

**GARMIN®**



# FORERUNNER® 970 WATCH

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## Owner's Manual

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M/N: A04907

# Table of Contents

## Introduction..... 1

Setting Up Your Watch.....	1
Button Functions.....	1
GPS Status and Status Icons.....	3
Touchscreen Functions.....	4
Enabling and Disabling the Touchscreen.....	4
Customizing the Watch Face.....	5

## Apps and Activities..... 5

Apps.....	6
Workouts.....	8
Starting a Workout.....	8
Workout Execution Score.....	9
Following a Workout From Garmin Connect.....	9
Following a Daily Suggested Workout.....	9
Starting an Interval Workout.....	10
Customizing an Interval Workout.....	10
Recording a Critical Swim Speed Test.....	11
Using Virtual Partner®.....	11
Setting a Training Target.....	12
Racing a Previous Activity.....	12
About the Training Calendar.....	12
Using Garmin Connect Training Plans.....	13
Using the Saved App.....	13
Using Voice Commands.....	13
Watch Voice Commands.....	14
Garmin Pay.....	15
Setting Up Your Garmin Pay Wallet.....	15
Paying for a Purchase Using Your Watch.....	15
Adding a Card to Your Garmin Pay Wallet.....	16
Managing Your Garmin Pay Cards.....	16
Changing Your Garmin Pay Passcode.....	17
Activities.....	17
Starting an Activity.....	18

Tips for Recording Activities.....	19
Stopping an Activity.....	19
Evaluating an Activity.....	19
Running.....	20
Going for a Run.....	20
Going for a Track Run.....	21
Tips for Recording a Track Run.....	21
Going for a Virtual Run.....	21
Calibrating the Treadmill Distance.....	21
Recording an Ultra Run Activity....	22
Ultra Run Auto Rest Settings....	22
Recording an Obstacle Racing Activity.....	22
PacePro™ Training.....	22
Downloading a PacePro Plan from Garmin Connect.....	23
Creating a PacePro Plan on Your Watch.....	23
Starting a PacePro Plan.....	24
Cycling.....	25
Using an Indoor Trainer.....	25
Power Guide.....	25
Creating and Using a Power Guide.....	26
Swimming.....	26
Swim Terminology.....	26
Stroke Types.....	27
Tips for Swimming Activities.....	27
Swim Auto Rest and Manual Rest.....	27
Training with the Drill Log.....	28
Multisport.....	28
Triathlon Training.....	28
Creating a Multisport Activity.....	29
Gym Activities.....	29
Recording a Strength Training Activity.....	29
Recording a Mobility Activity.....	30
Recording a HIIT Activity.....	30
Recording an Indoor Climbing Activity.....	31
Outdoor Activities.....	32
Golfing.....	32
Playing Golf.....	32
Golf Menu.....	34
Moving the Flag.....	35

Viewing Measured Shots.....	35	Satellite Settings.....	53
Keeping Score.....	35	Segments.....	53
Viewing the Direction to the Pin.....	36	<b>Controls.....</b>	<b>55</b>
Saving Custom Targets.....	37	Customizing the Controls Menu.....	58
Viewing Hazards.....	37	Using the LED Flashlight.....	59
Viewing Layup and Dogleg Distances.....	37	Editing the Custom Flashlight Strobe.....	59
Big Numbers Mode.....	38	<b>Glances.....</b>	<b>60</b>
Recording a Bouldering Activity...	38	Viewing Glances.....	63
Starting an Expedition.....	39	Customizing the Glances List.....	64
Recording a Track Point Manually.....	39	Creating a Glances Folder.....	64
Viewing Track Points.....	39	Body Battery.....	64
Going Fishing.....	39	Tips for Improved Body Battery Data.....	64
Going Hunting.....	40	Performance Measurements.....	65
Winter Sports.....	40	About VO2 Max. Estimates.....	66
Viewing Your Ski Runs.....	40	Getting Your VO2 Max. Estimate for Running.....	67
Recording a Backcountry Skiing or Snowboarding Activity.....	40	Getting Your VO2 Max. Estimate for Cycling.....	67
Cross-Country Skiing Power Data.....	41	Viewing Your Predicted Race Times.....	68
Water Sports.....	41	Heart Rate Variability Status.....	69
Viewing Your Water Sport Runs...	41	Performance Condition.....	69
Sailing.....	42	Viewing Your Performance Condition.....	70
Tack Assist.....	42	Running Economy.....	70
Sail Racing.....	43	Viewing Your Running Economy...	70
Setting the Starting Line.....	43	Getting Your FTP Estimate.....	71
Starting a Race.....	44	Lactate Threshold.....	71
Other Activities.....	45	Viewing Your Real-Time Stamina....	72
Recording a Breathwork Activity..	45	Viewing Your Power Curve.....	73
Recording a Meditation Activity...	45	Training Status.....	73
Customizing Activities and Apps....	45	Training Status Levels.....	74
Customizing the App List.....	46	Tips for Getting Your Training Status.....	74
Customizing Your Favorite Activities List.....	46	Acute Load.....	74
Pinning a Favorite Activity to the List.....	46	Training Load Focus.....	75
Customizing the Data Screens....	47	Load Ratio.....	75
Adding the Map Data Screen...	47	About Training Effect.....	76
Creating a Custom Activity.....	47	Recovery Time.....	76
Activity Settings.....	48	Recovery Heart Rate.....	77
Activity Alerts.....	50	Heat and Altitude Performance Acclimation.....	77
Playing Voice Alerts During an Activity.....	51	Pausing and Resuming Your Training Status.....	77
Routing Settings.....	52		
Using ClimbPro.....	52		
Enabling Auto Climb.....	53		

Training Readiness.....	78	<b>Connectivity.....</b>	<b>91</b>
Running Tolerance.....	79	Sensors and Accessories.....	91
Endurance Score.....	79	Wireless Sensors.....	92
Hill Score.....	80	Pairing Your Wireless Sensors.....	94
Viewing Cycling Ability.....	80	Heart Rate Accessory Running Pace and Distance.....	94
Race Calendar and Primary Race.....	81	Tips for Recording Running Pace and Distance.....	94
Training for a Race Event.....	81	Running Dynamics.....	94
Adding Weather Locations.....	81	Tips for Missing Running Dynamics Data.....	95
Using the Jet Lag Adviser.....	82	Running Power.....	96
Planning a Trip in the Garmin Connect App.....	82	Chest Heart Rate While Swimming.....	96
<b>Clocks.....</b>	<b>82</b>	Using the Varia Camera Controls.....	97
Setting an Alarm.....	82	inReach Remote.....	97
Editing an Alarm.....	83	Using the inReach Remote.....	97
Using the Countdown Timer.....	83	Phone Connectivity Features.....	97
Deleting a Countdown Timer.....	84	Pairing Your Phone.....	98
Using the Stopwatch.....	84	Calling from the Watch.....	98
Adding Alternate Time Zones.....	85	Using the Phone Assistant.....	98
Editing an Alternate Time Zone.....	85	Enabling Phone Notifications.....	99
Adding a Countdown Event.....	86	Viewing Notifications.....	99
Editing a Countdown Event.....	86	Receiving an Incoming Phone Call.....	99
<b>History.....</b>	<b>86</b>	Replying to a Text Message.....	100
Using History.....	87	Managing Notifications.....	100
Multisport History.....	87	Turning Off the Bluetooth Phone Connection.....	100
Personal Records.....	87	Turning On and Off Find My Phone Alerts.....	100
Viewing Your Personal Records.....	87	Locating a Phone Lost During a GPS Activity.....	100
Restoring a Personal Record.....	87	Wi-Fi Connectivity Features.....	101
Clearing Personal Records.....	88	Connecting to a Wi-Fi Network.....	101
Viewing Data Totals.....	88	Garmin Share.....	101
<b>Notifications and Alerts Settings....</b>	<b>88</b>	Sharing Data with Garmin Share....	102
Health and Wellness Alerts.....	89	Receiving Data with Garmin Share..	102
Setting an Abnormal Heart Rate Alert.....	89	Garmin Share Settings.....	102
Morning Report.....	89	Phone Apps and Computer Applications.....	102
Customizing Your Morning Report...	89	Garmin Connect.....	103
Evening Report.....	90	Garmin Connect+ Subscription..	103
Customizing Your Evening Report...	90	Using the Garmin Connect App..	104
Setting Time Alerts.....	90	Updating the Software Using the Garmin Connect App.....	104
Setting a Storm Alert.....	90	Unified Training Status.....	104
Turning On Phone Connection Alerts..	90		
<b>Sound and Vibration Settings.....</b>	<b>91</b>		
<b>Display and Brightness Settings.....</b>	<b>91</b>		

Using Garmin Connect on Your Computer.....	104
Updating the Software Using Garmin Express.....	105
Manually Syncing Data with Garmin Connect.....	105
Connect IQ Features.....	105
Downloading Connect IQ Features.....	105
Downloading Connect IQ Features Using Your Computer.....	105
Garmin Explore™ .....	105
Garmin Messenger App.....	106
Using the Messenger Feature.....	106
Garmin Golf™ App.....	107
<b>Focus Modes.....</b>	<b>107</b>
Customizing the Sleep Focus Mode..	107
Customizing the Activity Focus Mode.....	107
<b>Health and Wellness Settings.....</b>	<b>108</b>
Wrist Heart Rate .....	108
Wearing the Watch.....	108
Tips for Erratic Heart Rate Data....	109
Wrist Heart Rate Monitor Settings..	109
Broadcasting Heart Rate Data....	109
Pulse Oximeter.....	110
Getting Pulse Oximeter Readings..	111
Setting the Pulse Oximeter Mode..	111
Tips for Erratic Pulse Oximeter Data.....	111
Auto Goal.....	111
Intensity Minutes.....	112
Earning Intensity Minutes.....	112
Sleep Tracking.....	112
Using Automated Sleep Tracking...	112
Breathing Variations.....	112
<b>Map.....</b>	<b>113</b>
Viewing the Map.....	113
Saving or Navigating to a Location on the Map.....	113
Map Settings.....	114
Managing Maps.....	114
Downloading Maps with Outdoor Maps+ .....	115
Downloading TopoActive Maps..	115
Deleting Maps.....	115
Showing and Hiding Map Data.....	116
<b>Navigation.....</b>	<b>116</b>
Navigating to a Destination.....	116
Navigating to a Nearby Point of Interest.....	117
Navigating to Your Starting Point During an Activity.....	117
Marking and Starting Navigation to a Man Overboard Location.....	118
Stopping Navigation.....	118
Saving Locations.....	118
Saving Your Location.....	118
Saving a Dual Grid Location.....	118
Sharing a Location From a Map Using the Garmin Connect App.....	119
Starting a GPS Activity From a Shared Location.....	119
Navigating to a Shared Location During an Activity.....	119
Courses.....	119
Creating a Course on Garmin Connect.....	120
Sending a Course to Your Device.....	120
Creating and Following a Course on Your Device.....	120
Creating a Round-Trip Course....	121
Navigating with Sight 'N Go.....	121
Setting the Compass Heading.....	121
Setting a Reference Point.....	122
Projecting a Waypoint.....	122
<b>Safety and Tracking Features.....</b>	<b>123</b>
Adding Emergency Contacts.....	123
Adding Contacts.....	123
Turning Incident Detection On and Off.....	124
Requesting Assistance.....	124
Starting a GroupTrack Session.....	125
Tips for GroupTrack Sessions.....	125
<b>Music.....</b>	<b>125</b>
Connecting to a Third-Party Provider	126
Downloading Audio Content from a Third-Party Provider.....	126

Downloading Personal Audio Content.....	126
Listening to Music.....	127
Music Playback Controls.....	128
Connecting Bluetooth Headphones...	128
Changing the Audio Mode.....	129

## **User Profile..... 129**

Setting Up Your User Profile.....	129
Gender Settings.....	129
Viewing Your Fitness Age.....	129
About Heart Rate Zones.....	129
Fitness Goals.....	130
Setting Your Heart Rate Zones.....	130
Letting the Watch Set Your Heart Rate Zones.....	130
Heart Rate Zone Calculations.....	131
Setting Your Power Zones.....	131
Detecting Performance Measurements Automatically.....	131

## **Power Manager Settings..... 132**

Customizing the Battery Saver Feature.....	132
Customizing the Power Mode for an Activity.....	132
Customizing Power Modes.....	133

## **System Settings..... 133**

Customizing the Button Shortcuts.....	133
Setting Your Watch Passcode.....	134
Changing Your Watch Passcode....	134
Compass.....	134
Compass Settings.....	134
Calibrating the Compass	
Manually.....	135
Setting the North Reference.....	135
Altimeter and Barometer.....	135
Altimeter and Barometer Settings.	135
Calibrating the Barometric Altimeter.....	136
Time Settings.....	136
Syncing the Time.....	136
Advanced System Settings.....	136
Changing the Units of Measure.....	137
Data Recording Settings.....	137
Restore and Reset Settings.....	137

Restoring Your Settings and Data from Garmin Connect.....	137
Resetting All Default Settings.....	138
Viewing Device Information.....	138
Viewing E-label Regulatory and Compliance Information.....	138

## **Device Information..... 138**

About the AMOLED Display.....	138
Charging the Watch.....	139
Device Care.....	139
Cleaning the Watch.....	140
Changing the Bands.....	141
Specifications.....	142
Battery Life Information.....	142

## **Troubleshooting..... 142**

Product Updates.....	142
Getting More Information.....	143
My device is in the wrong language..	143
Tips for Maximizing the Battery Life..	143
Restarting Your Watch.....	143
Is my phone compatible with my watch?.....	144
My phone will not connect to the watch.....	144
Can I use my Bluetooth sensor with my watch?.....	144
My headphones will not connect to the watch.....	144
My music cuts out or my headphones won't stay connected.....	145
The speaker or microphone is quiet after water exposure.....	145
How can I undo a lap button press?..	145
Acquiring Satellite Signals.....	145
Improving GPS Satellite Reception	145
The heart rate on my watch is not accurate.....	145
The activity temperature reading is not accurate.....	146
Exiting Demo Mode.....	146
Activity Tracking.....	146
My step count does not seem accurate.....	146
The step counts on my watch and my Garmin Connect account don't match.....	146

The floors climbed amount does not seem accurate .....	146
--	-----

<b>Data Fields.....</b>	<b>147</b>
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<b>Appendix.....</b>	<b>160</b>
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Color Gauges and Running Dynamics Data .....	161
Ground Contact Time Balance Data .....	161
Vertical Oscillation and Vertical Ratio Data .....	162
VO2 Max. Standard Ratings .....	162
Running Economy Ratings .....	162
FTP Ratings .....	163
Endurance Score Ratings .....	164
Wheel Size and Circumference .....	165



# 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.

## Setting Up Your Watch






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

- Hold  to turn on the watch ([Button Functions, page 1](#)).
- Follow the on-screen instructions to complete the initial setup.  
During the initial setup, you can pair your phone with your watch to receive notifications, sync your activities, and more ([Pairing Your Phone, page 98](#)). If you are upgrading from a compatible watch, you can migrate your watch settings, saved courses, and more when you pair your new Forerunner watch with your phone.
- Charge the watch ([Charging the Watch, page 139](#)).
- Check for software updates ([System Settings, page 133](#)).  
For the best experience, you should keep the software on your watch up to date. Software updates provide changes and improvements to privacy, security, and features.
- Set up Wi-Fi® networks ([Connecting to a Wi-Fi Network, page 101](#)).
- Set up safety features ([Safety and Tracking Features, page 123](#)).
- Set up music ([Music, page 125](#)).
- Set up your Garmin Pay™ wallet ([Setting Up Your Garmin Pay Wallet, page 15](#)).
- Go for a run ([Going for a Run, page 20](#)).

## Button Functions








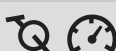









**TIP:** You can customize some button hold functions and create new button shortcuts ([Customizing the Button Shortcuts, page 133](#)).

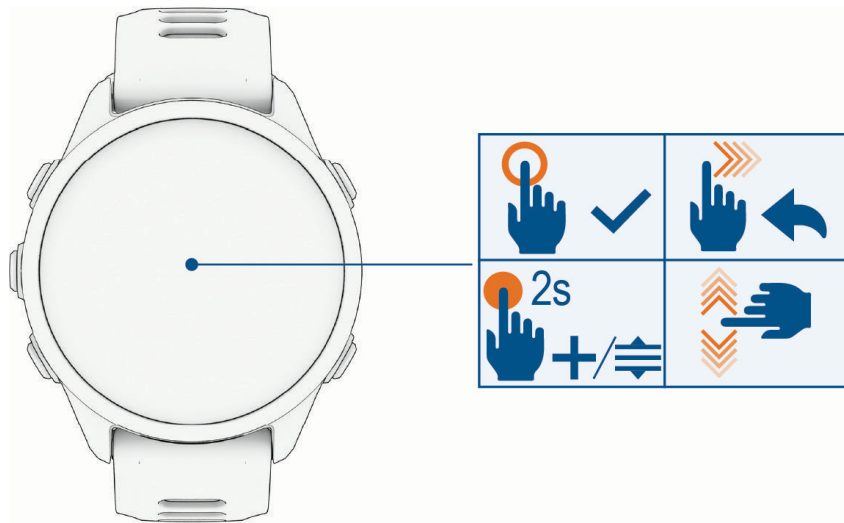
<p>①</p>  <p>Upper-left button</p>	<ul style="list-style-type: none"> <li>• Press to illuminate the screen.</li> <li>• Quickly press twice to turn the flashlight on or off (<a href="#">Using the LED Flashlight, page 59</a>).</li> <li>• Hold for two seconds to view the controls menu (<a href="#">Controls, page 55</a>).</li> <li>• Hold for three seconds to turn on the device.</li> <li>• Hold for five seconds to request assistance (<a href="#">Requesting Assistance, page 124</a>).</li> </ul>
<p>②</p>  <p>Middle-left button</p>	<ul style="list-style-type: none"> <li>• From the watch face, press to view the notification center (<a href="#">Viewing Notifications, page 99</a>).</li> <li>• Press to scroll through the menus or data screens.</li> <li>• From the watch face, hold to access the main menu.</li> </ul>
<p>③</p>  <p>Lower-left button</p>	<ul style="list-style-type: none"> <li>• From the watch face, press to scroll through the glances list (<a href="#">Viewing Glances, page 63</a>).</li> <li>• Press to scroll through the menus or data screens.</li> <li>• Hold to view the music controls (<a href="#">Listening to Music, page 127</a>).</li> </ul>
<p>④</p>  <p>Upper-right button</p>	<ul style="list-style-type: none"> <li>• Press to choose an option in a menu.</li> <li>• From the watch face, press to open the apps and activities menu (<a href="#">Apps and Activities, page 5</a>).</li> <li>• Press to start or stop an activity (<a href="#">Starting an Activity, page 18</a>).</li> </ul>
<p>⑤</p>  <p>Lower-right button</p>	<ul style="list-style-type: none"> <li>• Press to return to the previous screen.</li> <li>• During an activity, press to record a lap, rest, or advance to the next workout step.</li> </ul>

## 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
	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

## Touchscreen Functions







- Tap to choose an option in a menu.
- Hold the watch face data to open the glance or feature.  
**NOTE:** This feature is not available on all watch faces.
- Tap an icon at the top of the watch face to resume using the active app or activity.
- From the controls, glances, or apps menu, hold the watch face to edit, add to, or reorder the options.
- From the watch face, swipe down to view the notification center.
- From the watch face, swipe up to scroll through the glances list.
- Swipe up or down to scroll through the menus.
- Swipe right to return to the previous screen.
- Cover the screen with your palm to return to the watch face and turn down the screen brightness.

### Enabling and Disabling the Touchscreen






You can customize the touchscreen for general watch use, each activity profile ([Activity Settings, page 48](#)), and each focus mode ([Focus Modes, page 107](#)).

**NOTE:** The touchscreen is not available during swim activities. The touchscreen setting for each activity profile (such as run or bike) applies to the corresponding leg of a multisport activity.

- Hold , and select .  
To add this option to the controls menu, see ([Customizing the Controls Menu, page 58](#)).
- Hold , select **Watch Settings > Display & Brightness > Touch**, and select an option.
- To customize a shortcut to temporarily enable or disable the touchscreen, hold , select **Watch Settings > System > Shortcuts**.

## Customizing the Watch Face

You can customize the watch face information and appearance, or activate an installed Connect IQ™ watch face ([Connect IQ Features, page 105](#)).

- 1 From the watch face, hold .
- 2 Select **Watch Face**.
- 3 Press  or  to preview the watch face options.
- 4 Select **Add New** to choose from additional watch face options.
- 5 Scroll to a watch face, press , and select .
- 6 Select an option:

**NOTE:** Not all options are available for all watch faces.

- To activate the watch face, select **Apply**.
- To change the styles of fonts and graphics, select **Styles**.
- 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 color of the data that appears on the watch face, select **Data Color**.
- To remove the watch face, select **Delete**.

## Apps and Activities

Your watch includes a variety of preloaded apps and activities.

**Apps:** Apps provide interactive features for your watch, such as viewing workouts or calling someone from your watch ([Apps, page 6](#)).



**Activities:** Your watch comes preloaded with indoor and outdoor activity apps, including running, cycling, strength training, pool swimming, and more ([Activities, page 17](#)). When you start an activity, the watch displays and records sensor data, which you can save and share with the Garmin Connect™ community.

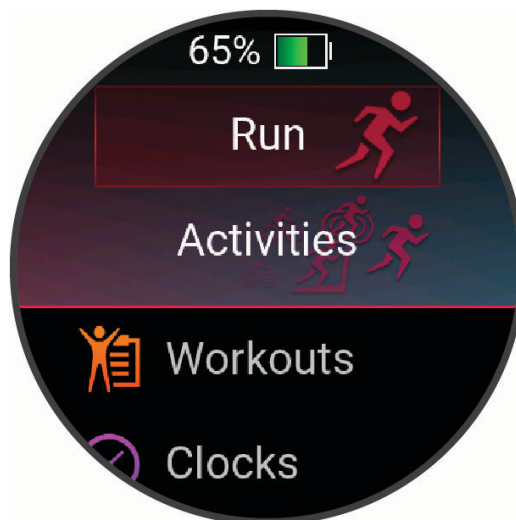
For more information about activity tracking and fitness metric accuracy, go to [garmin.com/ataccuracy](https://garmin.com/ataccuracy).

**Connect IQ Apps:** You can add features to your watch by installing apps from the Connect IQ app ([Connect IQ Features, page 105](#)).

## Apps

You can customize your watch using the apps menu, which lets you quickly access watch features and options. Some apps require a Bluetooth® connection to a compatible phone. Many apps can also be found in the glances ([Glances, page 60](#)) or controls ([Controls, page 55](#)).

From the watch face, press , and press  to scroll through the apps.



Name	More Information
ABC	Select to view combined altimeter, barometer, and compass information.
Broadcast Heart Rate	Select to broadcast heart rate data to a paired device ( <a href="#">Broadcasting Heart Rate Data, page 109</a> ).
Calendar	Select to view upcoming events from your phone calendar.
Clocks	Select to set an alarm, timer, stopwatch, alternate time zone, or countdown event ( <a href="#">Clocks, page 82</a> ).
Connect IQ	Select to use the Connect IQ store on your watch ( <a href="#">Connect IQ Features, page 105</a> ).
Garmin Share	Select to send or receive data with other Garmin® devices ( <a href="#">Garmin Share, page 101</a> ).
Health Snapshot™	Select to record several key health metrics, such as your average heart rate, stress level, and respiration rate, while you hold still for two minutes. It provides a glimpse of your overall cardiovascular status.
History	Select to view your recorded activity history, records, and totals ( <a href="#">Using History, page 87</a> ).
Map	Select to view the map ( <a href="#">Viewing the Map, page 113</a> ).
Map Manager	Select to view and manage downloaded maps ( <a href="#">Managing Maps, page 114</a> ).
Messenger	Select to view and send messages from the Garmin Messenger™ phone app ( <a href="#">Garmin Messenger App, page 106</a> ).
Moon Phase	Select to view the moonrise and moonset times, along with the moon phase, based on your GPS position.
Music	Select to control audio playback using your watch ( <a href="#">Listening to Music, page 127</a> ).
Notifications	Select to view your phone notifications ( <a href="#">Viewing Notifications, page 99</a> ).
Phone	Select to open the phone controls, such as contacts and the dial pad ( <a href="#">Calling from the Watch, page 98</a> ).
Phone Assistant	Select to speak a command for your phone's voice assistant ( <a href="#">Using the Phone Assistant, page 98</a> ).
Project Wpt.	Select to save a new location by projecting the distance and bearing from your current location ( <a href="#">Projecting a Waypoint, page 122</a> ).
Pulse Ox	Select to take a pulse oximeter reading ( <a href="#">Pulse Oximeter, page 110</a> ).
Reference Point	Select to set a reference point to provide the heading and distance to a location or bearing ( <a href="#">Setting a Reference Point, page 122</a> ).
Saved	Select to view your saved locations, courses, and waypoints ( <a href="#">Using the Saved App, page 13</a> ).
Settings	Select to open the settings menu.
Sunrise & Sunset	Select to view sunrise, sunset, and twilight times.
Tips	Select to view interactive watch tips and scan a direct link to <a href="https://support.garmin.com">support.garmin.com</a> to access the owner's manual for your watch.
Voice Command	Select to speak a command for your watch to perform ( <a href="#">Using Voice Commands, page 13</a> ).
Wallet	Select to open your Garmin Pay wallet ( <a href="#">Garmin Pay, page 15</a> ).

