GARMIN

owner's manual

FORERUNNER® 405

GPS-ENABLED SPORTS WATCH WITH WIRELESS SYNC

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Introduction

Thank you for purchasing the Garmin® Forerunner® 405 GPS-enabled sports watch.

WARNING: 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.

Contact Garmin

Contact Garmin Product Support if you have any questions while using your Forerunner. In the USA, go to www.garmin.com/support, or contact Garmin USA by phone at (913) 397.8200 or (800) 800.1020.

In the UK, contact Garmin (Europe) Ltd. by phone at 0808 2380000.

In Europe, go to www.garmin.com/support and click **Contact Support** for in-country support information, or contact Garmin (Europe) Ltd. by phone at +44 (0) 870.8501241.

Product Registration

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.

Free Software

Go to www.garmin.com/forerunner405 for information about Garmin Connect™ Web-based software or the Garmin Training Center® computer software. Use this software to store and analyze your workout data.

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Caring for the Forerunner

Clean the Forerunner and the heart rate monitor using a cloth dampened with a mild detergent solution. Wipe dry. Avoid chemical cleaners and solvents that may damage plastic components.

Do not store the Forerunner where prolonged exposure to temperature extremes may occur (such as in the trunk of a car), as permanent damage may result.

User information, such as history, locations, and tracks, is retained indefinitely in the memory of the unit without the need for external power. Back up important user data by transferring it to Garmin Connect or Garmin Training Center. See page 9.

Water Immersion

The Forerunner is waterproof to IEC Standard 60529 IPX7. It can withstand immersion in 1 meter of water for 30 minutes. Prolonged submersion can cause damage to the unit. After submersion, be certain to wipe dry and air dry the unit before using or charging.

CAUTION: The Forerunner is not intended to be used while swimming. Swimming or prolonged water submersion can cause a short in the unit, which can in rare cases result in a minor skin burn or irritation in the area of the unit.

Getting Started

WARNING: This product contains a non-replaceable lithium-ion battery. See the *Important Safety and Product Information* guide in the product box for important battery safety information.

WARNING: 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.

Step 1: Use the Touch Bezel

The silver bezel around the watch face acts as a multifunction button.

Tap: quickly press your finger on the bezel to make a selection, toggle a menu option, or change pages.

Touch and hold: hold your finger on one of the four labeled areas on the bezel to switch modes.

Double press: press two fingers on two areas on the bezel to turn on the backlight.

Touch and drag (scroll): press your finger on the bezel and drag it around the bezel to scroll through the menu options or to increase or decrease values.

Touch Bezel Areas and Buttons

❶ **time/date:** touch and hold to enter time/date mode.

❷ **GPS:** touch and hold to enter GPS mode.

❸ **menu:** touch and hold to open the menu page.

❹ **training:** touch and hold to enter training mode.

❺ **start/stop/enter:**

- Press to start/stop the timer in training mode.
- Press to make a selection.
- Press to exit power save mode.

❻ **lap/reset/quit:**

- Press to create a new lap in training mode.
- Press and hold to reset the timer in training mode.
- Press to exit a menu or page.
- Press to exit power save mode.

Bezel Tips

- Touch the bezel firmly.
- Touch the bezel on the outer ring, where the words appear, not the inner ring near the watch face.
- Make each bezel selection a separate action.
- Do not rest your finger or thumb on the bezel while using it.
- Do not wear thick gloves while using the bezel.
- If the bezel is wet, wipe the bezel dry before using it.

Locking the Bezel

To prevent accidental bezel taps (due to moisture or inadvertent bumping), press **enter** and **quit** simultaneously. To unlock the bezel, press **enter** and **quit** simultaneously again.

Power Save Mode

After a period of inactivity, the Forerunner switches to power save mode. The Forerunner is inactive if the timer is not running, you are not navigating to a destination and viewing the navigation page, and you have not pressed any buttons or tapped the bezel.

While in power save mode, you can view the time of day, turn on the backlight, and use the ANT+™ computer connection. To exit power save mode, press **enter** or **quit**. For custom options, see page 13.

Step 2: Charge the Battery

Your Forerunner ships with the power off to conserve the battery. Charge the Forerunner for at least 3 hours before using it. The length of time a fully charged battery will last depends upon usage. For more battery information, see page 40.

NOTE: To prevent corrosion, thoroughly dry the charging contacts and surrounding area before charging.

TIP: The Forerunner will not charge when outside the temperature range of 32°F–122°F (0°C–50°C).

1. Plug the USB connector on the charging clip cable into the AC adapter.
2. Plug the AC adapter into a standard wall outlet.
3. Align the charging clip posts with the contacts on the back of the Forerunner.

4. Clip the charger securely over the face of the Forerunner.

Step 3: Configure Your Forerunner

The first time you use your Forerunner, follow the on-screen instructions to learn how to use the bezel and configure the Forerunner.

If you are using an ANT+ heart rate monitor, select **Yes** during the configuration to allow the heart rate monitor to pair (connect) with your Forerunner. See Step 5 for more information.

Step 4: Acquire Satellite Signals

To set the correct time of day and begin using the Forerunner, you must acquire GPS satellite signals. It may take a few minutes to acquire signals.

NOTE: To turn off the GPS receiver and use the Forerunner indoors, see page 21.

NOTE: You cannot acquire satellites in power save mode. To exit power save mode, press **enter** or **quit**.

