

# fēnix<sup>™</sup> Owner's Manual



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# **Table of Contents**

Introduction	
Charging the Device	
Keys	
Sensors	
Viewing the Sensor Data	
Turning On a Sensor Mode	2
Acquiring Satellites	2
Stopping GPS	
Going for a Hike	
Profiles	
Changing Profiles	2
Creating a Custom Profile	
Deleting a Profile	3
Waypoints, Routes, and Tracks	3
Waypoints	3
Creating a Waypoint	
Finding a Waypoint by Name	
Navigating to a Waypoint	
Editing a Waypoint	
Projecting a Waypoint	
Deleting a Waypoint	
Deleting All Waypoints	
Routes	
Creating a Route	
Editing the Name of a Route	
Editing a Route	
Viewing a Route on the Map	
Reversing a Route	1
Tracks	
Recording a Track	
Saving the Current Track	
Viewing Details about the Track4	
Clearing the Current Track	
Deleting a Track	
Sending and Receiving Data Wirelessly	
Navigation	ł
Navigating to a Destination	2
Navigating with Sight 'N Go	
Calibrating the Compass	
Map	
Browsing the Map	
Navigating Using TracBack®	5
Altimeter and Barometer	
Changing the Plot Type	
Calibrating the Barometric Altimeter	כ
Marking and Starting Navigation to a Man Overboard Location	3
Geocaches	
Downloading Geocaches	
Logging the Attempt	
chirp	
Finding a Geocache with a chirp6	
Applications	
Clock	
Setting the Alarm6	6
Starting the Countdown Timer	

Using the Stopwatch	
Adding a Custom Time Zone	
Editing a Custom Time Zone	
Alerts	
Setting a Proximity Alarm	
Calculating the Size of an Area	
Viewing the Almanacs	4
Simulating a Location	
-	
ANT+™ Sensors	
Pairing Your ANT+ Sensors	
tempe	
Putting On the Heart Rate Monitor	
Setting Your Heart Rate Zones	
About Heart Rate Zones	
Fitness Goals	
Using an Optional Bike Cadence Sensor	
Customizing Your Device	8
Setup Overview	
Customizing the Main Menu	
Customizing the Data Pages	
System Settings	
About UltraTrac	
Compass Settings	9
Setting the North Reference	
Altimeter Settings	
Setting the Device Tones Display Settings	
Map Settings	
Track Settings	
Time Settings	
Changing the Units of Measure	
Position Format Settings	10
Fitness Settings	
Setting Your Fitness User Profile 1	
About Lifetime Athletes 1	
Geocache Settings1	
Device Information1	
Viewing Device Information 1	
Updating the Software	
	0
Cleaning the Device	
Specifications	
Heart Rate Monitor Specifications 1	
Battery Information	0
Heart Rate Monitor Battery 1	
Replacing the Heart Rate Monitor Battery 1	0
Data Management 1	
File Types 1	
Deleting Files 1	
Disconnecting the USB Cable	
Troubleshooting	
Locking the Keys	
Resetting Your Device	
Resetting the Device to Factory Settings	
Clearing All Sensor Plot Data	
Getting More Information 1	
Appendix1	
Registering Your Device 1	
Software License Agreement	
Heart Rate Zone Calculations 1	
Index1	3

# Introduction

# 

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

See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

# **Getting Started**

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

- 1 Charge the device (page 1).
- **2** Register the device (page 11).
- 3 Learn about the sensor data and modes (page 1).
- **4** Acquire satellites (page 4).
- 5 Go for a hike (page 2).
- 6 Create a waypoint (page 3).

### **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.



1	Ŷ	Select to turn the backlight on and off. Hold to turn the device on and off.
2	$\triangle$	Select to scroll through the data pages, options, and settings.
3	$\bigtriangledown$	Select to scroll through the data pages, options, and settings.
4	∽	Select to return to the previous screen. Hold to view the status page.
5	Orange key	Select to open the menu for the current screen. Select to choose an option and to acknowledge a message. Hold to mark a waypoint.

#### Viewing the Status Page

Keys

You can quickly switch to this page to view the time of day, battery life, and GPS status information from any other page. Hold **1**.



### Customizing the Arrow Keys

You can customize the hold function of  $\triangle$  and  $\bigtriangledown$ . This customization is saved with the active profile (page 2). For example, if the marine profile is active, you can customize the hold  $\triangle$  function to mark a man overboard (MOB) location.

