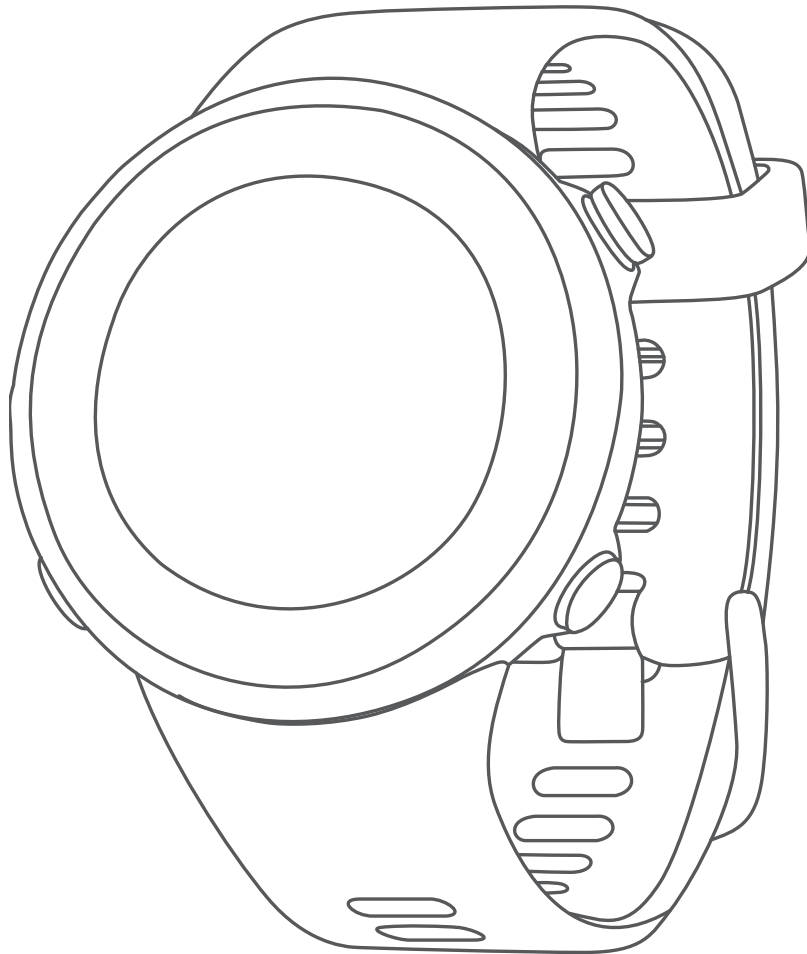


GARMIN®



# FORERUNNER® 45

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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.

## Device Overview



① LIGHT	Select to turn the device on. Select to turn the backlight on and off. Hold to view the controls menu.
② START STOP	Select to start and stop the activity timer. Select to choose an option or to acknowledge a message.
③ BACK	Select to return to the previous screen. Select to record a lap during an activity.
④ DOWN	Select to scroll through the widgets, data screens, options, and settings. Hold to open the music controls ( <i>Controlling Music Playback on a Connected Smartphone</i> , page 6).
⑤ UP	Select to scroll through the widgets, data screens, options, and settings. Hold to view the menu.

## Status Icons

The GPS status ring and icons temporarily overlay each data screen. For outdoor activities, the status ring turns green when GPS is ready. A flashing icon means the device is searching for a signal. A solid icon means the signal was found or the sensor is connected.

GPS	GPS status
	Battery status
	Smartphone connection status
	Heart rate status
	Foot pod status
	Speed and cadence sensor status

## Pairing Your Smartphone with Your Device

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

- From the app store on your smartphone, install and open the Garmin Connect app.
- Bring your smartphone within 10 m (33 ft.) of your device.
- Select **LIGHT** to turn on the device.  
The first time you turn on the device, it is in pairing mode.  
**TIP:** You can hold **LIGHT**, and select to manually enter pairing mode.
- Select an option to add your device to your Garmin Connect account:

- If this is the first time you are pairing a device with the Garmin Connect app, follow the on-screen instructions.
- If you already paired another device with the Garmin Connect app, from the or menu, select **Garmin Devices > Add Device**, and follow the on-screen instructions.

## Viewing the Controls Menu

The controls menu contains options, such as turning on do not disturb mode, locking the keys, and turning the device off.

- From any screen, hold **LIGHT**.



- Select **UP** or **DOWN** to scroll through the options.

## Training

### Going for a Run

The first fitness activity you record on your device can be a run, ride, or any outdoor activity. You may need to charge the device before starting the activity (*Charging the Device*, page 14).

- From the watch face, select **START**.
- Select an activity.
- Go outside, and wait while the device locates satellites.
- Select **START** to start the activity timer.
- Go for a run.



- After you complete your run, select **STOP** to stop the timer.
- Select an option:
  - Select **Resume** to restart the timer.
  - Select **Save** to save the run and reset the timer. You can view a summary, or select **DOWN** to view more data.



- Select **Discard > Yes** to delete the run.

### Starting an Activity

When you start an activity, GPS turns on automatically (if required). If you have an optional wireless sensor, you can pair it to the Forerunner device (*Pairing Your ANT+ Sensors*, page 11).

- 1 From the watch face, select **START**.
- 2 Select an activity.  
**NOTE:** You can select different activities to display on the device through your Garmin Connect account ([Changing Your Displayed Activities, page 12](#)).
- 3 If the activity requires GPS signals, go outside to an area with a clear view of the sky.
- 4 Wait until the green status ring appears.  
The device is ready after it establishes your heart rate, acquires GPS signals (if required), and connects to your wireless sensors (if required).
- 5 Select **START** to start the activity timer.  
The device records activity data only while the activity timer is running.  
**TIP:** You can hold **DOWN** while in an activity to open the music controls ([Controlling Music Playback on a Connected Smartphone, page 6](#)).

### Tips for Recording Activities

- Charge the device before starting an activity ([Charging the Device, page 14](#)).
- Select **BACK** to record laps.
- Select **UP** or **DOWN** to view additional data pages.

### Stopping an Activity

- 1 Select **STOP**.
- 2 Select an option:
  - To resume your activity, select **Resume**.
  - To save the activity, select **Save**.
  - To discard the activity, select **Discard > 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

Your device can guide you through multiple steps in a workout.

**NOTE:** Before you can download and use a training plan or workout, you must have a Garmin Connect account ([Pairing Your Smartphone with Your Device, page 1](#)).

- 1 Select **START**.
- 2 Select an activity.
- 3 Select **Options > Workouts**.  
**NOTE:** This option appears only when you have workouts loaded on your device for the selected activity.
- 4 Select an option:
  - Select **Intervals** to do or edit an interval workout.
  - Select **My Workouts** to do workouts downloaded from Garmin Connect.
  - Select **Training Calendar** to do or view your scheduled workouts.
- 5 Follow the on-screen instructions.

### Creating a Custom Workout on Garmin Connect

Before you can create a workout on the Garmin Connect app, you must have a Garmin Connect account ([Garmin Connect, page 10](#)).

- 1 From the Garmin Connect app, select **≡** or **⋮**.
- 2 Select **Training > Workouts > Create a Workout**.

- 3 Select an activity.
- 4 Create your custom workout.
- 5 Select **Save**.
- 6 Enter a name for your workout, and select **Save**.  
The new workout appears in your list of workouts.  
**NOTE:** You can send this workout to your device ([Sending a Custom Workout to Your Device, page 2](#)).

### Sending a Custom Workout to Your Device

You can send a custom workout you created using the Garmin Connect app to your device ([Creating a Custom Workout on Garmin Connect, page 2](#)).

- 1 From the Garmin Connect app, select **≡** or **⋮**.
- 2 Select **Training > Workouts**.
- 3 Select a workout from the list.
- 4 Select **↗**.
- 5 Select your compatible device.
- 6 Follow the on-screen instructions.

### Starting a Workout

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

- 1 From the watch face, select **START**.
- 2 Select an activity.
- 3 Select **Options > Workouts > My Workouts**.
- 4 Select a workout.  
**NOTE:** Only workouts that are compatible with the selected activity appear in the list.
- 5 Select **Do Workout**.
- 6 Select **START** to start the activity timer.

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

### 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 calendar widget. When you select a day in the 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.

