**GARMIN** 

# FORCE™ TROLLING MOTOR

#### **Getting Started**

#### **↑** WARNING

Do not run the motor when the propeller is out of the water. Contact with the rotating propeller may result in severe injury.

Do not use the motor in areas where you or other people in the water may come into contact with the rotating propeller.

Always disconnect the motor from the battery before cleaning or servicing the propeller to avoid injury.

You are responsible for the safe and prudent operation of your vessel. The autopilot features on the trolling motor are tools that enhance your capability to operate your boat. They do not relieve you of the responsibility of safely operating your boat. Avoid navigational hazards and never leave the motor controls unattended.

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

Use caution when using operating the trolling motor near hazards in the water, such as trees, shallow rocks, docks, pilings, and other boats.

#### **↑** CAUTION

When using the autopilot features, be prepared for sudden stops, acceleration, and turns.

When stowing or deploying the motor, be aware of the risk of entrapment or pinching from moving parts, which can result in injury.

When stowing or deploying the motor, be aware of slick surfaces around the motor. Slipping when stowing or deploying the motor may result in injury.

#### **Installing Batteries**

The remote control operates using two AA batteries (not included). Use lithium batteries for best results.

- 1 Turn the D-ring counter-clockwise, and pull up to remove the cover.
- 2 Insert two AA batteries, observing polarity



3 Replace the battery cover, and turn the D-ring clockwise.

#### Attaching a Lanyard

1 Starting from the back of the remote control, insert the loop of the lanyard ① through the slot.



- 2 Thread the other end of the lanyard ② through the loop, and pull it tight.
- 3 If necessary, place the lanyard around your neck or wrist to tether it during use.

#### **Deploying the Motor from the Stowed Position**

- 1 Disengage the safety strap.
- 2 Pull the pull-cable back until it stops to release the latch, and continue to hold it tight.
- 3 Lift the motor up and forward using the pull-cable, then lower it slowly into the deployed position.
- 4 If necessary, push down on the mount arm to lock the motor in the deployed position.

#### Adjusting the Depth of the Trolling Motor

- 1 Move the motor so that it stops halfway between the stowed and deployed positions.
- 2 Loosen the collar at the base of the steering system housing.



- 3 Raise or lower the depth of the trolling motor.
- 4 Tighten the collar at the base of the steering system housing.
- 5 Select an action:
  - If you are deploying the trolling motor, move the motor to the fully deployed position to check the depth.
  - If you are stowing the trolling motor, move the motor to the stowed position to check the depth.
- **6** Repeat this procedure if necessary to set the correct depth for the deployed or stowed position.

#### Stowing the Motor from the Deployed Position

#### NOTICE

You must allow the motor to stop rotating completely before moving it to the stowed position. If the motor is rotating when you move it to the stowed position, it may damage the steering system.

- 1 Pull the pull-cable up until it stops to release the latch, and continue to hold it tight.
- 2 Lift the pull-cable up and backward to lift and lower the motor slowly into the stowed position.

**NOTE:** You may need to adjust the depth of the trolling motor so it rests correctly on the mount base in the stowed position (*Adjusting the Depth of the Trolling Motor*, page 2). If it is adjusted too shallow, it may press on the gas spring. If it is adjusted too deep, it may hang off the end of the mount base.

- **3** If necessary, push down on the steering system housing to lock it in the stowed position.
- **4** Secure the safety strap (Securing the Safety Strap, page 2).

#### **Securing the Safety Strap**

The safety strap holds the motor securely to the base in the stowed position and prevents unintended deployment.

1 With the motor in the stowed position, lift the long end of the strap ① over the top of the motor.



- 2 Feed the end of the strap through the buckle ② on the other end of the strap.
- **3** Pull the strap through the buckle until it holds the motor securely to the mount.
- **4** Pull the strap away from the buckle, and push down to fasten it to the other side of the strap.

#### **Updating the Software**

You should update the trolling motor software for the best performance.

Use the ActiveCaptain® app on your compatible smartphone to download and install software updates on the trolling motor.

See the online owner's manual for more information (Downloading the Manuals from the Web, page 6).