- 1 Select the Orange key.
- 2 Select Setup > System > Hold Keys.
- 3 Select Hold Up or Hold Down.
- **4** Select an option.

### Sensors

#### Viewing the Sensor Data

You can quickly access real-time data for the compass, altimeter, barometer, and temperature sensors. This default sensor mode is called **On Demand** mode in the device sensor settings.

**NOTE:** These data pages automatically time out to low-power (watch) mode.

NOTE: This data is not recorded to the device (page 4).

**1** From the time of day page, select  $\triangle$  or  $\nabla$ .



**2** Select  $\nabla$ .



**3** Select  $\bigtriangledown$ .



4 Select  $\nabla$ .



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

**TIP:** To purchase a tempe<sup>™</sup> wireless temperature sensor, go to www.garmin.com. When you have the tempe paired with the fēnix (page 7), you automatically get accurate temperature readings without having to remove the device from your wrist.

### **Turning On a Sensor Mode**

The default sensor mode is **On Demand** mode, which offers you quick access to compass, altimeter, barometer, or temperature data. You can also put the device in **Always On** mode to display continuous sensor data. For example, you can put the device in altimeter mode and continuously monitor elevation data.

**NOTE:** If you have an optional heart rate monitor or speed and cadence sensor paired with the device, your device can display continuous heart rate or speed and cadence data.

- 1 Select the Orange key.
- 2 Select Setup > Sensors > Mode > Always On.

# **Acquiring Satellites**

Before you can use the GPS navigation features, such as recording a track, you must acquire satellite signals.

The device may need a clear view of the sky to acquire satellite signals. The time and date are set automatically based on the GPS position. To adjust the time settings, see page 6.

For more information about GPS, go to www.garmin.com /aboutGPS.

- **1** Hold  $\bigcirc$  to turn on the device.
- 2 Select your language (first time only).
- 3 Select the Orange key.
- 4 Select Start GPS.
- 5 Wait while the device locates satellites.

### **Stopping GPS**

- 1 Select the Orange key.
- 2 Select Stop GPS.

### Going for a Hike

Before you go for a hike, you should charge the device completely (page 1).

**NOTE:** The device turns on automatically while charging. If you do not charge the device before going for a hike, hold Q to turn on the device.

- 1 Select the Orange key.
- 2 Select Start GPS.
- 3 Wait while the device locates satellites.
- 4 Start hiking.
- 5 When you want to take a break or pause the device from tracking, hold → > Pause Track.
- 6 Hold **→** > **Resume Track**, and continue hiking.
- 7 When finished, hold **→** > **Save Track** to save your hiking data.
- 8 If necessary, select Yes to stop GPS.

# Sending Your Hike to BaseCamp™

Before you can send data to BaseCamp, you must download BaseCamp to your computer (www.garmin.com/basecamp).

You can view your hike, other tracks, and waypoints on your computer.

1 Connect your device to your computer using the USB cable (page 1).

Your device appears as a removable drive in My Computer on Windows  ${}^{(\!R)}$  computers and as a mounted volume on  $\mathsf{Mac}^{(\!R)}$  computers.

- 2 Start BaseCamp.
- 3 Follow the on-screen instructions.

# **Profiles**

Profiles are a collection of settings that optimize your device based on how you are using it. For example, the settings and views are different when you are using the device when hiking than when mountain biking.

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

### **Changing Profiles**

When you change activities, you can quickly change the setup of the handheld to suit the activity by changing the profile.

- 1 Select the Orange key.
- 2 Select Profiles.

3 Select a profile.

The profile you selected is now the active profile. Any changes you make are saved to the active profile.

### **Creating a Custom Profile**

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

- **1** Select the **Orange** key.
- 2 Select Setup > Profiles.
- **3** Select an option:
- Select a profile.
  - · Select Create New, and select the new profile.

The profile you selected is now the active profile. The previous profile was saved.

- 4 If necessary, select Edit, and edit the name of the profile.
- 5 Customize your settings (page 8) and data fields for the active profile.

Any changes you make are saved to the active profile.

### **Deleting a Profile**

- 1 Select the Orange key.
- 2 Select Setup > Profiles.
- 3 Select a profile.
- 4 Select Delete > Yes.