1. Go outdoors to an open area. For the best reception, make sure the antenna of the Forerunner is oriented toward the sky.

2. Touch and hold **training** to enter training mode.
3. Stand still and do not begin moving until the locating satellites page disappears.

When you are receiving satellite signals, the GPS icon appears in the training mode pages.

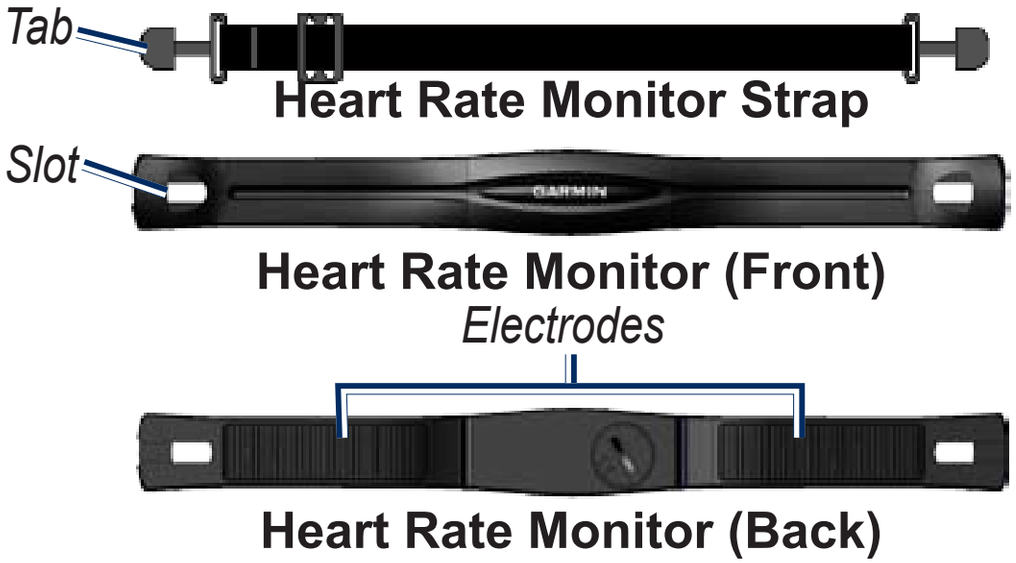
Step 5: Pair the Heart Rate Monitor (Optional)

⚠ CAUTION

The heart rate monitor may cause chafing when used for long periods of time. To alleviate this issue, apply an anti-friction lubricant or gel to the center of the hard strap where it contacts your skin.

Do not use gels or lubricants that contain sunscreen. Do not apply anti-friction gel or lubricant on the electrodes.

While you are trying to pair your heart rate monitor with your Forerunner for the first time, move 10 m away from other heart rate



monitors.

The heart rate monitor is on standby and ready to send data. Wear the heart rate monitor directly on your skin, just below your breastplate. It should be snug enough to stay in place during your run.

1. Push one tab on the strap through the slot in the heart rate monitor. Press the tab down.
2. Wet both electrodes on the back of the heart rate monitor to create a strong connection between your chest and the transmitter.
3. Wrap the strap around your chest and attach it to the other side of the heart rate monitor.

NOTE: The Garmin logo should be right-side up.

4. Press **quit** or **enter** to exit power save mode.
5. Bring the Forerunner within range (3 m) of the heart rate monitor. The heart rate icon appears on the training mode pages.

6. If heart rate data does not appear or if you have erratic heart rate data, follow the tips on page 34. If the problem persists, you may have to pair the sensors again. See page 33.

TIP: Set your maximum heart rate and resting heart rate in **Settings** > **User Profile**. Use Garmin Connect or Garmin Training Center to customize your heart rate zones.

For instructions on using accessories, see page 33.

Step 6: Go for a Run!

TIP: Set your user profile so the Forerunner can calculate calories correctly. Touch and hold **menu** > select **Settings** > **User Profile**.

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1. Touch and hold **training**.
2. Press **start** to start the timer.
3. After completing your run, press **stop**.
4. Press and hold **reset** to save your run data and reset the timer.

Step 7: Download Free Software

ANT Agent™ allows you to use your Forerunner with Garmin Connect, a Web-based training tool, and Garmin Training Center, a computer-based training tool.

1. Go to www.garmin.com/forerunner405.
2. Follow the on-screen instructions to download and install ANT Agent.

Step 8: Pair Your Computer and Forerunner

NOTE: Before connecting the USB ANT Stick™ to your computer, you must download software as instructed in Step 7 so that the necessary USB drivers are installed.

1. Plug the USB ANT Stick into an available USB port on your computer.

2. Bring your Forerunner within range (3 m) of your computer.
3. When the ANT Agent finds your Forerunner, ANT Agent displays the unit ID and asks you if you want to pair. Select **yes**.
4. Your Forerunner should display the same number ANT Agent displayed. If so, select **yes** on your Forerunner to complete pairing process.

Step 9: Transfer Data to Your Computer

Bring your Forerunner within range (3 m) of your computer. ANT Agent automatically transfers data between your Forerunner and Garmin Connect or Garmin Training Center.

NOTE: If you have a lot of data, this may take a few minutes. Forerunner functions are not available during data transfer.

Use Garmin Connect or Garmin Training Center to view and analyze your data.

Time/Date Mode

Touch and hold **time/date** to enter time/date mode.

