

GARMIN[®]

D2™ Bravo and D2 Bravo Titanium



Owner's Manual

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Introduction






⚠ WARNING

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

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

Keys



① LIGHT 	Select to turn the backlight on and off. Hold to view shortcut menu options, including turning the device on and off.
② START STOP 	Select to start or stop an activity. Select to choose an option in a menu. Hold to navigate to an airport by the airport code.
③ BACK 	Select to return to the previous page. Select to record a lap or a rest during an activity. Hold to navigate to the nearest airport.
④ DOWN 	Select to scroll through widgets, menus, and messages. Hold to view the clock from any page.
⑤ UP 	Select to scroll through widgets, menus, and messages. Select to dismiss a short message or notification. Hold to view the main menu.

Locking the Keys

You can lock the keys to prevent accidental key presses.

- 1 Hold **LIGHT** for two seconds, and select **Lock Device** to lock the keys.
- 2 Hold **LIGHT** for two seconds, and select **Unlock Device** to unlock the keys.

Charging the Device

NOTICE

To prevent corrosion, thoroughly clean and dry the contacts and the surrounding area before charging or connecting to a computer. Refer to the cleaning instructions in the appendix.

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 an AC adapter or a computer USB port.
- 2 If necessary, plug the AC adapter into a standard wall outlet.
- 3 Pinch the sides of the charging cradle ① to open the arms on the cradle.



- 4 With the contacts aligned, place the device into the cradle ② and release the arms to hold the device in place.
When you connect the device to a power source, the device turns on, and the battery charge level appears on the screen.
- 5 Charge the device completely.

Updating the Aviation Database

Before you can update the aviation database, you must create a Garmin® account and add your device. You can view your unit ID on the device information screen (*Viewing Device Information*, page 23).

The aviation database is valid for 28 days at a time and includes only airport locations.

- 1 Connect your device to a computer using the included USB cable.
- 2 Go to www.flyGarmin.com.
- 3 Log in to your Garmin account.
- 4 Follow the on-screen instructions to update the aviation database.

Pairing Your Smartphone with Your Device

You should connect your D2 Bravo device to a smartphone to use the full features of the device.

- 1 Go to (garmin.com/apps), and download the Garmin Connect™ Mobile app to your smartphone.
- 2 Bring your smartphone within 10 m (33 ft.) of your device.
- 3 On the D2 Bravo device, hold **UP**.
- 4 Select **Settings > Bluetooth > Pair Mobile Device**.
- 5 On your smartphone, open the Garmin Connect Mobile app.
- 6 Select an option to add your device to your Garmin Connect account:
 - If this is the first time you are pairing a device with the Garmin Connect Mobile app, follow the on-screen instructions.
 - If you already paired another device with the Garmin Connect Mobile app, from the settings menu, select **Garmin Devices > +**, and follow the on-screen instructions.

Support and Updates

Garmin Express™ (www.garmin.com/express) provides easy access to these services for Garmin devices.

- Product registration
- Product manuals
- Software updates
- Map, chart, or course updates

Setting Up Garmin Express

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

Flying

Setting the Altitude Alert

You can set an alarm to vibrate when you reach a specified altitude.

NOTE: The altitude alert is not available in low power mode.

- 1 From the clock, select **DOWN** until the altimeter page appears.
- 2 Select **START > Altitude Alert > Status > On**.
- 3 Select **Altitude**.
- 4 Select **UP** to select an altitude.

Setting the Barometric Pressure Manually

You can set the current barometric pressure manually. This can help to improve the accuracy of the pressure altitude reading.

- 1 From the clock, select **DOWN** until the barometer page appears.
- 2 Select **START > Barometer > Manual**.
- 3 Select the current barometric pressure.

Flying Activity

Before you start a flying activity, you should charge the device ([Charging the Device](#), page 1).

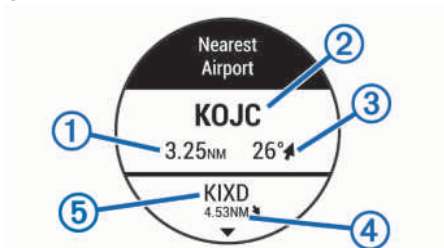
A flying activity starts automatically when your detected climb rate exceeds the value you set in the auto fly settings. The default auto fly value is 500 fpm.

To set the auto fly value, select **Settings > Apps > Fly > Auto Fly**.

Navigating to the Nearest Airport

- 1 Hold **⊕**.
A list of the nearest airports appears.
- 2 Select an airport.

Nearest Airport



①	Distance to the nearest airport
②	Nearest airport identifier
③	Bearing to the nearest airport
④	Distance to the second nearest airport
⑤	Second nearest airport identifier

Navigating to an Airport by Its Identifier

You can navigate directly to an airport by searching for the airport identifier.

- 1 Hold **=D>**.
- 2 Enter all or part of the alphanumeric airport identifier.
- 3 Select **✓**.

- 4 Select **START**.

A list of matching airports appears.

- 5 Select the airport.

Horizontal Situation Indicator



①	Course deviation distance. The dots indicate your distance off course.
②	To-and-from indicator. Indicates whether you are headed toward or away from the waypoint.
③	Bearing to the nearest airport.
④	Course deviation indicator (CDI). Indicates the location of the desired course line in relation to your location.
⑤	Distance to destination.

Stopping Navigation

Hold **UP**, and select Stop Navigation.

Disabling the Automatic Flight Timer

You can disable the automatic flight timer so your device does not automatically record flight data when your ground speed exceeds 30 kn.

- 1 Hold **UP**.
- 2 Select **Settings > Apps > Fly > Flight Timer > Manual**.

Heart Rate Features

This manual is for D2 Bravo models compatible with heart rate monitors and for wrist-based heart rate models. You must have a heart rate monitor to use the features described in this section.

D2 Bravo: This device is compatible with ANT+® heart rate monitors.

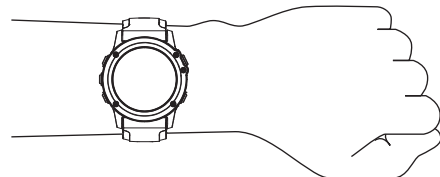
D2 Bravo Titanium: This device has a wrist-based heart rate monitor and is also compatible with ANT+ heart rate monitors. You can view wrist-based heart rate data on the heart rate widget. If both wrist-based heart rate and ANT+ heart rate data are available, your device uses the ANT+ heart rate data.

Wrist-based Heart Rate

Wearing the Device and Heart Rate

- Wear the D2 Bravo device above your wrist bone.

NOTE: The device should be snug but comfortable, and it should not move while running or exercising.



- Do not damage the heart rate sensor on the back of the device.
- See ([Troubleshooting](#), page 24) for more information about wrist-based heart rate.

Tips for Erratic Heart Rate Data

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

- Clean and dry your arm before putting on the device.
- Avoid wearing sunscreen under the device.
- Wear the device above your wrist bone. The device should be snug but comfortable.

NOTE: You can try wearing the device higher on your forearm. You can try wearing the device on your other arm.

- Warm up for 5 to 10 minutes and get a heart rate reading before starting your activity.

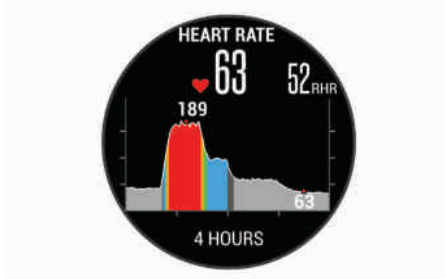
NOTE: In cold environments, warm up indoors.

- Rinse the device with fresh water after each workout.
- While exercising, use a silicone band.

Viewing the Heart Rate Widget

The widget displays your current heart rate in beats per minute (bpm), your lowest resting heart rate for today, and a graph of your heart rate.

- 1 From the clock, select **DOWN**.



- 2 Select **START** to view your average resting heart rate values for the last 7 days.

Broadcasting Heart Rate Data to Garmin Devices

You can broadcast your heart rate data from your D2 Bravo device and view it on paired Garmin devices. For example, you can broadcast your heart rate data to an Edge® device while cycling, or to a VIRB® action camera during an activity.

NOTE: Broadcasting heart rate data decreases battery life.

- 1 Hold **UP**.
- 2 Select **Settings > Sensors > Wrist Heart Rate > Broadcast HR**.

The D2 Bravo device starts broadcasting your heart rate data, and appears.

NOTE: You can view only the heart rate widget while broadcasting heart rate data.

- 3 Pair your D2 Bravo device with your Garmin ANT+ compatible device.

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

TIP: To stop broadcasting your heart rate data, select any key, and select Yes.

Turning Off the Wrist Heart Rate Monitor

For the D2 Bravo Titanium, the default value for the Wrist Heart Rate setting is Auto. The device automatically uses the wrist-based heart rate monitor unless you pair an ANT+ heart rate monitor to the device.

- 1 Hold **UP**.
- 2 Select **Settings > Sensors > Wrist Heart Rate > Off**.

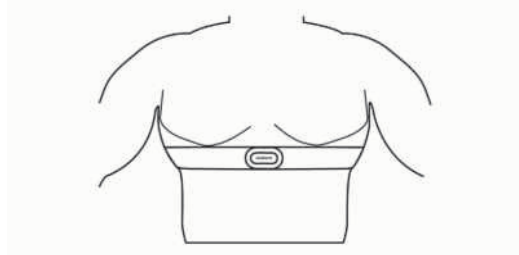
Putting On the Heart Rate Monitor

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

- 1 If necessary, attach the strap extender to the heart rate monitor.
- 2 Wet the electrodes ① on the back of the heart rate monitor to create a strong connection between your chest and the transmitter.



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



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

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

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

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

Tips for Erratic Heart Rate Data

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

- Reapply water to the electrodes and contact patches (if applicable).
- Tighten the strap on your chest.
- Warm up for 5 to 10 minutes.
- Follow the care instructions ([Caring for the Heart Rate Monitor, page 24](#)).
- Wear a cotton shirt or thoroughly wet both sides of the strap. Synthetic fabrics that rub or flap against the heart rate monitor can create static electricity that interferes with heart rate signals.
- Move away from sources that can interfere with your heart rate monitor.

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

Running Dynamics

You can use your compatible D2 Bravo device paired with the HRM-Run™ accessory to provide real-time feedback about your running form. If your D2 Bravo device was packaged with the HRM-Run accessory, the devices are already paired.

The HRM-Run accessory has an accelerometer in the module that measures torso movement in order to calculate six running metrics.

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

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

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

NOTE: Ground contact time is not available while walking.

Ground contact time balance: Ground contact time balance displays the left/right balance of your ground contact time while running. It displays a percentage. For example, 53.2 with an arrow pointing left or right.

Stride length: Stride length is the length of your stride from one footfall to the next. It is measured in meters.

Vertical ratio: Vertical ratio is the ratio of vertical oscillation to stride length. It displays a percentage. A lower number typically indicates better running form.

Training with Running Dynamics

Before you can view running dynamics, you must put on the HRM-Run accessory and pair it with your device ([Pairing ANT+ Sensors, page 22](#)). If your D2 Bravo was packaged with the accessory, the devices are already paired, and the D2 Bravo is set to display running dynamics.

Color Gauges and Running Dynamics Data

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

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

NOTE: The color gauge for ground contact time balance is different ([Ground Contact Time Balance Data, page 4](#)).

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

Color Zone	Percentile in Zone	Cadence Range	Vertical Oscillation Range	Vertical Ratio	Ground Contact Time Range
Purple	>95	>183 spm	<6.4 cm	<6.1%	<218 ms
Blue	70–95	174–183 spm	6.4–8.1 cm	6.1–7.4%	218–248 ms
Green	30–69	164–173 spm	8.2–9.7 cm	7.5–8.6%	249–277 ms
Orange	5–29	153–163 spm	9.8–11.5 cm	8.7–10.1%	278–308 ms
Red	<5	<153 spm	>11.5 cm	>10.1%	>308 ms

Ground Contact Time Balance Data

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


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

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

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

Tips for Missing Running Dynamics Data

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

- Make sure you have the HRM-Run accessory. Accessories with running dynamics have  on the front of the module.
- Pair the HRM-Run accessory with your D2 Bravo device again, according to the instructions.
- If the running dynamics data display shows only zeros, make sure the heart rate monitor is worn right-side up.

1 Select an option:

- If your HRM-Run accessory and D2 Bravo device are already paired, skip to step 8.
- If your HRM-Run accessory and D2 Bravo device are not already paired, complete all the steps in this procedure.

2 Hold **UP**.

3 Select **Settings > Apps**.

4 Select an activity.

5 Select **Data Screens**.

6 Select a running dynamics data screen.

NOTE: The running dynamics screens are not available for all activities.