#### **Operation**

You can use the remote control, the foot pedal, a compatible Garmin° chartplotter, or any combination of these devices to operate the trolling motor.

**NOTE:** Some features available when using the remote control and chartplotter are not available when using the foot pedal only.

#### **Trolling Motor Display Panel**

The display panel on the trolling motor mount shows important information at a glance.



1	Speed	Shows the motor speed level.
= 4	Trolling motor battery status	Green: the motor battery power is good. Yellow: the motor battery power is low. Red: the motor battery power is critically low.
**	GPS signal status	Green: the motor has acquired a GPS position. Yellow: the motor has a poor GPS signal. Red: the motor does not have a GPS signal.
\$	Motor status	Shows the status of the trolling motor ( <i>Status Indicator</i> , page 3).

(1)	Power	Hold to turn the motor off.
		NOTE: By default, the trolling motor turns on automatically when it receives power. It is not necessary to push this button to turn it on.
		When the propeller is turning, press to stop the propeller.
		Press three times to enter pairing mode.
<b>-</b> 0	Propeller status	Illuminates when the propeller is enabled.
<b>1</b>	Heading hold status	Illuminates when heading hold is enabled.
<b>‡</b>	Anchor lock status	Illuminates when anchor lock is enabled. Anchor lock uses the trolling motor to hold your position.

#### Status Indicator

Green	Normal operation
Red	Solid: system booting
	Blinking: system error
Blue	Pairing mode
Yellow	Recovery mode (for software updates and recovery procedures)

#### **Remote Control Keys**



Key	Description
① (J	Hold to turn the remote control on and off.
*\o	Press to enable and hold the cruise control at the current speed over ground (SOG).  Press to disable the cruise control and return to manual speed control.
<b>=</b> ©	If the propeller is enabled, press to set the it to full speed. If the propeller is disabled, press to enable the propeller and set it to full speed.  Press again to return to the previous speed and propeller state.
Ŵ	Press for manual control.  Hold to steer using gestures ( <i>Using Gesture Controls to Steer</i> , page 5).
<u> </u>	Press to enable and disable the propeller.
<b>()</b>	Press to navigate the menu.  When in the menu, press > to select a menu item, and press (to go back.  When in anchor lock, press to jog the anchor lock position forward, backward, left, or right.  When in heading hold or manual control, press (and) for single-degree step turns, or hold for steering in five-degree increments.  Press A and For incremental speed changes, or hold for continuous speed changes.

Key	Description
*	Press to enable heading hold (set and maintain the current heading).  Press to disable heading hold, stop the propeller, and resume manual control.  Hold to set the heading hold by pointing the remote ( <i>Using Gesture Controls to Set and Adjust Heading Hold</i> , page 5).
\$	Press to enable anchor lock. Anchor lock uses the trolling motor to hold your position.  When in anchor lock, press to disable heading hold and return to the previous steering mode.  Hold to jog the anchor lock position by pointing the remote (Using Gesture Controls to Adjust Your Anchor Lock Position, page 5).
	Press to open the menu. Press to exit the menu.
2	Press to mark a waypoint.
1 through 4	Press to open the shortcut for the Garmin chartplotter assigned to the key. <sup>1</sup>

#### **Remote Control Screen**



1	Shows the operational status of the trolling motor. For example, when in manual control, Manual is shown, and when the heading hold is enabled, Heading Hold is shown, along with the heading-hold set point in degrees.
<u>-</u> +	Shows the trolling motor battery status.  Green: the motor battery power is good.  Yellow: the motor battery is low.
	Red: the motor battery power is critically low.
	TIP: You can view the remote control battery level by pressing
0	Shows the status of the propeller. When the propeller icon is shown, the propeller is enabled. When the propeller icon is not shown, the propeller is disabled.
**	Shows the GPS signal strength of the trolling motor.
PROP	Shows the speed level of the propeller.
SOG	Shows the measured speed over ground (SOG) in the specified units.

#### **Foot Pedal**

You can use the foot pedal to operate the trolling motor.



