

Edge[®] 510

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.

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

Getting Started

When using your device the first time, you should complete these tasks to set up the device and learn about the basic features.

- 1 Install your device using the standard mount (page 1) or the out-front mount (page 1).
- 2 Turn on the device (page 2).
- 3 Locate satellites (page 2).
- 4 Go for a ride (page 3).
- 5 Charge the device (page 1).
- 6 Register the device (page 12).
- 7 Upload your ride to Garmin Connect™ (page 7).

Charging the Device

NOTICE

To prevent corrosion, thoroughly dry the mini-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 temperature range of 32° to 113°F (0° to 45°C).

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



- 2 Plug the small end of the USB cable into the mini-USB port.
- 3 Plug the USB end of the cable into the 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.

A fully charged battery can run for up to 15 hours before it must be recharged.

About the Battery

⚠ WARNING

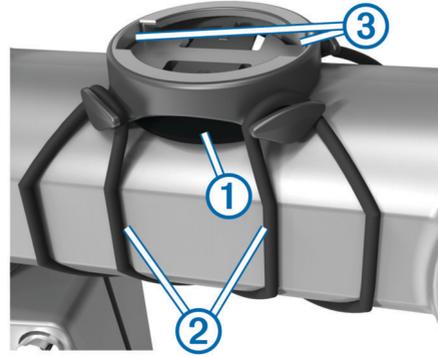
This device contains a lithium-ion battery. See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

Installing the Standard Mount

For the best GPS reception, position the bike mount so the front of the Edge 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 Edge 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 Edge with the bike mount notches ③.
- 6 Press down slightly and turn the Edge clockwise until it locks into place.

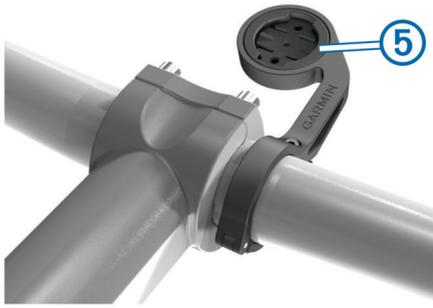


Installing the Out-Front Mount

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



- 3 If you want to change the orientation of the mount, remove the two screws on the back side of the mount ③, rotate the connector ④, and replace the screws.
 - 4 If the handlebar diameter is 26 mm, place the rubber pad around the handlebar.
 - 5 Place the handlebar connector around the rubber pad or handlebar (31.8 mm diameter).
 - 6 Replace the screw.
- NOTE:** Garmin® recommends a torque specification of 7 lbf-in. (0.8 N-m). Check the tightness of the screw periodically.
- 7 Align the tabs on the back of the Edge with the bike mount notches ⑤.



8 Press down slightly and turn the Edge 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.

Turning On the Device

The first time you turn on the device, you are prompted to configure system settings and profiles (page 8).

- 1 Hold .
- 2 Follow the on-screen instructions.
- 3 If your device included a heart rate monitor and a GSC™ 10, activate the ANT+™ sensors during configuration.

For more information about ANT+ sensors, see page 5.

Keys



| | | |
|---|---|--|
| ① |  | Select to turn the backlight on and off. Hold to turn the device on and off. |
| ② |  | Select to mark a new lap. |
| ③ |  | Select to start and stop the timer. |

Home Screen Overview

The home screen gives you quick access to all the features of the Edge.

| | |
|---|---|
|  | Select to change your bike profile. |
| RIDE | Select to go for a ride. |
| Road > | Select to change your activity profile. |
|  | Select to manage your history, courses, and workouts. |
|  | Select to view the setup menu. |

Using the Touchscreen

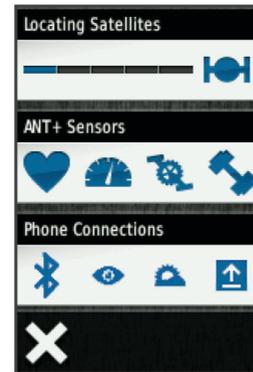
- When the timer is running, tap the screen to view the timer overlay.
The timer overlay allows you to use the settings and search features during a ride.

- Select  to save your changes and close the page.
- Select  to close the page and return to the previous page.
- Select  to return to the previous page.
- Select  to return to the home screen.
- Select  and  to scroll.
- Select  to view the connections page.
- Select  to delete an item.

Viewing the Connections Page

The connections page displays the status of the satellite signals, ANT+ sensors, and your smartphone.

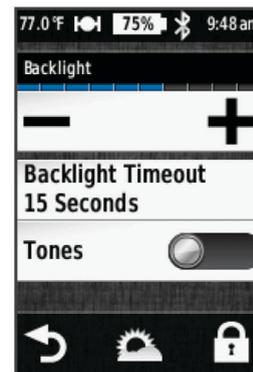
From the home screen, select the status bar at the top of the page.



The connections page appears. A flashing icon means the device is searching. You can select any icon to change the settings.

Using the Backlight

- At any time, select anywhere on the screen to turn on the backlight.
- Select  to adjust the backlight brightness and timeout.



Acquiring Satellite Signals

Before you can use the GPS tracking and navigation features, you must acquire 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.

- 1 Go outdoors to an open area.
The front of the device should be oriented toward the sky.
- 2 From the home screen, select **RIDE**.
- 3 Wait while the device locates satellites.

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

TIP: Do not begin moving until the timer page appears (page 3).

Training

Going for a Ride

Before you can record speed and distance, you must locate satellite signals ([page 2](#)) or pair your device with an optional ANT+ sensor.

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

- 1 From the home screen, select **RIDE**.
- 2 Wait while the device locates satellites.
- 3 Select **▶** to start the timer.

| | |
|--|--|
| Time 01:08:43 | |
| Speed 18.2^m | |
| Distance 20.23^m | |
| Cadence 83^r_p_m | Heart Rate 163^b_p_m |

- 4 Swipe the screen for additional data pages.
- 5 If necessary, tap the screen to view the timer overlay.
- 6 Select **▶** to stop the timer.
- 7 Select **Save**.