Tap the bezel to scroll through the available pages:

- Time
- Battery gauge
- Alarm set (if any)
- Goal/progress indicator (if any)
- Today's scheduled workouts transferred from Garmin Connect or Garmin Training Center (if any)

Time Options

Touch and hold **menu** > select **Settings** > **Time**. See page 29.

Training Mode

The Forerunner offers several training features and optional settings.

About the Training Page

Touch and hold **training** to enter training mode. Tap the bezel to scroll through the available pages.

To customize the data fields on the training pages, see page 25.

Sport Mode

Running is the default sport mode. Touch and hold **menu** > select **Training** > **Options** > **Sport Mode** to change the sport mode. Training settings such as AutoLap®, AutoPause®, heart rate zones, and speed zones are specific to running or biking. Any training options you change in running or biking mode are saved and used with that sport mode. The activity is tagged as running or biking when your history is uploaded to your computer.

Auto Pause

1. Touch and hold **menu** > select **Training** > **Options** > **Auto Pause**.
2. Select one of the following options:
   - **Off**
   - **Custom Pace**—pauses timer automatically when your speed drops below a specified value.
   - **When Stopped**—pauses timer automatically when you stop moving.
3. Press **quit** to exit.

Auto Pause is helpful if your training includes stop lights or other places where you need to slow down or stop.

Auto Lap

You can use Auto Lap to automatically mark the lap at a specific position or after you have traveled a specific distance. This setting is helpful for comparing your performance over different parts of a run (every 2 miles or major hill, for example).

To set Auto Lap:

1. Touch and hold **menu** > select **Training** > **Options** > **Auto Lap**.
2. Select **By Distance** to enter a value or **By Position** to choose an option:
   - **Lap Press Only**—marks a lap each time you press **lap** and each time you pass any of those locations again.

- **Start and Lap**—marks a lap at the GPS location where you press **start** and at any locations during the run where you pressed **lap**.
- **Mark and Lap**—marks a lap at the specific GPS location you mark when you select this option and at any location during the run where you pressed **lap**.

3. Press **quit** to exit.

NOTE: When doing a course (page 19), use **By Position** to mark laps at all of the lap positions marked in the course.

Auto Scroll

Use the auto scroll feature to automatically cycle through all of the training data pages while the timer is running.

To use auto scroll:

1. Touch and hold **menu** > select **Training** > **Options** > **Auto Scroll**.
2. Select a display speed: **Slow**, **Medium**, or **Fast**.
3. Press **quit** to exit.

Timeout

Touch and hold **menu** > select **Training** > **Options** > **Timeout**. Select **Off** to disable your Forerunner from going to power save mode when you are in Training mode. Select **Enabled** to use the automatic power save mode in all modes.

NOTE: Your Forerunner will only go into power save mode after a period of inactivity.

Speed Units

Touch and hold **menu** > select **Training** > **Options** > **Speed Units**.

Pace—amount of time it takes to travel a specific distance.

Speed—distance travelled in an hour, for example miles per hour or kilometers per hour.

NOTE: Changing speed units does not change your custom data fields (see page 25).

Virtual Partner®

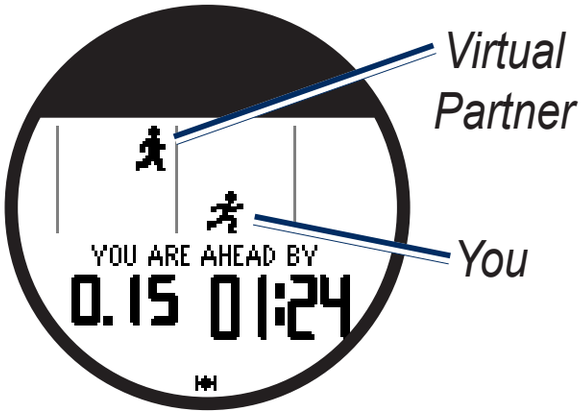
Touch and hold **menu** > select **Training** > **Options** > **Virtual Partner** > **On**.

Your Virtual Partner is a unique tool designed to help you meet your training goals. The Virtual Partner competes with you every time you and the timer are running.

If you make changes to the Virtual Partner pace/speed before you start the timer, those changes are saved. If you make changes to the Virtual Partner during the run, when the timer is started, the changes will not be saved when the timer is reset. If you make changes to the Virtual Partner during a run, the Virtual Partner uses the new pace from your location.

To change the Virtual Partner (VP) pace:

1. Touch and hold **training** to enter Training Mode.
2. Tap the bezel to view the Virtual Partner page.



3. Touch and drag clockwise to increase the VP pace. Touch and drag counter-clockwise to decrease the VP pace.

4. To save the changes, tap the bezel or wait for the page to timeout.

Workouts

Touch and hold **menu** > select **Training** > **Workouts** to choose the type of workout right for you.

Simple, interval, and heart rate workouts are replaced each time you create a workout of the same type. Advanced workouts must be created in Garmin Connect or Garmin Training Center.

NOTE: While performing a workout, tap the bezel to view more data pages.

When you complete all steps in your workout, the "Workout Finished" message appears.

To end a workout early:

1. Press **stop**.
2. Press and hold **reset**.

Simple Workouts

Simple workouts can be based on the following custom goals:

- Time
- Distance
- Calories

To set up a simple workout:

1. Touch and hold **menu** > select **Training** > **Workouts** > **Simple**.
2. Select the **Type** of simple workout.
3. Enter the **Duration** value.
4. Select **Do Workout**.
5. Press **start**.

