

# fēnix<sup>™</sup> 2 Owner's Manual



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# **Table of Contents**

Introduction	
Introduction	
Charging the Device	1
Keys	1
Locking the Keys	1
Viewing the Data Pages	1
Starting an Activity	1
Stopping an Activity	1
Support and Updates	1
Setting Up Garmin Express	2
Waypoints, Routes, and Tracks	
Waypoints	
Creating a Waypoint	
Navigating to a Waypoint	
Finding a Waypoint by Name	
Changing the Search Area	
Editing a Waypoint	
Increasing the Accuracy of a Waypoint Location	2
Projecting a Waypoint	
Deleting a Waypoint	
Deleting All Waypoints	
Routes	2
Creating a Route	2
Editing the Name of a Route	2
Editing a Route	
Viewing a Route on the Map	2
Deleting a Route	
Reversing a Route	
Tracks	
Saving a Track	
Creating a Track from a Saved Activity	
Viewing Details about the Track	
Deleting a Track	
Sending and Receiving Data Wirelessly	
Garmin Adventures	3
Navigation	
Navigating to a Destination	3
Navigating with Sight 'N Go	
Compass	
Navigating Using the Compass	
Map	
Panning and Zooming the Map	
Navigating To Your Starting Point	4
Navigating To Your Starting Point	4
Navigating To Your Starting Point	4
Navigating To Your Starting Point	4
Navigating To Your Starting Point	4 4
Navigating To Your Starting Point	4 4 4 <b>4</b>
Navigating To Your Starting Point	4 4 <b>4</b> 4
Navigating To Your Starting Point	4 4 4 4 4
Navigating To Your Starting Point	4 4 4 4 4 4
Navigating To Your Starting Point	4 4 4 4 4 4 4
Navigating To Your Starting Point	4 4 4 4 4 4 4
Navigating To Your Starting Point	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Navigating To Your Starting Point	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Navigating To Your Starting Point	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Navigating To Your Starting Point	4 4 4 4 4 4 4 4 4 4 5
Navigating To Your Starting Point	44 4 4 4 4 4 4 4 5 5
Navigating To Your Starting Point	4 4 4 4 4 4 4 4 4 4 5 5 5 5
Navigating To Your Starting Point	44 4 44444 <b>4</b> 4455555
Navigating To Your Starting Point	44 4 44444 <b>4</b> 4455555
Navigating To Your Starting Point	44 4 <b>4</b> 4 4 4 4 4 5 5 5 5 5 5 5 5
Navigating To Your Starting Point	44 4 <b>4</b> 4 4 4 4 4 5 5 5 5 5 5 5 5

Going for an Open Water Swim	5
Swim Terminology	. 6
Multisport	6
Starting a Multisport Activity	. 6
Editing a Multisport Activity	6
Workouts	6
Following a Workout From the Web	6
Starting a Workout	. O
Indoor Activities	. ხ
Starting an Indoor Activity	
Using History	. 6
Training	6
Garmin Connect	
Setting Up Your User Profile	
Fitness Goals	7
About Heart Rate Zones	_
About Lifetime Athletes	
Running Dynamics	
Training with Running Dynamics	. 7
Running Dynamics Data and Gauges	. 8
Tips for Missing Running Dynamics Data	
About VO2 Max. Estimates	
Getting Your VO2 Max. Estimate	
VO2 Max. Standard Ratings	
Recovery Advisor	. 9
Turning On the Recovery Advisor	
Viewing Your Recovery Time	
About Training Effect	
Viewing Your Predicted Race Times	9
Using Virtual Partner®	9
Applications	
Clock	
Setting the Alarm	
Changing the Alarm Clock Sound	
Starting the Countdown Timer	40
Using the Stopwatch	
	10
Using the Stopwatch Adding a Custom Time Zone	10 10
Using the Stopwatch	10 10 10
Using the Stopwatch	10 10 10 10
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs	10 10 10 10
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote	10 10 10 10 10
Using the Stopwatch Adding a Custom Time Zone. Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera	10 10 10 10 10 10
Using the Stopwatch Adding a Custom Time Zone. Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera	10 10 10 10 10 10
Using the Stopwatch Adding a Custom Time Zone. Editing a Custom Time Zone. Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device	10 10 10 10 10 10
Using the Stopwatch Adding a Custom Time Zone. Editing a Custom Time Zone. Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings	10 10 10 10 10 10 10
Using the Stopwatch Adding a Custom Time Zone. Editing a Custom Time Zone. Calculating the Size of an Area. Viewing the Almanacs. VIRB Remote. Controlling a VIRB Action Camera.  Customizing Your Device Activity Settings. Customizing the Data Pages.	10 10 10 10 10 10 10 10
Using the Stopwatch Adding a Custom Time Zone. Editing a Custom Time Zone. Calculating the Size of an Area. Viewing the Almanacs. VIRB Remote. Controlling a VIRB Action Camera.  Customizing Your Device Activity Settings Customizing the Data Pages Alerts	10 10 10 10 10 10 10 10
Using the Stopwatch Adding a Custom Time Zone. Editing a Custom Time Zone. Calculating the Size of an Area. Viewing the Almanacs. VIRB Remote. Controlling a VIRB Action Camera.  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause	10 10 10 10 10 10 10 10 11 11 11
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area. Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap®	10 10 10 10 10 10 10 10 11 11 11 12 12
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac	10 10 10 10 10 10 10 10 11 11 11 12 12
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance	10 10 10 10 10 10 10 10 11 11 11 12 12 12
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings	10 10 10 10 10 10 10 11 11 11 12 12 12
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings	10 10 10 10 10 10 10 11 11 11 12 12 12 12
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings	10 10 10 10 10 10 10 11 11 11 12 12 12 12
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings	10 10 10 10 10 10 10 11 11 11 12 12 12 12 13
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings Altimeter Settings Bluetooth® Connected Features	10 10 10 10 10 10 10 11 11 11 12 12 12 12 13 13
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings Altimeter Settings Bluetooth® Connected Features Pairing Your Smartphone with Your fēnix 2 Device	10 10 10 10 10 10 10 11 11 11 12 12 12 11 13 13
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings Altimeter Settings Bluetooth® Connected Features Pairing Your Smartphone with Your fēnix 2 Device General Settings	10 10 10 10 10 10 10 11 11 11 12 12 12 11 13 13
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings Altimeter Settings Bluetooth® Connected Features Pairing Your Smartphone with Your fēnix 2 Device General Settings Display Settings	10 10 10 10 10 10 10 11 11 11 12 12 12 13 13 13
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings Altimeter Settings Bluetooth® Connected Features Pairing Your Smartphone with Your fēnix 2 Device General Settings Display Settings Time Settings	10 10 10 10 10 10 10 11 11 11 12 11 12 11 11 11 11 11 11 11
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings Altimeter Settings Bluetooth® Connected Features Pairing Your Smartphone with Your fēnix 2 Device General Settings Time Settings Time Settings Changing the Units of Measure	10 10 10 10 10 10 10 11 11 11 12 11 12 11 11 11 11 11 11 11
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings Altimeter Settings Bluetooth® Connected Features Pairing Your Smartphone with Your fēnix 2 Device General Settings Time Settings Time Settings Changing the Units of Measure System Settings	10 10 10 10 10 10 10 11 11 11 12 12 12 13 13 13 13 13
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings Altimeter Settings Bluetooth® Connected Features Pairing Your Smartphone with Your fēnix 2 Device General Settings Time Settings Changing the Units of Measure System Settings Customizing the Hot Key	10 10 10 10 10 10 10 11 11 11 12 12 12 13 13 13 13 14
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings Altimeter Settings Bluetooth® Connected Features Pairing Your Smartphone with Your fēnix 2 Device General Settings Time Settings Changing the Units of Measure System Settings Customizing the Hot Key Map Settings Customizing the Hot Key Map Settings	10 10 10 10 10 10 10 11 11 11 12 12 11 11 11 11 11 11 11 11
Using the Stopwatch Adding a Custom Time Zone Editing a Custom Time Zone Calculating the Size of an Area Viewing the Almanacs VIRB Remote Controlling a VIRB Action Camera  Customizing Your Device Activity Settings Customizing the Data Pages Alerts Using Auto Pause Auto Lap® UltraTrac 3D Speed and Distance Sensors Settings Compass Settings Altimeter Settings Bluetooth® Connected Features Pairing Your Smartphone with Your fēnix 2 Device General Settings Time Settings Changing the Units of Measure System Settings Customizing the Hot Key	10 10 10 10 10 10 10 11 11 11 12 12 12 11 11 11 11 11 11 11

Resetting the Device to Factory Settings	14
ANT+ Sensors	14
Pairing ANT+ Sensors	
tempe	
Putting On the Heart Rate Monitor	14
Tips for Erratic Heart Rate Data	15
Foot Pod	
Setting the Foot Pod Mode	
Foot Pod Calibration	
Using an Optional Bike Cadence Sensor	16
Device Information	16
Viewing Device Information	16
Device Care	
Cleaning the Device	16
Specifications	16
Battery Information	16
Caring for the Heart Rate Monitor	
HRM-Run Specifications	
User Replaceable Batteries	
Replacing the Heart Rate Monitor Battery	
Data Management	
File Types	
Disconnecting the USB Cable	
Deleting Files	
Troubleshooting	
Resetting Your Device	
Maximizing the Battery Life	
3	
Appendix	
Data Fields	
Software License Agreement	19
Indov	20

# 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.

# **Charging the Device**

#### NOTICE

To prevent corrosion, thoroughly dry the contacts and the surrounding area before charging or connecting to a computer.

The device is powered by a built-in lithium-ion battery that you can charge using a standard wall outlet or a USB port on your computer.

- 1 Plug the USB end of the cable into the AC adapter or a computer USB port.
- 2 Plug the AC adapter into a standard wall outlet.
- **3** Align the left side of the charging cradle ① with the groove on the left side of the device.



**4** Align the hinged side of the charger ② with the contacts on the back of the device.

When you connect the device to a power source, the device turns on.

