

GARMIN®



XERO® C1

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 inspect your equipment before using a bow or firearm. You are responsible for understanding and complying with any applicable regulations for using a bow or firearm.

Always understand your target and what lies beyond your target before taking a shot. Failure to account for your shooting environment could cause property damage, injury, or death.

Only access the information displayed on the device with a glance. Always maintain awareness of your shooting environment and do not stare at the display or become distracted by the display. Failure to account for your shooting environment could cause property damage, injury, or death.

Do not interact with the device while handling your weapon. Doing so could cause distraction or reduce awareness of your shooting environment, which could lead to an accident resulting in serious personal injury or death.

Device Overview



- ① **USB-C® port (under weather cap):** Connect the USB-C cable to charge the device or download software updates using your computer.
- ② **OK:** Press to select menu options.
- ③ **↻ (PWR):** Press to turn the device on.
Press to return to the previous screen.
Hold for two seconds to turn off the device.
- ④ **^ v:** Press to scroll through the menu.

Installing the Tripod

The Xero C1 chronograph tripod mount uses 1/4 in.-20 thread size and is compatible with most tripods.

Screw the tripod ① into the bottom of the Xero C1 chronograph.



Charging the Device

⚠ WARNING

This product contains a lithium-ion battery. To prevent the possibility of personal injury, product damage, or other property damage caused by battery exposure to extreme heat, store the device out of direct sunlight.

NOTICE

To prevent corrosion, thoroughly dry the USB port, the weather cap, and the surrounding area before charging or connecting to a computer.

The device is powered by a built-in lithium-ion battery that you can charge using a standard AC adapter or a USB port on your computer.

NOTE: The device will not charge when outside the approved temperature range (*Specifications, page 14*).

- 1 Pull up the weather cap from the USB-C port.
- 2 Plug the small end of the USB cable into the USB-C port on the device.
- 3 Plug the large end of the USB cable into an external power source, such as an AC adapter or a USB port on your computer.
- 4 Charge the device completely.
It can take up to 4 hours to fully charge the battery.

Turning the Device On or Off

- To turn on the device, press **PWR**.
- To turn off the device, hold **PWR** for 2 seconds.

Recording Shot Data

Alignment Considerations

For best results, you should always follow these alignment considerations while using your chronograph.

- Always observe the position diagram for your projectile type.
- Always ensure the large, flat side of the chronograph is pointed at the target and the screen is facing you.
- Always ensure the chronograph has an unobstructed view of the target.
- Always ensure the projectile can travel at least 20 meters or 20 yards in front of the chronograph.

Automatic Radar Configuration

The Xero C1 chronograph automates some setup steps to help you get started faster.

Frequency Selection: When you start a session, the chronograph automatically checks for interference from other radars. If the chronograph detects interference from other radar systems, it switches to a clean channel automatically.

Position Offset: There is no need to enter a position offset manually. The Xero C1 chronograph uses an advanced algorithm that does not need position input to measure true muzzle velocity.

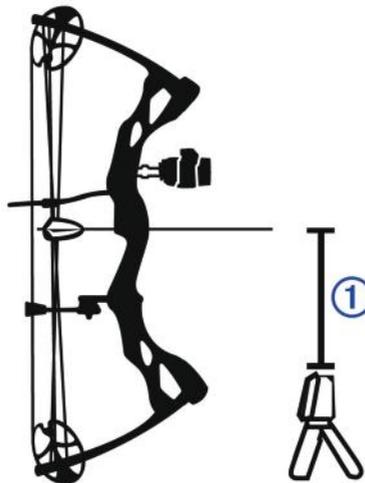
Starting a Bow Session

NOTICE

Always ensure that you position the chronograph so that it is not directly exposed to ejecting cartridge cases, muzzle blast, or other hazards that may damage the chronograph.

When you use the chronograph for archery, you should use a target that is at least 4 meters or 4 yards away from you.