Name	More Information
Weather	Select to view the current weather forecast and conditions.
Workouts	Select to view your saved workouts ( <a href="#">Workouts, page 8</a> ).

## 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 apps list to show all workouts currently loaded on your watch ([Apps and Activities, page 5](#)).

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 9](#)).

You can schedule workouts.

You can update and edit your current workouts.


## Starting a Workout

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

- 1 From the watch face, press .

**TIP:** If you already have a scheduled or suggested workout for today, you can scroll down and select **Workouts**.

- 2 Select **Activities**, and select an activity.

- 3 Press , and select **Training**.

- 4 Select an option:

- To start an interval workout or a workout with a training target, select **Quick Workout** ([Starting an Interval Workout, page 10](#), [Setting a Training Target, page 12](#)).
- To start a preloaded or saved workout, select **Workout Library** ([Following a Workout From Garmin Connect, page 9](#)).
- To start a scheduled workout from your Garmin Connect training calendar, select **Training Calendar** ([About the Training Calendar, page 12](#)).

**NOTE:** Not all options are available for all activity types.

- 5 Select a workout.

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

- 6 If necessary, select **Do Workout**.

- 7 Press  to start the activity timer.




After you begin a workout, the device displays each step of the workout, step notes (optional), the target (optional), and the current workout data. For strength, yoga, cardio, or Pilates activities, an instructional animation appears.



## Workout Execution Score



After you complete a workout, the watch displays your workout execution score based on how accurately you completed the workout. The active workout steps are prioritized the highest, measuring how closely your effort level matches the step target, and also that you completed all the steps. Warm up and recovery steps have a lower impact on your score. The cool down step does not impact your workout execution score at all.

**NOTE:** Your workout execution score appears only for running or cycling workouts.

	Good, 67 to 100%
	Average, 34 to 66%
	Low, 0 to 33%



## 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 103).


- 1 Select an option:
  - Open the Garmin Connect app, and select .
  - Go to [connect.garmin.com](https://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.

## 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 66).

- 1 From the watch face, press .
- 2 Select **Activities**.
- 3 Select an option:
  - Select **Running**, and select an activity.
  - Select **Cycling**, and select an activity.
- 4 Press , and select the daily suggested workout.









**NOTE:** No suggested workout appears if you have a scheduled rest day, or are following another training plan.
- 5 Scroll down to view details about the workout, such as the steps and estimated benefit.
- 6 Press , 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 training days, target type, and workout prompts, select **Settings**, and select an option.

**TIP:** If you disable the **Workout Prompt** option, you can enable prompts again later. From the activity, select **Training > Workout Library > Daily Suggestions**, select a workout, press , and select **Settings > Workout Prompt**.

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





## Starting an Interval Workout

**NOTE:** This feature is not available for all activities.

- 1 From the watch face, press .
- 2 Select **Activities**, and select an activity.
- 3 Press .
- 4 Select **Training > Quick Workout > Intervals**.
- 5 Select an option:
  - Select **Open Repeats** to mark your intervals and rest periods manually by pressing .
  - Select **Structured Repeats**, press , and select **Do Workout** to use an interval workout based on distance or time.
- 6 If necessary, select  to include a warm up before the workout.
- 7 Press  to start the activity timer.
- 8 When your interval workout has a warm up, press  to begin the first interval.
- 9 Follow the on-screen instructions.
- 10 At any time, press  to stop the current interval or rest period and transition to the next interval or rest period (optional).

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






## Customizing an Interval Workout

- 1 From the watch face, press .
- 2 Select **Activities**, and select an activity.
- 3 Press .
- 4 Select **Training > Quick Workout > Intervals > Structured Repeats**.
- 5 Press , 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**.
- 7 Press .

The watch saves your custom interval workout until you edit the workout again.

## 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 From the watch face, press .
- 2 Select **Activities** > **Swimming** > **Pool Swim**.
- 3 Press .
- 4 Select **Training** > **Workout Library** > **Critical Swim Speed** > **Do Critical Swim Speed Test**.
- 5 Press  to preview the workout steps (optional).
- 6 Press .
- 7 Press  to start the activity timer.
- 8 Follow the on-screen instructions.

## 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 feature and race against it.

**NOTE:** This feature is not available for all activities.


- 1 From the watch face, press .
- 2 Select **Activities**, and select an activity.
- 3 Press .
- 4 Select the activity settings.
- 5 Select **Data Screens** > **Add New** > **Virtual Partner**.
- 6 Enter a pace or speed value.
- 7 Press  or  to change the location of the Virtual Partner screen (optional).
- 8 Start your activity ([Starting an Activity, page 18](#)).
- 9 Press  or  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 watch gives you real-time feedback about how close you are to achieving your training target.

1 From the watch face, press .

2 Select **Activities**, and select an activity.

3 Press , and select **Training**.

4 Select an option:


- Select **Set a Target**.
- Select **Quick Workout**.

**NOTE:** Not all options are available for all activity types.

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.


6 Press  to start the activity timer.

**TIP:** You can hold , and select **Cancel Target** to cancel the training target.

## 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, press .

2 Select **Activities**, and select an activity.

3 Press .

4 Select **Training > Race Yourself**.


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 Press  to start the activity timer.

8 After you complete your activity, press , and select **Save**.

## 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 103](#)), and you must pair the Forerunner watch with a compatible phone.


- 1 From the Garmin Connect app, select ●●●.
- 2 Select **Training & Planning > Garmin Coach 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 glances list on your Forerunner watch.

## Using the Saved App

You can use the saved app to view your saved locations and courses.

- 1 From the watch face, press .
- 2 Select **Saved**.
- 3 Select a saved item.
- 4 Select an option:
  - To navigate to the location, select **Go To**.
  - To navigate the course, select **Do Course**.
  - To navigate the course in reverse, select **More > Do Course in Reverse**.
  - To view location details, select **More > Details**.
  - To edit the location or course details, select **More > Edit**.
  - To view a list of ascents in the course, select **More > View Climbs**.
  - To show the course on the map, even when you are not navigating, select **More > Show on Map**.
  - To share the location or course with the **Garmin Share** feature, select **More > Share** ([Garmin Share, page 101](#)).
  - To delete the location or course, select **More > Delete**.

## Using Voice Commands

- 1 Select an option:
  - From the watch face, press , and select **Voice Command**.
  - Hold , and select **Voice Command**.

**NOTE:** You can customize the controls menu ([Customizing the Controls Menu, page 58](#)).
- 2 Say a voice command for the watch to perform ([Watch Voice Commands, page 14](#)).

## Watch Voice Commands

The voice command system is designed to detect natural speech. This is a list of commonly used voice commands, but the watch does not require these exact phrases. You can try saying variations of these commands in a way that is natural to you. Go to [garmin.com/voicecommand/tips](https://garmin.com/voicecommand/tips) for voice command tips and troubleshooting information.

Voice Help Command	Function
What can I say?	Shows a list of common voice commands

## Device and Screen Functions

Voice Command	Function
Find my phone	Plays an audible alert on your paired phone, if it is within Bluetooth range.
Disable do not disturb	Disables do not disturb mode to dim the screen and disable alerts and notifications.
Turn on airplane mode	Enables airplane mode to turn off all wireless communications.
Increase brightness	Raises the brightness level.
Decrease brightness	Lowers the brightness level.
Set brightness to 80	Sets the brightness level to a specified percent. Available numbers are 0-100%.

## Clock Functions

Voice Command	Function
Set a timer for fifteen minutes	Sets a countdown timer for the specified time.
Pause timer	Pauses the currently running countdown timer.
Resume timer	Resumes the paused countdown timer.
Cancel timer	Cancels the currently running countdown timer.
Start stopwatch	Starts the stopwatch.
Stop stopwatch	Stops the stopwatch.
Wake me up at 3:15 a.m.	Sets a one-time alarm for the specified time.

## App and Activity Functions

Voice Command	Function
Show me the weather	Opens the weather app.
Open the calendar	Opens the calendar app.
Start a run	Starts a Run activity.
Start hiking	Starts a Hike activity.
Open the triathlon app	Starts a Triathlon activity.

**NOTE:** The apps and activities listed are examples, but you can control all of the default apps and activities with voice commands ([Apps, page 6](#)), ([Activities, page 17](#)).

## Navigation Functions

Voice Command	Function
Begin navigation	Opens the Navigate menu to navigate to a destination.
Save location	Saves your current location.
Switch to the compass app	Opens the compass.

## Media Functions

Voice Command	Function
Change volume to 8	Adjusts the volume to the specified level. Available numbers are 0-10 or 0-100%.
Increase volume	Raises the audio volume.
Decrease volume	Lowers the audio volume.
Play music	Plays the currently selected media.
Next song	Plays the next media track.
Previous song	Plays the previous media track.
Pause music	Pauses the currently playing media.
Mute	Silences all audio.
Unmute	Unsilences all audio.

## Garmin Pay

The Garmin Pay feature allows you to use your watch to pay for purchases in participating locations 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](https://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 location.


- 1 Select an option:
  - From the watch face, press .
  - Hold .
- 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, press  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.

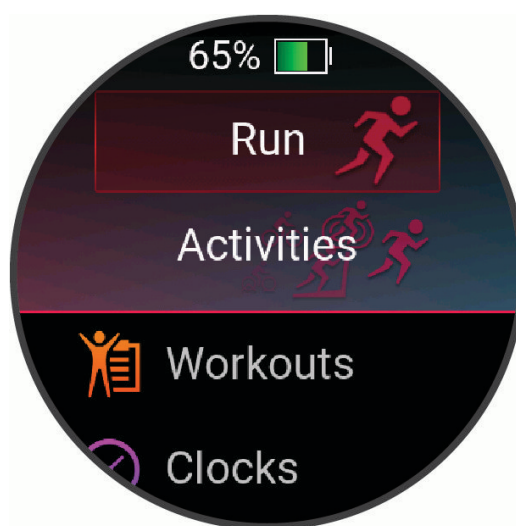
- 1 From the Garmin Connect app, select ●●●.
- 2 Select **Garmin Pay > Change Passcode**.
- 3 Follow the on-screen instructions.

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

## Activities

From the watch face, press , select **Activities**, and press  to scroll through the activities. Your favorite activities list appears at the top of the list ([Customizing Your Favorite Activities List](#), page 46).



**NOTE:** Some activities appear in more than one category.









Category	Activities
Running	Indoor Track, Obstacle Racing, Run, Track Run, Trail Run, Treadmill, Ultra Run, Virtual Run
Cycling	Bike, Bike Commute, Bike Indoor, Bike Tour, BMX, Cyclocross, eBike, eMTB, Gravel Bike, MTB, Road Bike
Swimming	Open Water, Pool Swim
Multisport	Brick, Duathlon, Pool Triathlon, Swimrun, Triathlon
Gym	Boxing, Cardio, Climb Indoor, Elliptical, Floor Climb, HIIT, Jump Rope, Mixed Martial Arts, Mobility, Pilates, Row Indoor, Stair Stepper, Strength, Walk Indoor, Yoga
Outdoor	Adventure Race, Archery, Bouldering, Disc Golf, Expedition, Fish, Golf, Hike, Horseback, Hunt, Inline Skating, Mountaineering, Rucking, Walk
Winter Sports	Backcountry Ski, Backcountry Snowboard, Ice Skating, Ski, Snowboard, Snowmobile, Snowshoe, XC Classic Ski, XC Skate Ski
Water Sports	Boat, Kayak, Row, Sail, Sail Expedition, Sail Race, Snorkel, SUP
Team Sports	American Football, Baseball, Basketball, Cricket, Field Hockey, Ice Hockey, Lacrosse, Rugby, Soccer/Football, Softball, Volleyball, Ultimate Disc
Racket Sports	Badminton, Padel, Pickleball, Platform Tennis, Racquetball, Squash, Table Tennis, Tennis
Motorsports	ATV, Motocross, Motorcycle, Overland
Other	Breathwork, Meditation, Track Me

## Starting an Activity




When you start an activity, GPS turns on automatically (if required).

- 1 From the watch face, press .
- 2 Select **Activities**.
- 3 Select an option:
  - Select an activity from your favorites.
  - Scroll to the **More** activities list, select an activity category, and select an activity.
- 4 If the activity requires GPS signals, go outside to an area with a clear view of the sky, and wait until the GPS status bar is filled.  
The watch is ready after it establishes your heart rate, acquires GPS signals (if required), and connects to your wireless sensors (if required).
- 5 Press  to start the activity timer.  
The watch records activity data only while the activity timer is running.

## Tips for Recording Activities

- Charge the watch before starting an activity ([Charging the Watch, page 139](#)).
- Press  to record laps, start a new set or pose, or advance to the next workout step.  
You can select  to discard a lap for certain activities ([How can I undo a lap button press?, page 145](#)).
- Press  or  to view additional data screens.
- Swipe up or down to view additional data screens.  
**TIP:** You can swipe down from the top of the screen to unlock the touchscreen during an activity.
- Swipe right or left to view the music controls or activity settings.
- 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.
- Hold , select the activity settings, and select **Power Mode** to use a power mode to extend battery life ([Customizing Power Modes, page 133](#)).


## Stopping an Activity

- 1 Press .
- 2 Select an option:
  - To resume your activity, select **Resume**.
  - To save the activity and view the details, select **Save**, press , and select an option.  
**NOTE:** After you save the activity, you can enter self-evaluation data ([Evaluating an Activity, page 19](#)).
  - To suspend your activity and resume it at a later time, select **Resume Later**.
  - To mark a lap, select **Lap**.  
You can select  to discard a lap for certain activities ([How can I undo a lap button press?, page 145](#)).
  - 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 Heart Rate**, and wait while the timer counts down ([Recovery Heart Rate, page 77](#)).
  - 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 ([Activity Settings, page 48](#)).

- 1 After you complete an activity, select **Save** ([Stopping an Activity, page 19](#)).
- 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.

## Running


### Going for a Run


The first fitness activity you record on your watch can be a run, ride, or any outdoor activity. You may need to charge the watch before starting the activity ([Charging the Watch, page 139](#)).

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

- 1 Press , and select an activity.
- 2 Go outside, and wait while the watch locates satellites.
- 3 Press .
- 4 Go for a run.



**NOTE:** During an activity, you can hold  to open the music controls ([Music Playback Controls, page 128](#)).

- 5 After you complete your run, press .
- 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.






**NOTE:** For more run options, see [Stopping an Activity, page 19](#).

## 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 .
- 3 Select **Activities > Running > Track Run**.
- 4 Wait while the watch locates satellites.
- 5 If you are running in lane 1, skip to step 8.
- 6 Select **Lane Number**.
- 7 Select a lane number.
- 8 Press .
- 9 Run around the track.
- 10 After you complete your activity, press , and select **Save**.




## Tips for Recording a Track Run

The Garmin track database contains over 10,000 tracks from all over the world.

- Wait until the watch acquires satellite signals before starting a track run.
- If your watch does not recognize the track, run four 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 four laps around the track.
- If you are running in a lane other than lane 1, set the lane number in the activity settings.


## 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 From the watch face, press .
- 2 Select **Activities > Running > 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  to start the activity timer.
- 6 After you complete your activity, press , 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 18](#)).
- 2 Run on the treadmill until your watch records at least 2.4 km (1.5 mi.).
- 3 After you finish the activity, press  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 > ✓**.
- 5 Check the treadmill display for the distance traveled, and enter the distance on your watch.

## Recording an Ultra Run Activity

- 1 From the watch face, press .
- 2 Select **Activities > Running > Ultra Run**.
- 3 Press  to start the activity timer.
- 4 Start running.
- 5 Press  to record a lap and start the rest timer.


**TIP:** You can configure how the Auto Rest setting records rest splits and laps ([Ultra Run Auto Rest Settings, page 22](#)).

- 6 When you are done resting, press  to resume running.
- 7 Press  or  to view additional data pages (optional).
- 8 After you complete your activity, press , and select **Save**.

## Ultra Run Auto Rest Settings


You can customize the options for automatically starting and stopping the rest timer for the Ultra Run activity.

**Status:** Enables automatically recording rest splits.

**Rest Start:** Automatically starts the rest timer when you stop running. You can use the Manual Only option to start the rest timer only when you press .




**Rest End:** Sets the pace required to end a rest split.

**Minimum Time:** Sets the amount of time before a rest split starts or ends.


**Lap Key:** Sets the  button to record a lap and start the rest timer, start the rest timer only, or record a lap only.

## Recording an Obstacle Racing Activity

When you participate in an obstacle course race, you can use the Obstacle Racing activity to record your time on each obstacle and your time running between obstacles.

- 1 From the watch face, press .
- 2 Select **Activities > Running > Obstacle Racing**.
- 3 Press  to start the activity timer.
- 4 Press  to manually mark the beginning and end of each obstacle.

**NOTE:** You can configure the **Obstacle Tracking** setting to save obstacle locations from your first loop of the course. On repeat loops of the course, the watch uses the saved locations to switch between obstacle and running intervals.

- 5 After you complete your activity, press , and select **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 103](#)).

- 1 Select an option:
  - Open the Garmin Connect app, and select ●●●.
  - Go to [connect.garmin.com](https://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 ([Creating a Course on Garmin Connect, page 120](#)).




- 1 From the watch face, press .
- 2 Select an outdoor running activity.
- 3 Scroll down to select **Training > PacePro Plans > Create New**.
- 4 Select a course.
- 5 Select an option:
  - Select **Goal Pace**, and enter your target pace.
  - Select **Goal Time**, and enter your target time.Scroll down to view your custom pace band with elevation plots, and preview the splits.
- 6 Press .
- 7 Select an option:
  - Select **Use Plan** to start the plan.
  - Select **Map** to view the course on the map.
  - Select **Delete** to discard the plan.

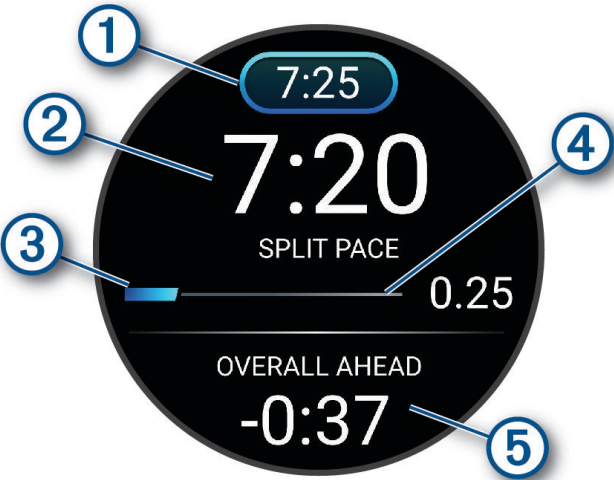
Starting a PacePro Plan

Before you can start a PacePro plan, you must download a plan from your Garmin Connect account, or create a PacePro plan on your watch ([Creating a PacePro Plan on Your Watch, page 23](#)).



- 1 From the watch face, press .
- 2 Select an outdoor running activity.
- 3 Scroll down to select **Training > PacePro Plans**.
- 4 Select a plan.

**TIP:** You can scroll down to preview the splits and elevation plot before you accept the PacePro plan.

- 5 Press .
- 6 Select **Use Plan** to start the plan.
- 7 If necessary, select  to enable course navigation.
- 8 Press  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

**TIP:** You can hold , and select **Stop PacePro > ** to stop the PacePro plan. The activity timer continues running.






## Cycling

### 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 94](#)).

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 From the watch face, press .
- 2 Select **Activities > Cycling > 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 8](#)).
  - Select **Follow Course** to follow a saved course ([Courses, page 119](#)).
  - 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  to start the activity timer.

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

### 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 26](#)). 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 94](#)).



## 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 94](#)). You must also have a course loaded to your Garmin Connect account ([Creating a Course on Garmin Connect, page 120](#)).

- 1 From the Garmin Connect app, select ●●●.
- 2 Select **Training & Planning > Power Guide > Create Power Guide Strategy**.
- 3 Follow the on-screen instructions to create the power guide.
- 4 Select .
- 5 Select your watch.
- 6 From the watch face, press .
- 7 On your watch, select an outdoor biking activity.
- 8 Scroll down to select **Training > Power Guide**.
- 9 Select a power guide.
- 10 Press , 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.

## 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 chest heart rate monitors, such as the HRM-Pro™ series accessories ([Chest Heart Rate While Swimming, page 96](#)). If both wrist-based heart rate and chest heart rate data are available, your watch uses the chest heart rate data.

## 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 47](#)).

Free	Freestyle
Back	Backstroke
Breast	Breaststroke
Fly	Butterfly
Mixed	More than one stroke type in an interval
Drill	Used with drill logging ( <a href="#">Training with the Drill Log, page 28</a> )

## 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 ([Swim Auto Rest and Manual Rest, page 27](#)).

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 28](#)).

## Swim Auto Rest and Manual Rest

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.








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

To use manual rests instead, you can turn off the auto rest feature in the activity options ([Activity Settings, page 48](#)). During a pool or open water swim activity, you can manually mark a rest interval by pressing . Swim data is not recorded during a rest interval.

**TIP:** Use manual rests if you are taking short rests or you want very precise swim interval timing.

## 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  or  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  or  to return to the swim training screens.






## 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 From the watch face, press .
- 2 Select **Activities > Multisport > Triathlon**.
- 3 Press  to start the activity timer.  
**NOTE:** The first time you start a triathlon activity, you can turn on **Auto Sport Change** so the watch will automatically detect sport changes and advance to the next transition or sport ([Activity Settings, page 48](#)).
- 4 If necessary, press  at the beginning and end of each transition ([How can I undo a lap button press?, page 145](#)).  
The transition feature is on by default, and the transition time is recorded separately from the activity time. The transition feature can be turned on or off in the triathlon activity settings. If transitions are turned off, press  to change sports.
- 5 After you complete your activity, press , and select **Save**.

## Creating a Multisport Activity

- 1 From the watch face, press .
- 2 Select **Activities** > **Edit** > **Add** > **Multisport**.
- 3 Select a multisport activity type, or select **Custom** and enter a name.  
Duplicate activity names include a number. For example, Triathlon(2).
- 4 Select two or more activities.
- 5 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.

## Gym 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 ([Activity Settings, page 48](#)).










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.



## Recording a Strength Training Activity

You can record sets during a strength training activity. A set is multiple repetitions (reps) of a single move.

- 1 From the watch face, press .
- 2 Select **Activities** > **Gym** > **Strength**.
- 3 Select a workout.
- 4 Press  to view a list of workout steps (optional).  
**TIP:** While viewing workout steps, you can press  and then press  to view an animation of the selected exercise, if available.
- 5 When you have finished viewing the workout steps, press , and select **Do Workout**.
- 6 Press , and select **Start Workout**.
- 7 Start your first set.  
The watch counts your reps. Your rep count appears when you complete at least four reps.  
**TIP:** The watch 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.
- 8 Press  to finish the set and move to the next exercise, if available.  
The watch displays the total reps for the set.
- 9 If necessary, edit the set, the number of reps, and the weight used for the set.
- 10 If necessary, press  when you are done resting to start your next set.
- 11 Repeat for each strength training set until your activity is complete.
- 12 After your last set, press , and select **Stop Workout**.
- 13 Select **Save**.

## Recording a Mobility Activity



You can record a mobility activity using active and rest intervals, or you can download mobility workouts from Garmin Connect.



- 1 Press .
- 2 Select **Activities > Gym > Mobility**.
- 3 Scroll down, and select **Training**.
- 4 Select an option:
  - To change the active and rest intervals, select **Intervals**.
  - To download and complete a workout from Garmin Connect, select **Workout Library > Browse Workouts**, and follow the on-screen instructions.
- 5 Press  to start the activity timer.

The watch guides you through the mobility exercises.
- 6 Scroll to view additional data screens.

## Recording a HIIT Activity








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

- 1 From the watch face, press .
- 2 Select **Activities > Gym > HIIT**.
- 3 Select an option:
  - Select **Free** to record an open, unstructured HIIT activity.
  - Select **HIIT Timers > AMRAP** to record as many rounds as possible during a set time period.
  - Select **HIIT Timers > EMOM** to record a set number of moves every minute on the minute.
  - Select **HIIT Timers > Tabata** to alternate between 20-second intervals of maximum effort with 10 seconds of rest.
  - Select **HIIT Timers > Custom** to set your move time, rest time, number of moves, and number of rounds.
  - Select **Workouts** to follow a saved workout.
- 4 If necessary, follow the on-screen instructions.
- 5 Press  to start your first round.

The watch 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 finish the activity, press  to stop the activity timer.
- 8 Select **Save**.

## 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 From the watch face, press .
- 2 Select **Activities > Gym > Climb Indoor**.
- 3 Select  to record route statistics.  
Select a grading system.
- 4 **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 .
- 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 .
- 14 Select **Save**.

## Outdoor Activities

### Golfing

#### Playing Golf

Before you play golf, you should charge the watch ([Charging the Watch, page 139](#)).

- 1 From the watch face, press .
- 2 Select **Activities** > **Outdoor** > **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.  
Courses are updated automatically.
- 4 If necessary, set your driver distance.
- 5 Select  to keep score.





- 6 Select a tee box.  
The hole information screen appears.




