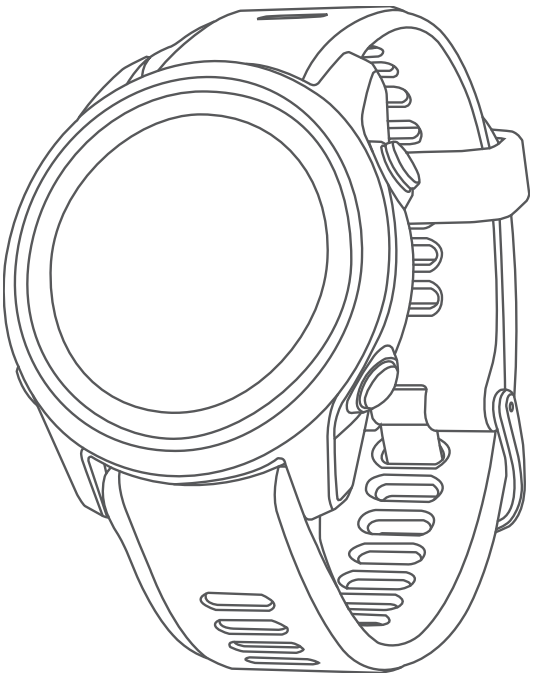
GARMIN®



FORERUNNER® 945 LTE

Owner's Manual

M/N: A03949

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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, rest, or transition during an activity.
4 DOWN	Select to scroll through the widgets, data screens, options, and settings. Hold to open the music controls (*Music*, page 82).
5 UP	Select to scroll through the widgets, data screens, options, and settings. Hold to view the menu. Hold to manually change sports during an activity.

GPS Status and Status Icons

For outdoor activities, the status bar turns green when GPS is ready. A flashing icon means the watch is searching for a signal. A solid icon means the signal was found or the sensor is connected.

GPS	GPS status
	Battery status
	Phone connection status
	Wi-Fi® technology status
	LiveTrack status
	GroupTrack status
	LTE status
	Heart rate status
	Running Dynamics Pod status
	Speed and cadence sensor status
	Bike lights status
	Bike radar status
	Extended display mode status
	Smart trainer status
	Power meter status
	tempe™ sensor status
	VIRB® camera status

Setting Up Your Watch

To take full advantage of the Forerunner features, complete these tasks.

- Pair the Forerunner device with your smartphone using the Garmin Connect™ app (*Pairing Your Phone*, page 70).
- Set up the LTE Subscription for your Forerunner device (*LTE Connected Features*, page 72).
- Set up safety features (*Safety and Tracking Features*, page 79).
- Set up music (*Music*, page 82).
- Set up Wi-Fi networks (*Connecting to a Wi-Fi Network*, page 78).
- Set up your Garmin Pay™ wallet (*Setting Up Your Garmin Pay Wallet*, page 85).

Activities and Apps

Your watch can be used for indoor, outdoor, athletic, and fitness activities. When you start an activity, the watch displays and records sensor data. You can create custom activities or new activities based on default activities (*Creating a Custom Activity*, page 6). When you finish your activities, you can save and share them with the Garmin Connect community.

You can also add Connect IQ™ activities and apps to your watch using the Connect IQ app (*Connect IQ Features*, page 78).

For more information about activity tracking and fitness metric accuracy, go to garmin.com/ataccuracy.

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 Watch*, page 122).

1. Select **START**, and select an activity.
2. Go outside, and wait while the device locates satellites.
3. Select **START** to start the activity timer.
4. Go for a run.

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

   - Select **Resume Later** to suspend the run and continue recording later.
   - Select **Lap** to mark a lap.
   - 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 watch (*Pairing Your Wireless Sensors*, page 100).

1. From the watch face, press **START**.
2. Select an activity.

   NOTE: Activities set as favorites appear first in the list (*Customizing Your Activity List*, page 104).
3. Select an option:
   - Select an activity from your favorites.
   - Select , and select an activity from the extended activity list.
4. If the activity requires GPS signals, go outside to an area with a clear view of the sky, and wait until the watch is ready.

   The watch is ready after it establishes your heart rate, acquires GPS signals (if required), and connects to your wireless sensors (if required).
5. If you are using LTE technology and not bringing your phone, go outside and wait until appears (*Tips for Using LTE Connected Features*, page 128).
6. Press **START** to start the activity timer.

   The device records activity data only while the activity timer is running.

   NOTE: You can hold **DOWN** while in an activity to open the music controls.

Tips for Recording Activities

- Charge the watch before starting an activity (*Charging the Watch*, page 122).
- Press to record laps, start a new set or pose, or advance to the next workout step.
- Press **UP** or **DOWN** to view additional data screens.
- During an activity, hold , and select **Change Sport** to transition to a different activity type.

  When your activity includes two or more sports, it is recorded as a multisport activity.

Stopping an Activity

1. Press **STOP**.
2. Select an option:
   - To resume your activity, select **Resume**.
   - To save the activity and view the details, select **Save**, press **START**, and select an option.

     NOTE: After you save the activity, you can enter self-evaluation data (*Evaluating an Activity*, page 6).
   - To suspend your activity and resume it at a later time, select **Resume Later**.
   - To mark a lap, select **Lap**.
   - To navigate back to the starting point of your activity along the path you traveled, select **Back to Start** > **TracBack**.

     NOTE: This feature is available only for activities that use GPS.
   - To navigate back to the starting point of your activity by the most direct path, select **Back to Start** > **Route**.

     NOTE: This feature is available only for activities that use GPS.
   - To measure the difference between your heart rate at the end of the activity and your heart rate two minutes later, select **Recovery HR**, and wait while the timer counts down.
   - To discard the activity, select **Discard**.

   NOTE: After stopping the activity, the watch saves it automatically after 30 minutes.

Evaluating an Activity

NOTE: This feature is not available for all activities.

You can customize the self-evaluation setting for certain activities (*Enabling Self Evaluation*, page 112).

1. After you complete an activity, select **Save** (*Stopping an Activity*, page 5).
2. Select a number that corresponds with your perceived effort.

   NOTE: You can select » to skip the self evaluation.
3. Select how you felt during the activity.

You can view evaluations in the Garmin Connect app.

Creating a Custom Activity

1. Press **START**.
2. Select **Add**.
3. Select an option:
   - Select **Copy Activity** to create your custom activity starting from one of your saved activities.
   - Select **Other** to create a new custom activity.
4. If necessary, select an activity type.
5. Select a name or enter a custom name.

   Duplicate activity names include a number, for example: Bike(2).
6. Select an option:
   - Select an option to customize specific activity settings. For example, you can customize the data screens or auto features.
   - Select **Done** to save and use the custom activity.
7. Select **Yes** to add the activity to your list of favorites.

Health Snapshot™

The Health Snapshot feature is an activity on your watch that records several key health metrics while you hold still for two minutes. It provides a glimpse of your overall cardiovascular status. The watch records metrics such as your average heart rate, stress level, and respiration rate. You can add the Health Snapshot activity to the list of your favorite activities (*Activities and App Settings*, page 105).

Indoor Activities

The watch can be used for training indoors, such as running on an indoor track or using a stationary bike or indoor trainer. GPS is turned off for indoor activities (*Activities and App Settings*, page 105).

When running or walking with GPS turned off, speed and distance are calculated using the accelerometer in the watch. The accelerometer is self-calibrating. The accuracy of the speed and distance data improves after a few outdoor runs or walks using GPS.

TIP: Holding the handrails of the treadmill reduces accuracy.

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 watch, such as a speed or cadence sensor.

Going for a Virtual Run

You can pair your watch with a compatible third-party app to transmit pace, heart rate, or cadence data.

1. Press **START**.
2. Select **Virtual Run**.
3. On your tablet, laptop, or phone, open the Zwift™ app or another virtual training app.
4. Follow the on-screen instructions to start a running activity and pair the devices.
5. Press **START** to start the activity timer.
6. After you complete your activity, press **STOP**, and select **Save**.

Calibrating the Treadmill Distance

To record more accurate distances for your treadmill runs, you can calibrate the treadmill distance after you run at least 2.4 km (1.5 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 5).
2. Run on the treadmill until your watch records at least 2.4 km (1.5 mi.).
3. After you finish the activity, press **STOP** to stop the activity timer.
4. 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**.
5. Check the treadmill display for the distance traveled, and enter the distance on your watch.

Recording a Strength Training Activity

You can record sets during a strength training activity. A set is multiple repetitions (reps) of a single move. You can create and find strength workouts using Garmin Connect and send them to your watch.

1. Press **START**.
2. Select **Strength**.
   The first time you record a strength training activity, you must select which wrist your watch is on.
3. Select a workout.
   NOTE: If you don't have any strength workouts downloaded to your watch, you can select **Free** > **START**, and go to step 6.
4. Press **DOWN** to view a list of workout steps (optional).
   TIP: While viewing workout steps, you can press START to view an animation of the selected exercise, if available.
5. Press **START** > **Do Workout** > **START** > **Start Workout** to start the set timer.
6. Start your first set.
   The device counts your reps. Your rep count appears when you complete at least four reps.
   TIP: The device can only count reps of a single move for each set. When you want to change moves, you should finish the set and start a new one.
7. Press to finish the set.
   The watch displays the total reps for the set. After several seconds, the rest timer appears.
8. If necessary, edit the number of reps.
   TIP: You can also add the weight used for the set.
9. When you are done resting, press to start your next set.
10. Repeat for each strength training set until your activity is complete.
11. After your last set, press **STOP** to stop the set timer.
12. Select **Stop Workout** > **Save**.

Tips for Recording Strength Training Activities

- Do not look at the watch while performing reps.
  You should interact with the watch at the beginning and end of each set, and during rests.
- Focus on your form while performing reps.
- Perform bodyweight or free weight exercises.
- Perform reps with a consistent, wide range of motion.
  Each rep is counted when the arm wearing the watch returns to the starting position.
  NOTE: Leg exercises may not be counted.
- Turn on automatic set detection to start and stop your sets.
- Save and send your strength training activity to your Garmin Connect account.
  You can use the tools in your Garmin Connect account to view and edit activity details.

Recording a HIIT Activity

You can use specialized timers to record a high-intensity interval training (HIIT) activity.

1. Press **START**.
2. Select **HIIT**.
3. Select an option:
   - Select **Free** to record an open, unstructured HIIT activity.
   - Select **HIIT Timers** (*HIIT Timers*, page 8).
   - Select **Workouts** to follow a saved workout.
4. If necessary, follow the on-screen instructions.
5. Press **START** to start your first round.
   The device displays a countdown timer and your current heart rate.
6. If necessary, press  to manually move to the next round or rest.
7. After you complete your activity, press **STOP**, and select **Save**.

HIIT Timers

You can use specialized timers to record a high-intensity interval training (HIIT) activity.

AMRAP: The AMRAP timer records as many rounds as possible during a set time period.

EMOM: The EMOM timer records a set number of moves every minute on the minute.

Tabata: The Tabata timer alternates between 20-second intervals of maximum effort and 10 seconds of rest.

Custom: You can set your move time, rest time, number of moves, and number of rounds.

Using an Indoor Trainer

Before you can use a compatible indoor trainer, you must pair the trainer with your watch using ANT+® technology (*Pairing Your Wireless Sensors*, page 100).

You can use your watch with an indoor trainer to simulate resistance while following a course, ride, or workout. While using an indoor trainer, GPS is turned off automatically.

1. Press **START**.
2. Select **Bike Indoor**.
3. Hold .
4. Select **Smart Trainer Options**.
5. Select an option:
   - Select **Free Ride** to go for a ride.
   - Select **Follow Workout** to follow a saved workout (*Workouts*, page 24).
   - Select **Follow Course** to follow a saved course (*Courses*, page 90).
   - Select **Set Power** to set the target power value.
   - Select **Set Grade** to set the simulated grade value.
   - Select **Set Resistance** to set the resistance force applied by the trainer.
6. Press **START** to start the activity timer.

   The trainer increases or decreases resistance based on the elevation information in the course or ride.

Recording an Indoor Climbing Activity

You can record routes during an indoor climbing activity. A route is a climbing path along an indoor rock wall.

1. Press **START**.
2. Select **Climb Indoor**.
3. Select **Yes** to record route statistics.
4. Select a grading system.

   NOTE: The next time you start an indoor climbing activity, the device uses this grading system. You can hold , select the activity settings, and select Grading System to change the system.
5. Select the difficulty level for the route.
6. Press **START**.
7. Start your first route.

   NOTE: When the route timer is running, the device automatically locks the buttons to prevent accidental button presses. You can hold any button to unlock the watch.
8. When you finish the route, descend to the ground.

   The rest timer starts automatically when you are on the ground.

   NOTE: If necessary, you can press to finish the route.
9. Select an option:
   - To save a successful route, select **Completed**.
   - To save an unsuccessful route, select **Attempted**.
   - To delete the route, select **Discard**.
10. Enter the number of falls for the route.
11. When you are done resting, press and begin your next route.
12. Repeat this process for each route until your activity is complete.
13. Press **STOP**.
14. Select **Save**.

Outdoor Activities

The Forerunner device comes preloaded with outdoor activities, such as running and cycling. GPS is turned on for outdoor activities. You can add new activities based on default activities, such as walking or rowing. You can also add custom activities to your device (*Creating a Custom Activity*, page 6).

Multisport

Triathletes, duathletes, and other multisport competitors can take advantage of the multisport activities, such as Triathlon or Swimrun. During a multisport activity, you can transition between activities and continue to view your total time. For example, you can switch from biking to running and view your total time for biking and running throughout the multisport activity.

You can customize a multisport activity, or you can use the default triathlon activity set up for a standard triathlon.

Triathlon Training

When you participate in a triathlon, you can use the triathlon activity to quickly transition to each sport segment, to time each segment, and to save the activity.

1. Select **START** > **Triathlon**.
2. Select **START** to start the timer.
3. Select at the beginning and end of each transition.

   The transition feature can be turned on or off for the triathlon activity settings.
4. After you complete your activity, select **STOP** > **Save**.

Creating a Multisport Activity

1. From the watch face, select **START** > **Add** > **Multisport**.
2. Select a multisport activity type, or enter a custom name.

   Duplicate activity names include a number. For example, Triathlon(2).
3. Select two or more activities.
4. Select an option:
   - Select an option to customize specific activity settings. For example, you can select whether to include transitions.
   - Select **Done** to save and use the multisport activity.
5. Select **Yes** to add the activity to your list of favorites.

Tips for Triathlon Training or Using Multisport Activities

- Select **START** to start your first activity.
- Select to transition to the next activity.

  If transitions are turned on, the transition time is recorded separately from the activity times.
- If necessary, select to start the next activity.
- Select **UP** or **DOWN** to view additional data pages.

Going for a Track Run

Before you go for a track run, make sure you are running on a standard-shape, 400 m track.

You can use the track run activity to record your outdoor track data, including distance in meters and lap splits.

1. Stand on the outdoor track.
2. From the watch face, press **START**.
3. Select **Track Run**.
4. Wait while the watch locates satellites.
5. If you are running in lane 1, skip to step 11.
6. Press .
7. Select the activity settings.
8. Select **Lane Number**.
9. Select a lane number.
10. Press **BACK** twice to return to the activity timer.
11. Press **START**.
12. Run around the track.

    After you run 3 laps, your watch records the track dimensions and calibrates your track distance.
13. After you complete your activity, press **STOP**, and select **Save**.

Tips for Recording a Track Run

- Wait until the GPS status indicator turns green before starting a track run.
- During your first run on an unfamiliar track, run for a minimum of 3 laps to calibrate your track distance.

  You should run slightly past your starting point to complete the lap.
- Run each lap in the same lane.

  NOTE: The default Auto Lap® distance is 1600 m, or 4 laps around the track.
- If you are running in a lane other than lane 1, set the lane number in the activity settings.

Recording an Ultra Run Activity

Before you record an ultra run activity, you can disable VO2 max. recording if you do not want this run type to affect your VO2 max. estimate (*Turning Off VO2 Max. Recording*, page 53).

1. Select **START** > **Ultra Run**.
2. Select **START** to start the activity timer.
3. Start running.
4. Select to record a lap and start the rest timer.

   NOTE: You can enable the Lap Key setting to record a lap and start the rest timer, start the rest timer only, or record a lap only (*Activities and App Settings*, page 105).
5. When you are done resting, select to resume running.
6. After you complete your run, select **STOP** > **Save**.

Swimming

NOTICE

The device is intended for surface swimming. Scuba diving with the device may damage the product and will void the warranty.

NOTE: The watch has wrist-based heart rate enabled for swim activities. The watch is also compatible with the HRM-Pro™ series, HRM-Swim™, and HRM-Tri™ accessories (*Chest Heart Rate While Swimming*, page 42). If both wrist-based heart rate and chest heart rate data are available, your watch uses the chest heart rate data.

Swimming in Open Water

You can record swim data including distance, pace, and stroke rate. You can add data screens to the default open water swimming activity (*Customizing the Data Screens*, page 107).

1. Press **START**.
2. Select **Open Water**.
3. Go outside and wait while the watch locates satellites.
4. Press **START** to start the activity timer.
5. Start swimming.
6. Press **UP** or **DOWN** to view additional data pages (optional).
7. After you complete your activity, press **STOP**, and select **Save**.

Going for a Pool Swim

1. Press **START**.
2. Select **Pool Swim**.
3. Select your pool size, or enter a custom size.
4. Press **START**.

   The device records swim data only while the activity timer is running.
5. Start your activity.

   The device automatically records swim intervals and lengths.
6. Press **UP** or **DOWN** to view additional data pages (optional).
7. When resting, press **STOP** to pause the activity timer.
8. Press **START** to restart the activity timer.
9. After you complete your activity, press **STOP**, and select **Save**.

Heart Rate While Swimming

NOTICE

The device is intended for surface swimming. Scuba diving with the device may damage the product and will void the warranty.

The watch has wrist-based heart rate enabled for swim activities. The watch is also compatible with the HRM-Pro series, HRM-Swim, and HRM-Tri accessories. If both wrist-based heart rate and chest heart rate data are available, your watch uses the chest heart rate data (*Chest Heart Rate While Swimming*, page 42).

Distance Recording

The Forerunner device measures and records distance by completed pool lengths. The pool size must be correct to display accurate distance (*Going for a Pool Swim*, page 12).

TIP: For accurate results, swim the entire length, and use one stroke for the entire length. Pause the timer when resting.

TIP: To help the device count your lengths, use a strong push off the wall and glide before your first stroke.

TIP: When doing drills, you must either pause the timer or use the drill logging feature (*Training with the Drill Log*, page 14).

Swim Terminology

Length: One trip down the pool.

Interval: One or more consecutive lengths. A new interval starts after a rest.

Stroke: A stroke is counted every time your arm wearing the watch completes a full cycle.

Swolf: Your swolf score is the sum of the time for one pool length and the number of strokes for that length. For example, 30 seconds plus 15 strokes equals a swolf score of 45. For open water swimming, swolf is calculated over 25 meters. Swolf is a measurement of swimming efficiency and, like golf, a lower score is better.

Critical swim speed (CSS): Your CSS is the theoretical speed that you can maintain continuously without exhaustion. You can use your CSS to guide your training pace and monitor your improvement.

Stroke Types

Stroke type identification is available only for pool swimming. Your stroke type is identified at the end of a length. Stroke types appear in your swimming history and in your Garmin Connect account. You can also select stroke type as a custom data field (*Customizing the Data Screens*, page 107).

Free	Freestyle
Back	Backstroke
Breast	Breaststroke
Fly	Butterfly
Mixed	More than one stroke type in an interval
Drill	Used with drill logging (*Training with the Drill Log*, page 14)

Tips for Swimming Activities

- Press to record an interval during open water swimming.
- Before starting a pool swimming activity, follow the on-screen instructions to select your pool size or enter a custom size.

  The watch measures and records distance by completed pool lengths. The pool size must be correct to display accurate distance. The next time you start a pool swimming activity, the watch uses this pool size. You can hold , select the activity settings, and select **Pool Size** to change the size.
- For accurate results, swim the entire pool length, and use one stroke type for the entire length. Pause the activity timer when resting.
- Press to record a rest during pool swimming (*Auto Rest and Manual Rest*, page 14).

  The watch automatically records swim intervals and lengths for pool swimming.
- To help the watch count your lengths, use a strong push off the wall and glide before your first stroke.
- When doing drills, you must either pause the activity timer or use the drill logging feature (*Training with the Drill Log*, page 14).

Resting During Pool Swimming

The default rest screen displays two rest timers. It also displays time and distance for the last completed interval.

NOTE: Swim data is not recorded during a rest.

1. During your swim activity, select to start a rest.

   The display reverses to white text on a black background, and the rest screen appears.
2. During a rest, select **UP** or **DOWN** to view other data screens (optional).
3. Select , and continue swimming.
4. Repeat for additional rest intervals.

Auto Rest and Manual Rest

NOTE: Swim data is not recorded during a rest. To view other data screens, you can press UP or DOWN.

The auto rest feature is available only for pool swimming. Your watch automatically detects when you are resting, and the rest screen appears. If you rest for more than 15 seconds, the watch automatically creates a rest interval. When you resume swimming, the watch automatically starts a new swim interval. You can turn on the auto rest feature in the activity options (*Activities and App Settings*, page 105).

TIP: For best results using the auto rest feature, minimize your arm motions while resting.

During a pool or open water swim activity, you can manually mark a rest interval by pressing .

Training with the Drill Log

The drill log feature is available only for pool swimming. You can use the drill log feature to manually record kick sets, one-arm swimming, or any type of swimming that is not one of the four major strokes.

1. During your pool swim activity, press **UP** or **DOWN** to view the drill log screen.
2. Press to start the drill timer.
3. After you complete a drill interval, press .

   The drill timer stops, but the activity timer continues to record the entire swim session.
4. Select a distance for the completed drill.

   Distance increments are based on the pool size selected for the activity profile.
5. Select an option:
   - To start another drill interval, press .
   - To start a swim interval, press **UP** or **DOWN** to return to the swim training screens.

The Forerunner Bike Computer and Your eBike

Before you can use a compatible eBike, such as a Shimano STEPS™ eBike, you must pair it with your Forerunner bike computer (*Pairing Your Wireless Sensors*, page 100).

Skiing and Winter Sports

You can add skiing and snowboarding activities to your activity list (*Customizing Your Activity List*, page 104). You can customize the data screens for each activity (*Customizing the Data Screens*, page 107).

Viewing Your Ski Runs

Your watch records the details of each downhill skiing or snowboarding run using the auto run feature. This feature is turned on by default for downhill skiing and snowboarding. It automatically records new ski runs when you start moving down hill.

1. Start a skiing or snowboarding activity.
2. Hold .
3. Select **View Runs**.
4. Press **UP** and **DOWN** to view details of your last run, your current run, and your total runs.

   The run screens include time, distance traveled, maximum speed, average speed, and total descent.

Cross-Country Skiing Power Data

NOTE: The HRM-Pro series accessory must be paired to the Forerunner watch using ANT+ technology. If your Forerunner watch was packaged with the HRM-Pro series accessory, the devices are already paired.

You can use your compatible Forerunner watch paired with the HRM-Pro series accessory to provide real-time feedback about your cross-country skiing performance. The power output is measured in watts. Factors that affect power include your speed, elevation changes, wind, and snow conditions. You can use power output to measure and improve your skiing performance.

NOTE: Skiing power values are generally lower than cycling power values. This is normal and occurs because humans are less efficient at skiing than they are at cycling. It is common for ski power values to be 30 to 40 percent lower than cycling power values at the same training intensity.

Recording a Backcountry Skiing or Snowboarding Activity

The backcountry skiing or snowboarding activity lets you switch between climbing and descending tracking modes so you can accurately track your statistics. You can customize the Mode Tracking setting to automatically or manually switch tracking modes (*Activities and App Settings*, page 105).

1. Press **START**.
2. Select **Backcountry Ski** or **Backcountry Snowboard**.
3. Select an option:
   - If you are starting your activity on a climb, select **Climbing**.
   - If you are starting your activity moving downhill, select **Descending**.
4. Press **START** to start the activity timer.
5. If necessary, press to switch between climbing and descending tracking modes.
6. After you complete your activity, press **STOP**, and select **Save**.

Recording a Bouldering Activity

You can record routes during a bouldering activity. A route is a climbing path along a boulder or small rock formation.

1. Press **START**.
2. Select **Bouldering**.
3. Select a grading system.

   NOTE: The next time you start a bouldering activity, the watch uses this grading system. You can hold , select the activity settings, and select Grading System to change the system.
4. Select the difficulty level for the route.
5. Press **START** to start the route timer.
6. Start your first route.
7. Press to finish the route.
8. Select an option:
   - To save a successful route, select **Completed**.
   - To save an unsuccessful route, select **Attempted**.
   - To delete the route, select **Discard**.
9. When you are done resting, press to start your next route.
10. Repeat this process for each route until your activity is complete.
11. After your last route, press **STOP** to stop the route timer.
12. Select **Save**.

Golfing

Playing Golf

Before you play golf, you should charge the device (*Charging the Watch*, page 122).

1. Press **START**.
2. Select **Golf**.

   The device locates satellites, calculates your location, and selects a course if there is only one course nearby.
3. If the course list appears, select a course from the list.
4. Select ✔ to keep score.
5. Select a tee box.
6. Select **UP** or **DOWN** to scroll through the holes.

   The device automatically transitions when you move to the next hole.

   TIP: You can press START to open the golf menu (*Golf Menu*, page 17).
7. After you complete your activity, select **START** > **End Round** > **End Round**.

Downloading Golf Courses

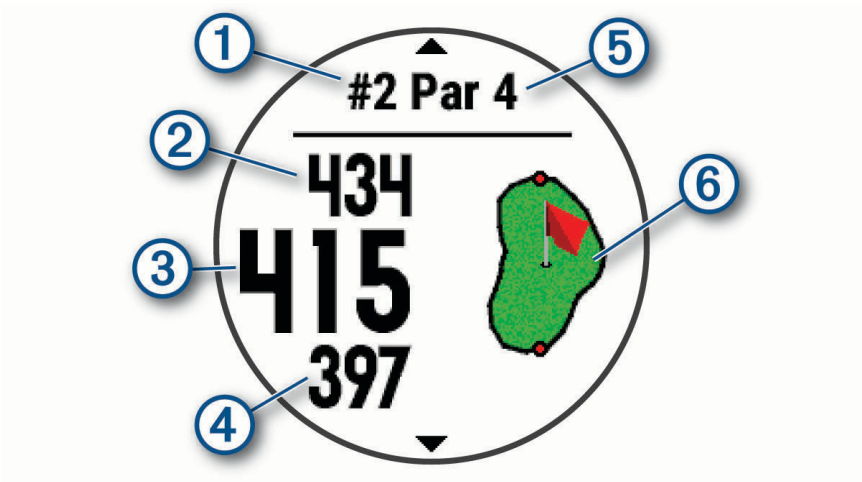
Before you play a course for the first time, you must download it using the Garmin Connect app.

1. From the Garmin Connect app, select •••.
2. Select **Download Golf Courses** > +.
3. Select a golf course.
4. Select **Download**.

   After the course finishes downloading, it appears in the list of courses on your Forerunner watch.

Hole Information

The watch calculates the distance to the front and back of the green, and to the selected pin location (*Moving the Flag*, page 17).



①	Current hole number
②	Distance to the back of the green
③	Distance to the selected pin location
④	Distance to the front of the green
⑤	Par for the hole
⑥	Map of the green

Golf Menu

During a round, you can press **START** to view additional features in the golf menu.

End Round: Ends the current round.

Pause Round: Pauses the current round. You can resume the round at any time by starting a Golf activity.

Move Flag: Allows you to move the pin location to get a more precise distance measurement (*Moving the Flag*, page 17).

Hazards: Shows the bunkers and water hazards for the current hole.

Measure Shot: Shows the distance of your previous shot recorded with the Garmin AutoShot™ feature (*Viewing Measured Shots*, page 18). You can also manually record a shot (*Manually Measuring a Shot*, page 18).

Layups: Shows the layup and distance options for the current hole (par 4 and par 5 holes only).

Scorecard: Opens the scorecard for the round (*Keeping Score*, page 18).

Odometer: Shows the recorded time, distance, and steps traveled. The odometer automatically starts and stops when you start or end a round. You can reset the odometer during a round.

PinPointer: The PinPointer feature is a compass that points to the pin location when you are unable to see the green. This feature can help you line up a shot even if you are in the woods or in a deep sand trap.

NOTE: Do not use the PinPointer feature while in a golf cart. Interference from the golf cart can affect the accuracy of the compass.

Moving the Flag

You can take a closer look at the green and move the pin location.

1. From the hole information screen, select **START** > **Move Flag**.
2. Select **UP** or **DOWN** to move the pin position.
3. Select **START**.

   The distances on the hole information screen are updated to show the new pin location. The pin location is saved for only the current round.

Viewing Measured Shots

Before the device can automatically detect and measure shots, you must enable scoring.

Your device features automatic shot detection and recording. Each time you take a shot along the fairway, the device records your shot distance so you can view it later.

TIP: Automatic shot detection works best when you wear the device on your leading wrist and make good contact with the ball. Putts are not detected.

1. While playing golf, select **START** > **Measure Shot**.

   Your last shot distance appears.

   NOTE: The distance automatically resets when you hit the ball again, putt on the green, or move to the next hole.
2. Select **DOWN** to view previously recorded shot distances.

Manually Measuring a Shot

You can manually add a shot if the watch doesn't detect it. You must add the shot from the location of the missed shot.

1. Take a shot and watch where your ball lands.
2. From the hole information screen, press **START**.
3. Select **Measure Shot**.
4. Press **START**.
5. Select **Add Shot** > ✔.
6. If necessary, enter the club you used for the shot.
7. Walk or drive to your ball.

The next time you take a shot, the watch automatically records your last shot distance. If necessary, you can manually add another shot.

Viewing Layup and Dogleg Distances

You can view a list of layup and dogleg distances for par 4 and 5 holes.

Select **START** > **Layups**.

Each layup and the distance until you reach each layup appear on the screen.

NOTE: Distances are removed from the list as you pass them.

Club Sensors

Your watch is compatible with Approach® CT10 golf club sensors. You can use paired club sensors to automatically track your golf shots, including location, distance, and club type. See the owner's manual for your club sensors for more information (garmin.com/manuals/ApproachCT10).

Keeping Score

1. From the hole information screen, press **START**.
2. Select **Scorecard**.

   The scorecard appears when you are on the green.
3. Press **UP** or **DOWN** to scroll through the holes.
4. Press **START** to select a hole.
5. Press **UP** or **DOWN** to set the score.

   Your total score is updated.

