



GHC 10

owner's manual

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Introduction

WARNINGS

You are responsible for the safe and prudent operation of your vessel.

The GHP™ 10/10V/12 is a tool that will enhance your capability to operate your boat. It does not relieve you from the responsibility of safely operating your boat. Avoid navigational hazards and never leave the helm unattended.

Always be prepared to promptly regain manual control of your boat.

Learn to operate the GHP on calm and hazard-free open water.



Use caution when operating the GHP near hazards in the water, such as docks, pilings, and other boats.

The GHP autopilot system continuously adjusts the steering of your boat to maintain a constant heading. In addition to the basic heading-hold functionality, the GHP autopilot system allows manual steering and several modes of automatic-steering functions and patterns.

Operate the GHP autopilot system using the GHC™ 10 control unit. Through the GHC 10 control unit, you engage and steer, set up, and customize the GHP autopilot system.

To install the GHP autopilot system, including the GHC 10 control unit, use the provided installation instructions.

Tips and Shortcuts

- Select the **STBY** key from any screen to place the autopilot in standby mode and return to the Heading screen.
- Select  to adjust the backlight and color mode.
- Hold  to turn the autopilot on or off.

NOTE: If more than one GHC 10 device is wired to turn on the autopilot, you must turn off all of the wired GHC 10 devices to turn off the autopilot.

- Select  or  to highlight an option on a menu.

Manual Conventions

In this manual, the GHP autopilot system is referred to as the autopilot, and the GHC 10 control unit is referred to as the device.

When you are instructed to select an item on the device, press a soft key along the bottom of the screen.

Arrows (>) in the text indicate that you should select each item in order. For example, if you see “select **Menu** > **Setup**,” you should select **Menu**, and then select **Setup**.

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Getting Started

Front Panel



Item	Description
①	Standby
②	Soft keys
③	Power key

Turning On the Autopilot

Select .


Turning Off the Autopilot

Hold .




NOTE: If more than one GHC 10 device is wired to turn on the autopilot, you must turn off all of the wired GHC 10 devices to turn off the autopilot.

Adjusting the Display

Adjusting the Color Mode

1. From any screen, select .
2. Select **Color Mode**.
3. Select **Select** to switch between night or day color modes.

Adjusting the Backlight

1. From any screen, select .
2. Select **Backlight**.
3. Select  or  to adjust the backlight brightness.
4. Select **Done**.

Turning On Network Sharing

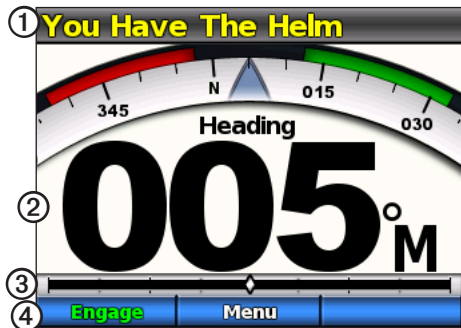
You can share color mode and backlight settings with other GHC 10 and GMI™ 10 devices across the NMEA 2000 network.

1. Select **Network Sharing**.
2. Select **Select** to turn on network sharing.

About the Heading Screen

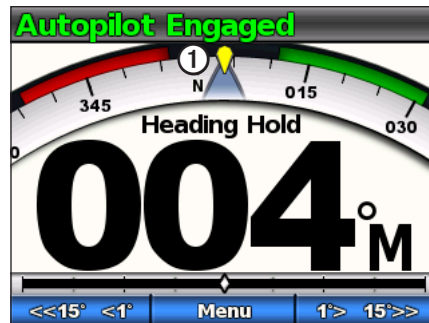
The heading screen displays the status of the autopilot and the heading. You can use the soft keys to engage the autopilot and manually adjust the heading from the heading screen.

When you turn on the autopilot, the system starts in standby mode, and displays the heading screen on the GHC 10.



Item	Description
①	Autopilot status
②	Actual heading
③	Rudder position indicator (sailboat and rudder sensor-equipped powerboats only)
④	Soft key functions

When you select **Engage** to activate the autopilot heading hold, the autopilot takes control of the helm and steers the boat to maintain your heading. The intended heading ① is indicated on the compass at the top of the heading screen.



Refer to [page 12](#) for information about the sailboat wind hold screen.

Powerboat Autopilot Operation

Powerboat Tips

Dynamic Menu Option

The first option in the menu accessed by selecting Menu from the heading screen changes based on the following conditions:

- If the autopilot is not steering a pattern, select the option to go to the engagement screen of the pattern last used.
- If the autopilot is steering a pattern, select the option to go to the configuration screen for the pattern. If there are no configurable settings for the pattern, you cannot select the menu option.