7 Select **Status > Enabled**.

8 Go for a run ([Going for a Run, page 7](#)).

9 Select **UP** or **DOWN** to open a running dynamics screen to view your metrics.

NOTE: Ground contact time and balance appears only while running. It is not calculated while walking.

Physiological Measurements

These physiological measurements require wrist-based heart rate or a compatible heart rate monitor. The measurements are estimates that can help you track and understand your training activities and race performances. These estimates are provided and supported by Firstbeat.

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

VO2 max.: VO2 max. is the maximum volume of oxygen (in milliliters) you can consume per minute per kilogram of body weight at your maximum performance.

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

Recovery advisor: The recovery advisor displays how much time remains before you are fully recovered and ready for the next hard workout.

Stress score: Stress score requires a chest heart rate monitor. Stress score measures your heart rate variability while standing still for 3 minutes. It provides your overall stress level. The scale is 1 to 100, and a lower score indicates a lower stress level.

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

Lactate threshold: Lactate threshold requires a chest heart rate monitor. Lactate threshold is the point where your muscles start to rapidly fatigue. Your device measures your lactate threshold level using heart rate and pace.

About VO2 Max. Estimates

VO2 max. is the maximum volume of oxygen (in milliliters) you can consume per minute per kilogram of body weight at your maximum performance. In simple terms, VO2 max. is an indication of athletic performance and should increase as your level of fitness improves. The D2 Bravo device has separate VO2 max. estimates for running and cycling. You can use your Garmin device paired with a compatible heart rate monitor and power meter to display your cycling VO2 max. estimate. You can use your Garmin device paired with a compatible heart rate monitor to display your running VO2 max. estimate.

Your VO2 max. estimate appears as a number and position on the color gauge.



Purple	Superior
Blue	Excellent
Green	Good
Orange	Fair
Red	Poor

VO2 max. data and analysis is provided with permission from The Cooper Institute®. For more information, see the appendix (*VO2 Max. Standard Ratings, page 28*), and go to www.CooperInstitute.org.

Getting Your VO2 Max. Estimate for Running

Before you can view your VO2 max. estimate, you must put on the heart rate monitor and pair it with your device (*Pairing ANT+ Sensors, page 22*). If your D2 Bravo device was packaged with a heart rate monitor, the devices are already paired. For the most accurate estimate, complete the user profile setup (*Setting*

Up Your User Profile, page 10), and set your maximum heart rate (*Setting Your Heart Rate Zones, page 10*).

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

- 1 Run for at least 10 minutes outdoors.
- 2 After your run, select **Save**.
- 3 Hold **UP**.
- 4 Select **Fitness > My Stats > VO2 Max. > Running**.

Getting Your VO2 Max. Estimate for Cycling

Before you can view your VO2 max. estimate, you must have a compatible heart rate monitor and a power meter. The power meter must be paired with your D2 Bravo device (*Pairing ANT+ Sensors, page 22*). For the most accurate estimate, complete the user profile setup (*Setting Up Your User Profile, page 10*) and set your maximum heart rate (*Setting Your Heart Rate Zones, page 10*).

NOTE: The estimate may seem inaccurate at first. The device requires a few rides to learn about your cycling performance.

- 1 Ride at a steady, high intensity for at least 20 minutes outdoors.
- 2 After your ride, select **Save**.
- 3 Select **START > My Stats > VO2 Max. > Cycling**.

Viewing Your Predicted Race Times

This feature requires a heart rate monitor.

For the most accurate estimate, complete the user profile setup (*Setting Up Your User Profile, page 10*), and set your maximum heart rate (*Setting Your Heart Rate Zones, page 10*). Your device uses the VO2 max. estimate (*About VO2 Max. Estimates, page 5*) and published data sources to provide a target race time based on your current state of fitness. This projection also presumes you have completed the proper training for the race.

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

Select **UP > My Stats > Race Predictor**.

Your projected race times appear for 5K, 10K, half marathon, and marathon distances.

Recovery Advisor

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

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

Turning On the Recovery Advisor

For the most accurate estimate, complete the user profile setup (*Setting Up Your User Profile, page 10*), and set your maximum heart rate (*Setting Your Heart Rate Zones, page 10*).

- 1 Hold **UP**.
- 2 Select **My Stats > Recovery Advisor > Status > On**.
- 3 Go for a run.

After 6 to 20 minutes, your performance condition appears (*Viewing Your Performance Condition, page 6*).

- 4 After your run, select **Save**.

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

Recovery Heart Rate

If you are training with a heart rate monitor, you can check your recovery heart rate value after each activity. Recovery heart rate is the difference between your exercising heart rate and your heart rate two minutes after the exercise has stopped. For example, after a typical training run, you stop the timer. Your heart rate is 140 bpm. After two minutes of no activity or cool

down, your heart rate is 90 bpm. Your recovery heart rate is 50 bpm (140 minus 90). Some studies have linked recovery heart rate to cardiac health. Higher numbers generally indicate healthier hearts.

TIP: For best results, you should stop moving for two minutes while the device calculates your recovery heart rate value. You can save or discard the activity after this value appears.

Lactate Threshold

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

If you already know your lactate threshold heart rate value, you can enter it in your user profile settings ([Setting Your Heart Rate Zones](#), page 10).

Performing a Guided Test to Determine Your Lactate Threshold

Before you can perform the guided test, you must put on a heart rate monitor and pair it with your device ([Pairing ANT+ Sensors](#), page 22). You must also have a VO2 max. estimate from a previous run ([About VO2 Max. Estimates](#), page 5).

TIP: The device requires a few runs with a heart rate monitor to get an accurate maximum heart rate value and VO2 max. estimate.

- 1 Hold **UP**.
- 2 Select **My Stats > Lactate Threshold > Do Guided Test**.
- 3 Select an outdoor running profile.
GPS is required to complete the test.
- 4 Follow the on-screen instructions.

Performance Condition

As you complete your activity, such as running or cycling, the performance condition feature analyzes your pace, heart rate, and heart rate variability to make a real-time assessment of your ability to perform compared to your average fitness level. Performance condition values range from -20 to +20. After the first 6 to 20 minutes of your activity, the device displays your performance condition score. For example, a score of +5 means that you are rested, fresh, and capable of a good run or ride. You can add performance condition as a data field to one of your training screens to monitor your ability throughout the activity. Performance condition can also be an indicator of fatigue level, especially at the end of a long training run or ride.

NOTE: The device requires a few runs or rides with a heart rate monitor to get an accurate VO2 max. estimate and learn about your running or riding ability ([About VO2 Max. Estimates](#), page 5).

Viewing Your Performance Condition

Your device analyzes your performance condition based on heart rate and power data. You can use an ANT+ heart rate monitor or a device with wrist-based heart rate.

- 1 If necessary, pair your compatible ANT+ sensor with your D2 Bravo device ([Pairing ANT+ Sensors](#), page 22).
- 2 Add **Perform. Cond.** to a data screen ([Customizing the Data Screens](#), page 19).
- 3 Go for a run or ride.
After 6 to 20 minutes, your performance condition appears.
- 4 Scroll to the data screen to view your performance condition throughout the run or ride.

Stress Score

Stress score is the result of a three-minute test performed while standing still, where the D2 Bravo device analyzes heart rate variability to determine your overall stress. Training, sleep, nutrition, and general life stress all impact how a runner performs. The stress score range is from 1 to 100, where 1 is a very low stress state and 100 is a very high stress state. Knowing your stress score can help you decide if your body is ready for a tough training run or yoga.

Viewing Your Stress Score

Before you can view your stress score, you must put on a heart rate monitor, pair it with your device ([Pairing ANT+ Sensors](#), page 22), and show the stress score app in the apps list ([Activity App Settings](#), page 19).

TIP: Garmin recommends that you measure your stress score at approximately the same time and under the same conditions every day.

- 1 From the clock, select **START**.
- 2 Select **Stress Score**.
- 3 Select **START**.
- 4 Stand still, and rest for 3 minutes.

Activities

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

You can also add Connect IQ™ activity apps to your device using your Garmin Connect account ([Connect IQ Features](#), page 17).

Starting an Activity

When you start an activity, GPS turns on automatically (if required). When you stop the activity, the device returns to watch mode.

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

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

Stopping an Activity

NOTE: Some options are not available for some activities.

- 1 Select **STOP**.
If you do not save the activity manually after stopping the activity, the device saves it automatically after 25 minutes have passed.
- 2 Select an option:
 - To resume your activity, select **Resume**.
 - To save the activity and return to watch mode, select **Save**.
 - To discard the activity and return to watch mode, select **Discard**.
 - To follow your track back to the starting point of your activity, select **TracBack**.
 - To suspend your activity and resume it at a later time, select **Resume Later**.

Skiing

Going Cross-Country Skiing

Before you go skiing, you should charge the device (*Charging the Device, page 1*).

- 1 From the clock, select **START**.
- 2 Select **XC Ski**.
- 3 Go outside, and wait while the device locates satellites.
- 4 Select **START** to start the timer.
History is recorded only while the timer is running.
- 5 Start your activity.
- 6 Select **LAP** to record laps (optional).
- 7 Select **UP** or **DOWN** to view additional data pages (optional).
- 8 After you complete your activity, select **STOP > Save**.

Going Downhill Skiing or Snowboarding

Before you go skiing or snowboarding, you should charge the device (*Charging the Device, page 1*).

- 1 From the clock, select **START**.
- 2 Select **Ski / Board**.
- 3 Go outside, and wait while the device locates satellites.
- 4 Select **START** to start the timer.
History is recorded only while the timer is running.
- 5 Start your activity.
The auto run feature is turned on by default. This feature automatically records new ski runs based on your movement. The timer pauses when you stop moving downhill and when you are on a chairlift. The timer remains paused during the chairlift ride.
- 6 If necessary, start moving downhill to restart the timer.
- 7 Select **UP** or **DOWN** to view additional data pages (optional).
- 8 After you complete your activity, select **STOP > Save**.

Viewing Your Ski Runs

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

- 1 Start a skiing or snowboarding activity.
- 2 Hold **UP**.
- 3 Select **View Runs**.
- 4 Select **UP** and **DOWN** to view details of your last run, your current run, and your total runs.
The run screens include time, distance traveled, maximum speed, average speed, and total descent.

Hiking

Going for a Hike

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

- 1 From the clock, select **START**.
- 2 Select **Hike**.
- 3 Go outside, and wait while the device locates satellites.
- 4 Select **START** to start the timer.
History is recorded only while the timer is running.
- 5 Start your activity.
The device records a track while you hike.
- 6 When you need to take a break or pause the device from tracking, select **STOP > Resume Later**.
The device saves the status of your hike and enters low power mode.

- 7 Select **START > Hike > Resume** to resume tracking.
- 8 Select **UP** or **DOWN** to view additional data pages (optional).
- 9 After you complete your activity, select **STOP > Save**.

Running

Going for a Run

Before you go for a run, you should charge the device (*Charging the Device, page 1*). Before you can use an ANT+ sensor for your run, you must pair the sensor with your device (*Pairing ANT+ Sensors, page 22*).

- 1 Put on your ANT+ sensors, such as a foot pod or heart rate monitor (optional).
- 2 From the clock, select **START**.
- 3 Select **Run**.
- 4 When using optional ANT+ sensors, wait while the device connects to the sensors.
- 5 Go outside, and wait while the device locates satellites.
- 6 Select **START** to start the timer.
History is recorded only while the timer is running.
- 7 Start your activity.
- 8 Select **LAP** to record laps (optional).
- 9 Select **UP** or **DOWN** to view additional data pages (optional).
- 10 After you complete your activity, select **STOP > Save**.

Using the Metronome

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

- 1 Hold **UP**.
- 2 Select **Settings > Apps**.
- 3 Select an activity.
NOTE: This feature is not available for all activities.
- 4 Select **Metronome > Status > On**.
- 5 Select an option:
 - Select **Beats / Minute** to enter a value based on the cadence you want to maintain.
 - Select **Alert Frequency** to customize the frequency of the beats.
 - Select **Sounds** to customize the metronome tone and vibration.
- 6 If necessary, select **Preview** to listen to the metronome feature before you run.
- 7 Hold **DOWN** to return to the clock.
- 8 Go for a run (*Going for a Run, page 7*).
The metronome starts automatically.
- 9 During your run, select **UP** or **DOWN** to view the metronome screen.
- 10 If necessary, hold **UP** to change the metronome settings.

Biking

Going for a Ride

Before you go for a ride, you should charge the device (*Charging the Device, page 1*). Before you can use an ANT+ sensor for your ride, you must pair the sensor with your device (*Pairing ANT+ Sensors, page 22*).