### Viewing Scheduled Workouts

You can view workouts scheduled in your training calendar and start a workout.

- 1 Press **START**.
- 2 Select an activity.
- 3 Select **Workouts > Training Calendar**.  
Your scheduled workouts appear, sorted by date.
- 4 Select a workout.
- 5 Select an option:
  - To view the steps for the workout, select **View**.
  - To start the workout, select **Do Workout**.

### Adaptive Training Plans



Your Garmin Connect account has an adaptive training plan and Garmin® coach to fit your training goals. For example, you can answer a few questions and find a plan to help you complete a 5 km race. The plan adjusts to your current level of fitness, coaching and schedule preferences, and race date. When you



start a plan, the Garmin Coach widget is added to the widget loop on your Forerunner device.

### 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), and you must pair the Forerunner device with a compatible smartphone.

- 1 From the Garmin Connect app, select  or .
- 2 Select **Training > Training Plans**.
- 3 Select and schedule a training plan.
- 4 Follow the on-screen instructions.
- 5 Review the training plan in your calendar.

### Starting Today's Workout

After you send a Garmin Coach training plan to your device, the Garmin Coach widget appears in your widget loop.

- 1 From the watch face, select **UP** or **DOWN** to view the Garmin Coach widget.

If a workout for this activity is scheduled for today, the device shows the workout name and prompts you to start it.



- 2 Select **START**.
- 3 Select **View** to view the workout steps (optional).
- 4 Select **Do Workout**.
- 5 Follow the on-screen instructions.

### Interval Workouts



You can create interval workouts based on distance or time. The device saves your custom interval workout until you create another interval workout. You can use open intervals for track workouts and when you are running a known distance.

#### Creating an Interval Workout

Interval workouts are available for running and biking activities.

- 1 From the watch face, select **START**.
- 2 Select an activity.
- 3 Select **Options > Workouts > Intervals > Edit > Interval > Type**.

**NOTE:** This option appears only when you have workouts loaded on your device for the selected activity.

- 4 Select **Distance, Time, or Open**.  
**TIP:** You can create an open-ended interval by selecting the Open option.
- 5 If necessary, select **Duration**, enter a distance or time interval value for the workout, and select .
- 6 Select **BACK**.
- 7 Select **Rest > Type**.
- 8 Select **Distance, Time, or Open**.
- 9 If necessary, select **Duration**, enter a distance or time value for the rest interval, and select .
- 10 Select **BACK**.
- 11 Select one or more options:
  - To set the number of repetitions, select **Repeat**.
  - To add an open-ended warm up to your workout, select **Warm Up > On**.

- To add an open-ended cool down to your workout, select **Cool Down > On**.

### Starting an Interval Workout

- 1 From the watch face, select **START**.
- 2 Select an activity.
- 3 Select **Options > Workouts > Intervals > Do Workout**.
- 4 Select **START** to start the activity timer.
- 5 When your interval workout has a warm up, select **BACK** to begin the first interval.
- 6 Follow the on-screen instructions.

After you complete all of the intervals, a message appears.

### Stopping an Interval Workout

- At any time, select **BACK** to stop the current interval or rest period and transition to the next interval or rest period.
- After all intervals and rest periods are complete, select **BACK** to end the interval workout and transition to a timer that can be used for cool down.
- At any time, select **STOP** to stop the activity timer. You can resume the timer or end the interval workout.

## Using Run and Walk Intervals

**NOTE:** You must set up the run/walk intervals before starting a run. After you start the run timer, you cannot change the settings.

- 1 From the watch face, select **START**.
- 2 Select a running activity.  
**NOTE:** Walk break alerts are available only for running activities.
- 3 Select **Options > Alerts > Run/Walk**.
- 4 Set the run time for each interval.
- 5 Set the walk time for each interval.
- 6 Go for a run.

Each time you complete an interval, a message appears. The device also beeps or vibrates if audible tones are turned on ([Setting the Device Sounds](#), page 14). After you turn on the run/walk intervals, it is used each time you go for a run until you turn it off or enable a different run mode.

## Training Indoors

You can turn off GPS when you are training indoors or to save battery life. When running or walking with GPS turned off, speed and distance are calculated using the accelerometer in the device. The accelerometer is self-calibrating. The accuracy of the speed and distance data improves after a few outdoor runs using GPS.

When cycling with GPS turned off, speed and distance data are not available unless you have an optional sensor that sends speed and distance data to the device, such as a speed or cadence sensor.

- 1 From the watch face, select **START**.
- 2 Select an activity.
- 3 Select **Options > GPS > Off**.  
**NOTE:** If you select an activity that is typically done indoors, GPS is automatically turned off.

### Calibrating the Treadmill Distance

To record more accurate distances for your treadmill runs, you can calibrate the treadmill distance after you run at least 1.5 km (1 mi.) on a treadmill. If you use different treadmills, you can manually calibrate the treadmill distance on each treadmill or after each run.

- 1 Start a treadmill activity ([Starting an Activity](#), page 1), and run at least 1.5 km (1 mi.) on the treadmill.

- 2 After you complete your run, select **STOP**.
- 3 Select an option:
  - To calibrate the treadmill distance the first time, select **Save**.  
The device prompts you to complete the treadmill calibration.
  - To manually calibrate the treadmill distance after the first-time calibration, select **Calibrate & Save > Yes**.
- 4 Check the treadmill display for the distance traveled, and enter the distance on your device.

## Personal Records

When you complete an activity, the device displays any new personal records you achieved during that activity. Personal records include your fastest time over several typical race distances and longest run or ride.

### Viewing Your Personal Records

- 1 From the watch face, hold **UP**.
- 2 Select **History > Records**.
- 3 Select a sport.
- 4 Select a record.
- 5 Select **View Record**.

### Restoring a Personal Record

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

- 1 From the watch face, hold **UP**.
- 2 Select **History > Records**.
- 3 Select a sport.
- 4 Select a record to restore.
- 5 Select **Previous > Yes**.

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

### Clearing a Personal Record

- 1 From the watch face, hold **UP**.
- 2 Select **History > Records**.
- 3 Select a sport.
- 4 Select a record to delete.
- 5 Select **Clear Record > Yes**.

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

### Clearing All Personal Records

- 1 From the watch face, hold **UP**.
- 2 Select **History > Records**.
- 3 Select a sport.
- 4 Select **Clear All Records > Yes**.

The records are deleted for that sport only.

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

## Activity Tracking

The activity tracking feature records your daily step count, distance traveled, intensity minutes, calories burned, and sleep statistics for each recorded day. Your calories burned includes your base metabolism plus activity calories.

The number of steps taken during the day appears on the steps widget. The step count is updated periodically.

For more information about activity tracking and fitness metric accuracy, go to [garmin.com/ataccuracy](http://garmin.com/ataccuracy).

## Auto Goal

Your device creates a daily step goal automatically, based on your previous activity levels. As you move during the day, the device shows your progress toward your daily goal ①.



If you choose not to use the auto goal feature, you can set a personalized step goal on your Garmin Connect account.

## Using the Move Alert

Sitting for prolonged periods of time can trigger undesirable metabolic state changes. The move alert reminds you to keep moving. After one hour of inactivity, Move! and the red bar appear. Additional segments appear after every 15 minutes of inactivity. The device also beeps or vibrates if audible tones are turned on (*Setting the Device Sounds, page 14*).

Go for a short walk (at least a couple of minutes) to reset the move alert.

### Turning on the Move Alert

- 1 From the watch face, hold **UP**.
- 2 Select **⚙ > Activity Tracking > Move Alert > On**.

## Garmin Move IQ™ Events

The Move IQ feature automatically detects activity patterns, such as walking, running, biking, swimming, and elliptical training, for at least 10 minutes. You can view the event type and duration on your Garmin Connect timeline, but they do not appear in your activities list, snapshots, or newsfeed. For more detail and accuracy, you can record a timed activity on your device.

## Intensity Minutes

To improve your health, organizations such as the World Health Organization recommend at least 150 minutes per week of moderate intensity activity, such as brisk walking, or 75 minutes per week of vigorous intensity activity, such as running.

The device monitors your activity intensity and tracks your time spent participating in moderate to vigorous intensity activities (heart rate data is required to quantify vigorous intensity). You can work toward achieving your weekly intensity minutes goal by participating in at least 10 consecutive minutes of moderate to vigorous intensity activities. The device adds the amount of moderate activity minutes with the amount of vigorous activity minutes. Your total vigorous intensity minutes are doubled when added.