Alerts

You can use alerts to train toward specific time, distance, calorie, heart rate, cadence, and power goals. Alert settings are saved with your activity profile.

Setting Range Alerts

If you have an optional heart rate monitor, GSC 10, or power meter, you can set up range alerts. A range alert notifies you any time the device is above or below a specified range of values. For example, you can set the device to alert you when your heart rate is below 60 beats per minute (bpm) and over 210 bpm. You can also use a training zone ([page 5](#)) for the range alert.

- 1 From the home screen, select **✖** > **Activity Profiles**.
- 2 Select a profile.
- 3 Select **Alerts**.
- 4 Select **Heart Rate**, **Cadence**, or **Power**.
- 5 Turn on the alert.
- 6 Enter the minimum and maximum values or select a zone.
- 7 Select **✓**.

Each time you exceed or drop below the specified range, a message appears. The device also beeps if audible tones are turned on ([page 10](#)).

Setting a Recurring Alert

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

- 1 From the home screen, select **✖** > **Activity Profiles**.
- 2 Select an activity profile.
- 3 Select **Alerts**.
- 4 Select **Time**, **Distance**, or **Calorie**.
- 5 Turn on the alert.
- 6 Enter a value.
- 7 Select **✓**.

Each time you reach the alert value, a message appears. The device also beeps if audible tones are turned on ([page 10](#)).

Workouts

You can create custom workouts that include goals for each workout step and for varied distances, times, and calories. You can create workouts using Garmin Connect, and transfer them to your device. You can also create and save a workout directly on 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 the Web

Before you can download a workout from Garmin Connect, you must have a Garmin Connect account ([page 7](#)).

- 1 Connect the device to your computer.
- 2 Go to www.garminconnect.com/workouts.
- 3 Create a new workout.
- 4 Select **Send to Device**.
- 5 Disconnect the device, and turn it on.
- 6 Select **■** > **Workouts**.
- 7 Select the workout.
- 8 Select **Do Workout**.

Creating a Workout

- 1 From the home screen, select **■** > **Workouts** > **+**.
A new workout appears. The first step is open by default, and it can be used as a warmup step.
- 2 Select **Name**, and enter a workout name.
- 3 Select **Add New Step**.
- 4 Select a step, and select **Edit Step**.
- 5 Select **Duration** to specify how the step is measured.
For example, select **Distance** to end the step after a specific distance.
If you select **Open**, you can select **↻** at anytime to end the step.
- 6 If necessary, enter a value in the field below **Duration**.
- 7 Select **Target** to choose your goal during the step.
For example, select **Heart Rate** to maintain a consistent heart rate during the step.
- 8 If necessary, select a target zone or enter a custom range.
For example, you can select a heart rate zone. Each time you exceed or drop below the specified heart rate, the device beeps and displays a message.
- 9 If necessary, select **✓** in the **Rest Lap** field.
During a rest lap, the timer continues to run and data is recorded.
- 10 Select **✓** to save the step.
- 11 Select **➔** to save the workout.

Repeating Workout Steps

Before you can repeat a workout step, you must create a workout with at least one step.

- 1 Select **Add New Step**.
- 2 Select **Duration**.
- 3 Select an option:
 - Select **Repeat** to repeat a step one or more times. For example, you can repeat a 5-mile step ten times.
 - Select **Repeat Until** to repeat a step for a specific duration. For example, you can repeat a 5-mile step for 60 minutes or until your heart rate reaches 160 bpm.
- 4 Select **Back to Step**, and select a step to repeat.

- 5 Select ✓ to save the step.

Starting a Workout

- 1 From the home screen, select ■ > **Workouts**.
- 2 Select a workout.
- 3 Select **Do Workout**.

After you begin a workout, the device displays each step of the workout, the target (if any), and current workout data. An audible alarm sounds when you are about to finish a workout step. A message appears, counting down the time or distance until a new step begins.

Stopping a Workout

- At any time, select ⏪ to end a workout step.
- At any time, select ▶ to stop the timer.
- At any time, select 🏠 > ■ > **Workouts** > **Stop Workout** to end the workout.

Editing a Workout

- 1 From the home screen, select ■ > **Workouts**.
- 2 Select a workout.
- 3 Select ✎.
- 4 Select a step, and select **Edit Step**.
- 5 Change the step attributes, and select ✓.
- 6 Select ↶ to save the workout.

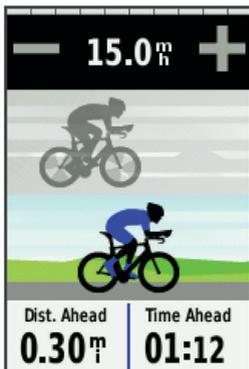
Deleting a Workout

- 1 From the home screen, select ■ > **Workouts**.
- 2 Select a workout.
- 3 Select ✎ > ✕ > ✓.

Using Virtual Partner®

Your Virtual Partner is a training tool designed to help you meet your goals.

- 1 Go for a ride.
- 2 Scroll to the Virtual Partner page to see who is leading.



- 3 If necessary, use + and - to adjust the speed of the Virtual Partner during your ride.

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.

Creating a Course on Your Device

Before you can create a course, you must have history with GPS track data saved to your device.

- 1 From the home screen, select ■ > **Courses** > +.
- 2 Select an activity on which to base your course.
- 3 Enter a name for the course.
- 4 Select ✓.
The course appears in the list.
- 5 Select the course, and review the course data.
- 6 If necessary, select **Settings** to edit the course features.
For example, you can change the name of the course or turn on Virtual Partner.
- 7 Select ↶ > **RIDE**.

Following a Course From the Web

Before you can download a course from Garmin Connect, you must have a Garmin Connect account ([page 7](#)).

- 1 Connect the device to your computer.
- 2 Go to www.garminconnect.com.
- 3 Create a new course or select an existing course.
- 4 Select **Send to Device**.
- 5 Disconnect the device, and turn it on.
- 6 Select ■ > **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 ▶, 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.