Heading Hold

You can engage the autopilot heading hold function to maintain your current heading without steering the helm.

Engaging Heading Hold

From the heading screen, select **Engage**.

The autopilot steers your boat to maintain the current heading.

Heading Adjustment

When the autopilot is engaged, you can adjust the heading using the helm (if your autopilot is equipped with Shadow Drive™) or the soft keys on the autopilot.

Heading Adjustment with the Helm

You can steer the boat manually from the helm while the autopilot is engaged. The autopilot does not steer the boat while you have the helm, and the message “You Have the Helm” flashes at the top of the screen in yellow. If you manually maintain a specific heading for a few seconds, the autopilot resumes control of the new heading, and the heading screen displays the message “Autopilot Engaged”.

Resuming a Pattern After a Helm Heading Adjustment

When the autopilot is steering a pattern, you might need to steer the boat manually from the helm to avoid hazards in the water. After you have passed all hazards, you must manually restart the pattern. The dynamic menu option ([page 3](#)) enables you to quickly resume the pattern.

Select **Menu** > [**Pattern Name**] to resume the last-used pattern.



Heading Adjustment with the Autopilot

You can steer your boat using the autopilot. Step steering turns the boat in increments of 1° when you select the steering soft key, and in larger increments when you hold the steering soft key. Rudder steering turns the boat in increments of 1° when you select the steering soft key, and steers the boat when you hold the steering soft key.

Changing the Steering Mode

1. From the heading screen, select **Menu** > **Steering Mode**.
2. Select an option:
 - Select **Steering Mode** > **Rudder** to enable rudder steering
 - Select **Steering Mode** > **Step** to enable step steering.

Adjusting the Step Steering Increments





1. From the heading screen, select **Menu** > **Steering Mode** > **Step Turn Size**.
2. Select  or  to set the step turn size.
3. Select **Done**.

Steering with the Soft Keys

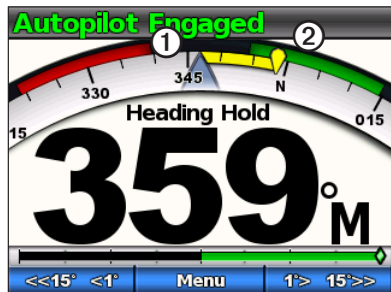
With the autopilot engaged, you can manually adjust the heading from the heading screen.

NOTE: If the autopilot is steering a pattern (page 5), manually adjusting the heading cancels the pattern.

Select an option:

- If you have step steering enabled, select  and .
- If you have rudder steering enabled, select  and .

The autopilot steers the boat, and the heading screen shows your actual heading ① and intended heading ②.



Direction Control

When your boat is properly equipped, you can control the drive direction of the boat (forward or reverse) using the autopilot.

Using Direction Control

From the Heading screen, select an option:

- When traveling forward in standby mode, select **Direction** to engage reverse.
The autopilot engages reverse drive and the message “Rev” appears in orange on the heading screen.
- When traveling in reverse in standby mode, select **Direction** to engage forward.
The autopilot engages forward drive and the message “Rev” is removed from the heading screen.

Steering Patterns

⚠ CAUTION

You are responsible for the safe operation of your boat. Do not begin a pattern until you are certain that the water is clear of obstacles.

The autopilot can steer the boat in preset patterns for fishing, and it can also perform other specialty maneuvers such as U-turns and man-overboard retrieval. You can use the GHC 10 to begin pattern steering.





Pattern steering is not based on GPS, and it can be used without a GPS device connected to the autopilot.

Zigzag Pattern

The zigzag pattern steers the boat from port to starboard and back, over a specified time and angle, across your current heading.

Setting Up the Zigzag Pattern

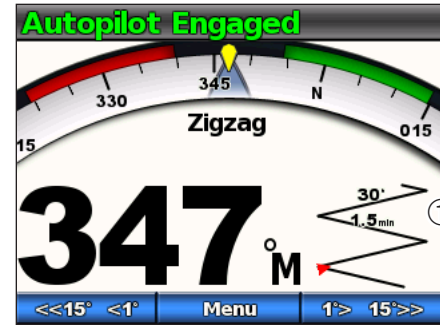
You can modify the amplitude and period of the zigzag pattern. The default values are 30° and 1.5 minutes.

1. From the heading screen, select **Menu > Pattern Steering > Zigzag > Setup > Zigzag Amplitude**.
2. Select  or  to set the amplitude in increments of 5°.
3. Select **Done**.
4. Select **Setup > Zigzag Period**.
5. Select  or  to set the period.
6. Select **Done**.