- 1 Pair your ANT+ sensors, such as a heart rate monitor, speed sensor, or cadence sensor (optional).
- 2 From the clock, select **START**.
- 3 Select **Bike**.

- 4 When using optional ANT+ sensors, wait while the device connects to the sensors.
- 5 Go outside, and wait while the device locates satellites.
- 6 Select **START** to start the timer.
History is recorded only while the timer is running.
- 7 Start your activity.
- 8 Select **UP** or **DOWN** to view additional data pages (optional).
- 9 After you complete your activity, select **STOP > Save**.

Swimming

NOTICE

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

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

Going for a Pool Swim

Before you go for a swim, you should charge the device ([Charging the Device, page 1](#)).

- 1 From the clock, select **START**.
- 2 Select **Pool Swim**.
- 3 Select your pool size, or enter a custom size.
- 4 Select **START** to start the timer.
History is recorded only while the timer is running.
- 5 Start your activity.
The device automatically records swim intervals and lengths.
- 6 Select **UP** or **DOWN** to view additional data pages (optional).
- 7 When resting, select **LAP** to pause the timer.
- 8 Select **LAP** to restart the timer.
- 9 After you complete your activity, select **STOP > Save**.

Swim Terminology

Length: One trip down the pool.

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

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

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

Stroke Types

Stroke type identification is available only for pool swimming. Your stroke type is identified at the end of a length. Stroke types appear when you are viewing interval history. You can also select stroke type as a custom data field ([Customizing the Data Screens, page 19](#)).

Free	Freestyle
Back	Backstroke
Breast	Breaststroke
Fly	Butterfly
Mixed	More than one stroke type in an interval
Drill	Used with drill logging (Training with the Drill Log, page 8)

Resting During Pool Swimming

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

NOTE: Swim data is not recorded during a rest.

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

The display reverses to white text on a black background, and the rest screen appears.

- 2 During a rest, select **UP** or **DOWN** to view other data screens (optional).
- 3 Select **LAP**, and continue swimming.
- 4 Repeat for additional rest intervals.

Training with the Drill Log

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

TIP: You can customize the data screens and data fields for your pool swim activity ([Customizing the Data Screens, page 19](#)).

- 1 From the clock, select **START**.
- 2 Select **Pool Swim**.
- 3 Select **START** to start the activity timer.
- 4 During your pool swim activity, select **UP** or **DOWN** to view the drill log screen.
- 5 Select **LAP** to start the drill timer.
- 6 After you complete a drill interval, select **LAP**.
The drill timer stops, but the activity timer continues to record the entire swim session.
- 7 Select a distance for the completed drill.
Distance increments are based on the pool size selected for the activity profile.
- 8 Select an option:
 - To start another drill interval, select **LAP**.
 - To start a swim interval, select **UP** or **DOWN** to return to the swim training screens.
- 9 After you complete your activity, select **STOP > Save**.

Going for an Open Water Swim

Before you go for a swim, you should charge the device ([Charging the Device, page 1](#)).

- 1 From the clock, select **START**.
- 2 Select **Open Water**.
- 3 Go outside, and wait while the device locates satellites.
- 4 Select **START** to start the timer.
History is recorded only while the timer is running.
- 5 Start your activity.
- 6 Select **LAP** to record an interval (optional).
- 7 Select **UP** or **DOWN** to view additional data pages (optional).
- 8 After you complete your activity, select **STOP > Save**.

Water Sports

Starting a Stand Up Paddle Boarding Activity

- 1 Pair your ANT+ sensor, such as a heart rate monitor (optional).
- 2 From the clock, select **START**.
- 3 Select **SUP**.
- 4 When using optional ANT+ sensors, wait while the device connects to the sensors.
- 5 Go outside, and wait while the device locates satellites.
- 6 Select **START** to start the timer.
History is recorded only while the timer is running.
- 7 Start your activity.
- 8 Select **UP** or **DOWN** to view additional data pages (optional).
- 9 After you complete your activity, select **STOP > Save**.

Starting a Rowing Activity

- 1 Pair your ANT+ sensor, such as a heart rate monitor (optional).
- 2 From the clock, select **START**.
- 3 Select **Row**.
- 4 When using optional ANT+ sensors, wait while the device connects to the sensors.
- 5 Go outside, and wait while the device locates satellites.
- 6 Select **START** to start the timer.
History is recorded only while the timer is running.
- 7 Start your activity.
- 8 Select **UP** or **DOWN** to view additional data pages (optional).
- 9 After you complete your activity, select **STOP** > **Save**.

Indoor Activities

The D2 Bravo device can be used for training indoors, such as running on an indoor track or using a stationary bike.

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

Multisport

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

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

Starting a Triathlon or Multisport Activity

Before you start an activity, you should charge the device ([Charging the Device, page 1](#)). Before you can use an ANT+ sensor, you must pair the sensor with your device ([Pairing ANT+ Sensors, page 22](#)).

- 1 Pair your ANT+ sensors, such as a foot pod or heart rate monitor (optional).
- 2 From the clock, select **START**.
- 3 Select **Triathlon** or a custom multisport activity.
- 4 Go outside, and wait while the device locates satellites.
- 5 Select **START** to start the timer.
History is recorded only while the timer is running.
- 6 Start your first activity.
- 7 Select **LAP** to transition to the next activity.
If transitions are turned on, the transition time is recorded separately from the activity times.
- 8 If necessary, select **LAP** to start the next activity.
- 9 Select **UP** or **DOWN** to view additional data pages (optional).
- 10 After you complete your activity, select **STOP** > **Save**.

Creating a Custom Activity

- 1 Hold **UP**.
- 2 Select **Settings** > **Apps** > **Add New**.
- 3 Select an activity type.
NOTE: If you are creating a custom multisport activity, you are prompted to select two or more activities and include transitions.
- 4 If necessary, select an accent color.

- 5 If necessary, select an icon.
- 6 Select a name or enter a custom name.
Duplicate activity names include a number, for example: Triathlon(2).
- 7 Select an option:
 - Select **Use Default** to create your custom activity starting from the default system settings.
 - Select a copy of an existing activity to create your custom activity starting from one of your saved activities.
- 8 If necessary, select the GPS mode.
- 9 Select an option:
 - Select **Done** to save and use the custom activity.
 - Select **Edit Settings** to customize specific activity settings.

Golfing

Playing Golf

Before you play a course for the first time, you must download it from the Garmin Connect Mobile app ([Garmin Connect, page 16](#)). Courses downloaded from the Garmin Connect Mobile app are updated automatically. Before you play golf, you should charge the device ([Charging the Device, page 1](#)).

- 1 From the clock, select **START**.
- 2 Select **Golf**.
- 3 Go outside, and wait while the device locates satellites.
- 4 Select a course from the list of available courses.
- 5 Select **UP** or **DOWN** to view additional data pages (optional).
The device automatically transitions when you move to the next hole.
- 6 After you complete your activity, select **START** > **End Round** > **Yes**.

Hole Information

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



①	Current hole number
②	Distance to the back of the green
③	Distance to the middle of the green
④	Distance to the front of the green
⑤	Par for the hole
▲	Next hole
▼	Previous hole

Viewing Layup and Dogleg Distances

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

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

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

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

Using the Golf Odometer

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

- 1 Select **START** > **Odometer**.
- 2 If necessary, select **Reset** to reset the odometer to zero.

Keeping Score

- 1 From the hole information screen, select **START** > **Start Scoring**.

The scorecard appears when you are on the green.

- 2 Select **–** or **+** to set the score.
Your total score ① is updated.



Reviewing Scores

- 1 Select **START** > **Scorecard**, and select a hole.
- 2 Select **–** or **+** to change the score for that hole.

Measuring a Shot

- 1 Take a shot, and watch where your ball lands.
- 2 Select **START** > **Measure Shot**.
- 3 Walk or drive to your ball.
The distance automatically resets when you move to the next hole.
- 4 If necessary, select **Reset** to reset the distance at any time.

Training

Setting Up Your User Profile

You can update your gender, birth year, height, weight, heart rate zone, and power zone settings. The device uses this information to calculate accurate training data.

- 1 Hold **UP**.
- 2 Select **Fitness** > **My Stats** > **User Profile**.
- 3 Select an option.

Fitness Goals

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

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

If you know your maximum heart rate, you can use the table ([Heart Rate Zone Calculations, page 10](#)) to determine the best heart rate zone for your fitness objectives.

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

About Heart Rate Zones

Many athletes use heart rate zones to measure and increase their cardiovascular strength and improve their level of fitness. A

heart rate zone is a set range of heartbeats per minute. The five commonly accepted heart rate zones are numbered from 1 to 5 according to increasing intensity. Generally, heart rate zones are calculated based on percentages of your maximum heart rate.

Setting Your Heart Rate Zones

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

- 1 Hold **UP**.
- 2 Select **Fitness** > **My Stats** > **User Profile** > **Heart Rate Zones**.
- 3 Select **Default** to view the default values (optional).
The default values can be applied to running, cycling, and swimming.
- 4 Select **Running**, **Cycling**, or **Swimming**.
- 5 Select **Preference** > **Set Custom**.
- 6 Select **Max. HR**, and enter your maximum heart rate.
- 7 Select **LTHR**, and enter your lactate threshold heart rate.
You can perform a guided test to estimate your lactate threshold ([Lactate Threshold, page 6](#)).
- 8 Select **Resting HR**, and enter your resting heart rate.
- 9 Select **Zones** > **Based On**.
- 10 Select an option:
 - Select **BPM** to view and edit the zones in beats per minute.
 - Select **%Max. HR** to view and edit the zones as a percentage of your maximum heart rate.
 - Select **%HRR** to view and edit the zones as a percentage of your heart rate reserve (maximum heart rate minus resting heart rate).
 - Select **%LTHR** to view and edit the zones as a percentage of your lactate threshold heart rate.
- 11 Select a zone, and enter a value for each zone.

Letting the Device Set Your Heart Rate Zones

The default settings allow the device to detect your maximum heart rate and set your heart rate zones as a percentage of your maximum heart rate.

- Verify that your user profile settings are accurate ([Setting Up Your User Profile, page 10](#)).
- Run often with the wrist or chest heart rate monitor.
- Try a few heart rate training plans, available from your Garmin Connect account.
- View your heart rate trends and time in zones using your Garmin Connect account.

Heart Rate Zone Calculations

Zone	% of Maximum Heart Rate	Perceived Exertion	Benefits
1	50–60%	Relaxed, easy pace, rhythmic breathing	Beginning-level aerobic training, reduces stress
2	60–70%	Comfortable pace, slightly deeper breathing, conversation possible	Basic cardiovascular training, good recovery pace
3	70–80%	Moderate pace, more difficult to hold conversation	Improved aerobic capacity, optimal cardiovascular training

Zone	% of Maximum Heart Rate	Perceived Exertion	Benefits
4	80–90%	Fast pace and a bit uncomfortable, breathing forceful	Improved anaerobic capacity and threshold, improved speed
5	90–100%	Sprinting pace, unsustainable for long period of time, labored breathing	Anaerobic and muscular endurance, increased power

About Lifetime Athletes

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

Setting Your Power Zones

The values for the zones are default values and may not match your personal abilities. If you know your functional threshold power (FTP) value, you can enter it and allow the software to calculate your power zones automatically. You can manually adjust your zones on the device or using your Garmin Connect account.

- 1 Hold **UP**.
- 2 Select **Fitness > My Stats > User Profile > Power Zones > Based On**.
- 3 Select an option:
 - Select **Watts** to view and edit the zones in watts.
 - Select **% FTP** to view and edit the zones as a percentage of your functional threshold power.
- 4 Select **FTP**, and enter your FTP value.
- 5 Select a zone, and enter a value for each zone.
- 6 If necessary, select **Minimum**, and enter a minimum power value.

Activity Tracking

Turning On Activity Tracking

The activity tracking feature records your daily step count, distance traveled, intensity minutes, floors climbed, calories burned, and sleep statistics for each recorded day. Your calories burned includes your base metabolism plus activity calories.

Activity tracking can be enabled during the initial device setup, or at any time.

NOTE: Turning on activity tracking can decrease the battery life between charges.

- 1 Hold **UP**.
- 2 Select **Settings > Activity Tracking > Status > On**.

Your step count does not appear until the device locates satellites and sets the time automatically. The device may need a clear view of the sky to locate satellite signals.

The number of steps taken during the day appears on an activity tracking widget. The step count is updated periodically.

Using the Move Alert

Before you can use the move alert, you must turn on activity tracking and the move alert ([Turning On Activity Tracking, page 11](#)).

