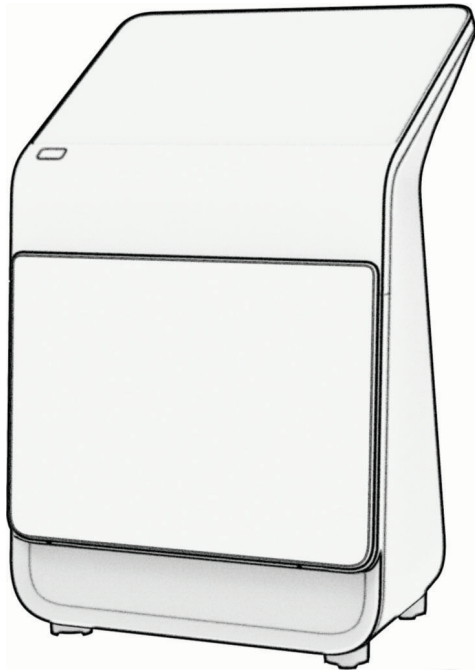


GARMIN®



APPROACH® R50

Owner's Manual

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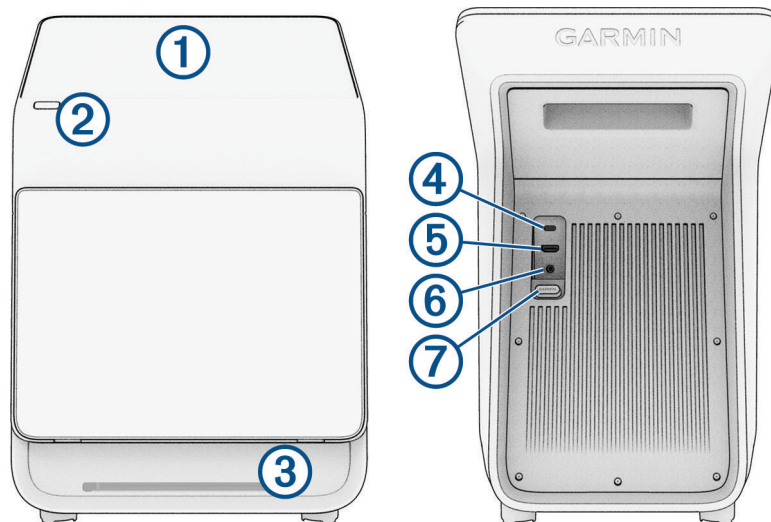
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Introduction

⚠ WARNING

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

Device Overview



- ① **Display:** Swipe to scroll through menu options.
Tap to choose an option in a menu.
- ② **Button:** Press to turn the launch monitor on.
Press to put the launch monitor into sleep mode.
Hold for one second to turn the launch monitor off.
- ③ **Status LED:** Indicates when the launch monitor is ready to record a shot.
- ④ **USB-C® port:** Connect a compatible USB-C cable to update your device software using your computer (*Updating Software with Garmin Express™*, page 13).
NOTE: You cannot charge the launch monitor with a USB-C cable.
- ⑤ **A/V port:** Connect a compatible HDMI® cable to output audio and video to an external display (*Connecting to an External Display*, page 12).
- ⑥ **Power port:** Connect the included power cable to charge the launch monitor or operate it without using the battery (*Charging the Device*, page 12).
- ⑦ **Cable door:** Pull down to access the cable ports.

Turning On the Launch Monitor

The first time you use the launch monitor, you are prompted to choose a language, connect to a wireless network, and set up your Garmin® account. For more information, go to garmin.com/videos/approachR50setup.

- 1 Press the button.
- 2 Follow the on-screen instructions.

Adding Users

The launch monitor is registered to a single profile, but you can add more profiles that can use the launch monitor features and compete against each other in virtual rounds.

NOTE: Your Garmin account is associated with the Garmin Golf™ app ([Garmin Golf App, page 12](#)).

- 1 From the profile screen, select **Add User**.
- 2 Select an option:
 - To sign into an existing Garmin account, select **Sign In**.
 - To create and sign into a new Garmin account, select **Create New Garmin Account**.
 - To create a profile that is not linked to a Garmin account, select **Create Guest Profile**.