5 Charge the device completely.

# Keys



1	LIGHT	Select to turn the backlight on and off. Hold to turn the device on and off or to lock the keys.
		noid to turn the device on and on or to lock the keys.
2	START	Select to start or stop an activity.
	STOP	Select to choose an option in a menu.
3		Select to return to the previous page.
	LAP	Select to record a lap or a rest during an activity.

4	DOWN	Select to scroll through the data pages, options, messages, and settings. Select to read a long message or notification. Hold to mark a waypoint.
(5)	UP MENU	Select to scroll through the data pages, options, messages, and settings. Select to dismiss a short message or notification. Hold to view the main menu.

#### Locking the Keys

You can lock the keys to prevent inadvertent key presses.

- Select the data page you want to view while the keys are locked.
- 2 Hold LIGHT for two seconds, and select Lock to lock the keys.
- 3 Hold LIGHT for two seconds to unlock the keys.

# **Viewing the Data Pages**

Customizable data pages allow you to quickly access real-time data from internal and connected sensors. When you start an activity, additional data pages appear.

From the time of day page or any data page, select **UP** or **DOWN** to cycle through the data pages.

# **Starting an Activity**

When you start an activity that requires GPS, GPS turns on automatically. When you stop the activity, GPS turns off, and the device returns to low-power mode.

- Select START.
- 2 Select an activity.
- 3 If necessary, follow the on-screen instructions to enter additional information.
- 4 If necessary, wait while the device connects to your ANT+™ sensors.
- 5 If the activity requires GPS, go outside, and wait while the device locates satellites.
- **6** Select **START** to start the timer.

**NOTE:** The device does not record your activity data until you start the timer.

# **Stopping an Activity**

**NOTE:** Some options are not available for some activities.

- 1 Select STOP
- 2 Select an option:
  - To reset your activity, select Reset.

This resets the timer and clears all recorded data since you started the activity.

- To record a lap, select Lap.
- To follow your track back to the starting point of your activity, select TracBack.
- · To resume your activity, select Resume.
- To save the activity and return to low-power mode, select Save.
- To discard the activity and return to low-power mode, select **Discard**.
- To suspend your activity and resume at a later time, select Resume Later.

# **Support and Updates**

Garmin Express™ provides easy access to these services for Garmin® devices. Some services may not be available for your device.

· Product registration

Introduction

- · Product manuals
- · Software updates
- · Map updates
- · Vehicles, voices, and other extras

#### **Setting Up Garmin Express**

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

# Waypoints, Routes, and Tracks

# Waypoints

Waypoints are locations you record and store in the device.

#### Creating a Waypoint

You can save your current location as a waypoint.

- 1 Hold DOWN.
- 2 Select an option:
  - To save the waypoint without changes, select Save.
  - To make changes to the waypoint, select Edit, make changes to the waypoint, and select Save.

#### Navigating to a Waypoint

- 1 Select START > Navigate > Waypoints.
- 2 Select a waypoint.

#### Finding a Waypoint by Name

- 1 Select START > Navigate > Waypoints > Spell Search.
- 2 Select UP, DOWN, and START to enter all or part of the waypoint name.
- 3 Select Done.
- 4 Select the waypoint.

#### **Changing the Search Area**

- 1 Select START > Navigate > Waypoints > Search Near.
- 2 Select an option:
  - To search near a waypoint, select Waypoints.
  - To search near a city, select Cities.
  - To search near your current location, select Current Loc.

#### **Editing a Waypoint**

Before you can edit a waypoint, you must create a waypoint.

- 1 Hold MENU.
- 2 Select User Data > Waypoints.
- Select a waypoint.
- 4 Select Edit.
- 5 Select an item to edit, such as the name.
- 6 Select UP, DOWN, and START to enter characters.
- 7 Select Done

# Increasing the Accuracy of a Waypoint Location

You can refine a waypoint location for more accuracy. When averaging, the device takes several readings at the same location and uses the average value to provide more accuracy.

- 1 Hold MENU.
- 2 Select User Data > Waypoints.
- 3 Select a waypoint.
- 4 Select Average Loc..
- **5** Move to the waypoint location.
- 6 Select Start.
- **7** Follow the on-screen instructions.

8 When the confidence reaches 100%, select Save.

For best results, collect four to eight samples for the waypoint, waiting at least 90 minutes between samples.

#### **Projecting a Waypoint**

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

- 1 Hold MENU.
- 2 Select Tools > Project Waypoint.
- 3 Follow the on-screen instructions.

The projected waypoint is saved with a default name.

#### **Deleting a Waypoint**

- 1 Hold MENU.
- 2 Select User Data > Waypoints.
- 3 Select a waypoint.
- 4 Select Delete > Yes.

# **Deleting All Waypoints**

- 1 Hold MENU.
- 2 Select Settings > System > Reset > All Waypoints.

#### **Routes**

A route is a sequence of waypoints or locations that leads you to your final destination.

#### **Creating a Route**

- 1 Hold MENU.
- 2 Select User Data > Routes > Create New.
- 3 Select First Point.
- 4 Select a category.
- **5** Select the first point on the route.
- 6 Select Next Point.
- 7 Repeat steps 4–6 until the route is complete.
- 8 Select Done to save the route.

#### Editing the Name of a Route

- 1 Hold MENU.
- 2 Select User Data > Routes.
- 3 Select a route.
- 4 Select Rename.
- 5 Select UP, DOWN, and START to enter characters.
- 6 Select Done.

#### **Editing a Route**

- 1 Hold MENU.
- 2 Select User Data > Routes.
- 3 Select a route.
- 4 Select Edit
- 5 Select a point.
- 6 Select an option:
  - To view the point on the map, select Map.
  - To change the order of the point on the route, select Move Up or Move Down.
  - To insert an additional point on the route, select Insert.
     The additional point is inserted before the point you are editing.
  - To add a point to the end of the route, select Next Point.
  - To remove the point from the route, select **Remove**.

#### Viewing a Route on the Map

1 Hold MENU.

- 2 Select User Data > Routes.
- 3 Select a route.
- 4 Select View Map.

#### **Deleting a Route**

- 1 Hold MENU.
- 2 Select User Data > Routes.
- 3 Select a route.
- 4 Select Delete > Yes.

#### Reversing a Route

- 1 Hold MENU.
- 2 Select User Data > Routes.
- Select a route.
- 4 Select Reverse.

#### **Tracks**

A track is a recording of your path. The track log contains information about points along the recorded path, including time, location, and elevation for each point.

The device records a track automatically during any activity that uses GPS. When you save an activity that uses GPS, the device saves the track as part of the activity.

#### Saving a Track

- 1 After you have completed an activity that uses GPS, select STOP > Save.
- 2 Create a track from the saved activity (Creating a Track from a Saved Activity).

# Creating a Track from a Saved Activity

You create a track from a saved activity. This allows you to share your track wirelessly with other compatible Garmin devices.

- 1 Hold MENU.
- 2 Select History > Activities.
- 3 Select an activity.
- 4 Select Save as Track.

#### Viewing Details about the Track

- 1 Hold MENU.
- 2 Select User Data > Tracks.
- 3 Select a track.
- 4 Select View Map.

The beginning and the end of the track are marked by flags.

- 5 Select BACK > Details.
- 6 Select **UP** and **DOWN** to view information about the track.

#### **Deleting a Track**

- 1 Hold MENU.
- 2 Select User Data > Tracks.
- 3 Select a track.
- 4 Select Delete > Yes.

# **Sending and Receiving Data Wirelessly**

Before you can share data wirelessly, you must be within 3 m (10 feet) of a compatible Garmin device.

Your device can send or receive data when connected to another compatible device. You can share waypoints, geocaches, routes, and tracks wirelessly.

- 1 Hold MENU.
- 2 Select User Data > Share Data > Unit to Unit.
- 3 Select Send or Receive.

4 Follow the on-screen instructions.

#### **Garmin Adventures**

You can create adventures to share your journeys with family, friends, and the Garmin community. Group related items together as an adventure. For example, you can create an adventure for your latest hiking trip. The adventure could contain the track log of the trip, photos of the trip, and geocaches you hunted. You can use BaseCamp™ to create and manage your adventures. For more information, go to http://adventures.garmin.com.

# **Navigation**

You can navigate to a route, track, waypoint, geocache, or any saved location in the device. You can use the map or the compass to navigate to your destination.

# **Navigating to a Destination**

You can navigate to waypoints, tracks, routes, geocaches, POIs, and GPS coordinates. You can also navigate using TracBack® or Sight 'N Go.

- 1 Select START > Navigate.
- 2 Select a type of destination.
- 3 Follow the on-screen prompts to select a destination.



The device displays information about your next waypoint.

4 Select UP or DOWN to view additional navigation data pages (Viewing the Data Pages).

#### **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 Select START > Navigate > Sight 'N Go.
- 2 Point the top mark on the bezel at an object.
- 3 Select START > Set Course.
- 4 Navigate using the compass (Navigating Using the Compass).
- 5 Select **DOWN** to view the map (optional).

#### Compass

The device 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 manually change the compass settings (Compass Settings).

#### **Navigating Using the Compass**

You can use the compass to navigate to your next waypoint.

- 1 While navigating, select **DOWN** to view the compass page. The two tick marks at the edge of the screen act as a bearing pointer, which indicates the direction to your next waypoint.
- 2 Point the painted mark above the device screen in the direction you are facing.

The painted mark indicates your heading, or your direction of travel.

Navigation 3

- 3 Orient yourself so that the bearing pointer aligns with the painted mark on the device.
- 4 Travel in that direction until you reach your destination.

# Map

▲ represents your location on the map. As you travel, the icon moves and leaves a track log (trail). Waypoint names and symbols appear on the map. When you are navigating to a destination, your route is marked with a line on the map.