Sitting for prolonged periods of time can trigger undesirable metabolic state changes. The move alert reminds you to keep moving. After one hour of inactivity, Move! and the red bar appear. The device also beeps or vibrates if audible tones are turned on ([System Settings, page 22](#)).

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

Auto Goal

Your device creates a daily step goal automatically, based on your previous activity levels. As you move during the day, the device shows your progress toward your daily goal [1](#).



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

Sleep Tracking

While you are sleeping, the device monitors your movement. Sleep statistics include total hours of sleep, sleep levels, and sleep movement. You can set your normal sleep hours in the user settings on your Garmin Connect account. You can view your sleep statistics on your Garmin Connect account.

Using Automated Sleep Tracking

Before you can use automated sleep tracking, you must turn on activity tracking ([Turning On Activity Tracking, page 11](#)).

- 1 Wear your device while sleeping.
- 2 Upload your sleep tracking data to the Garmin Connect site ([Using Garmin Connect on Your Computer, page 16](#)).

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

Using Do Not Disturb Mode

You can use do not disturb mode to turn off the backlight and vibration alerts. For example, you can use this mode while sleeping or watching a movie.

- 1 Hold **LIGHT**.
- 2 Select **Do Not Disturb**.
- 3 Select an option:
 - To turn on do not disturb mode, select **Status > On**.
 - To turn off do not disturb mode, select **Status > Off**.
 - To turn on do not disturb mode automatically during your normal sleep hours, select **Sleep Time**.

Intensity Minutes

To improve your health, organizations such as the U.S. Centers for Disease Control and Prevention, the American Heart Association®, and the World Health Organization, recommend at least 150 minutes per week of moderate intensity activity, such as brisk walking, or 75 minutes per week of vigorous intensity activity, such as running.

The device monitors your activity intensity and tracks your time spent participating in moderate to vigorous intensity activities (heart rate data is required to quantify vigorous intensity). You can work toward achieving your weekly intensity minutes goal by participating in at least 10 consecutive minutes of moderate to vigorous intensity activities. The device adds the amount of moderate activity minutes with the amount of vigorous activity minutes. Your total vigorous intensity minutes are doubled when added.

Workouts

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

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

Following a Workout From the Web

Before you can download a workout from Garmin Connect, you must have a Garmin Connect account ([Garmin Connect](#), page 16).

- 1 Connect the device to your computer.
- 2 Go to www.garminconnect.com.
- 3 Create and save a new workout.
- 4 Select **Send to Device**, and follow the on-screen instructions.
- 5 Disconnect the device.

Starting a Workout

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

- 1 Hold **UP**.
- 2 Select **Fitness > Training > My Workouts**.
- 3 Select a workout.
- 4 Select **Do Workout**.
- 5 If necessary, select an activity type.
- 6 Select **START** to start the timer.

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


About the Training Calendar

The training calendar on your device is an extension of the training calendar or schedule you set up in Garmin Connect. After you have added a few workouts to the Garmin Connect calendar, you can send them to your device. All scheduled workouts sent to the device appear in the training calendar list by date. When you select a day in the training calendar, you can view or do the workout. The scheduled workout stays on your device whether you complete it or skip it. When you send scheduled workouts from Garmin Connect, they overwrite the existing training calendar.

Using Garmin Connect Training Plans

Before you can download and use a training plan from Garmin Connect, you must have a Garmin Connect account ([Garmin Connect](#), page 16).

You can browse Garmin Connect to find a training plan, schedule workouts and courses, and download the plan to your device.

- 1 Connect the device to your computer.
- 2 Go to www.garminconnect.com.
- 3 Select and schedule a training plan.
- 4 Review the training plan in your calendar.
- 5 Select , and follow the on-screen instructions.



Interval Workouts

You can create interval workouts based on distance or time. The device saves your custom interval workout until you create another interval workout. You can use open intervals for track workouts and when you are running a known distance. When you select LAP, the device records an interval and moves to a rest interval.

Creating an Interval Workout

- 1 Hold **UP**.
- 2 Select **Fitness > Training > Intervals > Edit > Interval > Type**.
- 3 Select **Distance**, **Time**, or **Open**.

TIP: You can create an open-ended interval by selecting the Open option.

- 4 Select **Duration**, enter a distance or time interval value for the workout, and select .
- 5 Select **BACK**.
- 6 Select **Rest > Type**.
- 7 Select **Distance**, **Time**, or **Open**.
- 8 If necessary, enter a distance or time value for the rest interval, and select .
- 9 Select **BACK**.
- 10 Select one or more options:
 - To set the number of repetitions, select **Repeat**.
 - To add an open-ended warm up to your workout, select **Warm Up > On**.
 - To add an open-ended cool down to your workout, select **Cool Down > On**.

Starting an Interval Workout

- 1 Hold **UP**.
- 2 Select **Fitness > Training > Intervals > Do Workout**.
- 3 Select an activity.
- 4 Select **START** to start the timer.
- 5 When your interval workout has a warm up, select **LAP** to begin the first interval.
- 6 Follow the on-screen instructions.

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

Stopping an Interval Workout

- At any time, select **LAP** to end an interval.
- At any time, select **STOP** to stop the timer.
- If you added a cool down to your interval workout, select **LAP** to end the interval workout.

Using Virtual Partner®

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

NOTE: This feature is not available for all activities.

- 1 Hold **UP**.
- 2 Select **Settings > Apps**.
- 3 Select an activity.
- 4 Select **Data Screens > Virtual Partner > Status > On**.
- 5 Select **Set Pace** or **Set Speed**.
- 6 Enter a value.
- 7 Begin your activity.
- 8 Select **UP** or **DOWN** to scroll to the Virtual Partner screen and see who is leading.

Setting a Training Target

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

- 1 Hold **UP**.
- 2 Select **Fitness > Training > Set a Target**.
- 3 Select an activity.
- 4 Select an option:
 - Select **Distance Only** to select a preset distance or enter a custom distance.
 - Select **Distance and Time** to select a distance and time target.

- Select **Distance and Pace** or **Distance and Speed** to select a distance and pace or speed target.

The training target screen appears and displays your estimated finish time. The estimated finish time is based on your current performance and the time remaining.

- 5 Select **START** to start the timer.
- 6 After you complete your activity, select **STOP > Save**.

Canceling a Training Target

- 1 During an activity, hold **UP**.
- 2 Select **Fitness > Training > Cancel Target > Yes**.

Racing a Previous Activity

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

NOTE: This feature is not available for all activities.

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

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

Personal Records

When you complete an activity, the device displays any new personal records you achieved during that activity. Personal records include your fastest time over several typical race distances and longest run or ride.

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

Viewing Your Personal Records

- 1 Hold **UP**.
- 2 Select **Fitness > My Stats > Records**.
- 3 Select a sport.
- 4 Select a record.
- 5 Select **View Record**.

Restoring a Personal Record

You can set each personal record back to the one previously recorded.

- 1 Hold **UP**.
- 2 Select **Fitness > My Stats > Records**.
- 3 Select a sport.
- 4 Select a record to restore.
- 5 Select **Previous > Yes**.

NOTE: This does not delete any saved activities.

Clearing a Personal Record

- 1 Hold **UP**.
- 2 Select **Fitness > My Stats > Records**.
- 3 Select a sport.
- 4 Select a record to delete.
- 5 Select **Clear Record > Yes**.

NOTE: This does not delete any saved activities.

Clearing All Personal Records

- 1 Hold **UP**.
- 2 Select **Fitness > My Stats > Records**.

NOTE: This does not delete any saved activities.
- 3 Select a sport.
- 4 Select **Clear All Records > Yes**.

The records are deleted for that sport only.

About Training Effect

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

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

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

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

Clock


Setting an Alarm

You can set up to ten separate alarms. You can set each alarm to sound once or to repeat regularly.

- 1 Hold **UP**.
- 2 Select **Clock > Alarm Clock > Add Alarm**.
- 3 Select **Status > On**.
- 4 Select **Time**, and enter the alarm time.
- 5 Select **Notification**, and select a type of notification (optional).
- 6 Select **Frequency**, and select when the alarm should repeat.
- 7 Select **Backlight > On** to turn on the backlight with the alarm.

Starting the Countdown Timer

- 1 Hold **UP**.

TIP: You can select  to view the countdown timer.
- 2 Select **Clock > Timer**.
- 3 Enter the time.
- 4 If necessary, select **Restart > On** to automatically restart the timer after it expires.
- 5 If necessary, select **Notification**, and select a type of notification.
- 6 Select **Start Timer**.

Using the Stopwatch

- 1 Hold **UP**.

TIP: You can select  to view the countdown timer.

- 2 Select **Clock > Stopwatch**.
- 3 From the clock, select **START**.

Setting Sunrise and Sunset Alerts

You can set the sunrise and sunset alerts to sound a specific number of minutes or hours before the actual sunrise or sunset occurs.

- 1 Hold **UP**.
- 2 Select **Clock > Alerts**.
- 3 Select an option:
 - Select **Til Sunset > Status > On**.
 - Select **Til Sunrise > Status > On**.
- 4 Select **Time**, and enter the time.

Navigation

Projecting a Waypoint

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

- 1 If necessary, add the project waypoint app to the apps list ([Activity App Settings, page 19](#)).
- 2 Select **START > Project Wpt.**
- 3 Select **UP** or **DOWN** to set the heading.
- 4 Select **START**.
- 5 Select **DOWN** to select a unit of measure.
- 6 Select **UP** to enter the distance.
- 7 Select **START** to save.

The projected waypoint is saved with a default name.

Saving Your Location

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

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

Editing Your Saved Locations

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

- 1 Hold **UP**.
- 2 Select **Navigation > Saved Locations**.
- 3 Select a saved location.
- 4 Select an option to edit the location.

Deleting All Saved Locations

You can delete all of your saved locations at once.

- 1 Hold **UP**.
- 2 Select **Navigation > Saved Locations > Delete All**.

Navigating to a Destination

You can use your device to navigate to a destination or follow a course. When you start navigating, you can choose the activity to be used while traveling to your destination, such as hiking, running, or biking. If you are already recording an activity when you start navigation, the device continues to record the current activity while navigating.

- 1 Hold **UP**.
- 2 Select **Navigation**.
- 3 Select a category.

- 4 Respond to the on-screen prompts to choose a destination.
- 5 Select **Go To**.
- 6 Select an activity.
Navigation information appears.
- 7 Select **START** to begin navigation.
- 8 Select **UP** or **DOWN** to view additional data pages (optional).

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 Hold **UP**.
- 2 Select **Navigation > Sight 'N Go**.
- 3 Point the top of the watch at an object and select **START**.
- 4 Select an activity.
Navigation information appears.
- 5 Select **START** to begin navigation.
- 6 Select **UP** or **DOWN** to view additional data pages (optional).

Compass

The device has a 3-axis compass with automatic calibration. The compass features and appearance change depending on your activity, whether GPS is enabled, and whether you are navigating to a destination. You can change the compass settings manually ([Compass Settings, page 21](#)). To open the compass settings quickly, you can select **START** from the compass widget.

Map

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

- Map navigation ([Panning and Zooming the Map, page 14](#))
- Map settings ([Customizing Map Features, page 22](#))

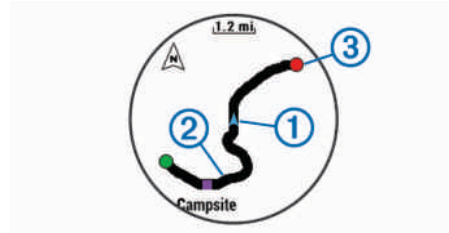
Panning and Zooming the Map



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

Navigating To Your Starting Point

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

During an activity, select **STOP > TracBack**.



Your current location  and track to follow  appear on the map.

Altimeter

The device contains an internal altimeter. The device collects elevation and pressure data continuously, even in low-power mode. The altimeter displays your approximate elevation based on pressure changes (*Altimeter Settings, page 21*). You can select **START** from the altimeter widget to open the altimeter settings quickly.

History

History includes time, distance, calories, average pace or speed, lap data, and optional ANT+ sensor information.

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

Using History

History contains previous activities you have saved on your device.

- 1 Hold **UP**.
- 2 Select **History > Activities**.
- 3 Select an activity.
- 4 Select an option:
 - To view additional information about the activity, select **Details**.
 - To select a lap and view additional information about each lap, select **Laps**.
 - To select an interval and view additional information about each interval, select **Intervals**.
 - To view the activity on a map, select **Map**.
 - To navigate in reverse the path you traveled for the activity, select **TracBack** (*Navigating To Your Starting Point, page 14*).
 - To delete the selected activity, select **Delete**.
 - To navigate the path you traveled for the activity, select **Go**.