Updating a Score

1. From the hole information screen, press **START**.
2. Select **Scorecard**.
3. Press **UP** or **DOWN** to scroll through the holes.
4. Press **START** to select a hole.
5. Press **UP** or **DOWN** to change the score for that hole.

   Your total score is updated.

Setting the Scoring Method

You can change the method the device uses to keep score.

1. From the hole information screen, hold ☰.
2. Select the activity settings.
3. Select **Scoring Method**.
4. Select a scoring method.

About Stableford Scoring

When you select the Stableford scoring method (*Setting the Scoring Method*, page 19), points are awarded based on the number of strokes taken relative to par. At the end of a round, the highest score wins. The device awards points as specified by the United States Golf Association.

The scorecard for a Stableford scored game shows points instead of strokes.

Points	Strokes Taken Relative to Par
0	2 or more over
1	1 over
2	Par
3	1 under
4	2 under
5	3 under

Setting Your Handicap

1. From the hole information screen, hold ☰.
2. Select the activity settings.
3. Select **Handicap Scoring**.
4. Select a handicap scoring option:
   - To enter the number of strokes to be subtracted from your total score, select **Local Handicap**.
   - To enter the player's handicap index and the course slope rating used to calculate your course handicap, select **Index/Slope**.
5. Set your handicap.

Enabling Statistics Tracking

The Stat Tracking feature enables detailed statistics tracking while playing golf.

1. From the hole information screen, hold ☰.
2. Select the activity settings.
3. Select **Stat Tracking**.

Recording Statistics

Before you can record statistics, you must enable statistics tracking (*Enabling Statistics Tracking*, page 19).

1. From the scorecard, select a hole.
2. Enter the total number of strokes taken, including putts, and press **START**.
3. Set the number of putts taken, and press **START**.

   NOTE: The number of putts taken is used for statistics tracking only and does not increase your score.
4. If necessary, select an option:

   NOTE: If you are on a par 3 hole, fairway information does not appear.
   - If your ball hit the fairway, select **In Fairway**.
   - If your ball missed the fairway, select **Missed Right** or **Missed Left**.
5. If necessary, enter the number of penalty strokes.

Using the Golf Odometer

You can use the odometer to record the time, distance, and steps traveled. The odometer automatically starts and stops when you start or end a round.

1. From the hole information screen, press **START**.
2. Select **Odometer**.
3. If necessary, select **Reset** to reset the odometer to zero.

Viewing the Direction to the Pin

The PinPointer feature is a compass that provides directional assistance when you are unable to see the green. This feature can help you line up a shot even if you are in the woods or in a deep sand trap.

NOTE: Do not use the PinPointer feature while in a golf cart. Interference from the golf cart can affect the accuracy of the compass.

1. From the hole information screen, press **START**.
2. Select **PinPointer**.

   The arrow points to the pin location.

Training

Training for a Race Event

Your watch can suggest daily workouts to help you train for a running or cycling event, if you have a VO2 max. estimate (*About VO2 Max. Estimates*, page 52).

1. On your phone or computer, go to your Garmin Connect calendar.
2. Select the day of the event, and add the race event.

   You can search for an event in your area or create your own event.
3. Add details about the event, and add the course if it's available.
4. Sync your watch with your Garmin Connect account.
5. On your watch, scroll to the primary event glance to see a countdown to your primary race event.
6. From the watch face, press **START**, and select a running or cycling activity.

   NOTE: If you have completed at least 1 outdoor run with heart rate data or 1 ride with heart rate and power data, daily suggested workouts appear on your watch.

Race Calendar and Primary Race

When you add a race event to your Garmin Connect calendar, you can view the event on your watch by adding the primary race glance (*Glances*, page 73). The event date must be in the next 365 days. The watch displays a countdown to the event, your goal time or predicted finish time (running events only), and weather information.

NOTE: Historical weather information for the location and date is available right away. Local forecast data appears approximately 14 days before the event.

If you add more than one race event, you are prompted to choose a primary event.

Depending on the available course data for your event, you can view elevation data, the course map, and add a PacePro™ plan (*PacePro Training*, page 30).

Unified Training Status

When you use more than one Garmin® device with your Garmin Connect account, you can choose which device is the primary data source for everyday use and for training purposes.

From the Garmin Connect app menu, select Settings.

Primary Training Device: Sets the priority data source for training metrics like your training status and load focus.

Primary Wearable: Sets the priority data source for daily health metrics like steps and sleep. This should be the watch you wear most often.

TIP: For the most accurate results, Garmin recommends that you sync often with your Garmin Connect account.

Health and Wellness Settings

Hold ☰, and select **Settings** > **Health & Wellness**.

Wrist Heart Rate: Allows you to customize the wrist heart rate monitor settings (*Wrist Heart Rate Monitor Settings*, page 39).

Pulse Ox Mode: Allows you to select a pulse oximeter mode (*Turning On All-Day Mode*, page 68).

Daily Summary: Enables the Body Battery™ daily summary that appears a few hours before the start of your sleep window. The daily summary provides insight on how your daily stress and activity history impacted your Body Battery level (*Body Battery*, page 69).

Stress Alerts: Notifies you when periods of stress have drained your Body Battery level.

Rest Alerts: Notifies you after you have a restful period and its impact on your Body Battery level.

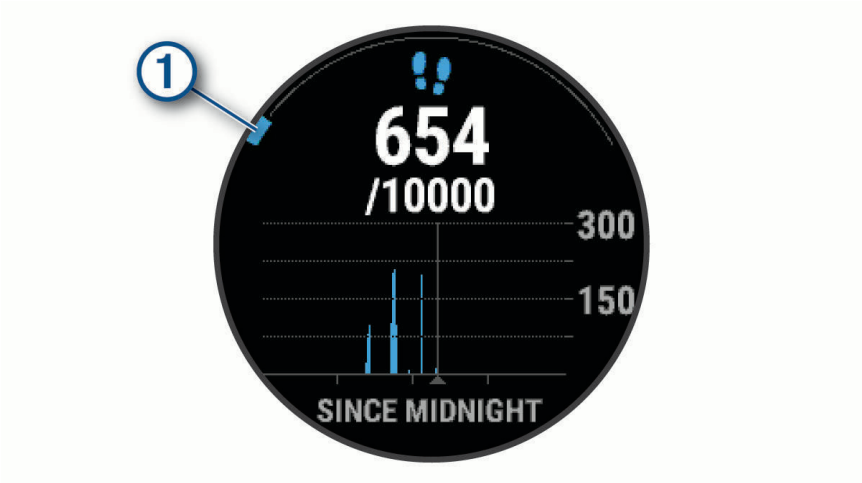
Move Alert: Enables or disables the Move Alert feature (*Using the Move Alert*, page 22).

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, daily floors climbed goal, and weekly intensity minutes goal.

Move IQ: Allows you to turn on and off Move IQ® events. When your movements match familiar exercise patterns, the Move IQ feature automatically detects the event and displays it in your timeline. The Move IQ events show activity type and duration, but they do not appear in your activities list or newsfeed. For more detail and accuracy, you can record a timed activity on your device.

Auto Goal

Your watch creates a daily step goal automatically, based on your previous activity levels. As you move during the day, the watch 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 (*System Settings*, page 117).

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

Turning on the Move Alert

1. Hold ☰.
2. Select **Settings** > **Notifications & Alerts** > **System Alerts** > **Health & Wellness** > **Move Alert** > **On**.

Sleep Tracking

While you are sleeping, the watch automatically detects your sleep and monitors your movement during your normal sleep hours. You can set your normal sleep hours in the Garmin Connect app or in the watch settings (*Customizing Sleep Mode*, page 23). Sleep statistics include total hours of sleep, sleep stages, sleep movement, and sleep score. Naps are added to your sleep statistics, and can also impact your recovery. You can view detailed sleep statistics on your Garmin Connect account.

NOTE: You can use do not disturb mode to turn off notifications and alerts, with the exception of alarms (*Using Do Not Disturb Mode*, page 23).

Using Automated Sleep Tracking

1. Wear your watch while sleeping.
2. Upload your sleep tracking data to the Garmin Connect site (*Manually Syncing Data with Garmin Connect*, page 72).

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

   You can view sleep information from the previous night on your Forerunner watch (*Glances*, page 73).

Customizing Sleep Mode

1. Hold ☰.
2. Select **System** > **Sleep Mode**.
3. Select an option:
   - Select **Schedule**, select a day, and enter your normal sleep hours.
   - Select **Watch Face** to use the sleep watch face.
   - Select **Backlight** to configure the screen settings.
   - Select **Nap Alarm** to set nap alarms to play as a tone, vibration, or both.
   - Select **Do Not Disturb** to enable or disable do not disturb mode.

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 117).

NOTE: You can add options to the controls menu.

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

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

- Start a timed activity for the most accurate calculation of intensity minutes.
- Wear your watch all day and night for the most accurate resting heart rate.

Move IQ

When your movements match familiar exercise patterns, the Move IQ feature automatically detects the event and displays it in your timeline. The Move IQ events show activity type and duration, but they do not appear in your activities list or newsfeed. For more detail and accuracy, you can record a timed activity on your device.

Workouts

You can create custom workouts that include goals for each workout step and for varied distances, times, and calories. During your activity, you can view workout-specific data screens that contain workout step information, such as the workout step distance or current pace.

On your watch: You can open the workouts app from the activity list to show all workouts currently loaded on your watch (*Customizing Your Activity List*, page 104).

You can also view your workout history.

On the app: You can create and find more workouts, or select a training plan that has built-in workouts and transfer them to your watch*Following a Workout From Garmin Connect*, page 24.

You can schedule workouts.

You can update and edit your current workouts.

Following a Workout From Garmin Connect

Before you can download a workout from Garmin Connect, you must have a Garmin Connect account (*Garmin Connect*, page 89).

1. Select an option:
   - Open the Garmin Connect app, and select •••.
   - Go to connect.garmin.com.
2. Select **Training & Planning** > **Workouts**.
3. Find a workout, or create and save a new workout.
4. Select or **Send to Device**.
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 89).

1. From the Garmin Connect app, select •••.
2. Select **Training & Planning** > **Workouts** > **Create a Workout**.
3. Select an activity.
4. Create your custom workout.
5. Select **Audio Note** to record a short note about your workout or a workout step (available for all workouts except swimming).

   Audio notes play on your connected Bluetooth® headphones, if available (*Connecting Bluetooth Headphones*, page 85).
6. Select **Save**.
7. 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 watch (*Following a Workout From Garmin Connect*, page 24).

Sending a Custom Workout to Your Watch

You can send a custom workout you created with the Garmin Connect app to your watch (*Creating a Custom Workout on Garmin Connect*, page 24).

1. From the Garmin Connect app, select •••.
2. Select **Training & Planning** > **Workouts**.
3. Select a workout from the list.
4. Select .
5. Select your compatible watch.
6. Follow the on-screen instructions.

Starting a Workout

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

1. Press **START**.
2. Select an activity.
3. Select > **Training** > **Workouts**.
4. Select a workout.

   NOTE: Only workouts that are compatible with the selected activity appear in the list.

5. Select **DOWN** to view workout steps (optional).

   TIP: You can press START to view an animation of the selected exercise or listen to audio notes with Bluetooth headphones (optional).
6. Select **START** > **Do Workout**.
7. Press **START** to start the activity timer.

After you begin a workout, the watch displays each step of the workout, optional step and audio notes, and the current workout data.

Following a Daily Suggested Workout

Before the watch can suggest a daily run or bike workout, you must have a VO2 max. estimate for that activity (*About VO2 Max. Estimates*, page 52).

1. Press **START**.
2. Select **Run** or **Bike**.

   The daily suggested workout appears.
3. Press **DOWN** to view details about the workout, such as steps and estimated benefit (optional).
4. Select **START**, and select an option:
   - To do the workout, select **Do Workout**.
   - To skip the workout, select **Dismiss**.
   - To view workout suggestions for the upcoming week, select **More Suggestions**.
   - To view the workout settings, such as **Target Type**, select **Settings**.

The suggested workout updates automatically to changes in training habits, recovery time, and VO2 max.

Turning Daily Suggested Workout Prompts On and Off

Daily suggested workouts are recommended based on your previous activities saved to your Garmin Connect account.

1. Press **START**.
2. Select **Run** or **Bike**.
3. Hold ☰.
4. Select **Training** > **Workouts** > **Daily Suggestions** > **Settings** > **Workout Prompt**.
5. Press **START** to disable or enable prompts.

Following a Pool Swim Workout

Your watch can guide you through multiple steps in a swim workout. Creating and sending a pool swim workout is similar to *Workouts*, page 24 and *Following a Workout From Garmin Connect*, page 24.

1. Press **START**.
2. Select **Pool Swim**.
3. Hold ☰.
4. Select **Training**.
5. Select an option:
   - Select **Workouts** to do workouts downloaded from Garmin Connect.
   - Select **Critical Swim Speed** to record a Critical Swim Speed (CSS) test or enter a CSS value manually (*Recording a Critical Swim Speed Test*, page 27).
   - Select **Training Calendar** to do or view your scheduled workouts.
6. Follow the on-screen instructions.

Recording a Critical Swim Speed Test

Your Critical Swim Speed (CSS) value is the result of a time-trial-based test expressed as a pace per 100 meters. Your CSS is the theoretical speed you can maintain continuously without exhaustion. You can use your CSS to guide your training pace and monitor your improvement.

1. Press **START**.
2. Select **Pool Swim**.
3. Hold ☰.
4. Select **Training** > **Critical Swim Speed** > **Do Critical Swim Speed Test**.
5. Press **DOWN** to preview the workout steps (optional).
6. Press **START**.
7. Press **START** to start the activity timer..
8. Follow the on-screen instructions.

Editing Your Critical Swim Speed Result

You can manually edit or enter a new time for your CSS value.

1. From the watch face, select **START** > **Pool Swim** > **Options** > **Critical Swim Speed** > **Critical Swim Speed**.
2. Enter the minutes.
3. Enter the seconds.

About the Training Calendar

The training calendar on your watch is an extension of the training calendar or schedule you set up in your Garmin Connect account. 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 glance. When you select a day in the calendar, you can view or do the workout. The scheduled workout stays on your watch whether you complete it or skip it. When you send scheduled workouts from Garmin Connect, they overwrite the existing training calendar.

Using Garmin Connect Training Plans

Before you can download and use a training plan, you must have a Garmin Connect account (*Garmin Connect*, page 89), and you must pair the Forerunner watch with a compatible phone.

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

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 glance is added to the glance loop on your Forerunner watch.

Starting Today's Workout

After you send a Garmin Coach training plan to your watch, the Garmin Coach glance appears in your glance loop (*Customizing the Glance Loop*, page 104).

1. From the watch face, press **UP** or **DOWN** to view the Garmin Coach glance.

   If a workout for this activity is scheduled for today, the watch shows the workout name and prompts you to start it.
2. Press **START**.
3. Press **DOWN** to view the workout steps (optional).
4. Press **START**, and select **Do Workout**.
5. Follow the on-screen instructions.

Interval Workouts

Interval workouts can be open or structured. Structured repeats can be based on distance or time. The device saves your custom interval workout until you edit the workout again.

Customizing an Interval Workout

1. Press **START**.
2. Select an activity.
3. Press .
4. Select **Training** > **Intervals** > **Structured Repeats**.

   A workout appears.
5. Press **START**, and select **Edit Workout**.
6. Select one or more options:
   - To set the interval duration and type, select **Interval**.
   - To set the rest duration and type, select **Rest**.
   - 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**.
7. Press **BACK**.

Starting an Interval Workout

1. Press **START**.
2. Select an activity.
3. Hold .
4. Select **Training** > **Intervals**.
5. Select an option:
   - Select **Open Repeats** to mark your intervals and rest periods manually by pressing .
   - Select **Structured Repeats** > **START** > **Do Workout** to use an interval workout based on distance or time.
6. Press **START** to start the activity timer.
7. When your interval workout has a warm up, press to begin the first interval.
8. Follow the on-screen instructions.

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

Stopping an Interval Workout

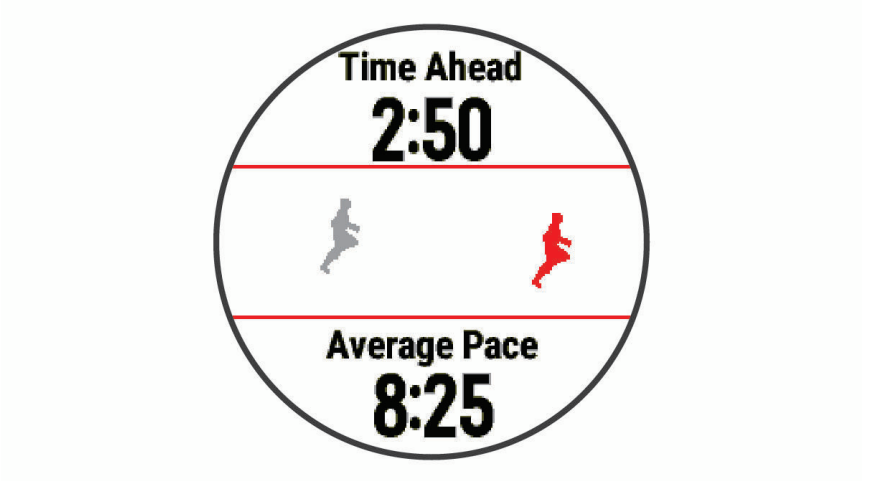
- At any time, select to stop the current interval or rest period and transition to the next interval or rest period.
- After all intervals and rest periods are complete, select to end the interval workout and transition to a timer that can be used for cool down.
- At any time, select **STOP** to stop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

Using Virtual Partner®

The Virtual Partner feature is a training tool designed to help you meet your goals. You can set a pace for the Virtual Partner and race against it.

NOTE: This feature is not available for all activities.

1. From the watch face, select **START**.
2. Select an activity.
3. Hold ☰.
4. Select the activity settings.
5. Select **Data Screens** > **Add New** > **Virtual Partner**.
6. Enter a pace or speed value.
7. Start your activity (*Starting an Activity*, page 5).
8. Select **UP** or **DOWN** to scroll to the Virtual Partner screen and see who is leading.



Setting a Training Target

The training target feature works with the Virtual Partner feature so you can train toward a set distance, distance and time, distance and pace, or distance and speed goal. During your training activity, the device gives you real-time feedback about how close you are to achieving your training target.

1. From the watch face, select **START**.
2. Select an activity.
3. Hold ☰.
4. Select **Training** > **Set a Target**.
5. Select an option:
   - Select **Distance Only** to select a preset distance or enter a custom distance.
   - Select **Distance and Time** to select a distance and time target.
   - Select **Distance and Pace** or **Distance and Speed** to select a distance and pace or speed target.

   The training target screen appears and displays your estimated finish time. The estimated finish time is based on your current performance and the time remaining.
6. Select **START** to start the timer.

Cancelling a Training Target

1. During an activity, hold ☰.
2. Select **Cancel Target** > **Yes**.

Racing a Previous Activity

You can race a previously recorded or downloaded activity. This feature works with the Virtual Partner feature so you can see how far ahead or behind you are during the activity.

NOTE: This feature is not available for all activities.

1. From the watch face, select **START**.
2. Select an activity.
3. Hold .
4. Select **Training** > **Race an Activity**.
5. Select an option:
   - Select **From History** to select a previously recorded activity from your device.
   - Select **Downloaded** to select an activity you downloaded from your Garmin Connect account.
6. Select the activity.

   The Virtual Partner screen appears indicating your estimated finish time.
7. Select **START** to start the timer.
8. After you complete your activity, select **START** > **Save**.

PacePro Training

Many runners like to wear a pace band during a race to help achieve their race goal. The PacePro feature allows you to create a custom pace band based on distance and pace or distance and time. You can also create a pace band for a known course to optimize your pace effort based on elevation changes.

You can create a PacePro plan using the Garmin Connect app. You can preview the splits and elevation plot before you run the course.

Downloading a PacePro Plan from Garmin Connect

Before you can download a PacePro plan from Garmin Connect, you must have a Garmin Connect account (*Garmin Connect*, page 89).

1. Select an option:
   - Open the Garmin Connect app, and select .
   - Go to connect.garmin.com.
2. Select **Training & Planning** > **PacePro Pacing Strategies**.
3. Follow the on-screen instructions to create and save a PacePro plan.
4. Select or **Send to Device**.

Creating a PacePro Plan on Your Watch

Before you can create a PacePro plan on your watch, you must create a course and load it to your watch (*Creating a Course on Garmin Connect*, page 91).

1. From the watch face, select **START**.
2. Select an outdoor running activity.
3. Hold ☰.
4. Select **Navigation** > **Courses**.
5. Select a course.
6. Select **PacePro** > **Create New**.
7. Select an option:
   - Select **Goal Pace**, and enter your target pace.
   - Select **Goal Time**, and enter your target time.

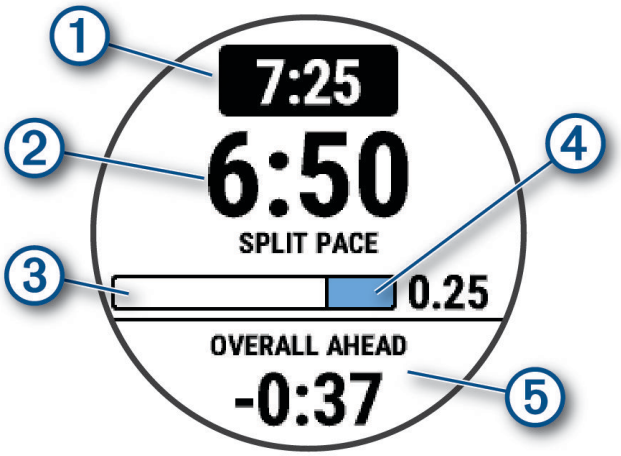
   The device displays your custom pace band.

   TIP: You can press **DOWN** to preview the splits.
8. Select **START**.
9. Select an option:
   - Select **Use Plan** > ✔ to enable course navigation and start the plan.
   - Select **Map** to preview the course.

Starting a PacePro Plan

1. From the watch face, select **START**.
2. Select an outdoor running activity.
3. Hold .
4. Select **Training** > **PacePro Plans**.
5. Select a plan.

   TIP: You can select **DOWN** > **View Splits** to preview the splits.
6. Select **START** to start the plan.
7. If necessary, select **Yes** to enable course navigation.
8. Select **START** to start the activity timer.



1	Target split pace
2	Current split pace
3	Completion progress for the split
4	Distance remaining in the split
5	Overall time ahead of or behind your target time

Stopping a PacePro Plan

1. Hold .
2. Select **Stop PacePro** > **Yes**.

   The device stops the PacePro plan. The activity timer continues running.

Power Guide

You can create and use a power strategy to plan your effort on a course. Your Forerunner device uses your FTP, the course elevation, and the projected time it will take you to complete the course to create a customized power guide.

One of the most important steps in planning a successful power guide strategy is choosing your effort level. Putting a harder effort into the course will increase the power recommendations, while choosing an easier effort will reduce them (*Creating and Using a Power Guide*, page 33). The primary goal of a power guide is to help you complete the course based on what is known about your ability, not to achieve a specific target time. You can adjust the effort level during your ride.

Power guides are always associated with a course and cannot be used with workouts or segments. You can view and edit your strategy in the Garmin Connect app and sync it with compatible Garmin devices. This feature requires a power meter, which must be paired with your device (*Pairing Your Wireless Sensors*, page 100).

Creating and Using a Power Guide

Before you can create a power guide, you must pair a power meter with your watch (*Pairing Your Wireless Sensors*, page 100). You must also have a course loaded to your watch (*Creating a Course on Garmin Connect*, page 91).

You can also create a power guide in the Garmin Connect app.

1. Press **START**.
2. Select an outdoor biking activity.
3. Hold ☰.
4. Select **Training** > **Power Guide** > **Create New**.
5. Select a course (*Courses*, page 90).
6. Select a riding position.
7. Select a gear weight.
8. Press **START**, and select **Use Plan**.

   TIP: You can preview the map, elevation plot, effort, settings, and splits. You can also adjust the effort, terrain, riding position, and gear weight before you start riding.

Segments

You can send running or cycling segments from your Garmin Connect account to your device. After a segment is saved to your device, you can race a segment, trying to match or exceed your personal record or other participants who have raced the segment.

NOTE: When you download a course from your Garmin Connect account, you can download all of the available segments in the course.

Strava™ Segments

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

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

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

Racing a Segment

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

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

1. Press **START**.
2. Select an activity.
3. Go for a run or ride.

   When you approach a segment, a message appears, and you can race the segment.
4. Start racing the segment.

A message appears when the segment is complete.

Viewing Segment Details

1. Select **START**.
2. Select an activity.
3. Hold ☰.
4. Select **Training** > **Segments**.
5. Select a segment.
6. Select an option:
   - Select **Race Times** to view the time and average speed or pace for the segment leader.
   - Select **Map** to view the segment on the map.
   - Select **Elevation Plot** to view an elevation plot of the segment.

Using the Metronome

The metronome feature plays tones at a steady rhythm to help you improve your performance by training at a faster, slower, or more consistent cadence.

NOTE: This feature is not available for all activities.

1. Press **START**.
2. Select an activity.
3. Hold ☰.
4. Select the activity settings.
5. Select **Metronome** > **Status** > **On**.
6. Select an option:
   - Select **Beats Per Minute** to enter a value based on the cadence you want to maintain.
   - Select **Alert Frequency** to customize the frequency of the beats.
   - Select **Sound and Vibe** to customize the metronome tone and vibration.
7. If necessary, select **Preview** to listen to the metronome feature before you run.
8. Go for a run (*Going for a Run*, page 4).

   The metronome starts automatically.
9. During your run, press **UP** or **DOWN** to view the metronome screen.
10. If necessary, hold ☰ to change the metronome settings.

Extended Display Mode

You can use Extended Display mode to display data screens from your Forerunner watch on a compatible Edge® bike computer during a ride or triathlon. See your Edge owner's manual for more information.

Setting Up Your User Profile

You can update your sex, date of birth, height, weight, wrist, heart rate zone, power zone, and Critical Swim Speed (CSS) settings (*Recording a Critical Swim Speed Test*, page 27). The watch uses this information to calculate accurate training data.

1 Hold ☰.
2 Select **User Profile**.
3 Select an option.

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 37) 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.

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.

Setting Your Heart Rate Zones

The watch uses your user profile information from the initial setup to determine your default heart rate zones. You can set separate heart rate zones for sport profiles, such as running, cycling, and swimming. For the most accurate calorie data during your activity, set your maximum heart rate. You can also set each heart rate zone and enter your resting heart rate manually. You can manually adjust your zones on the watch or using your Garmin Connect account.

1. Hold ☰.
2. Select **Settings** > **User Profile** > **Heart Rate & Power Zones** > **Heart Rate**.
3. Select **Max. HR**, and enter your maximum heart rate.

   You can use the Auto Detection feature to automatically record your maximum heart rate during an activity (*Detecting Performance Measurements Automatically*, page 37).
4. Select **LTHR**, and enter your lactate threshold heart rate.

   You can perform a guided test to estimate your lactate threshold (*Lactate Threshold*, page 57). You can use the Auto Detection feature to automatically record your lactate threshold during an activity (*Detecting Performance Measurements Automatically*, page 37).
5. Select **Resting HR** > **Set Custom**, and enter your resting heart rate.

   You can use the average resting heart rate measured by your watch, or you can set a custom resting heart rate.
6. Select **Zones** > **Based On**.
7. Select an option:
   - Select **%Max. HR** 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 heart rate reserve (maximum heart rate minus resting heart rate).
   - Select **%LTHR** to view and edit the zones as a percentage of your lactate threshold heart rate.
8. Select a zone, and enter a value for each zone.
9. Select **Sport Heart Rate**, and select a sport profile to add separate heart rate zones (optional).
10. Repeat the steps to add sport heart rate zones (optional).

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 35).
- Run often with the wrist or chest heart rate monitor.
- Try a few heart rate training plans, available from your Garmin Connect account.
- View your heart rate trends and time in zones using your Garmin Connect account.

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

Setting Your Power Zones

The power zones use default values based on gender, weight, and average ability, and may not match your personal abilities. If you know your functional threshold power (FTP) or threshold power (TP) value, you can enter it and allow the software to calculate your power zones automatically. You can manually adjust your zones on the watch or using your Garmin Connect account.

1. Hold ☰.
2. Select **User Profile** > **Heart Rate & Power Zones** > **Power**.
3. Select an activity.
4. Select **Based On**.
5. Select an option:
   - Select **Watts** to view and edit the zones in watts.
   - Select **%FTP** or **%TP** to view and edit the zones as a percentage of your threshold power.
6. Select **FTP** or **Threshold Power**, and enter your value.

   You can use the Auto Detection feature to automatically record your threshold power during an activity (*Detecting Performance Measurements Automatically*, page 37).
7. Select a zone, and enter a value for each zone.
8. If necessary, select **Minimum**, and enter a minimum power value.

Detecting Performance Measurements Automatically

The Auto Detection feature is turned on by default. The watch can automatically detect your maximum heart rate and lactate threshold during an activity. When paired with a compatible power meter, the watch can automatically detect your functional threshold power (FTP) during an activity.

1. Hold ☰.
2. Select **User Profile** > **Heart Rate & Power Zones** > **Auto Detection**.
3. Select an option.

Heart Rate Features

The watch has a wrist-based heart rate monitor and is also compatible with chest heart rate monitors. You can view heart rate data on the heart rate glance. If both wrist-based heart rate and chest heart rate data are available, your watch uses the chest heart rate data.

There are several heart rate-related features available in the default glance loop.

	Your current heart rate in beats per minute (bpm). There is graph of your heart rate for the last four hours, highlighting your highest and lowest heart rate.
	Your current stress level. The watch measures your heart rate variability while you are inactive to estimate your stress level. A lower number indicates a lower stress level.
	Your current Body Battery energy level. The watch calculates your current energy reserves based on sleep, stress, and activity data. A higher number indicates a higher energy reserve.
	The current saturation of oxygen in your blood. Knowing your oxygen saturation can help you determine how your body is adapting to exercise and stress. **NOTE:** The pulse oximeter sensor is located on the back of the watch.