### Earning Intensity Minutes

Your Forerunner device calculates intensity minutes by comparing your heart rate data to your average resting heart rate. If heart rate is turned off, the device calculates moderate intensity minutes by analyzing your steps per minute.

- Start a timed activity for the most accurate calculation of intensity minutes.
- Exercise for at least 10 consecutive minutes at a moderate or vigorous intensity level.
- Wear your device all day and night for the most accurate resting heart rate.



## Sleep Tracking

While you are sleeping, the device automatically detects your sleep and monitors your movement during your normal sleep hours. You can set your normal sleep hours in the user settings on your Garmin Connect account. Sleep statistics include total hours of sleep, sleep levels, and sleep movement. You can view your sleep statistics on your Garmin Connect account.

**NOTE:** Naps are not added to your sleep statistics. You can use do not disturb mode to turn off notifications and alerts, with the exception of alarms ([Using Do Not Disturb Mode, page 5](#)).

### Using Automated Sleep Tracking

- 1 Wear your device while sleeping.
- 2 Upload your sleep tracking data to the Garmin Connect site ([Garmin Connect, page 10](#)).

You can view your sleep statistics on your Garmin Connect account.

### Using Do Not Disturb Mode

You can use do not disturb mode to turn off the backlight, tone alerts, and vibration alerts. For example, you can use this mode while sleeping or watching a movie.

**NOTE:** You can set your normal sleep hours in the user settings on your Garmin Connect account. You can enable the Sleep Time option in the system settings to automatically enter do not disturb mode during your normal sleep hours ([System Settings, page 13](#)).

- 1 Hold **LIGHT**.
- 2 Select **Do Not Disturb**.

## Smart Features

### Bluetooth Connected Features

The Forerunner device has several Bluetooth connected features for your compatible smartphone using the Garmin Connect app.

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

**Audio prompts:** Allows the Garmin Connect app to play status announcements, such as mile splits and other data, on your smartphone during a run or other activity.

**Find my phone:** Locates your lost smartphone that is paired with your Forerunner device and currently within range.

**Find my watch:** Locates your lost Forerunner device that is paired with your smartphone and currently within range.

**Music controls:** Allows you to control the music player on your smartphone.

**Phone notifications:** Displays phone notifications and messages on your Forerunner device.

**Safety and tracking features:** Allows you to send messages and alerts to friends and family, as well as request assistance from emergency contacts set up in the Garmin Connect app. For more information, go to [Safety and Tracking Features, page 6](#).


**Social media interactions:** Allows you to post an update to your favorite social media website when you upload an activity to the Garmin Connect app.

**Software updates:** Allows you to update your device software.

**Weather updates:** Sends real-time weather conditions and notifications to your device.

**Workout downloads:** Allows you to browse for workouts in the Garmin Connect app and wirelessly send them to your device.

### Manually Syncing Data with Garmin Connect

- 1 Hold **LIGHT** to view the controls menu.
- 2 Select .

### Widgets

Your device comes preloaded with widgets that provide at-a-glance information. Some widgets require a Bluetooth connection to a compatible smartphone.

Some widgets are not visible by default. You can add them to the widget loop manually ([Customizing the Widget Loop, page 12](#)).

**Body Battery™:** Displays your current Body Battery level and a graph of your Body Battery levels for the last several hours.

**Calendar:** Displays upcoming meetings from your smartphone calendar.

**Calories:** Displays your calorie information for the current day.

**Garmin coach:** Displays scheduled workouts when you select a Garmin coach training plan in your Garmin Connect account.

**Health stats:** Displays a dynamic summary of your current health statistics. The measurements includes heart rate, Body Battery level, stress, and more.

**Heart rate:** Displays your current heart rate in beats per minute (bpm) and a graph of your heart rate.

**History:** Displays your activity history and a graph of your recorded activities.

**Intensity minutes:** Tracks your time spent participating in moderate to vigorous activities, your weekly intensity minutes goal, and progress toward your goal.

**Last activity:** Displays a brief summary of your last recorded activity, such as your last run, last ride, or last swim.

**Music controls:** Provides music player controls for your smartphone.

**My day:** Displays a dynamic summary of your activity today. The metrics include timed activities, intensity minutes, steps, calories burned, and more.

**Notifications:** Alerts you to incoming calls, texts, social network updates, and more, based on your smartphone notification settings.

**Steps:** Tracks your daily step count, step goal, and data for previous days.

**Stress:** Displays your current stress level and a graph of your stress level. You can do a breathing activity to help you relax.

**Weather:** Displays the current temperature and weather forecast.

### Viewing the Widgets

Your device comes preloaded with widgets that provide at-a-glance information. Some widgets require a Bluetooth connection to a compatible smartphone.

- From the watch face, select **UP** or **DOWN** to view the widgets.  
Available widgets include heart rate and activity tracking.
- Select **START** to view additional options and functions for a widget.

### About My Day

The My Day widget is a daily snapshot of your activity. This is a dynamic summary that updates throughout the day. The metrics include your last recorded sport, intensity minutes for the week, steps, calories burned, and more. You can select **START** to view additional metrics.

### Health Stats Widget

The Health Stats widget provides an at-a-glance view of your health data. This is a dynamic summary that updates throughout the day. The metrics include your heart rate, stress level, and

Body Battery level. You can select **START** to view additional metrics.


### Viewing the Weather Widget

Weather requires a Bluetooth connection to a compatible smartphone.

- 1 From the watch face, select **UP** or **DOWN** to view the weather widget.
- 2 Select **START** to view hourly weather data.
- 3 Select **DOWN** to view daily weather data.

## Locating a Lost Mobile Device




You can use this feature to help locate a lost mobile device that is paired using Bluetooth wireless technology and currently within range.

- 1 Hold **LIGHT** to view the controls menu.
- 2 Select .

The Forerunner device begins searching for your paired mobile device. An audible alert sounds on your mobile device, and the Bluetooth signal strength displays on the Forerunner device screen. The Bluetooth signal strength increases as you move closer to your mobile device.


- 3 Select **BACK** to stop searching.

## Controlling Music Playback on a Connected Smartphone

- 1 On your smartphone, start playing a song or playlist.
- 2 Hold **DOWN** from any screen to open the music controls.
- 3 Select an option:
  - Select  to play and pause the current music track.
  - Select  to skip to the next music track.
  - Select  to open more music controls, such as volume and previous track.

## Enabling Bluetooth Notifications

Before you can enable notifications, you must pair the Forerunner device with a compatible mobile device (*Pairing Your Smartphone with Your Device, page 1*).

- 1 From the watch face, hold **UP**.
- 2 Select  > **Phone** > **Notifications** > **Status** > **On**.
- 3 Select **During Activity**.
- 4 Select a notification preference.
- 5 Select a sound preference.
- 6 Select **Not During Activity**.
- 7 Select a notification preference.
- 8 Select a sound preference.

### Viewing Notifications

- 1 From the watch face, select **UP** or **DOWN** to view the notifications widget.
- 2 Select **START**.
- 3 Select a notification.
- 4 Select **DOWN** for more options.
- 5 Select **BACK** to return to the previous screen.

### Managing Notifications


You can use your compatible smartphone to manage notifications that appear on your Forerunner device.

Select an option:

- If you are using an iPhone® device, go to the iOS® notifications settings to select the items to show on the device.

- If you are using an Android™ smartphone, from the Garmin Connect app, select **Settings** > **Smart Notifications**.

## Turning Off the Bluetooth Smartphone Connection


- 1 Hold **LIGHT** to view the controls menu.
- 2 Select  to turn off the Bluetooth smartphone connection on your Forerunner device.

Refer to the owner's manual for your mobile device to turn off Bluetooth wireless technology on your mobile device.

## Turning On and Off Smartphone Connection Alerts


You can set the Forerunner device to alert you when your paired smartphone connects and disconnects using Bluetooth technology.

**NOTE:** Smartphone connection alerts are turned off by default.

- 1 From the watch face, hold **UP**.
- 2 Select  > **Phone** > **Connected Alerts** > **On**.