Changing the Course Speed

- 1 From the home screen, select ■ > **Courses**.
- 2 Select a course.
- 3 Select **RIDE**.
- 4 Scroll to the Virtual Partner page.
- 5 Use + or - to adjust the percentage of time to complete the course.

For example, to improve your course time by 20%, enter a course speed of 120%. You will race against the Virtual Partner to finish a 30-minute course in 24 minutes.

Stopping a Course

- 1 Tap the screen to view the timer overlay.
- 2 Select ⏸ > **Courses** > **Stop Course**.

Deleting a Course

- 1 From the home screen, select ■ > **Courses**.
- 2 Select a course.
- 3 Select ✎ > ✓.

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.

Restoring Your Personal Records

You can revert a personal record back to the previous saved record.

- 1 From the home screen, select  > **Personal Records**.
- 2 Select .
- 3 Select a record, and select .

NOTE: This does not delete any saved activities.

Training Zones

- Heart rate zones (page 5)
- Power zones (page 6)
- Speed zones (page 5)

Setting Your Speed Zones

Your device contains several different speed zones, ranging from very slow to your maximum speed. The values for the zones are default values and may not match your personal abilities. You can customize your zones on the device or using Garmin Connect.

- 1 From the home screen,  > **Training Zones** > **Speed**.
- 2 Select a zone.
You can enter a custom name for the zone.
- 3 Enter the minimum and maximum speed values.
- 4 Repeat steps 2–3 for each zone.

ANT+ Sensors

Your device can be used with wireless ANT+ sensors. For more information about compatibility and purchasing optional sensors, go to <http://buy.garmin.com>.

Putting On the Heart Rate Monitor

NOTE: If you do not have a heart rate monitor, you can skip this task.

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

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



- 2 Wet both electrodes  on the back of the strap to create a strong connection between your chest and the transmitter.



- 3 If the heart rate monitor has a contact patch , wet the contact patch.
- 4 Wrap the strap around your chest, and connect the strap hook  to the loop.
The Garmin logo should be right-side up.
- 5 Bring the device within range (3 m) of the heart rate monitor.

After you put on the heart rate monitor, it is on standby and ready to send data.

TIP: If the heart rate data is erratic or does not appear, you may have to tighten the strap on your chest or warm up for 5–10 minutes.

Setting Your Heart Rate Zones

The device uses your user profile information from the initial setup to determine your heart rate zones. You can manually adjust the heart rate zones according to your fitness goals (page 5). For the most accurate calorie data during your activity, set your maximum heart rate, minimum heart rate, resting heart rate, and heart rate zones.

- 1 From the home screen, select  > **Training Zones** > **Heart Rate**.
- 2 Enter your maximum, minimum, and resting heart rate values.
The zone values update automatically, but you can also edit each value manually.
- 3 Select **Based On:**.
- 4 Select an option:
 - Select **BPM** to view and edit the zones in beats per minute.
 - Select **% Max.** to view and edit the zones as a percentage of your maximum heart rate.
 - Select **% HRR** to view and edit the zones as a percentage of your resting heart rate.

About Heart Rate Zones

Many athletes use heart rate zones to measure and increase their cardiovascular strength and improve their level of fitness. A heart rate zone is a set range of heartbeats per minute. The five commonly accepted heart rate zones are numbered from 1 to 5 according to increasing intensity. Generally, heart rate zones are calculated based on percentages of your maximum heart rate.

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.
- Knowing your heart rate zones can prevent you from overtraining and can decrease your risk of injury.

If you know your maximum heart rate, you can use the table (page 14) to determine the best heart rate zone for your fitness objectives.

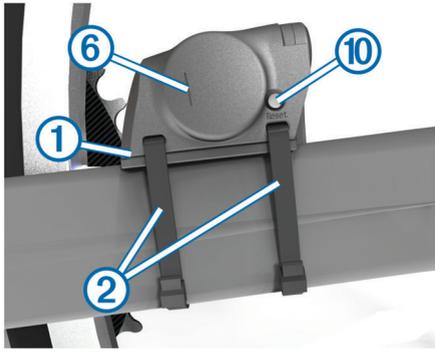
If you do not know your maximum heart rate, use one of the calculators available on the Internet. Some gyms and health centers can provide a test that measures maximum heart rate.

Installing the GSC 10

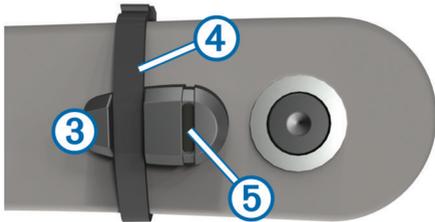
NOTE: If you do not have a GSC 10, you can skip this task.

Both magnets must be aligned with their respective indication lines for the Edge to receive data.

- 1 Place the GSC 10 on the rear chain stay (on the side opposite the drive train).
- 2 If necessary, place the flat rubber pad  or the triangle-shaped rubber pad between the GSC 10 and the chain stay for stability.

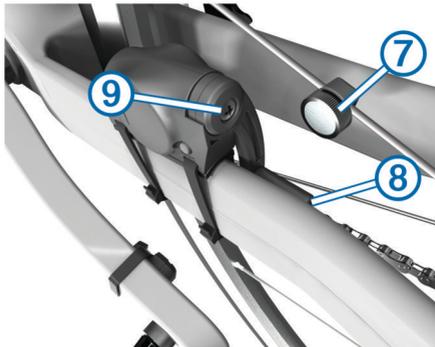


- 3 Loosely attach the GSC 10 using two cable ties ②.
- 4 Attach the pedal magnet ③ to the crank arm using the adhesive mount and a cable tie ④.



The pedal magnet must be within 5 mm of the GSC 10. The indication line ⑤ on the pedal magnet must line up with the indication line ⑥ on the GSC 10.

- 5 Unscrew the spoke magnet ⑦ from the plastic piece.



