Forerunner® 230/235

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. **Hold** to turn the device on and off. Select to turn the backlight on and off.
2. **Select** to start and stop the timer. Select to choose an option or to acknowledge a message.
3. **Select** to mark a new lap. Select to return to the previous screen.
4. **Select** to scroll through the widgets, data screens, options, and settings.
   - Select > to select an activity profile.
   - Select > to open the menu.
   - Hold to view the options menu.

Locking and Unlocking the Device Keys
You can lock the device keys to avoid accidental key presses during an activity or in watch mode.
1. Hold
2. Select Lock Device.
3. Hold to unlock the device keys.

Status Icons
Icons appear at the top of the home screen. A flashing icon means the device is searching for a signal. A solid icon means the signal was found or the sensor is connected.

- **GPS status**
- **Bluetooth® technology status**
- **Heart rate status**
- **Foot pod status**
- **Speed and cadence sensor status**
- **tempe™ sensor status**
- **VIRB® camera status**

Opening the Menu
1. Select .
2. Select ↓.

Training

Going for a Run
The first fitness activity you record on your device can be a run, ride, or any outdoor activity. You may need to charge the device (Charging the Device, page 10) before starting the activity.
1. Select , and select an activity profile.
2. Go outside, and wait while the device locates satellites.
3. Select to start the timer.
4. Go for a run.
5. After you complete your run, select to stop the timer.
6. Select an option:
   - Select Resume to restart the timer.
   - Select Save to save the run and reset the timer. You can select the run to view a summary.
   - Select Discard > Yes to delete the run.

Forerunner 235 Only

Wearing the Device and Heart Rate
- Wear the Forerunner device above your wrist bone.

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

NOTE: The heart rate sensor is located on the back of the device.
- See (Tips for Erratic Heart Rate Data, page 2) for more information about wrist-based heart rate.
- For more information about the accuracy of wrist-based heart rate, go to www.garmin.com/ataccuracy.

Viewing the Heart Rate Widget
The widget displays your current heart rate in beats per minute (bpm), resting heart rate for today, and a graph of your heart rate.
1. From the time of day screen, select ↓.
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, lotion, and insect repellent under the device.
- Avoid scratching the heart rate sensor on the back of the device.
- Wear the device above your wrist bone. The device should be snug but comfortable.
- Wait until the ❤ icon is solid before starting your activity.
- Warm up for 5 to 10 minutes and get a heart rate reading before starting your activity.

**Broadcasting Heart Rate Data to Garmin® Devices**
You can broadcast your heart rate data from your Forerunner 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.

**NOTE:** Broadcasting heart rate data decreases battery life.

1. Select V to view the heart rate widget.
2. Hold A.
3. Select Broadcast Heart Rate.
   The Forerunner device starts broadcasting your heart rate data, and ❤️ appears.
   **NOTE:** You can view only the heart rate page while broadcasting heart rate data.
4. Pair your Forerunner 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.

Activity Tracking
For more information about activity tracking accuracy, go to www.garmin.com/ataccuracy.

Turning On Activity Tracking
The activity tracking feature records your daily step count, step goal, distance traveled, and calories burned for each recorded day. Your calories burned include your base metabolism plus activity calories.

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

1. Select Menu > 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.

2. From the time of day screen, select V to view the activity tracking widget.
   The step count is updated periodically.

**Using the Move Alert**
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. Additional segments appear after every 15 minutes of inactivity. The device also beeps or vibrates if audible tones are turned on (**Setting the Device Sounds**, page 10).

   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.

**Using Do Not Disturb Mode**
Before you can use do not disturb mode, you must pair your device with a smartphone  (**Pairing Your Smartphone**, page 5). You can use do not disturb mode to turn off tones, vibrations, and the backlight for alerts and notifications. For example, you can use this mode while sleeping or watching a movie.

**NOTE:** You can set your normal sleep hours in the user settings on your Garmin Connect account.

1. From the time of day screen, select A to view the controls widget.
2. Select ‹ > Do Not Disturb > On.
   You can turn off do not disturb mode from the controls widget.
3. If necessary, select Menu > Settings > Do Not Disturb > Sleep Time > On.
   The device enters do not disturb mode during your normal sleep hours.

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

**NOTE:** Naps are not added to your sleep statistics. You can use do not disturb mode to turn off notifications and alerts, with the exception of alarms (**Using Do Not Disturb Mode**, page 2).