## Syncing Activities

You can sync activities from other Garmin devices to your Forerunner device using your Garmin Connect account. This allows your device to more accurately reflect your training status and fitness. For example, you can record a ride with an Edge® device, and view your activity details on your Forerunner device.



- 1 From the watch face, hold **UP**.
- 2 Select  > **User Profile** > **Physio TrueUp**.

When you sync your device with your smartphone, recent activities from your other Garmin devices appear on your Forerunner device.

## Playing Audio Prompts During Your Activity

Before you can set up audio prompts, you must have a smartphone with the Garmin Connect app paired to your Forerunner device.

You can set the Garmin Connect app to play motivational status announcements and training alerts on your smartphone during a run or other activity. During an audio prompt, the Garmin Connect app mutes the primary audio of the smartphone to play the announcement. You can customize the volume levels on the Garmin Connect app.

- 1 From the Garmin Connect app, select  or .
- 2 Select **Garmin Devices**.
- 3 Select your device.
- 4 Select **Activity Options** > **Audio Prompts**.
- 5 Select an option.

## Safety and Tracking Features

### ⚠ CAUTION

Incident detection and assistance are supplemental features 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.

The Forerunner device has safety and tracking features that must be set up with the Garmin Connect app.

### NOTICE

To use these features, you must be connected to the Garmin Connect app using Bluetooth technology. You can enter emergency contacts in your Garmin Connect account.

For more information about incident detection and assistance, go to [garmin.com/safety](https://garmin.com/safety).

**Assistance:** Allows you to send an automated message with your name, LiveTrack link, and GPS location to your emergency contacts.

**Incident detection:** When the Forerunner device detects an incident during an outdoor walk, run, or bike activity, the device sends an automated message, LiveTrack link, and GPS location to your emergency contacts.



**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.

**Live Event Sharing:** Allows you to send messages to friends and family during an event, providing real-time updates.


**NOTE:** This feature is available only if your device is connected to an Android smartphone.

### 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.

### Turning Incident Detection On and Off

- 1 From the watch face, hold **UP**.
- 2 Select  > **Safety > Incident Detection**.
- 3 Select an activity.

**NOTE:** Incident detection is available only for outdoor walk, run, and bike activities.

When an incident is detected by your Forerunner 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 indicating your contacts will be informed after 30 seconds have elapsed. You can select **Cancel** before the countdown is complete to cancel the message.

### Requesting Assistance

Before you can request assistance, you must set up emergency contacts ([Adding Emergency Contacts, page 7](#)).

- 1 Hold the **LIGHT** key.
- 2 When you feel three vibrations, release the key to activate the assistance feature.

The countdown screen appears.

**TIP:** You can select **Cancel** before the countdown is complete to cancel the message.

## Heart Rate Features

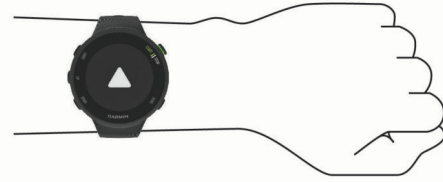
The Forerunner device has a wrist-based heart rate monitor and is also compatible with ANT+® chest heart rate monitors. You can view wrist-based heart rate data on the heart rate widget. When both wrist-based heart rate and ANT+ heart rate data are available, your device uses the ANT+ heart rate data.

### Wrist-based Heart Rate

#### Wearing the Device

- Wear the device above your wrist bone.

**NOTE:** The device should be snug but comfortable. For more accurate heart rate readings, the device should not move while running or exercising.



**NOTE:** The optical sensor is located on the back of the device.

- See [Tips for Erratic Heart Rate Data, page 7](#) for more information about wrist-based heart rate.
- For more information about accuracy, go to [garmin.com/ataccuracy](http://garmin.com/ataccuracy).

### Tips for Erratic Heart Rate Data

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

- Clean and dry your arm before putting on the device.
  - Avoid wearing sunscreen, lotion, and insect repellent under the device.
  - Avoid scratching the heart rate sensor on the back of the device.
  - Wear the device above your wrist bone. The device should be snug but comfortable.
  - Warm up for 5 to 10 minutes and get a heart rate reading before starting your activity.
- NOTE:** In cold environments, warm up indoors.
- Rinse the device with fresh water after each workout.

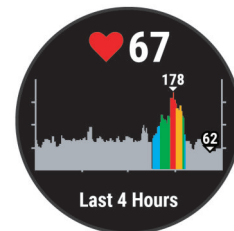
### Viewing the Heart Rate Widget

The widget displays your current heart rate in beats per minute (bpm) and a graph of your heart rate for the last 4 hours.

- 1 From the watch face, select **UP** or **DOWN** to view the heart rate widget.

**NOTE:** You may need to add the widget to your widget loop ([Customizing the Widget Loop, page 12](#)).

- 2 Select **START** to view your average resting heart rate values for the last 7 days.




### Broadcasting Heart Rate Data to Garmin Devices

You can broadcast your heart rate data from your Forerunner device and view it on paired Garmin devices.

**NOTE:** Broadcasting heart rate data decreases battery life.

- 1 From the heart rate widget, hold **UP**.
- 2 Select **Options > Broadcast Heart Rate**.

The Forerunner device starts broadcasting your heart rate data, and  appears.

**NOTE:** You can view only the heart rate widget while broadcasting heart rate data from the heart rate widget.

- 3 Pair your Forerunner device with your Garmin ANT+ compatible device.

**NOTE:** The pairing instructions differ for each Garmin compatible device. See your owner's manual.

**TIP:** To stop broadcasting your heart rate data, select any key, and select Yes.

### Broadcasting Heart Rate Data During an Activity

You can set up your Forerunner device to broadcast your heart rate data automatically when you begin an activity. For example, you can broadcast your heart rate data to an Edge device while cycling, or to a VIRB® action camera during an activity.

**NOTE:** Broadcasting heart rate data decreases battery life.

- 1 From the heart rate widget, hold **UP**.
- 2 Select **Options** > **Broadcast During Activity**.
- 3 Begin an activity (*Starting an Activity, page 1*).

The Forerunner device starts broadcasting your heart rate data in the background.

**NOTE:** There is no indication that the device is broadcasting your heart rate data during an activity.

- 4 If necessary, pair your Forerunner device with your Garmin ANT+ compatible device.

**NOTE:** The pairing instructions differ for each Garmin compatible device. See your owner's manual.

**TIP:** To stop broadcasting your heart rate data, stop the activity.

### Setting an Abnormal Heart Rate Alert

You can set the device to alert you when your heart rate exceeds a certain number of beats per minute (bpm) after a period of inactivity.

- 1 From the heart rate widget, hold **UP**.
- 2 Select **Options** > **Abnormal HR Alert** > **Status** > **On**.
- 3 Select **Alert Threshold**.
- 4 Select a heart rate threshold value.

Each time you exceed the threshold value, a message appears and the device vibrates.

### Turning Off the Wrist-based Heart Rate Monitor

The default value for the Wrist Heart Rate setting is Auto. The device automatically uses the wrist-based heart rate monitor unless you pair an ANT+ heart rate monitor to the device.

- 1 From the heart rate widget, hold **UP**.
- 2 Select **Options** > **Status** > **Off**.

## 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.

If you know your maximum heart rate, you can use the table (*Heart Rate Zone Calculations, page 8*) 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.

### Letting the Device Set Your Heart Rate Zones

The default settings allow the device to detect your maximum heart rate and set your heart rate zones as a percentage of your maximum heart rate.

- Verify that your user profile settings are accurate (*Setting Up Your User Profile, page 11*).
- Run often with the wrist or chest heart rate monitor.
- View your heart rate trends using your Garmin Connect account.

### Setting Your Maximum Heart Rate

The device uses your user profile information from the initial setup to estimate your maximum heart rate and determine your default heart rate zones. The default maximum heart rate is 220 minus your age. For the most accurate calorie data during your activity, you should set your maximum heart rate (if known).

- 1 From the watch face, hold **UP**.
- 2 Select **⚙** > **User Profile** > **Max. HR**.
- 3 Enter your maximum heart rate.

### Customizing Your Heart Rate Zones and Maximum Heart Rate

You can customize your heart rate zones based on your training goals. The device uses your user profile information from the initial setup to estimate your maximum heart rate and determine your default heart rate zones. The default maximum heart rate is 220 minus your age. For the most accurate calorie data during your activity, you should set your maximum heart rate (if known).