NOTE: Data recorded for guest profiles will only be stored locally.
- 3 Follow the on-screen instructions.

Deleting Users

- 1 From the profile screen, select **Edit Users**.
- 2 Select the user profiles you want to delete.
- 3 Select **Remove**.

Garmin Golf Membership

With a Garmin Golf membership, golfers can compete with each other at over 43,000 virtual courses and participate in a weekly virtual tournament. The membership can be purchased through your profile settings ([Profile Settings, page 11](#)).

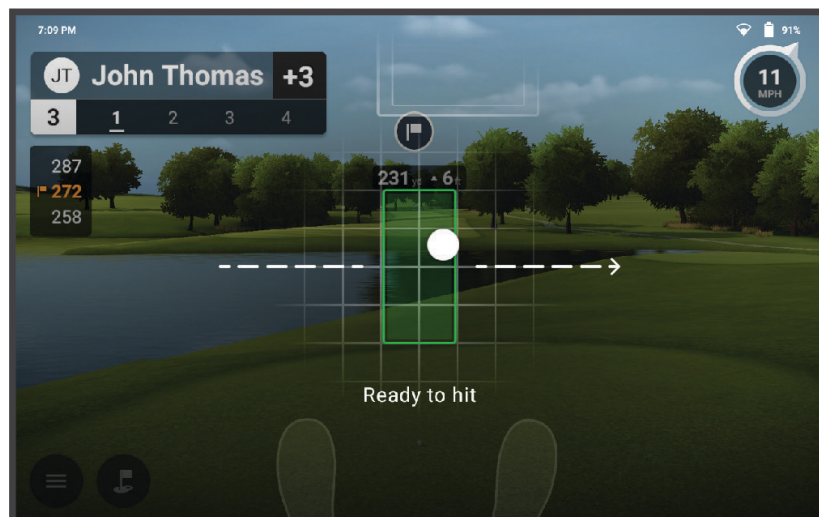
Preparing for a Shot

⚠ CAUTION

Failing to take one or more of the following actions could result in possible property damage or personal injury while using the device indoors:

- Ensure there is adequate ceiling height and that no objects can obstruct your backswing or follow through.
- Ensure that any net or impact screen is set up with adequate free space behind the net or screen.
- Ensure that any net or impact screen is high enough and extended enough to account for high-lofted shots or any errant shots.
- Ensure that any net or enclosure frame is padded to help reduce ball ricochet.

- 1 Place the launch monitor approximately 1.5 ft. (0.5 m) to the side of the desired tee location ([Launch Monitor Placement Considerations, page 4](#)).
- 2 Press the button to turn on the launch monitor.
- 3 Start a golf simulator game mode ([Using the Golf Simulator Features, page 4](#)).
- 4 Place the ball at the desired tee location.
- 5 If necessary, adjust the position of the ball so it appears within the hitting area on the launch monitor's display.



TIP: You can move the ball to any location within the hitting area. It may be helpful to move it during your session if the current location becomes worn.

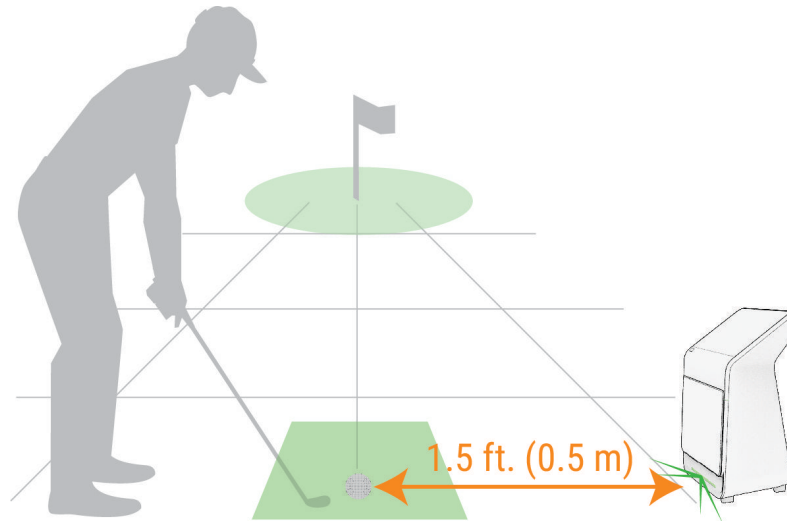
NOTE: The shape of the hitting area varies depending on whether club data is enabled.