①	Current hole number
②	Par for the hole
③	Map of the hole
④	Driver distance from the tee box
⑤	Distances to the front, middle, and back of the green

**NOTE:** Because pin locations change, the watch calculates the distance to the front, middle, and back of the green, but not the actual pin location.

- 7 Select an option:
  - Tap the map to view more detail or change the flag location ([Moving the Flag, page 35](#)).
  - Swipe up or down to scroll through the holes.
  - Press  to open the golf menu ([Golf Menu, page 34](#)).
  - Hold  to open the golf settings ([Golf Settings, page 34](#)).

When you move to the next hole, the watch automatically transitions to display the new hole information.

## Golf Menu

During a round, you can press  to access additional features in the golf menu.

**View Green:** Allows you to move the pin location to get a more precise distance measurement ([Moving the Flag, page 35](#)).

**Change Green:** Allows you to change the green when more than one green is available for a hole.

**Scorecard:** Opens the scorecard for the round ([Keeping Score, page 35](#)).

**Hazards:** Allows you to view distances to hazards along the fairway for par 4 and 5 holes ([Viewing Hazards, page 37](#)).

**Layups:** Allows you to view a list of layup and dogleg distances for par 4 and 5 holes ([Viewing Layup and Dogleg Distances, page 37](#)).

**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.

**Round Info:** Shows the recorded time, distance, and steps traveled during the current round. This automatically starts and stops when you start or end a round.

**Measure Shot:** Shows the distance of your previous shot recorded with the Garmin AutoShot™ feature ([Viewing Measured Shots, page 35](#)). You can also manually record a shot ([Manually Measuring a Shot, page 35](#)).

**Custom Targets:** Allows you to save a location, such as an object or obstacle, for the current hole ([Saving Custom Targets, page 37](#)).

**Club Stats:** Shows your statistics with each golf club, such as distance and accuracy information. Appears when you pair compatible Approach® club tracking sensors or enable the Club Prompt setting.

**Sunrise & Sunset:** Shows the sunrise, sunset, and twilight times for the current day.

**Settings:** Allows you to customize the golf activity settings ([Golf Settings, page 34](#)).

**End Round:** Ends the current round.

### Golf Settings

During a round, you can press , and select **Settings** to customize the golf settings.

**Scoring:** Allows you to set the scoring options ([Scoring Settings, page 36](#)).

**Driver Distance:** Sets the average distance the ball travels from the tee box on your drive. The driver distance appears as an arc on the map.

**Tournament Mode:** Disables the PinPointer feature. This feature is not allowed during sanctioned tournaments or handicap calculation rounds.

**Golf Distance:** Sets the unit of measure for distance while playing golf.

**Club Prompt:** Prompts you to enter which golf club you used after each detected shot to record your club statistics ([Recording Statistics, page 36](#)).

**Satellites:** Sets the satellite system to use for the activity ([Satellite Settings, page 53](#)).

**Big Numbers:** Changes the size of the numbers on the hole view screen ([Big Numbers Mode, page 38](#)).




**Record Activity:** Enables activity FIT file recording. FIT files record fitness information that is tailored for the Garmin Connect website and app.

**Touch:** Enables the touchscreen during the golf activity.

**Club Sensors:** Allows you to set up your compatible Approach club tracking sensors ([Pairing Your Wireless Sensors, page 94](#)).

## Moving the Flag

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


- 1 From the hole information screen, press .
- 2 Select **View Green**.
- 3 If necessary, use the slider on the right side of the screen to zoom in or out.
- 4 Tap or drag  to move the pin location.
- 5 Press .

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

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, press .

- 2 Select **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.

- 3 Press  and select **Previous Shots** to view all recorded shot distances.

**NOTE:** The distance from the most recent shot also displays at the top of the hole information screen.







## 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 .
- 3 Select **Measure Shot**.
- 4 Press .
- 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.



## Keeping Score

- 1 From the hole information screen, press .
- 2 Select **Scorecard**.  
The scorecard appears when you are on the green.
- 3 Press  or  to scroll through the holes.
- 4 Press  to select a hole.
- 5 Press  or  to set the score.


Your total score is updated.

## Recording Statistics

Before you can record statistics, you must enable statistics tracking ([Scoring Settings, page 36](#)).

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

## Scoring Settings

During a round, press , and select **Settings > Scoring**.

**Scoring Method:** Changes the method the device uses to keep score.

**Handicap Scoring:** Enables handicap scoring.

**Set Handicap:** Sets your handicap when handicap scoring is enabled.

**Show Score:** Displays your total score for the round at the top of the scorecard ([Keeping Score, page 35](#)).

**Stat Tracking:** Enables statistics tracking for the number of putts, greens in regulation, and fairways hit while playing golf.

**Penalties:** Enables penalty stroke tracking while playing golf ([Recording Statistics, page 36](#)).

**Prompt:** Enables the prompt at the start of a round asking if you want to keep score.

## About Stableford Scoring

When you select the Stableford scoring method ([Activity Settings, page 48](#)), 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

## 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 .
- 2 Select **PinPointer**.


The arrow points to the pin location.

## Saving Custom Targets

While playing a round, you can save up to five custom targets for each hole. Saving a target is useful for recording objects or obstacles that are not shown on the map. You can view the distances to these targets from the hazards and layups screen ([Playing Golf, page 32](#)).

- 1 Stand near the target you want to save.

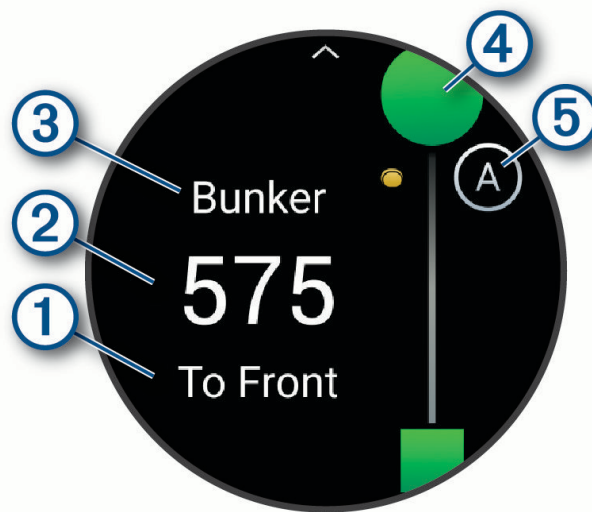
**NOTE:** You cannot save a target that is far from the currently selected hole.

- 2 From the hole information screen, press .
- 3 Select **Custom Targets**.
- 4 Select a target type.

## Viewing Hazards

You can view distances to hazards along the fairway for par 4 and 5 holes. Hazards that affect shot selection are displayed individually or in groups to help you determine the distance to layup or carry.

- 1 Press .
- 2 Select **Hazards**.



- The direction (1) and distance (2) to the front or back of the nearest hazard appear on the screen.
- The hazard type (3) is listed at the top of the screen.
- The green is represented as a half circle (4) at the top of the screen. The line below the green represents the center of the fairway.
- Hazards (5) are indicated by a letter signifying the order of the hazards on the hole, and are shown below the green in approximate locations relative to the fairway.

## Viewing Layup and Dogleg Distances


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

- 1 Press .
- 2 Select **Layups**.

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



## Big Numbers Mode

You can change the size of the numbers on the hole information screen.

- 1 During a round, press .
- 2 Select **Settings** > **Big Numbers**.









The distances to the front, middle, and back of the green appear in large font on the hole information screen.

- 3 Press  or  to view additional data, such as your handicap rating.



## 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 From the watch face, press .
- 2 Select **Activities** > **Outdoor** > **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  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  to stop the route timer.
- 12 Select **Save**.


## Starting an Expedition

You can use the **Expedition** activity to prolong the battery life while recording a multi-day activity.


- 1 From the watch face, press .
- 2 Select **Activities > Outdoor > Expedition**.
- 3 Press  to start the activity timer.  
The device enters low power mode and collects GPS track points once an hour. To maximize battery life, the device turns off all sensors and accessories, including the connection to your smartphone.

## Recording a Track Point Manually





During an expedition, track points are recorded automatically based on the selected recording interval. You can manually record a track point at any time.

- 1 During an expedition, press .
- 2 Select **Add Point**.

## Viewing Track Points





- 1 During an expedition, press .
- 2 Select **View Points**.
- 3 Select a track point from the list.
- 4 Select an option:
  - To start navigating to the track point, select **Go To**.
  - To view detailed information about the track point, select **Details**.

## Going Fishing

- 1 From the watch face, press .
- 2 Select **Activities > Outdoor > Fish**.
- 3 Press .
- 4 Press , and select an option:
  - To add the catch to your fish count and save the location, select **Log Catch**.
  - To save your current location, select **Save Location**.
  - To set an interval timer, end time, or end time reminder for the activity, select **Fish Timers**.
  - To navigate back to the starting point of your activity, select **Back to Start**, and select an option.
  - To view your saved locations, select **Saved Locations**.
  - To navigate to a destination, select **Navigation**, and select an option.
  - To edit the activity settings, select **Settings**, and select an option ([Activity Settings, page 48](#)).
- 5 After you complete your activity, press , and select **End Fish**.

## Going Hunting




You can save locations relevant to your hunt and view a map of saved locations. During a hunting activity, the device uses a GNSS mode that conserves battery life.

- 1 From the watch face, press .
- 2 Select **Activities > Outdoor > Hunt**.
- 3 Press , and select **Start Hunt**.
- 4 Press , and select an option:
  - To navigate back to the starting point of your activity, select **Back to Start**, and select an option.
  - To save your current location, select **Save Location**.
  - To view locations saved during this hunt activity, select **Hunt Locations**.
  - To view all previously saved locations, select **Saved Locations**.
  - To navigate to a destination, select **Navigation**, and select an option.
- 5 After you complete your hunt, press , and select **End Hunt**.

## Winter Sports

### 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  and  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.

### 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 ([Activity Settings, page 48](#)).

- 1 From the watch face, press .
- 2 Select an option:
  - Select **Activities > Winter Sports > Backcountry Ski**.
  - Select **Activities > Winter Sports > 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  to start the activity timer.
- 5 If necessary, press  to switch between climbing and descending tracking modes.
- 6 After you complete your activity, press , and select **Save**.



## Cross-Country Skiing Power Data

**NOTE:** The HRM-Pro series accessory must be paired to the Forerunner watch using ANT+ technology.




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.

## Water Sports

### Viewing Your Water Sport Runs

Your watch records the details of each water sport run using the auto run feature. This feature automatically records new runs based on your movement. The activity timer pauses when you stop moving. The activity timer starts automatically when your movement speed increases. You can view run details from the paused screen or while the activity timer is running.

- 1 Start a water sport activity, such as water skiing.
- 2 Hold .
- 3 Select **View Runs**.
- 4 Press  and  to view details of your last run, your current run, and your total runs.  
The run screens include time, distance traveled, maximum speed, and average speed.

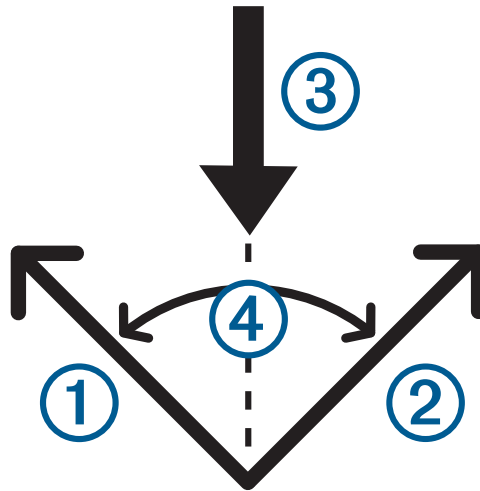
## Sailing

### Tack Assist

#### ⚠ CAUTION

The watch uses GPS-based course over ground to determine your course in the tack assist feature, and does not account for other factors that can affect your boat's direction, such as currents and tides. You are responsible for the safe and prudent operation of your vessel.

While cruising or racing into the wind, the tack assist feature can help you determine if your boat is being lifted or headed. When you calibrate tack assist, the watch captures your boat's port **①** and starboard **②** course over ground (COG) measurements, and uses the COG data to calculate the mean true wind direction **③** and the boat's tack angle **④**.



The watch uses this data to determine whether your boat is being lifted or headed due to wind shifts.

By default, the tack assist feature is set to automatic. Each time you calibrate the port or starboard COG, the watch recalibrates the opposite side and true wind direction. You can change the tack assist settings to enter a fixed tack angle or true wind direction.

#### *Calibrating the Tack Assist*

- 1 From the watch face, select
- 2 Select **Water Sports**, and select **Sail** or **Sail Race**.
- 3 Select or to view the tack assist screen.







**NOTE:** You may need to add the tack assist screen to the data screens for the activity ([Customizing the Data Screens, page 47](#)).

- 4 Select
- 5 Select an option:
  - To calibrate the starboard side, select
  - To calibrate the port side, select







**TIP:** If the wind is coming from the starboard side of the vessel, you should calibrate starboard. If the wind is coming from the port side of the vessel, you should calibrate port.

- 6 Wait while the device calibrates the tack assist.  
An arrow appears and indicates if your boat is being lifted or headed.

### *Entering a Fixed Tack Angle*

- 1 From the watch face, press .
- 2 Select **Water Sports**, and select **Sail** or **Sail Race**.
- 3 Press  or  to view the tack assist screen.
- 4 Hold .
- 5 Select **Tack Angle > Angle**.
- 6 Press  or  to set the value.

### *Entering a True Wind Direction*

- 1 From the watch face, press .
- 2 Select **Water Sports**, and select **Sail** or **Sail Race**.
- 3 Press  or  to view the tack assist screen.
- 4 Hold .
- 5 Select **True Wind Direction > Fixed**.
- 6 Press  or  to set the value.

### *Tips for Getting the Best Lift Estimate*



To get the best lift estimate when using the tack assist feature, you can try these tips. See [Entering a True Wind Direction, page 43](#) and [Calibrating the Tack Assist, page 42](#) for more information.

- Enter a fixed tack angle, and calibrate the port side.
- Enter a fixed tack angle, and calibrate the starboard side.
- Reset the tack angle, and calibrate both the port and starboard side.

### **Sail Racing**


You can use the device to help you cross the start line of a race exactly when the race begins. When you synchronize the regatta timer in the sail racing app with the official race countdown timer, you are alerted at one-minute intervals as the race start approaches. When you set the starting line, the device uses GPS data to indicate whether your boat will cross the start line before, after, or at the correct time to start the race.

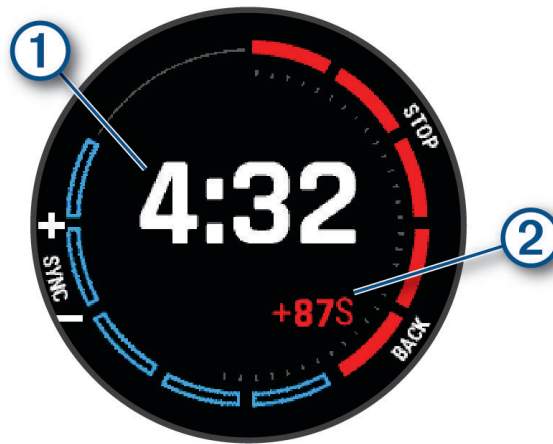
### **Setting the Starting Line**






- 1 From the watch face, press .
- 2 Select **Activities > Water Sports > Sail Race**.
- 3 Wait while the device locates satellites.
- 4 Hold .
- 5 Select **Start Line Settings**.
- 6 Select an option:
  - Select **Mark Port** to mark the port starting line mark as you sail past it.
  - Select **Mark Starboard** to mark the starboard starting line mark as you sail past it.
  - Select **Time to Burn** to enable or disable the time to burn data on the regatta timer data screen.
  - Select **Distance to Start** to set the distance to the start line, preferred distance units, and length of your boat.

## Starting a Race

Before you can view the time to burn, you must set the starting line ([Setting the Starting Line](#), page 43).






- 1 From the watch face, press .
- 2 Select **Activities > Water Sports > Sail Race**.
- 3 Wait while the watch locates satellites.  
The screen displays the regatta timer ① and time to burn ②.



- 4 If necessary, hold , and select an option:
  - To set a fixed timer, select **Regatta Time > Fixed**, and enter a length of time.
  - To set a start time within the next 24 hours, select **Regatta Time > GPS**, and enter a time of day.
- 5 Press .
- 6 Press  and  to synchronize the regatta timer with the official race countdown.  
**NOTE:** When the burn time is negative, you will arrive at the start line after the race starts. When the burn time is positive, you will arrive at the start line before the race starts.
- 7 Press  to start the activity timer.





## Other Activities


### Recording a Breathwork Activity

- 1 From the watch face, press .
- 2 Select **Activities > Other > Breathwork**.
- 3 Select an option:
  - Select **Coherence** to achieve a state of calm alertness.
  - Select **Relax and Focus** to relax your body and focus the mind.
  - Select **Relax and Focus (Short)** to relax your body and focus the mind in a shorter time frame.
  - Select **Tranquility** to lower your stress level and get ready for sleep.
- 4 If necessary, select **Do Workout**.
- 5 Press  to start the activity.
- 6 Follow the on-screen instructions as the watch guides you through the breathing exercises.
- 7 Press  to skip to the next step in the breathwork phase.
- 8 After you complete your activity, press , and select **Save**.  
Your average respiration rate and heart rate appear.
- 9 Press .
- 10 Select **All Stats**.  
Your average heart rate, maximum heart rate, average respiration rate, and stress change appear.

### Recording a Meditation Activity

You can use a guided session or create your own meditation activity.






- 1 From the watch face, press .
- 2 Select **Activities > Other > Meditation**.
- 3 Select an option:
  - Select **Free** to record an open, unstructured meditation activity.
  - Select **Session** to follow a guided session with audio.
  - Select **Custom** to create a custom session with audio.
- 4 If necessary, press , or follow the on-screen instructions.
- 5 Press  to start the activity timer.  
The watch displays a countdown timer or intention.
- 6 Select an option:
  - Select  to listen to the meditation audio from the external speaker and set the speaker volume.
  - Connect your headphones to listen to the meditation audio ([Connecting Bluetooth Headphones, page 128](#)).

**NOTE:** Notifications are disabled during the meditation activity.
- 7 After you complete your activity, press , and select **Save**.

### Customizing Activities and Apps






You can customize the activities and apps list, data screens, data fields, and other settings.

## Customizing the App List

- 1 From the watch face, press .
- 2 Select **Edit**.
- 3 Select an option:
  - To change the location of an app in the list, select an app, press  or  to move the app, and press  to select the new location.
  - To remove an app from the list, select the app, and select .
  - To add an app, select **Add**, and select one or more apps.



## Customizing Your Favorite Activities List


Your favorite activities list appears at the top of the list, and it provides quick access to the activities you use frequently. You can add or remove favorite activities at any time.

- 1 From the watch face, press .
- 2 Select **Activities**.  
Your favorite activities appear at the top of the list.
- 3 Select **Edit**.
- 4 Select an option:
  - To change the location of an activity in the list, select an activity, press  or  to move the activity, and press  to select the new location.
  - To remove a favorite activity, select the activity, and select  > **Remove**.
  - To add a favorite activity, select **Add**, and select one or more activities.

## Pinning a Favorite Activity to the List




You can pin up to three favorite activities to the top of the app and activity lists.

- 1 From the watch face, press .
- 2 Select **Activities**.
- 3 Scroll to a favorite activity ([Customizing Your Favorite Activities List](#), page 46).
- 4 Hold , and select **Pin Activity**.

The next time you press  from the watch face to open the app and activity lists, the pinned activity appears at the top of the list.


## Customizing the Data Screens

You can show, hide, and change the layout and content of data screens for each activity.


- 1 From the watch face, press .
- 2 Select **Activities**, and select an activity.
- 3 Press .
- 4 Select the activity settings.
- 5 Select **Data Screens**.
- 6 Scroll to the data screen you want to customize.
- 7 Select .
- 8 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 147](#). 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.
- 9 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 the Map Data Screen

You can add the map to the data screens loop for a GPS activity.



- 1 From the watch face, press .
- 2 Select **Activities**, and select a GPS activity.
- 3 Scroll down, and select the activity settings.
- 4 Select **Data Screens > Add New > Map**.

## Creating a Custom Activity

- 1 From the watch face, press .
- 2 Select **Activities > Edit > Add**.
- 3 Select an option:
  - Select **Copy Activity** to create your custom activity starting from one of your saved activities.
  - Select **Other > 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.

## Activity Settings

These settings allow you to customize each preloaded activity based on your needs. For example, you can customize data screens and enable alerts and training features. Not all settings are available for all activity types. Some activity types have separate settings lists ([Golf Settings, page 34](#)).

From the watch face, press , select **Activities**, select an activity, press , and select the activity settings.

**3D Distance:** Calculates your distance traveled using your elevation change as well as your horizontal movement over ground.

**3D Speed:** Calculates your speed using your elevation change as well as your horizontal movement over ground.


**Accent Color:** Sets the accent color for the activity icon.

**Add Activity:** Adds an activity type to a multisport activity.

**Alerts:** Sets the training or navigation alerts for the activity ([Activity Alerts, page 50](#)).

**Audio Output:** Sets the audio device to use for voice alerts ([Playing Voice Alerts During an Activity, page 51](#)).

**Auto Climb:** Detects elevation changes using the built-in altimeter and automatically displays relevant climb data ([Enabling Auto Climb, page 53](#)).

**Auto Lap:** Sets the options for the Auto Lap feature to automatically mark laps. The **Auto Distance** option marks laps at a specific distance. The **Auto Position** option marks laps at a location where you previously pressed . 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:** Automatically creates a rest interval when you stop moving during a pool swim activity ([Swim Auto Rest and Manual Rest, page 27](#)). Sets the options for automatically starting and stopping the rest timer for the ultra run activity ([Ultra Run Auto Rest Settings, page 22](#)).

**Auto Run:** Automatically detects ski or water sport runs using the built-in accelerometer ([Viewing Your Ski Runs, page 40](#), [Viewing Your Water Sport Runs, page 41](#)).

**Auto Scroll:** Automatically scrolls through all of the activity data screens while the activity timer is running.

**Auto Set:** Automatically starts and stops exercise sets during a strength training activity.

**Auto Sport Change:** Automatically detects a transition to the next sport in a multisport activity, such as a triathlon.

**Auto Start:** Automatically starts a motocross or BMX activity when you start moving.

**Broadcast Heart Rate:** Automatically broadcasts heart rate data from your watch to paired devices when you start the activity ([Broadcasting Heart Rate Data, page 109](#)).

**ClimbPro:** Displays ascent information for upcoming and current climbs while navigating a course ([Using ClimbPro, page 52](#)).

**Countdown Start:** Enables a countdown timer for pool swimming intervals.

**Data Screens:** Customizes data screens and adds new data screens for the activity ([Customizing the Data Screens, page 47](#)).

**Edit Weight:** Prompts you to add the weight used for an exercise set during a strength training or cardio activity.

**Ending Alerts:** Sets an alert for two or five minutes before the end of your meditation activity.

**Flashlight Strobe:** Sets the LED flashlight strobe mode, speed, and color during the activity.


**Grading System:** Sets the grading system for rating the route difficulty for a rock climbing activity.

**Jump Mode:** Sets the jump rope activity target to a set time, number of reps, or open ended.

**Lane Number:** Sets your lane number for track running.

**Laps:** Configures the settings for the **Auto Lap**, **Lap Key**, and **Lap Alert** options.

**Lap Alert:** Sets the data fields to show for laps.

**Lap Key:** Enables the  button for recording a lap or rest during an activity.



**Lock Device:** Locks the touchscreen and buttons during a multisport activity to prevent inadvertent button presses and touchscreen swipes.

**Map Settings:** Sets the display preferences for the map data screen for the activity ([Map Settings, page 114](#)).

**Map Layers:** Sets the map data to show on the map ([Showing and Hiding Map Data, page 116](#)).

**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:** Sets the ascent and descent tracking mode to automatic or manual for backcountry skiing and snowboarding.

**Obstacle Tracking:** Saves obstacle locations from your first loop of the course. On repeat loops of the course, the watch uses the saved locations to switch between obstacle and running intervals ([Recording an Obstacle Racing Activity, page 22](#)).

**Pack Weight:** Sets the weight of the pack you are carrying.

**Performance Condition:** Enables the performance condition feature during an activity ([Performance Condition, page 69](#)).

**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 Mode:** Sets the default power mode for the activity.

**Power Save Timeout:** Sets the timeout limit for the watch to stay in activity mode while waiting for you to start the activity, 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 After Sunset:** Sets the watch to record track points after sunset during an expedition.

**Record Temperature:** Records the ambient temperature around the watch or from a paired temperature sensor.

**Record VO2 Max.:** Records a VO2 max. estimate for trail run and ultra run activities.

**Recording Interval:** Sets the frequency for recording track points during an expedition. By default, GPS track points are recorded once an hour, and they are not recorded after sunset. Recording track points less frequently maximizes battery life.

**Rename:** Sets the activity name.

**Rep Counting:** Records rep counts during a workout. The **Workouts Only** option records rep counts during guided workouts only.

**Repeat:** Records repeats for multisport activities. For example, you can use this option for activities that include multiple transitions, such as a swimrun.