- Map navigation (Panning and Zooming the Map)
- · Map settings (Map Settings)

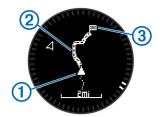
# Panning and Zooming the Map

- **1** While navigating, select **UP** to view the map.
- 2 Hold MENU.
- 3 Select Pan/Zoom.
- 4 Select an option:
  - To toggle between panning up and down, panning left and right, or zooming, select START.
  - To pan or zoom the map, select UP and DOWN.
  - To quit, select BACK.

# **Navigating To Your Starting Point**

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

During an activity, select STOP > TracBack.



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

#### **Altimeter and Barometer**

The device contains an internal altimeter and barometer. The device collects altimeter and barometer data continuously, even in low-power mode. The altimeter displays your approximate elevation based on pressure changes. The barometer displays environmental pressure data based on the fixed elevation where the altimeter was most recently calibrated (Altimeter Settings).

# 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 **DOWN** key to access the MOB function quickly (Customizing the Hot Key).

- Hold MENU.
- 2 Select Tools > MOB.

#### Geocaches

A geocache is like a hidden treasure. Geocaching is when you hunt for hidden treasures using GPS coordinates posted online by those hiding the geocache.

# **Downloading Geocaches**

1 Connect the device to your computer using a USB cable.

- 2 Go to www.garmin.com/geocaching.
- 3 If necessary, create an account.
- 4 Sign in.
- **5** Follow the on-screen instructions to find and download geocaches to your device.

# Navigating to a Geocache

Before you can navigate to a geocache, you must download a geocache to your device. Go to <a href="https://www.garmin.com/geocaching">www.garmin.com/geocaching</a> for more information.

Navigating to a geocache is like navigating to any other location (Navigating to a Destination).

# **Logging the Attempt**

After you have attempted to find a geocache, you can log your results.

- 1 Hold MENU.
- 2 Select User Data > Geocache > Log Attempt.
- 3 Select Found, Did Not Find, or Unattempted.
- 4 Select an option:
  - To begin navigation to a geocache nearest you, select Find Next.
  - To end the logging, select Done.

# chirp™

A chirp is a small Garmin accessory that is programmed and left in a geocache. You can use your device to find a chirp in a geocache. For more information about the chirp, see the *chirp Owner's Manual* at www.garmin.com.

# Finding a Geocache with a chirp Device

- 1 Hold MENU.
- 2 Select Settings > Sensors > chirp.
- 3 Select START > Navigate > Geocache.
- 4 Wait while the device locates satellites.
- 5 Select a geocache, and select chirp to show chirp details while you are navigating.
- 6 Select Go, and navigate to the geocache (Navigating to a Destination).

When you are within 10 m (33 ft.) of the geocache that contains a chirp device, a message appears.

# **Activities**

Your device can be used for a variety of outdoor, athletic, and fitness activities. When you start an activity, the device displays and records sensor data about your activity. You can save activities and share them with the Garmin Connect™ community.

The device functions differently depending on your activity. For example, data pages, recorded data, and menu options may appear differently based on your activity.

# Skiing

#### Going Downhill Skiing or Snowboarding

Before you go skiing or snowboarding, you should charge the device completely (Charging the Device).

- 1 Select START > Ski-Board.
- 2 Wait while the device locates satellites.
- 3 Select START to start the timer.
  History is recorded only while the timer is running.
- 4 Start your activity.

Geocaches Geocaches

The auto run feature is turned on by default. This feature automatically records new ski runs based on your movement

The Auto Pause® feature is turned on by default (Using Auto Pause). The timer pauses when you stop moving downhill and when you board the chairlift.

- **5** If necessary, start moving downhill to restart the timer.
- **6** After you complete your activity, select **STOP** > **Save**.

#### Viewing Your Ski Runs

Your device records the details of each skiing or snowboarding run. You can view run details from the paused screen or while the timer is running.

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

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

# **Hiking**

#### Going for a Hike

Before you go for a hike, you should charge the device completely (Charging the Device).

- 1 Select START > Hike.
- 2 Wait while the device locates satellites.
- 3 Start hiking.

The device records a track while you hike.

**4** When you want to take a break or pause the device from tracking, select **STOP** > **Resume Later**.

The device saves the status of your hike and enters low power mode.

- 5 Select START > Resume to resume tracking.
- 6 After you complete your hike, select STOP > Save.

# Running

#### Going for a Run

Before you go for a run, you should charge the device completely (Charging the Device). Before you can use an ANT+ sensor for your run, the sensor must be paired with your device (Pairing ANT+ Sensors).

- 1 Put on your ANT+ sensors, such as a foot pod or heart rate monitor (optional).
- 2 Select START > Run.
- 3 Select an option:
  - To use paired ANT+ sensors, wait for the device to connect to the sensors.
  - · To skip searching for ANT+ sensors, select Skip.
- **4** Go outside, and wait while the device locates satellites. The timer screen appears.



5 Select START to start the timer.

- 6 Go for a run.
- 7 Select LAP to record laps (optional).
- 8 Select UP and DOWN to view additional data pages (optional).
- 9 After you complete your run, select STOP > Save to save the run.

A summary appears.

# **Biking**

#### Going for a Ride

Before you go for a ride, you should charge the device completely (Charging the Device). Before you can use an ANT+ sensor for your ride, the sensor must be paired with your device (Pairing ANT+ Sensors).

- 1 Put on your ANT+ sensors, such as a heart rate monitor (optional).
- 2 Select START > Bike.
- 3 Select an option:
  - To use paired ANT+ sensors, wait for the device to connect to the sensors.
  - To skip searching for ANT+ sensors, select Skip.
- 4 Go outside, and wait while the device locates satellites.
- 5 Select START to start the timer.
  History is recorded only while the timer is running.
- 6 Start riding.
- **7** Select **UP** and **DOWN** to view additional data pages (optional).
- 8 After you complete your ride, select STOP > Save.

# **Swimming**

# NOTICE

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

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

#### Going for a Pool Swim

Before you go for a swim, you should charge the device completely (Charging the Device).

- 1 Select START > Swim > Pool.
- 2 Select your pool size, or enter a custom size.
- 3 Select START to start the timer.
  History is recorded only while the timer is running.
- 4 Start swimming.

The device automatically records swim intervals and lengths.

- 5 Select UP and DOWN to view additional data pages (optional).
- **6** When resting, select **LAP** to pause the timer.
- 7 Select LAP to restart the timer.
- **8** After you complete your swim, select **STOP** > **Save**.

#### Going for an Open Water Swim

Before you go for a swim, you should charge the device completely (Charging the Device).

- 1 Select START > Swim > Open Water.
- 2 Wait while the device locates satellites.
- 3 Select START to start the timer.
  History is recorded only while the timer is running.
- 4 Start swimming.

Activities 5

- 5 Select LAP to record an interval (optional).
- 6 Select UP and DOWN to view additional data pages (optional).
- 7 After you complete your swim, select STOP > Save.

#### **Swim Terminology**

Length: One trip down the pool.

Interval: One or more lengths. A new interval starts after you

rest.

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

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

# Multisport

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

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

#### **Starting a Multisport Activity**

- 1 Select START > Multisport > START.
- 2 Wait while the device locates satellites.
- 3 Select START to start the timer.
  History is recorded only while the timer is running.
- 4 Start your first activity.
- 5 Select LAP to transition to the next activity. If transitions are turned on, the transition time is recorded separately from the activity times.
- 6 If necessary, select LAP to start the next activity.
- 7 Select UP and DOWN to view additional data pages (optional).
- 8 After you complete your last activity, select STOP > Save.

# **Editing a Multisport Activity**

- 1 Select START > Multisport > DOWN.
- 2 Select an activity.
- **3** Repeat step 2 until the multisport activity is complete.
- 4 Select Done.
- 5 Select Yes to turn transitions on or No to turn transitions off. If transitions are turned on, the transition time is recorded separately from the activity times.

#### Workouts

You can create custom workouts that include goals for each workout step and for varied distances, times, and calories. You can create workouts using Garmin Connect or select a training plan that has built-in workouts from Garmin Connect, and transfer them to your device.

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

#### Following a Workout From the Web

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

- 1 Connect the device to your computer.
- 2 Go to www.garminconnect.com/workouts.

- 3 Create and save a new workout.
- 4 Select Send to Device, and follow the on-screen instructions.
- 5 Disconnect the device.

#### **Starting a Workout**

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

- 1 Select START > Workout.
- 2 Select a workout.
- 3 If necessary, select an activity type.
- 4 Select START.

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

# **Indoor Activities**

The fēnix 2 device can be used for training indoors, such as running on an indoor track or using a stationary bike.

GPS is turned off for indoor activities. When running with GPS turned off, speed, distance, and cadence are calculated using the accelerometer in the device. The accelerometer is self-calibrating. The accuracy of the speed, distance, and cadence data improves after a few outdoor runs using GPS.

#### **Starting an Indoor Activity**

- 1 Select START > Indoor.
- 2 Select an activity.
- 3 Wait while the device connects to your ANT+ sensors.
- 4 Select START to start the timer.
  History is recorded only while the timer is running.
- **5** Start your activity.

# **Using History**

History contains previous activities you have saved on your device.

- 1 Hold MENU.
- 2 Select History.
- 3 Scroll up and down to view your saved activities.
- 4 Select an activity.
- 5 Select an option:
  - To navigate the path you traveled for the activity, select Go.
  - To view additional information about the activity, select Details.
  - To view the activity on the map, select **View Map**.
  - To navigate in reverse the path you traveled for the activity, select TracBack.
  - To save the activity as a track for navigation, select Save as Track (Creating a Track from a Saved Activity).
  - To delete the selected activity, select Delete.

# **Training**

#### **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, go to <a href="https://www.garminconnect.com/start">www.garminconnect.com/start</a>.

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

Analyze your data: You can view more detailed information about your activity, including time, distance, elevation, heart rate, calories burned, cadence, VO2 max., 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.

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

# **Setting Up Your User Profile**

You can update your gender, birth year, height, weight, and heart rate zone (Setting Your Heart Rate Zones) settings. The device uses this information to calculate accurate training data.

- 1 Hold MENU.
- 2 Select Settings > User Profile.
- 3 Select an option.