- 1 Select **NEW SESSION > BOW**.
- 2 If you have enabled the **PROJECTILE WEIGHT ENTRY** setting (*Pro Settings, page 11*), select an option:
 - To calculate the kinetic energy and power factor of your arrow, select **YES**, and enter the weight of your arrow.
 - To continue without calculating kinetic energy and power factor, select **SKIP**.
- 3 If necessary, observe the alignment diagram, and press **OK** to continue.
- 4 Point the chronograph at the target with the screen facing you.
- 5 Hold the bow over the chronograph so the arrow is 15 to 35 cm (5 to 15 in.) above the chronograph ①.



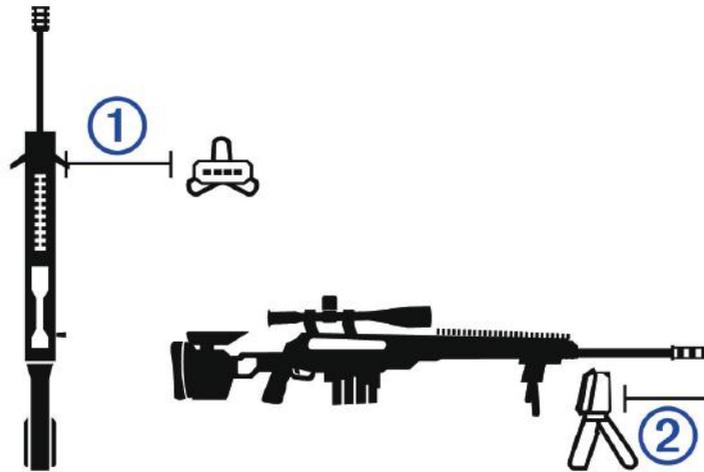
The device detects shots and displays measurements automatically as you shoot. The measured velocity is the speed of the arrow as it passes over the chronograph.

Starting a Rifle Session

NOTICE

Always ensure you position the chronograph so that it is not directly exposed to ejecting cartridge cases, muzzle blast, or other hazards that may damage the chronograph.

- 1 Select **NEW SESSION > RIFLE**.
- 2 Select a velocity range.
- 3 If you have enabled the **PROJECTILE WEIGHT ENTRY** setting (*Pro Settings, page 11*), select an option:
 - To calculate the kinetic energy and power factor of your bullet, select **YES**, and enter the weight of your bullet.
 - To continue without calculating kinetic energy and power factor, select **SKIP**.
- 4 If necessary, observe the alignment diagram and press **OK** to continue.
- 5 Position the rifle next to the chronograph, within 15 to 35 cm (5 to 15 in.) of the chronograph ①, and ensure the chronograph is 15 to 35 cm (5 to 15 in.) behind the muzzle ②.



NOTE: The chronograph can be positioned on either side of the rifle.

- 6 Point the chronograph at the target with the screen facing you.
The device detects shots and displays measurements automatically as you shoot.

Starting a Pistol Session

NOTICE

Always ensure you position the chronograph so that it is not directly exposed to ejecting cartridge cases, muzzle blast, or other hazards that may damage the chronograph.

- 1 Select **NEW SESSION > PISTOL**.
- 2 Select a velocity range.
- 3 If you have enabled the **PROJECTILE WEIGHT ENTRY** setting (*Pro Settings, page 11*), select an option:
 - To calculate the kinetic energy and power factor of your bullet, select **YES**, and enter the weight of your bullet.
 - To continue without calculating kinetic energy and power factor, select **SKIP**.
- 4 If necessary, observe the alignment diagram and press **OK** to continue.
- 5 Point the chronograph at the target with the screen facing you.
- 6 Hold the pistol over the chronograph so the barrel is positioned 15 to 35 cm (5 to 15 in.) above the chronograph ①.