**Restore Defaults:** Resets the activity settings.

**Route Stats:** Records route statistics for indoor climbing activities.

**Routing:** Sets the preferences for calculating routes for the activity ([Routing Settings, page 52](#)).

**Running Power:** Records running power data and customizes the settings ([Running Power Settings, page 96](#)).

**Runs:** Configures the settings for the **Auto Run**, **Lap Key**, and **Lap Alert** options.

**Satellites:** Sets the satellite system to use for the activity ([Satellite Settings, page 53](#)).

**Segments:** Displays your saved segments for the activity ([Segments, page 53](#)). The **Auto Effort** option automatically adjusts the target race time of a segment based on your performance during the segment.

**Segment Alerts:** Notifies you about approaching saved segments ([Segments, page 53](#)).

**Self Evaluation:** Sets how often you evaluate your perceived effort for the activity ([Evaluating an Activity, page 19](#)).

**SpeedPro:** Records advanced speed metrics for windsurf activity runs.

**Stroke Detection:** Automatically detects your stroke type for pool swimming.

**Touch:** Enables the touchscreen during an activity or only for the map screen.

**Touch Lock:** Enables swiping down from the top of the screen to unlock the touchscreen.

**Track Detection:** Automatically detects if you are on a track for running.

**Transitions:** Enables transitions for multisport activities.

**Units:** Sets the units of measure for the activity.

**Vibration Alerts:** Notifies you to inhale or exhale during a breathwork activity.

**Workout Videos:** Plays 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.

## 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 <a href="#">About Heart Rate Zones, page 129</a> and <a href="#">Heart Rate Zone Calculations, page 131</a> .
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.
Running Power	Event, range	You can set minimum and maximum power zone values.
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 From the watch face, press .

2 Select **Activities**, and select an activity.

**NOTE:** This feature is not available for all activities.

3 Press .

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).

## Playing Voice Alerts During an Activity

Your watch can play motivational status announcements during a run or other activity. During a voice alert, the watch or phone lowers the volume of the primary audio to play the announcement.

**NOTE:** This feature is not available for all activities.

1 From the watch face, hold .

2 Select **Watch Settings > Focus Modes > Activity > Voice Alerts**.



3 Select an option:

- To set voice alerts to play through the watch speaker, select **Audio Output > Watch**.
- To set voice alerts to play through your phone or connected Bluetooth headphones, if available, select **Audio Output > Connected Devices**.
- To hear an alert for each lap, select **Lap Alert**.
- To customize alerts with your pace and speed information, select **Pace/Speed Alert**.
- To customize alerts with your heart rate information, select **Heart Rate Alert**.
- To customize alerts with power data, select **Power Alert**.
- To hear alerts when you start and stop the activity timer, including the Auto Pause feature, select **Timer Events**.
- To hear workout alerts play as a voice alert, select **Workout Alerts**.
- To hear activity alerts play as a voice alert, select **Activity Alerts** ([Activity Alerts](#), page 50).

## 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.

From the watch face, press , select **Activities**, select an activity, press , select the activity settings, and select **Routing**.

**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.


## 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 From the watch face, press .
- 2 Select **Activities**, and select an activity.  
**NOTE:** This feature is not available for all activities.
- 3 Press .
- 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 ([Using the Saved App, page 13](#)).
- 8 Start following a saved course ([Navigating to a Destination, page 116](#)).

## 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 From the watch face, press .

2 Select **Activities**, and select an activity.

**NOTE:** This feature is not available for all activities.

3 Press .

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.

## Satellite Settings

You can change the satellite settings to customize the satellite systems used for each activity. For more information about satellite systems, go to [garmin.com/aboutGPS](https://garmin.com/aboutGPS).

From the watch face, press , select **Activities**, select an activity, press , select the activity settings, and select **Satellites**.

**NOTE:** This feature is not available for all activities.

**Off:** Disables satellite systems for the activity.

**Use Default:** Enables the watch to use the default activity focus mode setting for satellites (*Customizing the Activity Focus Mode*, page 107).

**GPS Only:** Enables the GPS satellite system.

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

**All + Multi-Band:** Enables multiple satellite systems on multiple frequency bands. Multi-band systems use multiple frequency bands and allow for more consistent track logs, improved positioning, improved multi-path errors, and fewer atmospheric errors when using the watch in challenging environments.

**Auto Select:** Enables the watch to use SatIQ™ technology to dynamically select the best multi-band system based on your environment. The Auto Select setting offers the best positioning accuracy while still prioritizing battery life.

**UltraTrac:** 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.

## 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](http://www.strava.com).

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

### Viewing Segment Details

1 From the watch face, press .

2 Select **Activities**, and select an activity.

**NOTE:** This feature is not available for all activities.

3 Press .

4 Select the activity settings.

5 Select **Segments**.

6 Select a segment.


7 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.

### 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 From the watch face, press .

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.

## Controls





















The controls menu lets you quickly access watch features and options. You can add, reorder, and remove the options in the controls menu ([Customizing the Controls Menu, page 58](#)).






From any screen, hold .



Icon	Name	Description
	ABC	Select to open the altimeter, barometer, and compass app.
	Airplane Mode	Select to enable airplane mode to turn off all wireless communications.
	Alarm Clock	Select to add or edit an alarm ( <a href="#">Setting an Alarm, page 82</a> ).
	Alt. Time Zones	Select to view the current time of day in additional time zones ( <a href="#">Adding Alternate Time Zones, page 85</a> ).
	Altimeter	Select to open the altimeter screen.
	Assistance	Select to send an assistance request ( <a href="#">Requesting Assistance, page 124</a> ).
	Barometer	Select to open the barometer screen.
	Battery Saver	Select to enable the battery saver feature ( <a href="#">Customizing the Battery Saver Feature, page 132</a> ).
	Brightness	Select to adjust the screen brightness ( <a href="#">Display and Brightness Settings, page 91</a> ).
	Broadcast Heart Rate	Select to turn on heart rate broadcasting to a paired device ( <a href="#">Broadcasting Heart Rate Data, page 109</a> ).
	Calendar	Select to view upcoming events from your phone calendar.
	Camera Controls	Select to manually take a photo and record a video clip ( <a href="#">Using the Varia Camera Controls, page 97</a> ).
	Clocks	Select to open the Clocks app to set an alarm, timer, stopwatch, or view alternate time zones ( <a href="#">Clocks, page 82</a> ).
	Compass	Select to open the compass screen.
	Display	Select to turn off the screen for alerts, gestures, and Always On Display mode ( <a href="#">Display and Brightness Settings, page 91</a> ).
	Do Not Disturb	Select to enable do not disturb mode to dim the screen and disable alerts and notifications. For example, you can use this mode while watching a movie.
	Find My Phone	Select to play an audible alert on your paired phone, if it is within Bluetooth range. The Bluetooth signal strength appears on the Forerunner watch screen, and it increases as you move closer to your phone. Select to navigate to your lost phone during a GPS activity ( <a href="#">Locating a Phone Lost During a GPS Activity, page 100</a> ).
	Flashlight	Select to turn on the LED flashlight ( <a href="#">Using the LED Flashlight, page 59</a> ).
	Garmin Share	Select to open the Garmin Share app ( <a href="#">Garmin Share, page 101</a> ).
	History	Select to view your activity history, records, and totals.








Icon	Name	Description
	Lock Device	Select to lock the buttons and the touchscreen to prevent inadvertent presses and swipes.
	Messenger	Select to open the Messenger app ( <a href="#">Using the Messenger Feature, page 106</a> ).
	Music	Select to control music playback on your phone. Select to control music playback on your watch or phone.
	Notifications	Select to view calls, texts, social network updates, and more, based on your phone notification settings ( <a href="#">Enabling Phone Notifications, page 99</a> ).
	Phone	Select to disable Bluetooth technology and your connection to your paired phone.
	Phone Assistant	Select to connect to your phone's voice assistant ( <a href="#">Using the Phone Assistant, page 98</a> ).
	Power Off	Select to turn off the watch.
	Pulse Oximeter	Select to open the pulse oximeter app ( <a href="#">Pulse Oximeter, page 110</a> ).
	Red Shift	Select to turn the screen to shades of red to use the watch in low light conditions.
	Reference Point	Select to set a reference point for navigation ( <a href="#">Setting a Reference Point, page 122</a> ).
	Save Location	Select to save your current location to navigate back to it later ( <a href="#">Using the Saved App, page 13</a> ).
	Settings	Select to open the settings menu.
	Sleep Mode	Select to enable or disable Sleep Mode ( <a href="#">Customizing the Sleep Focus Mode, page 107</a> ).
	Stopwatch	Select to start the stopwatch ( <a href="#">Using the Stopwatch, page 84</a> ).
	Strobe	Select to turn on the LED flashlight strobe. You can create a custom strobe mode ( <a href="#">Editing the Custom Flashlight Strobe, page 59</a> ).
	Sunrise & Sunset	Select to view sunrise, sunset, and twilight times.
	Sync	Select to sync your watch with your paired phone.
	Time Sync	Select to sync your watch with the time on your phone or using satellites.
	Timer	Select to set a countdown timer ( <a href="#">Using the Countdown Timer, page 83</a> ).
	Touch	Select to disable touchscreen controls.
	Voice Command	Select to open the voice command app and say a command ( <a href="#">Using Voice Commands, page 13</a> ).

Icon	Name	Description
	Volume	Select to open the watch volume controls.
	Wallet	Select to open your Garmin Pay wallet and pay for purchases with your watch ( <a href="#">Garmin Pay, page 15</a> ).
	Water Ejection	Select to play tones to eject water from the speaker and microphone ports.
	Weather	Select to view the current weather forecast and current conditions.
	Wi-Fi	Select to disable Wi-Fi communications.

## Customizing the Controls Menu

You can add, remove, and change the order of the shortcut menu options in the controls menu ([Controls, page 55](#)).













- 1 Hold  to open the controls menu.
- 2 Hold .
- 3 Select an option:
  - To add a control to the menu, select **Add Controls**, and select a control to add.
  - To change the location of a shortcut in the controls menu, select **Reorder Controls**, select a control to move, press  or  to move the control to a new position, and press  to select the new location.
  - To remove shortcut from the controls menu, select **Remove Controls**, and select a control to remove.

## Using the LED Flashlight

### WARNING

This device may have a flashlight that can be programmed to flash at various intervals. Consult your physician if you have epilepsy or are sensitive to bright or flashing lights.

Using the flashlight reduces battery life. You can decrease the brightness to extend the life of the battery.








- 1 Hold .
- 2 Select .
- 3 If necessary, press  to turn on the flashlight.
- 4 Select an option:
  - To adjust the brightness or color of the flashlight, press  or .
  - TIP:** From any screen, you can quickly press  twice to turn on the flashlight. For the first three seconds, you can press  or  to adjust the brightness or color of the flashlight.
  - To program the flashlight to flash in a selected pattern, hold , select **Strobe**, select a mode, and press .
  - To display your emergency contact information and program the flashlight to flash in a distress pattern, hold , select **Distress Pattern**, and press .


### CAUTION

Programming the flashlight to flash in a distress pattern will not contact your emergency contacts or emergency services on your behalf. Your emergency contact information will only appear if it has been configured in the Garmin Connect app.

## Editing the Custom Flashlight Strobe

Using the flashlight strobe reduces battery life.

- 1 Hold .
- 2 Select  > **Custom**.
- 3 Press  to turn on the flashlight strobe (optional).
- 4 Select .
- 5 Press  or  to scroll to a strobe setting.
- 6 Press  to scroll through the setting options.

**NOTE:** You can select slow blink to have a lower impact on battery life.
- 7 Press  to save.

# Glances

Your watch comes preloaded with glances that provide quick information ([Viewing Glances, page 63](#)). Some glances require a Bluetooth connection to a compatible phone.

Some glances are not visible by default. You can add them to the glances list manually ([Customizing the Glances List, page 64](#)). Some glances are a grouping of related metrics, such as health or activity performance.

Name	Description
ABC	Displays combined altimeter, barometer, and compass information.
Alternate time zones	Displays the current time of day in additional time zones ( <a href="#">Adding Alternate Time Zones, page 85</a> ).
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 ( <a href="#">Body Battery, page 64</a> ).
Calendar	Displays upcoming meetings from your phone calendar.
Calories	Displays your calorie information for the current day.
Camera controls	Allows you to manually take a photo and record a video clip when paired with a compatible Varia™ headlight or tail light camera ( <a href="#">Using the Varia Camera Controls, page 97</a> ).
Compass	Displays an electronic compass.
Countdowns	Displays upcoming countdown events.
Cycling ability	Displays your rider type, aerobic endurance, aerobic capacity, and anaerobic capacity ( <a href="#">Viewing Cycling Ability, page 80</a> ).
Dog tracking	Displays your dog's location information when you have a compatible dog tracking device paired with your Forerunner watch.
Endurance score	Displays a score, graph, and a short message that describes your overall endurance based on all recorded activities ( <a href="#">Endurance Score, page 79</a> ).
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.
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 ( <a href="#">Hill Score, page 80</a> ).
History	Displays your activity history and a graph of your recorded activities ( <a href="#">Using History, page 87</a> ).
HRV status	Displays your seven-day average of your overnight heart rate variability ( <a href="#">Heart Rate Variability Status, page 69</a> ).

Name	Description
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 ( <a href="#">Using the inReach Remote, page 97</a> ).
Jet Lag Adviser	Displays your internal clock during travel, and provides guidance to help you acclimate to the time zone of your destination ( <a href="#">Using the Jet Lag Adviser, page 82</a> ).
Last activity	Displays a brief summary of your last recorded activity.
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.
Messenger	Displays your Garmin Messenger app conversations and allows you to reply to messages from your watch ( <a href="#">Garmin Messenger App, page 106</a> ).
Moon phase	Displays the moonrise and moonset times, along with the moon phase, based on your GPS position.
Music	Provides music player controls for your phone. 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 ( <a href="#">Customizing the Sleep Focus Mode, page 107</a> ).
Notifications	Alerts you to incoming calls, texts, social network updates, and more, based on your phone notification settings ( <a href="#">Enabling Phone Notifications, page 99</a> ).
Primary race	Displays the race event you designate as the primary race in your Garmin Connect calendar ( <a href="#">Race Calendar and Primary Race, page 81</a> ).
Pulse oximeter	Allows you to take a manual pulse oximeter reading ( <a href="#">Getting Pulse Oximeter Readings, page 111</a> ). 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 ( <a href="#">Race Calendar and Primary Race, page 81</a> ).
Recovery	Displays your recovery time. The maximum time is four days.
Respiration	Your current respiration rate in breaths per minute and seven-day average. You can do a breathing activity to help you relax.
Running economy	Displays the energy cost of aerobic running. Several key metrics contribute to your running economy estimate ( <a href="#">Running Economy, page 70</a> ).
Running tolerance	Tracks your capacity to handle running activities while balancing the risk of injury with performance gains ( <a href="#">Running Tolerance, page 79</a> ).
Sleep coach	Provides recommendations for your sleep need based on sleep and activity history, HRV status, and naps.
Sleep score	Displays total sleep time, a sleep score, and sleep stage information for the previous night. You can also view any overnight breathing variations ( <a href="#">Sleep Tracking, page 112</a> ).

Name	Description
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.
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 ( <a href="#">Training Readiness, page 78</a> ).
Training status	Displays your current training status and training load, which shows you how your training affects your fitness level and performance ( <a href="#">Training Status, page 73</a> ).
Weather	Displays the current temperature and weather forecast. You can also view the current weather conditions on the map using several map overlays.




# Viewing Glances

Glances provide quick access to health data, activity information, built-in sensors, and more. When you pair your watch, you can view data from your phone, such as health information, weather, and calendar events.






- 1 From the watch face, press  to scroll through the glances list.



**TIP:** You can also swipe to scroll or tap to select options.



- 2 Press  to view more information.
- 3 Select an option:
  - Press  to view details about a glance.
  - Press  to view additional options and functions for a glance.

## Customizing the Glances List

- 1 From the watch face, press  to view the glances list.
- 2 Select **Edit**.
- 3 Select an option:
  - To change the location of a glance in the list, select a glance, press  or  to move the glance, and press  to select the new location.
  - To remove a glance from the list, select a glance, and select .
  - To add a glance to the list, select **Add**, and select one or more glances.  
**TIP:** You can select **Create Folder** to create a folder that contains multiple glances ([Creating a Glances Folder, page 64](#)).

## Creating a Glances Folder

You can customize the glances list to create folders of related glances.

- 1 From the watch face, press  to view the glances list.
- 2 Select **Edit > Add > Create Folder**.
- 3 Select the glances to include in the folder, and select **Done**.  
**NOTE:** If the glances are already in the glance list, 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 glances list, and hold .
  - To edit the glances in the folder, open the folder and select **Edit** ([Customizing the Glances List, page 64](#)).

## 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 64](#)).

## 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.



## 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 [garmin.com/performance-data/running](https://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.

**Functional threshold power (FTP):** The watch uses your user profile information from the initial setup to estimate your FTP ([Getting Your FTP Estimate, page 71](#)).

**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 69](#)).

**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 71](#)).

**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 68](#)).

**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 69](#)).

**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 73](#)).

**Running economy:** Running economy refers to the energy efficiency of a runner. Several key metrics contribute to your running economy estimate ([Running Economy, page 70](#)).

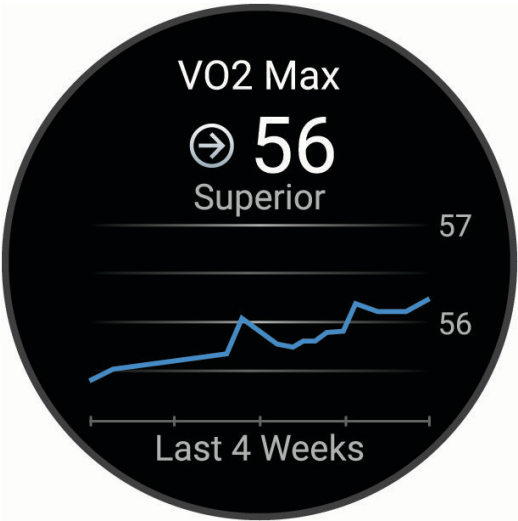
**Stamina:** The watch uses your VO2 max. estimate and heart rate data to provide real-time stamina estimates. It can be added as a data screen so you can view your potential and current stamina during your activity ([Viewing Your Real-Time Stamina, page 72](#)).

**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 66](#)).

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 162](#)), and go to [www.CooperInstitute.org](http://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 94](#)).



For the most accurate estimate, complete the user profile setup ([Setting Up Your User Profile, page 129](#)), and set your maximum heart rate ([Setting Your Heart Rate Zones, page 130](#)). 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 ([Activity Settings, page 48](#)).

- 1 Start a running activity.
- 2 Run outdoors at a moderate or high intensity, reaching at least 70% of your maximum heart rate.
- 3 After at least 10 minutes, select **Save**.
- 4 Press  or  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 94](#)). If you are using a chest heart rate monitor, you must put it on and pair it with your watch.




For the most accurate estimate, complete the user profile setup ([Setting Up Your User Profile, page 129](#)) and set your maximum heart rate ([Setting Your Heart Rate Zones, page 130](#)). 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  or  to scroll through the performance measurements.

## Viewing Your Predicted Race Times

For the most accurate estimate, complete the user profile setup ([Setting Up Your User Profile, page 129](#)), and set your maximum heart rate ([Setting Your Heart Rate Zones, page 130](#)).

Your watch uses the VO2 max. estimate and your training history to provide a target race time ([About VO2 Max. Estimates, page 66](#)). The watch analyzes several weeks of your training data to refine the race time estimates.

- 1 From the watch face, press  to view the running performance glance.
- 2 Press .
- 3 Scroll to view a predicted race time.
- 4 Press  to view more details.






- 5 Scroll 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 66).

## 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 47](#)).
- 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.

## Running Economy


Running economy measures the energy cost of running. While VO2 max. measures the maximum amount of oxygen your body can utilize during intense exercise, running economy reflects how efficiently your body converts that energy into running performance. Running economy is expressed in milliliters of oxygen consumed per kilogram of body weight per kilometer (ml/kg/km). Lower numbers mean that less energy was used.

**Requirements:** You must record several outdoor run or track run activities using a compatible accessory that measures step speed loss, such as the HRM 600.

**Key factors:** Running economy uses your profile information, run history, heart rate, speed, and running dynamics. Step speed loss is an essential factor, because it captures how much you slow down when your foot hits the ground ([Running Dynamics, page 94](#)). For best results, make sure your height and weight settings are correct ([Setting Up Your User Profile, page 129](#)).

**Understanding the results:** Keep in mind that running economy is ultimately all about aerobic performance. Easy runs of at least 30 minutes on a track or over flat terrain offer the maximum opportunity for gaining insight into this metric. Indoor runs and trail runs are not used to estimate or update your running economy. For more information, go to [garmin.com/performance-data/running](https://garmin.com/performance-data/running), and see the appendix ([Running Economy Ratings, page 162](#)).





## Viewing Your Running Economy

- From the watch face, press  to view the running performance glance.  
**NOTE:** You may need to add the glance to your glances list ([Customizing the Glances List, page 64](#)).
- From the Garmin Connect app, select **••• > Performance Stats > Running Economy**.  
You can also add running economy to your home screen data.

## Getting Your FTP Estimate

Before you can get your functional threshold power (FTP) estimate, you must pair a power meter with your watch ([Pairing Your Wireless Sensors, page 94](#)), and you must get your VO2 max. estimate ([Getting Your VO2 Max. Estimate for Cycling, page 67](#)).

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 steady, high intensity rides with a power meter. For best results, you should also ride with a heart rate monitor.

- 1 From the watch face, press  to view the performance glance.
- 2 Press .
- 3 Press  or  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 163](#)).








## Lactate Threshold

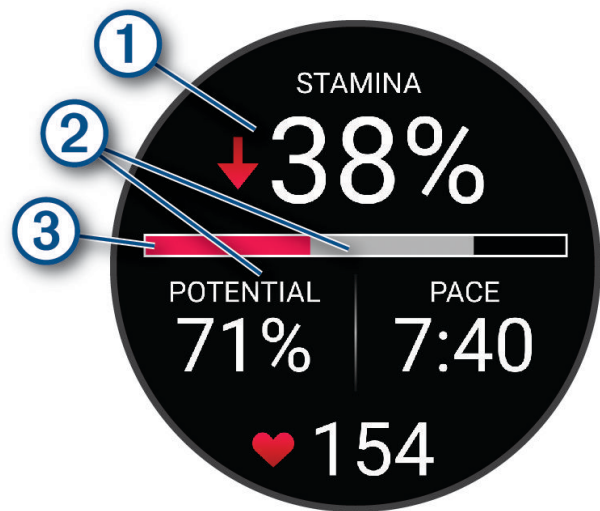
Lactate threshold is the exercise intensity at which lactate (lactic acid) starts to accumulate in the bloodstream. In running, this intensity level is estimated in terms of pace, heart rate, or power. When a runner exceeds the threshold, fatigue starts to increase at an accelerating rate. For experienced 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 130](#)). You can turn on the **Auto Detection** feature to automatically record your lactate threshold during an activity.

# 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 66).

- 1 From the watch face, press .
- 2 Select **Activities**.
- 3 Select a run or bike activity.
- 4 Press .
- 5 Select the activity settings.
- 6 Select **Data Screens > Add New > Stamina**.
- 7 Press  or  to change the location of the data screen (optional).
- 8 Press  to edit the primary stamina data field (optional).
- 9 Start your activity ([Starting an Activity](#), page 18).
- 10 Press  or  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 94](#)).

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.

- 1 From the Garmin Connect app, select ●●●.
- 2 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 [garmin.com/performance-data/running](https://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 66](#)). Your watch displays heat and altitude corrected VO2 max. values when you are acclimating to high heat environments or high altitude ([Heat and Altitude Performance Acclimation, page 77](#)).

**HRV:** HRV is your heart rate variability status over the last seven days ([Heart Rate Variability Status, page 69](#)).

**Acute load:** Acute load is a weighted sum of your recent exercise load scores including exercise duration and intensity. ([Acute Load, page 74](#)).

**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 75](#)).

**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 76](#)).

## 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 66](#)). 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 ([Activity Settings, page 48](#)).

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 104](#)).
- 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 4-week training load is lower than optimal in all intensity categories.

**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 4-week training load is higher than optimal.

## Load Ratio

Load ratio is the ratio of your acute (short-term) training load to your chronic (long-term) training load. It's helpful for tracking your training load changes.

Status	Value	Description
No Status	None	Load ratio will be visible after 2 weeks of training.
Low	Lower than 0.8	Your short-term training load is lower than your long-term training load.
Optimal 	0.8 to 1.4	The short-term and long-term training loads are balanced. The optimal range is based on your individual fitness level and training history.
High	1.5 to 1.9	Your short-term training load is higher than your long-term training load.
Very High	2.0 or higher	Your short-term training load is significantly higher than your long-term training load.

## 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 75). 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 seconds) 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 [firstbeat.com](https://firstbeat.com).

## 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.

## 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.

**NOTE:** Your recovery heart rate is not calculated for low-impact activities, such as yoga.

## 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.

## 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 66).

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.

# 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 view historical training readiness scores, go to your Garmin Connect account.

## Running Tolerance

Running tolerance is a feature designed to help you build mileage while balancing the risk of injury with performance gains. The running tolerance glance on your watch displays your acute impact load for today, a mileage estimate for the current training week, and a chart of your running tolerance and impact load trends over several weeks.