#### **Fitness Goals**

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

- · Your heart rate is a good measure of exercise intensity.
- Training in certain heart rate zones can help you improve cardiovascular capacity and strength.
- Knowing your heart rate zones can prevent you from overtraining and can decrease your risk of injury.

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

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

#### **About Heart Rate Zones**

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

# Setting Your Heart Rate Zones

Before the device can determine your heart rate zones, you must set up your fitness user profile (Setting Up Your User Profile).

You can manually adjust the heart rate zones according to your fitness goals.

1 Hold MENU.

- 2 Select Settings > Sensors > Heart Rate > HR Zones.
- **3** Enter the maximum and minimum heart rate for zone 5.
- 4 Enter your minimum heart rate for zones 4 through 1.

  The maximum heart rate for each zone is based on the minimum heart rate of the previous zone. For example, if you enter 167 as a minimum heart rate for zone 5, the device uses 166 as the maximum rate for zone 4.

#### 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

#### **About Lifetime Athletes**

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

# **Running Dynamics**

You can use your compatible fēnix 2 device paired with the HRM-Run™ accessory to provide real-time feedback about your running form. If your fēnix 2 device was packaged with the HRM-Run accessory, the devices are already paired.

The HRM-Run accessory has an accelerometer in the module that measures torso movement in order to calculate three running metrics: cadence, vertical oscillation, and ground contact time.

**NOTE:** The HRM-Run accessory is compatible with several ANT+ fitness products and can display heart rate data when paired. The running dynamics features are available only on some Garmin devices.

**Cadence**: Cadence is the number of steps per minute. It displays total steps (right and left combined).

**Vertical oscillation**: Vertical oscillation is your bounce while running. It displays the vertical motion of your torso, measured in centimeters for each step.

**Ground contact time**: Ground contact time is the amount of time in each step that you spend on the ground while running. It is measured in milliseconds.

**NOTE:** Ground contact time is not available while walking.

#### **Training with Running Dynamics**

Before you can view running dynamics, you must put on the HRM-Run accessory and pair it with your device (Pairing ANT+Sensors). If your fēnix 2 device was packaged with the HRM-Run accessory, the devices are already paired.

When you pair an HRM-Run accessory with your device, the running dynamics data page is visible when you are running.

**1** Go for a run using an HRM-Run sensor (Going for a Run).

- 2 Select DOWN to scroll to the running dynamics data page to view your metrics.
  - The primary metric appears as the top field on the data page. The gauge position corresponds with the primary metric.
- 3 Hold MENU, and select the field to display as the primary metric (optional).

# **Running Dynamics Data and Gauges**

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

Garmin has gathered data on runners with different levels of experience. The data values in zones four and five are typical for less experienced or slower runners. The data values in zones one, two, and three are typical for more experienced or faster runners. Less experienced runners tend to exhibit longer ground contact times, higher vertical oscillation, and lower cadence than more experienced runners. However, taller runners typically have slightly slower cadences and slightly higher vertical oscillation. Go to <a href="https://www.garmin.com">www.garmin.com</a> for more information on running dynamics. For additional theories and interpretations of running dynamics data, you can search reputable running publications and websites.



Zone	Percentile in Zone	Cadence Range	Vertical Oscillation Range	Ground Contact Time Range
1	>95	>185 spm	<6.7 cm	<208 ms
2	70–95	174–185 spm	6.7–8.3 cm	208–240 ms
3	30–69	163–173 spm	8.4-10.0 cm	241–272 ms
4	5–29	151–162 spm	10.1–11.8 cm	273–305 ms
(5)	<5	<151 spm	>11.8 cm	>305 ms

#### **Tips for Missing Running Dynamics Data**

If running dynamics data does not appear, you can try these tips.

- Make sure you have the HRM-Run accessory.
   The HRM-Run accessory has \*\* on the front of the module.
- Pair the HRM-Run accessory with your fenix 2 again, according to the instructions.
- If the running dynamics data display zeros, make sure the HRM-Run module is worn right-side up.

**NOTE:** Ground contact time appears only while running. It cannot be calculated while walking.

#### **About VO2 Max. Estimates**

You can use your Garmin device paired with the heart rate monitor to display your VO2 max. estimate. VO2 max. is the maximum volume of oxygen (in mililiters) you can consume per minute per kilogram of body weight at your maximum performance. In simple terms, VO2 max. is an indication of athletic performance and should increase as your level of fitness improves. VO2 max. estimates are provided and supported by Firstbeat<sup>®</sup> Technologies Ltd.

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

Before you can view your VO2 max. estimate, you must pair your heart rate monitor with your fēnix 2 device (Pairing ANT+Sensors) and run for at least 10 minutes. For the most accurate estimate, you should complete the user profile setup (Setting Up Your User Profile), and set your maximum heart rate (Setting Your Heart Rate Zones).

**NOTE:** The projections may seem inaccurate at first. The device requires a few runs to learn about your running performance.

- 1 Hold MENU.
- 2 Select VO2 Max.

The VO2 max. screen displays your VO2 max. estimate as a number and position on the gauge.



1	Superior
2	Excellent
3	Good
4	Fair
(5)	Poor

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

#### VO2 Max. Standard Ratings

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

Males	Percentile	20–29	30–39	40–49	50–59	60–69	70–79
Superior	95	55.4	54	52.5	48.9	45.7	42.1
Excellent	80	51.1	48.3	46.4	43.4	39.5	36.7
Good	60	45.4	44	42.4	39.2	35.5	32.3
Fair	40	41.7	40.5	38.5	35.6	32.3	29.4
Poor	0–40	<41.7	<40.5	<38.5	<35.6	<32.3	<29.4
Females	Percentile	20–29	30–39	40–49	50–59	60–69	70–79
Superior	95	49.6	47.4	45.3	41.1	37.8	36.7
Excellent				1	1	01.0	00
LXCOHOLIC	80	43.9	42.4	39.7	36.7	33	30.9
	80 60	43.9 39.5	42.4 37.8				
Good Fair				39.7	36.7	33	30.9

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

# **Recovery Advisor**

You can use your Garmin device paired with the heart rate monitor to display how much time remains before you are fully recovered and ready for the next hard workout. The recovery advisor feature includes recovery time and recovery check. Recovery advisor technology is provided and supported by Firstbeat Technologies Ltd.

**Recovery check**: The recovery check provides a real-time indication of your state of recovery within the first several minutes of a run.

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

### **Turning On the Recovery Advisor**

Before you can use the recovery advisor feature, you must put on the heart rate monitor and pair it with your device (Pairing ANT+ Sensors). If your fēnix 2 was packaged with a heart rate monitor, the devices are already paired. For the most accurate estimate, you should complete the user profile setup (Setting Up Your User Profile), and set your maximum heart rate (Setting Your Heart Rate Zones).

- 1 Hold MENU.
- 2 Select Recovery Advisor > Enable.
- 3 Go for a run.

Within the first several minutes of your run, a recovery check appears, showing your real-time state of recovery.

4 After your run, select Save.

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

#### **Viewing Your Recovery Time**

Before you can view your recovery time, you must enable the recovery advisor.

- 1 Hold MENU.
- 2 Select Recovery Advisor.

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

#### **About Training Effect**

Training Effect measures the impact of an activity on your aerobic fitness. Training Effect accumulates during the activity. As the activity progresses, the training effect value increases, telling you how the activity has improved your fitness. Training Effect is determined by your user profile information, heart rate, duration, and intensity of your activity.

It is important to know that your Training Effect numbers (1.0–5.0) may seem abnormally high during your first few runs. It takes several activities for the device to learn your aerobic fitness.

Training Effect	Description
1.0–1.9	Helps recovery (short activities). Improves endurance with longer activities (more than 40 minutes).
2.0-2.9	Maintains your aerobic fitness.
3.0–3.9	Improves your aerobic fitness if repeated as part of your weekly training program.
4.0-4.9	Highly improves your aerobic fitness if repeated 1–2 times per week with adequate recovery time.
5.0	Causes temporary overload with high improvement. Train up to this number with extreme care. Requires additional recovery days.

Training Effect technology is provided and supported by Firstbeat Technologies Ltd. For more information, go to www.firstbeattechnologies.com.

# **Viewing Your Predicted Race Times**

Before you can view your projected race times, you must put on the heart rate monitor and pair it with your device (Pairing ANT+ Sensors). If your fēnix 2 was packaged with a heart rate monitor, the devices are already paired. For the most accurate estimate, you should complete the user profile setup (Setting Up Your User Profile), and set your maximum heart rate (Setting Your Heart Rate Zones)

Your device uses the VO2 max. estimate (About VO2 Max. Estimates) and published data sources to provide a target race time based on your current state of fitness. This projection also presumes you have completed the proper training for the race.

**NOTE:** The projections may seem inaccurate at first. The device requires a few runs to learn about your running performance.

- 1 Put on your heart rate monitor, and go for a run.
- 2 Hold MENU.
- 3 Select VO2 Max.
- **4** Select **DOWN** to view the race predictor screen. Your projected race times appear for 5K, 10K, half marathon, and marathon distances.

# **Using Virtual Partner®**

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

- Hold MENU.
- 2 Select Settings > Activity.
- 3 Select an activity.

Virtual Partner is not available for all activities.

- 4 Select Virtual Partner.
- 5 Select Set Pace or Set Speed.
- 6 Begin your activity.

7 Select UP or DOWN to scroll to the Virtual Partner screen and see who is leading.

# **Applications**

#### Clock

#### Setting the Alarm

- 1 Hold MENU.
- 2 Select Clock > Alarm Clock > Add Alarm.
- 3 Select START. UP. and DOWN to set the time.
- 4 Select Once, Daily, or Weekdays.

#### **Changing the Alarm Clock Sound**

- 1 Hold MENU.
- 2 Select Settings > General > Sounds > Alarm Clock.
- 3 Select Tone, Vibration, Tone & Vib., or Message Only.

# Starting the Countdown Timer

- 1 Hold MENU.
- 2 Select Clock > Timer.
- 3 Select START, UP, and DOWN to set the time.
- 4 If necessary, select Notification, and select a type of notification.
- 5 Select Start.