- 1 From the Garmin Connect app, select **≡** or **⋮**.
- 2 Select **Garmin Devices**.
- 3 Select your device.
- 4 Select **User Settings** > **Heart Rate Zones** > **Running Zones**.
- 5 Enter your heart rate values for each zone.
- 6 Enter your maximum heart rate.
- 7 Select **Save**.

### 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

## Getting Your VO2 Max. Estimate for Running

This feature requires wrist-based heart rate.

For the most accurate estimate, complete the user profile setup (*Setting Up Your User Profile, page 11*), and set your maximum heart rate (*Setting Your Maximum Heart Rate, page 8*). The estimate may seem inaccurate at first. The device requires a few runs to learn about your running performance.

- 1 Run for at least 10 minutes outdoors.
- 2 After your run, select **Save**.

A notification appears to display your first VO2 max. estimate and each time your VO2 max. increases.



## 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. The Forerunner device requires wrist-based heart rate or a compatible chest heart rate monitor to display your VO2 max. estimate.

On the device, your VO2 max. estimate appears as a number, description, and position on the color gauge. On your Garmin Connect account, you can view additional details about your VO2 max. estimate, including your fitness age. Your fitness age gives you an idea of how your fitness compares with a person of the same gender and different age. As you exercise, your fitness age can decrease over time.



Purple	Superior
Blue	Excellent
Green	Good
Yellow	Fair
Red	Poor

VO2 max. data is provided by FirstBeat. VO2 max. analysis is provided with permission from The Cooper Institute®. For more information, see the appendix ([VO2 Max. Standard Ratings](#), page 17), and go to [www.CooperInstitute.org](http://www.CooperInstitute.org).

## Heart Rate Variability and Stress Level

Stress level is the result of a three-minute test performed while standing still, where the Forerunner device analyzes heart rate variability to determine your overall stress. Training, sleep, nutrition, and general life stress all impact how a runner performs. The stress level range is from 1 to 100, where 1 is a very low stress state and 100 is a very high stress state. Knowing your stress level can help you decide if your body is ready for a tough training run or yoga.

### Using the Stress Level Widget

The stress level widget displays your current stress level and a graph of your stress level for the last several hours. It can also guide you through a breathing activity to help you relax.

- 1 While you are sitting or inactive, select **UP** or **DOWN** to view the stress level widget.
- 2 Select **START**.
  - If your stress level is in the low or medium range, a graph appears showing your stress level for the last four hours.

**TIP:** To start a relaxation activity from the graph, select **DOWN > START**, and enter a duration in minutes.
  - If your stress level is in the high range, a message appears asking you to begin a relaxation activity.
- 3 Select an option:
  - View your stress level graph.

**NOTE:** Blue bars indicate periods of rest. Yellow bars indicate periods of stress. Gray bars indicate times when you were too active to determine your stress level.
  - Select **Yes** to start the relaxation activity, and enter a duration in minutes.

- Select **No** to bypass the relaxation activity and view the stress level graph.

## Body Battery

Your device analyzes your heart rate variability, stress level, sleep quality, and activity data to determine your overall Body Battery level. Like a gas gauge on a car, it indicates your amount of available reserve energy. The Body Battery level range is from 0 to 100, where 0 to 25 is low reserve energy, 26 to 50 is medium reserve energy, 51 to 75 is high reserve energy, and 76 to 100 is very high reserve energy.

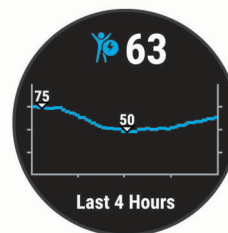
You can sync your device with your Garmin Connect account to view your most up-to-date Body Battery level, long-term trends, and additional details ([Tips for Improved Body Battery Data](#), page 9).

### Viewing the Body Battery Widget

The Body Battery widget displays your current Body Battery level and a graph of your Body Battery level for the last several hours.

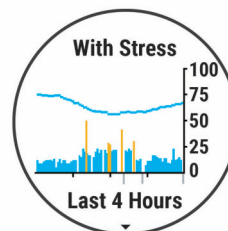
- 1 Select **UP** or **DOWN** to view the Body Battery widget.

**NOTE:** You may need to add the widget to your widget loop ([Customizing the Widget Loop](#), page 12).

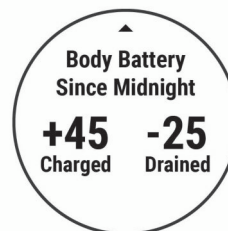


- 2 Select **START** to view a combined graph of your Body Battery and stress level.

Blue bars indicate periods of rest. Orange bars indicate periods of stress. Gray bars indicate times that you were too active to determine your stress level.



- 3 Select **DOWN** to see your Body Battery data since midnight.



### Tips for Improved Body Battery Data

- Your Body Battery level updates when you sync your device with your Garmin Connect account.
- For more accurate results, wear the device while sleeping.
- Rest and good sleep charge your Body Battery.
- Strenuous activity, high stress, and poor sleep can cause your Body Battery to drain.
- Food intake, as well as stimulants like caffeine, has no impact on your Body Battery.

## History

History includes time, distance, calories, average pace or speed, lap data, and optional sensor information.

**NOTE:** When the device memory is full, your oldest data is overwritten.

### Viewing History

History contains previous activities you have saved on your device.

The device has a history widget for quick access to your activity data (*Customizing the Widget Loop, page 12*).

- 1 From the watch face, hold **UP**.
- 2 Select **History**.
- 3 Select **This Week** or **Previous Weeks**.
- 4 Select an activity.
- 5 Select **DOWN** to view additional details about the activity.

### Deleting History

- 1 From the watch face, hold **UP**.
  - 2 Select **History > Options**.
  - 3 Select an option:
    - Select **Delete All Activities** to delete all activities from the history.
    - Select **Reset Totals** to reset all distance and time totals.
- NOTE:** This does not delete any saved activities.

### Viewing Data Totals

You can view the accumulated distance and time data saved to your device.

- 1 From the watch face, hold **UP**.
- 2 Select **History > Totals**.
- 3 If necessary, select an activity.
- 4 Select an option to view weekly or monthly totals.

### Data Management

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

#### 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.

### 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, hikes, and more. To sign up for a free account, go to [www.garminconnect.com](http://www.garminconnect.com).

**Store your activities:** After you complete and save an activity with your device, you can upload that activity to your Garmin Connect account 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, an overhead map view, pace and speed charts, and customizable reports.



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

**Track your progress:** You can track your daily steps, join a friendly competition with your connections, and meet your goals.

**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.

**Manage your settings:** You can customize your device and user settings on your Garmin Connect account.

#### Syncing Your Data with the Garmin Connect App

Your device periodically syncs data with the Garmin Connect app automatically. You can also manually sync your data at any time.

- 1 Bring the device within 3 m (10 ft.) of your smartphone.
- 2 From any screen, hold **LIGHT** to view the controls menu.
- 3 Select **☰**.
- 4 View your current data in the Garmin Connect app.

#### Using Garmin Connect on Your Computer

The Garmin Express™ application connects your device to your Garmin Connect account using a computer. You can use the Garmin Express application to upload your activity data to your Garmin Connect account and to send data, such as workouts or training plans, from the Garmin Connect website to your device.

- 1 Connect the device to your computer using the USB cable.
- 2 Go to [www.garmin.com/express](http://www.garmin.com/express).
- 3 Download and install the Garmin Express application.
- 4 Open the Garmin Express application, and select **Add Device**.
- 5 Follow the on-screen instructions.



## 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>.

### Pairing Your ANT+ Sensors

The first time you connect a wireless sensor to your device using ANT+ technology, you must pair the device and sensor. After they are paired, the device connects to the sensor automatically when you start an activity and the sensor is active and within range.

- 1 Install the sensor or put on the heart rate monitor. The heart rate monitor does not send or receive data until you put it on.
- 2 Bring the device within 3 m (10 ft.) of the sensor.  
**NOTE:** Stay 10 m (33 ft.) away from other ANT+ sensors while pairing.
- 3 From the watch face, hold **UP**.
- 4 Select **⚙ > Sensors & Accessories > Add New**.
- 5 Select an option:
  - Select **Search All**.
  - Select your sensor type.