**Impact load (mile or kilometer):** Your impact mile (equivalent) is the amount of mechanical load on the body generated by running 1 mile on even ground, at an easy pace (baseline). Impact load is estimated using factors such as running intensity, whether you're running uphill or downhill, and running dynamics data. For example, if you run 5 hard miles with hills, your impact load could be 8, meaning that the actual strain was equivalent to running 8 baseline miles. Similarly, if you run 3 slow and easy miles, it could have an impact load of 2.5.

**Acute impact load:** Acute impact load is a helpful indicator in the capacity you have to run that day, in the context of your weekly running tolerance. The impact load of each new run you record is added directly to your acute impact load, and the influence of that load diminishes gradually as time passes.

**Weekly impact load:** This value represents the unweighted sum impact of your runs for each training week. You can set the training week in your Garmin Connect settings. For the current training week, it displays how your "bucket" is filling throughout the week. It also provides the basis for the weekly historical view of impact load and running tolerance.

**Tolerance:** Tolerance reflects the maximum acute load your body can manage based on your running history. It is personalized, and it is adjusted at the beginning of each training week according to a science-based interpretation of your recent and long-term running history. For more information, go to [garmin.com/performance-data/running](https://garmin.com/performance-data/running).

**Understanding the results:** Hard, fast running produces higher ground reaction forces and puts more wear and tear on your body than easy jogging. Walking segments during a run produce only half the impact of normal running. You can review a chart of the actual mileage plotted next to the impact load in your run activity history. A healthy approach to running will always involve listening to your body and using data together.

## 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 164](#)).



## Hill Score

Your hill score helps you understand your current capacity for uphill running based on your training history and a VO2 max. estimate from the last two months. Your watch detects uphill segments with 2% grade or more during an outdoor running, walking, or hiking 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 66](#)), and power curve data from a paired power meter ([Viewing Your Power Curve, page 73](#)).


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 129](#)).

- 1 From the watch face, press  to view the cycling ability glance.

**NOTE:** You may need to add the glance to your glances list ([Customizing the Glances List, page 64](#)).

- 2 Press  to view your current rider type.



- 3 Press  to view a detailed analysis of your cycling ability (optional).



## 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 60](#)). 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 22](#)).





## 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 66](#)).

- 1 From the Garmin Connect app, select ●●●.
- 2 Select **Training & Planning > Races & Events > Find an Event**.
- 3 Search for an event in your area.  
You can also select **Create an Event** to create your own event.
- 4 Select **Add to Calendar**.
- 5 Sync your watch with your Garmin Connect account.
- 6 On your watch, scroll to the primary race glance to see a countdown to your primary race event.
- 7 From the watch face, press , and select a running or cycling activity.

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





## Adding Weather Locations

- 1 From the watch face, press , to view the weather glance.
- 2 Press .
- 3 On the first glance screen, press .
- 4 Select **Add Location**, and search for a location.
- 5 If necessary, repeat steps 3 and 4 to add more locations.
- 6 Press , and select a location to show the weather for that location.

## Using the Jet Lag Adviser

Before you can use the Jet Lag Adviser glance, you must plan a trip in the Garmin Connect app ([Planning a Trip in the Garmin Connect App, page 82](#)).

You can use the Jet Lag Adviser glance while traveling to see how your internal clock compares to the local time, and to receive guidance on how to reduce the effects of jet lag.

- 1 From the watch face, press  to view the **Jet Lag Adviser** glance.
- 2 Press  to see how your internal clock compares to the local time, and the overall level of your jet lag.
- 3 Select an option:
  - To see an informational message about your current jet lag level, press .
  - To see a timeline for recommended actions to help reduce symptoms of jet lag, press .




## Planning a Trip in the Garmin Connect App

- 1 From the Garmin Connect app, select **•••**.
- 2 Select **Training & Planning > Jet Lag Adviser > Add Trip Details**.
- 3 Follow the on-screen instructions.




# Clocks

## Setting an Alarm












You can set multiple alarms.

- 1 Select an option:
  - From the watch face, hold .
  - From the watch face, press .
  - Hold .
- 2 Select **Clocks > Alarms**.
- 3 Select an option:
  - To set and save an alarm for the first time, enter the alarm time.
  - To set and save additional alarms, select **Add Alarm**, and enter the alarm time.




## Editing an Alarm

- 1 Select an option:
  - From the watch face, hold .
  - From the watch face, press .
  - 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 & Vibe**.
  - To select a description for the alarm, select **Label**.
  - To delete the alarm, select **Delete**.






## Using the Countdown Timer

- 1 Select an option:
  - From the watch face, hold .
  - From the watch face, press .
  - Hold .
- 2 Select **Clocks > Timers**.
- 3 If you have never saved a timer, enter the time using the touchscreen or the  and  buttons.
- 4 If you previously saved a timer, select an option:
  - To set a new countdown timer without saving it, select **Quick Timer**, and enter the time.
  - To set and save a new countdown timer, select **Edit > Add Timer**, and enter the time.
  - To set a saved countdown timer, select the saved timer.
- 5 Press  to start the timer.
- 6 If necessary, select an option:
  - To stop the timer, select .
  - To restart the timer, select .
  - To save the timer, select  > **Save Timer**.
  - To automatically restart the timer after it expires, select  > **Auto Restart**.
  - To customize the timer notification, select  > **Sound & Vibe**.

## Deleting a Countdown Timer


- 1 Select an option:
  - From the watch face, hold .
  - From the watch face, press .
  - Hold .
- 2 Select **Clocks** > **Timers** > **Edit**.
- 3 Select a timer.
- 4 Select **Delete**.

## Using the Stopwatch

- 1 Select an option:
  - From the watch face, hold .
  - From the watch face, press .
  - Hold .
- 2 Select **Clocks** > **Stopwatch**.
- 3 Press  to start the timer.
- 4 Press  to restart the lap timer ①.









The total stopwatch time ② continues running.

5 Press  to stop both timers.

Select an option:

6




- To reset both timers, press .
- 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**.

## Adding Alternate Time Zones

You can display the current time of day in additional time zones.




Select an option:

1

- From the watch face, hold .
- From the watch face, press .
- Hold .

**TIP:** You can also view your alternate time zones in the glances list ([Customizing the Glances List](#), page 64).

2 Select **Clocks > Alt. Time Zones > Add Zone**.




3 Press  or  to highlight a region, and press  to select it.

4 Select a time zone.

## Editing an Alternate Time Zone

Select an option:

1

- From the watch face, hold .
- From the watch face, press .
- Hold .

**TIP:** You can also view your alternate time zones in the glances list ([Customizing the Glances List](#), page 64).

2 Select **Clocks > Alt. Time Zones**.

3 Select a time zone.




4 Press .

5 Select an option:

- To set the time zone to display on the glances list, 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**.

## Adding a Countdown Event

1 Select an option:

- From the watch face, hold .
- From the watch face, press .
- Hold .

**TIP:** You can also view your countdown events in the glances list ([Customizing the Glances List, page 64](#)).

2 Select **Clocks > Countdowns > Add**.

3 Enter a name.

4 Select a year, month, and day.




5 Select an option:

- Select **All Day**.
- Select **Specific Time**, and enter a time.

6 Select an icon.

## Editing a Countdown Event


1 Select an option:


- From the watch face, hold .
- From the watch face, press .
- Hold .

**TIP:** You can also view your countdown events in the glances list ([Customizing the Glances List, page 64](#)).

2 Select **Clocks > Countdowns**.

3 Select a countdown event.

4 Press , and select **Set as Favorite** to show the countdown event in the glances list (optional).

5 Press , and select **Edit Countdown**.

6 Select an option to edit:

- To rename the event, select **Name**.
- To change the date, select **Date**.
- To change the time, select **Time**.
- To change the event type, select **Type**.
- To add an abbreviated name for the event, select **Abbreviation**.
- To add an event location, select **Location**.
- To add event reminders, select **Reminders**.
- To repeat the event every year, select **Repeat Annually**.
- To remove the event, select **Delete Countdown**.

## 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 saved activity data, records, and totals.

The watch has a history glance for quick access to your activity data ([Glances, page 60](#)).

- 1 From the watch face, hold .
- 2 Select **History**.  
A bar graph of your recent activities appears.
- 3 Select an option:
  - To change the time period for the bar graph, press , and select **Graph Options**.
  - To view your personal records by sport, press , and select **Records** ([Personal Records, page 87](#)).
  - To view your weekly or monthly totals, press , and select **Totals** ([Viewing Data Totals, page 88](#)).
  - To view your activity history, press , and select an activity.

## 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.

## 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**.
- 3 Press , and select **Records**.
- 4 Select a sport.
- 5 Select a record.
- 6 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**.
- 3 Press , and select **Records**.
- 4 Select a sport.
- 5 Select a record to restore.
- 6 Select **Previous** > .



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

## Clearing Personal Records

- 1 From the watch face, hold .
  - 2 Select **History**.
  - 3 Press , and select **Records**.
  - 4 Select a sport.
  - 5 Select an option:
    - To delete one record, select a record, and select **Clear Record** > ✓.
    - To delete all records for the sport, select **Clear All Records** > ✓.
- 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**.
- 3 Press , and select **Totals**.
- 4 Select an activity.
- 5 Select an option to view weekly or monthly totals.

## Notifications and Alerts Settings

From the watch face, hold , and select **Watch Settings** > **Notifications & Alerts**.

**Smart Notifications:** Customizes the smart notifications that appear on your watch ([Enabling Phone Notifications, page 99](#)).

**Health & Wellness:** Customizes the health and wellness alerts that appear on your watch ([Health and Wellness Alerts, page 89](#)).

**Report Settings:** Enables reports, and customizes the report data and theme. You can select **Morning Report** to create and edit daily messages in the morning report ([Customizing Your Morning Report, page 89](#)). You can select **Evening Report** to set the schedule for the evening report ([Customizing Your Evening Report, page 90](#)). You can select **Choose Theme** to customize the background theme for your reports.

**System Alerts:** Sets time ([Setting Time Alerts, page 90](#)), barometer ([Setting a Storm Alert, page 90](#)), or phone connection alerts ([Turning On Phone Connection Alerts, page 90](#)).

**Notification Center:** Enables the notification center for viewing new notifications ([Viewing Notifications, page 99](#)).



## Health and Wellness Alerts

From the watch face, hold , and select **Watch Settings > Notifications & Alerts > Health & Wellness**.

**Daily Summary:** A Body Battery daily summary 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 64).

**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.

**Abnormal Heart Rate Alerts:** Notifies you when your heart rate exceeds or drops below a target value ([Setting an Abnormal Heart Rate Alert](#), page 89).

**Jet Lag Adviser:** Provides jet lag symptom advice for a trip, such as sleep and exercise recommendations ([Using the Jet Lag Adviser](#), page 82).

**Move Alert:** Reminds you to keep moving.

**Goal Alerts:** Notifies you when you reach your daily steps goal, daily floors climbed goal, and weekly intensity minutes goal.

## 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 at least ten minutes 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 **Watch Settings > Notifications & Alerts > Health & Wellness > 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.

## Morning Report

Your watch displays a morning report based on your normal wake time. Scroll to view the report, which includes weather, sleep, overnight heart rate variability status, and more ([Customizing Your Morning Report](#), page 89).

## Customizing Your Morning Report

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


- 1 From the watch face, hold .
- 2 Select **Watch Settings > Notifications & Alerts > Report Settings > Morning Report**.
- 3 Select an option:
  - To enable or disable the morning report, select **Show Report**.
  - To customize the order and type of data that appears in your morning report, select **Edit Report**.
  - To write and add custom messages to your morning report, select **Customize Daily Messages > Edit Messages**.

## Evening Report


Your watch displays an evening report prior to your sleep time. Scroll to view the report, which includes your Body Battery details, tomorrow's workout and weather, sleep coach recommendation, and more ([Customizing Your Evening Report, page 90](#)).

### Customizing Your Evening Report

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

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Notifications & Alerts** > **Report Settings** > **Evening Report**.
- 3 Select an option:
  - Select **Show Report** to enable or disable the evening report.
  - Select **Edit Report** to customize the order and type of data that appears in your evening report.
  - Select **Schedule Report** to set the amount of time between the report and your sleep start ([Customizing the Sleep Focus Mode, page 107](#)).


## Setting Time Alerts

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Notifications & Alerts** > **System Alerts** > **Time**.
- 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**.

## Setting a Storm Alert

### WARNING

This alert is an informational feature and is not intended to be the primary source for tracking changes in the weather. It is your responsibility to review weather reports and conditions, to remain aware of your surroundings, and to use safe judgment, especially during times of severe weather. Failure to heed this warning could result in serious personal injury or death.


- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Notifications & Alerts** > **System Alerts** > **Barometer** > **Storm Alert**.
- 3 Select an option:
  - Select **Status** to turn the alert on or off.
  - Select **Rate** to update the rate of barometric pressure change that triggers a storm alert.

## Turning On Phone Connection Alerts

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

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Notifications & Alerts** > **System Alerts** > **Phone**.

## Sound and Vibration Settings

From the watch face, hold , and select **Watch Settings** > **Sound & Vibe**. You can also customize these settings for different situations, such as sleep and activities ([Focus Modes, page 107](#)).


**Volume:** Mutes all sounds or adjusts the speaker volume.

**Alert Tones:** Plays a tone for alerts.

**Button Tones:** Plays a tone when you press a button.

**Vibration:** Sets watch vibrations for alerts and button presses.

## Display and Brightness Settings

From the watch face, hold , and select **Watch Settings** > **Display & Brightness**. You can also customize these settings for different situations, such as sleep and activities ([Focus Modes, page 107](#)).

**Brightness:** Sets the brightness level of the screen.

**Always On Display:** Sets the watch face data to remain visible and turn down the brightness and background. This option impacts the battery and display life ([About the AMOLED Display, page 138](#)).

**Text Size:** Adjusts the size of the text on the screen.

**Red Shift:** Turns the screen to shades of red, green, or orange so that you can use the watch in low light conditions and help preserve your night vision.

**Gesture:** Turns on the screen when you raise and turn your arm to look at your wrist.

**Timeout:** Sets the length of time before the screen turns off.

**Touch:** Enables the touchscreen. You can select **Map Only** to enable the touchscreen only on the map screen.

**Touch Lock:** Locks the touchscreen after the screen turns off. When this setting is enabled, you can swipe down to unlock the touchscreen.

## Connectivity

Connectivity features are available for your watch when you pair with your compatible phone ([Pairing Your Phone, page 98](#)). Additional features are available when you connect your watch to a Wi-Fi network ([Connecting to a Wi-Fi Network, page 101](#)).

## Sensors and Accessories

The Forerunner watch has several internal sensors, and you can pair additional wireless sensors for your activities.

## Wireless Sensors

Your watch can be paired and used with wireless sensors using ANT+ or Bluetooth technology ([Pairing Your Wireless Sensors, page 94](#)). After the devices are paired, you can customize the optional data fields ([Customizing the Data Screens, page 47](#)). 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](http://buy.garmin.com) for that sensor.

Sensor Type	Description
Club Sensors	You can use Approach golf club sensors to automatically track your golf shots, including location, distance, and club type.
DogTrack	Allows you to receive data from a compatible handheld dog tracking device.
eBike	You can use your watch with your eBike and view bike data, such as battery and range 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 HR	You can use an external sensor, such as the HRM 200, HRM 600, HRM-Fit™, or HRM-Pro series heart rate monitor, to view heart rate data during your activities. Some heart rate monitors can also store data or provide advanced running data ( <a href="#">Running Dynamics, page 94</a> ) ( <a href="#">Running Power, page 96</a> ).
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 ( <a href="#">Connecting Bluetooth Headphones, page 128</a> ).
inReach	The inReach remote function allows you to control your inReach satellite communicator using your Forerunner watch ( <a href="#">Using the inReach Remote, page 97</a> ).
Lights	You can use Varia smart bike lights to improve situational awareness. With a Varia headlight camera, you can also take photos and record video during a ride ( <a href="#">Using the Varia Camera Controls, page 97</a> ).
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 ( <a href="#">Setting Your Power Zones, page 131</a> ), or use range alerts to be notified when you reach a specified power zone ( <a href="#">Setting an Alert, page 51</a> ).
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 ( <a href="#">Using the Varia Camera Controls, page 97</a> ).
RD Pod	You can use a Running Dynamics Pod to record running dynamics data and view it on your watch ( <a href="#">Running Dynamics, page 94</a> ).
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 ( <a href="#">Using an Indoor Trainer, page 25</a> ).
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 ( <a href="#">Wheel Size and Circumference, page 165</a> ).
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.

## Pairing Your Wireless Sensors


The first time you connect a wireless sensor to your watch using ANT+ or Bluetooth technology, 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. For more information about connection types, go to [garmin.com/hrm\\_connection\\_types](https://garmin.com/hrm_connection_types).

- 1 Put on the heart rate monitor, install the sensor, or press the button to wake up the sensor.

**NOTE:** See your wireless sensor owner's manual for pairing information.

- 2 Bring the watch within 3 m (10 ft.) of the sensor.

**NOTE:** Stay 10 m (33 ft.) away from other wireless sensors while pairing.

- 3 From the watch face, hold .

- 4 Select **Watch Settings > Connectivity > 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. You can customize the optional data fields (*Customizing the Data Screens, page 47*).

## Heart Rate Accessory Running Pace and Distance

The HRM 600, HRM-Fit, and HRM-Pro series accessories calculate 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 or secure Bluetooth technology. You can also view it on compatible third-party training apps.

The pace and distance accuracy improves with calibration.

**Automatic calibration:** The default setting for your watch is **Auto Calibrate**. The heart rate 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 activities (*Tips for Recording Running Pace and Distance, page 94*).

**Manual calibration:** You can select **Calibrate & Save** after a treadmill run with your connected heart rate accessory (*Calibrating the Treadmill Distance, page 21*).

## Tips for Recording Running Pace and Distance

- Update your Forerunner watch software (*Product Updates, page 142*).
- Complete several outdoor runs with GPS and your connected HRM 600, HRM-Fit, or 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 21*).
- 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 21*).

## Running Dynamics

Running dynamics is real-time feedback about your running form. Your Forerunner watch has an accelerometer to calculate five running form metrics. To view all of the running form metrics, you must pair your Forerunner watch with the HRM 600, HRM-Fit, HRM-Pro series accessory, or other running dynamics accessory that measures torso movement. For more information, go to [garmin.com/performance-data/running](https://garmin.com/performance-data/running).

Metric	Sensor Type	Description
<b>Cadence</b>	Watch or compatible accessory	Cadence is the number of steps per minute. It displays the total steps (right and left combined).
<b>Stride length</b>	Watch or compatible accessory	Stride length is the length of your stride from one footfall to the next. It is measured in meters.
<b>Vertical oscillation</b>	Watch or compatible accessory	Vertical oscillation is your bounce while running. It displays the vertical motion of your torso, measured in centimeters.
<b>Vertical ratio</b>	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.
<b>Ground contact time</b>	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. <b>NOTE:</b> Ground contact metrics are not available while walking.
<b>Ground contact time balance</b>	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.
<b>Step speed loss</b>	HRM 600 only	Step speed loss is how much you slow down when your foot hits the ground while running. It is measured in centimeters per second. A lower number is typically better, as it indicates you have to do less propulsive work to speed back up. <b>NOTE:</b> Step speed loss metrics are not available while walking.
<b>Step speed loss percentage</b>	HRM 600 only	Step speed loss percent is how much you slow down when your foot hits the ground as a percentage of your running speed. This accounts for step speed loss typically increasing with faster running speed.

### 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 600, HRM-Fit, or HRM-Pro series accessory.
- Pair the running dynamics accessory with your watch again, according to the instructions.
- If you are using an HRM 600 accessory, pair it with your watch using the secure Bluetooth connection, rather than the open connection.

For more information about connection types, go to [garmin.com/hrm\\_connection\\_types](https://garmin.com/hrm_connection_types).

- If you are using an HRM-Fit or 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:** Some metrics do not appear while walking ([Running Dynamics, page 94](#)).



## 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 uphill, downhill, and wind, which a pace measurement does not do. For more information, go to [garmin.com/performance-data/running](https://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 147](#)). You can set up power alerts to be notified when you reach a specified power zone ([Activity Alerts, page 50](#)).

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 131](#)).

### Running Power Settings

From the watch face, press , select **Activities**, select a running activity, press , select the activity settings, and select **Running Power**.

**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.

### Chest Heart Rate While Swimming

The HRM 600, HRM-Pro series, 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 47](#)).

**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.









## 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 94](#)).





- 1 Select an option:
  - Add the **Camera Controls** control to your watch ([Customizing the Controls Menu, page 58](#)).
  - Add the **Camera Controls** glance to your watch ([Customizing the Glances List, page 64](#)).
- 2 From the **Camera Controls** control or glance, select an option:
  - Select  >  to view the camera settings.
  - Select  >  to record the ride.
  - Select  to take a photo.
  - Select  to save a clip.

## inReach Remote

The inReach remote function allows you to control your inReach satellite communicator using your Forerunner watch. Go to [buy.garmin.com](http://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 glances list ([Customizing the Glances List, page 64](#)).

- 1 Turn on the inReach satellite communicator.
- 2 On your Forerunner watch, press  from the watch face to view the inReach glance.
- 3 Press  to search for your inReach satellite communicator.
- 4 Press  to pair your inReach satellite communicator.
- 5 Press , 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**.




## Phone Connectivity Features

Phone connectivity features are available for your Forerunner watch when you pair it using the Garmin Connect app ([Pairing Your Phone, page 98](#)).

- App features from the Garmin Connect app, the Connect IQ app, and more ([Phone Apps and Computer Applications, page 102](#))
- Glances ([Glances, page 60](#))
- Controls menu features ([Controls, page 55](#))
- Safety and tracking features ([Safety and Tracking Features, page 123](#))
- Phone interactions, such as notifications ([Enabling Phone Notifications, page 99](#))






## 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 Select an option:
  - During the initial setup on your watch, select  when you are prompted to pair with your phone.
  - If you previously skipped the pairing process, from the watch face, hold , and select **Watch Settings > Connectivity > Pair Phone**.
  - If you want to pair a new phone, from the watch face, hold , and select **Watch 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.




## Calling from the Watch

**NOTE:** This feature is available only if your watch is connected to a compatible phone using Bluetooth technology.

- 1 From the watch face, press .
  - 2 Select **Phone**.
  - 3 Select an option:
    - To dial a phone number using the dial pad, select , dial the phone number, and select .
    - To call a phone number from your contacts, select , select a contact name, and select a phone number ([Adding Contacts, page 123](#)).
    - To view recent calls made or received on the watch, swipe up.
- NOTE:** The watch does not sync with the recent calls list on your phone.
- TIP:** You can select  to hang up before the call connects.

## Using the Phone Assistant


To use the phone assistant, your watch must be connected to a compatible phone using Bluetooth technology ([Pairing Your Phone, page 98](#)). Go to [garmin.com/voicefunctionality](https://garmin.com/voicefunctionality) for information about compatible phones. You can communicate with your phone's voice assistant using the integrated speaker and microphone in your watch. Go to [garmin.com/voicefunctionality/tips](https://garmin.com/voicefunctionality/tips) for tips about how to set up your phone assistant.

- 1 Select an option:
    - From the watch face, press .
    - Hold .
- NOTE:** You can customize the controls menu ([Customizing the Controls Menu, page 58](#)).
- 2 Select **Phone Assistant**.  
When connected to your phone's voice assistant,  appears.
  - 3 Say a command phrase, such as *Call Mom* or *Send a text message*.  
**NOTE:** Communication from the phone assistant is audible only.

## Enabling Phone Notifications

You can customize how notifications from your paired phone sound and appear on your watch during normal use.




**NOTE:** You can configure notifications during sleep or activities in the Focus Modes settings ([Focus Modes](#), [page 107](#)).

- 1 From the watch face, hold .
- 2 Select **Watch Settings > Connectivity > Phone > Notifications**.
- 3 Select an option:
  - To enable phone notifications, select **Status > On**.
  - To enable notifications for phone calls, select **Calls**, and select status, tone, and vibration preferences.
  - To enable notifications for text messages, select **Texts**, and select status, tone, and vibration preferences.
  - To enable notifications for phone apps, select **Apps**, and select status, tone, and vibration preferences.
  - To hide notification details until you perform an action, select **Privacy**, and select an option.
  - To change how long the watch displays notifications, select **Timeout**.
  - To add a signature to your text message replies from your watch, select **Signature**.

**NOTE:** This feature is available only for compatible Android™ phones.



## Viewing Notifications

You can view your phone notifications on your watch from several menu locations.

- 1 Select an option:
  - From the watch face, swipe down to view the notification center.
  - From the watch face, swipe up to view the notifications glance.  
**TIP:** From the glance, you can swipe left to dismiss a notification.
  - From the watch face, press , and select **Notifications** to view the notifications app.
  - Hold , and select **Notifications** to view the notifications control.
- 2 Select a notification.
- 3 Press  for more options.
- 4 Scroll to the top of the notifications, and select **Dismiss All** to dismiss all notifications.

## Receiving an Incoming Phone Call

When you receive a phone call on your connected phone, the Forerunner watch displays the name or phone number of the caller.

- To accept the call, select .
- To decline the call, select .
- To decline the call and immediately send a text message reply, select **Reply**, and select a message from the list.