Heart Rate Workouts

NOTE: To use heart rate workouts, you must have a heart rate monitor.

You can use the Forerunner to train using a specific heart rate zone or custom range of beats per minute (bpm). The type and duration settings function the same as a simple workout.

To create a heart rate workout:

1. Touch and hold **menu** > select **Training** > **Workouts** > **Heart Rate**.
2. Select the **Zone** you want to use. The minimum and maximum heart rate values are automatically set based on your heart rate zones. For more information about heart rate zones, see page 35 and page 45.
   OR
   Select **Custom** to set your own minimum and maximum heart rate values.

NOTE: The minimum value is 35 bpm. The maximum value is 250 bpm. When entering custom bpm values, the minimum and the maximum values must be at least 5 bpm apart.

3. Select the **Type** of heart rate workout.
4. Enter the **Duration** value.
5. Select **Do Workout**.
6. Press **start**.

Interval Workouts

You can create interval workouts with your Forerunner. The intervals can be based on time or distance for the run and rest portions of the workout.

To create an interval workout:

1. Touch and hold **menu** > select **Training** > **Workouts** > **Interval**.
2. Select the **Type** of interval workout.
3. Enter the **Duration** value.
4. Select the **Rest Type**.
5. Enter the **Duration** value.
6. Enter the **Reps** value.
7. Select **Warmup Yes** and **Cooldown Yes** (optional).
8. Select **Do Workout**.
9. Press **start**.

If you are doing a warm up or cool down, press **lap** at the end of your warm-up lap to start your first interval. At the end of your last interval, the Forerunner automatically starts a cool-down lap. When you are finished cooling down, press **lap** to end your workout.

As you approach the end of each interval, an alarm counts down the time until a new interval begins.

To end an interval early, press the **lap/reset** button.

Advanced Workouts

Advanced workouts can include goals for each workout step and varied distances, times, and calories. Use Garmin Connect or Garmin Training Center to create and edit workouts and transfer them to your Forerunner. You can also schedule workouts using Garmin Connect or Garmin Training Center. You can plan workouts in advance and store them on your Forerunner.

NOTE: For more information about transferring data to your Forerunner, see page 9.

TIP: In time/date mode, tap the bezel to view today's scheduled workout. Press **enter** to do the workout.

To start an advanced workout:

1. Touch and hold **menu** > select **Training** > **Workouts** > **Advanced**.
2. Select the workout.
3. Select **Do Workout**.
4. Press **start**.

After you begin an advanced workout, the Forerunner displays each step of the workout, including the name of the step, the goal (if any), and current workout data.

As you approach the end of each step, an alarm counts down the time until a new step begins.

To end an advanced workout step early:

Press the **lap/reset** button.

To delete an advanced workout:

1. Touch and hold **menu** > select **Training** > **Workouts** > **Advanced**.
2. Select the workout.
3. Select **Delete Workout** > **Yes**.
4. Press **quit** to exit.

Courses

Another way you can use the Forerunner for custom training is to follow courses based on a previously recorded activity. You can follow the course trying to match or exceed previously set goals. You can also race against the Virtual Partner when training with courses.

Creating Courses

Use Garmin Connect or Garmin Training Center to create courses and course points and transfer them to your Forerunner.

NOTE: For more information about transferring data to your Forerunner, see page 9.

To start a course:

1. Touch and hold **menu** > select **Training** > **Courses**.
2. Select a course from the list.
3. Select **Do Course**.
4. Press **start**. History is recorded even if you are not on the course.

When you are following a course in training mode, tap the bezel to view the navigation page.

To end a course manually, press **stop** > press and hold **reset**.

Beginning a Course

You can include a warm up before you begin your course. Press **start** to begin the course, and then warm up. Stay away from your course path as you warm up. When you are ready to begin your course, head toward your course. When you are on any part of the course path, the Forerunner displays an "On Course" message.

When you start a course, your Virtual Partner also starts the course. If you are warming up and are not on the course, the first time that you join the course, your Virtual Partner restarts the course from your current location.

If you stray away from the course, the Forerunner displays an "Off Course" message. Use the navigation page to find your way back to the course.

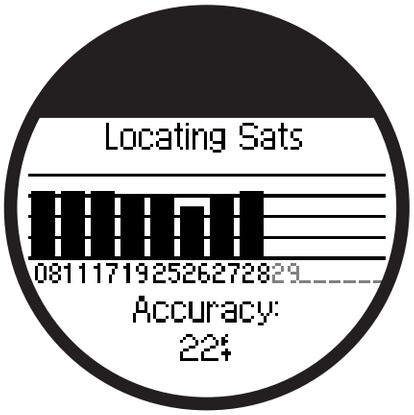
To delete a course:

1. Touch and hold **menu** > select **Training** > **Courses**.
2. Select a course from the list.
3. Select **Delete Course**.
4. Select **Yes** to delete the course.
5. Press **quit** to exit.

GPS Mode

Touch and hold **GPS** to view the GPS menu.

Satellites—view information about the GPS signals the Forerunner is currently receiving. The black bars represent the strength of each satellite signal. The number of the satellite appears below each bar. The GPS accuracy appears at the bottom of the page.