After the sensor is paired with your device, the sensor status changes from Searching to Connected. Sensor data appears in the data screen loop or a custom data field.

### Foot Pod

Your device is compatible with the foot pod. You can use the foot pod to record pace and distance instead of using GPS when you are training indoors or when your GPS signal is weak. The foot pod is on standby and ready to send data (like the heart rate monitor).

After 30 minutes of inactivity, the foot pod powers off to conserve the battery. When the battery is low, a message appears on your device. Approximately five hours of battery life remain.

### Going for a Run Using a Foot Pod

Before you go for a run, you must pair the foot pod with your Forerunner device (*Pairing Your ANT+ Sensors*, page 11).

You can run indoors using a foot pod to record pace, distance, and cadence. You can also run outdoors using a foot pod to record cadence data with your GPS pace and distance.

- 1 Install your foot pod according to the accessory instructions.
- 2 Select a running activity.
- 3 Go for a run.

### Foot Pod Calibration

The foot pod is self-calibrating. The accuracy of the speed and distance data improves after a few outdoor runs using GPS.

#### Improving Foot Pod Calibration

Before you can calibrate your device, you must acquire GPS signals and pair your device with the foot pod (*Pairing Your ANT+ Sensors*, page 11).

The foot pod is self-calibrating, but you can improve the accuracy of the speed and distance data with a few outdoor runs using GPS.

- 1 Stand outside for 5 minutes with a clear view of the sky.
- 2 Start a running activity.
- 3 Run on a track without stopping for 10 minutes.
- 4 Stop your activity, and save it.

Based on the recorded data, the foot pod calibration value changes, if necessary. You should not need to calibrate the foot pod again unless your running style changes.

### Calibrating Your Foot Pod Manually

Before you can calibrate your device, you must pair your device with the foot pod sensor (*Pairing Your ANT+ Sensors*, page 11). Manual calibration is recommended if you know your calibration factor. If you have calibrated a foot pod with another Garmin product, you may know your calibration factor.

- 1 From the watch face, hold **UP**.
- 2 Select **⚙ > Sensors & Accessories**.
- 3 Select your foot pod.
- 4 Select **Cal. Factor > Set Value**.
- 5 Adjust the calibration factor:
  - Increase the calibration factor if your distance is too low.
  - Decrease the calibration factor if your distance is too high.

### Setting Foot Pod Speed and Distance

Before you can customize the foot pod speed and distance, you must pair your device with the foot pod sensor (*Pairing Your ANT+ Sensors*, page 11).

You can set your device to calculate speed and distance using your foot pod data instead of GPS data.

- 1 From the watch face, hold **UP**.
- 2 Select **⚙ > Sensors & Accessories**.
- 3 Select your foot pod.
- 4 Select **Speed** or **Distance**.
- 5 Select an option:
  - Select **Indoor** when you are training with GPS turned off, usually indoors.
  - Select **Always** to use your foot pod data regardless of the GPS setting.

### Using an Optional Bike Speed or Cadence Sensor

You can use a compatible bike speed or cadence sensor to send data to your device.

- Pair the sensor with your device (*Pairing Your ANT+ Sensors*, page 11).
- Set your wheel size (*Wheel Size and Circumference*, page 18).
- Go for a ride (*Starting an Activity*, page 1).

## Customizing Your Device

### Setting Up Your User Profile

You can update your height, weight, birth year, gender, and maximum heart rate settings (*Setting Your Maximum Heart Rate*, page 8). The device uses this information to calculate training data.

- 1 From the watch face, hold **UP**.
- 2 Select **⚙ > User Profile**.
- 3 Select an option.

### Activity Options

Activity options are a collection of settings that optimize your device based on how you are using it. For example, the settings and data screens are different when you are using the device for running than for riding your bike.

When you are using an activity and you change settings such as data fields or alerts, the changes are saved automatically as part of the activity.

## Customizing Your Activity Options

You can customize your settings, data fields, and more for a particular activity.

- 1 From the watch face, select **START**.
- 2 Select an activity.
- 3 Select **Options**.
- 4 Select an option:


**NOTE:** Not all options are available for all activities.

- Select **Workouts** to do, view, or edit a workout (*Following a Workout, page 2*).
- Select **Data Screens** to customize the data screens and data fields (*Customizing the Data Fields, page 12*).
- Select **Alerts** to customize your training alerts (*Alerts, page 12*).
- Select **Laps** to set how laps are triggered (*Marking Laps by Distance, page 12*).
- Select **Auto Pause** to change when the activity timer automatically pauses (*Using the Auto Pause® Feature, page 13*).
- Select **GPS** to turn off GPS (*Training Indoors, page 3*) or change the satellite setting (*Changing the GPS Setting, page 13*).

All changes are saved to the activity.

## Changing Your Displayed Activities

Your device has default activities, such as Run and Bike. You can select additional activities to display on the device.

- 1 From the Garmin Connect app, select  or **...**.
- 2 Select **Garmin Devices**.
- 3 Select your device.
- 4 Select **Activity Options > Displayed Activities > Edit**.
- 5 Select the activities to display on your device.
- 6 Select **Done**.

Sync your device with the Garmin Connect app to view the updated activities (*Manually Syncing Data with Garmin Connect, page 5*).


## Customizing the Data Fields

You can customize data fields based on your training goals or optional accessories. For example, you can customize data fields to display your lap pace and heart rate zone.

- 1 Select **START**, and select an activity profile.
- 2 Select **Options > Data Screens**.
- 3 Select a page.
- 4 Select a data field to change it.

## Customizing the Widget Loop

You can change the order of widgets in the widget loop, remove widgets, and add new widgets.

- 1 From the watch face, hold **UP**.
- 2 Select  **> Widgets**.
- 3 Select a widget.
- 4 Select an option:
  - Select **Reorder** to change the location of the widget in the widget loop.
  - Select **Remove** to remove the widget from the widget loop.
- 5 Select **Add Widgets**.
- 6 Select a widget.

The widget is added to the widget loop.

## Alerts

You can use alerts to train toward specific heart rate, time, distance, calories, and pace goals and to set run/walk time intervals.

### 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 From the watch face, select **START**.
- 2 Select an activity.
- 3 Select **Options > Alerts > Add New**.
- 4 Select **Time, Distance, or Calories**.
- 5 Turn on the alert.
- 6 Select or enter a value.

Each time you reach the alert value, a message appears. The device also beeps or vibrates if audible tones are turned on (*Setting the Device Sounds, page 14*).

### Setting Your Heart Rate Alerts

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 From the watch face, select **START**.
- 2 Select an activity.
- 3 Select **Options > Alerts > Add New > Heart Rate**.
- 4 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 or vibrates if audible tones are turned on (*Setting the Device Sounds, page 14*).

## Marking Laps by Distance

You can set your device to use the Auto Lap® feature, which marks a lap automatically at every kilometer or mile. You can also mark laps manually. This feature is helpful for comparing your performance during different parts of an activity.

- 1 From the watch face, select **START**.
- 2 Select an activity.
- 3 Select **Options > Laps > Auto Lap**.

Each time you complete a lap, a message appears that displays the time for that lap. The device also beeps or vibrates if audible tones are turned on (*Setting the Device Sounds, page 14*). The Auto Lap feature stays on for the selected activity profile until you turn it off.

If necessary, you can customize the data screens to display additional lap data (*Customizing the Data Fields, page 12*).

## Turning on the Lap Key

You can customize BACK to function as a lap key during timed activities.

- 1 Select **START**, and select an activity profile.
- 2 Select **Options > Laps > Lap Key**.

The lap key stays on for the selected activity profile until you turn off the lap key.

## Using the Auto Pause® Feature

You can use the Auto Pause feature to pause the activity 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:** History is not recorded while the timer is stopped or paused.

- 1 From the watch face, select **START**.
- 2 Select an activity.
- 3 Select **Options** > **Auto Pause** > **When Stopped**.

The Auto Pause feature stays on for the selected activity until you turn it off.

## Changing the GPS Setting

By default, the device uses GPS to locate satellites. For more information about GPS, go to [www.garmin.com/aboutGPS](http://www.garmin.com/aboutGPS).