**NOTE:** To send a text message reply, you must be connected to a compatible Android phone using Bluetooth technology.

## Replying to a Text Message

**NOTE:** This feature is available only for compatible Android phones.

When you receive a text message notification on your watch, you can send a quick reply by selecting from a list of messages. You can customize messages in the Garmin Connect app.

**NOTE:** This feature sends text messages using your phone. Regular text message limits and charges from your carrier and phone plan may apply. Contact your mobile carrier for more information about text message charges or limits.

- 1 From the watch face, press  to view the notification center.
- 2 Select a text message notification.
- 3 Press .
- 4 Select **Reply**.
- 5 Select a message from the list.  
Your phone sends the selected message as an SMS text message.

## 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, and select the notifications to show on your phone and watch.



**NOTE:** All notifications that you enable on your iPhone also appear on your watch.

- If you are using an Android phone, from the Garmin Connect app, select **••• > Settings > Notifications > App Notifications**, and select the notifications that you want to appear on your watch.

## 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 ([Customizing the Controls Menu](#), page 58).



- 1 Hold  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 Find My Phone Alerts

- 1 From the watch face, hold .
- 2 Select **Watch Settings > Connectivity > Phone > Find My Phone Alerts**.

## Locating a Phone Lost During a GPS Activity

Your Forerunner watch automatically stores a GPS location when your paired phone is disconnected during a GPS activity. You can use this feature to help locate a phone that is lost during an activity.

- 1 Start a GPS activity.
- 2 When prompted to navigate to the last known location of your device, select .
- 3 Navigate to the location on the map ([Saving or Navigating to a Location on the Map](#), page 113).
- 4 Press  to view a compass pointing to the location (optional).
- 5 When your watch is within Bluetooth range of your phone, the Bluetooth signal strength appears on the screen.

The signal strength increases as you move closer to your phone.

## Wi-Fi Connectivity 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.

**Course updates:** Allows you to download and install golf course updates.


**Map downloads:** Allows you to download and install maps.

**Software updates:** You can download and install the latest software.

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

## 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 From the watch face, hold .
- 2 Select **Watch Settings > 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.

## Garmin Share

### NOTICE



It is your responsibility to use discretion when sharing information with others. Always ensure you are aware of and comfortable with the individual with whom you share information.

The Garmin Share feature allows you to use Bluetooth technology to wirelessly share your data with other compatible Garmin devices. With Garmin Share enabled and compatible Garmin devices in range of each other, you can select saved locations, courses, and workouts to transfer to another device through a direct, secured device-to-device connection, without the need for a phone or Wi-Fi connectivity.

## Sharing Data with Garmin Share




Before you can use this feature, you must have Bluetooth technology enabled on both compatible devices, and they must be within 3 m (10 ft.) of each other. When prompted, you must also consent to share your data with other Garmin devices using Garmin Share.

Your Forerunner watch can send and receive data when connected to another compatible Garmin device ([Receiving Data with Garmin Share, page 102](#)). You can also transfer your data between different devices. For example, you can share a favorite course from your Edge bike computer to your compatible Garmin watch.

- 1 From the watch face, press .
- 2 Select **Garmin Share** > **Share**.
- 3 Select a category, and select one item.
- 4 Select an option:
  - Select **Share**.
  - Select **Add More** > **Share** to select more than one item to share.
- 5 Wait while the device locates compatible devices.
- 6 Select a device.
- 7 Confirm the six-digit PIN matches on both devices, and select .
- 8 Wait while the devices transfer the data.
- 9 Select **Share Again** to share the same items with another user (optional).
- 10 Select **Done**.

## Receiving Data with Garmin Share

Before you can use this feature, you must have Bluetooth technology enabled on both compatible devices, and they must be within 3 m (10 ft.) of each other. When prompted, you must also consent to share your data with other Garmin devices using Garmin Share.

- 1 From the watch face, press .
- 2 Select **Garmin Share**.
- 3 Wait while the device locates compatible devices in range.
- 4 Select .
- 5 Confirm the six-digit PIN matches on both devices, and select .
- 6 Wait while the devices transfer the data.
- 7 Select **Done**.

## Garmin Share Settings

From the watch face, hold , and select **Watch Settings** > **Connectivity** > **Garmin Share**.

**Status:** Enables the watch to send and receive items through Garmin Share.

**Forget Devices:** Removes all of the devices the watch has previously shared items with.

## Phone Apps and Computer Applications

You can connect your watch to multiple Garmin phone apps and computer applications using the same Garmin account.

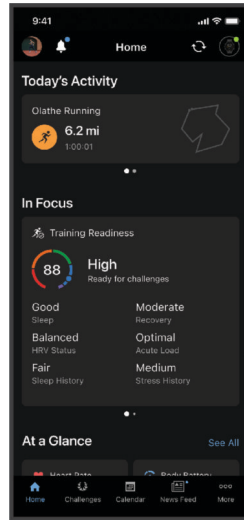
## Garmin Connect

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](https://garmin.com/connectapp)), or go to [connect.garmin.com](https://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.

## Garmin Connect+ Subscription

You can enhance the data, connections, and training available on your Garmin Connect account with a Garmin Connect+ subscription. To sign up, you can download the Garmin Connect app from the app store on your phone, or go to [connect.garmin.com](https://connect.garmin.com).

**Active Intelligence (AI):** Receive AI insights about your data and activities.

**LiveTrack+:** Send LiveTrack text messages, receive a personalized profile page, and view previous LiveTrack sessions.

**Track indoor activities:** View your indoor activity and workout data in real time, enabling you to adjust your performance during the activity.

**Training guidance:** Get additional expert support and guidance for select Garmin Coach training plans.

**Performance dashboard:** View your training data your way with customized charts and graphs.

**Social features:** Gain access to exclusive badges, badge challenges, and double points for challenges. You can update your profile avatar with customizable frames.

## Using the Garmin Connect App

After you pair your watch with your phone ([Pairing Your Phone, page 98](#)), you can use the Garmin Connect app to upload all of your activity data to your Garmin Connect account.

- 1 Verify the Garmin Connect app is running on your phone.
- 2 Bring your watch within 10 m (30 ft.) of your phone.

Your watch automatically syncs your data with the Garmin Connect app and your Garmin Connect account.

## 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 98](#)).

Sync your watch with the Garmin Connect app ([Using the Garmin Connect App, page 104](#)).

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

## 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, 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.

## 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 and fitness. For example, you can record a ride with an Edge bike computer, and view your activity details and recovery time 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 104](#)).

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

## 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 126](#)). 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 [garmin.com/express](http://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.



## 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.

## Manually Syncing Data with Garmin Connect

**NOTE:** You can add options to the controls menu (*Customizing the Controls Menu*, page 58).

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

## Connect IQ Features

You can add Connect IQ apps, glances, music providers, watch faces, and more to your watch using the Connect IQ store on your watch or phone ([garmin.com/connectiqapp](https://garmin.com/connectiqapp)).

**Watch Faces:** 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:** 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

Before you can download features from the Connect IQ app, you must pair your Forerunner watch with your phone (*Pairing Your Phone*, page 98).

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

## Downloading Connect IQ Features Using Your Computer

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

## Garmin Explore™

The Garmin Explore website and app allow you to create courses, waypoints, and collections, plan trips, sync tracks, upload activities, and use cloud storage. They offer advanced planning both online and offline, allowing you to share and sync data with your compatible Garmin device. You can use the app to download maps for offline access, and then navigate anywhere without using your cellular service.

You can download the Garmin Explore app from the app store on your phone ([garmin.com/exploreapp](https://garmin.com/exploreapp)), or you can go to [explore.garmin.com](https://explore.garmin.com).

## Garmin Messenger App

### ⚠ WARNING

The inReach features of the Garmin Messenger app, including SOS, tracking, and inReach Weather, are not available without a connected inReach satellite communicator and an active satellite subscription. Always test the app outdoors before using it on a trip.

### ⚠ CAUTION

The non-satellite messaging features of the Garmin Messenger app alone should not be relied on as a primary method to obtain emergency assistance.

### NOTICE

The app works over both the internet (using a wireless connection or cellular data on your phone) and the Iridium® satellite network. If you are using cellular data, your paired phone must be equipped with a data plan and be in an area of network coverage where data is available. If you are in an area without network coverage, you must have an active satellite subscription for your inReach satellite communicator to use the Iridium satellite network.

You can use the app to message other Garmin Messenger app users, including friends and family without Garmin devices. Anyone can download the app and connect their phone, allowing them to communicate with other app users over the internet (no login is required). App users can also create group messaging threads with other SMS phone numbers. New members added to the group message can download the app to see what others are saying.

Messages sent using a wireless connection or cellular data on your phone do not incur data charges or additional charges on your satellite subscription. Messages received may incur charges if message delivery is attempted over both the Iridium satellite network and the internet. Standard text messaging rates for your cellular data plan apply.

You can download the Garmin Messenger app from the app store on your phone ([garmin.com/messengerapp](https://garmin.com/messengerapp)).

## Using the Messenger Feature

### ⚠ CAUTION

The non-satellite messaging features of the Garmin Messenger app alone should not be relied on as a primary method to obtain emergency assistance.

### NOTICE

To use the Messenger feature, your Forerunner watch must be connected to the Garmin Messenger app on your compatible phone using Bluetooth technology.

The Messenger feature on your watch allows you to view, compose, and reply to messages from the Garmin Messenger phone app.

- 1 From the watch face, press  to view the **Messenger** glance.

**TIP:** The Messenger feature is available as a glance, app, or controls menu option on your watch.

- 2 Select the glance.
- 3 If this is your first time using the **Messenger** feature, scan the QR code with your phone, and follow the on-screen instructions to complete the pairing and setup process.
- 4 On your watch, select an option:
  - To compose a new message, select **New Message**, select a recipient, and either select a pre-defined message or compose your own.
  - To view a conversation, scroll down, and select a conversation.
  - To reply to a message, select a conversation, select **Reply**, and either select a pre-defined message or compose your own.

## Garmin Golf™ App


The Garmin Golf app allows you to upload scorecards from your Forerunner device to view detailed statistics and shot analyses. Golfers can compete with each other at different courses using the Garmin Golf app. More than 43,000 courses have leaderboards that anyone can join. You can set up a tournament event and invite players to compete. With a Garmin Golf membership, you can view green contour data on your phone and Forerunner device.

The Garmin Golf app syncs your data with your Garmin Connect account. You can download the Garmin Golf app from the app store on your phone ([garmin.com/golfapp](https://garmin.com/golfapp)).


## Focus Modes

Focus modes adjust the watch settings and behavior for different situations, such as sleep and activities. When you change the settings with a focus mode enabled, the settings are updated only for that focus mode.

### Customizing the Sleep Focus Mode

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Focus Modes** > **Sleep**.
- 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 **Notifications & Alerts** to configure phone notifications, health and wellness alerts, and system alerts ([Notifications and Alerts Settings, page 88](#)).
  - Select **Sound & Vibe** to configure alarm tones and vibration ([Sound and Vibration Settings, page 91](#)).
  - Select **Display & Brightness** to configure the screen settings ([Display and Brightness Settings, page 91](#)).

### Customizing the Activity Focus Mode

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Focus Modes** > **Activity**.
- 3 Select an option:
  - Select **Satellites** to set the satellite systems to use for all activities.  
**TIP:** You can customize the **Satellites** setting for individual activities ([Activity Settings, page 48](#)).
  - Select **Voice Alerts** to enable voice alerts during activities ([Playing Voice Alerts During an Activity, page 51](#)).
  - Select **Notifications & Alerts** to configure phone notifications, health and wellness alerts, and system alerts ([Notifications and Alerts Settings, page 88](#)).
  - Select **Display & Brightness** to configure the screen settings ([Display and Brightness Settings, page 91](#)).
  - Select **Sound & Vibe** to configure alert tones and vibration settings ([Sound and Vibration Settings, page 91](#)).

# Health and Wellness Settings

From the watch face, hold , and select **Watch Settings** > **Health & Wellness**.

**Wrist Heart Rate:** Customizes the wrist heart rate monitor settings ([Wrist Heart Rate Monitor Settings](#), page 109).

**Pulse Oximeter:** Sets the pulse oximeter mode ([Setting the Pulse Oximeter Mode](#), page 111).

**Move IQ:** Enables 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.

## Wrist Heart Rate

Your watch has a wrist-based heart rate monitor, and you can view your heart rate data on the heart rate glance ([Viewing Glances](#), page 63).

The watch is also compatible with chest heart rate monitors. If both wrist-based heart rate and chest heart rate data are available when you start an activity, your watch uses the chest heart rate data.

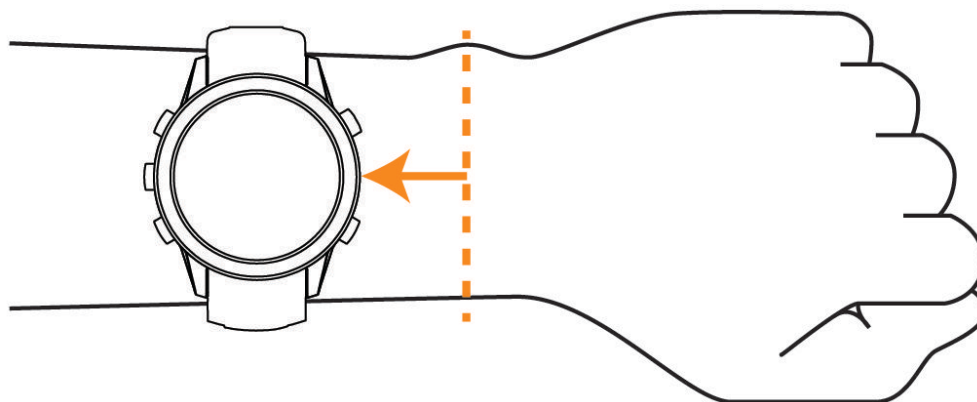
## Wearing the Watch

### 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](https://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 109 for more information about wrist-based heart rate.
- See [Tips for Erratic Pulse Oximeter Data](#), page 111 for more information about the pulse oximeter sensor.
- For more information about accuracy, go to [garmin.com/ataccuracy](https://garmin.com/ataccuracy).
- For more information about watch wear and care, go to [garmin.com/fitandcare](https://garmin.com/fitandcare).

## 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.

## Wrist Heart Rate Monitor Settings

From the watch face, hold , and select **Watch Settings > Health & Wellness > Wrist Heart Rate**.

**Status:** Enables 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. You can perform a manual reading from the pulse oximeter glance.

**Source Switching:** Selects the best source of heart rate data when wearing your watch and an external heart rate monitor. For more information, go to [www.garmin.com/dynamicsourceswitching/](http://www.garmin.com/dynamicsourceswitching/).




**Broadcast Heart Rate:** Broadcasts your heart rate data to a paired device (*Broadcasting Heart Rate Data, page 109*).

## 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 (*Activity Settings, page 48*). For example, you can broadcast your heart rate data to an Edge device while cycling.

1 Select an option:

- 1
  - Hold , and select **Watch Settings > Health & Wellness > Wrist Heart Rate > Broadcast Heart Rate**.
  - Hold  to open the controls menu, and select .


**NOTE:** You can add options to the controls menu (*Customizing the Controls Menu, page 58*).

2 Press .

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  to stop broadcasting your heart rate data.

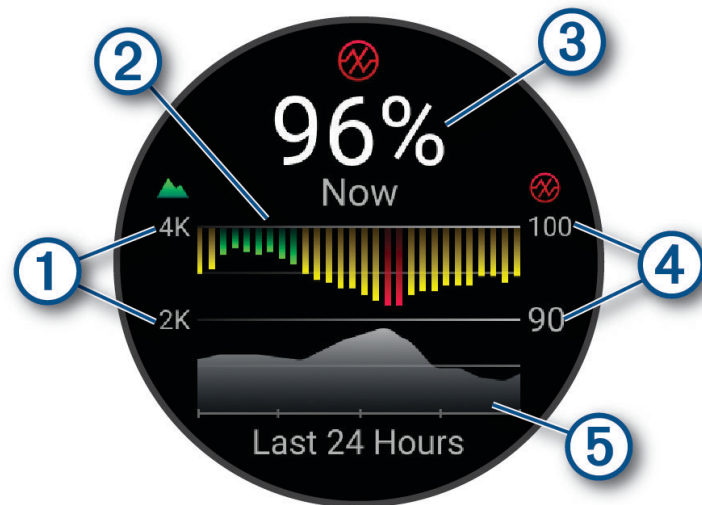
# Pulse Oximeter

Your watch has a wrist-based pulse oximeter to gauge the peripheral saturation of oxygen in your blood (SpO2). As your altitude increases, the level of oxygen in your blood can decrease. 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 111](#)). You can also turn on all-day readings ([Setting the Pulse Oximeter Mode, page 111](#)). When you view the pulse oximeter glance while you are not moving, 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](https://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  from the watch face to view the pulse oximeter glance.
- 2 Press  to view glance details and begin a pulse oximeter reading.
- 3 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.

- 4 Press  to view a graph of your pulse oximeter readings for the last seven days.

## Setting the Pulse Oximeter Mode

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Health & Wellness** > **Pulse Oximeter**.
- 3 Select an option:
  - To turn on measurements while you are inactive during the day, select **All Day**.  
**NOTE:** Turning on **All Day** mode decreases battery life.
  - To turn on continuous measurements while you sleep, select **During Sleep**.  
**NOTE:** Unusual sleep positions can cause abnormally low sleep-time SpO2 readings.
  - To turn off automatic measurements, select **On Demand**.

## 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.

## Auto Goal

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

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



## 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.

## 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 the Sleep Focus Mode*, page 107). Sleep statistics include total hours of sleep, sleep stages, sleep movement, and sleep score. Your sleep coach provides sleep need recommendations based on your sleep and activity history, HRV status, and naps (*Glances*, page 60). 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 (*Controls*, page 55).

### Using Automated Sleep Tracking

- 1 Wear your watch while sleeping.
- 2 Upload your sleep tracking data to your Garmin Connect account (*Using the Garmin Connect App*, page 104).  
You can view your sleep statistics on your Garmin Connect account.  
You can view sleep information, including naps, on your Forerunner watch (*Glances*, page 60).

## Breathing Variations

### ⚠ CAUTION

The Forerunner device is not a medical device and is not intended for use in the diagnosis or monitoring of any medical condition. For more information on pulse oximeter accuracy, go to [garmin.com/ataccuracy](https://garmin.com/ataccuracy).

The optical heart rate sensor on the Forerunner device has a pulse oximeter feature that can measure your overnight breathing variations. Breathing variation insights are provided to enhance awareness of your sleep environment and general wellness. Occasional or frequent breathing variations may be due to your individual lifestyle factors or your sleeping environment. Contact your doctor or healthcare provider if you're concerned about your level of breathing variations.

**NOTE:** You must turn on pulse oximeter sleep tracking to detect breathing variations (*Setting the Pulse Oximeter Mode*, page 111).

The sleep score glance displays your current breathing variations data.

**NOTE:** You may need to add the glance to your glances list (*Customizing the Glances List*, page 64).

On your Garmin Connect account, you can view additional details about breathing variations, including trends over multiple days.



# Map




Your watch can display several types of Garmin map data, including topographical contours, nearby points of interest, ski resort maps, and golf courses. You can use the Map Manager to download additional maps or manage map storage.

To purchase additional map data and view compatibility information, go to [garmin.com/maps](https://garmin.com/maps).

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






## Viewing the Map


1 Select an option to open the map:

- Press , and select **Map** to view the map without starting an activity.
- Go outside, start a GPS activity ([Starting an Activity, page 18](#)), and press  or  to scroll to the map screen.

2 If necessary, wait while the watch locates satellites.

3 Select an option to pan and zoom the map:

- To use the touchscreen, tap the map, tap and drag to position the crosshairs, and press  or  to zoom in or out.
- To use the buttons, hold , select **Pan/Zoom**, and press  or  to zoom in or out.






**NOTE:** You can press  to toggle between panning up and down, panning left and right, or zooming.


4 Hold  to select the point indicated by the crosshairs.

## 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, select an option:

- To use the touchscreen, tap the map, tap and drag to position the crosshairs, and press  or  to zoom in or out.
- To use the buttons, hold , select **Pan/Zoom**, and press  or  to zoom in or out.

**NOTE:** You can press  to toggle between panning up and down, panning left and right, or zooming.

2 Pan and zoom the map to center the location in the crosshairs.

3 Hold  to select the point indicated by the crosshairs.

4 If necessary, select a nearby point of interest.

5 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**.

## 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 Settings, page 48](#)).

From the watch face, hold , and select **Watch Settings > Map & Navigation**.

**Map Manager:** Shows the downloaded map versions and allows you to download additional maps ([Managing Maps, page 114](#)).

**Dark Mode:** Sets the map colors to either a white or black background for daytime or nighttime visibility. The Auto option adjusts the map colors based on the time of day.

**Marine Chart Mode:** Enables the nautical chart when displaying marine data. This option displays various map features in different colors so the marine data is more readable and the map reflects the drawing scheme of paper charts.

**High Contrast:** Sets the map to display data with higher contrast, for better visibility in challenging environments.

**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.

**Lock on Road:** Locks the position icon, which represents your position on the map, onto the nearest road.

**Detail:** Sets the amount of detail shown on the map. Showing more detail may cause the map to redraw more slowly.

**Symbol Set:** Sets the chart symbols in marine mode. The NOAA option displays the National Oceanic and Atmospheric Administration chart symbols. The International option displays the International Association of Lighthouse Authorities chart symbols.

## Managing Maps

1 From the watch face, hold .








2 Select **Watch Settings > Map & Navigation > Map Manager**.

3 Select an option:

- To download premium maps and activate your Outdoor Maps+ subscription for this device, select **Outdoor Maps+** ([Downloading Maps with Outdoor Maps+, page 115](#)).
- To download TopoActive maps, select **TopoActive Maps** ([Downloading TopoActive Maps, page 115](#)).



## Downloading Maps with Outdoor Maps+

Before you can download maps to your device, you must connect to a wireless network ([Connecting to a Wi-Fi Network, page 101](#)).

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Map & Navigation** > **Map Manager** > **Outdoor Maps+**.
- 3 If necessary, press , and select **Check Subscription** to activate your Outdoor Maps+ subscription for this watch.  
**NOTE:** Go to [garmin.com/outdoormaps](https://garmin.com/outdoormaps) for information about purchasing a subscription.
- 4 Select **Add Map**, and select a location.  
A preview of the map region appears.
- 5 From the map, complete one or more actions:
  - Drag the map to view different areas.
  - Pinch or spread two fingers on the touchscreen to zoom in and out of the map.
  - Select **+** and **-** to zoom in and out of the map.
- 6 Press , and select .
- 7 Select .
- 8 Select an option:
  - To edit the map name, select **Name**.
  - To change the map layers to download, select **Layers**.  
**TIP:** You can select  to view details about the map layers.
  - To modify the map region, select **Selected Area**.
- 9 Select  to download the map.  
**NOTE:** To prevent battery drain, the watch queues the map download for later, and the download starts when you connect the watch to an external power source.




## Downloading TopoActive Maps

Before you can download maps to your device, you must connect to a wireless network ([Connecting to a Wi-Fi Network, page 101](#)).

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Map & Navigation** > **Map Manager** > **TopoActive Maps** > **Add Map**.
- 3 Select a map.
- 4 Press , and select **Download**.  
**NOTE:** To prevent battery drain, the watch queues the map download for later, and the download starts when you connect the watch to an external power source.



## Deleting Maps

You can remove maps to increase the available device storage.

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Map & Navigation** > **Map Manager**.
- 3 Select an option:
  - Select **TopoActive Maps**, select a map, press , and select **Remove**.
  - Select **Outdoor Maps+**, select a map, press , and select **Delete**.

## Showing and Hiding Map Data




You can choose the map data to show on the map and save map data themes for multiple activities.

- 1 From the watch face, press .
  - 2 Select **Map**.
  - 3 Press .
  - 4 Select **Map Layers**.
  - 5 Select an option:
    - To customize the map data for an activity type, select **Activity Theme**, and select an activity.  
Changes you make to the map data settings are saved to the selected activity theme.
    - To select the installed map product to display, select **Map Type**, and select a map product.
    - To turn on specific map features, such as activity lines or saved locations, select the map feature, and select **Status > On**.
- TIP:** You can select **Apply to all Activities** to apply the setting to all activity themes.
- To view your downloaded map versions or download additional maps, select **Get More Maps** ([Managing Maps, page 114](#)).

## Navigation





### Navigating to a Destination

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

- 1 From the watch face, press .
- 2 Select **Map**.
- 3 Press .
- 4 Select **Navigate**.
- 5 Select a category.
- 6 Respond to the on-screen prompts to choose a destination.
- 7 Select **Go To**.
- 8 Select the activity you want to use while following the course.  
Navigation information appears.
- 9 Press  to begin navigation.


## Navigating to a Nearby Point of Interest

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

- 1 From the watch face, press .
- 2 Select **Map**.
- 3 Press .
- 4 Select **Navigate > Explore Nearby**.  
A list of points of interest near your current location appears.  
Select an option:
  - Select a category and, if necessary, follow the on-screen prompts.
  - Press  to open the keyboard, and enter a location name.
- 6 Select a point of interest from the search results.
- 7 Select **Go To**.
- 8 Select the activity you want to use while following the course.  
Navigation information appears.
- 9 Press  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 .
- 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 and the track to follow ② appear on the map.



## Marking and Starting Navigation to a Man Overboard Location

You can save a man overboard (MOB) location, and automatically start navigation back to it.