### Using the Stopwatch

- 1 Hold START.
- 2 Select Clock > Stopwatch.
- 3 Select Start.

#### **Adding a Custom Time Zone**

- 1 Hold MENU.
- 2 Select Clock > Alt. Zones > Add Zone.
- 3 Select a time zone.

The Alt. Zones data page is enabled automatically (Data Pages).

#### **Editing a Custom Time Zone**

- 1 Hold MENU.
- 2 Select Clock > Alt. Zones.
- 3 Select a time zone.
- 4 Select an option:
  - To change the time zone, select Edit Zone.
  - To customize the name of the time zone, select Edit Label.

# Calculating the Size of an Area

Before you can calculate the size of an area, you must acquire satellites.

- 1 Hold MENU.
- 2 Select Tools > Area Calc..
- 3 Walk around the perimeter of the area.
- 4 Select STOP to calculate the area.
- 5 Select an option:
  - Select Save Track, enter a name, and select Done.
  - Select Change Units to convert measurements of the area to a different unit of measure.
  - Select BACK to exit without saving.

# **Viewing the Almanacs**

You can view almanac information for the sun and moon, and hunting and fishing.

- 1 Hold MENU.
- 2 Select an option:
  - To view the sunrise, sunset, moonrise, and moonset information, select Tools > Sun & Moon.
  - To view the predicted best times for hunting and fishing, select Tools > Hunt & Fish.
- 3 If necessary, select UP or DOWN to view a different day.

#### **VIRB Remote**

The VIRB™ remote function allows you to control your VIRB action camera from a distance. Go to www.garmin.com/VIRB to purchase a VIRB action camera.

#### **Controlling a VIRB Action Camera**

Before you can use the VIRB remote function, you must enable the remote setting on your VIRB camera. See the *VIRB Series Owner's Manual* for more information.

- 1 Turn on your VIRB camera.
- 2 On your fēnix 2 device, hold MENU.
- 3 Select VIRB Remote.
- 4 Wait while the device connects to your VIRB camera.
- 5 Select an option:
  - To record video, select START.
     The video counter appears on the fēnix 2 screen.
  - To stop recording video, select DOWN.
  - To take a photo, select UP.

# **Customizing Your Device**

# **Activity Settings**

These settings allow you to customize each activity based on your needs. For example, you can customize data pages and enable alerts and training features. Not all settings are available for all activity types.

Hold **MENU**, select **Settings** > **Activity**, and select an activity.

**Data Pages**: Allows you to show or hide data pages for the selected activity (Customizing the Data Pages).

**Alerts**: Sets the training or navigation alerts for the selected activity.

Auto Lap: Sets the options for the auto lap feature (Auto Lap®).

**Auto Run**: Sets the device to detect ski runs automatically using the built-in accelerometer.

- Auto Pause: Sets the device to stop recording data when you stop moving or when you drop below a specified speed (Using Auto Pause).
- **3D Speed**: Sets the device to calculate your speed using both your elevation change and your horizontal movement over ground (3D Speed and Distance).
- **3D Distance**: Sets the device to calculate your distance traveled using both your elevation change and your horizontal movement over ground.

Data Recording: Sets the mode and interval for recording data.

GPS Mode: Sets the mode for the GPS antenna (UltraTrac).

**Foot Pod Speed**: Sets the device to calculate your speed using your foot pod instead of GPS.

**Bike Speed**: Sets the device to calculate your speed using your cadence sensor instead of GPS.

10 Applications

**Pool Length**: Sets the pool length for pool swimming (Going for a Pool Swim).

**Rest Timer**: Enables the rest data page for pool swimming.

Stroke Detection: Enables stroke detection for pool swimming.

Reset: Restores the factory default settings for the selected activity

In Menu: Shows or hides the selected activity in the activity menu.

#### **Customizing the Data Pages**

You can show, hide, and change the order of data pages for each activity. You can also edit the data fields for some data pages.

- 1 Hold MENU.
- 2 Select Settings > Activity.
- 3 Select the activity to customize.
- 4 Select Data Pages.
- 5 Select **Add Page**, and follow the on-screen instructions to add a new page (optional).
- 6 Select a page to edit data fields.
- 7 Select an option:
  - · Select Edit, and change the data fields.
  - Select Move Up or Move Down to change the order of the data pages.
  - Select **Delete** to remove the data page from the page loop.

#### Data Pages

Some data pages are available only for specific activities, and some data pages require you to pair the device with an ANT+ sensor (Pairing ANT+ Sensors). Minimum, maximum, and chart data are calculated from the time when you started the activity.

**NOTE:** Your body temperature affects the temperature reading. To get the most accurate temperature reading, remove the device from your wrist and wait 20 to 30 minutes.

Data Page	Description	ANT+ Sensor	Activities
1 Field	Displays one configurable data field.	None	All
2 Fields	Displays two configurable data fields.	None	All
3 Fields	Displays three configurable data fields.	None	All
Altimeter	Displays your current, minimum, and maximum elevation and a chart of the elevation history.	None	All
Barometer	Displays the current, minimum, and maximum barometric pressure and a chart of the barometric pressure history.	None	All
Compass	Displays the compass, with your direction of travel at the top.	None	All
Temp	Displays the current, minimum, and maximum temperature and a chart of the temperature history.	tempe™ (optional)	All
Мар	Displays the map.	None	All except pool swimming

Data Page	Description	ANT+ Sensor	Activities
Heart Rate	Displays your current, minimum, and maximum heart rate and a chart of your heart rate history.	Heart rate monitor (required)	All
Cadence	Displays your current, minimum, and maximum cadence and a chart of your cadence history.	Foot pod, bike cadence sensor, power sensor, Vector™, HRM-Run (optional)	Running, biking, custom
Power	Displays your current, minimum, and maximum generated power and a chart of your power history.	Power sensor, Vector	Biking, custom
Virtual Partner	Displays the Virtual Partner page (Using Virtual Partner®).	None	Running, biking, custom
Running Dynamics	Displays your running dynamics information (Running Dynamics).	HRM-Run (required)	Running, custom
Alt. Zones	Displays alternate time zones (Adding a Custom Time Zone).	None	All
Dual Grid	Displays your GPS coordinates.	None	All
Rest	Displays your rest time while swimming.	None	Pool swimming
Time	Displays the time and date.	None	All
Current Run	Displays data about your current ski run.	None	Downhill skiing or snowboarding
Total Runs	Displays data about your total ski runs for the current activity.	None	Downhill skiing or snowboarding
Workouts	Displays the goal and additional data for the current workout step.	None	Workout, custom

#### **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 once. The event is a specific value. For example, you can set the device to alert you when you reach a specified elevation.

Range alert: A range alert notifies you any time the device is above or below a specified range of values. For example, you can set the device to alert you when your heart rate is below 60 beats per minute (bpm) and over 210 bpm.

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

Alert Name	Alert Type	Description	
Battery	Event	You can set a low battery power alert.	
Cadence	Range	You can set minimum and maximum cadence values.	
Calories	Event, recurring	You can set the number of calories.	

Customizing Your Device 11

Alert Name	Alert Type	Description	
Distance	Event, recurring	You can set an interval, a custom distance from your final destination, or a custom distance if you go off-course from a track or route.	
Elevation	Event, range, recurring	You can set minimum and maximum elevation values. You can also set the device to alert you when you ascend or descend a specified amount.	
Heart Rate	Range	You can set minimum and maximum heart rate values or select zone changes. See About Heart Rate Zones and Heart Rate Zone Calculations.	
Nav. Arrival	Event	You can set alerts for reaching waypoints and the final destination of a track or route	
Pace	Range	You can set minimum and maximum pace values.	
Power	Range	You can set the high or low power level.	
Proximity	Recurring	See Setting a Proximity Alarm.	
Speed	Range	You can set minimum and maximum speed values.	
Time	Event, recurring	You can set an interval, a custom time until sunset, or a custom time from your estimated time of arrival.	

#### Setting an Alert

- 1 Hold MENU.
- 2 Select Settings > Activity.
- 3 Select an activity.

NOTE: This feature is not available for all activities.

- 4 Select Alerts.
- 5 Select the alert name.
- 6 If necessary, select the type of alert.
- 7 Select a zone, enter the minimum and maximum values, or enter a custom value for the alert.
- 8 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).

#### Setting a Proximity Alarm

Proximity alarms alert you when you are within a specified range of a particular location.

- 1 Hold MENU.
- 2 Select Settings > Activity.
- 3 Select an activity.

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

- 4 Select Alerts > Proximity > Edit > Create New.
- 5 Select a location.
- 6 Enter a radius.
- 7 Select Done.

#### **Using Auto Pause**

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

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

- 1 Hold MENU.
- 2 Select Settings > Activity.
- 3 Select an activity.

NOTE: This feature is not available for all activities.

4 Select Auto Pause.

#### Auto Lap®

#### Marking Laps by Distance

You can use Auto Lap to mark a lap at a specific distance automatically. This feature is helpful for comparing your performance over different parts of an activity (for example, every 1 mile or 5 kilometers).

- 1 Hold MENU.
- 2 Select Settings > Activity.
- 3 Select an activity.

NOTE: This feature is not available for all activities.

- 4 Select Auto Lap.
- 5 Select a distance.

Each time you complete a lap, a message appears that displays the time for that lap. The device also beeps or vibrates if audible tones are turned on (General Settings).

If necessary, you can customize the data pages to display additional lap data (Customizing the Data Pages).

#### UltraTrac

The UltraTrac feature is a GPS setting that records track points and sensor data less frequently. Enabling the UltraTrac feature increases battery life but decreases the quality of recorded activities. You should use the UltraTrac feature for activities that demand longer battery life and for which frequent sensor data updates are less important. The default interval between track points is one point per minute. You can adjust the interval.

#### 3D Speed and Distance

You can set 3D speed and distance to calculate your speed or distance using both your elevation change and your horizontal movement over ground. You can use it during activities such as skiing, climbing, navigating, hiking, running, or biking.