# 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 the Orange key.
- 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**.

### Finding a Waypoint by Name

- 1 Select the Orange key.
- 2 Select Waypoints > Spell Search.
- **3** Use the **Orange** key,  $\triangle$ , and  $\bigtriangledown$  to enter characters.
- 4 When finished, select \_ > Done.

### Navigating to a Waypoint

- 1 Select the Orange key.
- 2 Select Start GPS.
- 3 Wait while the device locates satellites.
- 4 Select the Orange key.
- 5 Select Waypoints, and select a waypoint from the list.
- 6 Select Go.



The device displays time to destination (1), distance to destination (2), and estimated time of arrival (3).

7 Select  $\bigtriangledown$  to view the compass page.



The two pointer marks ④ serve as a bearing pointer. The top orange mark ⑤ points in the direction you are facing.

- 8 Align the pointer marks with the top orange mark.
- **9** Continue to walk in that direction until you reach the destination.

### Editing a Waypoint

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

- 1 Select the Orange key.
- 2 Select Waypoints.
- 3 Select a waypoint.
- 4 Select Edit.
- 5 Select an item to edit, such as the name.
- **6** Use the **Orange** key,  $\triangle$ , and  $\bigtriangledown$  to enter characters.
- 7 When finished, 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 Select the Orange key.
- 2 Select Waypoints
- 3 Select a waypoint.
- 4 Select Average.
- 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 a marked location to a new location.

- 1 Select the Orange key.
- 2 Select Waypoints.
- 3 Select a waypoint.
- 4 Select Project.
- 5 Follow the on-screen instructions.

The projected waypoint is saved with a default name.

#### Deleting a Waypoint

- 1 Select the Orange key.
- 2 Select Waypoints.
- 3 Select a waypoint.
- 4 Select Delete > Yes.

#### Deleting All Waypoints

1 Select the Orange key.

2 Select Setup > Reset > Waypoints > Yes.

# Routes

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

# Creating a Route

- 1 Select the **Orange** key.
- 2 Select 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 Select the **Orange** key.
- 2 Select Routes.
- **3** Select a route.
- 4 Select Rename.
- **5** Use the **Orange** key,  $\triangle$ , and  $\nabla$  to enter characters.
- 6 When finished, select \_ > Done.

# Editing a Route

- 1 Select the **Orange** key.
- 2 Select Routes.
- 3 Select a route.
- 4 Select Edit.
- **5** Select a point.
- 6 Select an option:
  - To view the point on the map, select Details.
  - 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 to point you are editing.
  - To remove the point from the route, select Remove.

# Viewing a Route on the Map

- 1 Select the **Orange** key.
- 2 Select Routes.
- 3 Select a route.
- 4 Select View Map.

# Deleting a Route

- 1 Select the Orange key.
- 2 Select Routes.
- 3 Select a route.
- 4 Select Delete > Yes.

# **Reversing a Route**

- 1 Select the **Orange** key.
- 2 Select Routes.
- 3 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.

# Recording a Track

- 1 Select the Orange key.
- 2 Select Start GPS.
- 3 Wait while the device locates satellites.
- **4** Walk around to record a track.
  - Your distance and time appear.

You can customize the data pages (page 8).

- 6 Hold **⁴**.
- 7 Select an option:
  - Select Pause Track to pause tracking.
  - Select **Save Track** to save your track.
  - Select Clear Track to erase the track without saving.
  - Select Stop GPS to turn off GPS without deleting your track.

# Saving the Current Track

- 1 Select the Orange key.
- 2 Select Tracks > Current.
- **3** Select an option:
  - To save the entire track, select **Save**.
  - To save part of the track, select **Save Part**, and select the part to save.

# Viewing Details about the Track

- 1 Select the Orange key.
- 2 Select Tracks.
- 3 Select a track.
- 4 Select View Map.
- The beginning and the end of the track are marked by flags.
- 5 Select ← > Details.
- **6** Use  $\triangle$  and  $\bigtriangledown$  to view information about the track.

# **Clearing the Current Track**

- 1 Select the Orange key.
- 2 Select Tracks > Current > Clear.

# **Deleting a Track**

- 1 Select the Orange key.
- 2 Select Tracks.
- 3 Select a track.
- 4 Select Delete > Yes.