**TIP:** You can customize the hold function of the keys to access the MOB function ([Customizing the Button Shortcuts, page 133](#)).

- 1 From the watch face, press .
- 2 Select an activity.
- 3 Hold .
- 4 Select **Navigate > Last MOB**.  
Navigation information appears.

## Stopping Navigation



- 1 While navigating during an activity, hold .
- 2 Select the destination.  
Destination details appear.
- 3 Press .
- 4 Select **Stop Navigation**.  
Navigation to your destination stops, but your activity remains active.

## Saving Locations

### Saving Your Location



You can save your current location to navigate back to it later from the Saved app ([Using the Saved App, page 13](#)).

**NOTE:** You can add options to the controls menu ([Customizing the Controls Menu, page 58](#)).

- 1 Hold .
- 2 Select .
- 3 Follow the on-screen instructions.

### Saving a Dual Grid Location

You can save your current location using dual grid coordinates to navigate back to the same location later.

- 1 Customize a button or button combination for the **Dual Grid** feature ([Customizing the Button Shortcuts, page 133](#)).
- 2 Hold the button or button combination you customized to save a dual grid location.
- 3 Wait while the watch locates satellites.
- 4 Press  to save the location.
- 5 If necessary, press  to edit the location details.

## Sharing a Location From a Map Using the Garmin Connect App

### NOTICE

It is your responsibility to use discretion when sharing location information with others. Always ensure you are aware of and comfortable with the individual with whom you share location information.

**NOTE:** This feature is available only if your course-compatible Garmin device is connected to an iPhone device using Bluetooth technology.

You can share location information and data from Apple® Maps to your compatible Garmin device.

1 From Apple Maps, select a location.


2 Select  > .

3 If necessary, from the Garmin Connect app, select the Garmin device.

A notification appears in the Garmin Connect app indicating that the location is now available on your device ([Starting a GPS Activity From a Shared Location, page 119](#)).

### Starting a GPS Activity From a Shared Location

You can use the Garmin Connect app to share a location from Apple Maps to your watch, and navigate to that location ([Sharing a Location From a Map Using the Garmin Connect App, page 119](#)).

1 When you receive the location notification on your watch, select .

Your watch displays location information.

**TIP:** The location is saved in the Saved app ([Using the Saved App, page 13](#)).

2 Select **Go To**, and choose an activity.

3 Follow the on-screen instructions to proceed to your destination.

### Navigating to a Shared Location During an Activity

This feature is designed for activities using GPS. If GPS is turned off for your activity, you can view the location later.

**TIP:** The location is saved in the Saved app ([Using the Saved App, page 13](#)).

You can receive shared locations on your watch during a GPS activity and navigate to those locations ([Sharing a Location From a Map Using the Garmin Connect App, page 119](#)).

1 If a shared location notification appears during a GPS activity, select  to navigate to the shared location.

2 Follow the on-screen instructions to proceed to your destination.

## 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.

## 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 103](#)).

- 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 120](#)).

## 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 120](#)).

- 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.



## Creating and Following a Course on Your Device



- 1 From the watch face, press .
- 2 Select **Map**.
- 3 Press .
- 4 Select **Navigate > Create a Course**.
- 5 Enter a name using the keyboard.
- 6 Follow the on-screen prompts to add locations.
- 7 Press , and select  to save the course.
- 8 Select **Do Course**.
- 9 Select the activity you want to use while following the course.
- 10 Press  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 From the watch face, press .
- 2 Select **Map**.
- 3 Press .
- 4 Select **Navigate > Round-Trip Course**.
- 5 Select the activity you want to use while following the course.
- 6 Enter the total distance for the course.
- 7 Select a direction heading.






The device creates up to three courses. You can press  to view the courses.
- 8 Press  to select a course.
- 9 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**.
  - To save the course, select **Save**.
  - To view a list of ascents in the course, select **View Climbs**.

## 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, press .
- 2 Select **Map**.
- 3 Press .
- 4 Select **Navigate > Sight 'N Go**.
- 5 Point the top of the watch at an object, and press .
- Navigation information appears.
- 6 Press  to begin navigation.

## Setting the Compass Heading

- 1 Select an option:
  - From the compass glance, press .
  - From the ABC glance, scroll to view the compass, and press .
  - From the compass control, press .
  - From the ABC control, scroll to view the compass, and press .
- 2 Select **Lock Heading**.
- 3 Point the top of the watch toward your heading, and press .
- When you deviate from the heading, the compass displays the direction from the heading and degree of deviation.


## Setting a Reference Point

You can set a reference point to provide the heading and distance to a location or bearing.

1 Select an option:


- Hold .

**TIP:** You can set a reference point while you are recording an activity.

- From the watch face, press .

2 Select **Reference Point**.

3 Wait while the watch locates satellites.

4 Press , and select **Add Point**.

5 Select a location or bearing to use as a reference point for navigation.

The compass arrow and distance to your destination appear.

6 Point the top of the watch toward your heading.


When you deviate from the heading, the compass displays the direction from the heading and degree of deviation.

7 If necessary, press , and select **Change Point** to set a different reference point.

## Projecting a Waypoint

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

**NOTE:** You may need to add the Project Wpt. app to the activities and apps list.


1 From the watch face, press .

2 Select **Project Wpt..**

3 Press  or  to set the heading.

4 Press .

5 Press  to select a unit of measure.

6 Press  to enter the distance.

7 Press  to save.

The projected waypoint is saved with a default name.

# Safety and Tracking Features

## CAUTION

The safety and tracking features are supplemental features and should not be relied on as a primary method to obtain emergency assistance. The Garmin Connect app does not contact emergency services on your behalf.

## NOTICE

To use the safety and tracking features, the Forerunner watch must be connected to the Garmin Connect app using Bluetooth technology. Your paired phone must be equipped with a data plan and be in an area of network coverage where data is available. You can enter emergency contacts in your Garmin Connect account.

For more information about safety and tracking features, go to [garmin.com/safety](https://garmin.com/safety).

**Assistance:** Allows you to send a message with your name, LiveTrack link, and GPS location (if available) to your emergency contacts.

**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.

## 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 123](#)).

- 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 ([Using the Garmin Connect App, page 104](#)).

## 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 123](#)). 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).

- 1 From the watch face, hold .
- 2 Select **Watch 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.


## Requesting Assistance

### ⚠ 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

Before you can request assistance, you must set up emergency contacts in the Garmin Connect app ([Adding Emergency Contacts, page 123](#)). 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).

- 1 Hold .
- 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.


## Starting a GroupTrack Session

### NOTICE

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

Before you can start a GroupTrack session, you must pair the watch with a compatible phone ([Pairing Your Phone, page 98](#)).

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 Forerunner watch, hold , and select **Watch Settings > Safety & Tracking > LiveTrack > GroupTrack**.
- 2 Select an option:
  - Select **Visible To** to enable GroupTrack sessions for all of your Garmin Connect connections or only invited connections.
  - Select **Show on Map** to enable viewing connections on the map screen
  - Select **Activity Types** to select which activity types appear on the map screen during a GroupTrack session.
- 3 On the watch, start an outdoor activity.
- 4 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 the Map Data Screen, page 47](#)).

## 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. You can also listen to audio content directly through the speaker in your watch.

## 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 ([Downloading Connect IQ Features, page 105](#)).

- 1 From the watch face, press .
  - 2 Select **Connect IQ Store**.
  - 3 Follow the on-screen instructions to install a third-party music provider.
  - 4 Hold  from any screen to open the music controls.
  - 5 Select the music provider.
- NOTE:** If you want to select another provider, hold , select **Watch Settings > Music > 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 101](#)).


- 1 Hold  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  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.




## Downloading Personal Audio Content

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

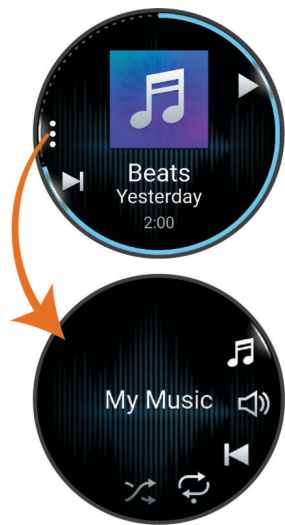
- 1 Connect the watch to your computer using the included USB cable.
- 2 On your computer, open the Garmin Express application, select your watch, and select **Music**.  
**TIP:** For Windows® computers, you can select  and browse to the folder with your audio files. For Apple computers, the Garmin Express 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.

## Listening to Music

- 1 Hold  from any screen to open the music controls.
- 2 Hold .
- 3 Select an option:
  - If this is your first time listening to music, select **Settings > Music > Music Providers**.
  - If this is not your first time listening to music, select **Music Providers**.
- 4 Select an option:
  - To listen to music downloaded to the watch from your computer, select **My Music**, and select an option ([Downloading Personal Audio Content, page 126](#)).
  - To listen to music from a third-party provider, select the name of the provider, and select a playlist.
  - To control music playback on your phone, select **Control Phone**.
- 5 If necessary, connect your Bluetooth headphones ([Connecting Bluetooth Headphones, page 128](#)).
- 6 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.


## Connecting Bluetooth Headphones

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



## Changing the Audio Mode

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


- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Music** > **Audio**.
- 3 Select an option.

## User Profile

You can update your user profile on your watch or on the Garmin Connect app.

### 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 11](#)). The watch uses this information to calculate accurate training data.

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

### Gender Settings

When you first set up the watch, you must choose a sex. Most fitness and training algorithms are binary. For the most accurate results, Garmin recommends selecting your sex assigned at birth. After the initial setup, you can customize the profile settings in your Garmin Connect account.


**Profile & Privacy:** Enables you to customize the data on your public profile.

**User Settings:** Sets your sex. If you select Not Specified, the algorithms that require a binary input will use the sex you specified when you first set up the watch.

### 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 an 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 129](#)).

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **User Profile** > **Fitness 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.

## 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 131](#)) 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.

## 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 From the watch face, hold .

2 Select **Watch Settings > User Profile > Heart Rate & Power Zones > Heart Rate**.

3 Select **Max. Heart Rate**, 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 131](#)).

4 Select **LTHR**, and enter your lactate threshold heart rate ([Lactate Threshold, page 71](#)).

You can use the Auto Detection feature to automatically record your lactate threshold during an activity ([Detecting Performance Measurements Automatically, page 131](#)).

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 **BPM** to view and edit the zones in beats per minute.
- 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 Watch Set Your Heart Rate Zones

The default settings allow the watch 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 129](#)).
- Run often with the wrist or chest heart rate monitor.
- 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 From the watch face, hold .
- 2 Select **Watch Settings > 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 **% of FTP** or **% of 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 131).
- 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 From the watch face, hold .
- 2 Select **Watch Settings > User Profile > Heart Rate & Power Zones > Auto Detection**.
- 3 Select an option.

# Power Manager Settings

From the watch face, hold , and select **Watch Settings > Power Manager**.

**Battery Saver:** Customizes system settings to extend battery life in watch mode (*Customizing the Battery Saver Feature, page 132*).

**Activity Power Modes:** Customizes system settings to extend battery life during an activity (*Customizing Power Modes, page 133*).


**Battery Percentage:** Displays remaining battery life as a percentage.

**Battery Estimates:** Displays remaining battery life as an estimated number of days or hours.

**Low Battery Alert:** Notifies you when the battery level is low.



## 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 (*Controls, page 55*).

- 1 From the watch face, hold .
- 2 Select **Watch Settings > Power Manager > Battery Saver**.  
The watch displays the hours of battery life gained with each setting change.


## Customizing the Power Mode for an Activity

You can customize the power mode settings for individual activities.


- 1 From the watch face, press .
- 2 Select **Activities**, and select an activity.
- 3 Press .
- 4 Select the activity settings.
- 5 Select **Power Mode**.
- 6 Select an option.  
The watch displays the hours of battery life available with the selected power mode.
- 7 Select an option:
  - To change the default power mode for the activity, select **Default Mode**.
  - To change when the low battery alert appears for the activity, select **Low Battery Alert**.
  - To change when the power mode automatically changes when the battery is low, select **Auto Enable Time**.
  - To automatically change the power mode when the low battery alert appears, select **Auto Enable Mode**.

## Customizing Power Modes

Your device comes preloaded with several power modes, allowing you to quickly adjust system settings, activity settings, and GPS settings to extend battery life during an activity. You can customize existing power modes and create new custom power modes.

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **Power Manager** > **Activity Power Modes**.
- 3 Select an option:
  - Select a power mode to customize.
  - Select **Add New** to create a custom power mode.
- 4 If necessary, enter a custom name.
- 5 Select an option to customize specific power mode settings.  
For example, you can change the GPS setting or disconnect your paired phone.  
The watch displays the hours of battery life gained with each setting change.
- 6 If necessary, select **Done** to save and use the custom power mode.

## System Settings

From the watch face, press , and select **Watch Settings** > **System**.

**Shortcuts:** Assigns shortcuts to buttons ([Customizing the Button Shortcuts, page 133](#)).

**Passcode:** Sets a four-digit passcode to secure your personal information when the watch is not on your wrist ([Setting Your Watch Passcode, page 134](#)).

**Do Not Disturb:** Enables do not disturb mode to dim the screen and disable alerts and notifications.

**Compass:** Calibrates the internal compass and customizes the settings ([Compass, page 134](#)).

**Altimeter & Barometer:** Calibrates the internal barometric altimeter and customizes the settings ([Altimeter and Barometer, page 135](#)).

**Time:** Adjusts the time settings ([Time Settings, page 136](#)).

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

**Voice:** Sets the watch voice dialect, voice type, and your dialect for voice controls.

**Advanced:** Opens the advanced system settings for setting the units of measure, data recording mode, and USB mode ([Advanced System Settings, page 136](#)).


**Restore & Reset:** Configures watch data backups and resets user data and settings ([Restore and Reset Settings, page 137](#)).

**Software Update:** Installs downloaded software updates, enables automatic updates, and allows you to manually check for updates ([Product Updates, page 142](#)).

**About:** Displays device, software, license, and regulatory information ([Viewing Device Information, page 138](#)).

## Customizing the Button Shortcuts

You can customize the hold function of individual buttons and combinations of buttons.


- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **System** > **Shortcuts**.
- 3 Select a button or combination of buttons to customize.
- 4 Select a function.

## Setting Your Watch Passcode

### NOTICE

If you enter your passcode incorrectly three times, the watch locks temporarily. After five incorrect attempts, the watch locks until you reset your passcode in the Garmin Connect app. If you have not paired your watch with your phone, the watch deletes your data and resets to the factory default settings after five incorrect attempts.


You can set up a watch passcode to secure your personal information when the watch is not on your wrist. If you are using the Garmin Pay feature, the watch uses the same four-digit passcode required to open your wallet ([Garmin Pay, page 15](#)).

- 1 From the watch face, hold .
- 2 Select **Watch Settings > System > Passcode > Set Passcode**.
- 3 Enter a four-digit passcode.

The next time you remove the watch from your wrist, you must enter the passcode before you can view any information.

## Changing Your Watch Passcode

You must know your existing watch passcode to change it. If you forget your passcode or make too many incorrect passcode attempts, you must reset it in the Garmin Connect app.

- 1 From the watch face, hold .
- 2 Select **Watch Settings > System > Passcode > Change Passcode**.
- 3 Enter your existing four-digit passcode.
- 4 Enter a new four-digit passcode.

The next time you remove the watch from your wrist, you must enter the passcode before you can view any information.

## 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 134](#)). You can view the compass from the controls menu ([Controls, page 55](#)), glances list ([Glances, page 60](#)), or a data screen during an activity ([Customizing the Data Screens, page 47](#)).

### Compass Settings

From the watch face, hold , and select **Watch Settings > System > Compass**.

**Calibrate:** Manually calibrates the compass sensor ([Calibrating the Compass Manually, page 135](#)).

**Display:** Sets the directional heading on the compass to letters, degrees, or milliradians.

**North Ref.:** Sets the north reference of the compass ([Setting the North Reference, page 135](#)).

**Mag. Variation:** Sets the magnetometer variation for the north reference if the **North Ref.** option is set to **User**.


**Mode:** Sets the compass to use a combination of GPS and electronic-sensor data when moving (Auto), GPS data only, or the magnetometer.

## 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 watch was already calibrated at the factory, and the watch 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 From the watch face, hold .
- 2 Select **Watch Settings > System > Compass > Calibrate**.
- 3 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 From the watch face, hold .
- 2 Select **Watch Settings > System > Compass > North Ref..**
- 3 Select an option:
  - To set geographic north as the heading reference, select **True**.
  - To set magnetic north as the heading without declination, select **Magnetic**.
  - To set grid north (000°) as the heading reference, select **Grid**.
  - To set the magnetic variation value manually, select **User > Mag. Variation**, enter the magnetic variation, and select **Done**.

## 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 and Barometer Settings, page 135](#)).

### Altimeter and Barometer Settings

From the watch face, hold , select **Watch Settings > System > Altimeter & Barometer**.

**Calibrate:** Manually calibrates the altimeter and barometer sensor.

**Auto Cal.:** Self-calibrates the sensor 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.

**Pressure:** Sets the units of measure for pressure.


**Barometer Plot:** Sets the length of time to show on the graph for the barometer glance.

## 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 From the watch face, hold .
- 2 Select **Watch Settings > System**.
- 3 Select **Altimeter & Barometer**.
- 4 Select **Calibrate**.
- 5 Select an option:
  - To enter the current elevation manually, select **Enter Manually**.
  - To calibrate automatically from the digital elevation model, select **Use DEM**.
  - To calibrate automatically from your GPS location, select **Use GPS**.

## Time Settings

From the watch face, hold , and select **Watch Settings > 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:** Sets the time if the Set Time option is set to Manual.

**Time Sync:** Syncs the time when you change time zones, and updates the time for daylight saving time ([Syncing the Time](#), page 136).

## Syncing the Time

Each time you turn on the watch and acquire satellites or open the Garmin Connect app on your paired phone, the watch automatically detects your time zone and the current time of day. You can also manually sync the time when you change time zones, and to update for daylight saving time.

- 1 From the watch face, hold .
- 2 Select **Watch Settings > System > Time > Time Sync**.
- 3 Wait while the watch connects to your paired phone or locates satellites ([Acquiring Satellite Signals](#), page 145).

**TIP:** You can press  to switch the source.

## Advanced System Settings

From the watch face, hold , and select **Watch Settings > System > Advanced**.

**Format:** Sets general format preferences, such as the units of measure, pace and speed shown during activities, and the start of the week ([Changing the Units of Measure](#), page 137). You can also set geographical position format and datum options.


**Data Recording:** Configures how the watch records activity data ([Data Recording Settings](#), page 137).

**USB Mode:** Sets the watch to use MTP (media transfer protocol) or Garmin mode when connected to a computer.



## Changing the Units of Measure

You can customize units of measure for distance, pace and speed, elevation, and more.

- 1 From the watch face, hold .
- 2 Select **Watch Settings** > **System** > **Advanced** > **Format** > **Units**.
- 3 Select a measurement type.
- 4 Select a unit of measure.

## Data Recording Settings

From the watch face, hold , and select **Watch Settings** > **System** > **Advanced** > **Data Recording**.

**Frequency:** Sets how often the watch records activity data. The **Smart** frequency 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. It records key points where you change direction, pace, or heart rate. Your activity record is smaller, allowing you to store more activities on the device memory.

**Log HRV:** Enables the watch to record your heart rate variability during an activity (*Heart Rate Variability Status*, page 69).

**Position Enhancement:** Enables the watch to record more position details for certain activities, such as running or hiking.

## Restore and Reset Settings

You can back up the settings from an existing Garmin watch and restore those settings to a different, compatible Garmin watch using the Garmin Connect app (*Restoring Your Settings and Data from Garmin Connect*, page 137). Settings include sport profiles, glances, user settings, workouts, and more.

From the watch face, hold , and select **Watch Settings** > **System** > **Restore & Reset**.

**Automatic Backups:** Periodically backs up your settings to your Garmin Connect account.

**Back Up Now:** Manually backs up your settings to your Garmin Connect account.


**View Report:** Displays any issues from when your watch last restored settings.

**NOTE:** This setting only appears if some watch settings did not restore properly.

**Backup Contents:** Displays the type of data that is saved.

**Reset:** Resets the selected settings to the factory default values (*Resetting All Default Settings*, page 138).


## Restoring Your Settings and Data from Garmin Connect

- 1 From the Garmin Connect app, select ●●●.
  - 2 Select **Garmin Devices**, and select your watch.
  - 3 Select **System** > **Restore & Reset** > **Device Backups**.
  - 4 Select a backup from the list.
  - 5 Select **Restore from Backup** > **Restore**.
  - 6 Follow the on-screen instructions.
  - 7 Wait for your watch to sync with the app.
  - 8 On your watch, press , and select ✓.
  - 9 Follow the on-screen instructions.
- The watch restarts and restores your settings and data.

## Resetting All Default Settings

Before you reset all default settings, you should sync the watch with the Garmin Connect app to upload your activity data.


You can reset all of the watch settings to the factory default values.

- 1 From the watch face, hold .
- 2 Select **Watch Settings > System > Restore & Reset > Reset**.
- 3 Select an option:
  - To reset all of the watch settings to the factory default values and save all user-entered information and activity history, select **Reset Default Settings**.
  - To delete all activities from the history, select **Delete All Activities**.
  - To reset all distance and time totals, select **Reset Totals**.
  - To reset all of the watch settings to the factory default values and delete all user-entered information and activity history, select **Delete Data and Reset Settings**.

**NOTE:** If you have set up a Garmin Pay wallet, this option deletes the wallet from your watch. If you have music stored on your watch, this option deletes your stored music.


## 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 **Watch 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 From the settings menu, select **System**.
- 3 Select **About**.

# Device Information

## About the AMOLED Display

By default, the watch settings are optimized for battery life and performance ([Tips for Maximizing the Battery Life, page 143](#)).

Image persistence, or pixel "burn-in," is normal behavior for AMOLED devices. To extend the display life, you should avoid displaying static images at high brightness levels for long time periods. To minimize burn-in, the Forerunner display turns off after the selected timeout ([Display and Brightness Settings, page 91](#)). You can turn your wrist toward your body, tap the touchscreen, or press a button to wake the watch.

## Charging the Watch

### ⚠ WARNING

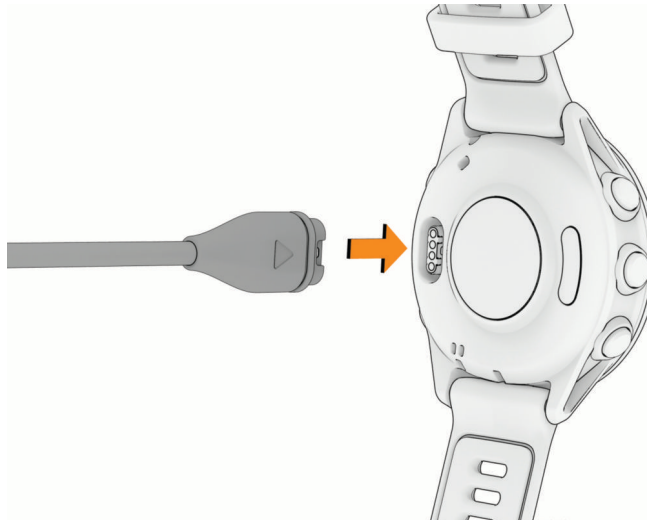
This device contains a lithium-ion battery. See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

### 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 139](#)).

Your watch comes with a proprietary charging cable. For optional accessories and replacement parts, go to [buy.garmin.com](http://buy.garmin.com), or contact your Garmin dealer.

- 1 Plug the cable (▲ end) into the charging port on your watch.



- 2 Plug the other end of the cable into a USB-C® computer port or AC adapter (5 W minimum power rating).  
The watch displays the current battery charge level.
- 3 Disconnect the watch after the battery charge level reaches 100%.

## Device Care

### NOTICE

Do not use a sharp object to clean the device.

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

Do not expose the microphone and speaker openings to sunscreen or other chemicals. Doing so could clog or otherwise adversely affect the microphone and speaker, degrading their performance.

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.

Avoid pressing the buttons under water.

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

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.

### NOTICE

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

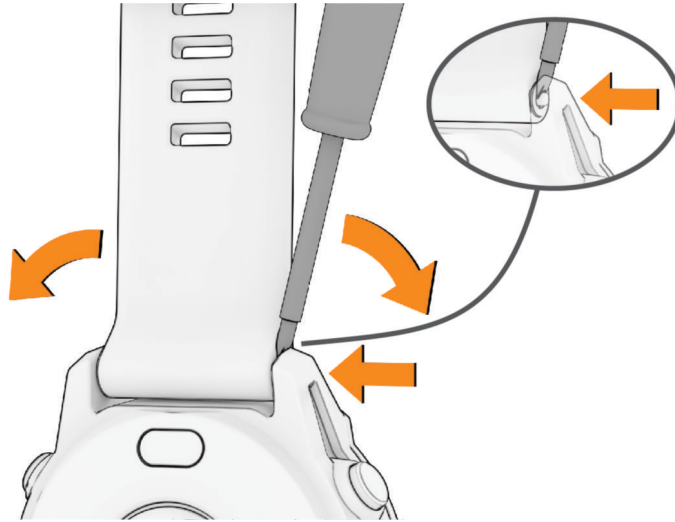
**TIP:** For more information, go to [garmin.com/fitandcare](https://garmin.com/fitandcare).