Multisport History

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

Viewing Your Time in Each Heart Rate Zone

Before you can view heart rate zone data, you must pair your device with a compatible heart rate monitor, complete an activity, and save the activity.

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

- 1 Hold **UP**.
- 2 Select **History > Activities**.
- 3 Select an activity.
- 4 Select **Time in Zone**.

Viewing Step Totals

Before you can view step totals, you must turn on activity tracking (*Turning On Activity Tracking, page 11*).

- 1 Hold **UP**.
- 2 Select **History > Steps**.
- 3 Select a day to view the accumulated step count, step goal, distance traveled, and calories burned.

Viewing Data Totals

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

- 1 Hold **UP**.
- 2 Select **History > Totals**.
- 3 If necessary, select an activity.
- 4 Select an option to view weekly or monthly totals.

Deleting History

- 1 Hold **UP**.
- 2 Select **History > Options**.
- 3 Select an option:
 - Select **Delete All Activities** to delete all activities from the history.
 - Select **Reset Totals** to reset all distance and time totals.

NOTE: This does not delete any saved activities.
- 4 Confirm your selection.

Using the Odometer

The odometer automatically records the total distance traveled and elevation gained.

- 1 Hold **UP**.
- 2 Select **Fitness > My Stats > Odometer**.
- 3 Select an option to view the odometer totals.
- 4 If necessary, select a total, and select **Yes** to reset the odometer to zero.

Connected Features

Connected features are available for your D2 Bravo device when you connect the device to a compatible smartphone using Bluetooth® wireless technology. Some features require you to install the Garmin Connect Mobile app on the connected smartphone. Go to www.garmin.com/apps for more information. Some features are also available when you connect your device to a wireless network.

Phone notifications: Displays phone notifications and messages on your D2 Bravo device.

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

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

Connect IQ: Allows you to extend your device features with new watch faces, widgets, apps, and data fields.

Enabling Bluetooth Notifications

Before you can enable notifications, you must pair the D2 Bravo device with a compatible mobile device (*Pairing Your Smartphone with Your Device, page 1*).

- 1 Hold **UP**.
- 2 Select **Settings > Bluetooth > Smart Notifications > Status > On**.
- 3 Select **During Activity**.
- 4 Select a notification preference.
- 5 Select a sound preference.
- 6 Select **Watch Mode**.
- 7 Select a notification preference.
- 8 Select a sound preference.

9 Select **Timeout**.

10 Select the amount of time the alert for a new notification appears on the screen.

Viewing Notifications

- 1 From the clock, select **UP** to view the notifications widget.
- 2 Select **START**, and select a notification.
- 3 If necessary, select **DOWN** to scroll through the contents of the notification.
- 4 Select **BACK** to return to the previous screen.
The notification remains on your D2 Bravo device until you view it or clear it on your mobile device.

Managing Notifications

You can use your compatible smartphone to manage notifications that appear on your D2 Bravo device.

Select an option:

- If you are using an Apple® device, use the notification center settings on your smartphone to select the items to show on the device.
- If you are using an Android™ device, use the app settings in the Garmin Connect Mobile app to select the items to show on the device.

Turning Off Bluetooth Technology

- 1 Hold **UP**.
- 2 Select **Settings > Bluetooth > Status > Off** to turn off Bluetooth wireless technology on your D2 Bravo device.
Refer to the owner's manual for your mobile device to turn off Bluetooth wireless technology on your mobile device.

Turning On and Off Bluetooth Connection Alerts

You can set the D2 Bravo device to alert you when your paired smartphone connects and disconnects using Bluetooth wireless technology.

NOTE: Bluetooth connection alerts are turned off by default.

- 1 Hold **UP**.
- 2 Select **Settings > Bluetooth > Alerts**.

Locating a Lost Mobile Device

You can use this feature to help locate a lost mobile device that is paired using Bluetooth wireless technology and currently within range.

- 1 From the clock, select **START**.
- 2 Select **Find Phone**.

The D2 Bravo device begins searching for your paired mobile device. An audible alert sounds on your mobile device, and the Bluetooth signal strength displays on the D2 Bravo device screen. The Bluetooth signal strength increases as you move closer to your mobile device.

- 3 Select **STOP** to stop searching.

Garmin Connect

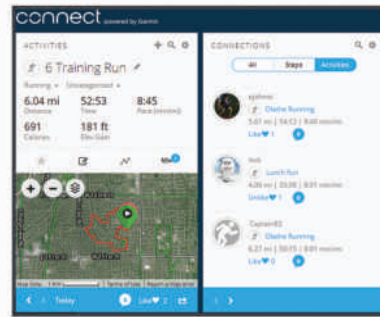
You can connect with your friends on your Garmin Connect account. Garmin Connect gives you the tools to track, analyze, share, and encourage each other. Record the events of your active lifestyle including runs, walks, rides, swims, hikes, triathlons, golf games, and more. Garmin Connect is also your online statistics tracker where you can analyze and share all your rounds of golf. To sign up for a free account, go to www.garminconnect.com/start.

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

Analyze your data: You can view more detailed information about your fitness and outdoor activities, including time,

distance, heart rate, calories burned, cadence, an overhead map view, and pace and speed charts. You can view more detailed information about your golf games, including scorecards, statistics, and course information. You can also view customizable reports.

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



Track your progress: You can track your daily steps, join a friendly competition with your connections, and meet your goals.

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

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

Using Garmin Connect Mobile

You can upload all of your activity data to your Garmin Connect account for comprehensive analysis. With your Garmin Connect account, you can view a map of your activity, and share your activities with friends. You can turn on auto upload in the Garmin Connect Mobile app.

- 1 From the Garmin Connect Mobile app settings menu, select **Garmin Devices**.
- 2 Select your D2 Bravo device, and select **Device Settings**.
- 3 Select the toggle switch to turn on auto upload.

Manually Uploading Data to Garmin Connect Mobile

- 1 Hold **UP**.
- 2 Select **Settings > Bluetooth > Sync**.

Using Garmin Connect on Your Computer

If you have not paired your D2 Bravo device with your smartphone, you can upload all of your activity data to your Garmin Connect account using your computer.

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

Wi-Fi® Connected Features

The D2 Bravo device has Wi-Fi connected features. The Garmin Connect Mobile app is not required for you to use Wi-Fi connectivity.

Activity uploads to your Garmin Connect account:

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

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

Software updates: Your device downloads the latest software update when a Wi-Fi connection is available. The next time you turn on or unlock the device, you can follow the on-screen instructions to install the software update.

Setting Up Wi-Fi Connectivity

- 1 Go to www.garminconnect.com/start, and download the Garmin Express application.
- 2 Follow the on-screen instructions to set up Wi-Fi connectivity with Garmin Express.

Connect IQ Features

You can add Connect IQ features to your watch from Garmin and other providers using the Garmin Connect Mobile app. You can customize your device with watch faces, data fields, widgets, and apps.

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

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

Widgets: Provide information at a glance, including sensor data and notifications.

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

Downloading Connect IQ Features

Before you can download Connect IQ features from the Garmin Connect Mobile app, you must pair your D2 Bravo device with your smartphone.

- 1 From the settings in the Garmin Connect Mobile app, select **Connect IQ Store**.
- 2 If necessary, select your device.
- 3 Select a Connect IQ feature.
- 4 Follow the on-screen instructions.

Downloading Connect IQ Features Using Your Computer

- 1 Connect the device to your computer using a USB cable.
- 2 Go to garminconnect.com and sign in.
- 3 From your devices widget, select **Connect IQ Store**.
- 4 Select a Connect IQ feature, and download it.
- 5 Follow the on-screen instructions.

Widgets

Your device comes preloaded with widgets that provide at-a-glance information. Some widgets require a Bluetooth connection to a compatible smartphone.

Some widgets are not visible by default. You can add them to the widget loop manually.

Notifications: Alerts you to incoming calls, texts, social network updates, and more, based on your smartphone notification settings.

Calendar: Displays upcoming meetings from your smartphone calendar.

Music controls: Provides music player controls for your smartphone.

Weather: Displays the current temperature and weather forecast.

Activity tracking: Tracks your daily step count, step goal, distance traveled, calories burned, and sleep statistics.

Intensity minutes: Tracks your time spent participating in moderate to vigorous activities, your weekly intensity minutes goal, and progress toward your goal.

Heart rate: Displays your current heart rate in beats per minute (bpm), lowest resting heart rate for today, and a graph of your heart rate.

Sensor information: Displays information from an internal sensor or a connected ANT+ sensor.

Compass: Displays an electronic compass.

METARs: Displays the current sky conditions, weather conditions, visibility distance, temperature, dew point, barometric pressure, and wind information.


Controls: Allows you to turn on and off the Bluetooth connectivity and features including do not disturb, find my phone, and manual syncing.

VIRB controls: Provides camera controls when you have a VIRB device paired with your D2 Bravo device.

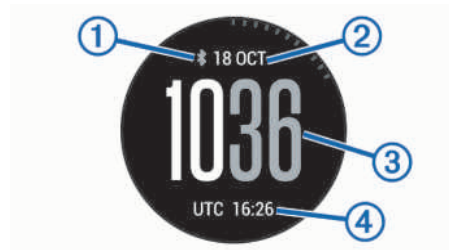
Golf: Displays golf information for your last round.

Viewing Widgets

Your device comes preloaded with several widgets, and more are available when you pair your device with a smartphone.

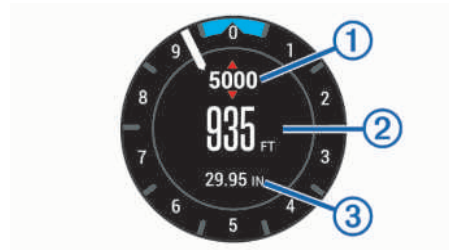
- 1 From any screen, hold .
The clock appears.
- 2 Select **UP** or **DOWN**.
The device cycles through the available widgets.
- 3 If you are recording an activity, select **BACK** to return to the activity data pages.
- 4 Select **START** to view additional options and functions for a widget (optional).

Time and Date



①	Bluetooth connectivity status
②	Date
③	Digital time
④	Coordinated Universal Time

Altimeter



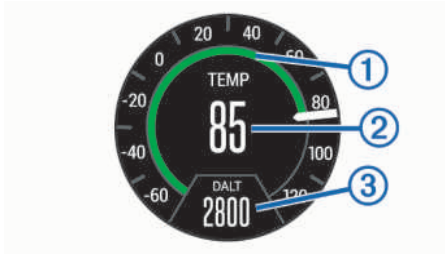
①	Alert altitude
②	Pressure altitude
③	Barometric pressure

Compass



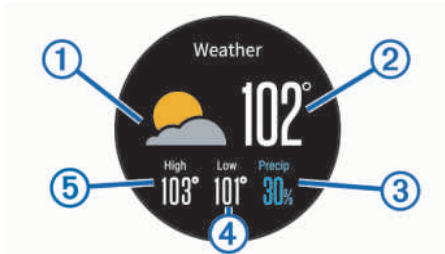
①	Compass ring
②	Direction of travel in degrees (tracking mode only)
③	Direction of travel

Temperature



①	Analog temperature
②	Digital temperature
③	Density altitude

Weather



①	Current weather conditions
②	Current temperature
③	Chance of precipitation
④	Daily low temperature
⑤	Daily high temperature

Calendar



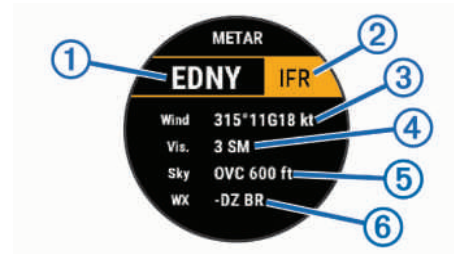
①	Current activity
②	Next activity
③	Additional activities

Notifications



①	Instant message
②	Email
③	Missed phone call
④	Additional notifications

METAR



①	Nearest airport identifier
②	Aviation flight category
③	Wind direction, speed, and gusts
④	Visibility in statute miles
⑤	Sky conditions
⑥	Weather conditions

Customizing the Widget Loop

You can show, hide, or move items in the widget loop.

- 1 Hold **UP**.
- 2 Select **Settings > Widgets**.
- 3 Select a widget.
- 4 Select an option:
 - Select **Status** to show or hide the widget from the widget loop.
 - Select **Move Up** or **Move Down** to change the location of the widget in the widget loop.

VIRB Remote

The VIRB remote function allows you to control your VIRB action camera using your device. Go to www.garmin.com/VIRB to purchase a VIRB action camera.

Controlling a VIRB Action Camera

Before you can use the VIRB remote function, you must enable the remote setting on your VIRB camera. See the *VIRB Series Owner's Manual* for more information. You must also set the VIRB widget to be shown in the widget loop (*Customizing the Widget Loop*, page 18).