GPS—turn GPS on or off (for indoor use).

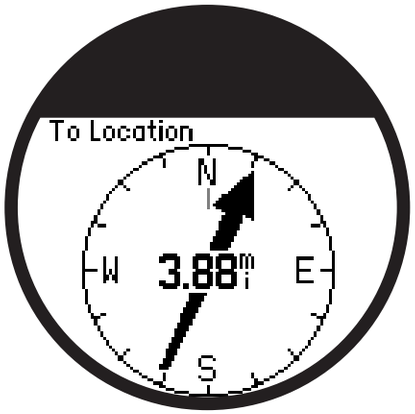
NOTE: When GPS is off, speed and distance data are not available, unless you are using the foot pod.

Save Location—save your current location. Press **enter** to edit the location. Press **quit** to exit.

To mark a known location using coordinates:

1. Touch and hold **GPS** > select **Save Location**.
2. Press **enter** > select **Position**.
3. Enter the known coordinates.
4. Edit the location name and elevation (optional).

Go To Location—select a location from the list, and then select **Go**. Your Forerunner navigates you to the saved location using the navigation page.



To stop navigating to the location, press **quit** > select **Stop Go To**.

To edit a location:

1. Touch and hold **GPS** > select **Go To Location**.
2. Select the location you would like to edit.
3. Select **Edit**.
4. Select an option to edit.

To delete a location, touch and hold **GPS** > select **Go To Location**. Select the location you would like to delete. Select **Delete** > **Yes**.

Back To Start—navigates you back to your starting point.

NOTE: You must start the timer to use Back To Start.

About GPS

The Global Positioning System (GPS) is a satellite-based navigation system made up of a network of 24 satellites. GPS works in any weather conditions, anywhere in the world, 24 hours a day. There are no subscription fees or setup charges to use GPS.

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

History

Your Forerunner automatically saves history when you start the timer. The Forerunner can record up to 1000 laps and approximately 20 hours of detailed tracklog data (when recording approximately 1 trackpoint every 4 seconds). Tracklog data includes your GPS position (if available) and accessory data such as heart rate data.

When the Forerunner memory is full, your oldest tracklog data is overwritten. Upload your history to Garmin Connect or Garmin Training Center periodically to keep track of all of your data (see page 9).

NOTE: Your Forerunner will not automatically delete or overwrite your lap summary data. See the next page to learn how to delete lap data.

Deleting History

After you have transferred your history to Garmin Connect or Garmin Training Center, you can delete the history from your Forerunner.

1. Touch and hold **menu** > select **History** > **Delete**.
2. Select an option:
   - **All Activities**—delete all activities from the history.
   - **Old Activities**—delete activities recorded more than one month ago.
   - **Totals**—reset all your totals.

Viewing Activities

You can view the following data on your Forerunner: time, distance, average pace/speed, calories, average heart rate data, and average cadence.

1. Touch and hold **menu** > select **History** > **Activities**.
2. Use the bezel to scroll through the activities. Tap the bezel to view lap information.
3. Press **quit** to exit.

Deleting Individual Runs and Laps

1. Touch and hold **menu** > select **History** > **Activities**.
2. Use the bezel to scroll through the activities. Tap the bezel to view lap information.
3. Press and hold **reset** while viewing the run or lap.
4. Select **Yes**.

Viewing Totals

The Forerunner records the total distance traveled and time you have worked out with your Forerunner.

1. Touch and hold **menu** > select **History** > **Totals**.
2. Press **quit** to exit.

Viewing Goals

Using Garmin Connect, you can set up different types of goals and send them to your Forerunner. Your Forerunner keeps track of your progress toward the goals.

1. Touch and hold **menu** > select **History** > **Goals**.
2. Press **quit** to exit.

Settings

Touch and hold **menu** > select **Settings**.

TIP: When finished selecting options or entering values on your Forerunner, press **enter** to save the setting.

Data Fields

You can show/hide the following pages and customize up to three data fields on each of the pages:

- Training 1 (always shown)
- Training 2
- Training 3
- Heart Rate (only appears when the Forerunner is receiving heart rate data)

To set data fields:

1. Touch and hold **menu** > select **Settings** > **Data Fields**.
2. Select one of the training pages.
3. Select the number of data fields.
4. Use the bezel to select and change the data fields.

Data Field Options

* Denotes a data field showing statute or metric units.
** Requires an optional accessory.

Data Field	Description
Cadence **	Steps per minute or revolutions of the crank arm per minute.
Cadence–Avg **	Average cadence for the duration of your current ride.
Cadence–Lap **	Average cadence for the current lap.

Data Field	Description
Calories	Number of calories burned.
Distance *	Distance traveled on the current run.
Dist–Lap *	Distance traveled in the current lap.
Dist–Last Lap *	Distance of the last completed lap.
Elevation *	Distance above/below sea level.
GPS Accuracy *	Margin of error for your exact location. For example, your GPS location is accurate to within +/- 19 ft.

Data Field	Description
Grade	Calculation of rise over run. For example, if for every 10 ft. you climb (elevation) you travel 200 ft. (distance), your grade is 5%.
HR **	Heart rate in bpm.
HR–%Max ** OR HR–%HRR **	Percentage of maximum heart rate. OR Percentage of heart rate reserve (maximum heart rate minus resting heart rate).
HR–Avg **	Average heart rate for the run.