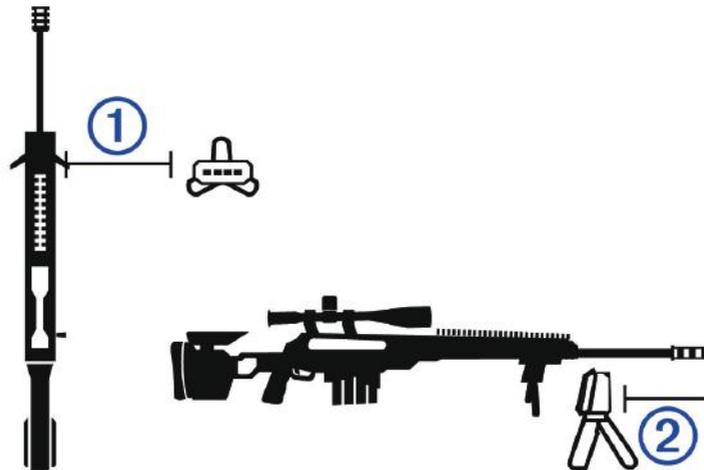
The device detects shots and displays measurements automatically as you shoot.

Starting an Air Rifle Session

NOTICE

Always ensure you position the chronograph so that it is not directly exposed to ejecting cartridge cases, muzzle blast, or other hazards that may damage the chronograph.

- 1 Select **NEW SESSION > AIR RIFLE**.
- 2 If you have enabled the **PROJECTILE WEIGHT ENTRY** setting (*Pro Settings, page 11*), select an option:
 - To calculate the kinetic energy and power factor of your projectile, select **YES**, and enter the weight of your projectile.
 - To continue without calculating kinetic energy and power factor, select **SKIP**.
- 3 If necessary, observe the alignment diagram and press **OK** to continue.
- 4 Position the air rifle next to the chronograph, within 15 to 35 cm (5 to 15 in.) of the chronograph ①, and ensure the chronograph is within 15 to 35 cm (5 to 15 in.) behind the muzzle ②.



NOTE: The chronograph can be positioned on either side of the air rifle.

- 5 Point the chronograph at the target with the screen facing you.
The device detects shots and displays measurements automatically as you shoot.

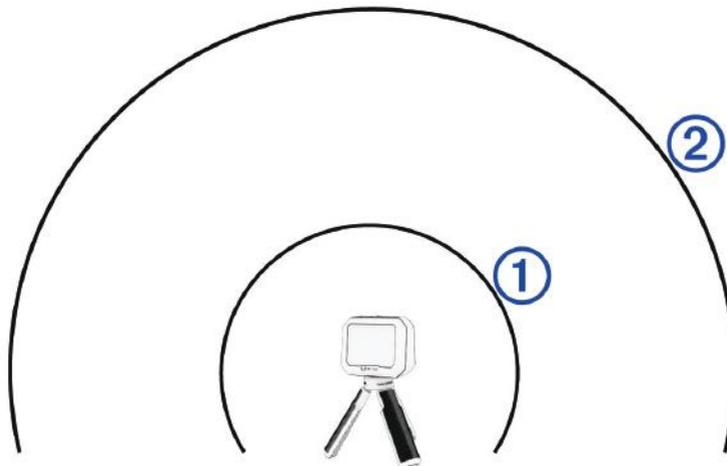
Starting a Session for Other Projectiles

NOTICE

Always ensure you position the chronograph so that it is not directly exposed to ejecting cartridge cases, muzzle blast, or other hazards that may damage the chronograph.

You can use the Xero C1 chronograph to measure velocity of other projectiles that may not fit into other categories, such as some muzzleloading firearms, shotguns with slugs, slingshots, or other weapons.

- 1 Select **NEW SESSION > OTHER**.
- 2 Select a velocity range.
- 3 If you have enabled the **PROJECTILE WEIGHT ENTRY** setting (*Pro Settings, page 11*), select an option:
 - To calculate the kinetic energy of your projectile, select **YES**, and enter the weight of your projectile.
 - To continue without calculating kinetic energy, select **SKIP**.
- 4 Point the chronograph at the target with the screen facing you.
- 5 Position the weapon next to the chronograph, within 15 cm (5 in.) ① to 35 cm (15 in.) ② of the chronograph.