**Using Automated Sleep Tracking**
1. Wear your device while sleeping.
2. Upload your sleep tracking data to the Garmin Connect site (**Garmin Connect**, page 8).
   You can view your sleep statistics on your Garmin Connect account.
Training Indoors
The device includes indoor activity profiles where GPS is turned off. You can turn off GPS when you are training indoors or to save battery life.

NOTE: Any change to the GPS setting is saved to the active profile.

Select Menu > Activity Settings > GPS > Off.
When running with GPS turned off, speed and distance are calculated using the accelerometer in the device. The accelerometer is self-calibrating. The accuracy of the speed and distance data improves after a few outdoor runs using GPS.

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 8).

1. Connect the device to your computer.
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. Select Menu > Training > My Workouts.
2. Select a workout.
3. Select Do Workout.
4. Select † to start the workout.

After you begin a workout, the device displays each step of the workout, the target (if any), and 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, you must have a Garmin Connect account (Garmin Connect, page 8).
You can browse your Garmin Connect account to find a training plan, schedule workouts, and send them to your device.

1. Connect the device to your computer.
2. From your Garmin Connect account, select and schedule a training plan.
3. Review the training plan in your calendar.
4. Select † > Send Workouts to Device, 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.

Creating an Interval Workout
1. Select Menu > Training > Intervals > Edit > Interval > Type.
2. Select Distance, Time, or Open.
   TIP: You can create an open-ended interval by setting the type to Open.
3. Select Duration, enter a distance or time interval value for the workout, and select .
4. Select Rest > Type.
5. Select Distance, Time, or Open.
6. If necessary, enter a distance or time value for the rest interval, and select .
7. 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. Select Menu > Training > Intervals > Do Workout.
2. Select †.
3. When your interval workout has a warm up, select  to begin the first interval.
4. Follow the on-screen instructions.

Stopping a Workout
• At any time, select  to end a workout step.
• At any time, select † to stop the timer.

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.

Viewing Your Personal Records
1. Select Menu > My Stats > Records.
2. Select a sport.
3. Select a record.
4. Select View Record.

Restoring a Personal Record
You can set each personal record back to the one previously recorded.

1. Select Menu > My Stats > Records.
2. Select a sport.
3. Select a record to restore.
4. Select Previous > Yes.
   NOTE: This does not delete any saved activities.

Clearing a Personal Record
1. Select Menu > My Stats > Records.
2. Select a sport.
3. Select a record to delete.
4. Select Clear Record > Yes.
   NOTE: This does not delete any saved activities.
Heart Rate Features

This manual is for the Forerunner 230 and 235 models. The heart rate features described in this section apply to both Forerunner models. You must have a heart rate monitor to use these features.

Forerunner 230: This device is compatible with ANT+ heart rate monitors.

Forerunner 235: This device has a wrist-based heart rate monitor and is compatible with ANT+ heart rate monitors.

Setting Your Heart Rate Zones

The device uses your user profile information from the initial setup to determine your default heart rate zones. You can manually enter heart rate values and set the range for each zone.

1. Select Menu > My Stats > User Profile > Heart Rate Zones.
2. Select an option:
   - Select Default to view and set up the default heart rate values.
   - Select Running or Cycling to set up custom heart rate values for each sport or accept the default values.
3. Select Max. HR, and enter your maximum heart rate.
4. Select Resting HR, and enter your resting heart rate.
5. Select Zones > Based On.
6. 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).
7. Select a zone, and enter a value for each heart rate 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 8).
- 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.

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.

About VO2 Max. Estimates

VO2 max. is the maximum volume of oxygen (in milliliters) you can consume per minute per kilogram of body weight at your maximum performance. In simple terms, VO2 max. is an indication of athletic performance and should increase as your level of fitness improves. The Forerunner device requires wrist-based heart rate or a compatible chest heart rate monitor to display your VO2 max. estimate.

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

![VO2 Max. Color Gauge]

VO2 max. data is provided by FirstBeat. VO2 max. analysis is provided with permission from The Cooper Institute®. For more information, see the appendix (VO2 Max. Standard Ratings, page 13), and go to www.CooperInstitute.org.

Getting Your VO2 Max. Estimate for Running

This feature requires a heart rate monitor.

For the most accurate estimate, complete the user profile setup (Setting Up Your User Profile, page 8), and set your maximum heart rate (Setting Your Heart Rate Zones, page 4). 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. Select Menu > My Stats > VO2 Max..

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 8), and set your maximum heart rate (Setting Your Heart Rate Zones, page 4). Your device uses the VO2 max. estimate (About VO2 Max. Estimates, page 4) 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 Menu > My Stats > Race Predictor.