# Sending and Receiving Data Wirelessly

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

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

- 1 Select the Orange key.
- 2 Select Share Data > Unit to Unit.
- 3 Select Send or Receive.
- 4 Follow the on-screen instructions.

# 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 a destination using the compass or map (page 5).

- 1 Select the Orange key.
- 2 Select Start GPS.
- 3 Wait while the device locates satellites.
- **4** Select the **Orange** key.
- 5 Select an option:
  - · Select Waypoints.
  - Select Tracks.
  - Select Routes.
  - Select GPS Tools > Coordinates.
  - Select GPS Tools > POIs.
  - Select GPS Tools > Geocaches.
- 6 Select a destination.
- 7 Select Go.



The device displays time to destination (1), distance to destination (2), and estimated time of arrival (3).

8 Select  $\bigtriangledown$  to view the compass page.



The two pointer marks ④ serve as a bearing pointer. The top orange mark ⑤ points in the direction you are facing.

**9** Align the pointer marks with the top orange mark.

**10** Continue to walk in that direction until you reach the destination.

# 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 the Orange key.
- 2 Select GPS Tools > Sight 'N Go.
- 3 Point the orange marks on the bezel at an object.
- 4 Select the Orange key.
- 5 Select an option:
  - · Select Set Course to navigate to the distant object.
  - Select Project (page 3).
- 6 Navigate using the compass (page 5) or map (page 5).

### Compass

The device has a 3-axis compass with automatic calibration.

- Compass navigation (page 3)
- Compass settings (page 9)

### **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** Select the **Orange** key.
- 2 Select Setup > Sensors > Compass > Calibrate > Start.
- **3** Follow the on-screen instructions.

# Мар

▲ 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 (page 5)
- Map settings (page 9)

### **Browsing the Map**

- **1** While navigating, select  $\nabla$  to view the map.
- 2 Select the **Orange** key.
- 3 Select one or more options:
  - Select **Pan**, and select ♀, △, ▽, and **→** to view different areas.
  - Select **Zoom**, and select  $\triangle$  and  $\bigtriangledown$  to zoom in and out of the map.

**NOTE:** To exit or change the browsing mode of the map, select the **Orange** key, and select an option.

# Navigating Using TracBack®

While navigating, you can navigate back to the beginning of your track. This can be helpful when finding your way back to camp or the trail head.

- 1 Select the Orange key.
- 2 Select Tracks > Current > 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.

- On Demand sensor data (page 1)
- Always On sensor data (page 2)
- Altimeter settings (page 9)

### Changing the Plot Type

You can change the way the device plots barometer and elevation data.

- 1 Select the Orange key.
- 2 Select Setup > Sensors > Altimeter.
- 3 Select Baro. Plot or Elev. Plot.
- 4 Select an option.

### **Calibrating the Barometric Altimeter**

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

- 1 Select the Orange key.
- 2 Select Setup > Sensors > Altimeter > Calibrate.
- 3 Follow the on-screen instructions.

### Marking and Starting Navigation to a Man Overboard Location

You can save a man overboard (MOB) location, and automatically start navigation back to it. You can customize the hold function of the  $\triangle$  or  $\bigtriangledown$  key to access the MOB function quickly (page 1).

- 1 Select the Orange key.
- 2 Select GPS Tools > MOB > Start.
- The map page opens showing the route to the MOB location.
- 3 Navigate using the compass (page 5) or map (page 5).

# 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 your device to a computer using the USB cable.
- 2 Go to www.opencaching.com.
- **3** If necessary, create an account.
- 4 Sign in.
- **5** Follow the onscreen instructions to find and download geocaches to your device.

# Navigating to a Geocache

Navigating to a geocache is like navigating to any other location.

- Go to the navigation section (page 5) for more information.
- Go to the profiles section (page 3) to create a profile for geocaching.
- Go to the geocache settings (page 10) to customize your device settings.
- Go to the data pages section (page 8) to customize your data fields.

# Logging the Attempt

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

- 1 Select the Orange key.
- 2 Select GPS Tools > Geocaches > 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 fēnix 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

- 1 Select the Orange key.
- 2 Select Setup > Geocaches > chirp > On.
- **3** Hold **→**.
- 4 Select Start GPS.
- 5 Wait while the device locates satellites.
- 6 Select the **Orange** key.
- 7 Select GPS Tools > Geocaches.
- 8 Select a geocache, and select **chirp** to show chirp details while you are navigating.
- 9 Select Go, and navigate to the geocache (page 3).When you are within 32.9 ft. (10 m) of the geocache that contains a chirp, a message appears.