- 6 If necessary, adjust the target alignment ([Adjusting the Target Alignment, page 9](#)).

NOTE: The target line is parallel to the front of the device by default. The ball and club angles are measured parallel to the target line.

- 7 Wait for the status LED to become solid green, and take a shot.

Launch Monitor Placement Considerations



When selecting a location for the launch monitor for a virtual round or practice mode session, you should observe these considerations.

- You must place the launch monitor approximately 1.5 ft. (0.5 m) to the side of the tee location.
- The launch monitor must face the tee location.
- For best results, you should place the launch monitor at approximately the same height as the tee location.
- You can place the launch monitor on an uneven surface. The launch monitor compensates for uneven surfaces, so leveling is not required.

Using the Golf Simulator Features

You can use the golf simulator features on your launch monitor to test your skills and help you have fun on the driving range. These features use internal cameras to record measurements that help you analyze your practice.

1 From the home screen, select an option:

- To start a practice session, select **Practice**.
- To play a virtual round of golf, select **Play**.

NOTE: To play a virtual round, you need a Garmin Golf membership ([Garmin Golf Membership, page 2](#)).

2 Follow the on-screen instructions.

Golf Simulator Settings

During a virtual round or practice session, select  > **Round Settings** or  > **Session Settings**.

NOTE: Some settings are available only during a virtual round.

NOTE: You can set the ball flight conditions manually, or to match the course location. The ball flight conditions affect the carry distances. If the carry distances during your virtual round or practice session are shorter or longer than expected, it could be due to the ball flight condition settings.

Putting: Enables or disables putting.

Gimme Distance: Sets how close the ball must be to the hole for the next shot to be automatically recorded as made.

Green Speed: Sets how fast the ball rolls on the green.

Tracking Mode: Sets what data is tracked.

In Game Sounds: Enables or disables in-game sound effects.

NOTE: To hear the in-game sound effects, you must connect to a compatible speaker using Bluetooth® technology ([Settings, page 11](#)) or to an external display ([Connecting to an External Display, page 12](#)).

Ball Flight Conditions

Elevation: Sets the course's elevation.

Relative Humidity: Sets the course's relative humidity.



Temperature: Sets the course's temperature.

Wind: Sets the course's wind speed.

Changing the View

During a virtual round or practice session, the map view appears by default. You can change the view for both the launch monitor's display and a connected external display ([Connecting to an External Display, page 12](#)) at any time, or change what data appears on the map view.

NOTE: During a virtual round, you must be connected to an external display to change the view. When connected to an external display, the map view appears on the external display, and you can select another view to appear on the launch monitor display.

- 1 Select  > **R50 Display** or  > **External Display**.
- 2 If necessary, select **Split Screen** to change to a split screen view.
- 3 If necessary, select **View Settings**.
- 4 Select an option:
 - To view a map of the current hole, select **Map**.
NOTE: You can customize which metrics appear, and set whether the average and accuracy of each metric appears. When you connect an external display, shot data is turned off for the map view by default.
 - To view the full list of club metrics, select **Data Fields**.
NOTE: You can customize which metrics appear, and set whether the average and accuracy of each metric appears.
 - To view the ball impact metrics with club graphs, select **Ball Impact**.
 - To view an impact video for the current shot, select **Impact Video**.
- 5 If necessary, select **Mirror R50 Display** to mirror the launch monitor's display to the external display.

Home Tee Hero

With a Garmin Golf membership ([Garmin Golf Membership, page 2](#)), you can play a virtual round of golf at a course rendered with 3D technology on your Approach launch monitor. There are over 43,000 courses available.