Following the Zigzag Pattern

1. From the heading screen, select **Menu > Pattern Steering > Zigzag**.
2. Select **Engage**.

The autopilot follows the zigzag pattern, and the heading screen shows the amplitude and period of the zigzag pattern ①.





TIP: To quickly resume a pattern after you make a heading adjustment with the helm or the soft keys (page 3), select the center soft key twice.

Circles Pattern



The circles pattern steers the boat in a continuous circle, in a specified direction, and at a specified time interval.

Setting Up the Circles Pattern

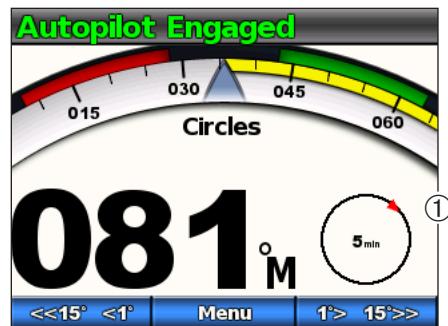
You can adjust the time the autopilot takes to complete the circle. The default value creates a circle that takes 5 minutes to complete.

1. From the heading screen, select **Menu > Pattern Steering > Circles > Time**.
2. Select  or  to set the time.
3. Select **Done**.

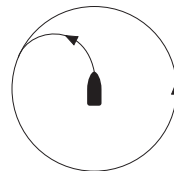
Following the Circles Pattern

1. From the heading screen, select **Menu > Pattern Steering > Circles**.
2. Select **Engage**.
3. Select an option:
 - Select  to begin a clockwise turn.
 - Select  to begin a counter-clockwise turn.

The autopilot follows the circles pattern, and the heading screen shows the time of the circles pattern ①.



The autopilot positions the boat so that the circle pattern is centered on the location at which you engage the pattern.





TIP: To quickly resume a pattern after you make a heading adjustment with the helm or the soft keys ([page 3](#)), select the center soft key twice.

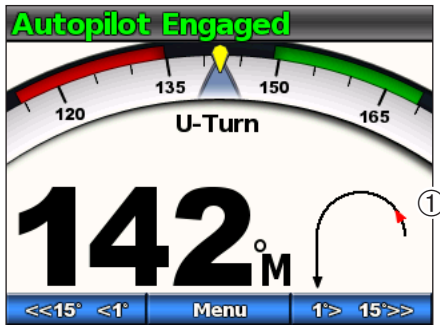
U-Turn Pattern

The u-turn pattern turns the boat around 180° and maintains the new heading. There are no settings to adjust for the u-turn pattern.

Following the U-Turn Pattern

1. From the heading screen, select **Menu > Pattern Steering > U-Turn**.
2. Select **Engage**.
3. Select an option:
 - Select  to begin a starboard turn.
 - Select  to begin a port turn.

The autopilot follows the u-turn pattern, and the heading screen shows the direction of the turn ①.



When the u-turn is completed, the autopilot maintains the new heading.

TIP: To quickly resume a pattern after you make a heading adjustment with the helm or the soft keys ([page 3](#)), select the center soft key twice.

Man Overboard Pattern

The man overboard pattern turns the boat around with the intent of running alongside the location where the man overboard pattern was initiated. There are no settings to adjust for the man overboard pattern.



Following the Man Overboard Pattern

WARNING

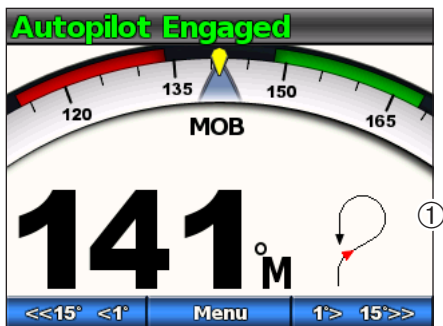
The man overboard pattern is not determined by GPS and is affected by wind, current, and speed. Be ready to adjust the throttle and take the helm to avoid harm to a person in the water.

CAUTION

The boat must be below planing speed when using this pattern.

1. From the Heading screen, select **Menu > Pattern Steering > Man Overboard**.
2. Select **Engage**.
3. Select an option:
 - Select  to begin a starboard turn.
 - Select  to begin a port turn.

The autopilot follows the man overboard pattern, and the heading screen shows the direction of the turn ①.



TIP: To quickly resume a pattern after you make a heading adjustment with the helm or the soft keys (page 3), select the center soft key twice.

