55.4	54	52.5	48.9	45.7	42.1
Excellent	80	51.1	48.3	46.4	43.4	39.5	36.7
Good	60	45.4	44	42.4	39.2	35.5	32.3
Fair	40	41.7	40.5	38.5	35.6	32.3	29.4
Poor	0-40	<41.7	<40.5	<38.5	<35.6	<32.3	<29.4

Females	Percentile	20–29	30–39	40–49	50–59	60–69	70–79
Superior	95	49.6	47.4	45.3	41.1	37.8	36.7
Excellent	80	43.9	42.4	39.7	36.7	33	30.9
Good	60	39.5	37.8	36.3	33	30	28.1
Fair	40	36.1	34.4	33	30.1	27.5	25.9
Poor	0-40	<36.1	<34.4	<33	<30.1	<27.5	<25.9

Data reprinted with permission from The Cooper Institute. For more information, go to www.CooperInstitute.org.

Appendix 15

## **Heart Rate Zone Calculations**

Zone	% of Maximum Heart Rate	Perceived Exertion	Benefits
1	50–60%	Relaxed, easy pace, rhythmic breathing	Beginning-level aerobic training, reduces stress
2	60–70%	Comfortable pace, slightly deeper breathing, conversation possible	Basic cardiovascular training, good recovery pace
3	70–80%	Moderate pace, more difficult to hold conversation	Improved aerobic capacity, optimal cardiovascular training
4	80–90%	Fast pace and a bit uncomfortable, breathing forceful	Improved anaerobic capacity and threshold, improved speed
5	90–100%	Sprinting pace, unsustainable for long period of time, labored breathing	Anaerobic and muscular endurance, increased power

# **Wheel Size and Circumference**

Your speed sensor automatically detects your wheel size. If necessary, you can manually enter your wheel circumference in the speed sensor settings.

The tire size is marked on both sides of the tire. This is not a comprehensive list. You can also measure the circumference of your wheel or use one of the calculators available on the internet.

Tire Size	Wheel Circumference (mm)
20 × 1.75	1515
20 × 1-3/8	1615
22 × 1-3/8	1770
22 × 1-1/2	1785
24 × 1	1753
24 × 3/4 Tubular	1785
24 × 1-1/8	1795
24 × 1.75	1890
24 × 1-1/4	1905
24 × 2.00	1925
24 × 2.125	1965
26 × 7/8	1920
26 × 1-1.0	1913
26 × 1	1952
26 × 1.25	1953
26 × 1-1/8	1970
26 × 1.40	2005
26 × 1.50	2010
26 × 1.75	2023
26 × 1.95	2050
26 × 2.00	2055
26 × 1-3/8	2068
26 × 2.10	2068
26 × 2.125	2070
26 × 2.35	2083
26 × 1-1/2	2100
26 × 3.00	2170
27 × 1	2145
27 × 1-1/8	2155
27 × 1-1/4	2161
27 × 1-3/8	2169

Tire Size	Wheel Circumference (mm)
29 x 2.1	2288
29 x 2.2	2298
29 x 2.3	2326
650 x 20C	1938
650 x 23C	1944
650 × 35A	2090
650 × 38B	2105
650 × 38A	2125
700 × 18C	2070
700 × 19C	2080
700 × 20C	2086
700 × 23C	2096
700 × 25C	2105
700C Tubular	2130
700 × 28C	2136
700 × 30C	2146
700 × 32C	2155
700 × 35C	2168
700 × 38C	2180
700 × 40C	2200
700 × 44C	2235
700 × 45C	2242
700 × 47C	2268

6 Appendix

Index	viewing 10
Δ.	in an a disconnection of the second of the s
A accessories 8 10 14	icons 1, 6
accessories 8, 10, 14 activities, starting 3	incident detection 7, 8 indoor training 5
alerts 11	installing 2, 9
ANT+ sensors 8, 10	
pairing 9	K kovo 1
power meters 10	keys 1
applications <b>7</b> smartphone <b>1</b>	L
assistance 7, 8	language 12, 14
Auto Lap 12	laps 1, 12 LiveTrack 8
Auto Pause 12	locations 6
Auto Scroll 12	categories 6
В	deleting 6
back to start 6	finding with the map 6
backlight 12	map options 6 saving 6
bands 14 battery	searching for 6
charging 1	sending 8
maximizing 12, 14	M
replacing 13	maps 6
type 2	menu 1
bike sensors 9 Bluetooth sensors 8	mounting the device 2
Bluetooth technology 1, 7, 12	N
••	navigation 6
C	back to start 6
cadence 9 calendar 4	
calibrating, power meter 10	O singe Con hands
calorie, alerts 11	O-rings. See bands
cleaning the device 13	P
clearing data 14	pairing
computer, connecting 10 Connect IQ 8	ANT+ sensors 9
contacts, adding 8	smartphone 1 pedals 10
courses 6, 7	personal records <b>5</b> , <b>6</b>
deleting 7	deleting 6
loading 6 custom data fields 12	power 10
customizing the device 6, 12	power (force), meters <b>5</b> , <b>10</b> power save <b>12</b>
cycling 5	profiles, user 5
D	R
data	recovery 5
screens 12	replacing the battery 13
sharing 12	resetting the device 14
storing 10	ride options 3
transferring 10 data fields 8, 14	S
deleting	satellite signals 3, 11, 14
all user data 11	saving activities 3
history 10	segments 3, 4
device, care 13	deleting 4
distance, alerts 11	settings 1, 11, 12, 14 device 12
E	sharing data 12
emergency contacts 7, 8	shortcuts 1
extended display 12	smartphone 7, 8, 12
F	pairing 1 software, updating 14
files, transferring 11	specifications 13
G	speed and cadence sensors 1, 9, 13
Garmin Connect 1, 3, 4, 6, 7, 10, 14	storing data 10
Garmin Express, updating software 14	system settings 12
GLONASS 11	T
GPS 1, 5, 8, 11	time, alerts 11
signal <b>3, 14</b>	timer 1, 3, 10
Н	tones 12 training 3, 11
heart rate 1, 5	plans 3, 4
alerts 11 monitor 5, 8, 9, 13	screens 12
zones <b>9</b> , <b>16</b>	troubleshooting 9, 14
history 3, 10, 12, 14	U
deleting 10	units of measure 12
sending to computer 10	

updates, software 12, 14 USB 14 disconnecting 11 user data, deleting 11 user profile 5 VO2 max. **5, 15** wheel sizes 16 widgets 1 workouts 4 deleting 4 loading 4

Index 17

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