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

Recovery Time
You can use your Garmin device with wrist-based heart rate or a compatible chest heart rate monitor to display how much time remains before you are fully recovered and ready for the next hard workout.

NOTE: The recovery time recommendation uses your VO2 max. estimate and may seem inaccurate at first. The device requires you to complete a few activities to learn about your performance.

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

Turning On the Recovery Advisor
For the most accurate estimate, complete the user profile setup (Setting Up Your User Profile, page 8), and set your maximum heart rate (Setting Your Heart Rate Zones, page 4).

2. Go for a run.
3. After your run, select Save.

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

Recovery Heart Rate
If you are training with wrist-based heart rate or a compatible chest heart rate monitor, you can check your recovery heart rate value after each activity. Recovery heart rate is the difference between your exercising heart rate and your heart rate two minutes after the exercise has stopped. For example, after a typical training run, you stop the timer. Your heart rate is 140 bpm. After two minutes of no activity or cool down, your heart rate is 90 bpm. Your recovery heart rate is 50 bpm (140 minus 90). Some studies have linked recovery heart rate to cardiac health. Higher numbers generally indicate healthier hearts.

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

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.

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

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

Turning Off the Wrist Heart Rate Monitor
The default setting for the Forerunner 235 is Auto. The device uses wrist-based heart rate automatically unless there is an accessory heart rate monitor connected to the device.

Select Menu > Settings > Heart Rate Monitor > Off.

Smart Features

Pairing Your Smartphone
You should connect your Forerunner device to a smartphone to complete the setup and use the full features of the device.

1. Go to www.garmin.com/intosports/apps, and download the Garmin Connect Mobile app to your smartphone.
2. From the Forerunner device, select Menu > Settings > Bluetooth > Pair Mobile Device.
3. Open the Garmin Connect Mobile app.
4. Select an option to add your device to your Garmin Connect account:
   • If this is the first device you have paired with the Garmin Connect Mobile app, follow the on-screen instructions.
   • If you have already paired another device with the Garmin Connect Mobile app, from the settings, select Garmin Devices > Add Device, and follow the on-screen instructions.

Phone Notifications
Phone notifications require a compatible smartphone to be paired with the Forerunner device. When your phone receives messages, it sends notifications to your device.

Enabling Bluetooth Notifications
1. Select Menu > Settings > Bluetooth > Smart Notifications.
2. Select During Activity.
3. Select Off, Show Calls Only, or Show All.
4. Select Not During Activity.
5. Select Off, Show Calls Only, or Show All.

NOTE: You can change the audible sounds for notifications.

Viewing Notifications
• When a notification appears on your Forerunner device, select # to view the notification.
• Select V to clear the notification.
• From the time of day screen, select A to view all of your notifications on the notifications widget.

Managing Notifications
You can use your compatible smartphone to manage notifications that appear on your Forerunner 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.

Opening the Music Controls
Music controls require a compatible smartphone to be paired with the device.

Hold A, and select Music Controls.

Playing Audio Prompts During Your Activity
Before you can set up audio prompts, you must have a smartphone with the Garmin Connect Mobile app paired to your Forerunner device.

You can set the Garmin Connect Mobile app to play motivational status announcements on your smartphone during a run or other activity. Audio prompts include the lap number and lap time, pace or speed, and volume levels on the smartphone to play the announcement. You can customize the volume levels on the Garmin Connect Mobile app.

1. From the settings in the Garmin Connect Mobile app, select Garmin Devices.
2. Select your device.
3. Select Activity Options > Audio Prompts.

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.

Calendar: Displays upcoming meetings from your smartphone calendar.

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

Heart rate: Displays your current heart rate in beats per minute (bpm) and a graph of your heart rate.

Music controls: Provides music player controls for your smartphone.

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

Steps: Tracks your daily step count, step goal, and data for the last 7 days.

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

Weather: Displays the current temperature and weather forecast.

Bluetooth Controls Widget

- Turns on or off do not disturb mode.
- Turns on or off Bluetooth technology.
- Synchronizes your data with the Garmin Connect Mobile app.
- Activates the find my phone feature. It sends a beacon to your smartphone that is paired and in range of your Forerunner device.

Viewing the Weather Widget

1. From the time of day screen, select V to view the weather widget.
2. Select # to view hourly weather data.

3. Scroll down to view daily weather data.

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.

1. Turn on your VIRB camera.
2. Pair the VIRB camera with your Forerunner device (Pairing ANT+ Sensors, page 8).
3. On the Forerunner device, select the VIRB accessory.
   When the VIRB accessory is paired, the VIRB screen is added to the data screens for the active profile.
4. Select an option:
   - Select Timer Start/Stop to control the camera using the timer #.
   - Video recording automatically starts and stops with the Forerunner device timer.