# **Applications**

### Clock

### Setting the Alarm

- 1 Select the Orange key.
- 2 Select Clock > Alarm Clock > Add Alarm.
- **3** Use the **Orange** key,  $\triangle$ , and  $\nabla$  to set the time.
- 4 Select Tone, Vibration, or Tone & Vib..
- 5 Select Once, Daily, or Weekdays.

### Starting the Countdown Timer

- 1 Select the Orange key.
- 2 Select Clock > Timer.
- **3** Use the **Orange** key,  $\triangle$ , and  $\bigtriangledown$  to set the time.
- 4 If necessary, select **Tone**, and select a type of notification.
- 5 Select Start.

### Using the Stopwatch

- 1 Select the Orange key.
- 2 Select Clock > Stopwatch.
- 3 Select Start.

### Adding a Custom Time Zone

- 1 Select the **Orange** key.
- 2 Select Clock > Alt. Zones > Add Zone.
- 3 Select a time zone.

The custom time zone page is added to the quick page loop (page 1).

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

- 1 Select the Orange key.
- 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.
  - To delete the time zone from the quick page loop, select Delete > Yes.

# Alerts

You can set the device to alert you in many different situations where your awareness of the surrounding conditions or other data is important. 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 bpm (beats per minute) 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
Proximity	Recurring	See page 7.
Distance	Event, recurring	You can set an interval or a custom distance from your final destination.
Time	Event, recurring	You can set an interval or a custom time from your estimated time of arrival.
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.
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.
Heart Rate	Range	You can set minimum and maximum heart rate values or select zone changes (page 8).
Cadence	Range	You can set minimum and maximum cadence values.
Battery	Event	You can set a low battery power alert.

### Setting a Proximity Alarm

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

- 1 Select the Orange key.
- 2 Select Alerts > Proximity > Create New.
- 3 Select a location.
- 4 Enter a radius.
- 5 Select Done.

# Calculating the Size of an Area

Before you can calculate the size of an area, you must acquire satellites (page 2).

- 1 Select the Orange key.
- 2 Select GPS Tools > Area Calc..
- 3 Walk around the perimeter of the area you want to calculate.
- **4** When you are finished, select the **Orange** key to calculate the area.
- **5** Select an option:
  - Select Save Track, enter a name, and select Done.
  - Select Change Units to convert the area to a different unit.
  - Select saving.

# Viewing the Almanacs

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

1 Select the **Orange** key.

- **2** Select an option:
  - To view the sunrise, sunset, moonrise, and moonset information, select **GPS Tools** > **Sun & Moon**.
  - To view the predicted best times for hunting and fishing, select GPS Tools > Hunt & Fish.
- **3** If necessary, select  $\triangle$  or  $\nabla$  to view a different day.

# **Viewing Satellite Information**

The satellite page shows your current location, GPS accuracy, satellite locations, and signal strength.

- **1** Select the **Orange** key.
- 2 Select Start GPS.
- 3 Select the Orange key.
- 4 Select GPS Tools > Satellite.
- **5** Select  $\bigtriangledown$  to view additional information.

### **Simulating a Location**

When you are planning routes or activities in a different area, you can turn off GPS and simulate a different location.

- 1 Select the Orange key.
- 2 Select Setup > System > GPS Mode > Demo Mode.
- 3 Select a location.
- 4 Select Go > Move to Location.

# ANT+<sup>™</sup> Sensors

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

- Heart rate monitor (page 7)
- GSC<sup>™</sup> 10 speed and cadence sensor (page 8)
- tempe wireless temperature sensor (page 7)

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

# Pairing Your ANT+ Sensors

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

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

- Bring the device with range (3 m) of the sensor.
  NOTE: Stay 10 m away from other ANT+ sensors while pairing.
- 2 Select the Orange key.
- 3 Select Setup > ANT Sensor.
- 4 Select your sensor.
- 5 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 a 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 (page 7) 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.



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



**3** Wrap the strap around your chest, and connect the strap hook (3) to the loop.

The Garmin logo should be right-side up.