- 1 Turn on your VIRB camera.
- 2 On your D2 Bravo device, select **UP** or **DOWN** from the watch face to view the VIRB widget.
- 3 Wait while the device connects to your VIRB camera.
- 4 Select an option:
 - To record video, select **START**.
The video counter appears on the D2 Bravo screen.

- To stop recording video, select **STOP**.
- To take a photo, select **DOWN**.

Customizing Your Device

Activity App Settings

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

Hold **UP**, select **Settings > Apps**, and select an activity.

Data Screens: Enables you to customize data screens for the activity (*Customizing the Data Screens, page 19*). You can also show or hide a map data screen for some activities.

Auto Fly: In watch mode, allows a flight activity to begin automatically when the detected climb rate exceeds a specified speed. The activity stops when the ground speed drops below 30 kn for a specified time.

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

Flight Timer: From the Fly app, allows the flight timer to start and stop automatically when your ground speed exceeds 30 kn.

Nautical Dist.: Displays distances in nautical units.

Nautical Spd.: Displays your speed in nautical units.

Metronome: Plays tones at a steady rhythm to help you improve your performance by training at a faster, slower, or more consistent cadence (*Using the Metronome, page 7*).

Auto Lap: Sets the options for the Auto Lap® feature (*Auto Lap, page 20*).

Auto Pause: Sets the device to stop recording data when you stop moving or when you drop below a specified speed (*Enabling Auto Pause®, page 20*).

Auto Climb: Enables the device to detect elevation changes automatically using the built-in altimeter.

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

3D Speed: Calculates your speed using your elevation change and your horizontal movement over ground (*3D Speed and Distance, page 20*).

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

Lap Key: Enables you to record a lap or a rest during the activity.

Auto Scroll: Enables you to move through all of the activity data screens automatically while the timer is running (*Using Auto Scroll, page 20*).

GPS: Sets the mode for the GPS antenna (*UltraTrac, page 20*).

Pool Size: Sets the pool length for pool swimming (*Going for a Pool Swim, page 8*).

Stroke Detect.: Enables stroke detection for pool swimming.

Timeout: Sets the power-save timeout setting for the activity (*Power Save Timeout Settings, page 21*).

Background Color: Sets the background color of each activity to black or white.

Accent Color: Sets the accent color of each activity to help identify which activity is active.

Status: Shows or hides the activity in the apps list.

Move Up: Adjusts the position of the activity in the apps list.

Move Down: Adjusts the position of the activity in the apps list.

Remove: Deletes the activity.

NOTE: This deletes the activity from the apps list and all user-entered activity settings. You can restore all of the

device settings to the factory default values to add a removed activity back to the list (*Restoring All Default Settings, page 24*).

Rename: Sets the activity name.

Customizing the Data Screens

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

- 1 Hold **UP**.
- 2 Select **Settings > Apps**.
- 3 Select the activity to customize.
- 4 Select **Data Screens**.
- 5 Select a data screen to customize.
- 6 Select an option:
 - Select **Status** to turn the data screen on or off.
 - Select **Layout** to adjust the number of data fields on the data screen.
 - Select a field to change the data that appears in the field.

Adding a Map to an Activity

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

- 1 Hold **UP**.
- 2 Select **Settings > Apps**.
- 3 Select the activity to customize.
- 4 Select **Data Screens > Map**.
- 5 Select **Status** to turn the map on or off.
- 6 Select **Orientation**.
- 7 Select an option:
 - To show north at the top of the page, select **North Up**.
 - To show your current direction of travel toward the top of the page, select **Track Up**.
- 8 Select **User Locations** to show or hide saved locations on the map.
- 9 Select **Auto Zoom** to select automatically the optimal zoom level for the map.

When Off is selected, you must zoom in or out manually.

Alerts

You can set alerts for each activity, which can help you to train toward specific goals, to increase your awareness of your environment, and to navigate to your destination. Some alerts are available only for specific activities. There are three types of alerts: event alerts, range alerts, and recurring alerts.

Event alert: An event alert notifies you once. The event is a specific value. For example, you can set the device to alert you when you reach a specified elevation.

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

Recurring alert: A recurring alert notifies you each 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
Cadence	Range	You can set minimum and maximum cadence values.
Calories	Event, recurring	You can set the number of calories.
Custom	Recurring	You can select an existing message or create a custom message and select an alert type.
Distance	Recurring	You can set a distance interval.

Alert Name	Alert Type	Description
Elevation	Range	You can set minimum and maximum elevation values.
Heart Rate	Range	You can set minimum and maximum heart rate values or select zone changes. See About Heart Rate Zones, page 10 and Heart Rate Zone Calculations, page 10 .
Pace	Range	You can set minimum and maximum pace values.
Power	Range	You can set the high or low power level.
Run/Walk	Recurring	You can set timed walking breaks at regular intervals.
Speed	Range	You can set minimum and maximum speed values.
Time	Event, recurring	You can set a time interval.

Setting an Alert

- 1 Hold **UP**.
- 2 Select **Settings > Apps**.
- 3 Select an activity.
NOTE: This feature is not available for all activities.
- 4 Select **Alerts**.
- 5 Select an option:
 - Select **Add New** to add a new alert for the activity.
 - Select the alert name to edit an existing alert.
- 6 If necessary, select the type of alert.
- 7 Select a zone, enter the minimum and maximum values, or enter a custom value for the alert.
- 8 If necessary, turn on the alert.

For event and recurring alerts, a message appears each time you reach the alert value. For range alerts, a message appears each time you exceed or drop below the specified range (minimum and maximum values).

Auto Lap

Marking Laps by Distance

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

- 1 Hold **UP**.
- 2 Select **Settings > Apps**.
- 3 Select an activity.
NOTE: This feature is not available for all activities.
- 4 Select **Auto Lap**.
- 5 Select an option:
 - Select **Auto Lap** to turn Auto Lap on or off.
 - Select **Auto Distance** to adjust the distance between laps.

Each time you complete a lap, a message appears that displays the time for that lap. The device also beeps or vibrates if audible tones are turned on ([System Settings, page 22](#)).

If necessary, you can customize the data pages to display additional lap data ([Customizing the Data Screens, page 19](#)).

Customizing the Lap Alert Message

You can customize one or two data fields that appear in the lap alert message.

- 1 Hold **UP**.
- 2 Select **Settings > Apps**.
- 3 Select an activity.
NOTE: This feature is not available for all activities.

- 4 Select **Auto Lap > Lap Alert**.
- 5 Select a data field to change it.
- 6 Select **Preview** (optional).

Enabling Auto Pause®

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

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

- 1 Hold **UP**.
- 2 Select **Settings > Apps**.
- 3 Select an activity.
NOTE: This feature is not available for all activities.
- 4 Select **Auto Pause**.
- 5 Select an option:
 - To pause the timer automatically when you stop moving, select **When Stopped**.
 - To pause the timer automatically when your pace or speed drops below a specified level, select **Custom**.

Enabling Auto Climb

You can use the auto climb feature to detect elevation changes automatically. You can use it during activities such as climbing, hiking, running, or biking.

- 1 Hold **UP**.
- 2 Select **Settings > Apps**.
- 3 Select an activity.
NOTE: This feature is not available for all activities.
- 4 Select **Auto Climb > Status > On**.
- 5 Select **Run Screen** to identify which data screen appears while running.
- 6 Select **Climb Screen** to identify which data screen appears while climbing.
- 7 If necessary, select **Invert Colors** to reverse the display colors when changing modes.
- 8 Select **Vertical Speed** to set the rate of ascent over time.
- 9 Select **Mode Switch** to set how quickly the device changes modes.

3D Speed and Distance

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

Using Auto Scroll

You can use the auto scroll feature to cycle through all of the activity data screens automatically while the timer is running.

- 1 Hold **UP**.
- 2 Select **Settings > Apps**.
- 3 Select an activity.
NOTE: This feature is not available for all activities.
- 4 Select **Auto Scroll**.
- 5 Select a display speed.

UltraTrac

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

Power Save Timeout Settings

The timeout settings affect how long your device stays in training mode, for example, when you are waiting for a race to start. Hold UP, select **Settings > Apps**, and select an activity. Select Timeout to adjust the timeout settings for the activity.

Normal: Sets the device to enter low-power watch mode after 5 minutes of inactivity.

Extended: Sets the device to enter low-power watch mode after 25 minutes of inactivity. The extended mode can result in shorter battery life between charges.

Turning On and Off the Lap Key

You can turn on the Lap Key setting to record a lap or a rest during an activity using LAP. You can turn off the Lap Key setting to avoid recording laps due to accidental key presses during an activity.

- 1 Hold UP.
- 2 Select **Settings > Apps**.
- 3 Select an activity.
- 4 Select **Lap Key**.
The lap key status changes to On or Off based on the current setting.

Watch Face Settings

You can customize the appearance of the watch face by selecting the layout, colors, and additional data. You can also download custom watch faces from the Connect IQ store.

Customizing the Watch Face

Before you can activate a Connect IQ watch face, you must install a watch face from the Connect IQ store ([Connect IQ Features, page 17](#)).

You can customize the watch face information and appearance, or activate an installed Connect IQ watch face.

- 1 Hold UP.
- 2 Select **Settings > Watch Face > Type**.
- 3 Select an option:
 - To activate the pre-loaded digital watch face, select **Digital**.
 - To activate the pre-loaded analog watch face, select **Analog**.
 - To activate an installed Connect IQ watch face, select the name of the installed watch face.
- 4 If using a pre-loaded watch face, select an option:
 - To change the background color, select **Background Color**.
 - To add or change an accent color for the digital watch face, select **Accent Color**.
 - To change the style of the digits for the digital watch face, select **Layout**.
 - To change the style of the hands for the analog watch face, select **Hands**.
 - To change the style of the numbers for the analog watch face, select **Background**.
 - To change the data that appears on the watch face, select **Additional Data**.
- 5 Select UP or DOWN to preview the watch face options.
- 6 Select START to save the selection.

Sensors Settings

Compass Settings

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

Calibrate: Allows you to manually calibrate the compass sensor ([Calibrating the Compass Manually, page 21](#)).

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

North Ref.: Sets the north reference of the compass ([Setting the North Reference, page 21](#)).

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

Calibrating the Compass Manually

NOTICE

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

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

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

Setting the North Reference

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

- 1 Hold UP.
- 2 Select **Settings > Sensors > Compass > North Ref.**
- 3 Select an option:
 - To set geographic north as the heading reference, select **True**.
 - To set the magnetic declination for your location automatically, select **Magnetic**.
 - To set grid north (000°) as the heading reference, select **Grid**.
 - To set the magnetic variation value manually, select **User**, enter the magnetic variance, and select **Done**.

Altimeter Settings

Hold UP, and select **Settings > Sensors > Altimeter**.

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

Barometer: Allows you to set the barometric pressure manually, or select a value from the nearest METAR station through Garmin Connect Mobile.

O2 Alert: Sets an alarm to vibrate when you reach a low-oxygen altitude.

Sync to Elevation: Allows you to synchronize the device to your current elevation manually.

Calibrating the Barometric Altimeter

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

- 1 Hold UP.
- 2 Select **Settings > Sensors > Altimeter**.
- 3 Select an option:
 - To calibrate automatically from your GPS starting point, select **Auto Cal. > On**.
 - To enter a known altitude, select **Calibrate**.

Elevation Settings

Hold UP, and select **Settings > Sensors > Elevation**.

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

Calibrate: Allows you to calibrate the altimeter sensor manually.

Navigation Settings

You can customize the map features and appearance when navigating to a destination.

Customizing Map Features

- 1 Hold **UP**.
- 2 Select **Settings > Navigation > Data Screens**.
- 3 Select an option:
 - Select **Map** to turn on or off the map.
 - Select **Guide** to turn on or off the guide screen that displays the compass bearing or course to follow while navigating.
 - Select a screen to add, remove, or customize.

Setting Up a Heading Bug

You can set up a heading indicator to display on your data pages while navigating. The indicator points to your target heading.

- 1 Hold **UP**.
- 2 Select **Settings > Navigation > Heading Bug**.

System Settings

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

User Profile: Allows you to open and customize your personal statistics (*Setting Up Your User Profile, page 10*).

Hot Keys: Allows you to assign shortcuts to device keys.

Language: Sets the language displayed on the device.

Time: Adjusts the time settings (*Time Settings, page 22*).

Backlight: Adjusts the backlight settings (*Backlight Settings, page 22*).

Sounds: Sets the device sounds, such as key tones, alerts, and vibrations.

Units: Sets the units of measure used on the device (*Changing the Units of Measure, page 22*).