1	Momentary propeller control	Hold to enable the propeller at the set speed. Release to disable the propeller.
2	Speed wheel	Rotate the wheel away from you to increase the propeller speed or cruise control speed.  Rotate the wheel toward you to decrease the propeller speed or cruise control speed.  NOTE: The speed wheel is inactive when anchor lock is enabled.
3	Steering pedal	Push the pedal with your toes to turn the motor clockwise. Push the pedal with your heel to turn the motor counter-clockwise.  NOTE: When anchor lock or heading hold is
		enabled, or you are following a route, press the pedal to resume manual control at the previous propeller speed.
4	Status indicator	Shows the status of the foot pedal (Status Indicator, page 4).
5	Continuous propeller control	Press to enable and disable the propeller.
<b>⑥</b>	Heading hold	Press to set and maintain the current heading. Press to disable heading hold, stop the propeller, and resume manual control.
⑦ ♣	Anchor lock	Press to enable anchor lock . Anchor lock uses the trolling motor to hold your position.  Press to disable anchor lock and return to the previous steering mode.

#### Status Indicator

The LED on the foot pedal indicates the foot pedal status.

Flashes green, then stops	The foot pedal is powering on.
Flashes blue, then stops	The foot pedal is connected to the trolling motor.
Flashes green when pushing a button	The foot pedal is sending a command for the button being pushed.
Flashes red when pushing a button	The foot pedal is not connected to the trolling motor.
Blinking red	The foot pedal batteries are low and should be replaced.
Off	The LED turns off when the pedal is connected to the trolling motor and not sending commands. This prolongs battery life.

#### **Gesture Controls**

You can point or move the remote control to interact with the trolling motor. You must calibrate the compass in the trolling motor (*Calibrating the Trolling Motor*, page 5), and the compass in the remote control (*Calibrating the Remote Control*, page 5) before you can use gesture controls.

<sup>&</sup>lt;sup>1</sup> Requires a connection to a compatible Garmin chartplotter.

#### **Using Gesture Controls to Steer**

You can steer the motor by moving the remote control.

- 1 If necessary, engage the propeller.
- 2 Hold .
- 3 While holding , move the remote control to the left or right to steer port or starboard.
- 4 Release to stop steering.

#### Using Gesture Controls to Set and Adjust Heading Hold

You can use the remote control to set and adjust the heading hold in a specified heading.

- 1 If necessary, engage the propeller.
- 2 Point the remote control toward where you want to engage or change the heading hold.
- 3 Hold 1.

The motor engages or changes the heading hold, and steers the boat in the direction you are pointing while you hold the key.

4 Release \$\frac{1}{2}\$ to set the heading hold direction.

## Using Gesture Controls to Adjust Your Anchor Lock Position

You can use the remote control to adjust your position when in anchor lock.

- 1 If necessary, engage anchor lock.
- 2 Hold 光.
- 3 Point the remote control in the direction you want to move your anchor lock position.

Your position jogs 1.5 m (5 ft.) in the direction you point.

- **4** Repeat the previous step until the anchor lock is in the location you want.
- 5 Release ₺.

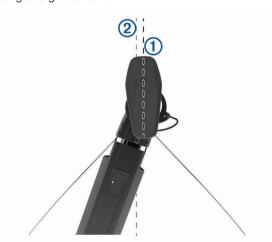
### **Basic Configuration**

You should perform these basic configuration procedures before using your trolling motor. For a complete list of settings and configuration options, see the online owner's manual (Downloading the Manuals from the Web, page 6).

#### **Setting the Bow Offset**

Based on the installation angle, the trolling motor may not align with the center line of your boat. For the best results, you should set the bow offset.

1 Using the remote control, adjust the angle of the trolling motor ① so it aligns with the center line of your boat ②, pointing straight forward.



2 On the remote control, select 

Settings > Trolling Motor > Calibrate > Bow Offset.

3 Repeat this procedure if necessary.

#### Calibrating the Trolling Motor

You must calibrate the compass in the trolling motor before you can use the autopilot features.

- 1 Drive the boat to an open area of calm water.
- 2 On the remote control, select **=** > Settings > Trolling Motor > Calibrate > Compass.
- 3 Follow the on-screen instructions.