Cancelling a Steering Pattern

While following a steering pattern, perform one of the following actions:

- Physically steer the boat at the helm (if your autopilot is equipped with Shadow Drive).
- Use the soft keys to manually adjust the heading.
- Select **STBY**.

GPS Steering Patterns

⚠ CAUTION

You are responsible for the safe operation of your boat. Do not begin a GPS pattern until you are certain that the water is clear of obstacles.

The autopilot can steer the boat along a route defined by your GPS device, or in preset patterns based on a GPS location (waypoint). To use GPS steering, you must have a compatible GPS device connected to the autopilot using NMEA 2000 or NMEA 0183. For more information on connecting a compatible GPS device, see the autopilot installation instructions.

GPS steering patterns are based on a GPS waypoint to which you are actively navigating using your optional GPS device. This waypoint is called the active waypoint.

Route To

The autopilot steers the boat according to a route defined on your chartplotter. Your GHC 10 must be connected to a NMEA 2000 or NMEA 0183 compatible chartplotter to use route to.

Following the Route To Pattern

Before you can begin using route to, you must define a route on your chartplotter. Refer to the owner's manual included with your chartplotter for information on how to define a route.

From the heading screen, select **Menu > GPS Steering > Route To**.



The autopilot steers your boat according to the route defined on your chartplotter, and the heading screen shows the distance to the next turn ① and distance off course ②.



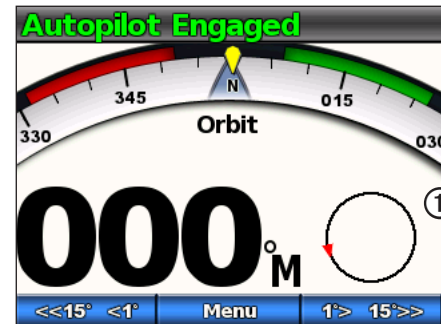
Orbit Pattern

The orbit pattern steers the boat in a continuous circle around the active waypoint (page 8). The size of the circle is defined by your distance from the active waypoint when you begin the orbit pattern. There are no settings to adjust.

Following the Orbit Pattern

1. From the heading screen, select **Menu > GPS Steering > Orbit > Engage**.
2. Select an option:
 - Select  to begin a clockwise turn.
 - Select  to begin a counter-clockwise turn.

The autopilot steers your boat in a continuous circle around the active waypoint, and the heading screen shows the direction of orbit ①.





Cloverleaf Pattern



The cloverleaf pattern steers the boat to repeatedly pass over an active waypoint. When you begin the cloverleaf pattern, the autopilot drives the boat toward the active waypoint and begins the cloverleaf pattern.

Setting up the Cloverleaf Pattern

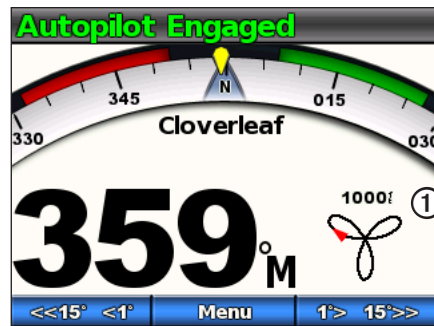
You can adjust the distance from the waypoint at which the autopilot turns your boat for another pass over the waypoint. The default setting turns the boat at a range of 1000 ft. (300 m) from the active waypoint.

1. From the heading screen, select **Menu** > **GPS Steering** > **Cloverleaf** > **Length**.
2. Select  or  to set the length.
3. Select **Done**.

Following the Cloverleaf Pattern

1. From the heading screen, select **Menu** > **GPS Steering** > **Cloverleaf** > **Engage**.
2. Select an option:
 - Select  to begin a starboard turn.
 - Select  to begin a port turn.

The autopilot steers your boat in a continuous cloverleaf pattern over the active waypoint, and the heading screen shows the cloverleaf turn direction and distance ①.





Search Pattern



The search pattern steers the boat in increasingly larger circles outward from the active waypoint, forming a spiral pattern. When you begin the search pattern, the autopilot drives the boat to the active waypoint and begins the pattern.

Setting up the Search Pattern

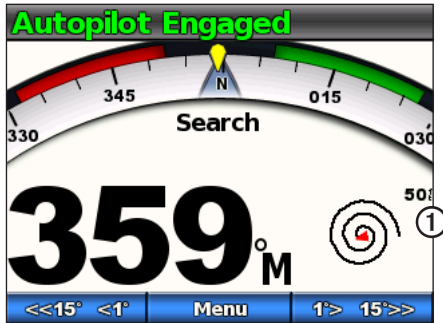
You can adjust the distance between each circle in the spiral. The default distance between the circles is 50 ft. (20 m).