- 1 From the watch face, select **START**.
- 2 Select an activity.
- 3 Select **Options** > **GPS**.
- 4 Select an option:
  - Select **GPS Only** to enable the GPS satellite system.
  - Select **GPS + GLONASS** (Russian satellite system) for more accurate position information in situations with poor sky visibility.
  - Select **GPS + GALILEO** (European Union satellite system) for more accurate position information in situations with poor sky visibility.

**NOTE:** Using GPS and another satellite together can reduce battery life more quickly than using GPS only (*GPS and Other Satellite Systems*, page 13).

## GPS and Other Satellite Systems

Using GPS and another satellite system together offers increased performance in challenging environments and faster position acquisition than using GPS only. However, using multiple systems can reduce battery life more quickly than using GPS only.

Your device can use these Global Navigation Satellite Systems (GNSS).

**GPS:** A satellite constellation built by the United States.

**GLONASS:** A satellite constellation built by Russia.

**GALILEO:** A satellite constellation built by the European Space Agency.

## Activity Tracking Settings

From the watch face, hold **UP**, and select **⚙** > **Activity Tracking**.

**Status:** Turns off the activity tracking features.

**Move Alert:** Displays a message and the move bar on the digital watch face and steps screen. The device also beeps or vibrates if audible tones are turned on (*Setting the Device Sounds*, page 14).

**Goal Alerts:** Allows you to turn on and off goal alerts, or turn them off only during activities. Goal alerts appear for your daily steps goal and weekly intensity minutes goal.

**Move IQ:** Allows your device to automatically start and save a timed walking or running activity when the Move IQ feature detects familiar movement patterns.

## Turning Off Activity Tracking

When you turn off activity tracking, your steps, intensity minutes, sleep tracking, and Move IQ events are not recorded.

- 1 From the watch face, hold **UP**.
- 2 Select **⚙** > **Activity Tracking** > **Status** > **Off**.

## Watch Face Settings

You can customize the appearance of the watch face by selecting the layout and accent color. You can also download custom watch faces from the Connect IQ™ store.

### Customizing the Watch Face

You can customize the watch face information and appearance.

- 1 From the watch face, hold **UP**.
- 2 Select **Watch Face**.
- 3 Select **UP** or **DOWN** to preview the watch face options.
- 4 Select **START**.
- 5 Select **Accent Color** to change the accent color (optional).
- 6 Select **Apply**.

### Downloading Connect IQ Features

Before you can download features from the Connect IQ app, you must pair your Forerunner device with your smartphone (*Pairing Your Smartphone with Your Device*, page 1).

- 1 From the app store on your smartphone, install and open the Connect IQ app.
- 2 If necessary, select your device.
- 3 Select a Connect IQ feature.
- 4 Follow the on-screen instructions.

### Downloading Connect IQ Features Using Your Computer

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

## System Settings

Hold **UP**, and select **⚙** > **System**.

**Language:** Sets the language displayed on the device.

**Time:** Adjusts the time settings (*Time Settings*, page 13).

**Backlight:** Adjusts the backlight settings (*Changing the Backlight Settings*, page 14).

**Sounds:** Sets the device sounds, such as key tones, alerts, and vibrations (*Setting the Device Sounds*, page 14).

**Do Not Disturb:** Turns on or off do not disturb mode. You can use the **Sleep Time** option to turn on do not disturb mode automatically during your normal sleep hours. You can set your normal sleep hours on your Garmin Connect account (*Using Do Not Disturb Mode*, page 5).

**Units:** Sets the units of measure used on the device (*Changing the Units of Measure*, page 14).

**Format:** Sets the device to display **Pace/Speed Preference** for running, cycling, or other activities. This preference affects several training options, history, and alerts (*Displaying Pace or Speed*, page 14) You can also change the **Start of Week** setting.

**Software Update:** Allows you to install software updates downloaded using Garmin Express or the Garmin Connect app (*Updating the Software Using the Garmin Connect App*, page 15).

**Reset:** Allows you to reset user data and settings (*Resetting All Default Settings*, page 16).

### Time Settings

Hold **UP**, and select **⚙** > **System** > **Time**.

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

**Set Time:** Allows you to set the time manually or automatically based on your paired mobile device or GPS location.

## Time Zones

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

## Changing the Backlight Settings

- 1 From the watch face, hold **UP**.
- 2 Select **⚙️** > **System** > **Backlight**.
- 3 Select an option:
  - Select **During Activity**.
  - Select **Not During Activity**.
- 4 Select an option:
  - Select **Keys** to turn on the backlight for key presses.
  - Select **Alerts** to turn on the backlight for alerts.
  - Select **Gesture** to turn on the backlight by raising and turning your arm to look at your wrist.
  - Select **Timeout** to set the length of time before the backlight turns off.

## Setting the Device Sounds

You can set the device to sound a tone or vibration when keys are selected or when an alert is triggered.

- 1 From the watch face, hold **UP**.
- 2 Select **⚙️** > **System** > **Sounds**.
- 3 Select an option:
  - Select **Key Tones** to turn the key tones on and off.
  - Select **Alert Tones** to enable the alert tones settings.
  - Select **Vibration** to turn device vibration on and off.
  - Select **Key Vibe** to enable vibration when you select a key.

## Displaying Pace or Speed

You can change the type of information that appears in your activity summary and history.

- 1 From the watch face, hold **UP**.
- 2 Select **⚙️** > **System** > **Format** > **Pace/Speed Preference**.
- 3 Select an activity.

## Changing the Units of Measure

You can customize units of measure for distance.

- 1 From the watch face, hold **UP**.
- 2 Select **⚙️** > **System** > **Units**.
- 3 Select **Miles** or **Kilometers**.

## Clock

### Setting the Time Manually

- 1 From the watch face, hold **UP**.
- 2 Select **⚙️** > **System** > **Time** > **Set Time** > **Manual**.
- 3 Select **Time**, and enter the time of day.

### Setting an Alarm

You can set multiple alarms. You can set each alarm to sound once or to repeat regularly.

- 1 From the watch face, hold **UP**.
- 2 Select **Alarm Clock** > **Add Alarm**.
- 3 Select **Time**, and enter the alarm time.
- 4 Select **Repeat**, and select when the alarm should repeat (optional).
- 5 Select **Sounds**, and select a type of notification (optional).
- 6 Select **Backlight** > **On** to turn on the backlight with the alarm.
- 7 Select **Label**, and select a description for the alarm (optional).

## Deleting an Alarm

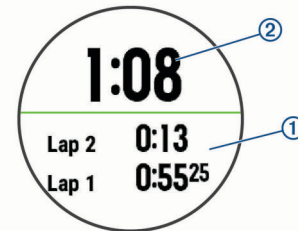
- 1 From the watch face, hold **UP**.
- 2 Select **Alarm Clock**.
- 3 Select an alarm.
- 4 Select **Delete**.

## Starting the Countdown Timer

- 1 From any screen, hold **LIGHT**.
- 2 Select **Timer**.
- 3 Enter the time.
- 4 If necessary, select **Restart** > **On** to automatically restart the timer after it expires.
- 5 If necessary, select **Sounds**, and select a type of notification.
- 6 Select **Start Timer**.

## Using the Stopwatch

- 1 From any screen, hold **LIGHT**.
- 2 Select **Stopwatch**.
- 3 Select **START** to start the timer.
- 4 Select **BACK** to restart the lap timer ①.



The total stopwatch time ② continues running.

- 5 Select **START** to stop both timers.
- 6 Select an option.
- 7 Save the recorded time as an activity in your history (optional).

## Device Information

### Viewing Device Information

You can view device information, such as the unit ID, software version, regulatory information, and license agreement.

- 1 From the watch face, hold **UP**.
- 2 Select **⚙️** > **About**.

### Charging the Device

#### ⚠️ 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.

#### NOTICE

To prevent corrosion, thoroughly clean and dry the contacts and the surrounding area before charging or connecting to a computer. Refer to the cleaning instructions in the appendix.

- 1 Plug the small end of the USB cable into the charging port on your device.





- 2 Plug the large end of the USB cable into a USB charging port.
- 3 Charge the device completely.

### Tips for Charging the Device

- 1 Connect the charger securely to the device to charge it using the USB cable ([Charging the Device, page 14](#)).  
You can charge the device by plugging the USB cable into a Garmin approved AC adapter with a standard wall outlet or a USB port on your computer. Charging a fully depleted battery takes up to two hours.
- 2 Remove the charger from the device after the battery charge level reaches 100%.