Wrist-based Heart Rate

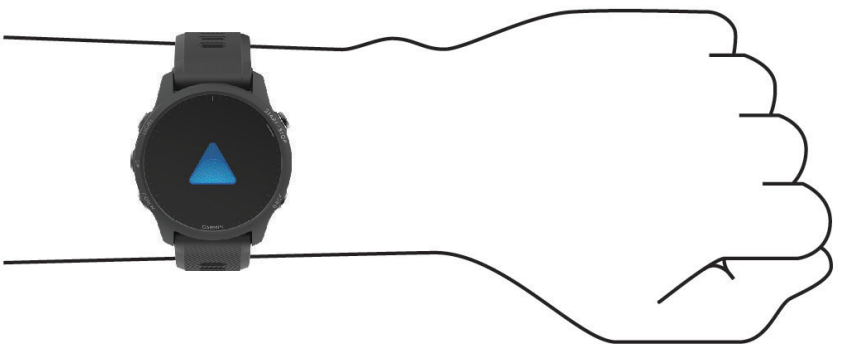
Wearing the Watch

⚠ CAUTION

Some users may experience skin irritation after prolonged use of the watch, especially if the user has sensitive skin or allergies. If you notice any skin irritation, remove the watch and give your skin time to heal. To help prevent skin irritation, ensure the watch is clean and dry, and do not overtighten the watch on your wrist. For more information, go to garmin.com/fitandcare.

- Wear the watch above your wrist bone.

  NOTE: The watch should be snug but comfortable. For more accurate heart rate readings, the watch should not shift while running or exercising. For pulse oximeter readings, you should remain motionless.



  NOTE: The optical sensor is located on the back of the watch.
- See *Tips for Erratic Heart Rate Data*, page 39 for more information about wrist-based heart rate.
- See *Tips for Erratic Pulse Oximeter Data*, page 68 for more information about the pulse oximeter sensor.
- For more information about accuracy, go to garmin.com/ataccuracy.
- For more information about watch wear and care, go to www.garmin.com/fitandcare.

Wrist Heart Rate Monitor Settings

Hold ☰, and select **Health & Wellness** > **Wrist Heart Rate**.

Status: Enables or disables the wrist heart rate monitor. The default value is Auto, which automatically uses the wrist heart rate monitor unless you pair an external heart rate monitor.

NOTE: Disabling the wrist heart rate monitor also disables the wrist-based pulse oximeter sensor.

While Swimming: Enables or disables the wrist heart rate monitor during swimming activities.

Abnormal Heart Rate Alerts: Allows you to set the watch to alert you when your heart rate exceeds or drops below a target value (*Setting an Abnormal Heart Rate Alert*, page 40).

Broadcast Heart Rate: Allows you to begin broadcasting your heart rate data to a paired device (*Broadcasting Heart Rate Data During an Activity*, page 40).

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 watch.
- Avoid wearing sunscreen, lotion, and insect repellent under the watch.
- Avoid scratching the heart rate sensor on the back of the watch.
- Wear the watch above your wrist bone. The watch should be snug but comfortable.
- Wait until the ♥ icon is solid before starting your activity.
- Warm up for 5 to 10 minutes and get a heart rate reading before starting your activity.

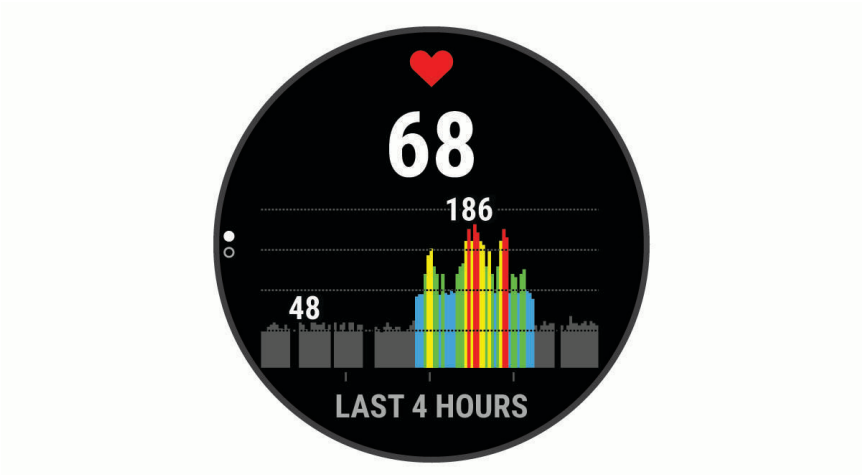
  NOTE: In cold environments, warm up indoors.
- Rinse the watch with fresh water after each workout.

Viewing the Heart Rate Glance

1 From the watch face, press **UP** or **DOWN** to view the heart rate glance.

  NOTE: You may need to add the glance to your glance loop (*Customizing the Glance Loop*, page 104).

2 Press **START** to view your current heart rate in beats per minute (bpm) and a graph of your heart rate for the last 4 hours.



3 Press **DOWN** to view your average resting heart rate values for the last 7 days.

Broadcasting Heart Rate Data

You can broadcast your heart rate data from your watch and view it on paired devices. Broadcasting heart rate data decreases battery life.

TIP: You can customize the activity settings to broadcast your heart rate data automatically when you begin an activity (*Activities and App Settings*, page 105). For example, you can broadcast your heart rate data to an Edge bike computer while cycling.

1. Select an option:
   - Hold ☰, and select **Health & Wellness** > **Wrist Heart Rate** > **Broadcast Heart Rate**.
   - Hold **LIGHT** to open the controls menu, and select ♥.

     NOTE: You can add options to the controls menu.
2. Press **START**.

   The watch starts broadcasting your heart rate data.
3. Pair your watch with your compatible device.

   NOTE: The pairing instructions differ for each Garmin compatible device. See your owner's manual.
4. Press **STOP** to stop broadcasting your heart rate data.

Broadcasting Heart Rate Data During an Activity

You can set up your Forerunner watch to broadcast your heart rate data automatically when you begin an activity. For example, you can broadcast your heart rate data to an Edge bike computer while cycling.

NOTE: Broadcasting heart rate data decreases battery life.

1. Press **START**.
2. Select an activity.
3. Press ☰.
4. Select the activity settings.
5. Select **Broadcast Heart Rate**.

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

   NOTE: There is no indication that the watch is broadcasting your heart rate data during an activity.
6. Begin the activity (*Starting an Activity*, page 5).
7. Pair your watch with your 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 (*Stopping an Activity*, page 5).

Setting an Abnormal Heart Rate Alert

⚠ CAUTION

This feature only alerts you when your heart rate exceeds or drops below a certain number of beats per minute, as selected by the user, after a period of inactivity. This feature does not notify you when your heart rate drops below the selected threshold during your chosen sleep window configured in the Garmin Connect app. This feature does not notify you of any potential heart condition and is not intended to treat or diagnose any medical condition or disease. Always defer to your health care provider for any heart-related issues.

You can set the heart rate threshold value.

1. From the watch face, hold ☰.
2. Select **Health & Wellness** > **Wrist Heart Rate** > **Abnormal Heart Rate Alerts**.
3. Select **High Alert** or **Low Alert**.
4. Set the heart rate threshold value.

Each time your heart rate exceeds or drops below the threshold value, a message appears and the watch vibrates.

Fitness_Notes

⚠ WARNING

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

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.

⚠ CAUTION

The pin tool is sharp. Use with care.

⚠ CAUTION

This feature only alerts you when your heart rate exceeds or drops below a certain number of beats per minute, as selected by the user, after a period of inactivity. This feature does not notify you when your heart rate drops below the selected threshold during your chosen sleep window configured in the Garmin Connect app. This feature does not notify you of any potential heart condition and is not intended to treat or diagnose any medical condition or disease. Always defer to your health care provider for any heart-related issues.

This feature only alerts you when your heart rate exceeds a certain number of beats per minute, as selected by the user, after a period of inactivity. This feature does not notify you of any potential heart condition and is not intended to treat or diagnose any medical condition or disease. Always defer to your health care provider for any heart-related issues.

⚠ CAUTION

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

NOTICE

Do not use a sharp object to clean the device.

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

Avoid pressing the buttons under water.

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

Thoroughly rinse the device with fresh water after exposure to chlorinated or salt water environments.

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.

Always wipe the device dry after cleaning.

Always wipe the device dry after cleaning or use, and store it in a cool, dry place.

Before you attempt to replace the battery, carefully read the instructions in the owner's manual.

The device is intended for surface swimming. Scuba diving with the device may damage the product and will void the warranty.

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

Calibrate the electronic compass outdoors. To improve heading accuracy, do not stand near objects that influence magnetic fields, such as vehicles, buildings, and overhead power lines.

The device is water resistant 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.

Before you can request assistance, you must set up emergency contacts in the Garmin Connect app (*Adding Emergency Contacts*, page 79). Your paired phone must be equipped with a data plan and be in an area of network coverage where data is available. Your emergency contacts must be able to receive emails or text messages (standard text messaging rates may apply).

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

NOTE: Run history is not recorded while the activity timer is stopped or paused.

NOTE: The device cannot record heart rate data while swimming.

NOTE: This does not erase any of your data or settings.

NOTE: This does not delete any saved activities.

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

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

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

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

NOTE: This product does not transmit heart rate data while swimming.

NOTE: In cold conditions, wear appropriate clothing to keep the heart rate monitor near your body temperature.

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

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

NOTE: If using a body composition scale, remove shoes and socks to ensure that all body composition parameters are read and recorded.

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

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

NOTE: The device is not intended to be used while swimming.

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

NOTICE

The heart rate monitor may cause chafing when used for long periods of time. To alleviate this issue, apply an anti-friction lubricant or gel to the center of the module where it contacts your skin. Do not apply anti-friction gel or lubricant on the electrodes. Do not use gels or lubricants that contain sunscreen.

NOTE: The device cannot record wrist heart rate data while swimming.

Turning Off the Wrist-based Heart Rate Monitor

The default value for the Wrist Heart Rate setting is Auto. The watch automatically uses the wrist-based heart rate monitor unless you pair a compatible heart rate monitor with ANT+ or Bluetooth technology to the watch.

NOTE: Disabling the wrist-based heart rate monitor also disables the wrist-based pulse oximeter sensor.

1. From the watch face, hold ☰.
2. Select **Health & Wellness** > **Wrist Heart Rate** > **Status** > **Off**.

Chest Heart Rate While Swimming

The HRM-Pro, HRM-Swim, and HRM-Tri heart rate accessories record and store your heart rate data while you are swimming. To view your heart rate data, you can add heart rate data fields (*Customizing the Data Screens*, page 107).

NOTE: Chest heart rate data is not visible on compatible watches while the heart rate monitor is underwater.

You must start a timed activity on your paired watch to view stored heart rate data later. During rest intervals when out of the water, the heart rate accessory sends your heart rate data to your watch. Your watch automatically downloads stored heart rate data when you save your timed swim activity. Your heart rate accessory must be out of the water, active, and within range of the watch (3 m) while data downloads. Your heart rate data can be reviewed in the watch history and on your Garmin Connect account.

If both wrist-based heart rate and chest heart rate data are available, your watch uses the chest heart rate data.

HRM-Pro Accessory

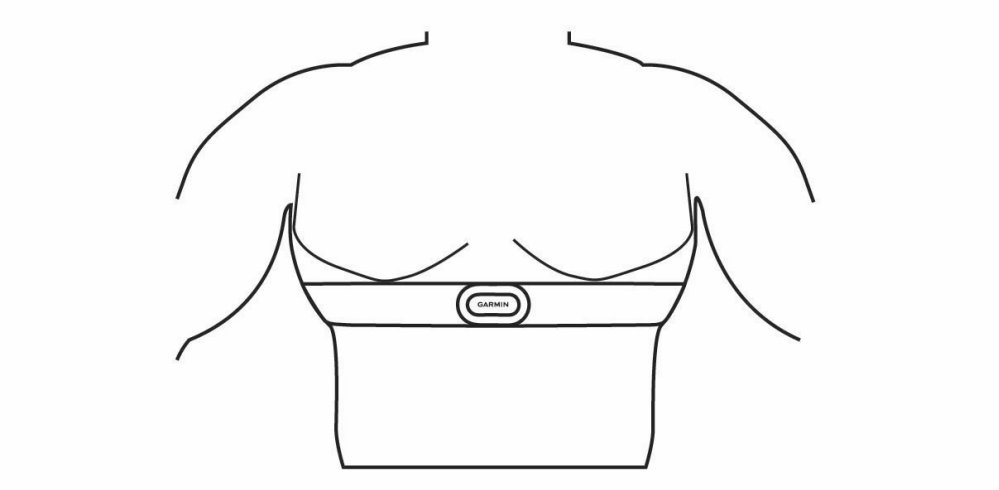
The device can record heart rate during your swim (*Chest Heart Rate While Swimming*, page 42).

Putting On the Heart Rate Monitor

You should wear the heart rate monitor directly on your skin, just below your sternum. It should be snug enough to stay in place during your activity. If necessary, you can purchase a strap extender at buy.garmin.com.

1 Wet the electrodes ① on the back of the heart rate monitor to create a strong connection between your chest and the transmitter.

2 Wear the heart rate monitor with the Garmin logo facing right-side up.



The loop ② and hook ③ connection should be on your right side.

3 Wrap the heart rate monitor around your chest, and connect the strap hook to the loop.

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

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

HRM-Pro Running Pace and Distance

The HRM-Pro series accessory calculates your running pace and distance based on your user profile and the motion measured by the sensor on every stride. The heart rate monitor provides running pace and distance when GPS is not available, such as during treadmill running. You can view your running pace and distance on your compatible Forerunner watch when connected using ANT+ technology. You can also view it on compatible third-party training apps when connected using Bluetooth technology.

The pace and distance accuracy improves with calibration.

Automatic calibration: The default setting for your watch is **Auto Calibrate**. The HRM-Pro series accessory calibrates each time you run outside with it connected to your compatible Forerunner watch.

NOTE: Automatic calibration does not work for indoor, trail, or ultra run activity profiles (*Tips for Recording Running Pace and Distance*, page 44).

Manual calibration: You can select **Calibrate & Save** after a treadmill run with your connected HRM-Pro series accessory (*Calibrating the Treadmill Distance*, page 7).

Tips for Recording Running Pace and Distance

- Update your Forerunner watch software (*Product Updates*, page 128).
- Complete several outdoor runs with GPS and your connected HRM-Pro series accessory. It's important that your outdoor range of paces matches your range of paces on the treadmill.
- If your run includes sand or deep snow, go to the sensor settings, and turn off **Auto Calibrate**.
- If you previously connected a compatible foot pod using ANT+ technology, set the foot pod status to **Off**, or remove it from the list of connected sensors.
- Complete a treadmill run with manual calibration (*Calibrating the Treadmill Distance*, page 7).
- If automatic and manual calibrations don't seem accurate, go to the sensor settings, and select **HRM Pace & Distance** > **Reset Calibration Data**.

  NOTE: You can try turning off **Auto Calibrate**, and then manually calibrate again (*Calibrating the Treadmill Distance*, page 7).

Running Power

Garmin running power is calculated using measured running dynamics information, user mass, environmental data, and other sensor data. The power measurement estimates the amount of power a runner applies to the road surface, and it is displayed in watts. Using running power as a gauge of effort may suit some runners better than using either pace or heart rate. Running power can be more responsive than heart rate for indicating the level of effort, and it can account for the uphills, downhills, and wind, which a pace measurement does not do. For more information, go to www.garmin.com/performance-data/running/.

Running power can be measured using a compatible running dynamics accessory or the watch sensors. You can customize the running power data fields to view your power output and make adjustments to your training (*Data Fields*, page 133). You can set up power alerts to be notified when you reach a specified power zone (*Activity Alerts*, page 108).

Running power zones are similar to cycling power zones. The values for the zones are default values based on gender, weight, and average ability, and may not match your personal abilities. You can manually adjust your zones on the watch or using your Garmin Connect account (*Setting Your Power Zones*, page 37).

Running Power Settings

Hold ☰, select **Activities & Apps**, select a running activity, and select the activity settings.

Status: Enables or disables recording Garmin running power data. You can use this setting if you prefer to use third-party running power data.

Source: Allows you to select which device to use to record running power data. The Smart Mode option automatically detects and uses the running dynamics accessory, when available. The watch uses wrist-based running power data when an accessory is not connected.

Account for Wind: Enables or disables using wind data when calculating your running power. Wind data is a combination of the speed, heading, and barometer data from your watch and the available wind data from your phone.

Heart Rate Storage for Timed Activities

You can start a timed activity on your compatible paired Forerunner device, and the heart rate monitor records your heart rate data even if you move away from your device. For example, you can record heart rate data during fitness activities or team sports where watches cannot be worn.

Your heart rate monitor automatically sends your stored heart rate data to your compatible Forerunner device when you save your activity. Your heart rate monitor must be active and within range (3 m) of the device while data is transferred.

Accessing Stored Heart Rate Data

If you save a timed activity before you upload the stored heart rate data, you can download the data from the HRM-Pro accessory.

NOTE: Your HRM-Pro accessory stores up to 18 hours of activity history. When the heart rate monitor memory is full, your oldest data is overwritten.

1. Put on the heart rate monitor.
2. From your Garmin device, select the History menu.
3. Select the timed activity you saved while you were wearing the heart rate monitor
4. Select **Download HR**.

Pool Swimming

NOTICE

Hand wash the heart rate monitor after exposure to chlorine or other pool chemicals. Prolonged exposure to these substances can damage the heart rate monitor.

The HRM-Pro accessory is designed primarily for open water swimming, but it can be used occasionally for pool swimming. The heart rate monitor should be worn under a swim suit or triathlon top during pool swimming. Otherwise, it may slide down your chest when pushing off the pool wall.

Caring for the Heart Rate Monitor

NOTICE

A buildup of sweat and salt on the strap can permanently damage the heart rate monitor and decrease its ability to report accurate data.

Using too much detergent when washing the heart rate monitor may damage the heart rate monitor..

- Rinse the heart rate monitor after every use.
- Hand wash the heart rate monitor after every seven uses or one pool swim, using warm water at a maximum temperature of 40°C (104°F), and a tiny amount of mild detergent, such as dishwashing liquid.
- Thoroughly rinse the strap after hand washing the heart rate monitor to remove detergent residue that can cause skin irritation.
- Do not put the heart rate monitor in a washing machine or dryer.
- When drying the heart rate monitor, hang it up or lay it flat.

Tips for Erratic Heart Rate Data

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

- Reapply water to the electrodes and contact patches (if applicable).
- Tighten the strap on your chest.
- Warm up for 5 to 10 minutes.
- Follow the care instructions (*Caring for the Heart Rate Monitor*, page 45).
- Wear a cotton shirt or thoroughly wet both sides of the strap.

  Synthetic fabrics that rub or flap against the heart rate monitor can create static electricity that interferes with heart rate signals.
- Move away from sources that can interfere with your heart rate monitor.

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

HRM-Swim Accessory

The device can record heart rate during your swim (*Chest Heart Rate While Swimming*, page 42).

Sizing the Heart Rate Monitor

Before your first swim, take some time sizing the heart rate monitor. It should be tight enough to stay in place when pushing off the pool wall.

- Select a strap extender, and attach it to the elastic end of the heart rate monitor.
  The heart rate monitor comes with three extender straps to fit different chest sizes.
  TIP: The medium strap extender works for most shirt sizes (from medium to extra-large).
- Put on the heart rate monitor backward to easily adjust the slider on the strap extender.
- Put on the heart rate monitor forward to easily adjust the slider on the heart rate monitor.

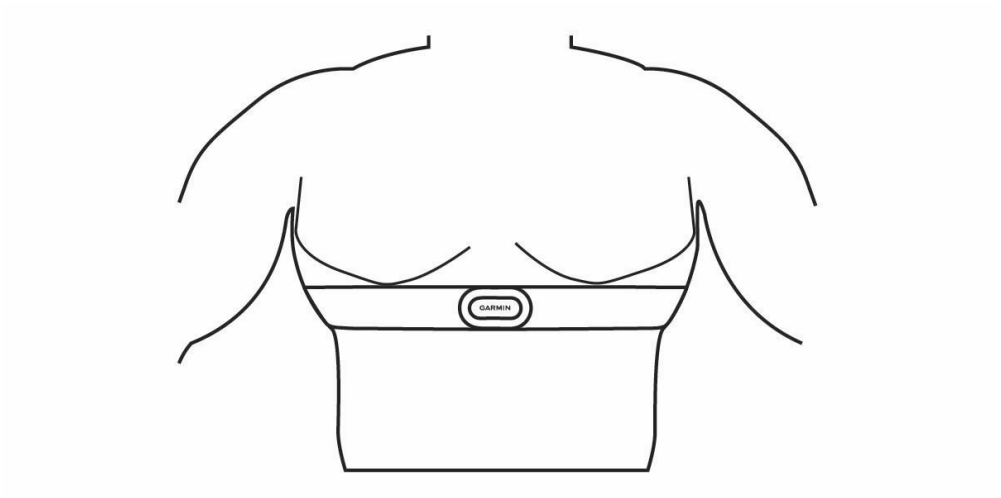
Putting On the Heart Rate Monitor

You should wear the heart rate monitor directly on your skin, just below your sternum.

1 Select a strap extender for the best fit.

2 Wear the heart rate monitor with the Garmin logo facing right-side up.
  The hook ① and loop ② connection should be on your right side.

3 Wrap the heart rate monitor around your chest, and connect the strap hook to the loop.



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

4 Tighten the heart rate monitor so it is snug around your chest, but not restrictive.

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

Tips for Using the HRM-Swim Accessory

- Adjust the tightness of the heart rate monitor and strap extender if the heart rate monitor slides down your chest when pushing off the pool wall.
- Stand up between intervals so that the heart rate monitor is out of the water to see your heart rate data.

Data Storage

The heart rate monitor can store up to 20 hours of data in a single activity. When the heart rate monitor memory is full, your oldest data is overwritten.

You can start a timed activity on your paired Forerunner device, and the heart rate monitor records your heart rate data even if you move away from your device. For example, you can record heart rate data during fitness activities or team sports where watches cannot be worn. Your heart rate monitor automatically sends your stored heart rate data to your Forerunner device when you save your activity. Your heart rate monitor must be active and within range (3 m) of the device while data is uploaded.

HRM-Tri Accessory

The HRM-Swim section of this manual explains recording heart rate during your swim (*Chest Heart Rate While Swimming*, page 42).

Running Dynamics

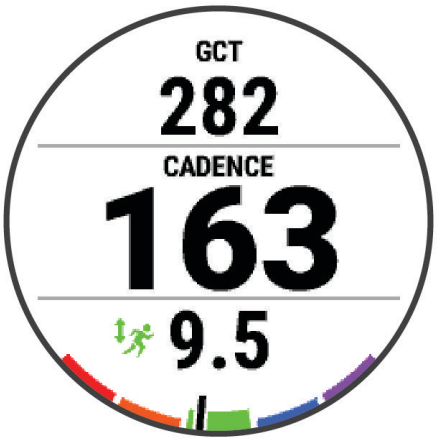
Running dynamics is real-time feedback about your running form. Your Forerunner watch has an accelerometer to calculate five running form metrics. For all six running form metrics, you must pair your Forerunner watch with the HRM-Pro series accessory or other running dynamics accessory that measures torso movement. For more information, go to www.garmin.com/performance-data/running/.

Metric	Sensor Type	Description
Cadence	Watch or compatible accessory	Cadence is the number of steps per minute. It displays the total steps (right and left combined).
Vertical oscillation	Watch or compatible accessory	Vertical oscillation is your bounce while running. It displays the vertical motion of your torso, measured in centimeters.
Ground contact time	Watch or compatible accessory	Ground contact time is the amount of time in each step that you spend on the ground while running. It is measured in milliseconds. **NOTE:** Ground contact time and balance are not available while walking.
Ground contact time balance	Compatible accessory only	Ground contact time balance displays the left/right balance of your ground contact time while running. It displays a percentage. For example, 53.2 with an arrow pointing left or right.
Stride length	Watch or compatible accessory	Stride length is the length of your stride from one footfall to the next. It is measured in meters.
Vertical ratio	Watch or compatible accessory	Vertical ratio is the ratio of vertical oscillation to stride length. It displays a percentage. A lower number typically indicates better running form.

Training with Running Dynamics

The watch automatically uses wrist-based running dynamics unless you pair a compatible running dynamics accessory (*Pairing Your Wireless Sensors*, page 100). You can add a running dynamics screen to any running activity (*Customizing the Data Screens*, page 107).

1. Press **START**, and select a running activity.
2. Press **START** to start the activity timer.
3. Go for a run.
4. Scroll to the running dynamics screen to view your metrics.



REMEMBER: Ground contact time balance is available only if you are using a compatible running dynamics accessory.

5. If necessary, hold ☰ to edit how the running dynamics data appears.

Color Gauges and Running Dynamics Data

The running dynamics screens display a color gauge for the primary metric. You can display cadence, vertical oscillation, ground contact time, ground contact time balance, or vertical ratio as the primary metric. The color gauge shows you how your running dynamics data compare to those of other runners. The color zones are based on percentiles.

Garmin has researched many runners of all different levels. The data values in the red or orange zones are typical for less experienced or slower runners. The data values in the green, blue, or purple zones are typical for more experienced or faster runners. More experienced runners tend to exhibit shorter ground contact times, lower vertical oscillation, lower vertical ratio, and higher cadence than less experienced runners. However, taller runners typically have slightly slower cadences, longer strides, and slightly higher vertical oscillation. Vertical ratio is your vertical oscillation divided by stride length. It is not correlated with height.

Go to www.garmin.com/performance-data/running/ for more information on running dynamics. For additional theories and interpretations of running dynamics data, you can search reputable running publications and websites.

Color Zone	Percentile in Zone	Cadence Range	Ground Contact Time Range
Purple	>95	>183 spm	<218 ms
Blue	70–95	174–183 spm	218–248 ms
Green	30–69	164–173 spm	249–277 ms
Orange	5–29	153–163 spm	278–308 ms
Red	<5	<153 spm	>308 ms

Ground Contact Time Balance Data

Ground contact time balance measures your running symmetry and appears as a percentage of your total ground contact time. For example, 51.3% with an arrow pointing left indicates the runner is spending more time on the ground when on the left foot. If your data screen displays both numbers, for example 48–52, 48% is the left foot and 52% is the right foot.

Color Zone	Red	Orange	Green	Orange	Red
Symmetry	Poor	Fair	Good	Fair	Poor
Percent of Other Runners	5%	25%	40%	25%	5%
Ground Contact Time Balance	>52.2% L	50.8–52.2% L	50.7% L–50.7% R	50.8–52.2% R	>52.2% R

While developing and testing running dynamics, the Garmin team found correlations between injuries and greater imbalances with certain runners. For many runners, ground contact time balance tends to deviate further from 50–50 when running up or down hills. Most running coaches agree that a symmetrical running form is good. Elite runners tend to have quick and balanced strides.

You can watch the gauge or data field during your run or view the summary on your Garmin Connect account after your run. As with the other running dynamics data, ground contact time balance is a quantitative measurement to help you learn about your running form.

Vertical Oscillation and Vertical Ratio Data

The data ranges for vertical oscillation and vertical ratio are slightly different depending on the sensor and whether it is positioned at the chest (HRM-Pro series, HRM-Run™, or HRM-Tri accessories) or at the waist (Running Dynamics Pod accessory).

Color Zone	Percentile in Zone	Vertical Oscillation Range at Chest	Vertical Oscillation Range at Waist	Vertical Ratio at Chest	Vertical Ratio at Waist
Purple	>95	<6.4 cm	<6.8 cm	<6.1%	<6.5%
Blue	70–95	6.4–8.1 cm	6.8–8.9 cm	6.1–7.4%	6.5–8.3%
Green	30–69	8.2–9.7 cm	9.0–10.9 cm	7.5–8.6%	8.4–10.0%
Orange	5–29	9.8–11.5 cm	11.0–13.0 cm	8.7–10.1%	10.1–11.9%
Red	<5	>11.5 cm	>13.0 cm	>10.1%	>11.9%

Tips for Missing Running Dynamics Data

This topic provides tips for using a compatible running dynamics accessory. If the accessory is not connected to your watch, the watch automatically switches to wrist-based running dynamics.

- Make sure you have a running dynamics accessory, such as the HRM-Pro series accessory.
  Accessories with running dynamics have on the front of the module.
- Pair the running dynamics accessory with your watch again, according to the instructions.
- If you are using the HRM-Pro series accessory, pair it with your watch using ANT+ technology, rather than Bluetooth technology.
- If the running dynamics data display shows only zeros, make sure the accessory is worn right-side up.
  NOTE: Ground contact time and balance appears only while running. It is not calculated while walking.
  REMEMBER: Ground contact time balance is not calculated with wrist-based running dynamics.

Performance Measurements

These performance measurements are estimates that can help you track and understand your training activities and race performances. The measurements require a few activities using wrist-based heart rate or a compatible chest heart rate monitor. Cycling performance measurements require a heart rate monitor and a power meter.

These estimates are provided and supported by Firstbeat Analytics™. For more information, go to www.garmin.com/performance-data/running/.

NOTE: The estimates may seem inaccurate at first. The watch requires you to complete a few activities to learn about your performance.

VO2 max.: VO2 max. is the maximum volume of oxygen (in milliliters) you can consume per minute per kilogram of body weight at your maximum performance (*About VO2 Max. Estimates*, page 52).

Predicted race times: The watch uses the VO2 max. estimate and your training history to provide a target race time based on your current state of fitness (*Viewing Your Predicted Race Times*, page 54).

HRV status: The watch analyzes your wrist heart rate readings while you are sleeping to determine your heart rate variability (HRV) status based on your personal, long-term HRV averages (*Heart Rate Variability Status*, page 55).

Performance condition: Your performance condition is a real-time assessment after 6 to 20 minutes of activity. It can be added as a data field so you can view your performance condition during the rest of your activity. It compares your real-time condition to your average fitness level (*Performance Condition*, page 55).

Functional threshold power (FTP): The watch uses your user profile information from the initial setup to estimate your FTP. For a more accurate rating, you can conduct a guided test (*Getting Your FTP Estimate*, page 56).

Lactate threshold: Lactate threshold requires a chest heart rate monitor. Lactate threshold is the point where your muscles start to rapidly fatigue. Your watch measures your lactate threshold level using heart rate data and pace (*Lactate Threshold*, page 57).

Stamina: The watch uses your VO2 max. estimate and heart rate data to provide real-time stamina estimates. It can be added as a data screen so you can view your potential and current stamina during your activity.

Power curve (cycling): The power curve displays your sustained power output over time. You can view your power curve for the previous month, three months, or twelve months (*Viewing Your Power Curve*, page 59).

Turning Off Performance Notifications

Some performance notifications appear upon completion of your activity. Some performance notifications appear during an activity or when you achieve a new performance measurement, such as a new VO2 max. estimate. You can turn off the performance condition feature to avoid some of these notifications.

1. Hold ☰.
2. Select **System** > **Performance Condition**.

Syncing Activities and Performance Measurements

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

Sync your Forerunner watch and other Garmin devices to your Garmin Connect account.

TIP: You can set a primary training device and primary wearable in the Garmin Connect app (*Unified Training Status*, page 21).

Recent activities and performance measurements from your other Garmin devices appear on your Forerunner watch.