Bluetooth Connected Features
The Forerunner device has several Bluetooth connected features for your compatible smartphone using the Garmin Connect Mobile app. For more information, go to www.garmin.com/manuals/forerunner235.

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

Audio prompts: Allows the Garmin Connect Mobile app to play status announcement prompts on your smartphone during a run or other activity.

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

Find my phone: Locates your lost smartphone that is paired with your Forerunner device and currently within range.

Find my watch: Locates your lost Forerunner device that is paired with your smartphone and currently within range.

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.

Music controls: Allows you to control the music player on your smartphone.

Phone notifications: Displays phone notifications and messages on your Forerunner 230/235 device.

Social media interactions: Allows you to post an update to your favorite social media website when you upload an activity to the Garmin Connect Mobile app.

Software updates: Allows you to update your device software.

Weather updates: Sends real-time weather conditions and notifications to your device.

Workout downloads: Allows you to browse for workouts in the Garmin Connect Mobile app and wirelessly send them to your device.

Turning On the Smartphone Connection Alert
You can set the Forerunner device to alert you when your paired smartphone connects and disconnects using Bluetooth wireless technology.

Select Menu > Settings > Bluetooth > Connection Alert > On.
Locating a Lost Smartphone
You can use the find my phone feature to help locate a lost smartphone that is paired using Bluetooth wireless technology and currently within range.

1. From the time of day screen, select A to view the controls widget.
2. Select ⌁ > Find My Phone.
   The Forerunner device begins searching for your paired smartphone. Bars appear on the Forerunner device screen corresponding to the Bluetooth signal strength, and an audible alert sounds on your smartphone.
3. Select ⌁ to stop searching.

Turning Off Bluetooth Technology
1. From the time of day screen, select A to view the controls widget.
2. Select ⌁ > Bluetooth > Off.
   ⌁ is gray when Bluetooth technology is turned off.

Connect IQ Features
You can add Connect IQ features to your watch from Garmin and other providers using the Connect IQ 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 features from the Connect IQ Mobile app, you must pair your Forerunner device with your smartphone.

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

Connecting Connect IQ Features Using Your Computer
1. Connect the device to your computer using a USB cable.
2. Go to www.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.

Viewing History
1. Select Menu > History > Activities.
2. Select A or V to view your saved activities.
3. Select an activity.
4. Select an option:
   - Select Details to view additional information about the activity.
   - Select Laps to select a lap and view additional information about each lap.
   - Select Time in Zone to view your time in each heart rate zone.
   - Select Delete to delete the selected activity.

Viewing Your Time in Each Heart Rate Zone
Before you can view heart rate zone data, you must complete an activity with heart rate and save the activity.

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

1. Select Menu > History > Activities.
2. Select an activity.
3. Select Time in Zone.

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

1. Select Menu > History > Totals.
2. Select an option to view weekly or monthly totals.

Deleting History
1. Select Menu > History > Options.
2. 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.
3. Confirm your selection.

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

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.
4. Press the Delete key on your keyboard.
   NOTE: If you are using an Apple computer, you must empty the Trash folder to completely remove the files.

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 the device.

1. Complete an action:
   - For Windows computers, select the Safely Remove Hardware icon in the system tray, and select your device.
   - For Apple computers, select the device, and select File > Eject.
2. Disconnect the cable from your computer.
Sending Data to Your Computer
You can upload your activity data manually to your Garmin Connect account using the USB cable.
1 Connect the device to your computer using the USB cable.
2 Go to www.garminconnect.com/start.
3 Follow the on-screen instructions.

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

Store your activities: After you complete and save an activity with your device, you can upload that activity to your Garmin Connect account and keep it as long as you want.
Analyze your data: You can view more detailed information about your activity, including time, distance, elevation, heart rate, calories burned, an overhead map view, pace and speed charts, and customizable reports.
NOTE: Some data requires an optional accessory such as a heart rate monitor.

Plan your training: You can choose a fitness goal and load one of the day-by-day training plans.
Track your progress: You can track your daily steps, join a friendly competition with your connections, and meet your goals.
Share your activities: You can connect with friends to follow each other's activities or 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.
Access the Connect IQ store: You can download apps, watch faces, data fields, and widgets.

Customizing Your Device

ANT+ Sensors
Your device can be used with wireless ANT+ sensors. For more information about compatibility and purchasing optional sensors, go to http://buy.garmin.com.