- 6 Place the spoke in the groove of the plastic piece, and tighten it slightly.
The spoke magnet can face away from the GSC 10 if there is not enough room between the sensor arm and the spoke. The spoke magnet must line up with the indication line ⑧ on the sensor arm.
- 7 Loosen the screw ⑨ on the sensor arm.
- 8 Move the sensor arm to within 5 mm of the spoke magnet.
You can also tilt the GSC 10 closer to either magnet to improve alignment.
- 9 Select **Reset** ⑩ on the GSC 10.
The LED turns red, then green.
- 10 Pedal to test the sensor alignment.
The red LED blinks each time the pedal magnet passes the sensor. The green LED blinks each time the spoke magnet passes the sensor arm.
NOTE: The LED blinks for the first 60 passes after a reset. Select **Reset** again if you require additional passes.
- 11 When everything is aligned and working correctly, tighten the cable ties, the sensor arm, and the spoke magnet.

Garmin recommends that the torque is 1.9 to 2.4 lbf-in. (0.21 to 0.27 N-m) to ensure a water tight seal on the GSC 10 sensor arm.

About the GSC 10

Cadence data from the GSC 10 is always recorded. If there is no GSC 10 paired, 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). There are two sensors on the GSC 10: one for cadence and one for speed.

Data Averaging for Cadence or Power

The non-zero data-averaging setting is available if you are training with an optional cadence sensor or power meter. The default setting is to exclude zero values that occur when you are not pedaling.

To change this setting, see [page 8](#).

Training with Power Meters

- Go to www.garmin.com/intosports for a list of third-party ANT+ sensors that are compatible with your device.
- For more information, see the owner's manual for your power meter.
- Adjust your power zones to match your goals and abilities ([page 6](#)).
- Use range alerts to be notified when you reach a specified power zone ([page 3](#)).
- Customize the power data fields ([page 9](#)).

Setting Your Power Zones

The values for the zones are default values and may not match your personal abilities. You can manually adjust your zones on the device or using Garmin Connect. If you know your functional threshold power (FTP) value, you can enter it and allow the software to calculate your power zones automatically.

- 1 From the home screen, select **⌘** > **Training Zones** > **Power**.
- 2 Enter your FTP value.
- 3 Select **Based On:**.
- 4 Select an option:
 - Select **Watts** to view and edit the zones in watts.
 - Select **% FTP** to view and edit the zones as a percentage of your functional threshold power.

Calibrating Your Power Meter

Before you can calibrate your power meter, it must be properly installed, paired with your GPS device, and actively recording data.

For calibration instructions specific to your power meter, refer to the manufacturer's instructions.

- 1 From the home screen, select **⌘**.
- 2 Select **Bike Profiles**.
- 3 Select a profile.
- 4 Select **⌘** > **Calibrate**.
- 5 Keep your power meter active by pedaling until the message appears.
- 6 Follow the on-screen instructions.

Pairing Your ANT+ Sensors

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

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

- 1 Bring the device within range (3 m) of the sensor.
NOTE: Stay 10 m away from other ANT+ sensors while pairing.
- 2 From the home screen, select the status bar at the top of the page.
- 3 Select a sensor.
- 4 Enable the sensor, and select **Search**.

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

Using the Weight Scale

If you have an ANT+ compatible weight scale, the device can read the data from the weight scale.

- 1 From the home screen, select **Weight Scale**.
A message appears when the weight scale is found.
- 2 Stand on the scale when indicated.
NOTE: If using a body composition scale, remove shoes and socks to ensure that all body composition parameters are read and recorded.
- 3 Step off the scale when indicated.
TIP: If an error occurs, step off the scale. Step on when indicated.

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 Your Ride

- 1 From the home screen, select **Rides**.
- 2 Select **Last Ride** or **All Rides**.
- 3 Select an option.

Viewing Data Totals

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

From the home screen, select **Totals**.

Sending Your Ride to Garmin Connect

NOTICE

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

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



- 2 Plug the small end of the USB cable into the mini-USB port.

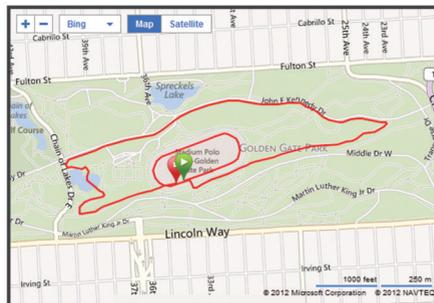
- 3 Plug the large end of the USB cable into a computer USB port.
- 4 Go to www.garminconnect.com/start.
- 5 Follow the on-screen instructions.

Garmin Connect

Garmin Connect gives you a simple way to store and track your activities, analyze your data, and share with others. To sign up for a free account, go to www.garminconnect.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 an overhead map view, pace and speed charts, and customizable reports.



Share your activities: You can email your activities to others, or post links to your activities on your favorite social networking sites.

Connected Features

The Edge has several connected features for your compatible Bluetooth®-enabled smartphone. For more information about how to use your Edge, go to www.garmin.com/intosports/apps.

NOTE: Your Edge must be connected to your Bluetooth-enabled smartphone to take advantage of these features.

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.

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

Course and workout downloads from Garmin Connect:

Allows you to search for activities on Garmin Connect using your smartphone and send them to your device so that you can repeat them as a course or workout.

Social media interactions: Allows you to automatically 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.

Pairing an Edge with Your Smartphone

You can pair the Edge with an Apple® or Android™ smartphone with the Garmin Connect Mobile application installed to use connected features.

- 1 Place the smartphone and the Edge within 33 ft. (10 m) of each other.
- 2 On the Edge, select **Bluetooth > Enable > Pair Smartphone**.
- 3 On the smartphone, enable Bluetooth.
A list of nearby Bluetooth devices appears.
- 4 Select the Edge from the list.

- 5 Confirm that the same passkey appears on both the Edge and the smartphone.