- 1 Rinse with water, or use a damp lint-free cloth.
- 2 Allow the watch to dry completely.

## 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.



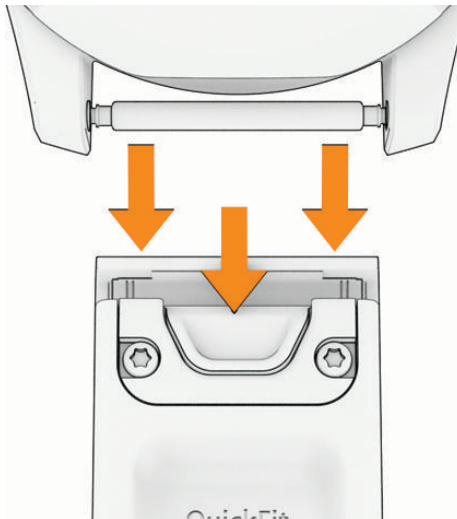
- 2 Remove the band from the watch.

- 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.

## Specifications

Battery type	Rechargeable, built-in lithium-ion battery
Water rating	Swim, 5 ATM <sup>1</sup>
Media storage	Up to 32 GB
Operating temperature range	From -20° to 60°C (from -4° to 140°F)
Charging temperature range	From 0° to 45°C (from 32° to 113°F)
European Union (EU) wireless frequencies (power)	2.4 GHz @ 17 dBm maximum 13.56 MHz @ 65 dBuA/m maximum
EU SAR values	0.11 W/kg limb

## Battery Life Information

The actual battery life depends on the features enabled on your watch, such as activity tracking, wrist-based heart rate, phone notifications, GPS, and connected sensors.

Mode	Battery Life
GPS Only GNSS mode	Up to 26 hr.
Auto Select GNSS mode	Up to 23 hr.
All + Multi-Band GNSS mode	Up to 21 hr.
GPS Only GNSS mode, with music playback	Up to 14 hr.
Auto Select GNSS mode, with music playback	Up to 13 hr.
All + Multi-Band GNSS mode, with music playback	Up to 12 hr.
Smartwatch mode with activity tracking, phone notifications, and wrist-based heart rate	Up to 15 d.

## Troubleshooting

### Product Updates

Your device automatically checks for updates when paired with a phone using Bluetooth technology or when connected to Wi-Fi. You can manually check for updates from the system settings ([System Settings, page 133](#)). On your phone, install the Garmin Connect app.

This provides easy access to these services for Garmin devices:

- Software updates
- Map updates
  - NOTE:** Map updates are available only through Garmin Express.
- Course updates
- Data uploads to Garmin Connect
- Product registration

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





## Getting More Information

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

- Go to [support.garmin.com](https://support.garmin.com) for additional manuals, articles, and software updates.
- Go to [buy.garmin.com](https://buy.garmin.com), or contact your Garmin dealer for information about optional accessories and replacement parts.
- Go to [www.garmin.com/ataccuracy](https://www.garmin.com/ataccuracy) for information about feature accuracy.  
This is not a medical device.

## My device is in the wrong language

You can change the watch language selection if you have accidentally selected the wrong language.

- 1 From the watch face, hold .
- 2 Select .
- 3 Select .
- 4 Scroll to the seventh item in the list, and press .
- 5 Select your language.



## Tips for Maximizing the Battery Life

To extend the life of the battery, you can try these tips.

- Change the power mode during an activity ([Customizing Power Modes, page 133](#)).
- Turn on the battery saver feature from the controls menu ([Controls, page 55](#)).
- Reduce the screen timeout ([Display and Brightness Settings, page 91](#)).
- Decrease the flashlight brightness and edit the strobe settings ([Editing the Custom Flashlight Strobe, page 59](#)).
- Stop using the **Always On Display** screen timeout option, and select a shorter timeout ([Display and Brightness Settings, page 91](#)).
- Reduce the screen brightness ([Display and Brightness Settings, page 91](#)).
- Use UltraTrac satellite mode for your activity ([Satellite Settings, page 53](#)).
- Turn off Bluetooth technology when you are not using connected features ([Controls, page 55](#)).
- When pausing your activity for a longer period of time, use the **Resume Later** option ([Stopping an Activity, page 19](#)).
- 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 5](#)).
- Limit the phone notifications the watch displays ([Managing Notifications, page 100](#)).
- Stop broadcasting heart rate data to paired devices ([Broadcasting Heart Rate Data, page 109](#)).
- Turn off wrist-based heart rate monitoring ([Wrist Heart Rate Monitor Settings, page 109](#)).  
**NOTE:** Wrist-based heart rate monitoring is used to calculate vigorous intensity minutes and calories burned.
- Turn on manual pulse oximeter readings ([Setting the Pulse Oximeter Mode, page 111](#)).

## Restarting Your Watch

If your watch stops responding, you can try these steps to restart it.

- Hold  until the watch turns off, and hold  to turn on the watch.
- Plug the watch into a USB-C charging port for at least 30 seconds, unplug the cable, and plug the cable in again.

## Is my phone compatible with my watch?


The Forerunner watch is compatible with phones using Bluetooth technology.

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

Go to [garmin.com/voicefunctionality](https://garmin.com/voicefunctionality) for voice functionality 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, and select ●●● > **Garmin Devices** > **Add Device** to enter pairing mode.
- From the watch face, hold , and select **Watch Settings** > **Connectivity** > **Phone** > **Pair Phone**.

## 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 From the watch face, hold .
- 2 Select **Watch Settings** > **Connectivity** > **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 47](#)).

## My headphones will not connect to the watch

If your Bluetooth headphones were previously connected to your phone, they may connect to your phone automatically instead of connecting to your watch. You can try these tips.

- Turn off Bluetooth technology on your phone.  
Refer to the owner's manual for your phone for more information.
- Stay 10 m (33 ft.) away from your phone while connecting your headphones to your watch.
- Pair your headphones with your watch ([Connecting Bluetooth Headphones, page 128](#)).



## 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.

## The speaker or microphone is quiet after water exposure

After swimming, bathing, or exposing the watch to water, residual water in the speaker and microphone ports may cause the watch to be temporarily quieter than usual. The water does not cause harm to the watch, but it may take up to 24 hours for the water to evaporate. Follow the device care instructions when you clean your watch after water exposure ([Device Care, page 139](#)). You can use the water ejection feature to help remove water from the ports ([Controls, page 55](#)).

## How can I undo a lap button press?

During an activity, you might accidentally press the lap button. In most cases,  appears on the screen next to a button, and you will have a few seconds to press the button and discard the most recent lap or sport change. The lap undo feature is available for activities that support manual laps, manual sport changes, and automatic sport changes. The lap undo feature is not available for activities that trigger automatic laps, runs, rests, or pauses, such as gym activities, pool swimming, and workouts.

## 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 [garmin.com/aboutGPS](https://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.

## The heart rate on my watch is not accurate

For more information on your heart rate sensor, go to [garmin.com/hearttrate](https://garmin.com/hearttrate).

## The activity 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 temperature external temperature sensor to view accurate ambient temperature readings while wearing the watch.

## Exiting Demo Mode

Demo mode shows a preview of features on your watch.

- 1 Quickly press  eight times.
- 2 Select .

## Activity Tracking

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

### 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 104](#)).
  - Sync your step count with the Garmin Connect app ([Using the Garmin Connect App, page 104](#)).

- 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.).

- 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.

# Data Fields

**NOTE:** Not all data fields are available for all activity types. Some data fields require ANT+ or Bluetooth 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.

## Cadence Fields

Name	Description
Average Cadence	Cycling. The average cadence for the current activity.
Average Cadence	Running. The average cadence for the current activity.
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).
Lap Cadence	Cycling. The average cadence for the current lap.
Lap Cadence	Running. The average cadence for the current 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.

## Charts

Name	Description
Barometer Chart	A chart showing the barometric pressure over time.
Elevation Chart	A chart showing the elevation over time.
Heart Rate Chart	A chart showing your heart rate throughout the activity.
Pace Chart	A chart showing your pace throughout the activity.
Power Chart	A chart showing your power throughout the activity.
Speed Chart	A chart showing your speed throughout the activity.

## Compass Fields

Name	Description
Compass Heading	The direction you are moving based on the compass.
GPS Heading	The direction you are moving based on GPS.
Heading	The direction you are moving.

### Distance Fields

Name	Description
Distance	The distance traveled for the current track or activity.
Int. Distance	The distance traveled for the current interval.
Lap Distance	The distance traveled for the current lap.
Last Lap Dist.	The distance traveled for the last completed lap.
Last Move Dist.	The distance traveled for the last completed move.
Move Distance	The distance traveled for the current move.
Nautical Distance	The distance traveled in nautical meters or nautical feet.

### Elevation Fields

Name	Description
Average Ascent	The average vertical distance of ascent since the last reset.
Average Descent	The average vertical distance of descent since the last reset.
Elevation	The altitude of your current location above or below sea level.
Glide Ratio	The ratio of horizontal distance traveled to the change in vertical distance.
GPS Elevation	The altitude of your current location using 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%.
Lap Ascent	The vertical distance of ascent for the current lap.
Lap Descent	The vertical distance of descent for the current lap.
Last Lap Ascent	The vertical distance of ascent for the last completed lap.
Last Lap Descent	The vertical distance of descent for the last completed lap.
Last Move Ascent	The vertical distance of ascent for the last completed move.
Last Move Descent	The vertical distance of descent for the last completed move.
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.
Minimum Elevation	The lowest elevation reached since the last reset.
Move Ascent	The vertical distance of ascent for the current move.
Move Descent	The vertical distance of descent for the current move.
Total Ascent	The total elevation distance ascended since the last reset.
Total Descent	The total elevation distance descended since the last reset.

## Floors Fields

Name	Description
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.

## Gears

Name	Description
Di2 Battery	The remaining battery power of a Di2 sensor.
Front	The front bike gear from a gear position sensor.
Gear Battery	The battery status of a gear position sensor.
Gear Combo	The current gear combination from a gear position sensor.
Gears	The front and rear bike gears 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.
Rear	The rear bike gear from a gear position sensor.

## Graphical

Name	Description
Cadence Gauge	Running. A color gauge showing your current cadence range.
Compass Gauge	The direction you are moving based on the compass.
GCT Balance Gauge	A color gauge showing the left/right balance of ground contact time while running.
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.
Heart Rate Gauge	A color gauge showing your current heart rate zone.
Heart Rate Zones Ratio	A color gauge showing the ratio of time spent in each heart rate zone.
PacePro Gauge	Running. Your current split pace and your target split pace.
Power Gauge	A color gauge showing your current power zone.
Stamina Gauge (Dist.)	A gauge showing your current stamina distance remaining.
Stamina Gauge (Time)	A gauge showing your current stamina time remaining.
Step Speed Loss Gauge	A color gauge showing your current step speed loss while running.
Step Speed Loss % Gauge	A color gauge showing your average step speed loss percent.
Total Ascent/Descent Gauge	The total elevation distances ascended and descended during the activity or since the last reset.
Training Effect Gauge	The impact of the current activity on your aerobic and anaerobic fitness levels.
Vertical Oscillation Gauge	A color gauge showing the amount of bounce while you are running.

Name	Description
Vertical Ratio Gauge	A color gauge showing the ratio of vertical oscillation to stride length.

#### Heart Rate Fields

Name	Description
% Heart Rate Reserve	The percentage of heart rate reserve (maximum heart rate minus resting heart rate).
Aerobic Training Effect	The impact of the current activity on your aerobic fitness level.
Anaerobic Training Effect	The impact of the current activity on your anaerobic fitness level.
Avg. %HRR	The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current activity.
Average HR	The average heart rate for the current activity.
Avg. HR %Max.	The average percentage of maximum heart rate for the current activity.
Heart Rate	Your heart rate in beats per minute (bpm). Your device must have wrist-based heart rate or be connected to a compatible heart rate monitor.
HR %Max.	The percentage of maximum heart rate.
HR Zone	The current range of your heart rate (1 to 5). The default zones are based on your user profile and maximum heart rate (220 minus your age).
Int. Avg. %HRR	The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current swim interval.
Int. Avg. %Max.	The average percentage of maximum heart rate for the current swim interval.
Int. Avg. HR	The average heart rate for the current swim interval.
Int. Max. %HRR	The maximum percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current swim interval.
Int. Max. %Max.	The maximum percentage of maximum heart rate for the current swim interval.
Int. Max. HR	The maximum heart rate for the current swim interval.
Lap %HRR	The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current lap.
Lap HR	The average heart rate for the current lap.
Lap HR %Max.	The average percentage of maximum heart rate 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 HR	The average heart rate for the last completed lap.
L. Lap HR %Max.	The average percentage of maximum heart rate for the last completed lap.
Last Move %HRR	The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the last completed move.
Last Move HR	The average heart rate for the last completed move.
L. Move HR %Max.	The average percentage of maximum heart rate for the last completed move.

Name	Description
Move %HRR	The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current move.
Move HR	The average heart rate for the current move.
Move HR %Max.	The average percentage of maximum heart rate for the current move.
Time in Zone	The time elapsed in each heart rate zone.

#### Lengths Fields

Name	Description
Interval Lengths	The number of pool lengths completed during the current interval.
Lengths	The number of pool lengths completed during the current activity.

#### Navigation Fields

Name	Description
Bearing	The direction from your current location to a destination. You must be navigating for this data to appear.
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.
Distance Remaining	The remaining distance to the final destination. You must be navigating for this data to appear.
Distance To Next	The remaining distance to the next waypoint on the route. You must be navigating for this data to appear.
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.
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.
Lat/Lon	The current position in latitude and longitude regardless of the selected position format setting.
Location	The current position using the selected position format setting.
Next Fork	The distance to the next fork on a trail based on the NextFork™ map guide.

Name	Description
Next Waypoint	The next point on the route. You must be navigating for this data to appear.
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.
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.
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 Speed to Target	The rate of ascent or descent to a predetermined altitude. You must be navigating for this data to appear.

#### Other Fields

Name	Description
Active Calories	The calories burned during the activity.
Ambient Pressure	The uncalibrated environmental pressure.
Barometric Pressure	The current calibrated environmental pressure.
Battery Hours	The number of hours remaining before the battery power is depleted.
Battery Level	The remaining battery power.
COG	The actual direction of travel, regardless of the course steered and temporary variations in heading.
Distance to Start Line	The remaining distance to the race starting line. 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.
GPS	The strength of the GPS satellite signal.
Intervals	The number of intervals completed for the current activity.
Laps	The number of laps completed for the current activity.
Last Round Reps	The number of repetitions in the last round of the activity.
Lift	The amount of lift time during a sailing 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.
Moves	The total number of moves completed during the current activity.
Performance Condition	The performance condition score is a real-time assessment of your ability to perform.
Reps	During a gym activity, the number of repetitions in a workout set.
Respiration Rate	Your respiration rate in breaths per minute (brpm).



Name	Description
Rounds	The number of exercise groups performed in an activity, such as jump rope.
Steps	The number of steps taken during the current activity.
Stress	Your current stress level.
Sunrise	The time of sunrise based on your GPS position.
Sunset	The time of sunset based on your GPS position.
Tack Assist	A gauge to help you determine if your boat is being lifted or headed.
Time of Day	The time of day based on your current location and time settings (format, time zone, daylight saving time).
Total Calories	The amount of total calories burned for the day.

#### Pace Fields

Name	Description
500m Pace	The current rowing pace per 500 meters.
Average 500m Pace	The average rowing pace per 500 meters for the current activity.
Average Pace	The average pace for the current activity.
Grade Adjusted Pace	The average pace adjusted by the steepness of the terrain.
Int. Pace	The average pace for the current interval.
Lap 500m Pace	The average rowing pace per 500 meters for the current lap.
Lap Pace	The average pace for the current lap.
Last Lap 500m Pace	The average rowing pace per 500 meters for the last lap.
Last Lap Pace	The average pace for the last completed lap.
Last Len. Pace	The average pace for your last completed pool length.
Last Move Pace	The average pace for the last completed move.
Move Pace	The average pace for the current move.
Pace	The current pace.

#### PacePro Fields

Name	Description
Next Split Distance	Running. The total distance of the next split.
Next Split Target Pace	Running. The target pace for the next split.
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.

## Power Fields

Name	Description
% FTP	The current power output as a percentage of functional threshold power.
3s Avg. Balance	The 3-second moving average of the left/right power balance.
3s Power	The 3-second moving average of power output.
3s Power to Weight	The 3-second average power measured in watts per kilogram for the current activity.
10s Avg. Balance	The 10-second moving average of the left/right power balance.
10s Power	The 10-second moving average of power output.
10s Power to Weight	The 10-second average power measured in watts per kilogram for the current activity.
30s Avg. Balance	The 30-second moving average of the left/right power balance.
30s Power	The 30-second moving average of power output.
30s Power to Weight	The 30-second average power measured in watts per kilogram for the current activity.
Avg. Balance	The average left/right power balance for the current activity.
Average Left PP	The average power phase angle for the left leg for the current activity.
Avg. Power	The average power output for the current activity.
Avg. Right PP	The average power phase angle for the right leg for the current activity.
Avg. Left PPP	The average power phase peak angle for the left leg for the current activity.
Avg. PCO	The average platform center offset for the current activity.
Avg. Power to Weight	The average power measured in watts per kilogram for the current activity.
Avg. Right PPP	The average power phase peak angle for the right leg for the current activity.
Balance	The current left/right power balance.
Intensity Factor	The Intensity Factor™ for the current activity.
Lap Balance	The average left/right power balance for the current lap.
Lap Left PPP	The average power phase peak angle for the left leg for the current lap.
Lap Left PP	The average power phase angle for the left leg for the current lap.
Lap Max. Power	The top power output for the current lap.
Lap NP	The average Normalized Power™ for the current lap.
Lap PCO	The average platform center offset for the current lap.
Lap Power	The average power output for the current lap.
Lap Power to Weight	The average power measured in watts per kilogram for the current lap.
Lap Right PPP	The average power phase peak angle for the right leg for the current lap.
Lap Right PP	The average power phase angle for the right leg for the current lap.
Last Lap Max. Power	The top power output for the last completed lap.
Last Lap NP	The average Normalized Power for the last completed lap.

Name	Description
Last Lap Power	The average power output for the last completed lap.
Left PPP	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 PP	The current power phase angle for the left leg. Power phase is the pedal stroke region where positive power is produced.
Max. Power	The top power output for the current activity.
NP	The Normalized Power for the current activity.
Pedal Smooth.	The measurement of how evenly a rider is applying force to the pedals throughout each pedal stroke.
PCO	The platform center offset. Platform center offset is the location on the pedal platform where force is applied.
Power	The current power output in watts. For skiing activities, your device must be connected to a compatible heart rate monitor.
Power to Weight	The current power measured in watts per kilogram.
Power Zone	The current range of power output based on your FTP or custom settings.
Right PPP	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 PP	The current power phase angle for the right leg. Power phase is the pedal stroke region where positive power is produced.
Time in Zone	The time elapsed in each power zone.
Time Seat.	The time spent seated while pedaling for the current activity.
Time Seat. Lap	The time spent seated while pedaling for the current lap.
Time Stand.	The time spent standing while pedaling for the current activity.
Time Stand. Lap	The time spent standing while pedaling for the current lap.
TSS	The Training Stress Score™ for the current activity.
Torque Eff.	The measurement of how efficiently a rider is pedaling.
Work	The accumulated work performed (power output) in kilojoules.

#### Rest Fields

Name	Description
Repeat On	The timer for the last interval plus the current rest (pool swimming).
Rest Timer	The timer for the current rest (pool swimming).

## Run Dynamics

Name	Description
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 Step Speed Loss	The average measure of step speed loss for the current activity.
Avg. Step Speed Loss Percent	The average ratio of step speed loss over speed for the current activity.
Average Stride Length	The average stride length for the current session.
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.
GCT Balance	The left/right balance of ground contact time while running.
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.
Lap GCT Balance	The average ground contact time balance for the current lap.
Lap Ground Contact Time	The average amount of ground contact time for the current lap.
Lap Step Speed Loss	The average step speed loss for the current lap.
Lap Step Speed Loss Percent	The average ratio of step speed loss over speed for the current lap.
Lap Stride Length	The average stride length 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.
Step Speed Loss	The measure of step speed loss in centimeters per second while running.
Step Speed Loss Percent	The ratio of step speed loss over speed while running.
Stride Length	The length of your stride from one footfall to the next, measured in meters.
Vertical Oscillation	The amount of bounce while you are running. The vertical motion of your torso, measured in centimeters for each step.
Vertical Ratio	The ratio of vertical oscillation to stride length.

**Speed Fields**

Name	Description
Avg. Moving Speed	The average speed when moving for the current activity.
Avg. Overall Speed	The average speed for the current activity, including both moving and stopped speeds.
Avg. Speed	The average speed for the current activity.
Avg. SOG	The average speed of travel for the current activity, regardless of the course steered and temporary variations in heading.
Lap SOG	The average speed of travel for the current lap, regardless of the course steered and temporary variations in heading.
Lap Speed	The average speed for the current lap.
Last Lap SOG	The average speed of travel for the last completed lap, regardless of the course steered and temporary variations in heading.
Last Lap Speed	The average speed for the last completed lap.
Last Move Speed	The average speed for the last completed move.
Max. SOG	The maximum speed of travel for the current activity, regardless of the course steered and temporary variations in heading.
Maximum Speed	The top speed for the current activity.
Move Speed	The average speed for the current move.
Speed	The current rate of travel.
SOG	The actual speed of travel, regardless of the course steered and temporary variations in heading.
Vertical Speed	The rate of ascent or descent over time.

**Stamina Fields**

Name	Description
Stamina	The current remaining stamina.
Distance Remaining	The current stamina distance remaining at the current effort.
Stamina Potential	The remaining potential stamina.
Time Remaining	The current stamina time remaining at the current effort.

## Stroke Fields

Name	Description
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 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.
Distance Per Stroke	Paddle sports. The distance traveled per stroke.
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.
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 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.
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 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 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.
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.

### Swolf Fields

Name	Description
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 ( <a href="#">Swim Terminology, page 26</a> ). In open water swimming, 25 meters is used to calculate your swolf score.
Interval Swolf	The average swolf score for the current interval.
Lap Swolf	The swolf score for the current lap.
Last Lap Swolf	The swolf score for the last completed lap.
Last Length Swolf	The swolf score for the last completed pool length.

### Temperature Fields

Name	Description
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.
Temperature	The temperature of the air. Your body temperature affects the temperature sensor. You can pair a temperature sensor with your device to provide a consistent source of accurate temperature data.

### Timer Fields

Name	Description
Active Time	The total time of active movement for the current activity.
Average Lap Time	The average lap time for the current activity.
Average Move Time	The average move time for the current activity.
Average Pose Time	The average pose time for the current activity.
Elapsed Time	The total time recorded. For example, if you start the activity 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.
Estimated Finish Time	The estimated finish time of the current activity.
Interval Time	The stopwatch time for the current interval.
Lap Time	The stopwatch time for the current lap.
Last Lap Time	The stopwatch time for the last completed lap.
Last Move Time	The stopwatch time for the last completed move.
Last Pose Time	The stopwatch time for the last completed pose.
Move Time	The stopwatch time for the current move.
Moving Time	The total time moving for the current activity.
Multisport Time	The total time for all sports in a multisport activity, including transitions.

Name	Description
Overall Ahead/Behind	The overall time ahead or behind of the target pace or speed.
Pose Time	The stopwatch time for the current pose.
Race Timer	The time elapsed in the current sail race.
Set Timer	During a strength training activity, the amount of time spent in the current workout set.
Stopped Time	The total time stopped for the current activity.
Swim Time	The swimming time for the current activity, not including rest time.
Timer	The current time of the activity timer.

#### Workout Fields

Name	Description
Reps to Go	During a workout, the remaining repetitions.
Step Duration	The time or distance remaining for the workout step.
Step Pace	The current pace during the workout step.
Step Speed	The current speed during the workout step.
Step Time	The time elapsed for the workout step.

## Appendix








## Color Gauges and Running Dynamics Data

The running dynamics screen displays a color gauge for the primary metric. You can customize 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, lower step speed loss, 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 [garmin.com/runningdynamics](https://garmin.com/runningdynamics) 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	Step Speed Loss Range
 Purple	>95	>185 spm	<218 ms	<8.2 cm/s
 Blue	70–95	174–185 spm	218–248 ms	8.2–12.1 cm/s
 Green	30–69	163–173 spm	249–277 ms	12.2–19.7 cm/s
 Orange	5–29	151–162 spm	278–308 ms	19.8–25.9 cm/s
 Red	<5	<151 spm	>308 ms	>25.9 cm/s

## 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 600, HRM-Fit, or HRM-Pro series 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%

## 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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## Running Economy Ratings

Color Zone	Rating	Males	Females
 Pink	Elite	<185	<190
 Purple	Superior	185 to 189	190 to 194
 Blue	Expert	190 to 194	195 to 199
 Green	Well Trained	195 to 204	200 to 209
 Yellow	Trained	205 to 214	210 to 219
 Orange	Intermediate	215 to 224	220 to 229
 Red	Recreational	> 224	> 229

## FTP Ratings

These tables include classifications for functional threshold power (FTP) estimates by sex.

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	5600-5999	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.