4 Bring the device within range (3 m) of the heart rate monitor. TIP: If the heart rate data is erratic or does not appear, you may have to tighten the strap on your chest or warm up for 5–10 minutes.

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

### **Setting Your Heart Rate Zones**

The device uses your fitness user profile (page 10) information to determine your heart rate zones. You can manually adjust the heart rate zones according to your fitness goals (page 8).

- 1 Select the Orange key.
- 2 Select Setup > Fitness > HR Zones.
- **3** Follow the on-screen instructions.

### About Heart Rate Zones

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

### **Fitness Goals**

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

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

If you know your maximum heart rate, you can use the table (page 12) 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.

# Using an Optional Bike Cadence Sensor

You can use the GSC 10 to send biking data to your device.

- Pair the sensor with your fenix (page 7).
- Create a custom profile for biking (page 3).
- Update your fitness user profile information (page 10).

# **Customizing Your Device**

### **Setup Overview**

The **Setup** menu contains numerous ways to customize your device. Garmin recommends that you take the time to familiarize yourself with the settings for each feature. If you take the time to customize your settings before your activity, you will spend less time adjusting the watch during your activity. To open the **Setup** menu, select the **Orange** key, and select **Setup**.

**NOTE:** Any changes you make are saved to the active profile (page 2).

(page _).	
Setup Item	Available Settings and Information
System	You can customize GPS settings, arrow keys, and the device language (page 9).
Data Pages	You can customize data pages and data fields (page 8).
Sensors	You can customize the compass (page 9) and altimeter (page 9) settings.
ANT Sensor	You can set up wireless accessories such as the heart rate monitor or tempe (page 7).
Tones	You can customize the tones and vibrations (page 9).
Display	You can adjust the backlight and screen contrast (page 9).
Reset	You can clear the trip data, sensor plots (page 11), waypoints, or track log, or you can reset all of your settings (page 11).
Мар	You can customize the map orientation and how items appear on the map (page 9).
Tracks	You can customize the track recording settings (page 9).
Time	You can customize the appearance of the time page (page 9).
Units	You can change the units of measure for data such as distance, elevation, and temperature (page 9).
Pos. Format	You can change how your position data appears (page 10).
Profiles	You can change the active profile and edit your profiles (page 2).
Fitness	You can turn on <b>Auto Lap</b> , customize your fitness user profile, and edit your heart rate zones (page 10).
Geocaches	You can customize how your geocaches are listed and activate chirp (page 10).
Menu	You can customize the items that appear in the main menu (page 8).
About	You can view information about the device and software (page 10).

# Customizing the Main Menu

You can move or delete items in the main menu.

- Select the Orange key.
- 2 Select Setup > 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.

### **Customizing the Data Pages**

You can customize the data pages for each profile (page 2).

- **1** Select the **Orange** key.
- 2 Select Setup > Data Pages.
- Select a category.
  Select Add Page.

- **5** Follow the on-screen instructions to select the number of data fields and the type of data to appear.
- **6** If necessary, select an existing data page.
- 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.

# System Settings

### Select Setup > System.

- GPS Mode: Sets the GPS to Normal, UltraTrac (page 9), or Demo Mode (GPS off).
- 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.
- Hold Keys: Allows you to customize the hold function of the arrow keys (page 1).
- Language: Sets the text language on the device.

**NOTE:** Changing the text language does not change the language of user-entered data or map data.

### About UltraTrac

UltraTrac is a GPS setting that records one point per minute. This allows you to use GPS tracking for up to 50 hours.

# **Compass Settings**

### Select Setup > Sensors > Compass.

- **Display**: Sets the directional heading on the compass to degrees or milli-radians.
- **North Ref.**: Sets the north reference of the compass (page 9).
- **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 (page 5).

### Setting the North Reference

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

- 1 Select the Orange key.
- 2 Select Setup > 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**.

# **Altimeter Settings**

### Select Setup > Sensors > Altimeter.

- Auto Cal.: Allows the altimeter to self-calibrate each time you turn on GPS tracking.
- **Baro. Plot**: **Variable** records changes in elevation while you are moving. **Fixed** assumes the device is stationary at a fixed elevation. Therefore, the barometric pressure should only change due to weather. **Amb. Press.** records ambient pressure changes over a period of time.

**Elev. Plot**: Sets the device to record elevation changes over a period of time or distance.

# **Setting the Device Tones**

You can customize tones for messages and keys.