Data Field	Description
HR–Avg %Max ** OR HR–Avg %HRR **	Average percentage of maximum heart rate for the run. OR Average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the run.
HR–Lap **	Average heart rate for the lap.
HR–Lap %Max ** OR HR–Lap %HRR **	Average percentage of maximum heart rate for the lap. OR Average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the lap.

Data Field	Description
HR Graph **	Line graph showing your current heart rate zone (1-5).
HR Zone **	Current range of heart rate (1–5). The default zones are based on your user profile, maximum heart rate, and resting heart rate.
Heading	Current direction you are traveling.
Laps	Amount of laps completed.
Pace *	Current pace.
Pace–Avg *	Average pace for the run.
Pace–Lap *	Average pace in the current lap.
Pace–Last Lap *	Average pace during the last full lap.

Data Field	Description
Speed *	Current speed.
Speed–Avg *	Average speed for the run.
Speed–Lap *	Average speed in the current lap.
Speed–Last Lap *	Average speed during the last full lap.
Sunrise	Time of sunrise based on your GPS position.
Sunset	Time of sunset based on your GPS position.
Time	Stopwatch time.
Time–Avg Lap	Average time to complete the laps so far.
Time–Lap	Amount of time in the current lap.

Data Field	Description
Time–Last Lap	Amount of time to complete the last full lap.
Time of Day	Current time of day based on your time settings (see page 29).

User Profile

Touch and hold **menu** > select **Settings** > **User Profile**. The Forerunner uses information that you enter about yourself to calculate calorie consumption. Set your user profile before you begin using the Forerunner.

Alarms

Touch and hold **menu** > select **Settings** > **Alarms**.

Set Alarm—turn alarm on or off. When the alarm is on, tap the bezel in time/date mode to view the alarm time.

Set Time—use the bezel to set the alarm time.

Type—set the alarm occurrence to **Daily** or **Once**.

When the alarm sounds:

- Tap the bezel to silence the alarm.
- Press **enter** to snooze for 9 minutes.
- Press **quit** to turn off the alarm.
- Do nothing. After 1 minute, the alarm will automatically snooze. After 1 hour, the alarm will automatically turn off.

Time

The Forerunner automatically sets the time of day using GPS satellite signals. If you lose battery power, you must charge the battery and then acquire satellites to reset the time of day.

Touch and hold **menu** > select **Settings** > **Time**.

Time Format—select **12 Hour** or **24 Hour**.

Time Zone—select your time zone or a nearby city.

DST (Daylight Saving Time)—select **Yes**, **No**, or **Auto**. The Auto setting automatically adjusts the time for daylight saving based on your time zone.

Time2—turn Time2 on or off. When Time2 is on, you can set **Time2 Format**, **Time2 Zone**, and **Time2 DST**. When Time2 is active, press and hold **enter** in time mode to Time2. The T2 or T1 icon appears next to the time.

System

Touch and hold **menu** > select **Settings** > **System**.

Language—change the on-screen text language. Changing the text language does not change the language of user-entered data, such as course names.

Alert Tones—turn message tones on or off.

Key Tones—turn button and bezel tones on or off.

Sensitivity—select the touch sensitivity level for the bezel. Select **High** to make the bezel respond to a lighter tap than **Low**.

Contrast—select the amount of screen contrast.

About—view your software version, GPS version, and unit ID.

Units—select **Statute** or **Metric** for the units of measure.

Backlight

Touch and hold **menu** > select **Settings** > **System** > **Backlight**.

Mode—select how the backlight turns on. Select **Manual** to press two fingers on the bezel to turn on the backlight for the timeout period. Select **Keys and Alerts** to turn on the backlight once with the two finger press, and then any time a key is pressed or when an alert message appears. Select **Off** to always have the backlight off.

Timeout—select the amount of time the backlight stays on. Use a short backlight setting to conserve battery power.

Brightness—adjust the brightness.

ANT+

Accessories

See page 33 for information about accessories.

Computer

Move away (10 m) from other ANT+ accessories while the Forerunner is trying to pair with the computer for the first time.

1. Verify that the computer is set up for data upload and that pairing is enabled in the ANT Agent. See page 9.
2. Touch and hold **menu** > select **Settings** > **ANT+** > **Computer**.
3. Select **Pairing** > **On**.
4. Bring your Forerunner within range (3 m) of the computer.

5. When the ANT Agent finds your Forerunner, ANT Agent displays the unit ID and asks you if you want to pair. Select **yes**.
6. Your Forerunner should display the same number ANT Agent displayed. If so, select **yes** on your Forerunner to complete pairing process.

NOTE: You can prevent your Forerunner from transferring data to/from any computer, even a paired computer. Touch and hold **menu** > select **Settings** > **ANT+** > **Computer** > **Enabled** > **No**.

Send All Data

By default, your Forerunner only sends new data to your computer. You can force the Forerunner to send all data to your computer. Touch and hold **menu** > select **Settings** > **ANT+** > **Computer** > **Force Send** > **Yes**. All data will be sent again.

Unit to Unit

You can transfer advanced workouts, courses, and locations to and from another Forerunner 405.

1. In the sending Forerunner, touch and hold **menu** > select **Settings** > **ANT+** > **Unit to Unit** > **Transfer**. Select the data you want to send.
2. In the receiving Forerunner, touch and hold **menu** > select **Settings** > **ANT+** > **Unit to Unit** > **Receive**.