Pairing ANT+ Sensors
Pairing is the connecting of ANT+ wireless sensors, for example, connecting a heart rate monitor with your Garmin device. The first time you connect an ANT+ sensor to your device, you must pair the device and sensor. After the initial pairing, the device automatically connects to the sensor when you start your activity and the sensor is active and within range.
NOTE: If your device was packaged with an ANT+ sensor, they are already paired.
1 Install the sensor or put on the heart rate monitor.
2 Bring the device within 1 cm of the sensor, and wait while the device connects to the sensor.
When the device detects the sensor, a message appears. You can customize a data field to display sensor data.
3 If necessary, select Menu > Settings > Sensors and Accessories to manage ANT+ sensors.

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.

Going for a Run Using a Foot Pod
Before you go for a run, you must pair the foot pod with your Forerunner device (Pairing ANT+ Sensors, page 8).
You can run indoors using a foot pod to record pace, distance, and cadence. You can also run outdoors using a foot pod to record cadence data with your GPS pace and distance.
1 Install your foot pod according to the accessory instructions.
2 Select a running activity.
3 Go for a run.

Foot Pod Calibration
The foot pod is self-calibrating. The accuracy of the speed and distance data improves after a few outdoor runs using GPS.

Setting Up Your User Profile
You can update your gender, birth year, height, weight, and heart rate zone settings. The device uses this information to calculate accurate training data.
1 Select Menu > My Stats > User Profile.
2 Select an option.

Activity Profiles
Activity profiles are a collection of settings that optimize your device based on how you are using it. For example, the settings and data screens are different when you are using the device for running than for riding your bike.
When you are using a profile and you change settings such as data fields or alerts, the changes are saved automatically as part of the profile.

Changing Your Activity Profile
The device has default activity profiles. You can modify each of the saved activity profiles.
TIP: The default activity profiles use a specific accent color for each sport.
1 Select Menu > Settings > Activity Profiles.
2 Select a profile.
You can show or hide the default activity profiles.

Activity Settings
These settings allow you to customize your device based on your training needs. For example, you can customize data screens and enable alerts and training features.

Customizing the Data Screens
You can customize data screens based on your training goals or optional accessories. For example, you can customize one of the data screens to display your lap pace or heart rate zone.
1 Select Menu > Activity Settings > Data Screens.
2 Select a screen.
   Some screens can only be turned on or off.
3 If necessary, edit the number of data fields.
4 Select a data field to change it.

Alerts
You can use alerts to train toward specific heart rate, pace, time, distance, cadence, and calories goals and to set run/walk time intervals.

Setting Range Alerts
A range alert notifies you when the device is above or below a specified range of values. For example, if you have an optional heart rate monitor, you can set the device to alert you when your heart rate is below zone 2 and over zone 5 (Setting Your Heart Rate Zones, page 4).
1 Select Menu > Activity Settings > Alerts > Add New.
2 Select the type of alert.
   Depending on your accessories and the activity profile, the alerts may include heart rate, pace, speed, and cadence.
3 If necessary, turn on the alert.
4 Select a zone or enter a value for each alert.
   Each time you exceed or drop below the specified range, a message appears. The device also beeps or vibrates if audible tones are turned on (Setting the Device Sounds, page 10).

Setting a 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.
1 Select Menu > Activity Settings > Alerts > Add New.
2 Select an option:
   • Select Custom, select a message, and select an alert type.
   • Select Time, Distance, or Calories.
3 Enter a value.
   Each time you reach the alert value, a message appears. The device also beeps or vibrates if audible tones are turned on (Setting the Device Sounds, page 10).

Setting Walk Break Alerts
Some running programs use timed walking breaks at regular intervals. For example, during a long training run, you can set the device to alert you to run for 4 minutes, and then walk for 1 minute, and repeat. You can use the Auto Lap feature while using the run/walk alerts.

NOTE: Walk break alerts are available only for running profiles.
1 Select Menu > Activity Settings > Alerts > Add New.
2 Select Run/Walk.
3 Enter a time for the run interval.
4 Enter a time for the walk interval.
   Each time you reach the alert value, a message appears. The device also beeps or vibrates if audible tones are turned on (Setting the Device Sounds, page 10).

Editing an Alert
1 Select Menu > Activity Settings > Alerts.
2 Select an alert.
3 Edit the alert values or settings.

Using Auto Pause
You can use the Auto Pause feature to pause the timer automatically when you stop moving or when your pace or speed drops below a specified value. This feature is helpful if your activity includes stop lights or other places where you need to slow down or stop.