NOTE: The weapon can be positioned at any point around the chronograph as long as the weapon and chronograph are positioned 15 to 35 cm (5 to 15 in.) away from each other. You should choose a location that works best for your weapon.

The device detects shots and displays measurements automatically as you shoot.

Pausing a Session

You can pause an active session and resume it later. This can be useful to conserve battery power while you are not using the device.

- 1 During a session, press ↶.
- 2 Select **PAUSE SESSION**.

Resuming a Paused Session

From the main menu, select **RESUME SESSION**.

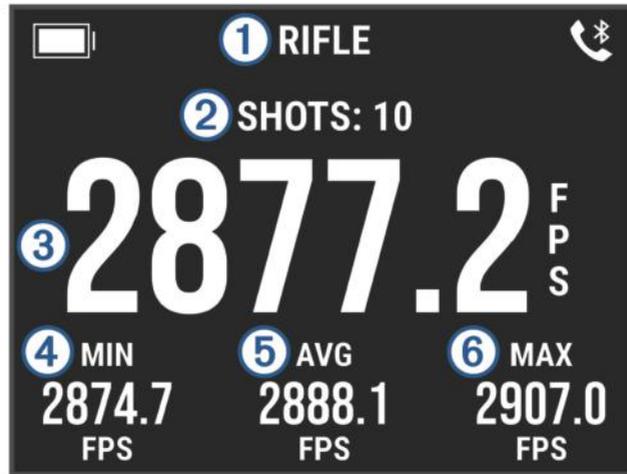
Ending a Session

- 1 During a session, press ↶.
- 2 Select **END SESSION**.

Shot Data

Each time you take a shot during a session, the chronograph records the shot automatically.

TIP: You can press OK, and select DATA FIELDS to change the information displayed in each data field.



①	Mode
②	Shots recorded
③	Velocity of the most recent shot
④	Minimum velocity recorded during the session (DATA FIELD 1)
⑤	Average velocity recorded during the session (DATA FIELD 2)
⑥	Maximum velocity recorded during the session (DATA FIELD 3)

Changing Data Fields

You can change the data fields that display with your shot data.

- 1 Select an option:
 - To change data fields during a session, press **OK**, and select **DATA FIELDS**.
 - To change data fields before a session, select **SETTINGS > DATA FIELDS**.
- 2 Select a data field.
- 3 Press **OK** to cycle through available data fields.

Data Fields

AVERAGE (AVG): Displays the average velocity recorded in the current session.

DEVIATION FROM AVERAGE (DEV/AVG): Displays how far the velocity of the most recent shot deviates from the average velocity of shots in the current session.

EXTREME SPREAD (EXT SPRD): Displays the extreme spread of the shot velocities recorded in the current session. Extreme spread is the difference between the maximum and minimum velocities recorded.

KINETIC ENERGY (KE): Displays the kinetic energy calculated for the most recent shot.

NOTE: You must enable the PROJECTILE WEIGHT ENTRY setting to use this data field (*Pro Settings, page 11*).

MAXIMUM (MAX): Displays the maximum velocity recorded in the current session.

MINIMUM (MIN): Displays the minimum velocity recorded in the current session.

POWER FACTOR (PF): Displays the power factor for the most recent shot. Power factor is a measurement of the momentum of the projectile.

NOTE: You must enable the PROJECTILE WEIGHT ENTRY setting to use this data field (*Pro Settings, page 11*).

STANDARD DEVIATION (STD DEV): Displays the standard deviation of shot velocities in the current session. The standard deviation is a number that shows how much recorded velocities deviate from the average velocity recorded. A high standard deviation means that the recorded velocities are more spread out from the average velocity recorded. A low standard deviation means that the recorded velocities are close to the average velocity recorded.

Viewing the Shot List

The shot list shows a list of your shots for a session.