- 1 Select the Orange key.
- 2 Select Setup > Tones.
- 3 Select Messages or Keys.
- 4 Select an option.

# **Display Settings**

### Select Setup > Display.

- **Backlight**: Adjusts the backlight level and the length of time before the backlight turns off.
- Contrast: Adjusts the screen contrast.

# **Map Settings**

### Select Setup > Map.

- **Orientation**: Adjusts how the map is shown on the page. **North Up** 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: Selects 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.

# **Track Settings**

#### Select Setup > Tracks.

- **Method**: Selects a track recording method. **Auto** records the tracks at a variable rate to create an optimum representation of your tracks. If you select **Distance** or **Time**, you can set the interval rate manually.
- **Interval**: Allows you to set the track log recording rate. Recording points more frequently creates a more-detailed track, but it fills the track log faster.
- Auto Start: Sets the device to record your track automatically when you select Start GPS.
- Auto Save: Sets the device to automatically save your track when you turn off GPS.
- Auto Pause: Sets the device to stop recording your track when you are not moving.
- **Output**: Sets the device to save the track as a GPX file or a GPX/FIT file (page 11).

# **Time Settings**

### Select Setup > 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 **Auto** 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 Select the Orange key.
- 2 Select Setup > Units.

- 3 Select a measurement type.
- 4 Select a unit of measure.

# **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.

#### Select Setup > 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.

### **Fitness Settings**

#### Select Setup > Fitness.

Auto Lap: Sets the device to automatically mark the lap at a specific distance.

User: Sets the user profile information (page 10).

**HR Zones**: Sets the five heart rate zones for fitness activities (page 8).

#### **Setting Your Fitness User Profile**

The device uses information that you enter about yourself to calculate accurate data. You can modify the following user profile information: gender, age, weight, height, and lifetime athlete (page 10).

- 1 Select the Orange key.
- 2 Select Setup > Fitness > User.
- 3 Modify the settings.

#### 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.

### **Geocache Settings**

Select Setup > Geocaches.

**List**: Allows you to display the geocache list by names or codes. **chirp**: Turns chirp searching on or off (page 6).

# **Device Information**

### **Viewing Device Information**

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

- 1 Select the Orange key.
- 2 Select Setup > About.

### Updating the Software

**NOTE:** Updating the software does not erase any of your data or settings.

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

### **Device Care**

#### NOTICE

Do not use a sharp object to clean the device.

Avoid chemical cleaners and solvents that can damage plastic components.

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

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

### **Specifications**

Battery type	500 mAh Lithium-ion battery
Battery life	Up to 6 weeks
Water resistance	Water resistant to 164 ft. (50 m)
Operating temperature range	From -4°F to 122°F (from -20°C to 50°C)
Radio frequency/ protocol	2.4 GHz ANT+ wireless communications protocol Bluetooth <sup>®</sup> Smart device

### **Heart Rate Monitor Specifications**

Battery type	User-replaceable CR2032, 3 volts	
Battery life	Up to 4.5 years (1 hour per day). When the battery is low, a message appears on your compatible Garmin device.	
Water resistance	Water resistant to 98.4 ft. (30 m)	
	<b>NOTE:</b> This product does not transmit heart rate data to your GPS device while swimming.	
Operating temperature range	From 23°F to 122°F (from -5°C to 50°C)	
Radio frequency/ protocol	2.4 GHz ANT+ wireless communications protocol	

### **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
Up to 2 weeks	Always On sensor mode
Up to 6 weeks	Watch mode

# **Heart Rate Monitor Battery**

#### 

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

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

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

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



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

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

### **Data Management**

**NOTE:** The device is not compatible with Windows 95, 98, Me, Windows  $NT^{(R)}$ , and Mac OS 10.3 and earlier.

### **File Types**

The device supports these file types.

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

### **Deleting Files**

#### NOTICE

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

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

### **Disconnecting the USB Cable**

If your device is connected to your computer as a removable drive or volume, you must safely disconnect your device from your computer to avoid data loss. If your device is connected to your Windows<sup>®</sup> 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<sup>®</sup> computers, drag the volume icon to the **Trash**.
- **2** Disconnect the cable from your computer.

# Troubleshooting

### Locking the Keys

You can lock the keys to prevent inadvertent key presses.