NOTE: History is not recorded while the timer is stopped or paused.
1 Select Menu > Activity Settings > Auto Pause.
2 Select an option:
   • Select When Stopped to pause the timer automatically when you stop moving.
   • Select Custom to pause the timer automatically when your pace or speed drops below a specified value.

Marking Laps by Distance
You can use the Auto Lap feature to mark a lap at a specific distance automatically. This feature is helpful for comparing your performance over different parts of a run (for example, every 1 mi. or 5 km).
1 Select Menu > Activity Settings > Laps > Auto Distance.
2 Select a distance.
   Each time you complete a lap, a message appears that displays the time for that lap. The device also beeps or vibrates if audible tones are turned on (Setting the Device Sounds, page 10).
   If necessary, you can customize the data screens to display additional lap data.

Using Auto Scroll
You can use the auto scroll feature to cycle through all of the training data screens automatically while the timer is running.
1 Select Menu > Activity Settings > Auto Scroll.
2 Select a display speed.

Changing the GPS Setting
By default, the device uses GPS to locate satellites. For increased performance in challenging environments and faster GPS position location, you can enable GPS and GLONASS. Using GPS and GLONASS reduces battery life more than using only GPS.
   Select Menu > Activity Settings > GPS > GPS + GLONASS.

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. Select Menu > Activity Settings > Power Save Timeout.
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.

Activity Tracking Settings
Select Menu > Settings > Activity Tracking.
Status: Enables the activity tracking feature.
Move Alert: Displays a message and move bar on the time of day screen. The device also beeps or vibrates if audible tones are turned on (Setting the Device Sounds, page 10).

System Settings
Select Menu > Settings > System.
• Language Settings (Changing the Device Language, page 10)
• Time Settings (Time Settings, page 10)
• Backlight Settings (Backlight Settings, page 10)
• Sound Settings (Setting the Device Sounds, page 10)
• Unit Settings (Changing the Units of Measure, page 10)
• Format Settings (Format Settings, page 10)
• Data Recording Settings (Data Recording Settings, page 10)
Changing the Units of Measure

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

1. Select Menu > Settings > System > Units.
2. Select a measurement type.
3. Select a unit of measure.

Changing the Device Language

Select Menu > Settings > System > Language.

Time Settings

Select Menu > Settings > System > Clock.

Watch Face: Allows you to select a watch face design.

Use Profile Color: Sets the accent color for the time of day screen to be the same as the activity profile color.

Background: Sets the background color to black or white.

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

Set Automatically: Allows you to set the time manually or automatically based on your GPS position.

Time Zones

Each time you turn on the device and acquire satellites or sync with your smartphone, the device automatically detects your time zone and the current time of day.

Setting the Time Manually

By default, the time is set automatically when the device acquires satellite signals.

1. Select Menu > Settings > System > Clock > Set Automatically > Off.
2. Select Set Time, and enter the time of day.

Setting the Alarm

1. Select Menu > Settings > Alarms > Add New > Status > On.
2. Select Time, and enter a time.
3. Select Sounds, and select an option.
4. Select Repeat, and select an option.

Deleting an Alarm

1. Select Menu > Settings > Alarms.
2. Select an alarm.
3. Select Remove > Yes.

Backlight Settings

Select Menu > Settings > System > Backlight.

Keys and Alerts: Sets the backlight to turn on for key presses and alerts.

Wrist Turn: Allows your device to turn on the backlight automatically when you rotate your wrist toward your body.

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

Setting the Device Sounds

The device sounds include key tones, alert tones, and vibrations.

Select Menu > Settings > System > Sounds.

Device Information

Charging the Device

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

Warning: 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.

1. Align the charger posts with the contacts on the back of the device, and connect the charging clip securely to the device.
2. Plug the USB cable into a USB charging port.
3. Charge the device completely.
4. Press to remove the charger.