Select an option:

- To view the shot list for the current session, press **OK**, and select **SHOT LIST**.
- To view the shot list for a previous session, select **HISTORY**, select a session, and select **SHOT LIST**.

Changing the Shot List Data Field

Before you can select from all available data fields in the shot list, you must enable the PROJECTILE WEIGHT ENTRY setting (*Pro Settings, page 11*).

You can change the data field that displays with each shot on the shot list.

1 Select an option:

- To change data fields during a session, press **OK**, and select **DATA FIELDS**.
- To change data fields before a session, select **SETTINGS > DATA FIELDS**.

2 Select **SHOT LIST DATA**.

3 Select a data field.

Deleting a Shot from the Shot List

You can delete shots from your shot list. This can be useful if there is a shot that you do not want to include in your session statistics.

NOTE: If you delete a shot from the shot list on the chronograph after you sync with the ShotView™ app, the shot will not be deleted from the app.

1 Select an option:

- To delete a shot from the current session, press **OK**, and select **SHOT LIST**.
- To delete a shot from a previous session, select **HISTORY**, select a session, and select **SHOT LIST**.

2 Select a shot, and select **DELETE**.

Viewing the Session Summary

The session summary shows a list of statistics for your current session.

Select an option:

- To view a summary of the current session, press **OK**, and select **SESSION SUMMARY**.
- To view a summary of a previous session, select **HISTORY**, select a session, and select **SESSION SUMMARY**.

Viewing Session History

You can view your shot details for previously recorded sessions.

- 1 From the main menu, select **HISTORY**.
- 2 Select a session.
- 3 Select an option:
 - To view a summary of the session data, select **SESSION SUMMARY**.
 - To view a full list of shots recorded during the selected session, select **SHOT LIST**.

ShotView App

You can download the ShotView app on your smartphone to view detailed statistics and shot analyses that are recorded on your Xero C1 chronograph.

You can go to garmin.com/shotviewapp for more information.

Pairing Your Smartphone

To use the connected features of the Xero C1 chronograph, it must be paired directly through the ShotView app, instead of from the Bluetooth® settings on your smartphone.

- 1 Turn on your Xero C1 chronograph, and place the chronograph and your smartphone within 3 m (10 ft.) of each other.
- 2 On your Xero C1 chronograph, select **SETTINGS > CONNECTIVITY**.
- 3 Enable the **STATUS** option, and select **PAIR PHONE**.
- 4 Using your phone, scan the QR code to download and install the ShotView app.
TIP: You can use the camera app on most phones to scan the QR code.
- 5 Follow the on-screen instructions to sign in to a Garmin® account and complete the pairing and setup process.

Settings

Changing the Units of Measure

- 1 Select **SETTINGS > UNITS**.
- 2 Select a unit of measure, and press **OK**.

Changing the Display Color

- 1 Select an option:
 - To change the display color during a session, press **OK**, and select **DISPLAY COLOR**.
 - To change the display color outside of a session, select **SETTINGS > DISPLAY COLOR**.
- 2 Press **OK** to cycle through the color options.

Changing the Backlight Brightness

- 1 Select an option:
 - To change the backlight brightness during a session, press **OK**, and select **BACKLIGHT**.
 - To change the backlight brightness outside of a session, select **SETTINGS > BACKLIGHT**.
- 2 Press **OK** to cycle through the brightness levels.

Pro Settings

Select **SETTINGS > PRO SETTINGS**.

PROJECTILE WEIGHT ENTRY: Enables or disables the projectile weight entry screen before each session. You can use the projectile weight to calculate the kinetic energy and power factor of your projectile.

SHOW ALIGNMENT DIAGRAMS: Enables or disables the alignment diagrams that appear before each session.

NOTE: An alignment diagram appears the first time you use a new mode even after you disable alignment diagrams.

Changing the Device Language

- 1 Select **SETTINGS > LANGUAGE**.
- 2 Select a language.

Resetting Data and Settings

The chronograph offers options for deleting your user data and resetting all settings to the factory default values.