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. The device has separate VO2 max. estimates for running and cycling. You must run either outside with GPS or ride with a compatible power meter at a moderate level of intensity for several minutes to get an accurate 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, such as where it ranks for your age and sex.

Purple	Superior
Blue	Excellent
Green	Good
Orange	Fair
Red	Poor

VO2 max. data is provided by Firstbeat Analytics. VO2 max. analysis is provided with permission from The Cooper Institute®. For more information, see the appendix (*VO2 Max. Standard Ratings*, page 140), and go to www.CooperInstitute.org.

Getting Your VO2 Max. Estimate for Running

This feature requires wrist-based heart rate or a compatible chest heart rate monitor. If you are using a chest heart rate monitor, you must put it on and pair it with your watch (*Pairing Your Wireless Sensors*, page 100). If your watch was packaged with a heart rate monitor, the devices are already paired.

For the most accurate estimate, complete the user profile setup (*Setting Up Your User Profile*, page 35), and set your maximum heart rate (*Setting Your Heart Rate Zones*, page 36). The estimate may seem inaccurate at first. The watch requires a few runs to learn about your running performance. You can disable VO2 max. recording for ultra run and trail run activities if you do not want those run types to affect your VO2 max. estimate (*Turning Off VO2 Max. Recording*, page 53).

1. Start a running activity.
2. Run for at least 10 minutes outdoors.
3. After your run, select **Save**.
4. Press **UP** or **DOWN** to scroll through the performance measurements.

Getting Your VO2 Max. Estimate for Cycling

This feature requires a power meter and wrist-based heart rate or a compatible chest heart rate monitor. The power meter must be paired with your watch (*Pairing Your Wireless Sensors*, page 100). If you are using a chest heart rate monitor, you must put it on and pair it with your watch. If your watch was packaged with a heart rate monitor, the devices are already paired.

For the most accurate estimate, complete the user profile setup (*Setting Up Your User Profile*, page 35) and set your maximum heart rate (*Setting Your Heart Rate Zones*, page 36). The estimate may seem inaccurate at first. The watch requires a few rides to learn about your cycling performance.

1. Start a cycling activity.
2. Ride at a steady, high intensity for at least 20 minutes.
3. After your ride, select **Save**.
4. Press **UP** or **DOWN** to scroll through the performance measurements.

Turning Off VO2 Max. Recording

You can disable VO2 max. recording for ultra run and trail run activities if you do not want these run types to affect your VO2 max. estimate (*About VO2 Max. Estimates*, page 52).

1. Hold ☰.
2. Select **Settings** > **Activities & Apps**.
3. Select **Trail Run** or **Ultra Run**.
4. Select the activity settings.
5. Select **Record VO2 Max.** > **Off**.

Viewing Your Fitness Age

Your fitness age gives you an idea of how your fitness compares with a person of the same sex. Your watch uses information, such as your age, body mass index (BMI), resting heart rate data, and vigorous activity history to provide a fitness age. If you have a Garmin Index™ scale, your watch uses the body fat percentage metric instead of BMI to determine your fitness age. Exercise and lifestyle changes can impact your fitness age.

NOTE: For the most accurate fitness age, complete the user profile setup (*Setting Up Your User Profile*, page 35).

1. Hold ☰.
2. Select **Settings** > **User Profile** > **Fitness Age**.

Heat and Altitude Performance Acclimation

Environmental factors such as high temperature and altitude impact your training and performance. For example, high altitude training can have a positive impact on your fitness, but you may notice a temporary VO2 max. decline while exposed to high altitudes. Your Forerunner watch provides acclimation notifications and corrections to your VO2 max. estimate and training status when the temperature is above 22°C (72°F) and when the altitude is above 800 m (2625 ft.). You can keep track of your heat and altitude acclimation in the training status glance.

NOTE: The heat acclimation feature is available only for GPS activities and requires weather data from your connected phone.

Viewing Your Predicted Race Times

For the most accurate estimate, complete the user profile setup (*Setting Up Your User Profile*, page 35), and set your maximum heart rate (*Setting Your Heart Rate Zones*, page 36).

Your watch uses the VO2 max. estimate and your training history to provide a target race time (*About VO2 Max. Estimates*, page 52). The watch analyzes several weeks of your training data to refine the race time estimates.

1. From the watch face, press **UP** or **DOWN** to view the performance glance.
2. Press **START** to view glance details.
3. Press **UP** or **DOWN** to view a predicted race time.

4. Press **START** to view predictions for other distances.

   NOTE: The predictions may seem inaccurate at first. The watch requires a few runs to learn about your running performance.

Heart Rate Variability Status

Your watch analyzes your wrist heart rate readings while you are sleeping to determine your heart rate variability (HRV). Training, physical activity, sleep, nutrition, and healthy habits all impact your heart rate variability. HRV values can vary widely based on gender, age, and fitness level. A balanced HRV status may indicate positive signs of health such as good training and recovery balance, greater cardiovascular fitness, and resilience to stress. An unbalanced or poor status may be a sign of fatigue, greater recovery needs, or increased stress. For best results, you should wear the watch while sleeping. The watch requires three weeks of consistent sleep data to display your heart rate variability status.

Color Zone	Status	Description
Green	Balanced	Your seven-day average HRV is within your baseline range.
Orange	Unbalanced	Your seven-day average HRV is above or below your baseline range.
Red	Low	Your seven-day average HRV is well below your baseline range.
No color	Poor No status	Your HRV values are averaging well below the normal range for your age. No status means that there is insufficient data to generate a seven-day average.

You can sync your watch with your Garmin Connect account to view your current heart rate variability status, trends, and educational feedback.

Performance Condition

As you complete your activity, such as running or cycling, the performance condition feature analyzes your pace, heart rate, and heart rate variability to make a real-time assessment of your ability to perform compared to your average fitness level. It is approximately your real-time percentage deviation from your baseline VO2 max. estimate.

Performance condition values range from -20 to +20. After the first 6 to 20 minutes of your activity, the device displays your performance condition score. For example, a score of +5 means that you are rested, fresh, and capable of a good run or ride. You can add performance condition as a data field to one of your training screens to monitor your ability throughout the activity. Performance condition can also be an indicator of fatigue level, especially at the end of a long training run or ride.

NOTE: The device requires a few runs or rides with a heart rate monitor to get an accurate VO2 max. estimate and learn about your running or riding ability (*About VO2 Max. Estimates*, page 52).

Viewing Your Performance Condition

This feature requires wrist-based heart rate or a compatible chest heart rate monitor.

1. Add **Performance Condition** to a data screen (*Customizing the Data Screens*, page 107).
2. Go for a run or ride.

   After 6 to 20 minutes, your performance condition appears.
3. Scroll to the data screen to view your performance condition throughout the run or ride.

Getting Your FTP Estimate

Before you can get your functional threshold power (FTP) estimate, you must pair a chest heart rate monitor and power meter with your watch (*Pairing Your Wireless Sensors*, page 100), and you must get your VO2 max. estimate (*Getting Your VO2 Max. Estimate for Cycling*, page 53).

The watch uses your user profile information from the initial setup and your VO2 max. estimate to estimate your FTP. The watch will automatically detect your FTP during rides at a steady, high intensity with heart rate and power.

1. Press **UP** or **DOWN** to view the performance glance.
2. Press **START** to view glance details.
3. Press **UP** or **DOWN** to view your FTP estimate.

   Your FTP estimate appears as a value measured in watts per kilogram, your power output in watts, and a position on the color gauge.

Purple	Superior
Blue	Excellent
Green	Good
Orange	Fair
Red	Untrained

For more information, see the appendix (*FTP Ratings*, page 140).

NOTE: When a performance notification alerts you to a new FTP, you can select Accept to save the new FTP, or Decline to keep your current FTP.

Conducting an FTP Test

Before you can conduct a test to determine your functional threshold power (FTP), you must pair a chest heart rate monitor and a power meter with your device (*Pairing Your Wireless Sensors*, page 100), and you must get your VO2 max. estimate (*Getting Your VO2 Max. Estimate for Cycling*, page 53).

NOTE: The FTP test is a challenging workout that takes about 30 minutes to complete. Choose a practical and mostly flat route that allows you to ride at a steadily increasing effort, similar to a time trial.

1. From the watch face, select **START**.
2. Select a cycling activity.
3. Hold ☰.
4. Select **Training** > **FTP Guided Test**.
5. Follow the on-screen instructions.

   After you begin your ride, the device displays each step duration, the target, and current power data. A message appears when the test is complete.
6. After you complete the guided test, complete the cool down, stop the timer, and save the activity.

   Your FTP appears as a value measured in watts per kilogram, your power output in watts, and a position on the color gauge.
7. Select an option:
   - Select **Accept** to save the new FTP.
   - Select **Decline** to keep your current FTP.

Lactate Threshold

Lactate threshold is the exercise intensity at which lactate (lactic acid) starts to accumulate in the bloodstream. In running, this intensity level is estimated in terms of pace, heart rate, or power. When a runner exceeds the threshold, fatigue starts to increase at an accelerating rate. For experienced runners, the threshold occurs at approximately 90% of their maximum heart rate and between 10 km and half-marathon race pace. For average runners, the lactate threshold often occurs well below 90% of maximum heart rate. Knowing your lactate threshold can help you determine how hard to train or when to push yourself during a race.

If you already know your lactate threshold heart rate value, you can enter it in your user profile settings (*Setting Your Heart Rate Zones*, page 36). You can turn on the **Auto Detection** feature to automatically record your lactate threshold during an activity.

Performing a Guided Test to Determine Your Lactate Threshold

This feature requires a Garmin chest heart rate monitor. Before you can perform the guided test, you must put on a heart rate monitor and pair it with your device (*Pairing Your Wireless Sensors*, page 100).

The device uses your user profile information from the initial setup and your VO2 max. estimate to estimate your lactate threshold. The device will automatically detect your lactate threshold during runs at a steady, high intensity with heart rate.

TIP: The device requires a few runs with a chest heart rate monitor to get an accurate maximum heart rate value and VO2 max. estimate. If you are having trouble getting a lactate threshold estimate, try manually lowering your maximum heart rate value.

1. From the watch face, select **START**.
2. Select an outdoor running activity.

   GPS is required to complete the test.
3. Hold ☰.
4. Select **Training** > **Lactate Threshold Guided Test**.
5. Start the timer, and follow the on-screen instructions.

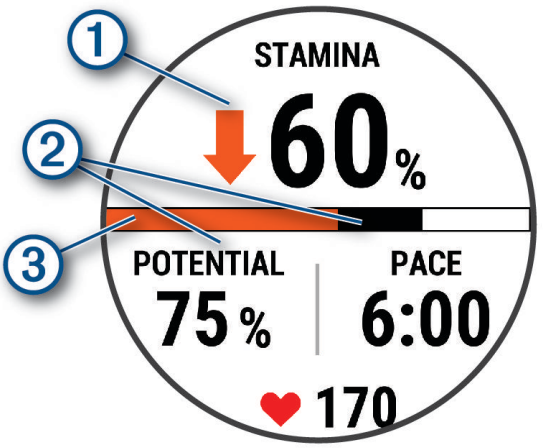
   After you begin your run, the device displays each step duration, the target, and current heart rate data. A message appears when the test is complete.
6. After you complete the guided test, stop the timer and save the activity.

   If this is your first lactate threshold estimate, the device prompts you to update your heart rate zones based on your lactate threshold heart rate. For each additional lactate threshold estimate, the device prompts you to accept or decline the estimate.

Viewing Your Real-Time Stamina

Your watch can provide real-time stamina estimates based on your heart rate data and VO2 max. estimate (*About VO2 Max. Estimates*, page 52).

1. Hold ☰.
2. Select **Settings** > **Activities & Apps**.
3. Select a run or bike activity.
4. Select the activity settings.
5. Select **Data Screens** > **Add New** > **Stamina**.
6. Press **UP** or **DOWN** to change the location of the data screen (optional).
7. Press **START** to edit the primary stamina data field (optional).
8. Start your activity (*Starting an Activity*, page 5).
9. Press **UP** or **DOWN** to scroll to the data screen.



1	Primary stamina data field. Shows your current stamina percentage, distance remaining, or time remaining.
2	Potential stamina.
3	Current stamina. Red: Stamina is depleting. Orange: Stamina is steady. Green: Stamina is recharging.

Viewing Your Power Curve

Before you can view your power curve, you must record a ride that's at least one hour long using a power meter in the last 90 days (*Pairing Your Wireless Sensors*, page 100).

You can create workouts in your Garmin Connect account. The power curve displays your sustained power output over time. You can view your power curve for the previous month, three months, or twelve months.

From the Garmin Connect app menu, select **Performance Stats** > **Power Curve**.

Training Status

These measurements are estimates that can help you track and understand your training activities. The measurements require you to complete activities for two weeks using wrist-based heart rate or a compatible chest heart rate monitor. Cycling performance measurements require a heart rate monitor and a power meter. The measurements may seem inaccurate at first when the watch is still learning about your performance.

These estimates are provided and supported by Firstbeat Analytics. For more information, go to www.garmin.com/performance-data/running/.

Training status: Training status shows you how your training affects your fitness and performance. Your training status is based on changes to your VO2 max., acute load, and HRV status over an extended time period.

VO2 max.: VO2 max. is the maximum volume of oxygen (in milliliters) you can consume per minute per kilogram of body weight at your maximum performance (*About VO2 Max. Estimates*, page 52).

HRV: HRV is your heart rate variability status over the last seven days (*Heart Rate Variability Status*, page 55).

Acute load: Acute load is a weighted sum of your recent exercise load scores including exercise duration and intensity. (*Acute Load*, page 61).

Training load focus: Your watch analyzes and distributes your training load into different categories based on the intensity and structure of each activity recorded. Training load focus includes the total load accumulated per category, and the focus of the training. Your watch displays your load distribution over the last 4 weeks (*Training Load Focus*, page 62).

Recovery time: The recovery time displays how much time remains before you are fully recovered and ready for the next hard workout (*Recovery Time*, page 66).

Training Status Levels

Training status shows you how your training affects your fitness level and performance. Your training status is based on changes to your VO2 max., acute load, and HRV status over an extended time period. You can use your training status to help plan future training and continue improving your fitness level.

No Status: The watch needs you to record multiple activities over two weeks, with VO2 max. results from running or cycling, to determine your training status.

Detraining: You have a break in your training routine or you are training much less than usual for a week or more. Detraining means that you are unable to maintain your fitness level. You can try increasing your training load to see improvement.

Recovery: Your lighter training load is allowing your body to recover, which is essential during extended periods of hard training. You can return to a higher training load when you feel ready.

Maintaining: Your current training load is enough to maintain your fitness level. To see improvement, try adding more variety to your workouts or increasing your training volume.

Productive: Your current training load is moving your fitness level and performance in the right direction. You should plan recovery periods into your training to maintain your fitness level.

Peaking: You are in ideal race condition. Your recently reduced training load is allowing your body to recover and fully compensate for earlier training. You should plan ahead, since this peak state can only be maintained for a short time.

Overreaching: Your training load is very high and counterproductive. Your body needs a rest. You should give yourself time to recover by adding lighter training to your schedule.

Unproductive: Your training load is at a good level, but your fitness is decreasing. Try focusing on rest, nutrition, and stress management.

Strained: There is imbalance between your recovery and training load. It is a normal result after a hard training or major event. Your body may be struggling to recover, so you should pay attention to your overall health.

Tips for Getting Your Training Status

The training status feature depends on updated assessments of your fitness level, including at least one VO2 max. measurement per week (*About VO2 Max. Estimates*, page 52). Indoor run activities do not generate a VO2 max. estimate in order to preserve the accuracy of your fitness level trend. You can disable VO2 max. recording for ultra run and trail run activities if you do not want those run types to affect your VO2 max. estimate (*Turning Off VO2 Max. Recording*, page 53).

To get the most out of the training status feature, you can try these tips.

- At least one time per week, run or ride outdoors with a power meter, and reach a heart rate higher than 70% of your maximum heart rate for at least 10 minutes.

  After using the watch for one or two weeks, your training status should be available.
- Record all of your fitness activities on your primary training device, allowing your watch to learn about your performance (*Syncing Activities and Performance Measurements*, page 51).
- Wear the watch consistently while you sleep, to continue generating an up-to-date HRV status. Having a valid HRV status can help maintain a valid training status when you do not have as many activities with VO2 max. measurements.

Acute Load

Acute load is a weighted sum of your excess post-exercise oxygen consumption (EPOC) for the last several days. The gauge indicates whether your current load is low, optimal, high, or very high. The optimal range is based on your individual fitness level and training history. The range adjusts as your training time and intensity increase or decrease.

Training Load Focus

In order to maximize performance and fitness gains, training should be distributed across three categories: low aerobic, high aerobic, and anaerobic. Training load focus shows you how much of your training is currently in each category and provides training targets. Training load focus requires at least 7 days of training to determine if your training load is low, optimal, or high. After 4 weeks of training history, your training load estimate will have more detailed target information to help you balance your training activities.

Below targets: Your training load is lower than optimal in all intensity categories. Try increasing the duration or frequency of your workouts.

Low aerobic shortage: Try adding more low aerobic activities to provide recovery and balance for your higher intensity activities.

High aerobic shortage: Try adding more high aerobic activities to help improve your lactate threshold and VO2 max. over time.

Anaerobic shortage: Try adding a few more intense, anaerobic activities to improve your speed and anaerobic capacity over time.

Balanced: Your training load is balanced and provides all-around fitness benefits as you continue training.

Low aerobic focus: Your training load is mostly low aerobic activity. This provides a solid foundation and prepares you for adding more intense workouts.

High aerobic focus: Your training load is mostly high aerobic activity. These activities help to improve lactate threshold, VO2 max., and endurance.

Anaerobic focus: Your training load is mostly intense activity. This leads to rapid fitness gains, but should be balanced with low aerobic activities.

Above targets: Your training load is higher than optimal, and you should consider scaling back the duration and frequency of your workouts.

About Training Effect

Training Effect measures the impact of an activity on your aerobic and anaerobic fitness. Training Effect accumulates during the activity. As the activity progresses, the Training Effect value increases. Training Effect is determined by your user profile information and training history, and heart rate, duration, and intensity of your activity. There are seven different Training Effect labels to describe the primary benefit of your activity. Each label is color coded and corresponds to your training load focus (*Training Load Focus*, page 62). Each feedback phrase, for example, "Highly Impacting VO2 Max." has a corresponding description in your Garmin Connect activity details.

Aerobic Training Effect uses your heart rate to measure how the accumulated intensity of an exercise affects your aerobic fitness and indicates if the workout had a maintaining or improving effect on your fitness level. Your excess post-exercise oxygen consumption (EPOC) accumulated during exercise is mapped to a range of values that account for your fitness level and training habits. Steady workouts at moderate effort or workouts involving longer intervals (>180 sec) have a positive impact on your aerobic metabolism and result in an improved aerobic Training Effect.

Anaerobic Training Effect uses heart rate and speed (or power) to determine how a workout affects your ability to perform at very high intensity. You receive a value based on the anaerobic contribution to EPOC and the type of activity. Repeated high-intensity intervals of 10 to 120 seconds have a highly beneficial impact on your anaerobic capability and result in an improved anaerobic Training Effect.

You can add Aerobic Training Effect and Anaerobic Training Effect as data fields to one of your training screens to monitor your numbers throughout the activity.

Training Effect	Aerobic Benefit	Anaerobic Benefit
From 0.0 to 0.9	No benefit.	No benefit.
From 1.0 to 1.9	Minor benefit.	Minor benefit.
From 2.0 to 2.9	Maintains your aerobic fitness.	Maintains your anaerobic fitness.
From 3.0 to 3.9	Impacts your aerobic fitness.	Impacts your anaerobic fitness.
From 4.0 to 4.9	Highly impacts your aerobic fitness.	Highly impacts your anaerobic fitness.
5.0	Overreaching and potentially harmful without enough recovery time.	Overreaching and potentially harmful without enough recovery time.

Training Effect technology is provided and supported by Firstbeat Analytics. For more information, go to www.firstbeat.com.

Training Readiness

Your training readiness is a score and a short message that helps you determine how ready you are for training each day. The score is continuously calculated and updated throughout the day using these factors:

- Sleep score (last night)
- Recovery time
- HRV status
- Acute load
- Sleep history (last 3 nights)
- Stress history (last 3 days)

Color Zone	Score	Description
Purple	95 to 100	Prime Best possible
Blue	75 to 94	High Ready for challenges
Green	50 to 74	Moderate Good to go
Orange	25 to 49	Low Time to slow down
Red	1 to 24	Poor Let your body recover

To see your training readiness trends over time, go to your Garmin Connect account.

Endurance Score

Your endurance score helps you understand your overall endurance based on all recorded activities with heart rate data. You can view recommendations for improving your endurance score, and the top sports contributing to your score over time.

Color Zone	Description
Pink	Elite
Purple	Superior
Blue	Expert
Green	Well Trained
Yellow	Trained
Orange	Intermediate
Red	Recreational

For more information, see the appendix (*Endurance Score Ratings*, page 141).

Hill Score

Your hill score helps you understand your current capacity for uphill running based on your training history and VO2 max. estimate. Your watch detects uphill segments with 2% grade or more during an outdoor running activity. You can view your hill endurance, hill strength, and changes to your hill score over time.

Color Zone	Score	Description
Pink	95 to 100	Elite
Purple	85 to 94	Expert
Blue	70 to 84	Skilled
Green	50 to 69	Trained
Orange	25 to 49	Challenger
Red	1 to 24	Recreational

Viewing Cycling Ability

Before you can view your cycling ability, you must have a 7-day training history, VO2 max. data recorded in your user profile (*About VO2 Max. Estimates*, page 52), and power curve data from a paired power meter (*Viewing Your Power Curve*, page 59).

Cycling ability is a measurement of your performance across three categories: aerobic endurance, aerobic capacity, and anaerobic capacity. Cycling ability includes your current rider type, such as climber. Information you enter in your user profile, such as body weight, also helps determine your rider type (*Setting Up Your User Profile*, page 35).

1. Press **UP** or **DOWN** to view the cycling ability glance.

   NOTE: You may need to add the glance to your glance loop (*Customizing the Glance Loop*, page 104).
2. Press **START** to view your current rider type.
3. Press **START** to view a detailed analysis of your cycling ability (optional).

Recovery Time

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

NOTE: The recovery time recommendation uses your VO2 max. estimate and may seem inaccurate at first. The device requires you to complete a few activities to learn about your performance.

The recovery time appears immediately following an activity. The time counts down until it is optimal for you to attempt another hard workout. The device updates your recovery time throughout the day based on changes in sleep, stress, relaxation, and physical activity.

Viewing Your Recovery Time

For the most accurate estimate, complete the user profile setup (*Setting Up Your User Profile*, page 35), and set your maximum heart rate (*Setting Your Heart Rate Zones*, page 36).

1. Start a running activity.
2. After your run, select **Save**.

   The recovery time appears. The maximum time is 4 days.

   NOTE: From the watch face, you can press UP or DOWN to view the training status glance, and press START to scroll through the metrics to view your recovery time.

Recovery Heart Rate

If you are training with wrist-based heart rate or a compatible chest heart rate monitor, you can check your recovery heart rate value after each activity. Recovery heart rate is the difference between your exercising heart rate and your heart rate two minutes after the exercise has stopped. For example, after a typical training run, you stop the timer. Your heart rate is 140 bpm. After two minutes of no activity or cool down, your heart rate is 90 bpm. Your recovery heart rate is 50 bpm (140 minus 90). Some studies have linked recovery heart rate to cardiac health. Higher numbers generally indicate healthier hearts.

TIP: For best results, you should stop moving for two minutes while the device calculates your recovery heart rate value.

Pausing and Resuming Your Training Status

If you are injured or sick, you can pause your training status. You can continue to record fitness activities, but your training status, training load focus, recovery feedback, and workout recommendations are temporarily disabled.

You can resume your training status when you are ready to start training again. For best results, you need at least one VO2 max. measurement each week (*About VO2 Max. Estimates*, page 52).

1. When you want to pause your training status, select an option:
   - From the training status glance, hold , and select **Options** > **Pause Training Status**.
   - From your Garmin Connect settings, select **Performance Stats** > **Training Status** > > **Pause Training Status**.
2. Sync your watch with your Garmin Connect account.
3. When you want to resume your training status, select an option:
   - From the training status glance, hold , and select **Options** > **Resume Training Status**.
   - From your Garmin Connect settings, select **Performance Stats** > **Training Status** > > **Resume Training Status**.
4. Sync your watch with your Garmin Connect account.

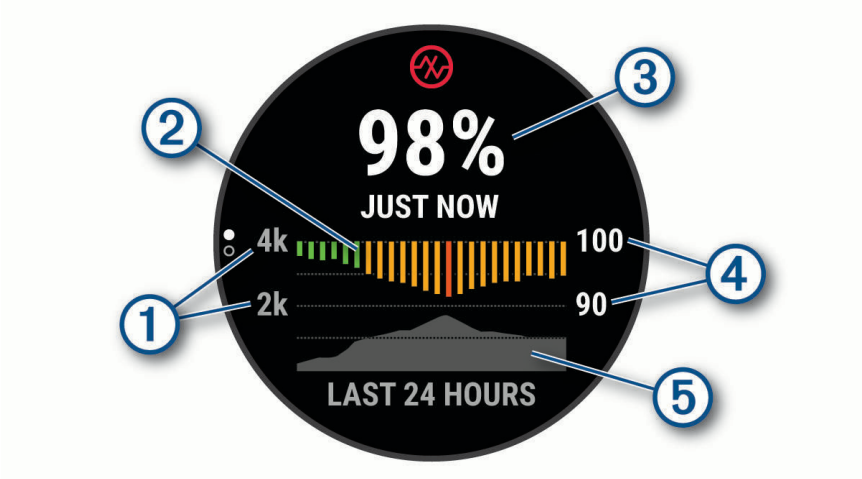
Pulse Oximeter

Your watch has a wrist-based pulse oximeter to gauge the peripheral saturation of oxygen in your blood. Knowing your oxygen saturation can help you determine how your body is acclimating to high altitudes for alpine sport and expedition.

You can manually begin a pulse oximeter reading by viewing the pulse oximeter glance (*Getting Pulse Oximeter Readings*, page 68). You can also turn on all-day readings (*Turning On All-Day Mode*, page 68). When you remain motionless, your watch analyzes your oxygen saturation and your elevation. The elevation profile helps indicate how your pulse oximeter readings are changing, relative to your to elevation.

On the watch, your pulse oximeter reading appears as an oxygen saturation percentage and color on the graph. On your Garmin Connect account, you can view additional details about your pulse oximeter readings, including trends over multiple days.

For more information about pulse oximeter accuracy, go to garmin.com/ataccuracy.



①	The elevation scale.
②	A graph of your average oxygen saturation readings for the last 24 hours.
③	Your most recent oxygen saturation reading.
④	The oxygen saturation percentage scale.
⑤	A graph of your elevation readings for the last 24 hours.

Getting Pulse Oximeter Readings

You can manually begin a pulse oximeter reading by viewing the pulse oximeter glance. The glance displays your most recent blood oxygen saturation percentage, a graph of your hourly average readings for the last 24 hours, and a graph of your elevation for the last 24 hours.

NOTE: The first time you view the pulse oximeter glance, the watch must acquire satellite signals to determine your elevation. You should go outside, and wait while the watch locates satellites.

1. While you are sitting or inactive, press **UP** or **DOWN** to view the pulse oximeter glance.
2. Press **START** to view glance details.
3. Press **START**, and select **Take Reading** to begin a pulse oximeter reading.
4. Remain motionless for up to 30 seconds.

   NOTE: If you are too active for the watch to get a pulse oximeter reading, a message appears instead of a percentage. You can check again after several minutes of inactivity. For best results, hold the arm wearing the watch at heart level while the watch reads your blood oxygen saturation.

Turning On Pulse Oximeter Sleep Tracking

You can set your device to continuously measure your blood oxygen saturation while you sleep.

NOTE: Unusual sleep positions can cause abnormally low sleep-time SpO2 readings.

1. From the pulse oximeter glance, hold ☰.
2. Select **Pulse Ox Options** > **During Sleep**.

Turning On All-Day Mode

1. From the pulse oximeter glance, hold ☰.
2. Select **Pulse Ox Options** > **All Day**.

   The device automatically analyzes your oxygen saturation throughout the day, when you are not moving.

   NOTE: Turning on all-day mode decreases battery life.

Tips for Erratic Pulse Oximeter Data

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

- Remain motionless while the watch reads your blood oxygen saturation.
- Wear the watch above your wrist bone. The watch should be snug but comfortable.
- Hold the arm wearing the watch at heart level while the watch reads your blood oxygen saturation.
- Use a silicone or nylon band.
- Clean and dry your arm before putting on the watch.
- Avoid wearing sunscreen, lotion, and insect repellent under the watch.
- Avoid scratching the optical sensor on the back of the watch.
- Rinse the watch with fresh water after each workout.

Using the Stress Level Glance

The stress level glance 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 (*Customizing the Glance Loop*, page 104).

1. While you are sitting or inactive, press **UP** or **DOWN** to view the stress level glance.
2. Press **START**.
3. Select an option:
   - Press **DOWN** to view additional details.

     TIP: Blue bars indicate periods of rest. Orange bars indicate periods of stress. Gray bars indicate times when you were too active to determine your stress level.
   - Press **START** to start a **Breathwork** activity.

Body Battery

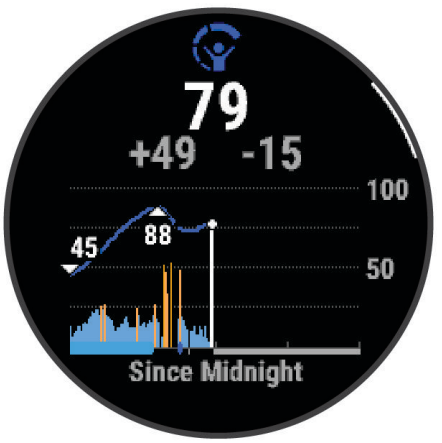
Your watch analyzes your heart rate variability, stress level, sleep quality, and activity data to determine your overall Body Battery level. Like a gas gauge on a car, it indicates your amount of available reserve energy. The Body Battery level range is from 5 to 100, where 5 to 25 is very low reserve energy, 26 to 50 is low reserve energy, 51 to 75 is medium reserve energy, and 76 to 100 is high reserve energy.

You can sync your watch 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 69).

Viewing the Body Battery Glance

1. Press **UP** or **DOWN** to view the Body Battery glance.

   NOTE: You may need to add the glance to your glance loop (*Customizing the Glance Loop*, page 104).
2. Press **START** to view a graph of your body battery and stress levels since midnight.