GLONASS: Using GLONASS provides increased performance in challenging environments and faster position acquisition. Using the GPS and GLONASS options can reduce battery life more than using the GPS option only.

Pos. Format: Sets the geographical position format and datum options.

Format: Sets general format preferences, such as the pace and speed shown during activities, and the start of the week.

Data Recording: Sets how the device records activity data. The Smart recording option (default) allows for longer activity recordings. The Every Second recording option provides more detailed activity recordings, but may not record entire activities that last for longer periods of time.

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

Restore Defaults: Allows you to reset user data and settings (*Restoring All Default Settings, page 24*).

Software Update: Allows you to install software updates downloaded using Garmin Express.

About: Displays device, software, and license information.

Time Settings

Hold **UP**, and select **Settings > System > Time**.

Time Format: Sets the device to show time in a 12-hour or 24-hour format.

Set Time: Sets the time zone for the device. The Auto option sets the time zone automatically based on your GPS position.

Time: Allows you to adjust the time if it is set to the Manual option.

Backlight Settings

Hold **UP**, and select **Settings > System > Backlight**.

Mode: Sets the backlight to turn on manually or automatically. The Auto option allows you to separately set the backlight for keys, alerts, and gestures.

NOTE: When you set Gesture to On, you trigger the backlight by raising and turning your arm to look at your wrist.

Timeout: Sets the length of time before the backlight turns off.

Brightness: Sets the brightness level of the backlight.

Changing the Units of Measure

You can customize units of measure for distance, pace and speed, elevation, weight, height, and temperature.

- 1 Hold **UP**.
- 2 Select **Settings > System > Units**.
- 3 Select a measurement type.
- 4 Select a unit of measure.

ANT+ Sensors

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

- Heart rate monitor, such as HRM-Run (*Putting On the Heart Rate Monitor, page 3*)
- Bike speed and cadence sensor (*Using an Optional Bike Speed or Cadence Sensor, page 23*)
- Foot pod (*Foot Pod, page 23*)
- Power sensor, such as Vector™
- tempe™ wireless temperature sensor (*tempe, page 23*)

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

Pairing ANT+ Sensors

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

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

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

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

Using an Optional Bike Speed or Cadence Sensor

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

- Pair the sensor with your device (*Pairing ANT+ Sensors*, page 22).
- Update your fitness user profile information (*Setting Up Your User Profile*, page 10).
- Set your wheel size (*Wheel Size and Circumference*, page 28).
- Go for a ride (*Going for a Ride*, page 7).

Foot Pod

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

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

Improving Foot Pod Calibration

Before you can calibrate your device, you must acquire GPS signals and pair your device with the foot pod (*Pairing ANT+ Sensors*, page 22).

The foot pod is self-calibrating, but you can improve the accuracy of the speed and distance data with a few outdoor runs using GPS.

- 1 Stand outside for 5 minutes with a clear view of the sky.
- 2 Start a running activity.
- 3 Run on a track without stopping for 10 minutes.
- 4 Stop your activity, and save it.

Based on the recorded data, the foot pod calibration value changes, if necessary. You should not need to calibrate the foot pod again unless your running style changes.

Calibrating Your Foot Pod Manually

Before you can calibrate your device, you must pair your device with the foot pod sensor (*Pairing ANT+ Sensors*, page 22).

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

- 1 Hold **UP**.
- 2 Select **Settings > Sensors**.
- 3 Select your foot pod.
- 4 Select **Cal. Factor > Set Value**.
- 5 Adjust the calibration factor:
 - Increase the calibration factor if your distance is too low.
 - Decrease the calibration factor if your distance is too high.

Setting Foot Pod Speed and Distance

Before you can customize the foot pod speed and distance, you must pair your device with the foot pod sensor (*Pairing ANT+ Sensors*, page 22).

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

- 1 Hold **UP**.
- 2 Select **Settings > Sensors**.
- 3 Select your foot pod.
- 4 Select **Speed**.
- 5 Select an option:

- Select **Indoor** when you are training with GPS turned off, usually indoors.
- Select **Always** to use your foot pod data regardless of the GPS setting.

tempe

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

Device Information

Contacting Garmin Aviation Product Support

- Go to fly.garmin.com/support for in-country support information.
- In the Americas, call (866) 739-5687.
- In Europe, Africa, and the Middle East, call +44 (0) 37 0850 1243.
- In Asia Pacific and Australia, call +65 6348 0378.

Viewing Device Information

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

- 1 Hold **UP**.
- 2 Select **Settings > System > About**.

Specifications

Battery type	Rechargeable, built-in lithium-ion battery
Battery life	Up to 6 wk.
Water rating	10 ATM ¹
Operating temperature range	From -20° to 55°C (from -4° to 131°F)
Charging temperature range	From 0° to 45°C (from 32° to 113°F)
Radio frequency	2.4 GHz
Radio protocols	ANT+ wireless technology, Wi-Fi, Bluetooth Smart device

Battery Information

The actual battery life depends on the features enabled on your device, such as activity tracking, smartphone notifications, GPS, internal sensors, and connected ANT+ sensors.

Battery Life	Mode
Up to 20 hr.	Normal GPS mode
Up to 50 hr.	UltraTrac GPS mode with two-minute polling interval
Up to 6 wk.	Watch mode

HRM-Run Specifications

Battery type	User-replaceable CR2032, 3 V
Battery life	1 yr. (approximately 1 hr./day)
Operating temperature range	From -10° to 50°C (from 14° to 122°F)
Radio frequency/protocol	2.4 GHz ANT+ wireless communications protocol
Water rating	5 ATM*

The device withstands pressure equivalent to a depth of 50 m. For more information, go to www.garmin.com/waterrating.

¹ The device withstands pressure equivalent to a depth of 100 m. For more information, go to www.garmin.com/waterrating.

Data Management

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

Disconnecting the USB Cable

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

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

Deleting Files

NOTICE

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

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

Troubleshooting

My daily step count does not appear

The daily step count is reset every night at midnight.

If dashes appear instead of your step count, allow the device to acquire satellite signals and set the time automatically.

The temperature reading is not accurate

Your body temperature affects the temperature reading for the internal temperature sensor. To get the most accurate temperature reading, you should remove the watch from your wrist and wait 20 to 30 minutes.

You can also use an optional temperature external temperature sensor to view accurate ambient temperature readings while wearing the watch.

Resetting Your Device

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

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

Restoring All Default Settings

NOTE: This deletes all user-entered information and activity history.

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

- 1 Hold **UP**.
- 2 Select **Settings > System > Restore Defaults > Yes**.

Maximizing the Battery Life

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

- Reduce the backlight timeout (*Backlight Settings, page 22*).
- Reduce the backlight brightness.
- Use UltraTrac GPS mode for your activity (*UltraTrac, page 20*).
- Turn off Bluetooth wireless technology when you are not using connected features (*Connected Features, page 15*).
- When pausing your activity for a longer period of time, use the resume later option (*Stopping an Activity, page 6*).

- Turn off activity tracking (*Activity Tracking, page 11*).
- Use a Connect IQ watch face that is not updated every second.

For example, use a watch face without a second hand (*Customizing the Watch Face, page 21*).

- Limit the smartphone notifications the device displays (*Managing Notifications, page 16*).
- Stop broadcasting heart rate data to paired Garmin devices (*Broadcasting Heart Rate Data to Garmin Devices, page 3*).
- Turn off wrist-based heart rate monitoring.

NOTE: Wrist-based heart rate monitoring is used to calculate vigorous intensity minutes and calories burned.

Getting More Information

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

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

Device Maintenance

Device Care

NOTICE

Do not use a sharp object to clean the device.

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

Thoroughly rinse the device with fresh water after exposure to chlorine, salt water, sunscreen, cosmetics, alcohol, or other harsh chemicals. Prolonged exposure to these substances can damage the case.

Avoid pressing the keys under water.

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

Do not store the device where prolonged exposure to extreme temperatures can occur, because it can cause permanent damage.

Cleaning the Device

NOTICE

Even small amounts of sweat or moisture can cause corrosion of the electrical contacts when connected to a charger. Corrosion can prevent charging and data transfer.

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

After cleaning, allow the device to dry completely.

TIP: For more information, go to garmin.com/fitandcare.

Metal Watch Band Adjustment

If your watch includes a metal watch band, you should take your watch to a jeweler or other professional to adjust the length of the metal band.

Heart Rate Monitor Care Instructions

Caring for the Heart Rate Monitor

NOTICE

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

- Rinse the heart rate monitor after every use.

- Hand wash the heart rate monitor after every seven uses, using a tiny amount of mild detergent, such as dishwashing liquid.
NOTE: Using too much detergent may damage the heart rate monitor.
- Do not put the heart rate monitor in a washing machine or dryer.
- When drying the heart rate monitor, hang it up or lay it flat.

User Replaceable Batteries

⚠ WARNING

Do not use a sharp object to remove batteries.

Keep the battery away from children.

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

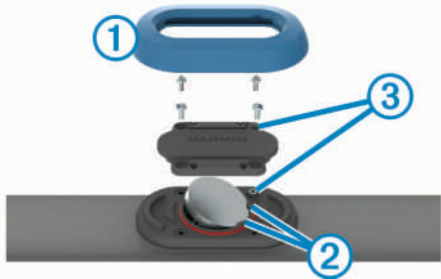
Replaceable coin cell batteries may contain perchlorate material. Special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

⚠ CAUTION

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

Replacing the Heart Rate Monitor Battery

- 1 Remove the sleeve ① from the heart rate monitor module.
- 2 Use a small Phillips (00) screwdriver to remove the four screws on the front of the module.
- 3 Remove the cover and battery.



- 4 Wait 30 seconds.
- 5 Insert the new battery under the two plastic tabs ② with the positive side facing up.
NOTE: Do not damage or lose the O-ring gasket. The O-ring gasket should remain around the outside of the raised plastic ring.
- 6 Replace the front cover and the four screws.
Observe the orientation of the front cover. The raised screw ③ should fit in the matching raised screw hole on the front cover.
NOTE: Do not overtighten.
- 7 Replace the sleeve.

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

Appendix

Data Fields

%FTP: The current power output as a percentage of functional threshold power.

%HRR: The percentage of heart rate reserve (maximum heart rate minus resting heart rate).

10s Avg. Power: The 10-second moving average of power output.

10s Avg Balance: The 10-second moving average of the left/right power balance.

24-Hour Max.: The maximum temperature recorded in the last 24 hours.

24-Hour Min.: The minimum temperature recorded in the last 24 hours.

30s Avg. Power: The 30-second moving average of power output.

30s Avg Balance: The 30-second moving average of the left/right power balance.

3s Avg. Balance: The three-second moving average of the left/right power balance.

3s Avg. Power: The 3-second moving average of power output.

500m Pace: The current swimming pace per 500 meters.

Ambient Press.: The uncalibrated ambient pressure.

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

Average Pace: The average pace for the current activity.

Average Power: The average power output for the current activity.

Average SWOLF: The average swolf score for the current activity. Your swolf score is the sum of the time for one length plus the number of strokes for that length (*Swim Terminology, page 8*). In open water swimming, 25 meters is used to calculate your swolf score.

Avg. %HRR: The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current activity.

Avg. Ascent: The average vertical distance of ascent since the last reset.

Avg. Balance: The average left/right power balance for the current activity.

Avg. Cadence: Cycling. The average cadence for the current activity.

Avg. Cadence: Running. The average cadence for the current activity.

Avg. Descent: The average vertical distance of descent since the last reset.

Avg. GCT Bal.: The average ground contact time balance for the current session.

Avg. Lap Time: The average lap time for the current activity.

Avg. Speed: The average speed for the current activity.

Avg. Stride Len.: The average stride length for the current session.

Avg. Strk/Len: The average number of strokes per length during the current activity.

Avg. Strk Rate: The average number of strokes per minute (spm) during the current activity.

Avg. Vert. Osc.: The average amount of vertical oscillation for the current activity.

Avg. Vert. Ratio: The average ratio of vertical oscillation to stride length for the current session.

Avg 500m Pace: The average swimming pace per 500 meters for the current activity.

Avg Dist Per Stk: The average distance traveled per stroke during the current activity.

Avg GCT: The average amount of ground contact time for the current activity.

Avg HR %Max.: The average percentage of maximum heart rate for the current activity.

Balance: The current left/right power balance.

Baro. Pressure: The calibrated current pressure.