You can now enable connected features using Garmin Connect Mobile.

Sending a Ride to Your Smartphone

Before you can send a ride to your smartphone, you must install and open the Garmin Connect Mobile application on your smartphone and pair your device with your smartphone (page 9).

- 1 From the home screen, select **■** > **Rides**.
- 2 Select a ride.
- 3 Select **■**.

Deleting History

- 1 From the home screen, select **■** > **Delete**.
- 2 Select an option:
 - Select **All Rides** to delete all saved activities from the history.
 - Select **Old Rides** to delete activities recorded more than one month ago.
 - Select **All Totals** to reset all distance and time totals.
NOTE: This does not delete any saved activities.
 - Select **All Courses** to delete all courses you have saved or transferred to the device.
 - Select **All Workouts** to delete all workouts you have saved or transferred to the device.
 - Select **All Personal Records** to delete all personal records saved to the device.
NOTE: This does not delete any saved activities.
- 3 Select **✓**.

Data Recording

The device uses smart recording. It records key points where you change direction, speed, or heart rate.

When a power meter is paired, the device records points every second. Recording points every second provides an extremely detailed track, and uses more of the available memory.

For information about data averaging for cadence and power, see page 6.

Data Recording Settings

Select **✕** > **System** > **Data Recording**.

Recording Interval: Controls how the device records activity data. **Smart** records key points where you change direction, speed, or heart rate. **1 Sec.** records points every second. It creates a very detailed record of your activity and increases the size of the activity.

Data Averaging: Controls whether the device includes zero values for cadence and power data that occur when you are not pedaling.

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 mini-USB port, the weather cap, and the surrounding area before charging or connecting to a computer.

- 1 Pull up the weather cap from the mini-USB port.
- 2 Plug the small end of the USB cable into the mini-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 (page 8).
Your device and memory card (optional) appear as removable drives in My Computer on Windows computers and as mounted volumes on Mac computers.
NOTE: Some computers with multiple network drives cannot display device drives. See your operating system help file 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 **Garmin** or memory card drive or volume.
- 6 Select **Edit** > **Paste**.
The file appears in the list of files in the device memory or on the memory card.

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.

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.

- 1 Complete an action:
 - For Windows computers, select the **Safely Remove Hardware** icon in the system tray, and select your device.
 - For Mac computers, drag the volume icon to the trash.
- 2 Disconnect the cable from your computer.

Customizing Your Device

Profiles

The Edge has several ways for you to customize the device including profiles. Profiles are a collection of settings that optimize your device based on how you are using it. For example, you can create different settings and views for training and mountain biking.

When you are using a profile and you change settings such as data fields or units of measurement, the changes are saved automatically as part of the profile.

Bike Profiles: You can create bike profiles for each bike you own. The bike profile includes optional ANT+ sensors, bike weight, wheel size, odometer value, and crank length.

Activity Profiles: You can create activity profiles for each type of biking. For example, you can have a profile for training, racing, and mountain biking. The activity profile includes customized data pages, alerts, training zones (such as heart

rate and speed), training settings (such as **Auto Pause** and **Auto Lap**), and navigation settings.

User Profile: You can update your gender, age, weight, height, and lifetime athlete settings. The device uses this information to calculate accurate ride data.

Updating Your Bike Profile

You can customize 10 bike profiles. The device uses the bike weight, odometer value, wheel size, and crank length to calculate accurate ride data.

- 1 From the home screen, select **⌘** > **Bike Profiles**.
- 2 Select an option:
 - Select a profile.
 - Select **+** to add a new profile.
- 3 Select the name of the bike.
- 4 If necessary, edit the name, color, and image for the profile.
- 5 If you are using a speed and cadence sensor or power sensor, select an option:
 - Select **Wheel Size** > **Automatic** to calculate your wheel size using GPS distance.
 - Select **Wheel Size** > **Custom** to enter your wheel size. For a table of wheel sizes and circumferences, see [page 14](#).
 - Select **Crank Length** > **Automatic** to calculate your crank length using GPS distance.
 - Select **Crank Length** > **Custom** to enter your crank length.

Any changes you make are saved to the active profile.

Updating Your Activity Profile

You can customize five activity profiles. You can customize your settings and data fields for a particular activity or trip.

- 1 From the home screen, select **⌘** > **Activity Profiles**.
- 2 Select an option:
 - Select a profile.
 - Select **+** to add a new profile.
- 3 If necessary, edit the name and background image for the profile.
- 4 Select an option:
 - Select **Training Pages** to customize the data pages and data fields ([page 9](#)).
 - Select **Alerts** to customize your training alerts ([page 3](#)).
 - Select **Auto Pause** to change when the timer automatically pauses ([page 9](#)).
 - Select **Auto Lap** to set how laps are triggered ([page 9](#)).
 - Select **Auto Scroll** to customize the display of the training data pages when the timer is running ([page 10](#)).

All changes you make are saved to the active profile.

Setting Up Your User Profile

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

- 1 From the home screen, select **⌘** > **User Profile**.
- 2 Select an option.

About Lifetime Athletes

A lifetime athlete is an individual who has trained intensely for many years (with the exception of minor injuries) and has a resting heart rate of 60 beats per minute (bpm) or less.

Bluetooth Settings

Select **⌘** > **Bluetooth**.

Enable: Enables Bluetooth wireless technology.

NOTE: Other Bluetooth settings appear only when Bluetooth is enabled.

Friendly Name: Allows you to enter a friendly name that identifies your devices with Bluetooth wireless technology.

Pair Smartphone: Connects your device with a compatible Bluetooth-enabled smartphone.

About Training Settings

The following options and settings allow you to customize your device based on your training needs. These settings are saved to an activity profile. For example, you can set time alerts for your racing profile and you can set an Auto Lap® position trigger for your mountain biking profile.

Customizing the Data Pages

You can customize data pages for each activity profile ([page 8](#)).