1. From the heading screen, select **Menu** > **GPS Steering** > **Search** > **Spacing**.
2. Select  or  to set the spacing.
3. Select **Done**.

Following the Search Pattern

1. From the heading screen, select **Menu > GPS Steering > Search > Engage**.
2. Select an option:
 - Select  to begin a starboard turn.
 - Select  to begin a port turn.

The autopilot follows the search pattern around the active waypoint, and the heading screen shows the spacing of the search pattern ①.



Cancelling a GPS Steering Pattern

While following a GPS steering pattern, perform one of the following actions:

- Physically steer the boat at the helm (if your autopilot is equipped with Shadow Drive).
- Use the soft keys to manually adjust the heading.
- Select **STBY**.

Sailboat Autopilot Operation

⚠ CAUTION

When engaged, the autopilot controls only the rudder. You and your crew remain responsible for the sails while the autopilot is engaged.

In addition to heading hold, you can use the autopilot to maintain a wind hold. You can also use the autopilot to control the rudder while tacking and gybing.

Heading Hold

You can engage the autopilot heading hold function to maintain your current heading without steering the helm (page 2).

Engaging Heading Hold

From the heading screen, select **Engage**.

The autopilot steers your boat to maintain the current heading.

Heading Adjustment

You can adjust the heading using the soft keys on the autopilot when the autopilot is engaged. You must set the autopilot to standby to adjust the heading using the helm.

Adjusting the Heading with the Autopilot

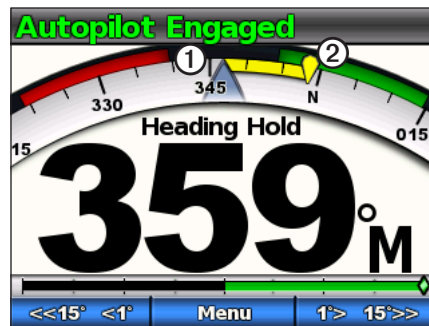
You can adjust the heading using step steering on the autopilot.

NOTE: If the autopilot is steering a route (page 15), manually adjusting the heading cancels the route.

Select an option:

- Select **<<15° <1°** or **1° >15°>>** to steer the boat in increments of 1°.
- Hold **<<15° <1°** or **1° >15°>>** to steer the boat in larger increments. The increment size is shown on the soft key.

The autopilot steers your boat, and the heading screen shows your actual heading ① and intended heading ②.



Adjusting the Step Steering Increments

1. From the heading screen, select **Menu > Step Turn Size**.
2. Select **↑** or **↓** to set the step turn size.
3. Select **Done**.

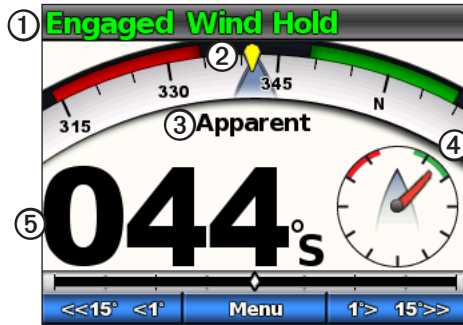
Wind Hold

You can set the autopilot to maintain a specific bearing relative to the current wind angle. Your device must be connected to a NMEA 2000 or NMEA 0183 compatible wind sensor to perform a wind hold or a wind-based tack or gybe.

Wind Hold Screen

The heading screen displays the status of the autopilot. When the autopilot is not engaged, select **Wind Hold** to activate wind hold.

The autopilot steering heading screen changes to include new information related to wind hold.



①	Autopilot status
②	Compass displaying current heading
③	Wind type: true or apparent

④	Bearing relative to wind angle
⑤	Wind gauge: current wind angle

Engaging Wind Hold From Heading Hold

With heading hold engaged, select **Menu > Wind Hold**.

The autopilot steers your boat to maintain the same heading relative to the wind direction, and the heading screen shows the wind gauge.

Using Wind Hold to Aid Raising and Lowering Sails

1. Engage wind hold.
2. Use the soft keys to adjust the wind hold direction to 0°.

The autopilot steers your boat directly into the wind, which is ideal for raising and lowering sails.

Wind Hold Adjustment

You can adjust the wind hold angle using the soft keys on the autopilot when wind hold is engaged.