## Device Care

### NOTICE

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

Avoid pressing the keys under water.

Do not use a sharp object to clean the device.

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

Thoroughly rinse the device with fresh water after exposure to chlorine, salt water, sunscreen, cosmetics, alcohol, or other harsh chemicals. Prolonged exposure to these substances can damage the case.

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

### Cleaning the Device

### NOTICE

Even small amounts of sweat or moisture can cause corrosion of the electrical contacts when connected to a charger. Corrosion can prevent charging and data transfer.

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

After cleaning, allow the device to dry completely.

**TIP:** For more information, go to [www.garmin.com/fitandcare](http://www.garmin.com/fitandcare).

### Changing the Bands

You can replace the bands with new Forerunner bands.

- 1 Use a screwdriver to loosen the screws.



- 2 Remove the screws.
- 3 Gently remove the bands.
- 4 Align the new bands.
- 5 Replace the screws using the screwdriver.

## Specifications

Battery type	Rechargeable, built-in lithium-ion battery
Battery life	Up to 7 days for watch mode with smart notifications, activity tracking, and wrist heart rate Up to 13 hr. in GPS mode
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 @ +6 dBm nominal
Water rating	Swim, 5 ATM <sup>1</sup>

## Troubleshooting

### Product Updates

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

This provides easy access to these services for Garmin devices:

- Data uploads to Garmin Connect
- Product registration

### 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 with Your Device, page 1](#)).

Sync your device with the Garmin Connect app ([Manually Syncing Data with Garmin Connect, page 5](#)).

When new software is available, the Garmin Connect app automatically sends the update to your device. The update is applied when you are not actively using the device. When the update is complete, your device restarts.

### Setting Up Garmin Express

- 1 Connect the device to your computer using a USB cable.
- 2 Go to [www.garmin.com/express](http://www.garmin.com/express).
- 3 Follow the on-screen instructions.

### 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.

<sup>1</sup> The device withstands pressure equivalent to a depth of 50 m. For more information, go to [www.garmin.com/waterrating](http://www.garmin.com/waterrating).

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.

## Getting More Information

- Go to [support.garmin.com](https://support.garmin.com) for additional manuals, articles, and software updates.
- Go to [buy.garmin.com](https://buy.garmin.com), or contact your Garmin dealer for information about optional accessories and replacement parts.

## Activity Tracking

For more information about activity tracking accuracy, go to [garmin.com/ataccuracy](https://garmin.com/ataccuracy).

### My daily step count does not appear

The daily step count is reset every night at midnight.

If dashes appear instead of your step count, allow the device to acquire satellite signals and set the time automatically.

### My step count does not seem accurate

If your step count does not seem accurate, you can try these tips.

- Wear the device on your non-dominant wrist.
- Carry the device in your pocket when pushing a stroller or lawn mower.
- Carry the device in your pocket when actively using your hands or arms only.

**NOTE:** The device may interpret some repetitive motions, such as washing dishes, folding laundry, or clapping your hands, as steps.

### The step counts on my device and my Garmin Connect account don't match

The step count on your Garmin Connect account updates when you sync your device.

- 1 Select an option:
  - Sync your step count with the Garmin Connect application (*Using Garmin Connect on Your Computer, page 10*).
  - Sync your step count with the Garmin Connect app (*Manually Syncing Data with Garmin Connect, page 5*).

- 2 Wait while the device syncs your data.

Syncing can take several minutes.

**NOTE:** Refreshing the Garmin Connect app or the Garmin Connect application does not sync your data or update your step count.

### My intensity minutes are flashing

When you exercise at an intensity level that qualifies toward your intensity minutes goal, the intensity minutes flash.

Exercise for at least 10 consecutive minutes at a moderate or vigorous intensity level.

## 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](https://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.

## 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.
  - Sync your device to the Garmin Connect app using your Bluetooth enabled smartphone.

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.

## Restarting the Device

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

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

- 1 Hold **LIGHT** for 15 seconds.

The device turns off.
- 2 Hold **LIGHT** for one second to turn on the device.

## Resetting All Default Settings

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

- 1 From the watch face, hold **UP**.
- 2 Select **⚙ > System > Reset**.
- 3 Select an option:
  - To reset all of the device settings to the factory default values and save all activity information, select **Reset Settings**.
  - To delete all activities from your history, select **Delete All**.

## My device is in the wrong language

- 1 From the watch face, hold **UP**.
- 2 Scroll down to the second-to-last item in the list, and select it.
- 3 Select the first item in the list.
- 4 Select your language.

## Is my smartphone compatible with my device?

The Forerunner device is compatible with smartphones using Bluetooth wireless technology.

Go to [www.garmin.com/ble](https://www.garmin.com/ble) for compatibility information.

## My phone will not connect to the device

If your phone will not connect to the device, you can try these tips.

- Turn off your smartphone and your device, and turn them back on again.
- Enable Bluetooth technology on your smartphone.
- Update the Garmin Connect app to the latest version.
- Remove your device from the Garmin Connect app and the Bluetooth settings on your smartphone to retry the pairing process.
- If you bought a new smartphone, remove your device from the Garmin Connect app on the smartphone you intend to stop using.
- Bring your smartphone within 10 m (33 ft.) of the device.
- On your smartphone, open the Garmin Connect app, select **☰** or **•••**, and select **Garmin Devices > Add Device** to enter pairing mode.
- Select **UP > ⚙ > Phone > Pair Phone**.



## Can I use the cardio activity outdoors?

You can use the cardio activity and turn on GPS for outdoor use.

- 1 Select **START** > **Cardio** > **Options** > **GPS**.
- 2 Select an option.
- 3 Go outside, and wait while the device locates satellites.
- 4 Select **START** to start the activity timer.

GPS stays on for the selected activity until you turn it off.

## Tips for Existing Garmin Connect Users

- 1 From the Garmin Connect app, select ☰ or ⋮.
- 2 Select **Garmin Devices** > **Add Device**.

## Maximizing Battery Life

You can do several things to extend the life of the battery.

- Reduce the backlight timeout (*Changing the Backlight Settings, page 14*).
- Turn off Bluetooth wireless technology when you are not using connected features (*Turning Off the Bluetooth Smartphone Connection, page 6*).
- Turn off activity tracking (*Activity Tracking Settings, page 13*).
- Use a watch face that is not updated every second.

For example, use a watch face without a second hand (*Customizing the Watch Face, page 13*).

- Limit the smartphone notifications the device displays (*Managing Notifications, page 6*).
- Stop broadcasting heart rate data to paired Garmin devices (*Broadcasting Heart Rate Data to Garmin Devices, page 7*).
- Turn off wrist-based heart rate monitoring (*Turning Off the Wrist-based Heart Rate Monitor, page 8*).

**NOTE:** Wrist-based heart rate monitoring is used to calculate vigorous intensity minutes and calories burned.

## How can I manually pair ANT+ sensors?

You can use the device settings to manually pair ANT+ sensors. The first time you connect a sensor to your device using ANT+ wireless technology, you must pair the device and sensor. After they are paired, the device connects to the sensor automatically when you start an activity and the sensor is active and within range.

- 1 Stay 10 m (33 ft.) away from other ANT+ sensors while pairing.
- 2 If you are pairing a heart rate monitor, put on the heart rate monitor.

## 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

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The heart rate monitor does not send or receive data until you put it on.

- 3 Hold **UP**.
- 4 Select ⚙ > **Sensors & Accessories** > **Add New**.
- 5 Select an option:
  - Select **Search All**.
  - Select your sensor type.

After the sensor is paired with your device, a message appears. Sensor data appears in the data page loop or a custom data field.

## Appendix

### Data Fields

Some data fields require ANT+ accessories to display data.

**Average Pace:** The average pace for the current activity.

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

**Cadence:** Running. The steps per minute (right and left).

**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.

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

**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 Distance:** The distance traveled for the current lap.

**Lap Pace:** The average pace for the current lap.

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

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

**Pace:** The current pace.

**Speed:** The current rate of travel.

**Steps:** The number of steps during the current activity.

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

**Timer:** The stopwatch time for the current activity.

## 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)
700 × 40C	2200
700 × 44C	2235
700 × 45C	2242
700 × 47C	2268

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
29 × 2.1	2288
29 × 2.2	2298
29 × 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
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