# **Sensors Settings**

- You can calibrate and configure the internal compass (Compass Settings).
- You can calibrate and configure the internal barometric altimeter (Altimeter Settings).
- · You can pair and configure ANT+ sensors (ANT+ Sensors).

#### **Compass Settings**

Hold **MENU**, and select **Settings** > **Sensors** > **Compass**.

**Display**: Sets the directional heading on the compass to degrees or milli-radians.

**North Ref.**: Sets the north reference of the compass (Setting the North Reference).

Mode: Sets the compass to use either a combination of GPS and the electronic sensor data when moving (Auto) or GPS data only (Off).

**Calibrate**: Allows you to manually calibrate the compass sensor (Calibrating the Compass).

# Setting the North Reference

You can set the directional reference used in calculating heading information.

- 1 Hold MENU.
- 2 Select Settings > Sensors > Compass > North Ref..
- 3 Select an option:
  - To set geographic north as the heading reference, select True.
  - To set the magnetic declination for your location automatically, select Magnetic.
  - To set grid north (000°) as the heading reference, select Grid.

 To set the magnetic variation value manually, select User, enter the magnetic variance, and select Done.

#### Calibrating the Compass

#### **NOTICE**

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

Your device was already calibrated at the factory, and the device uses automatic calibration by default. If you experience irregular compass behavior, for example, after moving long distances or after extreme temperature changes, you can manually calibrate the compass.

- 1 Hold MENU.
- 2 Select Settings > Sensors > Compass > Calibrate > Start.
- 3 Follow the on-screen instructions.

#### **Altimeter Settings**

Hold MENU, and select Settings > Sensors > Altimeter.

**Auto Cal.**: Allows the altimeter to self-calibrate each time you turn on GPS tracking.

Calibrate: Allows you to manually calibrate the altimeter sensor.

#### Calibrating the Barometric Altimeter

Your device was already calibrated at the factory, and the device uses automatic calibration at your GPS starting point by default. You can manually calibrate the barometric altimeter if you know the correct elevation or the correct sea level pressure.

- 1 Hold MENU.
- 2 Select Settings > Sensors > Altimeter.
- 3 Select an option:
  - To calibrate automatically from your GPS starting point, select Auto Cal. > At Start.
  - To calibrate automatically with periodic GPS calibration updates, select Auto Cal. > Continuous.
  - To enter the current elevation or sea-level pressure, select Calibrate.

# **Bluetooth® Connected Features**

The fēnix 2 device has several Bluetooth connected features for your compatible smartphone. Some features require you to install Garmin Connect Mobile or BaseCamp Mobile on your smartphone. Go to www.garmin.com/apps for more information.

**Phone notifications**: Displays phone notifications and messages on your fēnix 2 device.

**LiveTrack**: Allows friends and family to follow your races and training activities in real time. You can invite followers using email or social media, allowing them to view your live data on a Garmin Connect tracking page.

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

Activity review in BaseCamp Mobile: Allows you to send activities to your smartphone running the BaseCamp Mobile app. You can view the activities, including the track and sensor data, in the app.

Cloud backup in BaseCamp Mobile: Allows you to back up saved activities to your Garmin Cloud account using BaseCamp Mobile.

**Adventure downloads**: Allows you to browse adventures in the BaseCamp Mobile app and send them to your device.

#### Pairing Your Smartphone with Your fenix 2 Device

**NOTE:** The device cannot connect to ANT+ sensors while Bluetooth wireless technology is turned on.

- 1 Bring your smartphone within 10 m (33 ft.) of your fenix 2 device.
- 2 On the fēnix 2 device, hold MENU.
- 3 Select Settings > Bluetooth.
- 4 Complete an action:
  - If this is the first time you have paired a phone with your device, select OK.
  - If you have already paired another phone with your device, select Pair Mobile Device.
- **5** On your smartphone, go to the Bluetooth settings menu, and search for nearby devices.
  - See the smartphone owner's manual for more information.
- 6 Select your fēnix 2 device from the list of nearby devices. A passkey appears on the fēnix 2 screen.
- 7 On your smartphone, enter the passkey.
- 8 On your fēnix 2 device, select Always On, In Activity, or Not in Activity, and select OK.

The device turns Bluetooth wireless technology on and off automatically based on your selection.

- 9 Select Show or Hide to show or hide smartphone notifications on the fēnix 2 screen.
- 10 Go to www.garmin.com/apps, and download the Garmin Connect Mobile app or the BaseCamp Mobile app to your smartphone (optional).

# **General Settings**

Hold **MENU**, and select **Settings** > **System**.

**Sounds**: Allows you to turn the key tones on or off and set the tone and vibration settings for various device alerts.

**Display**: Allows you to change the backlight and contrast settings.

Time: Sets the date, time, and time zone.

**Language**: Sets the language of the device interface.

**Units**: Sets the measurement units used to display data.

#### **Display Settings**

Hold MENU, and select Settings > General > Display.

**Backlight**: Sets the backlight level and the length of time before the backlight turns off.

Contrast: Sets the screen contrast.

#### **Time Settings**

Hold MENU, and select Settings > General > Time.

**Time Page**: Allows you to customize the appearance of the time of day.

Format: Allows you to select a 12-hour or a 24-hour display time.

**Time Zone**: Allows you to select the time zone for the device. You can select **Automatic** to set the time zone automatically based on your GPS position.

#### **Changing the Units of Measure**

You can customize units of measure for distance and speed, elevation, depth, temperature, and pressure.

- 1 Hold MENU.
- 2 Select Settings > General > Units.
- 3 Select a measurement type.
- 4 Select a unit of measure.

# **System Settings**

Hold MENU, and select Settings > System.

Customizing Your Device 13

**WAAS**: Sets the device to use Wide Area Augmentation System (WAAS) GPS signals. For information about WAAS, go to www.garmin.com/aboutGPS/waas.html.

**Hot Keys**: Allows you to customize the hold function of the **DOWN** key.

**USB Mode**: Sets the device to use mass storage mode or Garmin mode when connected to a computer.

**Map**: Allows you to change the appearance of the map.

**Pos. Format**: Sets the position format, datum, and spheroid used to calculate your GPS coordinates.

**Menu**: Allows you to customize the items that appear in the main menu.

**Reset**: Allows you to reset user data and settings.

**About**: Displays device, software, and license information.

#### **Customizing the Hot Key**

You can customize the hold function of the **DOWN** key. By default, holding **DOWN** marks a waypoint.

- 1 Hold MENU.
- 2 Select Settings > System > Hot Keys > Hold Down.
- 3 Select a function.

#### **Map Settings**

To open the map settings, hold **MENU**, and select **Settings** > **System** > **Map**.

Orientation: sets how the map is shown on the page. North Up sets how the map shows north at the top of the page. Track Up shows your current direction of travel toward the top of the page.

**Auto Zoom**: Automatically selects the appropriate zoom level for optimal use on your map. When **Off** is selected, you must zoom in or out manually.

**Points**: Sets the zoom level for points on the map.

Track Log: Allows you to show or hide tracks on the map.

**Go To Line**: Allows you to select how the course appears on the map.

**Map Colors**: Allows you to select whether land or water is highlighted on the map.

#### **Position Format Settings**

**NOTE:** Do not change the position format or the map datum coordinate system unless you are using a map or chart that specifies a different position format.

Hold MENU, and select Settings > System > Pos. Format.

**Format**: Sets the position format in which a given location reading appears.

**Datum**: Sets the coordinate system on which the map is structured.

**Spheroid**: Shows the coordinate system the device is using. The default coordinate system is WGS 84.

#### **Customizing the Main Menu**

You can add, delete, or move items in the main menu.

- 1 Hold MENU.
- 2 Select Settings > System > Menu.
- 3 Select a menu item.
- 4 Select an option:
  - Select Move Up or Move Down to change the location of the item in the list.
  - Select Remove to delete an item from the list.
  - Select Insert to add an item to the list.

# **Resetting the Device to Factory Settings**

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

- 1 Hold MENU.
- 2 Select Settings > System > Reset > All Settings.

# **ANT+ Sensors**

The device is compatible with these optional, wireless ANT+ accessories

- Heart rate monitor, such as HRM-Run (Putting On the Heart Rate Monitor)
- Bike speed and cadence sensor (Using an Optional Bike Cadence Sensor)
- Foot pod (Foot Pod)
- · Power sensor, such as Vector
- tempe wireless temperature sensor (tempe)

For information about compatibility and purchasing additional sensors, go to http://buy.garmin.com.

# **Pairing ANT+ Sensors**

Before you can pair ANT+ sensors, Bluetooth wireless technology must be turned off (Pairing Your Smartphone with Your fēnix 2 Device).

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

**NOTE:** If a heart rate monitor was bundled with your device, the included heart rate monitor is already paired with your device.

- 1 If you are pairing a heart rate monitor, put on the heart rate monitor (Putting On the Heart Rate Monitor).
  - The heart rate monitor does not send or receive data until you put it on.
- 2 Bring the device within 3 m (10 ft.) of the sensor.
  - **NOTE:** Stay 10 m (33 ft.) away from other ANT+ sensors while pairing.
- 3 Hold MENU.
- 4 Select Settings > Sensors.
- 5 Select your sensor.
- 6 Select New Search.

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

#### tempe

The tempe is an ANT+ wireless temperature sensor. You can attach the sensor to a secure strap or loop where it is exposed to ambient air, and therefore, provides a consistent source of accurate temperature data. You must pair the tempe with your device to display temperature data from the tempe.

# **Putting On the Heart Rate Monitor**

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

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

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

14 ANT+ Sensors

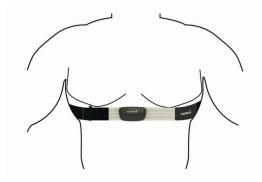


The Garmin logos on the module and the strap should be right-side up.

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



- 3 If the heart rate monitor has a contact patch ③, wet the contact patch.
- **4** Wrap the strap around your chest, and connect the strap hook ④ to the loop ⑤.