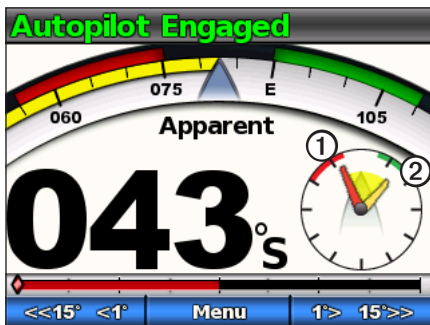
Adjusting the Wind Hold Angle with the Autopilot

You can adjust the wind hold angle using step steering on the autopilot.

Select **<<15° <1°** or **1> 15°>>** to adjust the wind hold angle in increments of 1°.

Hold **<<15° <1°** or **1> 15°>>** to adjust the wind hold angle in larger increments. The increment size is shown on the soft key and is the same as the step steering increment ([page 12](#)).

The heading dial on the wind screen shows your actual heading ① and intended heading ② while the autopilot steers the boat.



Tack and Gybe

You can set the autopilot to perform a tack or gybe while heading hold or wind hold is engaged.

Tack and Gybe Settings

Settings that define how the autopilot performs a tack or gybe are set up during the installation. However, if the autopilot is not performing a tack or gybe in a safe or satisfactory manner, you may want to adjust the following settings:

- Heading Hold Tack Angle ([page 17](#))
- Tack/Gybe Delay ([page 17](#))
- Gybe Inhibitor ([page 17](#))
- Wind Hold Type ([page 18](#))
- Wind Limiter ([page 18](#))

Tacking and Gybing from Heading Hold

Before you begin a tack or gybe from heading hold, you must set the heading hold tack angle ([page 17](#)).

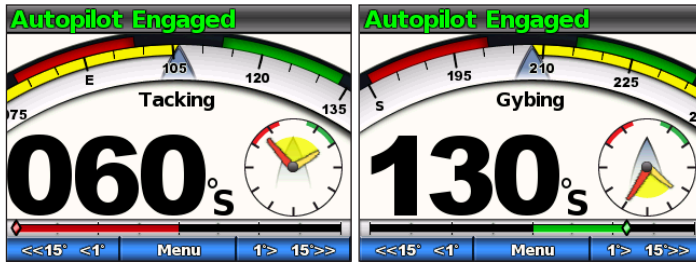
1. Engage heading hold ([page 3](#)).
2. Select **Menu > Tack/Gybe**.
3. Select **<** or **>** to choose a direction.

The autopilot steers your boat through a tack or gybe, and the heading screen shows a “Tacking” message until the maneuver is complete.

Tacking and Gybing from Wind Hold

1. Engage wind hold (page 13).
2. Select **Menu** > **Tack/Gybe**.
3. Select **TACK** or **GYBE**.

The autopilot steers your boat through a tack or gybe, and the wind hold screen shows the compass and wind gauges with yellow highlights that indicate the direction and progress of the tack or gybe.



TIP: You can begin a tack or gybe directly from the heading hold or wind hold screen.

Select an option:

- To begin a tack or gybe to port, hold the left and center soft keys for one second.
- To begin a tack or gybe to starboard, hold the right and center soft keys for one second.

Route To

⚠ CAUTION

Garmin recommends using route to only under motor power. Using route to while under sail can cause an unexpected gybe, risking damage to your sailboat. Unattended sails and rigging can be damaged or cause injury to any crew or passengers during an unexpected gybe maneuver.

The autopilot steers the boat according to a route defined on your chartplotter. Your GHC 10 must be connected to a NMEA 2000 or NMEA 0183 compatible chartplotter to use route to.

Using Route To

Before you can begin using route to, you must define a route on your chartplotter. Refer to the owner's manual included with your chartplotter for information on how to define a route.

From the heading screen, select **Menu** > **Route To**.

The autopilot steers your boat along the route defined on your chartplotter, and the heading screen shows the distance to the next turn ① and the distance off course ②.



Settings

You can customize system, remote control, and user settings.

System Settings

From the heading screen, select **Menu > Setup > System**.

- **Units**—set the units of measure used to represent values displayed on the GHC 10.
 - **System Units**—units used for every measurement displayed by the GHC 10. You can select **Statute** (mi., ft.), **Metric** (km, m), **Nautical** (nm, ft.), or **Metric Nautical** (nm, m).
 - **Helm Displacement**—unit used for displacement volume of the hydraulic steering pump, typically indicated on the helm. You can select **Cubic Inches** (cu. in.) or **Cubic Centimeters** (cc).
- **Heading**—set the reference used in calculating heading information.
 - **Magnetic**—calculates the heading based on magnetic north.
 - **True**—calculates the heading based on true north.
- **Variance**—set the variance from true north. Variance is available only when the Heading is set to **True**.
 - **Auto**—automatically determines the ideal variance setting.
 - **User**—you define the variance setting.
- **Beeper**—set whether the device makes sounds when you select a key or when an alarm sounds.
 - **Alarms Only**—beeps only when an alarm sounds.
 - **On (Keys & Alarms)**—beeps when you select a key and when an alarm sounds.