Specifications

Forerunner Specifications

<table>
<thead>
<tr>
<th>Battery type</th>
<th>Rechargeable, built-in lithium-ion battery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forerunner 230 battery life, watch mode</td>
<td>Up to 12 wk.</td>
</tr>
<tr>
<td></td>
<td>Up to 11 wk. with activity tracking</td>
</tr>
<tr>
<td></td>
<td>Up to 5 wk. with activity tracking and smartphone notifications</td>
</tr>
<tr>
<td>Forerunner 230 battery life, activity mode</td>
<td>Up to 16 hr. in GPS mode</td>
</tr>
<tr>
<td></td>
<td>Up to 12 hr. in GPS + GLONASS mode</td>
</tr>
<tr>
<td>Forerunner 235 battery life, watch mode</td>
<td>Up to 9 wk.</td>
</tr>
<tr>
<td></td>
<td>Up to 8 wk. with activity tracking</td>
</tr>
<tr>
<td></td>
<td>Up to 4 wk. with activity tracking and smartphone notifications</td>
</tr>
<tr>
<td></td>
<td>Up to 9 days with activity tracking,</td>
</tr>
<tr>
<td></td>
<td>smartphone notifications, and wrist-based</td>
</tr>
<tr>
<td></td>
<td>heart rate</td>
</tr>
<tr>
<td>Forerunner 235 battery life, activity mode with wrist-based heart rate</td>
<td>Up to 11 hr. in GPS mode</td>
</tr>
<tr>
<td></td>
<td>Up to 9 hr. in GPS + GLONASS mode</td>
</tr>
<tr>
<td>Water rating</td>
<td>5 ATM*</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>From -20º to 60ºC (from -4º to 140ºF)</td>
</tr>
<tr>
<td>Charging temperature range</td>
<td>From 0º to 45ºC (from 32º to 113ºF)</td>
</tr>
<tr>
<td>Radio frequency/protocol</td>
<td>2.4 GHz ANT+ wireless communications protocol</td>
</tr>
<tr>
<td></td>
<td>Bluetooth Smart wireless technology</td>
</tr>
</tbody>
</table>
Heart Rate Monitor Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery type</td>
<td>User-replaceable CR2032, 3 volts</td>
</tr>
<tr>
<td>Battery life</td>
<td>Up to 4.5 yr. at 1 hr./day</td>
</tr>
<tr>
<td>Water resistance</td>
<td>3 ATM*</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>From -5° to 50°C (from 23° to 122°F)</td>
</tr>
<tr>
<td>Radio frequency/protocol</td>
<td>2.4 GHz ANT+ wireless communications protocol</td>
</tr>
</tbody>
</table>

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

Device Care

**NOTICE**

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

Avoid pressing the keys under water.

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.

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 www.garmin.com/fitandcare.

Caring for the Heart Rate Monitor

**NOTICE**

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

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

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

User Replaceable Batteries

**WARNING**

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

Troubleshooting

Tips for Charging the Device

1. Connect the charger securely to the device to charge it using the USB cable (Charging the Device, page 10).

   You can charge the device by plugging the USB cable into a Garmin approved AC adapter with a standard wall outlet or a USB port on your computer. Charging a fully depleted battery takes up to two hours.

2. Remove the charger from the device after the battery charge level reaches 100%.

Product Updates

On your computer, install Garmin Express™ (www.garmin.com/express). On your smartphone, install the Garmin Connect Mobile app.

This provides easy access to these services for Garmin devices:
- Software updates
- Data uploads to Garmin Connect
- Product registration

Getting More Information

- Go to support.garmin.com for additional manuals, articles, and software updates.
- Go to www.garmin.com/intosports.
- Go to www.garmin.com/learningcenter.
- Go to buy.garmin.com, or contact your Garmin dealer for information about optional accessories and replacement parts.

Acquiring Satellite Signals

The device may need a clear view of the sky to acquire satellite signals. The time and date are set automatically based on the GPS position.

1. Go outdoors to an open area.
2. Wait while the device locates satellites.

   It may take 30–60 seconds to locate satellite signals.

Improving GPS Satellite Reception

- Frequently sync the device to your Garmin Connect account:
  - Connect your device to a computer using the USB cable and the Garmin Express application.
  - Sync your device to the Garmin Connect Mobile app using your Bluetooth enabled smartphone.

While connected to your Garmin Connect account, the device downloads several days of satellite data, allowing it to quickly locate satellite signals.

- Take your device outside to an open area away from tall buildings and trees.
- Remain stationary for a few minutes.

Restarting the Device

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

**NOTE:** Restarting the device may erase your data or settings.
1. Hold ⌘ for 15 seconds. The device turns off.
2. Hold ⌘ for one second to turn on the device.

### Clearing User Data
You can restore all of the device settings to the factory default values.

**NOTE:** This deletes all user-entered information, but it does not delete your history.

1. Hold ⌘, and select Yes to turn off the device.
2. While holding ⌘, hold ⌘ to turn on the device.
3. Select Yes.

### Restoring All Default Settings
**NOTE:** This deletes all user-entered information and activity history.

You can reset all settings back to the factory default values.

Select Menu > Settings > System > Restore Defaults > Yes.

### Viewing Device Information
You can view the unit ID, software version, regulatory information (e-label), and license agreement.