#### **Calibrating the Remote Control**

#### **NOTICE**

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

You must calibrate the compass in the remote control before you can control the motor using gestures. If the gesture controls are not working properly after calibration, you can repeat this process as often as needed.

- 1 Select => Settings > Remote > Calibrate.
- 2 Select Start, and follow the on-screen instructions.

#### **Gain Settings**

If the autopilot features, such as heading hold and anchor lock, do not perform as expected, you may need to adjust the gain settings.

See the online owner's manual for more information (Downloading the Manuals from the Web, page 6).

#### **Connecting to a Chartplotter**

Your compatible Garmin chartplotter must have the latest software version installed before you can connect the trolling motor.

You can connect the trolling motor wirelessly to a compatible Garmin chartplotter on your boat. After you connect to a compatible chartplotter, you can control the trolling motor from the chartplotter in addition to the remote control and foot pedal. Download the latest version of your chartplotter's owner's manual for complete operation instructions.

- **1** Turn on the chartplotter and the trolling motor.
- 2 Make sure that the chartplotter is hosting a wireless network.
  NOTE: If you have multiple chartplotters installed, only one is the wireless network host. Consult your chartplotter's owner's manual for more information.
- 3 On the chartplotter, select Settings > Communications > Wireless Devices > Garmin Trolling Motor > Start.
- 4 On the trolling motor display panel, press three times to enter pairing mode.
  - $\ensuremath{\mathcal{Z}}$  on the trolling motor display panel illuminates blue as it searches for a connection to the chartplotter, and changes to green when the connection is successful.
- 5 After the chartplotter and trolling motor connect successfully, enable the trolling motor bar on the chartplotter to control the motor.

Download the latest version of your chartplotter's owner's manual for complete operation instructions.

#### Pairing the Remote Control

The remote control is paired with the trolling motor at the factory, but you may need to pair them again if the connection is broken.

- **1** Turn on the trolling motor.
- 2 On the trolling motor display panel, press three times to enter pairing mode.

- 3 Turn on the remote control.
- 4 On the remote control, select = > Settings > Remote > Pair

the connection is successful.

#### Pairing the Foot Pedal

The foot pedal is paired with the trolling motor at the factory, but you may need to pair them again if the connection is broken.

- 1 Turn on the trolling motor.
- 2 On the trolling motor display panel, press three times to enter pairing mode.
  - con the trolling motor display panel illuminates blue as it searches for a connection.
- 3 Connect the foot pedal to power using the power cable, or insert batteries to turn it on.
- 4 Within 30 seconds of turning on the foot pedal, hold ♣ until the status LED on the foot pedal illuminates blue.
- 5 Release ₺.

The status LED on the foot pedal illuminates blue as it searches for a connection, then turns off when it pairs successfully with the trolling motor.

con the trolling motor display panel changes to green when the connection is successful.

#### More Information

#### Downloading the Manuals from the Web

You can get the latest owner's manual and translations of manuals from the Garmin website.

- 1 Go to www.garmin.com/manuals/force trolling motor.
- 2 Download the manual.

#### **Garmin Support Center**

Go to support.garmin.com for help and information, such as product manuals, frequently asked questions, videos, software updates, and customer support.

#### **Maintenance Needs and Schedule**

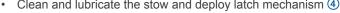
To maintain your warranty, you must perform a series of routine maintenance tasks as you prepare your motor for the season. If you use or transport the motor in dry, dusty environments (traveling on gravel roads, for example) you should perform these tasks more often during the season.

For detailed procedures and information on service and replacement parts, download the Force Trolling Motor Maintenance Manual from www.garmin.com/manuals/force trolling motor.



- Examine the power cable for wear, and patch or repair as necessary 1.
- Check the power terminals, and clean them if necessary 2.
- Lubricate the hinges and bushings 3.

- Clean and lubricate the stow and deploy latch mechanism 4.
- Check the mount rails, and replace them if necessary 5.
- Check the mount bumper, and replace it if necessary 6.
- Clean or replace the anodes in the propeller drive motor ?.





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