①	The profile name for the current player.
②	The current player's score for the round.
③	The wind speed and direction.
④	The hole number.
⑤	The shot number for the current hole.
⑥	The direction of the pin.
⑦	The distance to the front and back of the green, and to the pin.
⑧	The distance to the shot target. TIP: You can move the shot target by dragging it to the desired location on the course.
⑨	The elevation difference between the location of the ball and the shot target.
⑩	Select to open the menu.
⑪	Select to change to an overhead camera view.

Virtual Round Scoring

During a virtual round, the launch monitor calculates your score using the stroke play scoring method. Each shot you take counts as one stroke. Hitting the ball into the water or out of bounds adds a penalty stroke. If putting is disabled, additional strokes are added based on how accurate you are with your approach shot. You can receive 0 to 3 additional strokes depending on how close your approach shot is to the hole.

Viewing Your Scorecard


During a virtual round, select  > **Scorecard**.

Picking Up Your Ball



During a virtual round, you can receive a score of 10 on the current hole and skip to the next hole.

Select  > **Pick Up Ball** > **Pick Up Ball**.

Ending the Round

During a virtual round, select  > **End Round**.

Viewing Saved Scorecards

- 1 From the home screen, select  > **Scorecards**.
- 2 Select a scorecard.
- 3 If necessary, select  > **Delete Scorecard** > **Delete** to delete the scorecard.

Practice

The practice mode allows you to practice on a virtual driving range, and provides detailed metrics and ball impact videos for every shot.



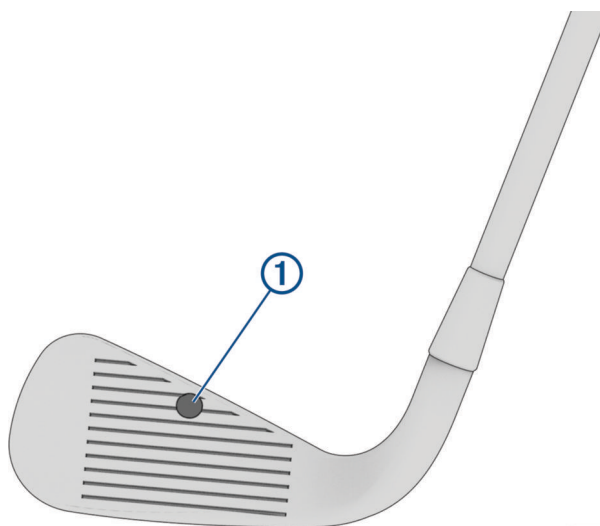
- ① A swing metric for the list of shots from the session. Select the drop-down arrow to display a different metric.
- ② The list of shots taken during the session, grouped by club. Select the drop-down arrow next to each club to see every shot taken with that club during the session.
TIP: You can edit or delete a shot from the list by swiping left on it.
- ③ Select to change to an overhead camera view with distance markers.
- ④ Swing metrics for the selected shot. Swipe up to scroll through the full list of metrics.
TIP: You can select a swing metric to display a different metric in that field.
TIP: You can tap and hold a swing metric to view a definition of the metric.
- ⑤ The trajectory of the shot.
- ⑥ Select to open the menu.
- ⑦ Select to change to a full screen view.
- ⑧ The profile name for the current player.
- ⑨ The club for the shot.
- ⑩ Select to tag the shot and write a note about it.
- ⑪ Select to open the display settings.

Applying the Club Stickers

In order to track club data, you need to apply one of the included club stickers to the face of the club you are using.


NOTE: You should replace the club sticker once it becomes worn or dirty.