NOTE: If you clear data from the chronograph after you sync with the ShotView app, the data will not be deleted from the app.

- 1 Select **SETTINGS > RESET**.
- 2 Select an option:
 - To delete all of your recorded sessions from the chronograph, select **CLEAR ALL SESSIONS**.
 - To reset all settings to default values, select **RESET ALL SETTINGS**.
 - To reset all settings to factory default values and delete all user data and sessions, select **FACTORY RESET**.
- 3 Select **YES**.

Device Information

Software Updates

Software updates provide changes and improvements to the device features and operation. Software updates are small and take a few minutes to complete.

You can update your chronograph using two methods.

- You can update the chronograph using the ShotView app on your smartphone ([Updating the Software Using the ShotView App, page 12](#)).
- You can connect the chronograph to a computer and update it using the Garmin Express™ application ([Updating Software with Garmin Express, page 12](#)).

Updating the Software Using the ShotView App

When an update is available, the ShotView app sends it to the chronograph automatically.

When the update transfers to your chronograph, the chronograph prompts you to install the update. If you choose not to install the update, you are prompted to install the update the next time you turn on your chronograph.

Do not turn off your chronograph while the update is installing.

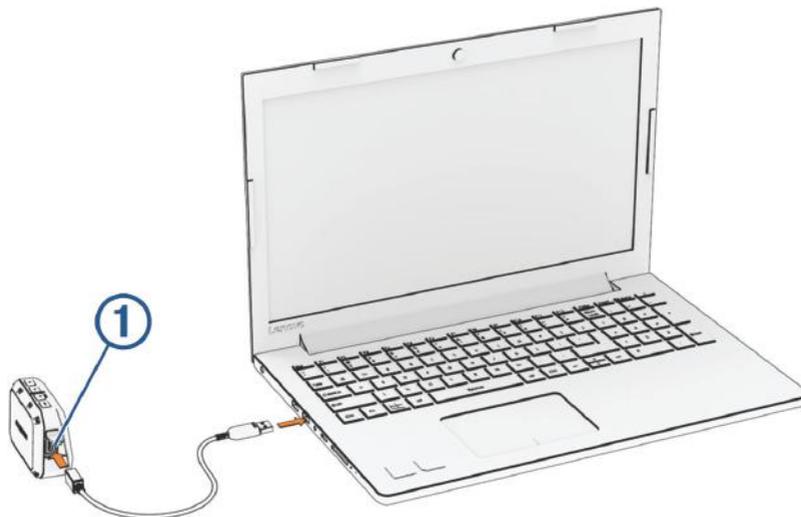
After the update is complete, the chronograph restarts and operates normally.

Updating Software with Garmin Express

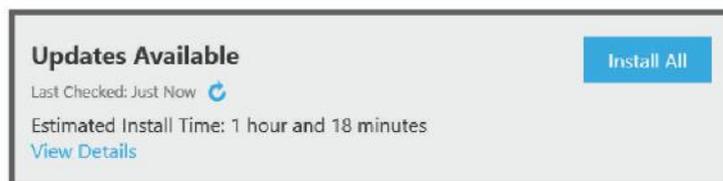
You can use the Garmin Express application to download and install the latest software updates for your chronograph.

- 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 (*Installing Garmin Express, page 13*).
- 2 Open the  Garmin Express application.
- 3 Connect your chronograph to your computer using a USB-C cable.

The small end of the cable connects to the USB-C port  on your Xero C1 chronograph, and the large end connects to an available USB port on your computer.



- 4 In the Garmin Express application, click **Add a Device**.
The Garmin Express application searches for your device and displays the device name and serial number.
- 5 Click **Add Device**, and follow the on-screen instructions to add your device to the Garmin Express application.
When setup is complete, the Garmin Express application displays the updates available for your device.



- 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 device.
- 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.

Installing Garmin Express

The Garmin Express application is available for Windows® and Mac® computers.