   Blue bars indicate periods of rest. Orange bars indicate periods of stress. Gray bars indicate times when you were too active to determine your stress level.
3. Press **DOWN** to view a list of factors impacting your Body Battery level.

   TIP: Select each factor to view more details.

Tips for Improved Body Battery Data

- For more accurate results, wear the watch while sleeping.
- Good sleep charges your Body Battery.
- Strenuous activity and high stress can cause your Body Battery to drain more quickly.
- Food intake, as well as stimulants like caffeine, has no impact on your Body Battery.

Smart Features

Pairing Your Phone

To use the connected features on your watch, you must pair it directly through the Garmin Connect app, instead of from the Bluetooth settings on your phone.

1. During the initial setup on your watch, select ✓ when you are prompted to pair with your phone.
   NOTE: If you previously skipped the pairing process, you can hold ☰, and select **Settings** > **Connectivity** > **Phone** > **Pair Phone**.
2. Scan the QR code with your phone, and follow the on-screen instructions to complete the pairing and setup process.

Tips for Existing Garmin Connect Users

1. From the Garmin Connect app, select •••.
2. Select **Garmin Devices** > **Add Device**.

Enabling Bluetooth Notifications

Before you can enable notifications, you must pair the watch with a compatible phone (*Pairing Your Phone*, page 70).

1. Hold ☰.
2. Select **Connectivity** > **Phone** > **Notifications** > **Status** > **On**.
3. Select **General Use** or **During Activity**.
4. Select a notification type.
5. Select status, sound, privacy, and timeout preferences.
6. Press **BACK**.
7. Select **Signature** to add a signature to your text message replies.

Viewing Notifications

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

Managing Notifications

You can use your compatible phone to manage notifications that appear on your Forerunner watch.

Select an option:

- If you are using an iPhone®, go to the iOS® notifications settings to select the items to show on the watch.
- If you are using an Android™ phone, from the Garmin Connect app, select **Settings** > **Notifications**.

Turning Off the Bluetooth Phone Connection

You can turn off the Bluetooth phone connection from the controls menu.

NOTE: You can add options to the controls menu.

1. Hold **LIGHT** to view the controls menu.
2. Select to turn off the Bluetooth phone connection on your Forerunner watch.
   Refer to the owner's manual for your phone to turn off Bluetooth technology on your phone.

Turning On and Off Phone Connection Alerts

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

NOTE: Phone connection alerts are turned off by default.

1 Hold ☰.
2 Select **Settings** > **Connectivity** > **Phone** > **Connected Alerts**.

Playing Audio Prompts During an Activity

You can enable your Forerunner watch to play motivational status announcements during a run or other activity. Audio prompts play on your connected Bluetooth headphones, if available. Otherwise, audio prompts play on your phone paired through the Garmin Connect app. During an audio prompt, the watch or phone mutes the primary audio to play the announcement.

NOTE: This feature is not available for all activities.

1 Hold ☰.
2 Select **Audio Prompts**.
3 Select an option:
   - To hear a prompt for each lap, select **Lap Alert**.
   - To customize prompts with your pace and speed information, select **Pace/Speed Alert**.
   - To customize prompts with your heart rate information, select **Heart Rate Alert**.
   - To customize prompts with power data, select **Power Alert**.
   - To hear prompts when you start and stop the activity timer, including the Auto Pause® feature, select **Timer Events**.
   - To hear workout alerts play as an audio prompt, select **Workout Alerts**.
   - To hear activity alerts play as an audio prompt, select **Activity Alerts** (*Activity Alerts*, page 108).
   - To hear a sound play right before an audio alert or prompt, select **Audio Tones**.
   - To change the language or the dialect of the voice prompts, select **Dialect**.

Bluetooth Connected Features

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

- Activity uploads
- Assistance
- Audio prompts
- Connect IQ
- Find my phone
- Find my watch
- GroupTrack
- Incident detection
- LiveTrack and Live Event Sharing
- Music controls
- Phone notifications
- Social media interactions
- Software updates
- Spectator messages
- Weather updates
- Workout, course, and PacePro downloads

Manually Syncing Data with Garmin Connect

NOTE: You can add options to the controls menu.

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

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.

NOTE: You can add options to the controls menu.

1. Hold **LIGHT** to view the controls menu.
2. Select **Find My Phone**.

   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.

LTE Connected Features

This Forerunner device has certain features that require an LTE Subscription and must be set up using the Garmin Connect app. For subscription information, go to garmin.com/subscriptions.

Some of the features listed here are available using LTE or Bluetooth technology (*Bluetooth Connected Features*, page 71).

- Assistance Plus
- Assistance
- Incident detection
- LiveTrack
- Live Event Sharing
- Spectator messages

Glances

Your watch comes preloaded with glances that provide quick information (*Viewing the Glances and Widgets*, page 76). Some glances require a Bluetooth connection to a compatible phone.

Some glances are not visible by default. You can add them to the glance loop manually (*Customizing the Glance Loop*, page 104).

Name	Description
ABC	Displays combined altimeter, barometer, and compass information.
Alternate time zones	Displays the current time of day in additional time zones (*Adding Alternate Time Zones*, page 120).
Altitude acclimation	At altitudes above 800 m (2625 ft.), displays graphs showing altitude-corrected values for your average pulse oximeter reading, respiration rate, and resting heart rate for the last seven days.
Altimeter	Displays the approximate elevation based on pressure changes.
Barometer	Displays the environmental pressure data based on elevation.
Body Battery	With all-day wear, displays your current Body Battery level and a graph of your level for the last several hours (*Body Battery*, page 69).
Calendar	Displays upcoming meetings from your phone calendar.
Calories	Displays your calorie information for the current day.
Compass	Displays an electronic compass.
Cycling Ability	Displays your rider type, aerobic endurance, aerobic capacity, and anaerobic capacity (*Viewing Cycling Ability*, page 66).
Endurance score	Displays a score, graph, and a short message that describes your overall endurance based on all recorded activities (*Endurance Score*, page 65).
Floors climbed	Tracks your floors climbed and progress toward your goal.
Garmin coach	Displays scheduled workouts when you select a Garmin coach adaptive training plan in your Garmin Connect account. The plan adjusts to your current level of fitness, coaching and schedule preferences, and race date.
Golf	Displays golf scores and statistics for your last round.
Health Snapshot	Starts a Health Snapshot session on your watch that records several key health metrics while you hold still for two minutes. It provides a glimpse of your overall cardiovascular status. The watch records metrics such as your average heart rate, stress level, and respiration rate. Displays summaries of your saved Health Snapshot sessions (*Health Snapshot™*, page 6).
Heart rate	Displays your current heart rate in beats per minute (bpm) and a graph of your average resting heart rate (RHR).
Hill score	Displays a score, graph, contributing metrics, and a short message that describes your hill climbing performance based on your recorded running activities (*Hill Score*, page 65).
History	Displays your activity history and a graph of your recorded activities.
HRV Status	Displays your seven-day average of your overnight heart rate variability (*Heart Rate Variability Status*, page 55).
Intensity minutes	Tracks your time spent participating in moderate to vigorous activities, your weekly intensity minutes goal, and progress toward your goal.
inReach® controls	Allows you to send messages on your paired inReach device (*Using the inReach Remote*, page 102).
Last activity	Displays a brief summary of your last recorded activity.

Name	Description
Last ride Last run Last swim	Displays a brief summary of your last recorded activity and history of the specified sport.
Lights	Provides bike light controls when you have a Varia™ light paired with your Forerunner watch.
Music controls	Provides music player controls for your phone or watch music.
Naps	Displays total nap time and Body Battery level gains. You can start the nap timer and set an alarm to wake you up (*Customizing Sleep Mode*, page 23).
Notifications	Alerts you to incoming calls, texts, social network updates, and more, based on your phone notification settings (*Enabling Bluetooth Notifications*, page 70).
Performance	Displays performance measurements that help you track and understand your training activities and race performances (*Performance Measurements*, page 51).
Primary race	Displays the race event you designate as the primary race in your Garmin Connect calendar (*Race Calendar and Primary Race*, page 21).
Pulse oximeter	Allows you to take a manual pulse oximeter reading (*Getting Pulse Oximeter Readings*, page 68). If you are too active for the watch to determine your pulse oximeter reading, the measurements are not recorded.
Race calendar	Displays your upcoming race events set in your Garmin Connect calendar (*Race Calendar and Primary Race*, page 21).
RCT camera controls	Allows you to manually take a photo and record a video clip (*Using the Varia Camera Controls*, page 102).
Respiration	Your current respiration rate in breaths per minute and seven-day average. You can do a breathing activity to help you relax.
Sleep	Displays total sleep time, a sleep score, and sleep stage information for the previous night.
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. If you are too active for the watch to determine your stress level, stress measurements are not recorded (*Using the Stress Level Glance*, page 69).
Sunrise and sunset	Displays sunrise, sunset, and civil twilight times.
Temperature	Displays temperature data from the internal temperature sensor.
Training readiness	Displays a score and a short message that helps you determine how ready you are for training each day (*Training Readiness*, page 64).
Training status	Displays your current training status and training load, which shows you how your training affects your fitness level and performance (*Training Status*, page 60).
VIRB controls	Provides camera controls when you have a VIRB device paired with your Forerunner watch (*VIRB Remote*, page 102).
Weather	Displays the current temperature and weather forecast. You can also view the current weather conditions on the map using several map overlays.

Name	Description
Women's health	Displays your current cycle or pregnancy tracking status. You can view and log your daily symptoms.

Viewing the Glances and Widgets

Glances provide quick access to health data, activity information, built-in sensors, and more. Your watch comes preloaded with several glances, and more are available when you pair your watch with a phone.

1 From the watch face, select **UP** or **DOWN**.

The watch scrolls through the glance loop and displays summary data for each glance.

2 Select **START** to view the widget and more information.

TIP: You can select **DOWN** to view additional options and functions.

Viewing the Controls Menu

The controls menu contains options, such as the stopwatch, locating your connected phone, and turning the watch off. You can also open the Garmin Pay wallet.

NOTE: You can add, reorder, and remove the options in the controls menu.

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

2 Press **UP** or **DOWN** to scroll through the options.

Customizing the Controls Menu

You can add, remove, and change the order of the shortcut menu options in the controls menu (*Viewing the Controls Menu*, page 76).

1 From the watch face, hold ☰.

2 Select **Settings** > **Appearance** > **Controls**.

3 Select a shortcut to customize.

4 Select an option:

- Select **Reorder** to change the location of the shortcut in the controls menu.
- Select **Remove** to remove the shortcut from the controls menu.

5 If necessary, select **Add New** to add an additional shortcut to the controls menu.

Morning Report

Your watch displays a morning report based on your normal wake time. Press DOWN, and select ✔ to view the report, which includes weather, sleep, overnight heart rate variability status, and more (*Customizing Your Morning Report*, page 77).

Customizing Your Morning Report

NOTE: You can customize these settings on you watch or in your Garmin Connect account.

1. Hold .
2. Select **Appearance** > **Morning Report**.
3. Select an option:
   - Select **Show Report** to enable or disable the morning report.
   - Select **Edit Report** to customize the order and type of data that appears in your morning report.
   - Select **Your Name** to customize your display name.

Viewing the Weather Glance

1. From the watch face, press **UP** or **DOWN** to view the weather glance.
   NOTE: You may need to add the glance to your glance loop (*Customizing the Glance Loop*, page 104).
2. Press **START** to view weather details.
3. Press **UP** or **DOWN** to view hourly, daily, and additional weather data.

Updating the Weather Locations

1. From the watch face, press **UP** or **DOWN** to view the weather glance.
2. Press **START**.
3. On the first glance screen, press **START**.
4. Select an option:
   - Select **Add Location**, and search for a location.
   - Select **Weather Options** > **Update Current Location** > ✓
     TIP: You should wait while the watch locates satellites (*Acquiring Satellite Signals*, page 129)

Women's Health

Menstrual Cycle Tracking

Your menstrual cycle is an important part of your health. You can use your watch to log physical symptoms, sex drive, sexual activity, ovulation days, and more. You can learn more and set up this feature in the Health Stats settings of the Garmin Connect app.

- Menstrual cycle tracking and details
- Physical and emotional symptoms
- Period and fertility predictions
- Health and nutrition information

NOTE: You can use the Garmin Connect app to add and remove glances.

Pregnancy Tracking

The pregnancy tracking feature displays weekly updates on your pregnancy and provides health and nutrition information. You can use your watch to log physical and emotional symptoms, blood glucose readings, and baby movement. You can learn more and set up this feature in the Health Stats settings of the Garmin Connect app.

Opening the Music Controls

Music controls require a Bluetooth connection to a compatible smartphone.

1. From the watch face, hold **LIGHT**.
2. Select .
3. Select **UP** or **DOWN** to use the music controls.

Connect IQ Features

You can add Connect IQ features to your watch from Garmin and other providers using the Connect IQ app (garmin.com/connectiqapp). You can customize your watch with watch faces, device apps, data fields, and music providers.

Watch Faces: Allow you to customize the appearance of the clock.

Device Apps: Add interactive features to your watch, such as glances and new outdoor and fitness activity types.

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

Music: Add music providers to your watch.

Downloading Connect IQ Features Using Your Computer

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

Wi-Fi Connected Features

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

Audio content: Allows you to sync audio content from third-party providers.

Software updates: Your device downloads and installs the latest software update automatically when a Wi-Fi connection is available.

Workouts and training plans: You can browse for and select workouts and training plans on the Garmin Connect site. The next time your device has a Wi-Fi connection, the files are wirelessly sent to your device.

Connecting to a Wi-Fi Network

You must connect your watch to the Garmin Connect app on your phone or to the Garmin Express™ application on your computer before you can connect to a Wi-Fi network.

1. Hold ☰.
2. Select **Connectivity** > **Wi-Fi** > **My Networks** > **Search for Networks**.

   The watch displays a list of nearby Wi-Fi networks.
3. Select a network.
4. If necessary, enter the password for the network.

The watch connects to the network, and the network is added to the list of saved networks. The watch reconnects to this network automatically when it is within range.

Safety and Tracking Features

⚠ CAUTION

All of the safety and tracking features must be set up using the Garmin Connect app.

The LTE connected features are only available for the Forerunner LTE device.

Assistance Plus is available only when you obtain the LTE Subscription. The Assistance Plus feature is not available in every market where this product is sold.

NOTICE

To use the safety and tracking features, the Forerunner watch must be connected to the Garmin Connect app using Bluetooth technology. You must have a data plan and be in an area of network coverage where data is available for your Forerunner watch with 4G LTE (required for Assistance Plus) or your paired phone. You can enter emergency contacts in your Garmin Connect account.

For more information about safety and tracking features, go to www.garmin.com/safety.

Assistance Plus: If you have an active LTE Subscription, are within an LTE network coverage area, and Assistance Plus is enabled, your Forerunner device can contact the Garmin International Emergency Response Coordination Center (IERCC) team if an incident is detected or if you need emergency assistance. A Garmin IERCC team member will attempt to contact emergency services on your behalf and may contact one or more of your emergency contacts.

Assistance: If an incident is detected or if you need assistance, your Forerunner device can send an automated message with your name, LiveTrack link, and GPS location (if available) to your emergency contacts. Assistance does not contact the Garmin IERCC team or emergency services on your behalf.

Incident detection: When the Forerunner watch detects an incident during certain outdoor activities, the watch sends an automated message, LiveTrack link, and GPS location (if available) 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 web 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 watch is connected to a compatible Android phone.

GroupTrack: Allows you to keep track of your connections using LiveTrack directly on screen and in real time.

Adding Emergency Contacts

Emergency contact phone numbers are used for the safety and tracking features.

1. From the Garmin Connect app, select •••.
2. Select **Safety & Tracking** > **Safety Features** > **Emergency Contacts** > **Add Emergency Contacts**.
3. Follow the on-screen instructions.

Your emergency contacts receive a notification when you add them as an emergency contact, and can accept or decline your request. If a contact declines, you must choose another emergency contact.

Requesting Assistance

NOTICE

Before you can request assistance or Assistance Plus, you must set up emergency contacts in the Garmin Connect app (*Adding Emergency Contacts*, page 79). You must have a data plan and be in an area of network coverage where data is available for your Forerunner watch with 4G LTE (required for Assistance Plus) or your paired phone. Your emergency contacts must be able to receive emails or text messages (standard text messaging rates may apply).

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

   The countdown screen appears.

   TIP: Before the countdown is complete, you can hold any button to cancel the message.

Adding Contacts

You can add up to 50 contacts to the Garmin Connect app. Contact emails can be used with the LiveTrack feature. Three of these contacts can be used as emergency contacts (*Adding Emergency Contacts*, page 79).

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

After you add contacts, you must sync your data to apply the changes to your Forerunner device (*Manually Syncing Data with Garmin Connect*, page 72).

Turning Incident Detection On and Off

⚠ CAUTION

Incident detection is a supplemental feature available only for certain outdoor activities. Incident detection should not be relied on as a primary method to obtain emergency assistance. The Garmin Connect app does not contact emergency services on your behalf.

NOTICE

Before you can enable incident detection on your watch, you must set up emergency contacts in the Garmin Connect app (*Adding Emergency Contacts*, page 79). Your paired phone or Forerunner with 4G LTE must be equipped with a data plan and be in an area of network coverage where data is available. Your emergency contacts must be able to receive emails or text messages (standard text messaging rates may apply).

1. From the watch face, hold ☰.
2. Select **Settings** > **Safety & Tracking** > **Incident Detection**.
3. Select a GPS activity.

   NOTE: Incident detection is available only for certain outdoor activities.

When an incident is detected by your Forerunner watch and your phone is connected, the Garmin Connect app can send an automated text message and email with your name and GPS location (if available) to your emergency contacts. A message appears on your device and paired phone indicating your contacts will be informed after 15 seconds have elapsed. If assistance is not needed, you can cancel the automated emergency message. If you have an LTE Subscription, incident detection can be enabled for activities without your phone.

Live Event Sharing

Live event sharing allows you to send messages to friends and family during an event, providing real-time updates including cumulative time and last lap time. Before the event, you can customize the list of recipients and the message content in the Garmin Connect app.

Turning On Live Event Sharing

Before you can use live event sharing, you must set up the LiveTrack feature in the Garmin Connect app.

NOTE: LiveTrack features are available when your Forerunner device is connected to the Garmin Connect app using Bluetooth technology, or when you obtain the LTE Subscription.

1. In the Garmin Connect app, from the settings menu, select **Safety & Tracking** > **Live Event Sharing**.

   You can customize the message triggers and options.
2. Go outside, and select a GPS activity on your Forerunner device.
3. Select ⋮ > **Live Event Sharing** > **Sharing**.

   Live event sharing is enabled for 24 hours.
4. Select **Recipients** to add people from your contacts.

Spectator Messaging

NOTE: Spectator messaging is available when your Forerunner watch has an active LTE Subscription or when your paired phone has a data plan and is in an area of network coverage where data is available.

Spectator messaging is a feature that allows your LiveTrack followers to send you audio and text messages during your run activity. You can set up this feature in the LiveTrack settings of the Garmin Connect app. To receive audio messages, you must have Bluetooth headphones connected to your watch.

Blocking Spectator Messages

If you want to block spectator messages, Garmin recommends turning it off before you start the activity.

TIP: If you have already started an activity, you can block spectator messages from the incoming message (**START** > **Disable**).

1. Go outside, and select a GPS activity on your Forerunner device.
2. Select ☰ > **LiveTrack** > **Spectator Messaging**.

Starting a GroupTrack Session

Before you can start a GroupTrack session, you must pair the watch with a compatible phone (*Pairing Your Phone*, page 70).

NOTE: Your paired phone must be equipped with a data plan and be in an area of network coverage where data is available.

These instructions are for starting a GroupTrack session with a Forerunner watch. If your connections have other compatible devices, you can see them on the map. The other devices may not be able to display GroupTrack riders on the map.

1. On the watch, hold ☰, and select **Settings** > **Safety & Tracking** > **LiveTrack** > **GroupTrack** > **Show on Map** to enable viewing connections on the map screen.
2. In the Garmin Connect app, from the settings menu, select **Safety & Tracking** > **LiveTrack** > ⋮ > **Settings** > **GroupTrack**.
3. Select **All Connections** or **Invite Only** and select your connections.
4. Select **Start LiveTrack**.
5. On the watch, start an outdoor activity.
6. Scroll to the map to view your connections.

Tips for GroupTrack Sessions

The GroupTrack feature allows you to keep track of other connections in your group using LiveTrack directly on the screen. All members of the group must be your connections in your Garmin Connect account.

- Start your activity outside using GPS.
- Pair your Forerunner device with your phone using Bluetooth technology.
- In the Garmin Connect app, select ••• > **Connections** to update the list of connections for your GroupTrack session.
- Make sure all of your connections pair with their phones and start a LiveTrack session in the Garmin Connect app.
- Make sure all your connections are in range (40 km or 25 mi.).
- During a GroupTrack session, scroll to the map to view your connections (*Adding a Map to an Activity*, page 107).

Music

NOTE: There are three different music playback options for your Forerunner watch.

- Third-party provider music
- Personal audio content
- Music stored on your phone

On a Forerunner watch, you can download audio content to your watch from your computer or from a third-party provider, so you can listen when your phone is not nearby. To listen to audio content stored on your watch, you can connect Bluetooth headphones.

Downloading Personal Audio Content

Before you can send your personal music to your watch, you must install the Garmin Express application on your computer (www.garmin.com/express).

You can load your personal audio files, such as .mp3 and .m4a files, to a Forerunner watch from your computer. For more information, go to www.garmin.com/musicfiles.

1. Connect the watch to your computer using the included USB cable.
2. On your computer, open the Garmin Express application, select your watch, and select **Music**.

   TIP: For Windows computers, you can select and browse to the folder with your audio files. For Apple® computers, the Garmin Express application uses your iTunes® library.
3. In the **My Music** or **iTunes Library** list, select an audio file category, such as songs or playlists.
4. Select the checkboxes for the audio files, and select **Send to Device**.
5. If necessary, in the Forerunner list, select a category, select the checkboxes, and select **Remove From Device** to remove audio files.

Connecting to a Third-Party Provider

Before you can download music or other audio files to your watch from a supported third-party provider, you must connect the provider to your watch.

Some third-party music provider options are already installed on your watch. For more options, you can download the Connect IQ app on your phone (garmin.com/connectiqapp).

1. Hold **DOWN** from any screen to open the music controls.
2. Select the music provider.

   NOTE: If you want to select another provider, hold , select Music Providers, and follow the on-screen instructions.

Downloading Audio Content from a Third-Party Provider

Before you can download audio content from a third-party provider, you must connect to a Wi-Fi network (*Connecting to a Wi-Fi Network*, page 78).

1. Hold **DOWN** from any screen to open the music controls.
2. Hold .
3. Select **Music Providers**.
4. Select a connected provider.
5. Select a playlist or other item to download to the watch.
6. If necessary, press **BACK** until you are prompted to sync with the service.

NOTE: Downloading audio content can drain the battery. You may be required to connect the watch to an external power source if the battery is low.

Disconnecting from a Third-Party Provider

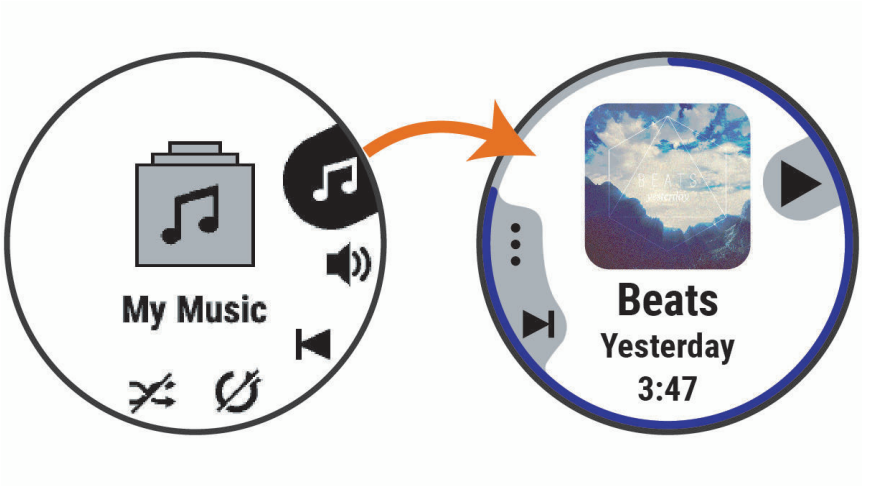
1. From the Garmin Connect app, select •••.
2. Select **Garmin Devices**, and select your watch.
3. Select **Music**.
4. Select an installed third-party provider, and follow the on-screen instructions to disconnect the third-party provider from your watch.

Listening to Music

1. Hold **DOWN** from any screen to open the music controls.
2. If necessary, connect your Bluetooth headphones (*Connecting Bluetooth Headphones*, page 85).
3. Hold ☰.
4. Select **Music Providers**, and select an option:
   - To listen to music downloaded to the watch from your computer, select **My Music** (*Downloading Personal Audio Content*, page 82).
   - To control music playback on your phone, select **Control Phone**.
   - To listen to music from a third-party provider, select the name of the provider, and select a playlist.
5. Select ▶.

Music Playback Controls

NOTE: Music playback controls may look different, depending on the selected music source.



⋮	Select to view more music playback controls.
♫	Select to browse the audio files and playlists for the selected source.
🔊	Select to adjust the volume.
▶	Select to play and pause the current audio file.
⏭	Select to skip to the next audio file in the playlist. Hold to fast forward through the current audio file.
⏮	Select to restart the current audio file. Select twice to skip to the previous audio file in the playlist. Hold to rewind through the current audio file.
↻	Select to change the repeat mode.
⤮	Select to change the shuffle mode.

Controlling Music Playback on a Connected Phone

1. On your phone, start playing a song or playlist.
2. On your Forerunner watch, hold **DOWN** from any screen to open the music controls.
3. Select **Music Providers** > **Control Phone**.

Changing the Audio Mode

You can change the music playback mode from stereo to mono.

1. Hold ☰.
2. Select **Settings** > **Music** > **Audio**.
3. Select an option.

Connecting Bluetooth Headphones

1. Bring the headphones within 2 m (6.6 ft.) of your watch.
2. Enable pairing mode on the headphones.
3. Hold ☰.
4. Select **Settings** > **Music** > **Headphones** > **Add New**.
5. Select your headphones to complete the pairing process.

Garmin Pay

The Garmin Pay feature allows you to use your watch to pay for purchases in participating stores using credit or debit cards from a participating financial institution.

Setting Up Your Garmin Pay Wallet

You can add one or more participating credit or debit cards to your Garmin Pay wallet. Go to garmin.com/garminpay/banks to find participating financial institutions.

1. From the Garmin Connect app, select •••.
2. Select **Garmin Pay** > **Get Started**.
3. Follow the on-screen instructions.

Paying for a Purchase Using Your Watch

Before you can use your watch to pay for purchases, you must set up at least one payment card.

You can use your watch to pay for purchases in a participating store.

1. Hold **LIGHT**.
2. Select **Wallet**.
3. Enter your four-digit passcode.

   NOTE: If you enter your passcode incorrectly three times, your wallet locks, and you must reset your passcode in the Garmin Connect app.

   Your most recently used payment card appears.

4. If you have added multiple cards to your Garmin Pay wallet, select **DOWN** to change to another card (optional).
5. Within 60 seconds, hold your watch near the payment reader, with the watch facing the reader.

   The watch vibrates and displays a check mark when it is finished communicating with the reader.
6. If necessary, follow the instructions on the card reader to complete the transaction.

TIP: After you successfully enter your passcode, you can make payments without a passcode for 24 hours while you continue to wear your watch. If you remove the watch from your wrist or disable heart rate monitoring, you must enter the passcode again before making a payment.

Adding a Card to Your Garmin Pay Wallet

You can add up to 10 credit or debit cards to your Garmin Pay wallet.

1. From the Garmin Connect app, select •••.
2. Select **Garmin Pay** > ⋮ > **Add Card**.
3. Follow the on-screen instructions.

After the card is added, you can select the card on your watch when you make a payment.

Managing Your Garmin Pay Cards

You can temporarily suspend or delete a card.

NOTE: In some countries, participating financial institutions may restrict the Garmin Pay features.

1. From the Garmin Connect app, select •••.
2. Select **Garmin Pay**.
3. Select a card.
4. Select an option:
   - To temporarily suspend or unsuspend the card, select **Suspend Card**.
     The card must be active to make purchases using your Forerunner watch.
   - To delete the card, select 🗑.

Changing Your Garmin Pay Passcode

You must know your current passcode to change it. If you forget your passcode, you must reset the Garmin Pay feature for your Forerunner watch, create a new passcode, and reenter your card information.

1. From the Garmin Connect app, select •••.
2. Select **Garmin Pay** > **Change Passcode**.
3. Follow the on-screen instructions.

The next time you pay using your Forerunner watch, you must enter the new passcode.

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.

Using History

History contains previous activities you have saved on your watch.

The watch has a history glance for quick access to your activity data (*Glances*, page 73).

1. From the watch face, hold ☰.
2. Select **History**.
3. Select an option:
   - To view additional information about the activity, select **All Stats**.
   - To view the impact of the activity on your aerobic and anaerobic fitness, select **Training Effect** (*About Training Effect*, page 62).
   - To view your time in each heart rate zone, select **Heart Rate**.
   - To view your time in each power zone, select **Running Power** or **Power**.
   - To select a lap and view additional information about each lap, select **Laps**.
   - To select a ski or snowboard run and view additional information about each run, select **Runs**.
   - To select an exercise set and view additional information about each set, select **Sets**.
   - To view the activity on a map, select **Map**.
   - To view an elevation plot for the activity, select **Elevation Plot**.
   - To delete the selected activity, select **Delete**.

Multisport History

Your device stores the overall multisport summary of the activity, including overall distance, time, calories, and optional accessory data. Your device also separates the activity data for each sport segment and transition so you can compare similar training activities and track how quickly you move through the transitions. Transition history includes distance, time, average speed, and calories.

Viewing Your Time in Each Heart Rate Zone

Viewing your time in each heart rate zone can help you adjust your training intensity.

1. From the watch face, hold ☰.
2. Select **History**.
3. Select **This Week** or **Previous Weeks**
4. Select an activity.
5. Press **START**, and select **Heart Rate**.

Personal Records

When you complete an activity, the watch displays any new personal records you achieved during that activity. Personal records include your fastest time over several typical race distances, highest strength activity weight for major movements, and longest run, ride, or swim.

NOTE: For cycling, personal records also include most ascent and best power (power meter required).

Viewing Your Personal Records

1. From the watch face, hold ☰.
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 .
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 .
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 .
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.