The Garmin logos should be right-side up.

**5** Bring the device within 3 m (10 ft.) of the heart rate monitor. After you put on the heart rate monitor, it is active and sending data.

**TIP:** If the heart rate data is erratic or does not appear, see the troubleshooting tips (Tips for Erratic Heart Rate Data).

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

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

- Reapply moisture to the electrodes and contact patch. You can use water, saliva, or electrode gel.
- · Tighten the strap on your chest.
- Warm up for 5–10 minutes.
- Wash the strap after every seven uses (Caring for the Heart Rate Monitor).
- Wear a cotton shirt or wet your shirt if suitable for your activity.

Synthetic fabrics that rub or flap against the heart rate monitor can create static electricity that interferes with heart rate signals.

 Move away from sources that can interfere with your heart rate monitor.

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

 Replace the battery (Replacing the Heart Rate Monitor Battery).

#### **Foot Pod**

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

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

#### **Setting the Foot Pod Mode**

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

- 1 Hold MENU.
- 2 Select Settings > Sensors > Foot Pod.
- 3 Select an option:
  - Select **Indoor** when you are training indoors without GPS.
  - Select Always On when training outdoors, when your GPS signal is weak, or when you lose satellite signals.

#### **Foot Pod Calibration**

Calibrating your foot pod is optional and can improve accuracy. There are three ways to adjust the calibration: distance, GPS, and manual.

#### Calibrating Your Foot Pod by Distance

Before you can calibrate your device, you must pair your device with the foot pod (Pairing ANT+ Sensors).

For best results, the foot pod should be calibrated using the inside lane of a regulation track or an exact distance. A regulation track (2 laps = 800 m or 0.5 mi.) is more accurate than a treadmill.

- 1 Hold MENU.
- 2 Select Settings > Sensors > Foot Pod > Calibrate > Distance.
- 3 Select Start to begin recording.
- 4 Run or walk 800 m or 0.5 mi.
- 5 Select Stop.

#### Calibrating Your Foot Pod by GPS

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

- 1 Hold MENU.
- 2 Select Settings > Sensors > Foot Pod > Calibrate > GPS.
- 3 Select Start to begin recording.
- **4** Run or walk approximately 1 k or 0.62 mi. The device informs you when you have traveled far enough.

#### Calibrating Your Foot Pod Manually

Before you can calibrate your device, you must pair your device with the foot pod (Pairing ANT+ Sensors).

Manual calibration is recommended if you know your calibration factor. If you have calibrated a foot pod with another Garmin product, you may know your calibration factor.

- 1 Hold MENU.
- 2 Select Settings > Sensors > Foot Pod > Calibrate > Manual.
- 3 Adjust the calibration factor:
  - · Increase the calibration factor if your distance is too low.
  - Decrease the calibration factor if your distance is too high.

ANT+ Sensors 15

# **Using an Optional Bike Cadence Sensor**

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

- Pair the sensor with your device (Pairing ANT+ Sensors).
- Update your fitness user profile information (Setting Up Your User Profile).
- Go for a ride (Going for a Ride).

# **Device Information**

# **Viewing Device Information**

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

- 1 Hold MENU.
- 2 Select Settings > System > About.

#### **Device Care**

#### **NOTICE**

Do not use a sharp object to clean the device.

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

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 keys 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 Device

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

# **Specifications**

Battery type	500 mAh Lithium-ion battery	
Battery life	Up to 5 weeks	
Water rating	5 ATM*	
Operating temperature range	From -20° to 50°C (from -4° to 122°F)	
Radio frequency/protocol	2.4 GHz ANT+ wireless technology Bluetooth Smart device	

<sup>\*</sup>The device withstands pressure equivalent to a depth of 50 meters. For more information, go to www.garmin.com/waterrating.

#### **Battery Information**

The actual battery life depends on how much you use GPS, device sensors, optional wireless sensors, and the backlight.

Battery Life	Mode
16 hours	Normal GPS mode
50 hours	UltraTrac GPS mode with one-minute polling interval
Up to 5 weeks	Watch mode

# **Caring for the Heart Rate Monitor**

#### NOTICE

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

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

- Go to www.garmin.com/HRMcare for detailed washing instructions.
- Rinse the strap after every use.
- · Machine wash the strap after every seven uses.
- · Do not put the strap in a dryer.
- · When drying the strap, hang it up or lay it flat.
- To prolong the life of your heart rate monitor, unsnap the module when not in use.

# **HRM-Run Specifications**

Battery type	User-replaceable CR2032, 3 volts	
Battery life	1 year (1 hour per day)	
Water rating	3 ATM*	
	<b>NOTE:</b> This product does not transmit heart rate data while swimming.	
Operating temperature range	From -20° to 60°C (from -4° to 140°F)	
Radio frequency/ protocol	2.4 GHz ANT+ wireless communications protocol	

\*The device withstands pressure equivalent to a depth of 30 meters. For more information, go to www.garmin.com/waterrating.

# **User Replaceable Batteries**

#### **⚠ WARNING**

Do not use a sharp object to remove batteries.

Keep the battery away from children.

Never put batteries in mouth. If swallowed, contact your physician or local poison control center.

Replaceable coin cell batteries may contain perchlorate material. Special handling may apply. See www.dtsc.ca.gov.hazardouswaste/perchlorate.

#### **△ CAUTION**

Contact your local waste disposal department to properly recycle the batteries.

#### **Replacing the Heart Rate Monitor Battery**

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



- 3 Wait 30 seconds.
- 4 Insert the new battery with the positive side facing up.
  NOTE: Do not damage or lose the O-ring gasket.
- 5 Replace the back cover and the four screws.

NOTE: Do not overtighten.

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

# **Data Management**

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

#### File Types

The device supports these file types.

- Files from BaseCamp. Go to www.garmin.com/trip\_planning.
- Files from Garmin Connect.
- GPI custom POI files from the Garmin POI Loader. Go to www.garmin.com/products/poiloader.
- · GPX track files for navigation.
- · GPX geocache files. Go to www.garmin.com/geocaching.
- · FIT files for Garmin Connect.

#### Disconnecting the USB Cable

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

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

#### **Deleting Files**

#### NOTICE

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

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

# **Troubleshooting**

#### **Resetting Your Device**

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

- 1 Hold LIGHT for at least 25 seconds.
- 2 Hold LIGHT for one second to turn on the device.

#### Maximizing the Battery Life

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

- Reduce the backlight brightness and timeout (Display Settings).
- Use UltraTrac GPS mode for your activity (UltraTrac).
- Turn off Bluetooth wireless technology when you are not using connected features (Bluetooth® Connected Features).
- When pausing your activity for a longer period of time, use the resume later option (Stopping an Activity).

#### **Getting More Information**

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

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

# **Appendix**

# **Data Fields**

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

A HR %MAX: The average percentage of maximum heart rate for the current activity.

AMB PRESS: The uncalibrated ambient pressure.

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

**AVG ASCENT**: The average vertical distance of ascent since the last reset.

**AVG BAL**: The average left/right power balance for the current activity.

AVG CAD: The average cadence for the current activity.

**AVG DESCNT**: The average vertical distance of descent since the last reset.

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

**AVG LAP**: The average lap time for the current activity.

AVG PACE: The average pace for the current activity.

**AVG PWR**: The average power output for the current activity.

**AVG SPEED**: The average speed for the current activity.

**AVG STRK DIS**: Average distance traveled per stroke during the current activity.

**AVG STRK RATE**: Average strokes per minute (spm) during the current activity.

**AVG STRKS/LEN**: Average number of strokes per length during the current activity.

**AVG SWOLF**: The average Swolf score for the current activity. Swolf score is the sum of the time for one length plus the number of strokes for that length (Swim Terminology).

**BAL**: The current left/right power balance.

**BAL 3S**: The three-second moving average of the left/right power balance.

**BAROMETER**: The calibrated current pressure.

**BATTERY**: The remaining battery power.

**BEARING**: The direction from your current location to a destination. You must be navigating for this data to appear.

**CADENCE**: The number of revolutions of the crank arm or number of steps per minute.

CALORIES: The amount of total calories burned.

**CMP HDNG**: The direction you are moving based on the compass.

**COMPASS**: Compass heading. A visual representation of the direction in which the device is pointing.

**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.

**DATE**: The current day, month, and year.

**DESCENT**: The total elevation distance descended for the current activity.

**DISTANCE**: The distance traveled for the current track or activity.

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

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

Appendix 17

- **FINAL DEST**: Final destination. The last point on the route or course.
- **FINAL DIST**: The remaining distance to the final destination. You must be navigating for this data to appear.
- **FINAL 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.
- **FINAL ETE**: The estimated time remaining until you reach the final destination. You must be navigating for this data to appear.
- FINAL LOC: The position of your final destination.
- **FINAL VDST**: The elevation distance between your current position and the final destination. You must be navigating for this data to appear.
- **FINAL VSPD**: The rate of ascent or descent to a predetermined altitude. You must be navigating for this data to appear.
- **GCT**: 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.
- **GLIDE RATIO**: The ratio of horizontal distance traveled to the change in vertical distance.
- **GPS**: The strength of the GPS satellite signal.
- **GPS ELEVTN**: The altitude of your current location using GPS.
- **GPS HDNG**: GPS heading. The direction you are moving based on GPS.
- **GRADE**: The calculation of rise (elevation) over run (distance). For example, if for every 3 m (10 feet) you climb you travel 60 m (200 feet), the grade is 5%.
- **GR DEST**: The glide ratio required to descend from your current position to the destination elevation. You must be navigating for this data to appear.
- **HEADING**: The direction you are moving.
- **HEART RATE**: Your heart rate in beats per minute (bpm). Your device must be connected to a compatible heart rate monitor.
- **HR** %MAX: The percentage of maximum heart rate.
- **HR ZONE**: The current range of your heart rate (1 to 5). The default zones are based on your user profile and maximum heart rate (220 minus your age).
- **INTERVAL**: The distance traveled for the current interval.
- INT LEN: Amount of pool lengths completed during the current interval.
- **INT PACE**: The average pace for the current interval.
- INT STRK: Total number of strokes for the current interval.
- **INT STRK DIS**: Average distance traveled per stroke during the current interval.
- INT STRK RATE: Average strokes per minute (spm) during the current interval.
- INT SWOLF: The average Swolf score for the current interval. Swolf score is the sum of the time for one length plus the number of strokes for that length (Swim Terminology).
- **INT TIME**: The stopwatch time for the current interval.
- KILOJOULES: The accumulated work performed (power output) in kilojoules.
- LAP ASCNT: The vertical distance of ascent for the current lap.
- **LAP BAL**: The average left/right power balance for the current lap.
- LAP CAD: The average cadence for the current lap.
- **LAP DESCNT**: The vertical distance of descent for the current lap.
- LAP DIST: The distance traveled for the current lap.