- 1 On your computer, go to garmin.com/express.
- 2 Select an option:
 - To view the system requirements and verify the Garmin Express application is compatible with your computer, select **System Requirements**.
 - To install on a Windows computer, select **Download for Windows**.
 - To install on a Mac computer, select **Download for Mac**.
- 3 Open the downloaded file, and follow the on-screen instructions to complete the installation.

Device Care

NOTICE

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

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

Secure the weather cap tightly to prevent damage to the USB port.

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

Cleaning the Outer Casing

NOTICE

Avoid chemical cleaners and solvents that can damage plastic components.

- 1 Clean the outer casing of the device (not the screen) using a cloth dampened with a mild detergent solution.
- 2 Wipe the device dry.

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.

Viewing E-label Regulatory and Compliance Information

The label for this device is provided electronically. The e-label may provide regulatory information, such as identification numbers provided by the FCC or regional compliance markings, as well as applicable product and licensing information.

- 1 From the main menu, select **SETTINGS**.
- 2 Select **ABOUT**.

Specifications

Battery type	Rechargeable, built-in lithium-ion battery
Rifle measurement accuracy	+/- 0.1% of the target velocity
Bow, pistol, and air rifle measurement accuracy	+/- 0.4% of the target velocity
Wireless frequency and transmit power	2.4 GHz @ 4.04 dBm maximum 24 GHz @ 18.68 dBm maximum
Operating temperature range	From -10° to 55°C (from 14° to 131°F)
Charging temperature range	From 0° to 45°C (from 32° to 113°F)
Water rating	IEC 60529 IPX7 ¹

Troubleshooting

Resetting the Device

If the device stops responding, you may need to reset it. This does not erase any of your data or settings.

Hold **PWR** for 20 seconds.

Resetting the Chronograph to Factory Default Settings

You can reset your chronograph to the factory default settings. Resetting clears all data from the chronograph.

- 1 Turn off the chronograph.
- 2 While holding **OK** and , press **PWR** to turn on the device.
- 3 When the Xero logo appears, release **OK**.
- 4 Continue holding  until the device starts.

The chronograph is not detecting my shot velocity

You can perform these actions to help determine why the chronograph isn't detecting your velocity.

- Verify the chronograph is facing the target. With the screen facing you, the large, flat side of the chronograph should point at the target.
- Verify the target is at least 20 meters or 20 yards from the chronograph.
- Verify the chronograph and the weapon are properly aligned based on your weapon type ([Recording Shot Data, page 3](#)).
- Verify the session is active. The shot data screen appears while the session is active.
- Verify that you selected the correct velocity range for your weapon and projectile while setting up your session.

The chronograph is detecting shots from the shooter next to me

It is possible for the chronograph to detect shots from adjacent shooters. For best results, you should always ensure the nearest shooter is at least 1.5 m (5 ft.) from your location.

The chronograph temperature is approaching a critical level

To prevent overheating, the Xero C1 chronograph turns off when it is used at temperatures above the listed operating temperature ([Specifications, page 14](#)). If a warning message appears, you should move the device to a cooler location.

¹ The device withstands incidental exposure to water of up to 1 m for up to 30 min. For more information, go to www.garmin.com/waterrating.

The chronograph does not turn on

- Make sure the chronograph is within the approved operating or charging temperature range ([Specifications, page 14](#)).
- Charge the chronograph for 4 hours ([Charging the Device, page 2](#)).
If the chronograph does not turn on, disconnect the charger, and charge it for another 4 hours.

My language is missing from the chronograph

If the language files are missing from your Xero C1 chronograph, you can reinstall them using the Garmin Express application.

- 1 Download and install the Garmin Express application on your computer ([Installing Garmin Express, page 13](#)).
- 2 Connect the Xero C1 chronograph to your computer using a USB-C cable.
- 3 From the Garmin Express application, select your Xero C1 device.
- 4 Select **Tools & Content**.
- 5 Select the **Utilities** tab.
- 6 Select **Language Files**.
- 7 Select one or more languages, and select **Install Now**.