Viewing Data Totals

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

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

Deleting History

1. From the watch face, hold .
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.

Garmin Connect

You can connect with your friends on Garmin Connect. Garmin Connect gives you the tools to track, analyze, share, and encourage each other. Record the events of your active lifestyle including runs, walks, rides, swims, hikes, triathlons, and more. To sign up for a free account, you can download the app from the app store on your phone garmin.com/connectapp, or go to connect.garmin.com.

Store your activities: After you complete and save an activity with your watch, 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, cadence, running dynamics, an overhead map view, pace and speed charts, and customizable reports.

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

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

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 share links to your activities.

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

Using Garmin Connect on Your Computer

The Garmin Express application connects your watch 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 watch. You can also add music to your watch (*Downloading Personal Audio Content*, page 82). You can also install software updates and manage your Connect IQ apps.

1. Connect the watch to your computer using the USB cable.
2. Go to 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.

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

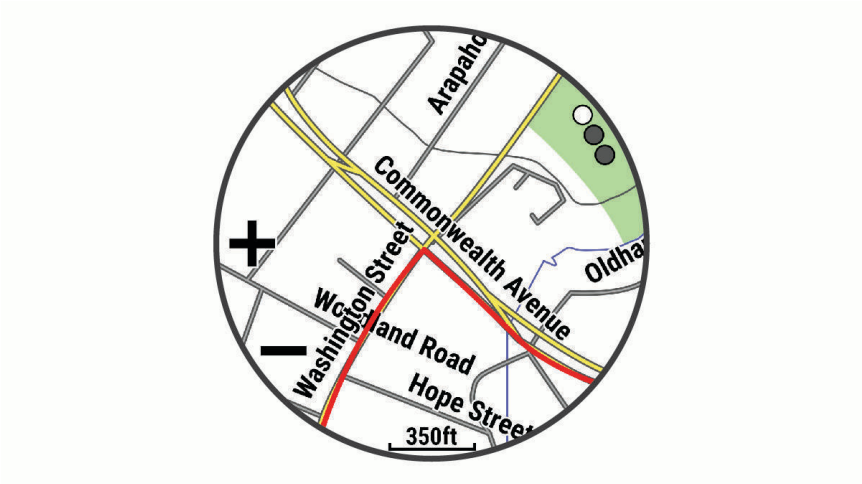
If you do not know the purpose of a file, do not delete it. Your device memory contains important system files that should not be deleted.

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: Mac operating systems provide limited support for MTP file transfer mode. You must open the Garmin drive on a Windows operating system. You should use the Garmin Express application to remove music files from your device.

Navigation

You can use the GPS navigation features on your device to view your path on a map, save locations, and find your way home.



Courses

⚠ WARNING

This feature allows users to download courses created by other users. Garmin makes no representations about the safety, accuracy, reliability, completeness, or timeliness of courses created by third parties. Any use or reliance on courses created by third parties is at your own risk.

You can send a course from your Garmin Connect account to your device. After it is saved to your device, you can navigate the course on your device.

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.

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 a Course on Your Device

1. From the watch face, press **START**.
2. Select an activity.
3. Hold .
4. Select **Navigation** > **Courses**.
5. Select a course.
6. Select **Do Course**.
   Navigation information appears.
7. Press **START** to begin navigation.

Creating a Round-Trip Course

The device can create a round-trip course based on a specified distance and direction of navigation.

1. Press **START**.
2. Select **Run** or **Bike**.
3. Hold .
4. Select **Navigation** > **Round-Trip Course**.
5. Enter the total distance for the course.
6. Select a direction heading.
   The device creates up to three courses. You can press **DOWN** to view the courses.
7. Press **START** to select a course.
8. Select an option:
   - To begin navigation, select **Go**.
   - To view the course on the map and pan or zoom the map, select **Map**.
   - To view a list of turns in the course, select **Turn By Turn**.
   - To view an elevation plot of the course, select **Elevation Plot**.
   - To save the course, select **Save**.
   - To view a list of ascents in the course, select **View Climbs**.

Creating a Course on Garmin Connect

Before you can create a course on the Garmin Connect app, you must have a Garmin Connect account (*Garmin Connect*, page 89).

1. From the Garmin Connect app, select •••.
2. Select **Training & Planning** > **Courses** > **Create Course**.
3. Select a course type.
4. Follow the on-screen instructions.
5. Select **Done**.
   NOTE: You can send this course to your device (*Sending a Course to Your Device*, page 91).

Sending a Course to Your Device

You can send a course you created using the Garmin Connect app to your device (*Creating a Course on Garmin Connect*, page 91).

1. From the Garmin Connect app, select •••.
2. Select **Training & Planning** > **Courses**.
3. Select a course.
4. Select .
5. Select your compatible device.
6. Follow the on-screen instructions.

Viewing Course Details

You can view course details before you navigate a course.

1. Press **START**.
2. Select an activity.
3. Hold .
4. Select **Navigation** > **Courses**.
5. Press **START** to select a course.
6. Select an option:
   - To begin navigation, select **Do Course**.
   - To create a custom pace band, select **PacePro**.
   - To create or view an analysis of your effort for the course, select **Power Guide**.
   - To view the course on the map and pan or zoom the map, select **Map**.
   - To begin the course in reverse, select **Do Course in Reverse**.
   - To view an elevation plot of the course, select **Elevation Plot**.
   - To change the course name, select **Name**.
   - To view a list of ascents in the course, select **View Climbs**.
   - To delete the course, select **Delete**.

Saving Your Location

You can save your current location to navigate back to it later.

NOTE: You can add options to the controls menu.

1. Hold **LIGHT**.
2. Select **Save Location**.
3. Follow the on-screen instructions.

Editing Your Saved Locations

You can delete a saved location or edit its name, elevation, and position information.

1. From the watch face, select **START** > **Navigate** > **Saved Locations**.
2. Select a saved location.
3. Select an option to edit the location.

Projecting a Waypoint

You can create a new location by projecting the distance and bearing from your current location to a new location.

1. If necessary, select **START** > **Add** > **Project Wpt.** to add the project waypoint app to the apps list.
2. Select **Yes** to add the app to your list of favorites.
3. From the watch face, select **START** > **Project Wpt.**.
4. Select **UP** or **DOWN** to set the heading.
5. Select **START**.
6. Select **DOWN** to select a unit of measure.
7. Select **UP** to enter the distance.
8. Select **START** to save.

The projected waypoint is saved with a default name.

Navigating to a Destination

You can use your device to navigate to a destination or follow a course.

1. Press **START**.
2. Select an activity.
3. Hold ☰.
4. Select **Navigation**.
5. Select a category.
6. Respond to the on-screen prompts to choose a destination.
7. Select **Go To**.

   Navigation information appears.
8. Press **START** to begin navigation.

Navigating to a Point of Interest

If the map data installed on your watch includes points of interest, you can navigate to them.

1. Press **START**.
2. Select an activity.
3. Hold ☰.
4. Select **Navigation** > **Points of Interest**, and select a category.

   A list of points of interest near your current location appears.
5. If necessary, select an option:
   - To search near a different location, select **Search Near**, and select a location.
   - To search for a point of interest by name, select **Spell Search**, and enter a name.
   - To search for nearby points of interest, select **Around Me** (*Navigating with the Around Me Feature*, page 96).
6. Select a point of interest from the search results.
7. Select **Go**.

   Navigation information appears.
8. Press **START** to begin navigation.

Points of Interest

A point of interest is a place that you may find useful or interesting. Points of interest are organized by category and can include popular travel destinations such as gas stations, restaurants, hotels, and entertainment venues.

Navigating with Sight 'N Go

You can point the device at an object in the distance, such as a water tower, lock in the direction, and then navigate to the object.

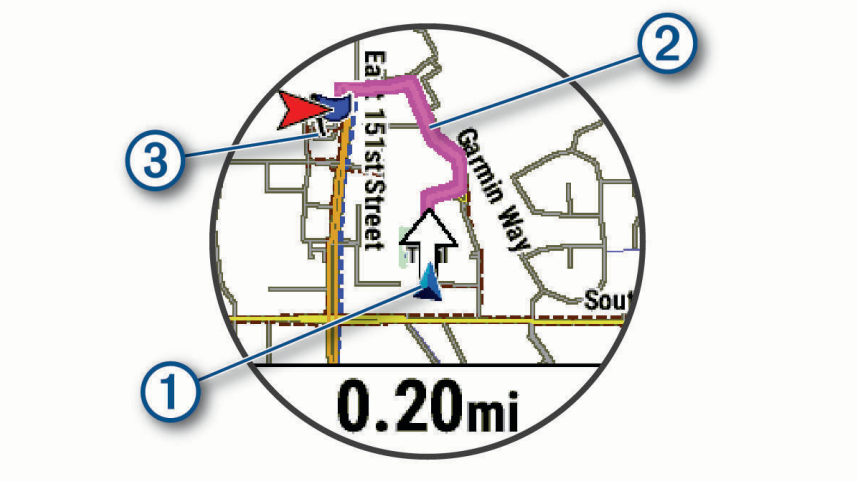
1. From the watch face, select **START** > **Navigate** > **Sight 'N Go**.
2. Point the top of the watch at an object, and select **START**.

   Navigation information appears.
3. Select **START** to begin navigation.

Navigating to Your Starting Point During an Activity

You can navigate back to the starting point of your current activity in a straight line or along the path you traveled. This feature is available only for activities that use GPS.

1. During an activity, press **STOP**.
2. Select **Back to Start**, and select an option:
   - To navigate back to the starting point of your activity along the path you traveled, select **TracBack**.
   - If you do not have a supported map or are using direct routing, select **Route** to navigate back to the starting point of your activity in a straight line.
   - If you are not using direct routing, select **Route** to navigate back to the starting point of your activity using turn-by-turn directions.



Your current location ①, the track to follow ②, and your destination ③ appear on the map.

Navigating to the Starting Point of Your Last Saved Activity

You can navigate back to the starting point of your last saved activity in a straight line or along the path you traveled. This feature is available only for activities that use GPS.

1. Select **START** > **Navigate** > **Activities**.
2. Select your last saved activity.
3. Select **Back to Start**.
4. Select an option:
   - To navigate back to the starting point of your activity along the path you traveled, select **TracBack**.
   - To navigate back to the starting point of your activity in a straight line, select **Route**.
5. Select **DOWN** to view the compass (optional).

   The arrow points toward your starting point.

Stopping Navigation

1. During an activity, hold ☰.
2. Select **Stop Navigation**.

Map

▲ represents your location on the map. Location names and symbols appear on the map. When you are navigating to a destination, your route is marked with a line on the map.

- Map navigation (*Panning and Zooming the Map*, page 96)
- Map settings (*Map Settings*, page 96)

Viewing the Map

1. Start an outdoor activity.
2. Select **UP** or **DOWN** to scroll to the map screen.
3. Hold , and select an option:
   - To pan or zoom the map, select **Pan/Zoom**.

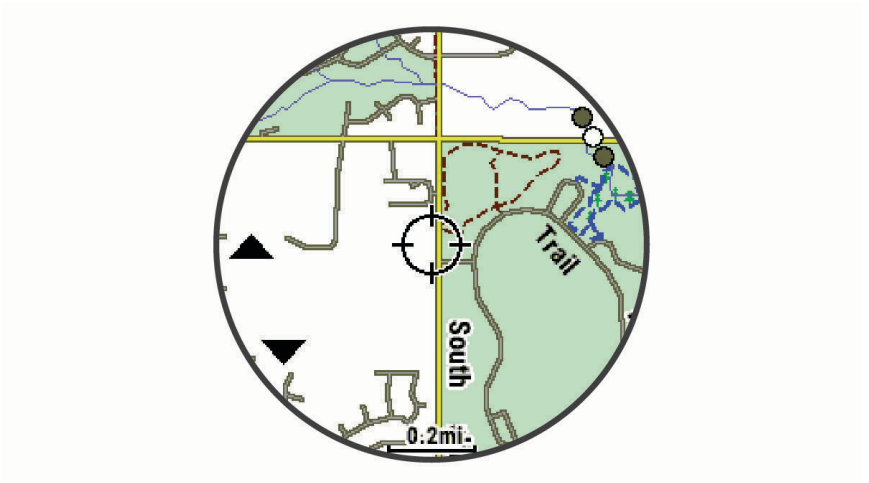
     TIP: You can select **START** to toggle between panning up and down, panning left and right, or zooming. You can hold **START** to select the point indicated by the crosshairs.
   - To see nearby points of interest and waypoints, select **Around Me**.

Saving or Navigating to a Location on the Map

You can select any location on the map. You can save the location or start navigating to it.

1. From the map, hold .
2. Select **Pan/Zoom**.

   Controls and crosshairs appear on the map.



3. Pan and zoom the map to center the location in the crosshairs.
4. Hold **START** to select the point indicated by the crosshairs.
5. If necessary, select a nearby point of interest.
6. Select an option:
   - To start navigating to the location, select **Go**.
   - To save the location, select **Save Location**.
   - To view information about the location, select **Review**.

Navigating with the Around Me Feature

You can use the around me feature to navigate to nearby points of interest and waypoints.

NOTE: The map data installed on your device must include points of interest to navigate to them.

1. From the map, hold .
2. Select **Around Me**.
   Icons indicating points of interest and waypoints appear on the map.
3. Select **UP** or **DOWN** to highlight a section of the map.
4. Select **STOP**.
   A list of points of interest and waypoints in the highlighted map section appear.
5. Select a location.
6. Select an option:
   - To start navigating to the location, select **Go**.
   - To view the location on the map, select **Map**.
   - To save the location, select **Save Location**.
   - To view information about the location, select **Review**.

Panning and Zooming the Map

1. While navigating, select **UP** or **DOWN** to view the map.
2. Hold .
3. Select **Pan/Zoom**.
4. Select an option:
   - To toggle between panning up and down, panning left and right, or zooming, select **START**.
   - To pan or zoom the map, select **UP** and **DOWN**.
   - To quit, select **BACK**.

Map Settings

You can customize how the map appears in the map app and data screens.

NOTE: If necessary, you can customize the map settings for specific activities instead of using the system settings (*Activity Map Settings*, page 109).

Hold , and select **Map**.

Orientation: Sets the orientation of the map. The North Up option shows north at the top of the screen. The Track Up option shows your current direction of travel at the top of the screen.

User Locations: Shows or hides saved locations on the map.

Auto Zoom: Automatically selects the zoom level for optimal use of your map. When disabled, you must zoom in or out manually.

Lock on Road: Locks the position icon, which represents your position on the map, onto the nearest road.

Track Log: Shows or hides the track log, or the path you have traveled, as a colored line on the map.

Track Color: Changes the track log color.

Detail: Sets the amount of detail shown on the map. Showing more detail may cause the map to redraw more slowly.

Shaded Relief: Shows or hides relief shading for a three dimensional view of the map topography.

Marine: Sets the map to display data in marine mode.

Draw Segments: Shows or hides segments, as a colored line on the map.

Draw Contours: Shows or hides contour lines on the map.

Altimeter and Barometer

The watch contains an internal altimeter and barometer. The watch collects elevation and pressure data continuously, even in low-power mode. The altimeter displays your approximate elevation based on pressure changes. The barometer displays environmental pressure data based on the fixed elevation where the altimeter was most recently calibrated (*Altimeter Settings*, page 115). You can press **START** from the altimeter or barometer glances to open the altimeter or barometer settings quickly.

Compass

The watch has a 3-axis compass with automatic calibration. The compass features and appearance change depending on your activity, whether GPS is enabled, and whether you are navigating to a destination. You can change the compass settings manually (*Compass Settings*, page 114).

Navigation Settings

You can customize the map features and appearance when navigating to a destination.

Customizing Navigation Data Screens

1 Hold ☰.
2 Select **Settings** > **Navigation** > **Data Screens**.
3 Select an option:
- Select **Map** > **Status** to turn on or off the map.
- Select **Map** > **Data Field** to turn on or off a data field that shows routing information on the map.
- Select **Up Ahead** to turn on or off information about upcoming course points.
- Select **Compass** to turn on or off the compass.
- Select **Elevation Plot** to turn on or off the elevation plot.
- Select a screen to add, remove, or customize.

Setting Up a Heading Bug

You can set up a heading indicator to display on your data pages while navigating. The indicator points to your target heading.

1 Hold ☰.
2 Select **Settings** > **Navigation** > **Heading Bug**.

Setting Navigation Alerts

You can set alerts to help you navigate to your destination.

1 Hold ☰.
2 Select **Navigation** > **Alerts**.
3 Select an option:
- To set an alert for a specified distance from your final destination, select **Final Distance**.
- To set an alert for the estimated time remaining until you reach your final destination, select **Final ETE**.
- To set an alert when you stray from the course, select **Off Course**.
- To enable turn-by-turn navigation prompts, select **Turn Prompts**.
4 If necessary, select **Status** to turn on the alert.
5 If necessary, enter a distance or time value, and select ✓.

Wireless Sensors

Your watch can be paired and used with wireless sensors using ANT+ or Bluetooth technology (*Pairing Your Wireless Sensors*, page 100). After the devices are paired, you can customize the optional data fields (*Customizing the Data Screens*, page 107). If your watch was packaged with a sensor, they are already paired.

For information about specific Garmin sensor compatibility, purchasing, or to view the owner's manual, go to buy.garmin.com for that sensor.

Sensor Type	Description
Club Sensors	You can use Approach CT10 golf club sensors to automatically track your golf shots, including location, distance, and club type.
eBike	You can use your watch with your eBike and view bike data, such as battery and shifting information, during your rides.
Extended Display	You can use the Extended Display mode to display data screens from your Forerunner watch on a compatible Edge bike computer during a ride or triathlon.
External Heart Rate	You can use an external sensor, such as the HRM-Pro or HRM-Dual™ heart rate monitor, to view heart rate data during your activities. Some heart rate monitors can also store data or provide advanced running data (*Running Dynamics*, page 47) (*Running Power*, page 44).
Foot Pod	You can use a foot pod to record pace and distance instead of using GPS when you are training indoors or when your GPS signal is weak.
Headphones	You can use Bluetooth headphones to listen to music loaded onto your Forerunner watch (*Connecting Bluetooth Headphones*, page 85).
inReach	The inReach remote function allows you to control your inReach satellite communicator using your Forerunner watch (*Using the inReach Remote*, page 102).
Lights	You can use Varia smart bike lights to improve situational awareness.
Muscle O2	You can use a muscle oxygen sensor to view hemoglobin and muscle oxygen saturation data while you train.
Power	You can use the Rally™ or Vector™ power meter bike pedals to view your power data on your watch. You can adjust your power zones to match your goals and abilities (*Setting Your Power Zones*, page 37), or use range alerts to be notified when you reach a specified power zone (*Setting an Alert*, page 109).
Radar	You can use a Varia rearview bike radar to improve situational awareness and send alerts about approaching vehicles. With a Varia radar camera tail light, you can also take photos and record video during a ride (*Using the Varia Camera Controls*, page 102).
RD Pod	You can use a Running Dynamics Pod to record running dynamics data and view it on your watch (*Running Dynamics*, page 47).
Shifting	You can use electronic shifters to display shifting information during a ride. The Forerunner watch displays current adjustment values when the sensor is in adjustment mode.
Shimano Di2	You can use Shimano® Di2™ electronic shifters to display shifting information during a ride. The Forerunner watch displays current adjustment values when the sensor is in adjustment mode.
Smart Trainer	You can use your watch with an indoor bike smart trainer to simulate resistance while following a course, ride, or workout (*Using an Indoor Trainer*, page 9).
Spd./Cad.	You can attach speed or cadence sensors to your bike and view the data during your ride. If necessary, you can manually enter your wheel circumference (*Wheel Size and Circumference*, page 142).
Tempe	You can attach the tempe temperature sensor to a secure strap or loop where it is exposed to ambient air, so it provides a consistent source of accurate temperature data.
VIRB Remote	The VIRB remote function allows you to control your VIRB action camera using your watch (*VIRB Remote*, page 102).

Pairing Your Wireless Sensors

The first time you connect a wireless sensor to your device using ANT+ or Bluetooth 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.

NOTE: If a heart rate monitor was bundled with your device, the included heart rate monitor is already paired with your device.

1. If you are pairing a heart rate monitor, put on the heart rate monitor (*Putting On the Heart Rate Monitor*, page 46, *Putting On the Heart Rate Monitor*, page 43).

   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 wireless sensors while pairing.
3. Hold .
4. Select **Settings** > **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 Wireless Sensors*, page 100).

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 Wireless Sensors*, page 100).

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 Wireless Sensors*, page 100).

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 ☰.
2. Select **Settings** > **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 Wireless Sensors*, page 100).

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

1. Hold ☰.
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 watch.

- Pair the sensor with your watch (*Pairing Your Wireless Sensors*, page 100).
- Set your wheel size (*Wheel Size and Circumference*, page 142).
- Go for a ride (*Starting an Activity*, page 5).

Training with Power Meters

- Go to buy.garmin.com for a list of power meters that are compatible with your Forerunner device (such as Rally and Vector).
- For more information, see the owner's manual for your power meter.
- Adjust your power zones to match your goals and abilities (*Setting Your Power Zones*, page 37).
- Use range alerts to be notified when you reach a specified power zone (*Setting an Alert*, page 109).
- Customize the power data fields (*Customizing the Data Screens*, page 107).

Using Electronic Shifters

Before you can use compatible electronic shifters, such as Shimano Di2 shifters, you must pair them with your Forerunner device (*Pairing Your Wireless Sensors*, page 100). You can customize the optional data fields (*Customizing the Data Screens*, page 107). The Forerunner device displays current adjustment values when the sensor is in adjustment mode.

Situational Awareness

⚠ WARNING

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

Your Forerunner device can be used with the Varia smart bike lights and rearview radar (*Wireless Sensors*, page 98). See the owner's manual for your Varia device for more information.

Using the Varia Camera Controls

NOTICE

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

Before you can use the Varia camera controls, you must pair the accessory with your watch (*Pairing Your Wireless Sensors*, page 100).

1. Add the **RCT Camera** widget to your watch (*Glances*, page 73).
2. From the **RCT Camera** widget, select an option:
   - Select ⋮ to view the camera settings.
   - Select 📷 to take a photo.
   - Select ▶ to save a clip.

tempe

The tempe is an ANT+ wireless temperature sensor. You can attach the sensor to a secure strap or loop where it is exposed to ambient air, and therefore, provides a consistent source of accurate temperature data. You must pair the tempe with your watch to display temperature data from the tempe.

inReach Remote

The inReach remote function allows you to control your inReach satellite communicator using your Forerunner watch. Go to buy.garmin.com for more information about compatible devices.

Using the inReach Remote

Before you can use the inReach remote function, you must add the inReach glance to the glance loop (*Customizing the Glance Loop*, page 104).

1. Turn on the inReach satellite communicator.
2. On your Forerunner watch, press **UP** or **DOWN** from the watch face to view the inReach glance.
3. Press **START** to search for your inReach satellite communicator.
4. Press **START** to pair your inReach satellite communicator.
5. Press **START**, and select an option:
   - To send an SOS message, select **Initiate SOS**.

     NOTE: You should only use the SOS function in a real emergency situation.
   - To send a text message, select **Messages** > **New Message**, select the message contacts, and enter the message text or select a quick text option.
   - To send a preset message, select **Send Preset**, and select a message from the list.
   - To view the timer and distance traveled during an activity, select **Tracking**.

VIRB Remote

The VIRB remote function allows you to control your VIRB action camera using your device.

Controlling a VIRB Action Camera

Before you can use the VIRB remote function, you must enable the remote setting on your VIRB camera. See the *VIRB Series Owner's Manual* for more information.

1. Turn on your VIRB camera.
2. Pair your VIRB camera with your Forerunner watch (*Pairing Your Wireless Sensors*, page 100).
   The VIRB glance is automatically added to the glance loop.
3. Press **UP** or **DOWN** from the watch face to view the VIRB glance.
4. If necessary, wait while your watch connects to your camera.
5. Select an option:
   - To record video, select **Start Recording**.
     The video counter appears on the Forerunner screen.
   - To take a photo while recording video, press **DOWN**.
   - To stop recording video, press **STOP**.
   - To take a photo, select **Take Photo**.
   - To take multiple photos in burst mode, select **Take Burst**.
   - To send the camera to sleep mode, select **Sleep Camera**.
   - To wake the camera from sleep mode, select **Wake Camera**.
   - To change video and photo settings, select **Settings**.

Controlling a VIRB Action Camera During an Activity

Before you can use the VIRB remote function, you must enable the remote setting on your VIRB camera. See the *VIRB Series Owner's Manual* for more information.

1. Turn on your VIRB camera.
2. Pair your VIRB camera with your Forerunner watch (*Pairing Your Wireless Sensors*, page 100).
   When the camera is paired, a VIRB data screen is automatically added to activities.
3. During an activity, press **UP** or **DOWN** to view the VIRB data screen.
4. If necessary, wait while your watch connects to your camera.
5. Hold ☰.
6. Select **VIRB Remote**.
7. Select an option:
   - To control the camera using the activity timer, select **Settings** > **Recording Mode** > **Timer Start/Stop**.
     NOTE: Video recording automatically starts and stops when you start and stop an activity.
   - To control the camera using the menu options, select **Settings** > **Recording Mode** > **Manual**.
   - To manually record video, select **Start Recording**.
     The video counter appears on the Forerunner screen.
   - To take a photo while recording video, press **DOWN**.
   - To manually stop recording video, press **STOP**.
   - To take multiple photos in burst mode, select **Take Burst**.
   - To send the camera to sleep mode, select **Sleep Camera**.
   - To wake the camera from sleep mode, select **Wake Camera**.

Customizing Your Device

Customizing the Glance Loop

1 Hold .
2 Select **Appearance** > **Glances**.
3 Select an option:
- To change the location of a glance in the loop, select a glance, and press **UP** or **DOWN**.
- To remove a glance from the loop, select a glance, and select .
- To add a glance to the loop, select **Add**, and select a glance.

  TIP: You can select **Create Folder** to create folders that contain multiple glances (*Creating Glance Folders*, page 104).

Creating Glance Folders

You can customize the glance loop to create folders of related glances.

1 Hold .
2 Select **Appearance** > **Glances** > **Add** > **Create Folder**.
3 Select the glances to include in the folder, and select **Done**.

  NOTE: If the glances are already in the glance loop, you can move or copy them into the folder.
4 Select or enter a name for the folder.
5 Select an icon for the folder.
6 If necessary, select an option:
- To edit the folder, scroll to the folder in the glance loop, and hold .
- To edit the glances in the folder, open the folder and select **Edit** (*Customizing the Glance Loop*, page 104).

Customizing Your Activity List

1 From the watch face, hold .
2 Select **Settings** > **Activities & Apps**.
3 Select an option:
- Select an activity to customize the settings, set the activity as a favorite, change the order of appearance, and more.
- Select **Add** to add more activities or create custom activities.

Activities and App Settings

These settings allow you to customize each preloaded activity app based on your needs. For example, you can customize data pages and enable alerts and training features. Not all settings are available for all activity types.

Hold , select **Activities & Apps**, select an activity, and select the activity settings.

3D Distance: Calculates your distance traveled using your elevation change and your horizontal movement over ground.

3D Speed: Calculates your speed using your elevation change and your horizontal movement over ground.

Accent Color: Sets the accent color of each activity to help identify which activity is active.

Add Activity: Allows you to customize a multisport activity.

Alerts: Sets the training or navigation alerts for the activity (*Activity Alerts*, page 108).

Auto Climb: Enables the watch to detect elevation changes automatically using the built-in altimeter (*Enabling Auto Climb*, page 111).

Auto Lap: Sets the options for the Auto Lap feature to automatically mark laps. The Auto Distance option marks laps at a specific distance. When you complete a lap, a customizable lap alert message appears. This feature is helpful for comparing your performance over different parts of an activity.

Auto Pause: Sets the options for the Auto Pause feature to stop recording data when you stop moving or when you drop below a specified speed. This feature is helpful if your activity includes stop lights or other places where you must stop.

Auto Rest: Enables the watch to automatically create a rest interval when you stop moving (*Auto Rest and Manual Rest*, page 14).

Auto Scroll: Sets the watch to scroll through all of the activity data screens automatically while the activity timer is running.

Auto Set: Enables the watch to start and stop exercise sets automatically during a strength training activity.

Auto Start: Sets the watch to automatically start a motocross or BMX activity when you start moving.

Background Color: Sets the background color of each activity to black or white.

Broadcast Heart Rate: Enables automatic heart rate data broadcasting when you start the activity (*Broadcasting Heart Rate Data During an Activity*, page 40).

ClimbPro: Displays ascent planning and monitoring screens while navigating (*Using ClimbPro*, page 111).

Countdown Start: Enables a countdown timer for pool swimming intervals.

Data Screens: Enables you to customize data screens and add new data screens for the activity (*Customizing the Data Screens*, page 107).

Driver Distance: Sets the average distance the ball travels on your drive while playing golf.

Edit Weight: Allows you to add the weight used for an exercise set during a strength training or cardio activity.

Golf Distance: Sets the unit of measure for distance while playing golf.

Grading System: Sets the grading system for rating the route difficulty for a rock climbing activity.

Handicap Scoring: Enables handicap scoring while playing golf. The Local Handicap option allows you to enter the number of strokes to be subtracted from your total score. The Index/Slope option allows you to enter your handicap and the course slope rating so the watch can calculate your course handicap. When you enable either handicap scoring option, you can adjust your handicap value.

Lane Number: Sets your lane number for track running.

Lap Key: Enables or disables the button for recording a lap or rest during an activity.

Lock Keys: Locks the buttons during a multisport activity to prevent inadvertent button presses.

Map: Sets the display preferences for the map data screen for the activity (*Activity Map Settings*, page 109).

Metronome: Plays tones or vibrates at a steady rhythm to help you improve your performance by training at a faster, slower, or more consistent cadence. You can set the beats per minute (bpm) of the cadence you want to maintain, beat frequency, and sound settings.

Mode Tracking: Enables or disables automatic ascent or descent mode tracking for backcountry skiing and snowboarding.

Pool Size: Sets the pool length for pool swimming.

Power Averaging: Controls whether the watch includes zero values for bike power data that occur when you are not pedaling.

Power Save Timeout: Sets the power-save timeout length for how long your watch stays in training mode, for example, when you are waiting for a race to start. The Normal option sets the watch to enter low-power watch mode after 5 minutes of inactivity. The Extended option sets the watch to enter low-power watch mode after 25 minutes of inactivity. The extended mode can result in shorter battery life between charges.

Record Activity: Enables activity FIT file recording for golf activities. FIT files record fitness information that is tailored for Garmin Connect.

Record Temperature: Records the ambient temperature around the watch during certain activities.

Record VO2 Max.: Enables VO2 max. recording for trail run and ultra run activities.

Rename: Sets the activity name.