The sending Forerunner connects to the other Forerunner and sends the data.

Using Accessories

The following ANT+ accessories are compatible with the Forerunner 405:

- Heart rate monitor
- Foot pod
- GSC™ 10 speed and cadence bike sensor
- USB ANT Stick (see page 9 and page 31)

To purchase accessories, go to http://buy.garmin.com or contact your Garmin dealer.

Pairing Accessories

If you purchased an accessory with ANT+ wireless technology, you need to pair it with your Forerunner.

Pairing is connecting ANT+ accessories, such as the heart rate monitor, with your Forerunner. The pairing process only takes a few seconds when the accessories are activated and functioning correctly. When paired, your Forerunner only receives data from your accessory, even if you are near other accessories.

After you pair the first time, your Forerunner automatically recognizes your accessory each time the accessory is activated.

To pair accessories:

1. Move away (10 m) from other accessories. Bring the accessory to be paired within range (3 m) of the Forerunner.
2. Touch and hold **menu** > select **Settings** > **ANT+** > **Accessories**.

3. Select your accessory.
4. Select **Enabled** > **Yes**.
5. Scroll to view **Status**. If the Forerunner cannot pair with the accessory, select **Rescan**.

TIP: The accessory needs to send data to complete the pairing process. You need to wear the heart rate monitor, take a step wearing the foot pod, or pedal your bike with the GSC 10.

Status Icons

When in training mode, the icon for the accessory blinks as the Forerunner scans for the new accessory. The icon is solid when the accessory is paired.

	Heart rate monitor active
	Speed and cadence sensor active
	Foot pod active

Heart Rate Monitor

For information about putting on the heart rate monitor, see page 6.

Heart Rate Monitor Tips

If you are noticing inaccurate or erratic heart rate data, use the following tips.

- Make sure the heart rate monitor is snug against your body.
- Reapply water, saliva, or electrode gel to the electrodes.
- Clean the electrodes. Dirt and sweat residue can interfere with heart rate signals.
- 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 of strong electromagnetic fields and some 2.4 GHz wireless sensors, which can interfere with your heart rate monitor. Sources of interference may include very high voltage power lines, electric motors, microwave ovens, 2.4 GHz cordless phones, and wireless LAN access points.

Heart Rate Zones

CAUTION: Consult your physician to specify heart rate zones/targets that are appropriate for your fitness level and health condition.

Many athletes are using 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 1–5 according to increasing intensity. The Forerunner sets the heart rate zone ranges (see the table on page 45) based on your maximum and resting heart rates set in your user profile (see page 29).

You can also customize your heart rate zones in your user profile of Garmin Connect or Garmin Training Center. After customizing your heart rate zones, transfer data to your Forerunner.

How Do Heart Rate Zones Affect Your 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 decrease your risk of injury.

Heart Rate Monitor Battery

The heart rate monitor contains a user-replaceable CR2032 battery.

NOTE: Contact your local waste disposal department to properly dispose of batteries.

To replace the battery:

1. Locate the circular battery cover on the back of the heart rate monitor.
2. Use a coin to twist the cover counter-clockwise so the arrow on the cover points to **OPEN**.

3. Remove the cover and replace the battery with the positive side facing up.

NOTE: Be careful not to damage or lose the O-ring gasket on the cover.

4. Use a coin to twist the cover clockwise so the arrow on the cover points to **CLOSE**.

Foot Pod

Your Forerunner is compatible with the foot pod. You can use the foot pod to send data for your Forerunner when training indoors or when your GPS signal is weak or you lose satellite signals. The foot pod is on standby and ready to send data (like the heart rate monitor). You must pair the foot pod with your Forerunner. See page 33.

Calibrating the Foot Pod

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

Distance Calibration

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

1. Touch and hold **menu** > select **Settings** > **ANT+** > **Accessories** > **Foot Pod** > **Calibrate** > **Distance**.
2. Select a distance.
3. Press **start** to begin recording.
4. Run or walk the distance.
5. Press **stop**.

GPS Calibration

You must have GPS signals to calibrate the Foot Pod using GPS.

1. Touch and hold **menu** > select **Settings** > **ANT+** > **Accessories** > **Foot Pod** > **Calibrate** > **GPS**.
2. Press **start** to begin recording.

3. Run or walk approximately 1000 m. The Forerunner informs you that you have traveled far enough.

Manual Calibration

If your foot pod distance seems slightly high or low each time you run, you can manually adjust the calibration factor.

Touch and hold **menu** > select **Settings** > **ANT+** > **Accessories** > **Foot Pod** > **Cal Factor**. Adjust the calibration factor. Increase the calibration factor if your distance is too low; decrease the calibration factor if your distance is too high.

GSC 10

Your Forerunner is compatible with the GSC 10 speed and cadence bike sensor. You must pair the GSC 10 with your Forerunner. See page 33.

Calibrating the Bike Sensor

Calibrating your bike sensor is optional and can improve accuracy.

1. Touch and hold **menu** > select **Settings** > **ANT+** > **Accessories** > **Bike Sensor** > **Calibration**.
2. Select **Manual** to enter the wheel size. Select **Auto** to allow GPS to determine your wheel size.

Appendix

Resetting the Forerunner

If your Forerunner is locked up, reset your Forerunner. Press and hold **enter** and **quit** simultaneously until the screen goes blank (about 7 seconds). This does not erase any of your data or settings.