- 1 From the home screen, select **⌘** > **Activity Profiles**.
- 2 Select a profile.
- 3 Select **Training Pages**.
- 4 Select a data page.
- 5 If necessary, enable the data page.
- 6 Select the number of data fields you want to see on the page.
- 7 Select **✓**.
- 8 Select a data field to change it.
- 9 Select **✓**.

Using Auto Pause

You can use Auto Pause® to pause the timer automatically when you stop moving or when your speed drops below a specified value. This feature is helpful if your ride includes stop lights or other places where you need to slow down or stop.

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

- 1 From the home screen, select **⌘** > **Activity Profiles**.
- 2 Select a profile.
- 3 Select **Auto Pause** > **Auto Pause Mode**.
- 4 Select an option:
 - Select **When Stopped** to pause the timer automatically when you stop moving.
 - Select **Custom Speed** to pause the timer automatically when your speed drops below a specified value.
- 5 If necessary, customize optional time data fields ([page 9](#)).
The **Time - Elapsed** data field displays the entire time including paused time.

Marking Laps by Position

You can use Auto Lap to automatically mark the lap at a specific position. This feature is helpful for comparing your performance over different parts of a ride (for example, a long climb or training sprints). During courses, use the **By Position** option to trigger laps at all of the lap positions saved in the course.

- 1 From the home screen, select **⌘** > **Activity Profiles**.
- 2 Select a profile.
- 3 Select **Auto Lap** > **Auto Lap Trigger** > **By Position** > **Lap At**.
- 4 Select an option:
 - Select **Lap Press Only** to trigger the lap counter each time you select **↺** and each time you pass any of those locations again.

- Select **Start and Lap** to trigger the lap counter at the GPS location where you select  and at any location during the ride where you select .
- Select **Mark and Lap** to trigger the lap counter at a specific GPS location marked before the ride and at any location during the ride where you select .

5 If necessary, customize the lap data fields ([page 9](#)).

Marking Laps by Distance

You can use Auto Lap to automatically mark the lap at a specific distance. This feature is helpful for comparing your performance over different parts of a ride (for example, every 10 miles or 40 kilometers).

- 1 From the home screen, select  > **Activity Profiles**.
- 2 Select a profile.
- 3 Select **Auto Lap** > **Auto Lap Trigger** > **By Distance** > **Lap At**.
- 4 Enter a value.
- 5 If necessary, customize the lap data fields ([page 9](#)).

Using Auto Scroll

You can use the auto scroll feature to automatically cycle through all of the training data pages while the timer is running.

- 1 From the home screen, select  > **Activity Profiles**.
- 2 Select a profile.
- 3 Select **Auto Scroll** > **Auto Scroll Speed**.
- 4 Select a display speed.

Changing the Start Notice

This feature automatically detects when your device has acquired satellites and is moving. It is a reminder to start the timer so you can record your ride data.

- 1 From the home screen, select  > **Activity Profiles**.
- 2 Select a profile.
- 3 Select **Start Notice** > **Start Notice Mode**.
- 4 Select an option:
 - Select **Once**.
 - Select **Repeat** > **Repeat Delay** to change the amount of time to delay the reminder.

System Settings

Select  > **System**.

- GPS Settings ([page 10](#))
- Display Settings ([page 10](#))
- Data Recording Settings ([page 8](#))
- Unit Settings ([page 10](#))
- Configuration Settings ([page 10](#))
- Language Settings ([page 10](#))
- Tone Settings ([page 10](#))

GPS Settings

Training Indoors

You can turn GPS off when you are training indoors or to save battery life.

From the home screen, select  > **System** > **GPS** > **GPS Mode** > **Off**.

When GPS is off, speed and distance are not available unless you have an optional sensor that sends speed and distance data to the device (such as the GSC 10). The next time you turn on the device, it will search for satellite signals again.

Setting Your Elevation

If you have accurate elevation data for your present location, you can manually calibrate the altimeter on your device.

- 1 From the home screen, select  > **System** > **GPS** > **Set Elevation**.

- 2 Enter the elevation, and select .

Viewing Satellites

The satellite page shows your current GPS satellite information. For more information about GPS, go to www.garmin.com/aboutGPS.

From the home screen, select  > **System** > **GPS** > **View Satellites**.

GPS accuracy appears at the bottom of the page. The green bars represent the strength of each satellite signal received (the number of the satellite appears below each bar).

Changing the Satellite Settings

By default, the Edge connects to GPS and GLONASS satellites for increased performance in challenging environments and faster position acquisition. You can set the device to use only GPS satellites to increase battery life.

- 1 From the home screen, select  > **System** > **GPS** > **GPS Mode**.
- 2 Select an option:
 - For increased performance, select **GPS+GLONASS**.
 - For increased battery life, select **GPS Only**.

Display Settings

Select  > **System** > **Display**.

Backlight Timeout: Adjusts the length of time before the backlight turns off ([page 2](#)).

Color Mode: Sets the device to display day or night colors. You can select **Auto** to allow the device to automatically set day or night colors based on the time of day.

Screen Capture: Allows you to save the image on the device screen.

Calibrate Screen: Aligns the screen to properly respond to touches ([page 12](#)).

Data Recording Settings

Select  > **System** > **Data Recording**.

Recording Interval: Controls how the device records activity data. **Smart** records key points where you change direction, speed, or heart rate. **1 Sec.** records points every second. It creates a very detailed record of your activity and increases the size of the activity.

Data Averaging: Controls whether the device includes zero values for cadence and power data that occur when you are not pedaling.

Changing the Units of Measure

You can customize units of measure for distance and speed, elevation, temperature, weight, position format, and time format.

- 1 Select  > **System** > **Units**.
- 2 Select a measurement type.
- 3 Select a unit of measure for the setting.

Changing the Configuration Settings

You can modify all of the settings you configured in the initial setup.

- 1 Select  > **System** > **Device Reset** > **Initial Setup**.
- 2 Follow the on-screen instructions.

Changing the Device Language

From the home screen, select  > **System** > **Language**.