- **LAP HR**: The average heart rate for the current lap.
- LAP PACE: The average pace for the current lap.
- **LAP PWR**: The average power output for the current lap.
- **LAPS**: The number of laps completed for the current activity.
- **LAP SPEED**: The average speed for the current lap.
- **LAP TIME**: The stopwatch time for the current lap.
- **LAP TOTAL**: The stopwatch time for all the completed laps.
- **LAST INT**: The distance traveled for the last completed interval.
- **LAT/LON**: The current position in latitude and longitude regardless of the selected position format setting.
- **LENGTHS**: Amount of pool lengths completed during the current activity.
- **L HR %MAX**: The average percentage of maximum heart rate for the current lap.
- **LINT LEN**: Amount of pool lengths completed during the last completed interval.
- LINT PACE: The average pace for the last completed interval.
- **LINT STRK**: Total number of strokes for the last completed interval.
- **LINT STRK DIS**: Average distance traveled per stroke during the last completed interval.
- **LINT STRK RATE**: Average strokes per minute (spm) during the last completed interval.
- **LINT STRKS/LEN**: Average number of strokes per length during the last completed interval.
- **LINT SWOLF**: The average Swolf score for the last completed interval. Swolf score is the sum of the time for one length plus the number of strokes for that length (Swim Terminology).
- **LINT TIME**: The stopwatch time for the last completed interval.
- **LINT TYPE**: The stroke type used during the last completed interval.
- **LLAP ASCNT**: The vertical distance of ascent for the last completed lap.
- **LLAP CAD**: The average cadence for the last completed lap.
- **LLAP DECNT**: The vertical distance of descent for the last completed lap.
- **LLAP DIST**: The distance traveled for the last completed lap.
- **LLAP HR**: The average heart rate for the last completed lap.
- **LLAP PACE**: The average pace for the last completed lap.
- **LLAP SPD**: The average speed for the last completed lap.
- **LLAP TIME**: The stopwatch time for the last completed lap.
- **LLEN PACE**: The average pace for your last completed pool length.
- **LLEN STRK**: Number of strokes for the last completed pool length.
- **LLEN STRK RATE**: Average strokes per minute (spm) during the last completed pool length.
- **LLEN SWOLF**: The Swolf score for the last completed pool length. Swolf score is the sum of the time for one length plus the number of strokes for that length (Swim Terminology).
- **LLEN TYPE**: The stroke type used during the last completed pool length.
- **LOCATION**: The current position using the selected position format setting.
- **MAX ASCENT**: The maximum rate of ascent in feet per minute or meters per minute since the last reset.
- **MAX DESCNT**: The maximum rate of descent in meters per minute or feet per minute since the last reset.
- **MAX ELEVTN**: The highest elevation reached for the current track or activity.

18 Appendix

MAX PWR: The top power output for the current activity.

MAX SPEED: The top speed for the current activity.

**MAX TEMP**: The maximum temperature recorded in the last 24 hours.

MIN ELEVTN: The lowest elevation reached since the last reset.

**MIN TEMP**: The minimum temperature recorded in the last 24 hours.

**MOV'N AVG**: The average speed while moving for the current activity.

MOV'N TIME: A running tally of the time spent moving since the last reset

**NEXT DEST**: The next point on the route. You must be navigating for this data to appear.

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

**NEXT ETA**: 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.

**NEXT ETE**: The estimated time remaining until you reach the next point in your route. You must be navigating for this data to appear.

**NEXT VDST**: Next waypoint vertical distance. The elevation distance between your current position and the next waypoint in the route. You must be navigating for this data to appear.

NONE: This is a blank data field.

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

**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.

PACE: The current pace.

**PDL SMOOTH**: Pedal smoothness. The measurement of how evenly a rider is applying force to the pedals throughout each pedal stroke.

POWER: The current power output in watts.

**PWR 10S**: The 10-second moving average of power output.

PWR 30S: The 30-second moving average of power output.

PWR 3S: The three-second moving average of power output.

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

**REST REP**: The time remaining until the start of your next timed swim interval.

**REST TIME**: The timer for the current rest break.

SPEED: The current rate of travel.

STEPS: The number of steps recorded by the foot pod.

**STOP TIME**: A running tally of the time spent not moving since the last reset.

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

**STRK TYPE**: The current stroke type.

**STROKES**: Total number of strokes for the current activity.

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

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

**TEMP**: The temperature of the air. Your body temperature affects the temperature sensor.

**TIME**: The time since you started the activity, not including time while the activity was paused.

**TIMER**: The current time of the countdown timer.

**TO COURSE**: The direction in which you must move to get back on the route. You must be navigating for this data to appear.

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

**TORQUE EFF**: Torque efficiency. The measurement of how efficiently a rider is pedaling.

TRACK DIST: The distance traveled for the current track.

**TURN**: The angle of difference (in degrees) between the bearing to your destination and your current course. L means turn left. R means turn right. You must be navigating for this data to appear.

**VERT SPEED**: The rate of ascent or descent over time.

**VMG**: 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.

V OSC: Vertical oscillation. The amount of bounce while you are running. The vertical motion of your torso, measured in centimeters for each step.

**WATTS/KG**: The amount of power output in watts per kilogram.

# **Software License Agreement**

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Appendix 19

Index	foot pod 14, 15	replacing the battery 16
	G	resetting the device 14, 17
A	Garmin Connect 6, 13	routes 2, 3 creating 2
accessories 17	storing data 6	deleting 3
activities 3, 4, 10	Garmin Express 2	editing 2
saving 1, 5, 6	registering the device 1	viewing on the map 2
starting 1, 6	updating software 1	running dynamics 7, 8
adventures 3	geocaches 3, 4, 17	
alarms 11	downloading 4	<b>S</b>
clock 10	navigating to 4	saving activities 5, 6
proximity 12	GPS <b>12</b> , <b>13</b> , <b>16</b>	screen 13
alerts 11, 12	ground contact time 7	settings 10, 12–14
location 12 almanac	Н	sharing data <b>3</b> Sight 'N Go <b>3</b>
hunting and fishing 10	heart rate	skiing
sunrise and sunset 10	alerts 12	alpine 4, 5
altimeter 4, 13	monitor 8, 9, 14-16	snowboarding 4, 5
calibrating 13	zones 7	smartphone
ANT+ sensors 12, 14	hiking 5	applications 13
applications 13	history 5, 6	pairing 13
smartphone 13	sending to computer 6	snowboarding 4, 5
area calculation 10	HomePort 17	software
Auto Lap 12	hunting and fishing times 10	license 16
Auto Pause 12	1	updating 1
В	intervals 6	version 16
backlight 1, 13		software license agreement 19
barometer 4, 13	K	specifications 16
BaseCamp 3, 17	keys 1, 13, 14	speed 12 stopwatch 10
battery 16	locking 1	strokes 6
charging 1	L	sunrise and sunset times 10
life 16	language 13	swimming 5
maximizing 17	lengths 6	swolf score 6
replacing 16	lifetime athlete 7	system settings 13
bearing pointer 3	locations 3	_
bike sensors 16	deleting 2	
Bluetooth technology 13	editing 2	tempe 14
С	saving 2	temperature 14
cadence 7	locking, keys 1	time
alerts 12	М	alerts 12 settings 10, 13
sensors 16	main menu, customizing 14	zones 10
calibrating	man overboard (MOB) 4	zones and formats 10, 13
altimeter 13	maps 3	timer <b>5</b> , <b>6</b>
compass 13	browsing 4	countdown 10
calorie, alerts 12	navigating 4	tones 10
charging 1	orientation 14	TracBack 1, 4
chirp 4	settings 14	tracks 3, 5, 14
cleaning the device 16 compass 3, 12	updating 1	deleting 3
calibrating 13	menu 1	training 13
contrast 13	MOB 4	pages 5
coordinates 3	moon phase 10	plans 6
countdown timer 10	multisport 6	Training Effect 9 transferring, files 4, 17
customizing the device 11, 14	N	trip planner. See routes
cycling 5	navigation 3	troubleshooting 8, 14, 15, 17
	compass 3	
D	Sight 'N Go 3	U
data	waypoints 2	UltraTrac 12
pages 1, 11	north reference 12	unit ID 16
sharing 3 storing 6	0	units of measure 13
transferring 6	open-water swimming 5	USB
data fields 5	open-water swimming 5	disconnecting 17
deleting	P	transferring files 17 user data, deleting 17
all user data 17	pairing	user profile 7
locations 2	ANT+ sensors 14	user prome 7
distance 12	smartphone 13	V
alerts 12	pool size 5	vertical oscillation 7
downloading, geocaches 4	position format 14	VIRB remote 10
F	power (force), alerts 12	Virtual Partner 9
files	product registration 1	VO2 max. <b>8, 9</b>
transferring 4	profiles 4	W
types 17	user 7	WAAS 13
finding locations	projected finish time 9 proximity alarms 12	water resistance 16
near your location 2	proximity diamina 12	waypoints 1–3
waypoints 2	R	deleting 2
fishing times 10	recovery 9	editing 2
fitness 9	registering the device 1	projecting 2

20 Index

saving 2 workouts 6 loading 6

Z zones, time 10 zooming 1

Index 21

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