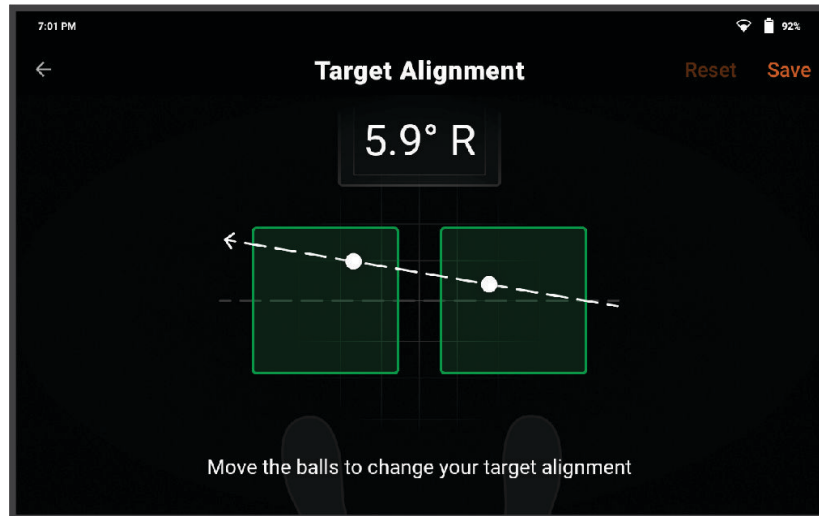
Apply the sticker ① to the top-center of the club face.



Adjusting the Target Alignment



During a practice session, the target alignment is set to 0 degrees by default. You can adjust the target alignment up to 15 degrees to the left or right.

- 1 During a practice session, select  > **Target Alignment**.
- 2 If necessary, select **Reset** to set the target alignment back to 0 degrees.
- 3 Place a golf ball within each of the two areas pictured on the launch monitor's display.




- 4 Move the golf balls to adjust your target alignment.
- 5 Select **Save**.




Viewing Your Practice Session Statistics

- 1 During a practice session, select  > **Session Summary**.
Statistics for each shot appear.
TIP: You can group the shots by club by selecting  > **Group by Club**.
- 2 If necessary, select multiple shots from the list to see average metrics for those shots.


Viewing Saved Practice Sessions

- 1 From the home screen, select  > **Practice Sessions**.
- 2 Select a practice session.

Deleting Saved Practice Sessions

- 1 From the home screen, select  > **Practice Sessions**.
- 2 Select an option:
 - To select one or more practice sessions, tap and hold a session, then select additional sessions, if necessary.
 - To select all of the practice sessions, select  > **Edit Sessions** > **Select All**.
- 3 Select  > **Delete**.

Ending Your Practice Session

- 1 During a practice session, select  > **End Session**.
- 2 Select an option:
 - To save the session, select **Save**.
 - To delete the session, select **Delete**.

Weekly Tournament

With a Garmin Golf membership, you can compete in a virtual tournament against other golfers around the world on different courses each week. You can play in each weekly tournament as many times as you want. All scores are posted on the leaderboard.

NOTE: Putting is disabled in weekly tournaments.

Connecting to a Third-Party Simulator

While connected to a wireless network ([Connecting to a Wireless Network, page 10](#)), you can view all of your recorded shots in detailed, high-definition graphics on your compatible third-party simulator software.

- 1 From the home screen, select **Connect**.
- 2 Select a simulator app.
- 3 Follow the on-screen instructions.

Wi-Fi® Connectivity Features

NOTE: Some features require a Garmin Golf membership ([Garmin Golf Membership, page 2](#)).

Data uploads to your Garmin Golf account: Automatically sends your practice data and virtual round scorecards to your Garmin Golf account as soon as you end your session.


Weekly tournament leaderboards: Automatically posts your weekly tournament scores to the online leaderboards.

Software updates: Automatically downloads and installs the latest software.

Download courses: Select and download courses to play virtual rounds on.

Third-party simulators: Connect to third-party simulator software to view your recorded shots with more detailed graphics.

Connecting to a Wireless Network



- 1 From the home screen, select  > **Settings** > **Wi-Fi**.
- 2 If necessary, select **Wi-Fi** to enable Wi-Fi technology.
- 3 Select a wireless network from the list.
- 4 If necessary, enter the password.

The launch monitor stores the network information and connects automatically when you return to this location.

Customizing Your Device

Customizing Your Golf Club List

You can customize the list of golf clubs available during a practice session.

- 1 From the home screen, select  > **My Bag**.
- 2 Select an option:
 - To edit a club, select a club from the active or inactive list, and select an option to change.
 - To add a club, select .

Settings

From the home screen, select  > **Settings**.

Profile: Configures the preferences for the current profile ([Profile Settings, page 11](#)).