Setting the Device Tones

From the home screen, select  > **System** > **Tones**.

Time Zones

Each time you turn on the device and acquire satellites, the device automatically detects your time zone and the current time of day.

Device Information

Specifications

Edge Specifications

| | |
|--|--|
| Battery type | Rechargeable, built-in lithium-ion battery |
| Battery life | 20 hours, GPS only 15 hours, GPS and GLONASS 6 hours, GPS and GLONASS with 100% backlight |
| Water resistance | IPX7 |
| Operating temperature range | From -4° to 158°F (from -20° to 70°C) |
| Charging temperature range | From 32° to 113°F (from 0° to 45°C) |
| Bands (O-rings) for the standard mount | Two sizes: <ul style="list-style-type: none">AS568-125 Inner diameter: 1.3 in. Outer diameter: 1.5 in. Cross section: 0.1 in.AS568-131 Inner diameter: 1.7 in. Outer diameter: 1.9 in. Cross section: 0.1 in. NOTE: Use Ethylene Propylene Diene Monomer (EPDM) replacement bands only. Go to http://buy.garmin.com , or contact your Garmin dealer. |

About IPX7

NOTICE

The device is waterproof to IEC Standard 60529 IPX7. It can withstand immersion in 1 meter of water for 30 minutes. Prolonged submersion can cause damage to the device. After submersion, be certain to wipe dry and air dry the device before using or charging.

Heart Rate Monitor Specifications

| | |
|-----------------------------|---|
| Battery type | User-replaceable CR2032, 3 volts |
| Battery life | Up to 4.5 years (1 hour per day) |
| Water resistance | Water resistant to 98.4 ft. (30 m) NOTE: This product does not transmit heart rate data while swimming. |
| Operating temperature range | From 23° to 122°F (from -5° to 50°C) |
| Radio frequency/protocol | 2.4 GHz ANT+ wireless communications protocol |

GSC 10 Specifications

| | |
|-----------------------------|---|
| Battery type | User-replaceable CR2032, 3 volts |
| Battery life | Approximately 1.4 years (1 hour per day) |
| Water resistance | IPX7 |
| Operating temperature range | From 5° to 158°F (from -15° to 70°C) |
| Radio frequency/protocol | 2.4 GHz ANT+ wireless communications protocol |

Device Care

NOTICE

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

Never use a hard or sharp object to operate the touch screen, or damage may result.

Avoid chemical cleaners and solvents that can damage plastic components.

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

Cleaning the Device

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

Caring for the Heart Rate Monitor

NOTICE

You must unsnap and remove the module before cleaning 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.
- 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.

Heart Rate Monitor Battery

WARNING

Do not use a sharp object to remove user-replaceable batteries.

Contact your local waste disposal department to properly recycle the batteries. Perchlorate Material – special handling may apply. Go to www.dtsc.ca.gov/hazardouswaste/perchlorate.

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.

After you replace the heart rate monitor battery, you must pair it with the device again.

Replacing the GSC 10 Battery

- 1 Locate the circular battery cover ① on the side of the GSC 10.



- 2 Use a coin to twist the cover counter-clockwise until it is loose enough to remove (the arrow points to unlocked).
- 3 Remove the cover and the battery ②.
- 4 Wait 30 seconds.
- 5 Insert the new battery with the positive side facing up.
NOTE: Do not damage or lose the O-ring gasket.
- 6 Use a coin to twist the cover clockwise back into place (the arrow points to locked).

After you replace the GSC 10 battery, you must pair the GSC 10 with the device again.

Troubleshooting

Resetting the Device

If the device stops responding, you may need to reset it. This does not erase any of your data or settings.

Hold \odot for 10 seconds.

The device resets and turns on.

Clearing User Data

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

NOTE: This deletes all user-entered information, but it does not delete your history.

- 1 Turn off the device.
- 2 Place your finger on the top left corner of the touchscreen.
- 3 While holding your finger on the touchscreen, turn on the device.
- 4 Select \checkmark .

Maximizing Battery Life

- Decrease the backlight (page 12).
- Shorten the backlight timeout (page 12).
- Select the **Smart** recording interval (page 8).
- Turn on the **Auto Power Down** feature (page 12).
- Turn off the Bluetooth wireless feature (page 9).
- Select the **GPS Only** setting (page 10).

Decreasing the Backlight

- 1 Select \odot to open the status page.
- 2 Use $-$ and $+$ to adjust the brightness.

Adjusting the Backlight Timeout

You can decrease the backlight timeout to maximize the battery life.

- 1 Select \odot > **Backlight Timeout**.
- 2 Select an option.

Using the Auto Power Down Feature

This feature automatically turns off the device after 15 minutes of inactivity.

- 1 Select \times > **System** > **Auto Power Down**.
- 2 Select **On**.

Calibrating the Touchscreen

- 1 From the home screen, select \times > **System** > **Display** > **Calibrate Screen**.
- 2 Follow the on-screen instructions.

Locking the Touchscreen

You can lock the screen to prevent inadvertent screen touches.

- 1 Select \odot .
- 2 Select \mathfrak{L} .

Unlocking the Touchscreen

- 1 Select \odot .
- 2 Select \mathfrak{L} .

Getting More Information

You can find more information about this product on the Garmin website.

- Go to www.garmin.com/intosports.
- Go to www.garmin.com/learningcenter.
- Go to <http://buy.garmin.com>, or contact your Garmin dealer for information about optional accessories and replacement parts.

Temperature Readings

The device may display temperature readings that are higher than the actual air temperature if the device is placed in direct sunlight, held in your hand, or is charging with an external battery pack. Also, the device will take some time to adjust to significant changes in temperature.

Viewing Device Information

You can view the unit ID, software version, and license agreement.

From the home screen, select \times > **System** > **About**.

Appendix

Registering Your Device

Help us better support you by completing our online registration today.

- Go to <http://my.garmin.com>.
- Keep the original sales receipt, or a photocopy, in a safe place.