Clearing User Data

To clear/erase all user data, press and hold **enter** and **quit** simultaneously until the screen goes blank (about 7 seconds) to reset the Forerunner. Continue holding the **quit** button, but release the **enter** button. Follow the on-screen directions.

Updating the Forerunner Software Using Garmin Connect

Go to www.garmin.com/forerunner405 for information about Forerunner software updates and Garmin Connect Web-based software.

If there is new software available, Garmin Connect alerts you to update the Forerunner's software. Follow the instructions to update the software. Make sure your device stays in range of the computer during the update process.

Battery Information

Actual battery life depends on use of the following items: GPS, backlight, ANT+ computer connection, and time spent in power save mode.

On a fully charged battery, the Forerunner should last one week if you train for 30 minutes a day with GPS and the Forerunner is in power save mode for the remaining time.

On a fully charged battery, the Forerunner lasts for up to 2 weeks in power save mode.

On a fully charged battery, the Forerunner can last for up to 8 hours with GPS on.

Specifications

Forerunner

Watch size: W × L × D: 1.88 × 2.78 × 0.646 in. (47.75 × 70.5 × 16.4 mm)

Weight: 2.1 oz. (60 g)

Display: 1.06 in. (27 mm) diameter, 124 × 95 pixels resolution, with LED backlight.

Water resistance: IPX7. Not intended to be used while user is swimming.

Data storage: approximately 20 hours of data (assuming 1 trackpoint is being recorded every 4 seconds).

Memory: up to 1000 laps; 100 user locations (waypoints).

Computer interface: wireless USB ANT Stick

Battery type: 300 mAh rechargeable lithium-ion battery

Battery life: up to 8 hours in GPS mode; up to 2 weeks in power save mode.

Operating temperature range: From 5°F to 122°F (from -15°C to 50°C)

Charging temperature range: From 32°F to 122°F (from 0°C to 50°C)

Radio frequency/protocol: 2.4 GHz/Dynastream ANT+ wireless communications protocol

GPS Antenna: internal patch

GPS Receiver: high-sensitivity integrated

USB ANT Stick

Physical size: L × W × D: 2.32 × 0.71 × 0.28 in. (59 × 18 × 7 mm)

Weight: 0.01 lbs. (6 g)

Transmission range: Approximately 16.4 ft. (5 m)

Operating temperature: From 14°F to 122°F (from -10°C to 50°C)

Radio frequency/protocol: 2.4 GHz/Dynastream ANT+ wireless communications protocol

Power source: USB

Heart Rate Monitor

Physical size: L × W × D: 13.7 × 1.3 × 0.4 in. (34.7 × 3.4 × 1.1 cm)

Weight: 1.6 oz. (44 g)

Water resistance: 32.9 ft. (10 m)

Transmission range: approximately 9.8 ft. (3 m)

Battery: user-replaceable CR2032 (3 volts)

Battery life: approximately 3 years (1 hour per day)

Operating temperature: From 14°F to 122°F (from -10°C to 50°C)

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

Radio frequency/protocol: 2.4 GHz/Dynastream ANT+ wireless communications protocol

Software License Agreement

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

Garmin grants 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.

You acknowledge that the Software is the property of Garmin and is protected under the United States of America copyright laws and

international copyright treaties. You further acknowledge that the structure, organization, and code of the Software are valuable trade secrets of Garmin and that the Software in source code form remains a valuable trade secret of Garmin. You agree not to decompile, disassemble, modify, reverse assemble, reverse engineer, or reduce to human readable form the Software or any part thereof or create any derivative works based on the Software. You agree not to export or re-export the Software to any country in violation of the export control laws of the United States of America.

Declaration of Conformity (DoC)

Hereby, Garmin, declares that this Forerunner is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

To view the full Declaration of Conformity, see the Garmin Web site for your Garmin product: www.garmin.com.

Troubleshooting

Problem	Solution/Answer
The bezel is not responding to my taps.	Unlock the bezel: press **enter** and **quit** simultaneously. Press firmly on the bezel for the best results. Tap the outer ring on the bezel, not the inner ring near the watch face. Adjust the sensitivity setting (see page 30).
My Forerunner never gets satellite signals.	Touch and hold **GPS.** Make sure **GPS** is set to **On**. Take your Forerunner outside and away from tall buildings. Remain stationary for several minutes.
The battery gauge does not seem accurate.	Allow the Forerunner to fully discharge, and then fully charge it (without interrupting the charge cycle).
The heart rate monitor, foot pod, or GSC 10 will not pair with the Forerunner.	Stay 10 m away from other ANT+ accessories while pairing. Bring the Forerunner within range (3 m) of the sensor while pairing. Restart the scan for the accessory (see page 33). Make sure the accessory is sending data (for example, you need to be wearing the heart rate monitor). If the problem persists, replace the battery in the accessory.
The heart rate data is inaccurate.	See page 34.
The heart rate monitor strap is too big.	A smaller elastic strap is sold separately. Go to http://buy.garmin.com.

Problem	Solution/Answer
Some of my data is missing from my Forerunner.	The Forerunner overwrites the oldest detailed data if you do not transfer it to your computer. Transfer data regularly to avoid losing data.

Heart Rate Zone Table

	% of Maximum Heart Rate or Resting 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

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