Rep Counting: Enables or disables rep counting during a workout. The Workouts Only option enables rep counting during guided workouts only.

Repeat: Enables the Repeat option for multisport activities. For example, you can use this option for activities that include multiple transitions, such as a swimrun.

Restore Defaults: Allows you to reset the activity settings.

Route Stats: Enables route statistics tracking for indoor climbing activities.

Routing: Sets the preferences for calculating routes for the activity (*Routing Settings*, page 109).

Running Power: Allows you to record running power data and customize the settings (*Running Power Settings*, page 44).

Runs: Sets the preferences for ski or snowboard runs. You can enable Auto Run to detect runs automatically using the built-in accelerometer. You can also enable the Lap Key and the Lap Alert settings.

Satellites: Sets the satellite system to use for the activity (*Changing the Satellite Setting*, page 112).

Scoring: Enables or disables scorekeeping automatically when you start a round of golf. The Always Ask option prompts you when you begin a round.

Scoring Method: Sets the scoring method to stroke play or Stableford scoring while playing golf.

Segment Alerts: Enables prompts that alert you to approaching segments (*Segments*, page 33).

Self Evaluation: Sets how often you evaluate your perceived effort for the activity (*Evaluating an Activity*, page 6).

Stat Tracking: Enables statistics tracking while playing golf (*Recording Statistics*, page 20).

Stroke Detect.: Enables stroke detection for pool swimming.

Transitions: Enables transitions for multisport activities.

Vibration Alerts: Enables alerts that notify you to inhale or exhale during a breathwork activity.

Workout Videos: Enables instructive workout animations for a strength, cardio, yoga, or Pilates activity. Animations are available for pre-installed workouts and workouts downloaded from your Garmin Connect account.

Customizing the Data Screens

You can show, hide, and change the layout and content of data screens for each activity.

1. Hold ☰.
2. Select **Activities & Apps**.
3. Select the activity to customize.
4. Select the activity settings.
5. Select **Data Screens**.
6. Select a data screen to customize.
7. Select an option:
   - Select **Layout** to adjust the number of data fields on the data screen.
   - Select **Data Fields**, and select a field to change the data that appears in the field.

     TIP: For a list of all the available data fields, go to (*Data Fields*, page 133). Not all data fields are available for all activity types.
   - Select **Reorder** to change the location of the data screen in the loop.
   - Select **Remove** to remove the data screen from the loop.
8. If necessary, select **Add New** to add a data screen to the loop.

   You can add a custom data screen, or select one of the predefined data screens.

Adding a Map to an Activity

You can add the map to the data screens loop for an activity.

1. From the watch face, hold ☰.
2. Select **Settings** > **Activities & Apps**.
3. Select the activity to customize.
4. Select the activity settings.
5. Select **Data Screens** > **Add New** > **Map**.

Activity Alerts

You can set alerts for each activity, which can help you to train toward specific goals, to increase your awareness of your environment, and to navigate to your destination. Some alerts are available only for specific activities. There are three types of alerts: event alerts, range alerts, and recurring alerts.

Event alert: An event alert notifies you one time. The event is a specific value. For example, you can set the watch to alert you when you burn a specified number of calories.

Range alert: A range alert notifies you each time the watch is above or below a specified range of values. For example, you can set the watch to alert you when your heart rate is below 60 beats per minute (bpm) and over 210 bpm.

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

Alert Name	Alert Type	Description
Cadence	Range	You can set minimum and maximum cadence values.
Calories	Event, recurring	You can set the number of calories.
Custom	Event, recurring	You can select an existing message or create a custom message and select an alert type.
Distance	Event, recurring	You can set a distance interval.
Elevation	Range	You can set minimum and maximum elevation values.
Heart Rate	Range	You can set minimum and maximum heart rate values or select zone changes. See *About Heart Rate Zones*, page 35 and *Heart Rate Zone Calculations*, page 37.
Pace	Range	You can set minimum and maximum pace values.
Pacing	Recurring	You can set a target swim pace.
Power	Range	You can set the high or low power level.
Proximity	Event	You can set a radius from a saved location.
Run/Walk	Recurring	You can set timed walking breaks at regular intervals.
Speed	Range	You can set minimum and maximum speed values.
Stroke Rate	Range	You can set high or low strokes per minute.
Time	Event, recurring	You can set a time interval.
Track Timer	Recurring	You can set a track time interval in seconds.

Setting an Alert

1. Hold ☰.
2. Select **Activities & Apps**.
3. Select an activity.

   NOTE: This feature is not available for all activities.
4. Select the activity settings.
5. Select **Alerts**.
6. Select an option:
   - Select **Add New** to add a new alert for the activity.
   - Select the alert name to edit an existing alert.
7. If necessary, select the type of alert.
8. Select a zone, enter the minimum and maximum values, or enter a custom value for the alert.
9. If necessary, turn on the alert.

For event and recurring alerts, a message appears each time you reach the alert value. For range alerts, a message appears each time you exceed or drop below the specified range (minimum and maximum values).

Activity Map Settings

You can customize the appearance of the map data screen for each activity.

Hold ☰, select **Activities & Apps**, select an activity, select the activity settings, and select **Map**.

Configure Maps: Shows or hides data from installed map products.

Use Sys. Settings: Enables the watch to use the preferences from the map system settings (*Map Settings*, page 96). When this setting is disabled, you can customize the map settings for the activity.

Routing Settings

You can change the routing settings to customize the way the watch calculates routes for each activity.

NOTE: Not all settings are available for all activity types.

Hold ☰, select **Activities & Apps**, select an activity, select the activity settings, and select **Routing**.

Activity: Sets an activity for routing. The watch calculates routes optimized for the type of activity you are doing.

Popularity Routing: Calculates routes based on the most popular runs and rides from Garmin Connect.

Courses: Sets how you navigate courses using the watch. Use the Follow Course option to navigate a course exactly as it appears, without recalculating. Use the Use Map option to navigate a course using routable maps, and recalculate the route if you stray from the course.

Calculation Method: Sets the calculation method to minimize the time, distance, or ascent in routes.

Avoidances: Sets the road or transportation types to avoid in routes.

Type: Sets the behavior of the pointer that appears during direct routing.

Auto Lap

Marking Laps by Distance

You can use Auto Lap to mark a lap at a specific distance automatically. This feature is helpful for comparing your performance over different parts of an activity (for example, every 1 mile or 5 kilometers).

1. Hold ☰.
2. Select **Settings** > **Activities & Apps**.
3. Select an activity.

   NOTE: This feature is not available for all activities.
4. Select the activity settings.
5. Select **Auto Lap**.
6. Select an option:
   - Select **Auto Lap** to turn Auto Lap on or off.
   - Select **Auto Distance** to adjust the distance between laps.

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 (*System Settings*, page 117).

If necessary, you can customize the data pages to display additional lap data (*Customizing the Data Screens*, page 107).

Customizing the Lap Alert Message

You can customize one or two data fields that appear in the lap alert message.

1. Hold ☰.
2. Select **Activities & Apps**.
3. Select an activity.

   NOTE: This feature is not available for all activities.
4. Select the activity settings.
5. Select **Auto Lap** > **Lap Alert**.
6. Select a data field to change it.
7. Select **Preview** (optional).

Enabling Auto Pause

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

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

1. Hold ☰.
2. Select **Settings** > **Activities & Apps**.
3. Select an activity.

   NOTE: This feature is not available for all activities.
4. Select the activity settings.
5. Select **Auto Pause**.
6. Select an option:
   - To pause the timer automatically when you stop moving, select **When Stopped**.
   - To pause the timer automatically when your pace or speed drops below a specified level, select **Custom**.

Using ClimbPro

The ClimbPro feature helps you manage your effort for the upcoming climbs on a course. You can view climb details, including gradient, distance, and elevation gain, before or in real time while following a course. Cycling climb categories, based on length and gradient, are indicated by color.

1. Hold ☰.
2. Select **Activities & Apps**.
3. Select an activity.
4. Select the activity settings.
5. Select **ClimbPro** > **Status** > **When Navigating**.
6. Select an option:
   - Select **Data Field** to customize the data field that appears on the ClimbPro screen.
   - Select **Alert** to set alerts at the start of a climb or at a certain distance from the climb.
   - Select **Descents** to turn descents on or off for running activities.
   - Select **Climb Detection** to choose the types of climbs detected during cycling activities.
7. Review the climbs and course details for the course (*Viewing Course Details*, page 92).
8. Start following a saved course (*Navigating to a Destination*, page 93).

Enabling Auto Climb

You can use the auto climb feature to detect elevation changes automatically. You can use it during activities such as climbing, hiking, running, or biking.

1. Hold ☰.
2. Select **Settings** > **Activities & Apps**.
3. Select an activity.

   NOTE: This feature is not available for all activities.
4. Select the activity settings.
5. Select **Auto Climb** > **Status**.
6. Select **Always** or **When Not Navigating**.
7. Select an option:
   - Select **Run Screen** to identify which data screen appears while running.
   - Select **Climb Screen** to identify which data screen appears while climbing.
   - Select **Invert Colors** to reverse the display colors when changing modes.
   - Select **Vertical Speed** to set the rate of ascent over time.
   - Select **Mode Switch** to set how quickly the device changes modes.

   NOTE: The Current Screen option allows you to automatically switch to the last screen you were viewing before the auto climb transition occurred.

Enabling Self Evaluation

When you save an activity, you can evaluate your perceived effort and how you felt during the activity (*Evaluating an Activity*, page 6). You can view your evaluation information in your Garmin Connect account.

1 Hold ☰.
2 Select **Settings** > **Activities & Apps**.
3 Select an activity.

NOTE: This feature is not available for all activities.

4 Select the activity settings.
5 Select **Self Evaluation**.
6 Select an option:
   - To evaluate only after following a structured workout or interval, select **Workouts Only**.
   - To evaluate after every activity, select **Always**.

3D Speed and Distance

You can set 3D speed and distance to calculate your speed or distance using both your elevation change and your horizontal movement over ground. You can use it during activities such as skiing, climbing, navigating, hiking, running, or biking.

Using Auto Scroll

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

1 Hold ☰.
2 Select **Settings** > **Activities & Apps**.
3 Select an activity.

NOTE: This feature is not available for all activities.

4 Select the activity settings.
5 Select **Auto Scroll**.
6 Select a display speed.

Changing the Satellite Setting

For more information about satellite systems, go to www.garmin.com/aboutGPS.

1 Hold ☰.
2 Select **Settings** > **Activities & Apps**.
3 Select the activity to customize.
4 Select the activity settings.
5 Select **Satellites**.
6 Select an option:

NOTE: These settings are not available for all activities.

   - Select **Off** to disable satellite systems for the activity.
   - Select **Use Default** to use the default system setting for satellites (*System Settings*, page 117).
   - 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.
   - Select **UltraTrac** to record track points and sensor data less frequently (*UltraTrac*, page 113).

NOTE: Using GPS and another satellite together can reduce battery life more quickly than using GPS only.

UltraTrac

The UltraTrac feature is a GPS setting that records track points and sensor data less frequently. Enabling the UltraTrac feature increases battery life but decreases the quality of recorded activities. You should use the UltraTrac feature for activities that demand longer battery life and for which frequent sensor data updates are less important.

Power Save Timeout Settings

The timeout settings affect how long your device stays in training mode, for example, when you are waiting for a race to start. Hold , select **Settings** > **Activities & Apps**, select an activity, and select the activity settings. Select **Power Save Timeout** to adjust the timeout settings for the activity.

Normal: Sets the device to enter low-power watch mode after 5 minutes of inactivity.

Extended: Sets the device to enter low-power watch mode after 25 minutes of inactivity. The extended mode can result in shorter battery life between charges.

Removing an Activity or App

1. From the watch face, hold .
2. Select **Settings** > **Activities & Apps**.
3. Select an activity.
4. Select an option:
   - To remove an activity from your list of favorites, select **Remove from Favorites**.
   - To delete the activity from the apps list, select **Remove from List**.

GroupTrack Settings

Hold , and select **Safety & Tracking** > **LiveTrack** > **GroupTrack**.

Visible To: Allows you to select who can see your GroupTrack session.

Show on Map: Enables you to view connections on the map screen during a GroupTrack session.

Activity Types: Allows you to select which activity types appear on the map screen during a GroupTrack session.

Watch Face Settings

You can customize the appearance of the watch face by selecting the layout, colors, and additional data. You can also download custom watch faces from the Connect IQ store.

Customizing the Watch Face

Before you can activate a Connect IQ watch face, you must install a watch face from the Connect IQ store (*Connect IQ Features*, page 78).

You can customize the watch face information and appearance, or activate an installed Connect IQ watch face.

1 From the watch face, hold .
2 Select **Watch Face**.
3 Select **UP** or **DOWN** to preview the watch face options.
4 Select **Add New** to scroll through additional pre-loaded watch faces.
5 Select **START** > **Apply** to activate a pre-loaded watch face or an installed Connect IQ watch face.
6 If using a pre-loaded watch face, select **START** > **Customize**.
7 Select an option:
   - To change the style of the numbers for the analog watch face, select **Dial**.
   - To change the style of the hands for the analog watch face, select **Hands**.
   - To change the style of the numbers for the digital watch face, select **Layout**.
   - To change the style of the seconds for the digital watch face, select **Seconds**.
   - To change the data that appears on the watch face, select **Data**.
   - To add or change an accent color for the watch face, select **Accent Color**.
   - To change the background color, select **Bkgd. Color**.
   - To save the changes, select **Done**.

Sensors Settings

Compass Settings

Hold , and select **Settings** > **Sensors & Accessories** > **Compass**.

Calibrate: Allows you to manually calibrate the compass sensor (*Calibrating the Compass Manually*, page 114).

Display: Sets the directional heading on the compass to degrees or milliradians.

North Ref.: Sets the north reference of the compass (*Setting the North Reference*, page 115).

Mode: Sets the compass to use electronic-sensor data only (On), a combination of GPS and electronic-sensor data when moving (Auto), or GPS data only (Off).

Calibrating the Compass Manually

NOTICE

Calibrate the electronic compass outdoors. To improve heading accuracy, do not stand near objects that influence magnetic fields, such as vehicles, buildings, and overhead power lines.

Your device was already calibrated at the factory, and the device uses automatic calibration by default. If you experience irregular compass behavior, for example, after moving long distances or after extreme temperature changes, you can manually calibrate the compass.

1 Hold .
2 Select **Sensors & Accessories** > **Compass** > **Calibrate** > **Start**.
3 Follow the on-screen instructions.

   TIP: Move your wrist in a small figure eight motion until a message appears.

Setting the North Reference

You can set the directional reference used in calculating heading information.

1. Hold .
2. Select **Sensors & Accessories** > **Compass** > **North Ref.**.
3. Select an option:
   - To set geographic north as the heading reference, select **True**.
   - To set the magnetic declination for your location automatically, select **Magnetic**.
   - To set grid north (000º) as the heading reference, select **Grid**.
   - To set the magnetic variation value manually, select **User**, enter the magnetic variance, and select **Done**.

Altimeter Settings

Hold , and select **Sensors & Accessories** > **Altimeter**.

Calibrate: Allows you to manually calibrate the altimeter sensor.

Auto Cal.: Allows the altimeter to self-calibrate each time you use satellite systems.

Sensor Mode: Sets the mode for the sensor. The Auto option uses both the altimeter and barometer according to your movement. You can use the Altimeter Only option when your activity involves changes in altitude, or the Barometer Only option when your activity does not involve changes in altitude.

Elevation: Sets the units of measure for elevation.

Calibrating the Barometric Altimeter

Your watch was already calibrated at the factory, and the watch uses automatic calibration at your GPS starting point by default. You can manually calibrate the barometric altimeter if you know the correct elevation.

1. Hold .
2. Select **Settings** > **Sensors & Accessories** > **Altimeter**.
3. Select an option:
   - To calibrate automatically from your GPS starting point, select **Auto Cal.**, and select an option.
   - To enter the current elevation manually, select **Calibrate** > **Enter Manually**.
   - To enter the current elevation from the digital elevation model, select **Calibrate** > **Use DEM**.
   - To enter the current elevation from your GPS starting point, select **Calibrate** > **Use GPS**.

Barometer Settings

Hold , and select **Sensors & Accessories** > **Barometer**.

Calibrate: Allows you to manually calibrate the barometer sensor.

Plot: Sets the time scale for the chart in the barometer widget.

Storm Alert: Sets the rate of barometric pressure change that triggers a storm alert.

Pressure: Sets how the device displays pressure data.

Calibrating the Barometer

Your watch was already calibrated at the factory, and the watch uses automatic calibration at your GPS starting point by default. You can manually calibrate the barometer if you know the correct elevation or the correct sea level pressure.

1. Hold .
2. Select **Settings** > **Sensors & Accessories** > **Barometer** > **Calibrate**.
3. Select an option:
   - To enter the current elevation and sea level pressure (optional), select **Enter Manually**.
   - To calibrate automatically from the digital elevation model, select **Use DEM**.
   - To calibrate automatically from your GPS starting point, select **Use GPS**.

Xero® Laser Location Settings

Before you can customize laser location settings, you must pair a compatible Xero device (*Pairing Your Wireless Sensors*, page 100).

Hold ☰, and select **Sensors & Accessories** > **XERO Locations** > **Laser Locations**.

During Activity: Enables the display of laser location information from a compatible, paired Xero device during an activity.

Share Mode: Allows you to share laser location information publicly or broadcast it privately.

Power Manager Settings

Hold ☰, and select **Settings** > **Power Manager**.

Battery Saver: Allows you to customize system settings to extend battery life in watch mode (*Customizing the Battery Saver Feature*, page 116).

Battery Percentage: Displays remaining battery life as a percentage.

Battery Estimates: Displays remaining battery life as an estimated number of days or hours.

Customizing the Battery Saver Feature

The battery saver feature allows you to quickly adjust system settings to extend battery life in watch mode.

You can turn on the battery saver feature from the controls menu (*Viewing the Controls Menu*, page 76).

1. Hold ☰.
2. Select **Settings** > **Power Manager** > **Battery Saver**.
3. Select **Status** to turn on the battery saver feature.
4. Select **Edit**, and select an option:
   - Select **Watch Face** to enable a low-power watch face that updates once per minute.
   - Select **Music** to disable listening to music from your watch.
   - Select **Phone** to disconnect your paired phone.
   - Select **Wi-Fi** to disconnect from a Wi-Fi network.
   - Select **LTE** to disconnect from the LTE connected services.
   - Select **Wrist Heart Rate** to turn off the wrist heart rate monitor.
   - Select **Pulse Ox** to turn off the pulse oximeter sensor.
   - Select **Backlight** to disable the automatic backlight.

   The watch displays the hours of battery life gained with each setting change.

System Settings

Hold ☰, and select **Settings** > **System**.

Language: Sets the language displayed on the watch.

Time: Adjusts the time settings (*Time Settings*, page 117).

Display: Adjusts the screen settings (*Changing the Screen Settings*, page 118).

Satellites: Sets the default satellite system to use for activities. If necessary, you can customize the satellite setting for each activity (*Changing the Satellite Setting*, page 112).

Sound and Vibe: Sets the watch sounds, such as button tones, alerts, and vibrations.

Sleep Mode: Allows you to set your sleep hours and sleep mode preferences (*Customizing Sleep Mode*, page 23).

Do Not Disturb: Allows you to enable the Do Not Disturb mode. You can edit your preferences for the screen, notifications, alerts, and wrist gestures.

Hot Keys: Allows you to assign shortcuts to buttons (*Customizing the Hot Keys*, page 118).

Auto Lock: Allows you to lock the buttons automatically to prevent accidental button presses. Use the During Activity option to lock the buttons during a timed activity. Use the Not During Activity option to lock the buttons when you are not recording a timed activity.

Format: Sets general format preferences, such as the units of measure, pace and speed shown during activities, the start of the week, and geographical position format and datum options (*Changing the Units of Measure*, page 118).

Performance Condition: Enables the performance condition feature during an activity (*Performance Condition*, page 55).

Data Recording: Sets how the watch records activity data. The Smart recording option (default) allows for longer activity recordings. The Every Second recording option provides more detailed activity recordings, but may not record entire activities that last for longer periods of time.

USB Mode: Sets the watch to use MTP (media transfer protocol) or Garmin mode when connected to a computer.

Reset: Allows you to reset user data and settings (*Resetting All Default Settings*, page 130).

Software Update: Allows you to install downloaded software updates, enable automatic updates, or manually check for updates (*Product Updates*, page 128).

About: Displays device, software, license, and regulatory information.

Time Settings

Hold ☰, and select **System** > **Time**.

Time Format: Sets the watch to show time in a 12-hour, 24-hour, or military format.

Date Format: Sets the display order for the day, month, and year for dates.

Set Time: Sets the time zone for the watch. The Auto option sets the time zone automatically based on your GPS position.

Time: Allows you to adjust the time if the Set Time option is set to Manual.

Alerts: Allows you to set hourly alerts, as well as sunrise and sunset alerts that sound a specific number of minutes or hours before the actual sunrise or sunset occurs (*Setting Time Alerts*, page 118).

Sync With GPS: Allows you to manually sync the time when you change time zones, and to update for daylight saving time (*Syncing the Time with GPS*, page 120).

Setting Time Alerts

1 Hold ☰.
2 Select **System** > **Time** > **Alerts**.
3 Select an option:
   - To set an alert to sound a specific number of minutes or hours before the actual sunset occurs, select **Til Sunset** > **Status** > **On**, select **Time**, and enter the time.
   - To set an alert to sound a specific number of minutes or hours before the actual sunrise occurs, select **Til Sunrise** > **Status** > **On**, select **Time**, and enter the time.
   - To set an alert to sound every hour, select **Hourly** > **On**.

Changing the Screen Settings

1 Hold ☰.
2 Select **System** > **Display**.
3 Select **Large Fonts** to increase the size of the text on the screen.
4 Select an option:
   - Select **During Activity**.
   - Select **General Use**.
   - Select **During Sleep**.

     NOTE: Some options are not available during sleep.
5 Select an option:
   - Select **Keys** to turn on the screen for button presses.
   - Select **Alerts** to turn on the screen for alerts.
   - Select **Gesture** to turn on the screen by raising and turning your arm to look at your wrist.
   - Select **Timeout** to set the length of time before the screen turns off.
   - Select **Brightness** to set the brightness level of the screen.

Customizing the Hot Keys

You can customize the hold function of individual keys and combinations of keys.

1 From the watch face, hold ☰.
2 Select **Settings** > **System** > **Hot Keys**.
3 Select a key or combination of keys to customize.
4 Select a function.

Changing the Units of Measure

You can customize units of measure for distance, pace and speed, elevation, and more.

1 Hold ☰.
2 Select **System** > **Format** > **Units**.
3 Select a measurement type.
4 Select a unit of measure.

Clocks

Setting an Alarm

You can set multiple alarms.

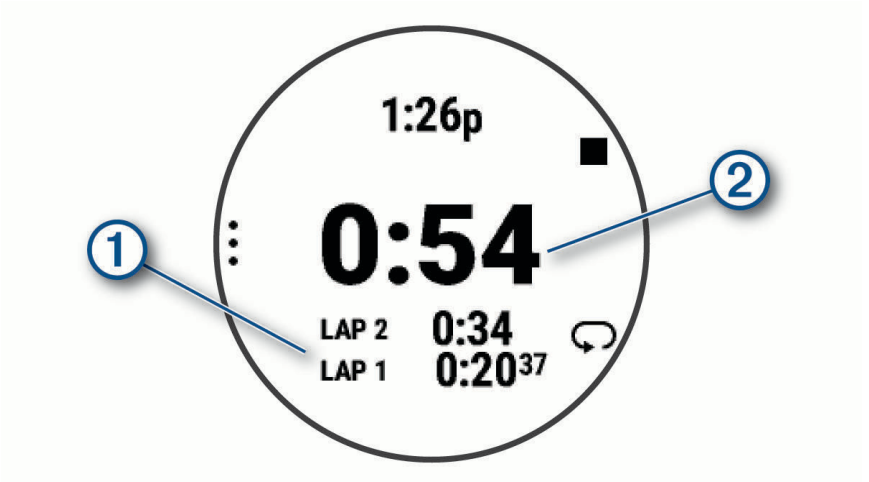
1 From the watch face, hold ☰.
2 Select **Clocks** > **Alarms** > **Add Alarm**.
3 Enter the alarm time.

Editing an Alarm

1. From the watch face, hold .
2. Select **Clocks** > **Alarms**.
3. Select an alarm.
4. Select an option:
   - To turn the alarm on or off, select **Status**.
   - To change the alarm time, select **Time**.
   - To set the alarm to repeat regularly, select **Repeat**, and select when the alarm should repeat.
   - To select the type of alarm notification, select **Sound and Vibe**.
   - To turn the display on or off with the alarm, select **Backlight**.
   - To select a description for the alarm, select **Label**.
   - To delete the alarm, select **Delete**.

Using the Stopwatch

1. From the watch face, hold .
2. Select **Clocks** > **Stopwatch**.
3. Press **START** to start the timer.
4. Press to restart the lap timer ①.



   The total stopwatch time ② continues running.
5. Press **STOP** to stop both timers.
6. Select an option:
   - To reset both timers, press **DOWN**.
   - To save the stopwatch time as an activity, press , and select **Save Activity**.
   - To reset the timers and exit the stopwatch, press , and select **Done**.
   - To review the lap timers, press , and select **Review**.
     NOTE: The **Review** option only appears if there have been multiple laps.
   - To return to the watch face without resetting the timers, press , and select **Go to Watchface**.
   - To enable or disable lap recording, press , and select **Lap Key**.

Starting the Countdown Timer

1. From the watch face, hold .
2. Select **Clocks** > **Timers**.
3. Select an option:
   - To set and save a countdown timer for the first time, enter the time, press , and select **Save Timer**.
   - To set and save additional countdown timers, select **Add Timer**, and enter the time.
   - To set a countdown timer without saving it, select **Quick Timer**, and enter the time.
4. If necessary, press , and select an option:
   - Select **Time** to change the time.
   - Select **Restart** > **On** to automatically restart the timer after it expires.
   - Select **Sound and Vibe**, and select a type of notification.
5. Press **START** to start the timer.

Deleting a Timer

1. From the watch face, hold .
2. Select **Clocks** > **Timers**.
3. Select a timer.
4. Press , and select **Delete**.

Syncing the Time with GPS

Each time you turn on the watch and acquire satellites, the watch automatically detects your time zones and the current time of day. You can also manually sync the time with GPS when you change time zones, and to update for daylight saving time.

1. Hold .
2. Select **Settings** > **System** > **Time** > **Sync With GPS**.
3. Wait while the device locates satellites (*Acquiring Satellite Signals*, page 129).

Setting the Time Manually

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

Adding Alternate Time Zones

You can display the current time of day in additional time zones.

NOTE: You can view your alternate time zones in the glance loop (*Customizing the Glance Loop*, page 104).

1. Hold .
2. Select **Clocks** > **Alt. Time Zones** > **Add Zone**.
3. Press **UP** or **DOWN** to highlight a region, and press **START** to select it.
4. Select a time zone.
5. If necessary, rename the zone.

Editing an Alternate Time Zone

1 Hold ☰.
2 Select **Clocks** > **Alt. Time Zones**.
3 Select a time zone.
4 Press **START**.
5 Select an option:
   - To set the time zone to display on the glance loop, select **Set as Favorite**.
   - To enter a custom name for the time zone, select **Rename**.
   - To enter a custom abbreviation for the time zone, select **Abbreviate**.
   - To change the time zone, select **Change Zone**.
   - To delete the time zone, select **Delete**.

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 ☰.
2 Select **Settings** > **System** > **About**.

Viewing E-label Regulatory and Compliance Information

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

1 From the watch face, hold ☰.
2 Select **Settings** > **System** > **About**.

Charging the Watch

⚠ 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 (*Device Care*, page 124).

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

2 Plug the large end of the USB cable into a USB charging port.
The watch displays the current battery charge level.

Tips for Charging the Watch

1 Connect the charger securely to the watch to charge it using the USB cable (*Charging the Watch*, page 122).
You can charge the watch 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 watch after the battery charge level reaches 100%.

Specifications

Forerunner Specifications

⚠ WARNING

When the temperature is at or below 0°C (32°F), the LTE connectivity may be disabled to preserve overall device functionality. When the LTE connectivity is disabled, LTE connected features will be disabled (*LTE Connected Features*, page 72).

Battery type	Rechargeable, built-in lithium-ion battery
Battery life, watch mode	Up to 2 wk. with activity tracking, smartphone notifications, and wrist-based heart rate
Battery life, watch mode with music	Up to 20 hr. with activity tracking, smartphone notifications, wrist-based heart rate, and music playback
Battery life, activity mode	Up to 35 hr. in GPS mode with wrist-based heart rate
Battery life, activity mode with music	Up to 12 hr. in GPS mode with wrist-based heart rate and music playback
Battery life, activity mode and LTE LiveTrack	Up to 10 hr. in GPS mode with wrist-based heart rate
Battery life, activity mode with music and LTE LiveTrack	Up to 7 hr. in GPS mode with wrist-based heart rate and music playback
Battery life, UltraTrac mode, no music playback	Up to 50 hr. Up to 45 hr. with wrist-based heart rate
Media storage	Up to 1,000 songs
Water rating	Swim, 5 ATM[1]
Operating temperature range	From 0° to 45°C (from 32° to 113°F)
Charging temperature range	From 0° to 45°C (from 32° to 113°F)
Wireless frequency	1950 MHz @ 23 dBm maximum
Max. SAR value	1.84 W/kg torso, 0.77 W/kg arm

HRM-Pro Specifications

Battery type	User-replaceable CR2032, 3 V
Battery life	Up to 1 yr. at 1 hr./day
Water resistance	5 ATM[1]
Operating temperature range	From 0° to 40°C (from 32° to 104°F)
Wireless frequency	2.4 GHz @ 8 dBm maximum

[1] The device withstands pressure equivalent to a depth of 50 m. For more information, go to www.garmin.com/waterrating.

HRM-Swim Specifications and HRM-Tri Specifications

Battery type	User-replaceable CR2032 (3 V)
HRM-Swim battery life	Up to 18 mo. (approximately 3 hr./wk.)
HRM-Tri battery life	Up to 10 mo. for triathlon training (approximately 1 hr./day)
Operating temperature range	From -10° to 50°C (from 14° to 122°F)
Wireless frequency/protocol	2.4 GHz @ +1 dBm nominal
Water rating	Swim, 5 ATM[2]

Device Care

NOTICE

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

Avoid pressing the buttons 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 Watch

⚠ CAUTION

Some users may experience skin irritation after prolonged use of the watch, especially if the user has sensitive skin or allergies. If you notice any skin irritation, remove the watch and give your skin time to heal. To help prevent skin irritation, ensure the watch is clean and dry, and do not overtighten the watch on your wrist.