Data Fields

Some data fields require ANT+ accessories to display data.

Balance: The current left/right power balance.

Balance - 10s Avg.: The 10-second moving average of left/right power balance.

Balance - 30s Avg.: The 30-second moving average of left/right power balance.

Balance - 3s Avg.: The three-second moving average of left/right power balance.

Balance - Avg.: The average left/right power balance for the current activity.

Balance - Lap: The average left/right power balance for the current lap.

Battery Level: The remaining battery power.

Cadence: The revolutions of the crank arm or strides per minute. Your device must be connected to a cadence accessory.

Cadence - Avg.: The average cadence for the current activity.

Cadence - Lap: The average cadence for the current lap.

Calories: The amount of total calories burned.

Calories - Fat: The amount of fat calories burned. Requires a New Leaf® assessment.

Calories to Go: During a workout, the remaining calories when you are using a calorie target.

Course Pt. Dist.: The remaining distance to the next point on the course.

Dist. - Lap: The distance traveled for the current lap.

Dist. - Last Lap: The distance traveled for the last completed lap.

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

Dist. to Go: During a workout or course, the remaining distance when you are using a distance target.

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

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

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

ETA at Destination: The estimated time of day 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 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.

GPS Accuracy: The margin of error for your exact location. For example, your GPS location is accurate to within +/- 12 feet (3.65 m).

GPS Signal Strength: The strength of the GPS satellite signal.

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

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 - %HRR: The percentage of heart rate reserve (maximum heart rate minus resting heart rate).

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

HR - Avg.: The average heart rate for the current activity.

HR - Avg. %HRR: The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current activity.

HR - Avg. %Max.: The average percentage of maximum heart rate for the current activity.

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

HR - Lap %HRR: The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current lap.

HR - Lap %Max.: The average percentage of maximum heart rate for the current lap.

HR - Last Lap: The average heart rate for the last completed lap.

HR to Go: During a workout, the amount you are above or below the heart rate target.

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

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

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

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

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

Power: The current power output in watts.

Power - %FTP: The current power output as a percentage of functional threshold power.

Power - 10s Avg.: The 10-second moving average of power output.

Power - 30s Avg.: The 30-second moving average of power output.

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

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

Power - IF: The intensity factor for the current activity.

Power - kj: The current power output in kilojoules.

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

Power - Last Lap: The average power output for the last completed lap.

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

Power - NP: The normalized power for the current activity.

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

Power - NP Last Lap: The average normalized power for the last completed lap.

Power - TSS: The training stress score for the current activity.

Power - Watts/kg: The amount of power output in watts per kilogram.

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

Reps to Go: During a workout, the remaining repetitions.

Speed: The current rate of travel.

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

Speed - Lap: The average speed for the current lap.

Speed - Last Lap: The average speed for the last completed lap.

Speed - Max.: The top speed for the current activity.

Speed Zone: The current range of speed.

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

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

Temperature: The temperature of the air. Your body temperature affects the temperature sensor.

Time: The stopwatch time for the current activity.

Time - Avg. Lap: The average time to complete the laps so far.

Time - Elapsed: 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.

Time - Lap: The stopwatch time for the current lap.

Time - Last Lap: The stopwatch time for the last completed lap.

Time of Day: The current 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 Go: During a workout, the remaining time when you are using a time target.

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.

Time to Sunrise: The estimated time remaining before sunrise.

Time to Sunset: The estimated time remaining before sunset.

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

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

Vertical Speed: The rate of ascent or descent over time.

VS - 30S Avg.: The 30-second moving average of vertical speed.

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

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

To modify your bike profile, see [page 9](#).

| Wheel Size | L (mm) |
|------------|--------|
| 12 × 1.75 | 935 |
| 14 × 1.5 | 1020 |
| 14 × 1.75 | 1055 |
| 16 × 1.5 | 1185 |
| 16 × 1.75 | 1195 |
| 18 × 1.5 | 1340 |
| 18 × 1.75 | 1350 |
| 20 × 1.75 | 1515 |
| 20 × 1-3/8 | 1615 |

| Wheel Size | L (mm) |
|------------------|--------|
| 22 × 1-3/8 | 1770 |
| 22 × 1-1/2 | 1785 |
| 24 × 1 | 1753 |
| 24 × 3/4 Tubular | 1785 |
| 24 × 1-1/8 | 1795 |
| 24 × 1-1/4 | 1905 |
| 24 × 1.75 | 1890 |
| 24 × 2.00 | 1925 |
| 24 × 2.125 | 1965 |
| 26 × 7/8 | 1920 |
| 26 × 1(59) | 1913 |
| 26 × 1(65) | 1952 |
| 26 × 1.25 | 1953 |
| 26 × 1-1/8 | 1970 |
| 26 × 1-3/8 | 2068 |
| 26 × 1-1/2 | 2100 |
| 26 × 1.40 | 2005 |
| 26 × 1.50 | 2010 |
| 26 × 1.75 | 2023 |
| 26 × 1.95 | 2050 |
| 26 × 2.00 | 2055 |
| 26 × 2.10 | 2068 |
| 26 × 2.125 | 2070 |
| 26 × 2.35 | 2083 |
| 26 × 3.00 | 2170 |
| 27 × 1 | 2145 |
| 27 × 1-1/8 | 2155 |
| 27 × 1-1/4 | 2161 |
| 27 × 1-3/8 | 2169 |
| 650 × 35A | 2090 |
| 650 × 38A | 2125 |
| 650 × 38B | 2105 |
| 700 × 18C | 2070 |
| 700 × 19C | 2080 |
| 700 × 20C | 2086 |
| 700 × 23C | 2096 |
| 700 × 25C | 2105 |
| 700 × 28C | 2136 |
| 700 × 30C | 2170 |
| 700 × 32C | 2155 |
| 700C Tubular | 2130 |
| 700 × 35C | 2168 |
| 700 × 38C | 2180 |
| 700 × 40C | 2200 |

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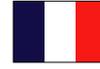
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