Wi-Fi: Connect to a wireless network ([Wi-Fi® Connectivity Features, page 10](#)).

Bluetooth: Connect to a compatible speaker using Bluetooth technology so you can hear in-game sounds during a virtual round of golf.

Display & Brightness: Sets the display theme to light or dark, sets the display brightness, and turns adaptive brightness on or off.

Battery & Power: Configures your battery and power saver preferences, and displays the battery power percentage ([Battery and Power Settings, page 11](#)).

Language & Input: Sets the device language.

Date & Time: Sets the date, time, and time format.

Device Registration: Displays the profile the launch monitor is registered to, and provides information on how to register it to a different user.

Downloaded Courses: Displays the list of courses downloaded to the launch monitor, and adds or removes courses.

Software Update: Update the device software or revert to a previous software version.

Factory Reset: Reset all network settings, or delete all user data and reset all settings to factory default values ([Restoring All Default Settings, page 12](#)).

About: Displays device information, such as the unit ID and software version.

Legal: Displays regulatory information and the license agreements.

Help & Support: Enables screenshots and sends a diagnostic report to Garmin product support.

Profile Settings

From the home screen, select  > **Settings** > **Profile**.

Edit Name: Edits the name for the profile.

Handedness: Sets the profile to left-handed or right-handed.

System of Measurement: Sets the units of measure preferences.

Garmin Golf Membership: Displays the Garmin Golf membership status for the profile, and allows you to purchase a membership ([Garmin Golf Membership, page 2](#)).

Share Scorecard: Sets whether your virtual round scorecards can be viewed publicly on your Garmin Connect™ website profile.

Storage & Processing: Opts out of data storage and processing, which results in the deletion of all your personal data from the Garmin servers.

Device Upload: Sets whether the data from your launch monitor is uploaded to the Garmin servers and is viewable in the Garmin Golf app.

Manage or Delete Garmin Account: Displays information about how to manage or delete your Garmin account.

Switch User: Sign in to a different profile.

Sign Out: Sign out of your Garmin account. To log back into this profile, you will need to re-enter your Garmin account email and password.

Remove from Device: Removes the profile from the device and deletes all profile data.

Battery and Power Settings

Select a profile, and select  > **Settings** > **Battery & Power**.


Battery Percentage: Displays the battery life as a percentage next to the battery life icon.

Power Saver: Sets how long the launch monitor needs to be idle before it turns off automatically when plugged into an outlet.

Battery Saver: Sets how long the launch monitor needs to be idle before it turns off automatically when unplugged.

Restoring All Default Settings

You can restore all of the launch monitor settings back to the factory default values.

- 1 From the home screen, select  > **Settings** > **Factory Reset**.
- 2 Select an option:
 - To reset all network settings, select **Reset Wi-Fi & Bluetooth**.
 - To reset all of the launch monitor settings to the factory default values and erase all user data, select **Erase all data (factory reset)**.
- 3 Follow the on-screen instructions.

Device Information

Charging the Device

WARNING

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.

NOTE: You can use the launch monitor while it is charging.

- 1 Open the cable door on the back of the launch monitor.
- 2 Connect the AC adapter to the power port.



- 3 Connect the opposite end of the AC adapter to the power cable.
- 4 Connect the power cable to a wall outlet.

Connecting to an External Display

You can connect your launch monitor to an external display using a compatible HDMI cable (not included). During a virtual round or practice session, you can configure what view and data appears on the external display ([Changing the View, page 5](#)).

- 1 Open the cable door on the back of the launch monitor.
- 2 Connect a minimum 1080p-capable HDMI cable to the A/V port.
- 3 Connect the opposite end of the cable to an available HDMI port on the external display.

Garmin Golf App

The Garmin Golf app allows you to view detailed statistics and shot analyses that are recorded on your Approach launch monitor. The Garmin Golf app syncs your data with your Garmin Connect account. You can download the Garmin Golf app from the app store on your phone (garmin.com/golfapp).

Updating Software with Garmin Express™

You can use the Garmin Express application to download and install the latest software updates for your launch monitor.