- Bearing:** The direction from your current location to a destination. You must be navigating for this data to appear.
- Cadence:** Cycling. The number of revolutions of the crank arm. Your device must be connected to a cadence accessory for this data to appear.
- Cadence:** Running. The steps per minute (right and left).
- Calories:** The amount of total calories burned.
- Compass Hdg.:** The direction you are moving based on the compass.
- Course:** The direction from your starting location to a destination. Course can be viewed as a planned or set route. You must be navigating for this data to appear.
- Dest. Location:** The position of your final destination.
- Dest. Name:** The last point on the route to the destination. You must be navigating for this data to appear.
- Dist. Per Stroke:** The distance traveled per stroke.
- Dist. Remaining:** The remaining distance to the final destination. You must be navigating for this data to appear.
- Distance:** The distance traveled for the current track or activity.
- Distance to Next:** The remaining distance to the next waypoint on the route. You must be navigating for this data to appear.
- Elapsed Time:** The total time recorded. For example, if you start the timer and run for 10 minutes, then stop the timer for 5 minutes, then start the timer and run for 20 minutes, your elapsed time is 35 minutes.
- Elevation:** The altitude of your current location above or below sea level.
- ETA:** The estimated time of day when you will reach the final destination (adjusted to the local time of the destination). You must be navigating for this data to appear.
- ETA at Next:** The estimated time of day when you will reach the next waypoint on the route (adjusted to the local time of the waypoint). You must be navigating for this data to appear.
- ETE:** The estimated time remaining until you reach the final destination. You must be navigating for this data to appear.
- GCT:** The amount of time in each step that you spend on the ground while running, measured in milliseconds. Ground contact time is not calculated while walking.
- GCT Balance:** The left/right balance of ground contact time while running.
- Glide Ratio:** The ratio of horizontal distance traveled to the change in vertical distance.
- Glide Ratio Dest.:** The glide ratio required to descend from your current position to the destination elevation. You must be navigating for this data to appear.
- GPS Elevation:** The altitude of your current location using GPS.
- GPS Heading:** The direction you are moving based on GPS.
- Grade:** The calculation of rise (elevation) over run (distance). For example, if for every 3 m (10 ft.) you climb you travel 60 m (200 ft.), the grade is 5%.
- Heading:** The direction you are moving.
- Heart Rate:** Your heart rate in beats per minute (bpm). Your device must be connected to a compatible heart rate monitor.
- HR %Max.:** The percentage of maximum heart rate.
- HR Zone:** The current range of your heart rate (1 to 5). The default zones are based on your user profile and maximum heart rate (220 minus your age).
- Int. Avg. %HRR:** The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current swim interval.
- Int. Avg. %Max.:** The average percentage of maximum heart rate for the current swim interval.
- Int. Avg. HR:** The average heart rate for the current swim interval.
- Int. Distance:** The distance traveled for the current interval.
- Int. Max. %HRR:** The maximum percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current swim interval.
- Int. Max. %Max.:** The maximum percentage of maximum heart rate for the current swim interval.
- Int. Max. HR:** The maximum heart rate for the current swim interval.
- Int. Pace:** The average pace for the current interval.
- Int. SWOLF:** The average swolf score for the current interval.
- Int Dist Per Stk:** The average distance traveled per stroke during the current interval.
- Intensity Factor:** The Intensity Factor™ for the current activity.
- Interval Lengths:** The number of pool lengths completed during the current interval.
- Interval Time:** The stopwatch time for the current interval.
- Int Strk/Len:** The average number of strokes per length during the current interval.
- Int Strk Rate:** The average number of strokes per minute (spm) during the current interval.
- Int Strk Type:** The current stroke type for the interval.
- Int Strokes:** The total number of strokes for the current interval.
- L. Int. Stk. Rate:** The average number of strokes per minute (spm) during the last completed interval.
- L. Int. Stk. Type:** The stroke type used during the last completed interval.
- L. Int. Strokes:** The total number of strokes for the last completed interval.
- L. Int. SWOLF:** The average swolf score for the last completed interval.
- L. Len. Stk. Rate:** The average number strokes per minute (spm) during the last completed pool length.
- L. Len. Stk. Type:** The stroke type used during the last completed pool length.
- L. Len. Strokes:** The total number of strokes for the last completed pool length.
- Lap %HRR:** The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current lap.
- Lap 500m Pace:** The average swimming pace per 500 meters for the current lap.
- Lap Ascent:** The vertical distance of ascent for the current lap.
- Lap Balance:** The average left/right power balance for the current lap.
- Lap Cadence:** Cycling. The average cadence for the current lap.
- Lap Cadence:** Running. The average cadence for the current lap.
- Lap Descent:** The vertical distance of descent for the current lap.
- Lap Distance:** The distance traveled for the current lap.
- Lap GCT:** The average amount of ground contact time for the current lap.
- Lap GCT Bal.:** The average ground contact time balance for the current lap.
- Lap HR:** The average heart rate for the current lap.
- Lap HR %Max.:** The average percentage of maximum heart rate for the current lap.
- Lap NP:** The average Normalized Power for the current lap.

- Lap Pace:** The average pace for the current lap.
- Lap Power:** The average power output for the current lap.
- Laps:** The number of laps completed for the current activity.
- Lap Speed:** The average speed for the current lap.
- Lap Stride Len.:** The average stride length for the current lap.
- Lap Time:** The stopwatch time for the current lap.
- Lap Vert. Osc.:** The average amount of vertical oscillation for the current lap.
- Lap Vert. Ratio:** The average ratio of vertical oscillation to stride length for the current lap.
- Last Int. Dist.:** The distance traveled for the last completed interval.
- Last Int. Pace:** The average pace for the last completed interval.
- Last Int. Time:** The stopwatch time for the last completed interval.
- Last Lap Ascent:** The vertical distance of ascent for the last completed lap.
- Last Lap Cad.:** Cycling. The average cadence for the last completed lap.
- Last Lap Cad.:** Running. The average cadence for the last completed lap.
- Last Lap Descent:** The vertical distance of descent for the last completed lap.
- Last Lap Dist.:** The distance traveled for the last completed lap.
- Last Lap HR:** The average heart rate for the last completed lap.
- Last Lap NP:** The average Normalized Power for the last completed lap.
- Last Lap Pace:** The average pace for the last completed lap.
- Last Lap Power:** The average power output for the last completed lap.
- Last Lap Speed:** The average speed for the last completed lap.
- Last Lap Time:** The stopwatch time for the last completed lap.
- Last Len. Pace:** The average pace for your last completed pool length.
- Last Len. SWOLF:** The swolf score for the last completed pool length.
- Lat/Lon:** The current position in latitude and longitude regardless of the selected position format setting.
- Lengths:** The number of pool lengths completed during the current activity.
- L Int Dist P Stk:** The average distance traveled per stroke during the last completed interval.
- L Lap 500m Pace:** The average swimming pace per 500 meters for the last lap.
- Location:** The current position using the selected position format setting.
- Max. Ascent:** The maximum rate of ascent in feet per minute or meters per minute since the last reset.
- Max. Descent:** The maximum rate of descent in meters per minute or feet per minute since the last reset.
- Max. Elevation:** The highest elevation reached since the last reset.
- Max. Lap Power:** The top power output for the current lap.
- Maximum Speed:** The top speed for the current activity.
- Max Power:** The top power output for the current activity.
- Min. Elevation:** The lowest elevation reached since the last reset.
- Nautical Dist:** The distance traveled in nautical meters or nautical feet.
- Nautical Speed:** The current speed in knots.
- Next Waypoint:** The next point on the route. You must be navigating for this data to appear.
- NP:** The Normalized Power™ for the current activity.
- Off Course:** The distance to the left or right by which you have strayed from the original path of travel. You must be navigating for this data to appear.
- Pace:** The current pace.
- Pedal Smooth.:** The measurement of how evenly a rider is applying force to the pedals throughout each pedal stroke.
- Perform. Cond.:** The performance condition score is a real-time assessment of your ability to perform.
- Power:** The current power output in watts.
- Power to Weight:** The current power measured in watts per kilogram.
- Power Zone:** The current range of power output (1 to 7) based on your FTP or custom settings.
- Repeat On:** The timer for the last interval plus the current rest (pool swimming).
- Rest Timer:** The timer for the current rest (pool swimming).
- Speed:** The current rate of travel.
- Steps:** The number of steps recorded by the foot pod.
- Stride Length:** The length of your stride from one footfall to the next, measured in meters.
- Stroke Rate:** The number of strokes per minute (spm).
- Strokes:** The total number of strokes for the current activity.
- Sunrise:** The time of sunrise based on your GPS position.
- Sunset:** The time of sunset based on your GPS position.
- Temperature:** The temperature of the air. Your body temperature affects the temperature sensor.
- Time in Zone:** The time elapsed in each heart rate or power zone.
- Time of Day:** The time of day based on your current location and time settings (format, time zone, daylight saving time).
- Timer:** The current time of the countdown timer.
- Time to Next:** The estimated time remaining before you reach the next waypoint in the route. You must be navigating for this data to appear.
- Torque Eff.:** The measurement of how efficiently a rider is pedaling.
- Total Ascent:** The total elevation distance ascended since the last reset.
- Total Descent:** The total elevation distance descended since the last reset.
- Training Effect:** The current impact (1.0 to 5.0) on your aerobic fitness.
- TSS:** The Training Stress Score™ for the current activity.
- V Dist to Dest:** The elevation distance between your current position and the final destination. You must be navigating for this data to appear.
- Vertical Osc.:** The amount of bounce while you are running. The vertical motion of your torso, measured in centimeters for each step.
- Vertical Ratio:** The ratio of vertical oscillation to stride length.
- Vertical Speed:** The rate of ascent or descent over time.
- Vert Spd to Tgt:** The rate of ascent or descent to a predetermined altitude. You must be navigating for this data to appear.
- VMG:** The speed at which you are closing on a destination along a route. You must be navigating for this data to appear.
- Work:** The accumulated work performed (power output) in kilojoules.

VO2 Max. Standard Ratings

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

Males	Percentile	20–29	30–39	40–49	50–59	60–69	70–79
Superior	95	55.4	54	52.5	48.9	45.7	42.1
Excellent	80	51.1	48.3	46.4	43.4	39.5	36.7
Good	60	45.4	44	42.4	39.2	35.5	32.3
Fair	40	41.7	40.5	38.5	35.6	32.3	29.4
Poor	0–40	<41.7	<40.5	<38.5	<35.6	<32.3	<29.4

Females	Percentile	20–29	30–39	40–49	50–59	60–69	70–79
Superior	95	49.6	47.4	45.3	41.1	37.8	36.7
Excellent	80	43.9	42.4	39.7	36.7	33	30.9
Good	60	39.5	37.8	36.3	33	30	28.1
Fair	40	36.1	34.4	33	30.1	27.5	25.9
Poor	0–40	<36.1	<34.4	<33	<30.1	<27.5	<25.9

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Wheel Size and Circumference

The wheel size is marked on both sides of the tire. This is not a comprehensive list. You can also use one of the calculators available on the Internet.

Wheel Size	L (mm)
12 × 1.75	935
14 × 1.5	1020
14 × 1.75	1055
16 × 1.5	1185
16 × 1.75	1195
18 × 1.5	1340
18 × 1.75	1350
20 × 1.75	1515
20 × 1-3/8	1615
22 × 1-3/8	1770
22 × 1-1/2	1785
24 × 1	1753
24 × 3/4 Tubular	1785
24 × 1-1/8	1795
24 × 1-1/4	1905
24 × 1.75	1890
24 × 2.00	1925
24 × 2.125	1965
26 × 7/8	1920
26 × 1(59)	1913
26 × 1(65)	1952
26 × 1.25	1953
26 × 1-1/8	1970
26 × 1-3/8	2068
26 × 1-1/2	2100
26 × 1.40	2005
26 × 1.50	2010
26 × 1.75	2023
26 × 1.95	2050
26 × 2.00	2055
26 × 2.10	2068
26 × 2.125	2070
26 × 2.35	2083
26 × 3.00	2170
27 × 1	2145
27 × 1-1/8	2155

Wheel Size	L (mm)
27 × 1-1/4	2161
27 × 1-3/8	2169
650 × 35A	2090
650 × 38A	2125
650 × 38B	2105
700 × 18C	2070
700 × 19C	2080
700 × 20C	2086
700 × 23C	2096
700 × 25C	2105
700 × 28C	2136
700 × 30C	2170
700 × 32C	2155
700C Tubular	2130
700 × 35C	2168
700 × 38C	2180
700 × 40C	2200

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Symbol Definitions

These symbols may appear on the device or accessory labels.

~	Alternating current. The device is suitable for alternating current.
—	Direct current. The device is suitable for direct current only.
⊞	Fuse. Indicates a fuse specification or location.
	WEEE disposal and recycling symbol. The WEEE symbol is attached to the product in compliance with the EU directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE). It is intended to deter the improper disposal of this product and to promote reuse and recycling.

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