- **Auto Power**—enables the device to turn on automatically when the NMEA 2000 network turns on.
- **Unit Voltage**—the device displays an alert and sounds an alarm when the battery reaches a specified voltage. When you select On, you must specify the voltage at which the alarm sounds and the alert displays.
- **Language**—set the on-screen language.
- **Operating Mode**—set the device to operate normally or in store demonstration mode.
- **System Information**—shows the device ID numbers and software information for the GHC and GHP.
- **Factory Defaults**—select Reset to restore the device to factory defaults.

GHC 10 Remote Settings

Connecting the GHC 10 Remote

Before using the GHC 10 remote, you must connect the remote to the GHC 10 and configure the settings.

You can connect one GHC 10 remote (optional) to a GHC 10.

1. From the Heading screen, select **Menu > Setup > Remote**.
2. Select **Search for Remote**, then hold the left and right double-arrow keys on the remote. The autopilot searches for and pairs with the GHC 10 remote.

Configuring the GHC 10 Remote

1. From the Heading screen, select **Menu > Setup > Remote**.
2. Select an option:
 - **Button 1 Action**—set the function performed by the first button on the remote.
 - **Button 2 Action**—set the function performed by the second button on the remote.
 - **Button 3 Action**—set the function performed by the third button on the remote.
 - **Disconnect Remote**—disconnect the remote from the device.

GHC 10 User Settings

CAUTION

On a GHP 10 autopilot system, if you disable the Shadow Drive, you must set the autopilot to standby (**STBY**) to manually control the helm. Use caution when disabling the Shadow Drive.

On a GHP 10V autopilot system, if you disable the Shadow Drive, any adjustment to the helm completely disengages the autopilot.

Although the autopilot is configured for your boat during installation, you may find it necessary to adjust it depending on sea conditions.

Select **Menu > Setup > User Autopilot Configuration**.

- **Shadow Drive™**—enables the device to enter standby mode automatically when you manually steer the helm, then engages the heading hold again when you hold a steady course for a few seconds.

NOTE: The Shadow Drive is only available on hydraulic steering

systems.

- **Shadow Drive Sensitivity**—Shadow Drive is activated when a certain amount of pressure is placed on the helm. Adjust this setting if the Shadow Drive is being falsely tripped or not activating properly. If the autopilot disengages while the helm is steady, decreasing the sensitivity value can help alleviate unwanted disengaging. If the Shadow Drive does not disengage the autopilot correctly when you take the helm, increasing the sensitivity value may help.

NOTE: This setting does not apply to a GHP 10V or GHP 12 autopilot system.

- **Sea State Filtering**—adjust the sea state filtering to set the heading responsiveness. Set sea state filtering to 0% under normal operating conditions. Increase sea state filtering in choppy conditions at low speeds to reduce rudder activity and reduce wear on the autopilot system.
- **Direction Control**—enable the device to set the drive direction to forward or reverse from the heading screen when the autopilot is in standby mode. See [page 4](#) for information about **using** direction control.
- **Heading Hold Tack Angle**—(sailboats only) set the fixed angle at which the autopilot performs a tack or gybe maneuver with heading hold engaged. Select an angle from 1° to 180°.
- **Tack/Gybe Delay**—(sailboats only) the autopilot delays steering a tack or gybe after you initiate the maneuver using the remote or the device. The delay counts down on the heading screen, and sounds an alarm when the autopilot begins the tack or gybe. Select a delay from 0 to 15 seconds.
- **Gybe Inhibitor**—(sailboats only) prevents the autopilot from performing a gybe. The gybe inhibitor does not prevent you from manually performing a gybe using the helm or step steering.

- **Wind Hold Type**—(sailboats only) autopilot steers to apparent wind or true wind when wind hold is engaged. For both true and apparent wind, wind angle is calculated in reference to the bow of the boat, and is represented in degrees to port or starboard.

NOTE: The option to switch between wind-hold types is only available if your boat is equipped with both a wind sensor and a water speed sensor.