- 1 If you do not have the Garmin Express application installed on your computer, go to garmin.com/express and follow the on-screen instructions to install it.
- 2 Open the Garmin Express application.
- 3 Connect your launch monitor to your computer using a USB-C cable.
- 4 In the Garmin Express application, select **Add a Device**.
The Garmin Express application searches for your launch monitor and displays the device name and serial number.
- 5 Select **Add Device**, and follow the on-screen instructions to add your launch monitor to the Garmin Express application.
When setup is complete, the Garmin Express application displays the updates available for your launch monitor.
- 6 Select an option:
 - To install all available updates, click **Install All**.
 - To install a specific update, click **View Details**, and click **Install** next to the update you want.The Garmin Express application downloads and installs the updates onto your launch monitor.
- 7 Follow the on-screen instructions during the update process to finish installing updates.
For example, during the update process, the Garmin Express application may instruct you to disconnect and reconnect your device.

Specifications

Battery type	Rechargeable, built-in lithium-ion battery
Battery life	Up to 4 hr.
Operating temperature range	From -10° to 55°C (from 14° to 131°F)
Charging temperature range	From 3° to 47°C (from 37° to 117°F)
Wireless frequencies/protocols	2.4 GHz @ 19.7 dBm maximum
Water rating	IEC 60529 IPX3 ¹

Getting More Information

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

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

Device Care

NOTICE

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

Never use a hard or sharp object to operate the touchscreen, or damage may result.

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

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

¹ The device withstands spraying water when tilted up to 60° vertically.

Cleaning the Device

- 1 Dampen a soft, clean, lint-free cloth with fresh water.
- 2 Gently wipe the device.

Long-Term Storage

When you do not plan to use the device for several months, you should charge the battery to at least 50% before you store the device. You should store the device in a cool, dry place with temperatures around the typical household level. After storage, you should fully recharge the device before using it.

Troubleshooting

Tips for Improving the Launch Monitor's Accuracy

If your swing metrics seem to be inaccurate, you can try these tips.

- When prompted after starting a virtual round or practice session, set the ball flight conditions to match where you typically play (*Golf Simulator Settings, page 5*).
- Adjust the target alignment on the launch monitor (*Adjusting the Target Alignment, page 9*).
- Minimize the amount of direct sunlight hitting the front of the launch monitor. If the sun is low on the horizon and the launch monitor is facing it, it can cause misreads.
- Minimize the amount of direct sunlight hitting the club face. Sunlight can reduce the visibility of the club sticker, which can cause no club metrics to be detected.
- Do not apply the club sticker on or near white decorations on the club face.
- Replace the club sticker if it has become dirty or worn.
- Place the golf ball so its logos or markings are facing the launch monitor, especially if the ball has a matte surface.
- Avoid having reflective surfaces within view of the launch monitor camera.
- If possible, avoid hitting the ball from tall grass or grass divots. The grass can obstruct the launch monitor's view of the ball, resulting in misreads.
- Place the launch monitor at the same level as the hitting mat.

My speaker will not connect to the device

If your speaker will not connect to the launch monitor using Bluetooth technology, you can try these tips.

- Bring the launch monitor within range of your speaker.
- Turn off your speaker and launch monitor, and turn them back on again.
- Make sure Bluetooth technology is enabled on your launch monitor (*Settings, page 11*).
- Turn Bluetooth technology off on your launch monitor, and turn it back on.
- Remove your speaker from the Bluetooth settings on your launch monitor to retry the pairing process.

The launch monitor won't turn on

The operating temperature range for the launch monitor is from -10° to 55°C (from 14° to 131°F). If the launch monitor is operated or stored in a temperature above the listed operating temperature, it may overheat and fail to turn on (*Specifications, page 13*). If the launch monitor overheats, you should move it to a cooler location, and wait for it to resume normal operation.

Resetting the Device

If the launch monitor stops responding, you may need to reset it. This does not erase any of your saved data or settings. If you reset the launch monitor during a virtual round or practice session, you may lose the data for that round or session.

- 1 Hold the button for six seconds.
The launch monitor turns off.
- 2 Press the button to turn on the launch monitor.