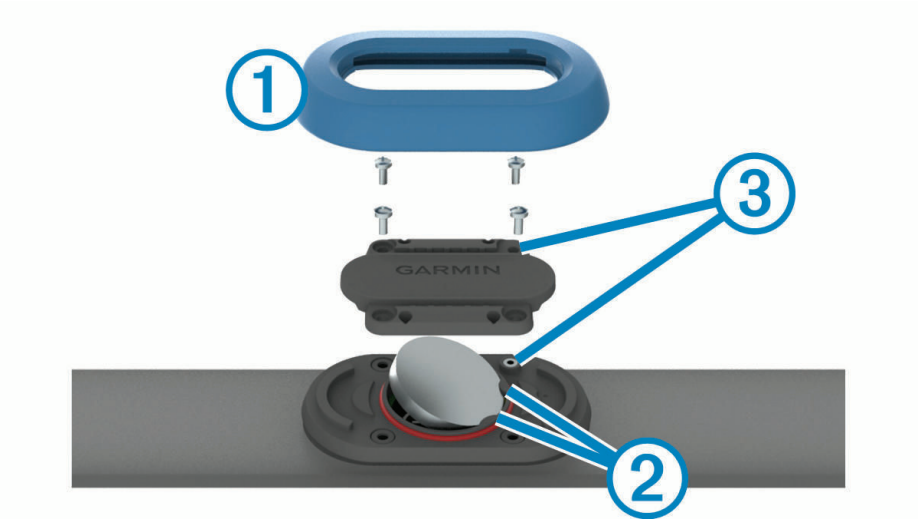
TIP: For more information, go to www.garmin.com/fitandcare.

1. Rinse with water, or use a damp lint-free cloth.
2. Allow the watch to dry completely.

[2] The device withstands pressure equivalent to a depth of 50 m. For more information, go to www.garmin.com/waterrating.

Replacing the HRM-Swim Battery and the HRM-Tri Battery

1 Remove the sleeve ① from the heart rate monitor module.



2 Use a small Phillips (00) screwdriver to remove the four screws on the front of the module.

3 Remove the cover and battery.

4 Wait 30 seconds.

5 Insert the new battery under the two plastic tabs ② with the positive side facing up.

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

The O-ring gasket should remain around the outside of the raised plastic ring.

6 Replace the front cover and the four screws.

Observe the orientation of the front cover. The raised screw ③ should fit in the matching raised screw hole on the front cover.

NOTE: Do not overtighten.

7 Replace the sleeve.

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

Changing the Bands

You can replace the bands with new Forerunner bands or compatible QuickFit® 22 bands.

1 Use the pin tool to push in the watch pin.

2 Remove the band from the watch.

3 Select an option:

- To install Forerunner bands, align one side of the new band with the holes on the device, push in the exposed watch pin, and press the band into place.

NOTE: Make sure the band is secure. The watch pin should align with the holes on the device.

- To install QuickFit 22 bands, remove the watch pin from the Forerunner band, replace the watch pin on the device, and press the new band into place.

NOTE: Make sure the band is secure. The latch should close over the watch pin.

4 Repeat the steps to change the other band.

Troubleshooting

Product Updates

Your device automatically checks for updates when connected to Bluetooth or Wi-Fi. You can manually check for updates from the system settings (*System Settings*, page 117). On your computer, install Garmin Express (www.garmin.com/express). On your phone, install the Garmin Connect app.

This provides easy access to these services for Garmin devices:

- Software updates
- Map updates
- Course updates
- Data uploads to Garmin Connect
- Product registration

Setting Up Garmin Express

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

Getting More Information

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

  This is not a medical device. The pulse oximeter feature is not available in all countries.

Tips for Using LTE Connected Features

When you start an activity, the Forerunner device uses Bluetooth technology for features like LiveTrack, if you are connected to your phone. If your phone is not connected, the Forerunner device enables LTE.

- Hold **LIGHT**, and select to view the LTE status.

  Standby means that the LTE signal is ready for use as needed.
- Charge your device before starting an activity using LTE connectivity only.

  LTE connected features use more battery life during an activity than Bluetooth connected features.

Activity Tracking

For more information about activity tracking accuracy, go to 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 watch on your non-dominant wrist.
- Carry the watch in your pocket when pushing a stroller or lawn mower.
- Carry the watch in your pocket when actively using your hands or arms only.

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

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

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

1. Select an option:
   - Sync your step count with the Garmin Express application (*Using Garmin Connect on Your Computer*, page 89.
   - Sync your step count with the Garmin Connect app (*Manually Syncing Data with Garmin Connect*, page 72).
2. Wait while your data syncs.

   Syncing can take several minutes.

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

The floors climbed amount does not seem accurate

Your watch uses an internal barometer to measure elevation changes as you climb floors. A floor climbed is equal to 3 m (10 ft.).

- Locate the small barometer holes on the back of the watch, near the charging contacts, and clean the area around the charging contacts.

  The barometer performance may be affected if the barometer holes are obstructed. You can rinse the watch with water to clean the area.

  After cleaning, allow the watch to dry completely.
- Avoid holding handrails or skipping steps while climbing stairs.
- In windy environments, cover the watch with your sleeve or jacket as strong gusts can cause erratic readings.

My intensity minutes are flashing

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

Acquiring Satellite Signals

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

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

1. Go outdoors to an open area.

   The front of the device should be oriented toward the sky.
2. Wait while the device locates satellites.

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

Improving GPS Satellite Reception

- Frequently sync the watch to your Garmin account:
  - Connect your watch to a computer using the USB cable and the Garmin Express application.
  - Sync your watch to the Garmin Connect app using your Bluetooth enabled phone.
  - Connect your watch to your Garmin account using a Wi-Fi wireless network.

  While connected to your Garmin account, the watch downloads several days of satellite data, allowing it to quickly locate satellite signals.
- Take your watch outside to an open area away from tall buildings and trees.
- Remain stationary for a few minutes.

Restarting the Watch

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

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

1. Hold ⏻ for 15 seconds.

   The watch turns off.
2. Hold ⏻ for one second to turn on the watch.

Resetting All Default Settings

Before you reset all default settings, you should sync the device with the Garmin Connect app to upload your activity data.

NOTE: This deletes all user-entered information and activity history. If you have set up a Garmin Pay wallet, restoring default settings also deletes the wallet from your device.

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

1. From the watch face, hold ☰.
2. Select **Settings** > **System** > **Reset**.
3. Select an option:
   - To reset all of the device settings to the factory default values and save all activity information and stored music, select **Reset Default Settings**.
   - To delete all activities from your history, select **Delete All Activities**.
   - To reset all distance and time totals, select **Reset Totals**.
   - To reset the all of the device settings to the factory default values and delete all activity information and stored music, select **Delete Data and Reset Settings**.

Updating the Software Using the Garmin Connect App

Before you can update your watch software using the Garmin Connect app, you must have a Garmin Connect account, and you must pair the watch with a compatible phone (*Pairing Your Phone*, page 70).

Sync your watch with the Garmin Connect app (*Manually Syncing Data with Garmin Connect*, page 72).

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

Updating the Software Using Garmin Express

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

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

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

   NOTE: If you have already set up your device with Wi-Fi connectivity, Garmin Connect can automatically download available software updates to your device when it connects using Wi-Fi.

My Device is in the Wrong Language

1. Hold ☰.
2. Scroll down to the last item in the list, and select it.
3. Select the first item in the list.
4. Use **UP** and **DOWN** to select your language.

Is my phone compatible with my watch?

The Forerunner watch is compatible with phones using Bluetooth technology.

Go to www.garmin.com/ble for Bluetooth compatibility information.

My phone will not connect to the watch

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

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

Maximizing Battery Life

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

- Turn off music.
- Reduce the display brightness, and disable the screen setting (*Changing the Screen Settings*, page 118).
- Set up the battery saver preferences in the power manager (*Customizing the Battery Saver Feature*, page 116).
- Turn off Bluetooth technology when you are not using connected features (*Bluetooth Connected Features*, page 71).
- Reduce the display timeout (*Changing the Screen Settings*, page 118).
- Stop broadcasting heart rate data to paired Garmin devices (*Broadcasting Heart Rate Data*, page 40).
- Turn off wrist-based heart rate monitoring (*Turning Off the Wrist-based Heart Rate Monitor*, page 42).

  NOTE: Wrist-based heart rate monitoring is used to calculate vigorous intensity minutes and calories burned.
- Limit the phone notifications the watch displays (*Managing Notifications*, page 70).
- Turn off the pulse oximeter feature (*Turning Off the Wrist-based Heart Rate Monitor*, page 42).
- When pausing your activity for a longer period of time, use the **Resume Later** option (*Stopping an Activity*, page 5).
- Select the **Smart** recording interval (*System Settings*, page 117).
- Use UltraTrac GPS mode for your activity (*UltraTrac*, page 113).
- 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 114).

The temperature reading is not accurate

Your body temperature affects the temperature reading for the internal temperature sensor. To get the most accurate temperature reading, you should remove the watch from your wrist and wait 20 to 30 minutes.

You can also use an optional tempe external temperature sensor to view accurate ambient temperature readings while wearing the watch.

How can I manually pair sensors?

The first time you connect a wireless sensor to your watch using ANT+ or Bluetooth technology, you must pair the watch and sensor. If the sensor has both ANT+ and Bluetooth technology, Garmin recommends that you pair using ANT+ technology. After they are paired, the watch connects to the sensor automatically when you start an activity and the sensor is active and within range.

1. Bring the watch within 3 m (10 ft.) of the sensor.

   NOTE: Stay 10 m (33 ft.) away from other wireless sensors while pairing.
2. If you are pairing a heart rate monitor, put on the heart rate monitor.

   The heart rate monitor does not send or receive data until you put it on.
3. Hold .
4. Select **Settings** > **Sensors & Accessories** > **Add New**.
5. Select an option:
   - Select **Search All**.
   - Select your sensor type.

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

Can I use my Bluetooth sensor with my watch?

The watch is compatible with some Bluetooth sensors. The first time you connect a sensor to your Garmin watch, you must pair the watch and sensor. After they are paired, the watch connects to the sensor automatically when you start an activity and the sensor is active and within range.

1. Hold .
2. Select **Sensors & Accessories** > **Add New**.
3. Select an option:
   - Select **Search All**.
   - Select your sensor type.

   You can customize the optional data fields (*Customizing the Data Screens*, page 107).

My music cuts out or my headphones won't stay connected

When using a Forerunner watch connected to Bluetooth headphones, the signal is strongest when there is a direct line of sight between the watch and the antenna on the headphones.

- If the signal passes through your body, you may experience signal loss or your headphones may become disconnected.
- If you wear your Forerunner watch on your left wrist, you should make sure the headphone's Bluetooth antenna is on your left ear.
- Since headphones vary by model, you can try wearing the watch on your other wrist.
- If you are using metal or leather watch bands, you can switch to silicone watch bands to improve signal strength.

Appendix

Data Fields

NOTE: Not all data fields are available for all activity types. Some data fields require compatible accessories to display data. Some data fields appear in more than one category on the watch.

TIP: You can also customize the data fields from the watch settings in the Garmin Connect app.

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

% Heart Rate Reserve: The percentage of heart rate reserve (maximum heart rate minus resting heart rate).

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

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

24-Hour Maximum: The maximum temperature recorded in the last 24 hours from a compatible temperature sensor.

24-Hour Minimum: The minimum temperature recorded in the last 24 hours from a compatible temperature sensor.

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

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

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

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

500m Pace: The current rowing pace per 500 meters.

Aerobic Training Effect: The impact of the current activity on your aerobic fitness level.

Ambient Pressure: The uncalibrated environmental pressure.

Anaerobic Training Effect: The impact of the current activity on your anaerobic fitness level.

Average % Heart Rate Reserve: The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current activity.

Average 500m Pace: The average rowing pace per 500 meters for the current activity.

Average Ascent: The average vertical distance of ascent since the last reset.

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

Average Cadence: Cycling. The average cadence for the current activity.

Average Cadence: Running. The average cadence for the current activity.

Average Descent: The average vertical distance of descent since the last reset.

Average Distance Per Stroke: Swimming. The average distance traveled per stroke during the current activity.

Average Distance Per Stroke: Paddle sports. The average distance traveled per stroke during the current activity.

Average GCT Balance: The average ground contact time balance for the current session.

Average Ground Contact Time: The average amount of ground contact time for the current activity.

Average Heart Rate: The average heart rate for the current activity.

Average Heart Rate %Max.: The average percentage of maximum heart rate for the current activity.

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

Average Left Power Phase: The average power phase angle for the left leg for the current activity.

Average Nautical Speed: The average speed in knots for the current activity.

Average Overall Speed: The average speed for the current activity, including both moving and stopped speeds.

Average Pace: The average pace for the current activity.

Average Power: The average power output for the current activity.

Average Right Power Phase: The average power phase angle for the right leg for the current activity.

Average Speed: The average speed for the current activity.

Average Stride Length: The average stride length for the current session.

Average Stroke Rate: Paddle sports. The average number of strokes per minute (spm) during the current activity.

Average Strokes Per Length: The average number of strokes per pool length during the current activity.

Average Swolf: The average swolf score for the current activity. Your swolf score is the sum of the time for one length plus the number of strokes for that length (*Swim Terminology*, page 13). In open water swimming, 25 meters is used to calculate your swolf score.

Average Vertical Oscillation: The average amount of vertical oscillation for the current activity.

Average Vertical Ratio: The average ratio of vertical oscillation to stride length for the current session.

Avg. Left Peak Power Phase: The average power phase peak angle for the left leg for the current activity.

Avg. Moving Speed: The average speed when moving for the current activity.

Avg. Platform Center Offset: The average platform center offset for the current activity.

Avg. Right Peak Power Phase: The average power phase peak angle for the right leg for the current activity.

Balance: The current left/right power balance.

Barometric Pressure: The current calibrated environmental pressure.

Battery Percentage: The percentage of the battery power remaining.

Bearing: The direction from your current location to a destination. You must be navigating for this data to appear.

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

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

Cadence Gauge: Running. A color gauge showing your current cadence range.

Calories: The amount of total calories burned.

Compass Gauge: The direction you are moving based on the compass.

Compass Heading: The direction you are moving based on the compass.

Course: The direction from your starting location to a destination. Course can be viewed as a planned or set route. You must be navigating for this data to appear.

Destination Location: The position of your final destination.

Destination Waypoint: The last point on the route to the destination. You must be navigating for this data to appear.

Di2 Battery: The remaining battery power of a Di2 sensor.

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

Distance Per Stroke: Paddle sports. The distance traveled per stroke.

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

Distance Remaining: The current stamina distance remaining at the current effort.

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

eBike Battery: The remaining battery power of an ebike.

eBike Range: The estimated remaining distance the ebike can provide assistance.

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

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

Estimated Finish Time: The estimated finish time of the current activity.

Estimated Total Distance: The estimated distance from the start to the final destination. You must be navigating for this data to appear.

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

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

ETE: The estimated time remaining until you reach the final destination. You must be navigating for this data to appear.

Floors Climbed: The total number of floors climbed up for the day.

Floors Descended: The total number of floors climbed down for the day.

Floors per Minute: The number of floors climbed up per minute.

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

Front: The front bike gear from a gear position sensor.

GCT Balance: The left/right balance of ground contact time while running.

GCT Balance Gauge: A color gauge showing the left/right balance of ground contact time while running.

Gear Battery: The battery status of a gear position sensor.

Gear Combo: The current gear combination from a gear position sensor.

Gear Ratio: The number of teeth on the front and rear bike gears, as detected by a gear position sensor.

Gears: The front and rear bike gears from a gear position sensor.

Glide Ratio: The ratio of horizontal distance traveled to the change in vertical distance.

Glide Ratio to Destination: The glide ratio required to descend from your current position to the destination elevation. You must be navigating for this data to appear.

GPS: The strength of the GPS satellite signal.

GPS Elevation: The altitude of your current location using GPS.

GPS Heading: The direction you are moving based on GPS.

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

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

Ground Contact Time: The amount of time in each step that you spend on the ground while running, measured in milliseconds. Ground contact time is not calculated while walking.

Ground Contact Time Gauge: A color gauge showing the amount of time in each step that you spend on the ground while running, measured in milliseconds.

Heading: The direction you are moving.

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.

Heart Rate %Max.: The percentage of maximum heart rate.

Heart Rate Gauge: A color gauge showing your current heart rate zone.

Heart Rate 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).

Intensity Factor: The Intensity Factor™ for the current activity.

Interval Average %HRR: The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current swim interval.

Interval Average %Max.: The average percentage of maximum heart rate for the current swim interval.

Interval Average Heart Rate: The average heart rate for the current swim interval.

Interval Distance: The distance traveled for the current interval.

Interval Lengths: The number of pool lengths completed during the current interval.

Interval Maximum %HRR: The maximum percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current swim interval.

Interval Maximum %Max.: The maximum percentage of maximum heart rate for the current swim interval.

Interval Maximum Heart Rate: The maximum heart rate for the current swim interval.

Interval Pace: The average pace for the current interval.

Interval Stroke Rate: The average number of strokes per minute (spm) during the current interval.

Interval Strokes Per Length: The average number of strokes per pool length during the current interval.

Interval Stroke Type: The current stroke type for the interval.

Interval Swolf: The average swolf score for the current interval.

Interval Time: The stopwatch time for the current interval.

Lap % Heart Rate Reserve: The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current lap.

Lap 500m Pace: The average rowing pace per 500 meters for the current lap.

Lap Ascent: The vertical distance of ascent for the current lap.

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

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

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

Lap Descent: The vertical distance of descent for the current lap.

Lap Distance: The distance traveled for the current lap.

Lap Distance Per Stroke: Swimming. The average distance traveled per stroke during the current lap.

Lap Distance Per Stroke: Paddle sports. The average distance traveled per stroke during the current lap.

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

Lap GCT Balance: The average ground contact time balance for the current lap.

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

Lap Ground Contact Time: The average amount of ground contact time for the current lap.

Lap Heart Rate: The average heart rate for the current lap.

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

Lap Left Peak Power Phase: The average power phase peak angle for the left leg for the current lap.

Lap Left Power Phase: The average power phase angle for the left leg for the current lap.

Lap Normalized Power: The average Normalized Power for the current lap.

Lap Pace: The average pace for the current lap.

Lap Platform Center Offset: The average platform center offset for the current lap.

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

Lap Right Peak Power Phase: The average power phase peak angle for the right leg for the current lap.

Lap Right Power Phase: The average power phase angle for the right leg for the current lap.

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

Lap Speed: The average speed for the current lap.

Lap Stride Length: The average stride length for the current lap.

Lap Stroke Rate: Swimming. The average number of strokes per minute (spm) during the current lap.

Lap Stroke Rate: Paddle sports. The average number of strokes per minute (spm) during the current lap.

Lap Strokes: Swimming. The total number of strokes for the current lap.

Lap Strokes: Paddle sports. The total number of strokes for the current lap.

Lap Swolf: The swolf score for the current lap.

Lap Time: The stopwatch time for the current lap.

Lap Vertical Oscillation: The average amount of vertical oscillation for the current lap.

Lap Vertical Ratio: The average ratio of vertical oscillation to stride length for the current lap.

Last Lap %HRR: The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the last completed lap.

Last Lap 500m Pace: The average rowing pace per 500 meters for the last lap.

Last Lap Ascent: The vertical distance of ascent for the last completed lap.

Last Lap Cadence: Cycling. The average cadence for the last completed lap.

Last Lap Cadence: Running. The average cadence for the last completed lap.

Last Lap Descent: The vertical distance of descent for the last completed lap.

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

Last Lap Distance Per Stroke: Swimming. The average distance traveled per stroke during the last completed lap.

Last Lap Distance Per Stroke: Paddle sports. The average distance traveled per stroke during the last completed lap.

Last Lap Heart Rate: The average heart rate for the last completed lap.

Last Lap Heart Rate %Max.: The average percentage of maximum heart rate for the last completed lap.

Last Lap Max. Power: The top power output for the last completed lap.

Last Lap Normalized Power: The average Normalized Power for the last completed lap.

Last Lap Pace: The average pace for the last completed lap.

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

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

Last Lap Stroke Rate: Swimming. The average number of strokes per minute (spm) during the last completed lap.

Last Lap Stroke Rate: Paddle sports. The average number of strokes per minute (spm) during the last completed lap.

Last Lap Strokes: Swimming. The total number of strokes for the last completed lap.

Last Lap Strokes: Paddle sports. The total number of strokes for the last completed lap.

Last Lap Swolf: The swolf score for the last completed lap.

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

Last Length Pace: The average pace for your last completed pool length.

Last Length Stroke Rate: The average number strokes per minute (spm) during the last completed pool length.

Last Length Strokes: The total number of strokes for the last completed pool length.

Last Length Stroke Type: The stroke type used during the last completed pool length.

Last Length Swolf: The swolf score for the last completed pool length.

Lat/Lon: The current position in latitude and longitude regardless of the selected position format setting.

Left Peak Power Phase: The current power phase peak angle for the left leg. Power phase peak is the angle range over which the rider produces the peak portion of the driving force.

Left Power Phase: The current power phase angle for the left leg. Power phase is the pedal stroke region where positive power is produced.

Lengths: The number of pool lengths completed during the current activity.

Load: The training load for the current activity. Training load is the amount of excess post-exercise oxygen consumption (EPOC), which indicates the strenuousness of your workout.

Location: The current position using the selected position format setting.

Maximum Ascent: The maximum rate of ascent in feet per minute or meters per minute since the last reset.

Maximum Descent: The maximum rate of descent in meters per minute or feet per minute since the last reset.

Maximum Elevation: The highest elevation reached since the last reset.

Maximum Lap Power: The top power output for the current lap.

Maximum Nautical Speed: The maximum speed in knots for the current activity.

Maximum Power: The top power output for the current activity.

Maximum Speed: The top speed for the current activity.

Minimum Elevation: The lowest elevation reached since the last reset.

Moving Time: The total time moving for the current activity.

Multisport Time: The total time for all sports in a multisport activity, including transitions.

Muscle O2 Saturation %: The estimated muscle oxygen saturation percentage for the current activity.

Nautical Distance: The distance traveled in nautical meters or nautical feet.

Nautical Speed: The current speed in knots.

Next Fork: The distance to the next fork on a trail.

Next Split Distance: Running. The total distance of the next split.

Next Split Target Pace: Running. The target pace for the next split.

Next Waypoint: The next point on the route. You must be navigating for this data to appear.

Normalized Power: The Normalized Power™ for the current activity.

Off Course: The distance to the left or right by which you have strayed from the original path of travel. You must be navigating for this data to appear.

Overall Ahead/Behind: Running. The overall time ahead or behind of the target pace.

Pace: The current pace.

PacePro Gauge: Running. Your current split pace and your target split pace.

Pedal Smoothness: The measurement of how evenly a rider is applying force to the pedals throughout each pedal stroke.

Performance Condition: The performance condition score is a real-time assessment of your ability to perform.

Platform Center Offset: The platform center offset. Platform center offset is the location on the pedal platform where force is applied.

Power: Cycling. The current power output in watts.

Power: Skiing. The current power output in watts. Your device must be connected to a compatible heart rate monitor.

Power Gauge: A color gauge showing your current power zone.

Power to Weight: The current power measured in watts per kilogram.

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

Rear: The rear bike gear from a gear position sensor.

Repeat On: The timer for the last interval plus the current rest (pool swimming).

Reps: During a strength training activity, the number of repetitions in a workout set.

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

Respiration Rate: Your respiration rate in breaths per minute (brpm).

Rest Timer: The timer for the current rest (pool swimming).

Right Peak Power Phase: The current power phase peak angle for the right leg. Power phase peak is the angle range over which the rider produces the peak portion of the driving force.

Right Power Phase: The current power phase angle for the right leg. Power phase is the pedal stroke region where positive power is produced.

Set Timer: During a strength training activity, the amount of time spent in the current workout set.

Speed: The current rate of travel.

Split Distance: Running. The total distance of the current split.

Split Distance Remaining: Running. The remaining distance of the current split.

Split Pace: Running. The pace for the current split.

Split Target Pace: Running. The target pace for the current split.

Stamina: The current remaining stamina.

Stamina Gauge (Dist.): A color gauge showing stamina data and distance remaining at the current effort.

Stamina Gauge (Time): A color gauge showing stamina data and time remaining at the current effort.

Stamina Potential: The remaining potential stamina.

Step Duration: The time or distance remaining for the workout step.

Step Pace: The current pace during the workout step.

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

Step Speed: The current speed during the workout step.

Step Time: The time elapsed for the workout step.

Stopped Time: The total time stopped for the current activity.

Stress: Your current stress level.

Stride Length: The length of your stride from one footfall to the next, measured in meters.

Stroke Rate: Swimming. The number of strokes per minute (spm).

Stroke Rate: Paddle sports. The number of strokes per minute (spm).

Strokes: Swimming. The total number of strokes for the current activity.

Strokes: Paddle sports. The total number of strokes for the current activity.

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

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

Swim Time: The swimming time for the current activity, not including rest time.

Temperature: The temperature of the air. Your body temperature affects the temperature sensor. You can pair a tempe sensor with your device to provide a consistent source of accurate temperature data.

Time in Zone: The time elapsed in each heart rate or power zone.

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

Timer: The current time of the countdown timer.

Time Remaining: The current stamina time remaining at the current effort.

Time Seated: The time spent seated while pedaling for the current activity.

Time Seated Lap: The time spent seated while pedaling for the current lap.

Time Standing: The time spent standing while pedaling for the current activity.

Time Standing Lap: The time spent standing while pedaling for the current lap.

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.

Torque Efficiency: The measurement of how efficiently a rider is pedaling.

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

Total Ascent/Descent Gauge: The total elevation distances ascended and descended during the activity or since the last reset.

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

Total Hemoglobin: The estimated total hemoglobin concentration in the muscle.

Training Effect Gauge: The impact of the current activity on your aerobic and anaerobic fitness levels.

Training Stress Score: The Training Stress Score™ for the current activity.

Velocity Made Good: The speed at which you are closing on a destination along a route. You must be navigating for this data to appear.

Vertical Dist. to Dest.: The elevation distance between your current position and the final destination. You must be navigating for this data to appear.

Vertical Oscillation: The amount of bounce while you are running. The vertical motion of your torso, measured in centimeters for each step.

Vertical Oscillation Gauge: A color gauge showing the amount of bounce while you are running.

Vertical Ratio: The ratio of vertical oscillation to stride length.

Vertical Ratio Gauge: A color gauge showing the ratio of vertical oscillation to stride length.

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

Vertical Speed to Target: The rate of ascent or descent to a predetermined altitude. You must be navigating for this data to appear.

Work: The accumulated work performed (power output) in kilojoules.

VO2 Max. Standard Ratings

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

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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FTP Ratings

These tables include classifications for functional threshold power (FTP) estimates by gender.

Males	Watts per Kilogram (W/kg)
Superior	5.05 and greater
Excellent	From 3.93 to 5.04
Good	From 2.79 to 3.92
Fair	From 2.23 to 2.78
Untrained	Less than 2.23

Females	Watts per Kilogram (W/kg)
Superior	4.30 and greater
Excellent	From 3.33 to 4.29
Good	From 2.36 to 3.32
Fair	From 1.90 to 2.35
Untrained	Less than 1.90

FTP ratings are based on research by Hunter Allen and Andrew Coggan, PhD, *Training and Racing with a Power Meter* (Boulder, CO: VeloPress, 2010).

Endurance Score Ratings

These tables include classifications for endurance score estimates by age and sex.

Males	Recreational	Intermediate	Trained	Well Trained	Expert	Superior	Elite
18-20	Less than 4999	5000-5699	5700-6299	6300-6999	7000-7599	7600-8299	8300 and greater
21-39	Less than 5099	5100-5799	5800-6599	6600-7299	7300-8099	8100-8799	8800 and greater
40-44	Less than 5099	5100-5799	5800-6499	6500-7199	7200-7899	7900-8599	8600 and greater
45-49	Less than 4999	5000-5699	5700-6399	6400-6999	7000-7699	7700-8399	8400 and greater
50-54	Less than 4899	4900-5499	5500-6099	6100-6799	6800-7399	7400-7999	8000 and greater
55-59	Less than 4599	4600-5099	5100-5699	5700-6199	6200-6799	6800-7299	7300 and greater
60-64	Less than 4299	4300-4799	4800-5299	5300-5699	5700-6199	6200-6699	6700 and greater
65-69	Less than 4099	4100-4499	4500-4899	4900-5399	5400-5799	5800-6199	6200 and greater
70-74	Less than 3799	3800-4199	4200-4599	4600-4899	4900-5299	5300-5699	5700 and greater
75-80	Less than 3599	3600-3899	3900-4299	4300-4599	4600-4999	5000-5299	5300 and greater
80 and older	Less than 3299	3300-3599	3600-3999	4000-4299	4300-4699	4700-4999	5000 and greater

Females	Recreational	Intermediate	Trained	Well Trained	Expert	Superior	Elite
18-20	Less than 4599	4600-5099	5100-5499	5500-5999	6000-6399	6400-6899	6900 and greater
21-39	Less than 4699	4700-5199	5200-5699	5700-6299	6300-6799	6800-7299	7300 and greater
40-44	Less than 4699	4700-5199	5200-5699	5700-6199	6200-6699	6700-7199	7200 and greater
45-49	Less than 4599	4600-5099	5100-5599	5600-6099	6100-6599	6600-7099	7100 and greater
50-54	Less than 4499	4500-4999	5000-5399	5400-5899	5900-6299	6300-6799	6800 and greater
55-59	Less than 4299	4300-4699	4700-5099	5100-5599	5600-5099	6000-6399	6400 and greater
60-64	Less than 4099	4100-4499	4500-4899	4900-5299	5300-5699	5700-6099	6100 and greater
65-69	Less than 3799	3800-4199	4200-4599	4600-4899	4900-5299	5300-5699	5700 and greater
70-74	Less than 3699	3700-4099	4100-4399	4400-4799	4800-5099	5100-5499	5500 and greater
75-80	Less than 3499	3500-3799	3800-4199	4200-4499	4500-4899	4900-5199	5200 and greater
80 and older	Less than 3199	3200-3499	3500-3799	3800-4099	4100-4399	4400-4699	4700 and greater

These estimates are provided and supported by Firstbeat Analytics.

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. You can measure the circumference of your wheel or use one of the calculators available on the internet.

Symbol Definitions

These symbols may appear on the device or accessory labels.

WEEE disposal and recycling symbol. The WEEE symbol is attached to the product in compliance with the EU directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE). It is intended to deter the improper disposal of this product and to promote reuse and recycling.

February 2024

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