- Apparent wind speed reflects the flow of air actually experienced while on a boat. **Apparent** is the only available wind hold option if your boat is equipped with a wind sensor and no water speed sensor.
 - True wind data reflects the flow of air experienced with reference to the speed of the boat. Select **True** or **Apparent** if your boat is equipped with a wind sensor and a water speed sensor.
- **Wind Limiter**—(sailboats only) during a gybe, the wind limiter slows the rate of turn as the wind direction approaches the stern. If the rate of turn is too slow, decrease the wind limiter value. If the rate of turn is too fast, increase the wind limiter value.

Power Mode

You can enable a power mode to help reduce rudder activity.

Changing the Power Mode

1. From the heading screen, select **Menu > Setup > User Autopilot Configuration**.
2. Select an option:
 - Select **Power Mode > Economy** to enable economy power mode.
 - Select **Power Mode > Normal** to return to normal operation.

Customizing the Power Mode

You can adjust the level of rudder activity while in economy power mode.

1. From the heading screen, select **Menu > Setup > User Autopilot Configuration > Power Saver**.
2. Select a percentage and select **Done**.

A higher percentage setting will reduce rudder activity at the expense of heading performance. Therefore, the higher you set the percentage, the more your course will deviate before the autopilot corrects it.

TIP: In choppy conditions at low speeds, increasing the Power Saver percentage will reduce rudder activity and reduce wear on the autopilot system.

Appendix

Configuring the Autopilot

NOTICE

Changes made to the configuration of the autopilot directly affect the behavior of the autopilot, and should be made by an authorized installer. Unnecessary adjustments of the autopilot configuration may render the autopilot inoperable.

The autopilot is configured for your boat during the installation process, and the main autopilot configuration settings rarely need to be adjusted. If the autopilot is not working correctly, contact your installer.

For advanced autopilot configuration, see the installation instructions included with your autopilot.

Registering Your Product

1. Go to my.garmin.com.
2. Follow the on-screen instructions.
3. Keep the original sales receipt, or a photocopy, in a safe place.

Contacting Garmin Product Support

Contact Garmin Product Support if you have any questions about this product.

- In the USA, go to www.garmin.com/support, or contact Garmin USA by phone at (913) 397.8200 or (800) 800.1020.
- In the UK, contact Garmin (Europe) Ltd. by phone at 0808 2380000.
- In Europe, go to www.garmin.com/support and click **Contact Support** for in-country support

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Declaration of Conformity (DoC)

Hereby, Garmin, declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. To view the full Declaration of Conformity, go to www.garmin.com/compliance.



The GHP 10/12 and the GHC 10 are NMEA 2000® certified.

Error and Warning Messages

Error Message	Cause	Autopilot Action
No rudder position feedback sensor detected	The autopilot can't detect a rudder feedback device or valid rudder position.	<ul style="list-style-type: none"> Alarm sounds for 5 seconds Drive unit is disabled Autopilot transitions to Standby
Rudder position data is invalid.	The autopilot loses valid rudder position feedback data.	<ul style="list-style-type: none"> Alarm sounds for 5 seconds Drive unit is disabled Autopilot transitions to Standby
Autopilot is not receiving navigation data. Autopilot placed in heading hold.	The autopilot is no longer receiving valid navigation data while performing a Route-To. This message will also be shown if navigation is stopped on a chartplotter prior to disengaging the autopilot.	<ul style="list-style-type: none"> Alarm sounds for 5 seconds Autopilot transitions to heading hold
Connection with autopilot lost	The GHC lost connection with CCU.	N/A
Lost wind data	The autopilot is no longer receiving valid wind data.	<ul style="list-style-type: none"> Alarm sounds for 5 seconds Autopilot transitions to heading hold
Low GHC supply voltage	The supply voltage level is below the value specified in the low voltage alarm menu.	N/A
Rudder sensor is not calibrated.	The drive unit rudder sensor has not been calibrated. Calibrate the rudder.	<ul style="list-style-type: none"> Alarm sounds for 5 seconds Drive unit is disabled Autopilot transitions to Standby
Rudder near limit. Center the rudder.	The rudder remains near its limit (rudder stop) for more than 5 seconds.	<ul style="list-style-type: none"> Sounds alarm Continues in normal operation
"Rudder near limit" flashes on the title bar	The autopilot has driven the rudder near its limit (rudder stop). The autopilot cannot drive the rudder further in this direction.	Continues in normal operation
Warning! A gybe has been initiated. Would you like to continue?	The autopilot has detected that the user has attempted to initiate a gybe.	<ul style="list-style-type: none"> Sounds alarm GHC 10 prompts for user input. Selecting Gybe initiates the gybe, and selecting Cancel cancels the gybe.

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