Select Menu > Settings > System > About.

### Updating the Software Using Garmin Express
Before you can update your device software, you must have a Garmin Connect account, and you must download the Garmin Express application.

1. Connect the device to your computer using the USB cable. When new software is available, Garmin Express sends it to your device.
2. Follow the on-screen instructions.
3. Do not disconnect your device from the computer during the update process.

### Maximizing Battery Life
- Shorten the backlight timeout (Backlight Settings, page 10).
- Shorten the timeout to watch mode (Power Save Timeout Settings, page 9).
- Turn off activity tracking (Activity Tracking, page 2).
- Select the Smart recording interval (Data Recording Settings, page 10).
- Turn off GLONASS (Changing the GPS Setting, page 9).
- Turn off the Bluetooth wireless feature (Turning Off Bluetooth Technology, page 7).
- Turn off wrist-based heart rate monitoring (Turning Off the Wrist Heart Rate Monitor, page 5).

### 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.

### Earning Intensity Minutes
Your Forerunner device calculates intensity minutes by comparing your heart rate data to your average resting heart rate. If heart rate is turned off, the device calculates moderate intensity minutes by analyzing your steps per minute.

- Start a timed activity for the most accurate calculation of intensity minutes.
- Exercise for at least 10 consecutive minutes at a moderate or vigorous intensity level.
- Wear your device all day and night for the most accurate resting heart rate.

### 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.

### 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, lotion, and insect repellent under the device.
- Avoid scratching the heart rate sensor on the back of the device.
- Wear the device above your wrist bone. The device should be snug but comfortable.
- Wait until the ❤ icon is solid before starting your activity.
- Warm up for 5 to 10 minutes and get a heart rate reading before starting your activity.

**NOTE:** In cold environments, warm up indoors.

- Rinse the device with fresh water after each workout.

### Data Fields
Some data fields require ANT+ accessories to display data.

- **%HRR:** The percentage of heart rate reserve (maximum heart rate minus resting heart rate).
- **24-Hour Max.:** The maximum temperature recorded in the last 24 hours.
- **24-Hour Min.:** The minimum temperature recorded in the last 24 hours.
- **Average %HRR:** The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) for the current activity.
- **Average Cadence:** Cycling. The average cadence for the current activity.
- **Average Cadence:** Running. The average cadence for the current activity.
- **Average HR:** The average heart rate for the current activity.
- **Average HR %Max.:** The average percentage of maximum heart rate for the current activity.
- **Average Lap Time:** The average lap time for the current activity.
- **Average Pace:** The average pace for the current activity.
- **Average Speed:** The average speed for the current activity.

### Appendix

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- **Average Cadence:** Running. The average cadence for the current activity.
- **Average HR:** The average heart rate for the current activity.
- **Average HR %Max.:** The average percentage of maximum heart rate for the current activity.
- **Average Lap Time:** The average lap time for the current activity.
- **Average Pace:** The average pace for the current activity.
- **Average Speed:** The average speed for the current activity.
Heart Rate Zone Calculations

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.

Distance: The distance traveled for the current track or activity.

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.

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).

Lap %HRR: The average percentage of heart rate reserve (maximum heart rate minus resting heart rate) 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 Distance: The distance traveled 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.

VO2 Max. Standard Ratings

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

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

<table>
<thead>
<tr>
<th>Females</th>
<th>Percentile</th>
<th>20–29</th>
<th>30–39</th>
<th>40–49</th>
<th>50–59</th>
<th>60–69</th>
<th>70–79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superior</td>
<td>95</td>
<td>49.6</td>
<td>47.4</td>
<td>45.3</td>
<td>41.1</td>
<td>37.8</td>
<td>36.7</td>
</tr>
<tr>
<td>Excellent</td>
<td>80</td>
<td>43.9</td>
<td>42.4</td>
<td>39.7</td>
<td>36.7</td>
<td>33</td>
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<td>30</td>
<td>28.1</td>
</tr>
<tr>
<td>Fair</td>
<td>40</td>
<td>36.1</td>
<td>34.4</td>
<td>33</td>
<td>30.1</td>
<td>27.5</td>
<td>25.9</td>
</tr>
<tr>
<td>Poor</td>
<td>0–40</td>
<td>&lt;36.1</td>
<td>&lt;34.4</td>
<td>&lt;33</td>
<td>&lt;30.1</td>
<td>&lt;27.5</td>
<td>&lt;25.9</td>
</tr>
</tbody>
</table>

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Heart Rate Zone Calculations

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

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