- 1 Select the data page you want to view while the keys are locked.
- **2** Hold  $\frown$  and  $\triangle$  to lock the keys.
- **3** Hold  $\frown$  and  $\triangle$  to unlock the keys.

### **Resetting Your Device**

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

- 1 Hold <sup></sup><sup></sup> for at least 25 seconds.
- **2** Hold  $\bigcirc$  for one second to turn on the device.

### **Resetting the Device to Factory Settings**

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

- 1 Select the Orange key.
- 2 Select Setup > Reset > All Settings > Yes.

### **Clearing All Sensor Plot Data**

- 1 Select the Orange key.
- 2 Select Setup > Reset > Clear Plots > Yes.

### **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

### **Registering Your Device**

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

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

# Software License Agreement

BY USING THE DEVICE, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE FOLLOWING SOFTWARE LICENSE AGREEMENT. PLEASE READ THIS AGREEMENT CAREFULLY.

Garmin Ltd. and its subsidiaries ("Garmin") grant you a limited license to use the software embedded in this device (the "Software") in binary executable form in the normal operation of the product. Title, ownership rights, and intellectual property rights in and to the Software remain in Garmin and/or its thirdparty providers.

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# **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

# Index

#### Α

accessories 11 alarms 7 clock 6 proximity 7 alerts 7 location 7 almanac hunting and fishing 7 sunrise and sunset 7 altimeter 1, 2, 5, 6, 9, 11 ANT+ sensors 7 pairing 7 area calculation 7 Auto Lap 10

### В

backlight 1, 9 barometer 1, 2, 5, 6, 11 BaseCamp 2, 11 battery 10 charging 1 life 1, 10 replacing 10 bearing pointer 3

#### С

calibrating altimeter 6 compass 5 charging the device 1 chirp 6, 10 cleaning the device 10 compass 1–3, 5, 9 computer, connecting 2 contrast 9 coordinates 5 countdown timer 6 customizing the device 1, 8

### D

data, sharing 4 data fields 8 deleting all user data 11 locations 3 profiles 3 demo mode 7 device registration 11 resetting 11 distance 4 downloading, geocaches 6

### E

elevation 1, 2 plot 5, 11

#### F files

transferring 6

types 11 fishing times 7 fitness 10

### G

geocaches 4–6, 10, 11 downloading 6 navigating to 6 navigation, geocaches 6 GPS 9, 10 signal 1, 2, 7 stopping 2, 7 GSC 10 7

### Н

heart rate, zones **8**, heart rate monitor **2**, **7**, HomePort **11** hunting and fishing times

# K

keys 1, 9 locking 11

### L

language 9 lifetime athlete 10 locations 5, 7 editing 3 saving 3 locking, keys 11

#### Μ

main menu, customizing 8 man overboard (MOB) 1, 6 maps 4 browsing 5 navigating 5 orientation 9 settings 9 zoom 5 menu 1 moon phase 7

### Ν

navigation 2, 4, 5 compass 5 Sight 'N Go 5 waypoints 3 north reference 9

#### Ρ

pairing ANT+ sensors 7 POI Loader 11 position format 10 product registration 11 profiles 2, 3, 10 proximity alarms 7

### R

registering the device 11 replacing battery 10 resetting, device 11 restoring settings 11 routes 4, 5 creating 4 deleting 4 editing **4** viewing on the map **4** 

### S

satellite page 7 satellite signals 2, 7 screen 9 settings 8-11 sharing data 4 Sight 'N Go 5 software updating 10 version 10 software license agreement 10, 11 specifications 10 speed 4 speed and cadence sensors 2 stopwatch 6 sunrise and sunset times 7 system settings 9

### Т

tempe 7 temperature 1, 2, 7 time of day 1 time settings 6, 9 time zones 6, 9 timer, countdown 6 tones 6, 9 TracBack 5 tracks 2, 4, 5, 9 deleting 4 transferring files 6 trip planner. See routes troubleshooting 11

### U

UltraTrac 9 unit ID 10 units of measure 9 updating software 10 USB disconnecting 11 transferring files 11 user data, deleting 11 user profile 10

### V

vibration alerts 9

### W

WAAS 9 water resistance 10 waypoints 1, 3–5 deleting 3 editing 3 projecting 3 saving 3

### Ζ

zones, time 6 zooming 1 maps 5

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