

# GARMIN®

## REACTOR™ 40 MECHANICAL

### THIRD-PARTY DRIVE UNIT AND RUDDER FEEDBACK UNIT WIRING REFERENCE

#### Important Safety Information

##### WARNING

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

You are responsible for the safe and prudent operation of your vessel. The autopilot is a tool that enhances your capability to operate your boat. It does not relieve you of the responsibility of safely operating your boat. Avoid navigational hazards and never leave the helm unattended.

To avoid possible personal injury and damage to your boat, the autopilot system should be installed by a qualified marine installer. Specific knowledge of marine steering and electrical systems is required for proper installation.

##### CAUTION

To avoid possible personal injury, always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding.

When in use, beware of hot surfaces on the heat-sink, motor, and solenoid components to avoid possible personal injury.

##### NOTICE

The drive unit movement must be limited by physical end stops. Failure to install end stops will cause the drive unit to act as a travel limiter and will damage the drive unit.

When drilling or cutting, always check what is on the opposite side of the surface to avoid damaging the vessel.

#### Third-Party Drive Units and Rudder Feedback Units

##### NOTICE

The wiring connection information below is provided to Garmin® by third-party drive unit/rudder manufacturers. Those manufacturers may change the recommended wiring connections at any time without notice to you or to Garmin. Garmin is not responsible for the accuracy, reliability, or timeliness of the wiring connection information provided herein. Consult your drive unit or rudder manufacturer for the most current wiring connection information before connecting your drive unit or rudder to the autopilot system.

This document contains common drive unit and rudder feedback unit wiring connections for a variety of drive units and rudder feedback units.

For the most reliable connection information, you must consult your drive unit or rudder manufacturer before connecting your drive unit or rudder feedback unit to the autopilot system.



## Drive Units

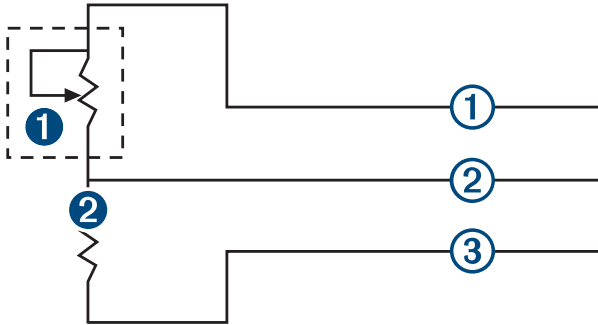
| Manufacturer        | Motor (+)<br>Red | Motor (-)<br>Black | Clutch (+)<br>Blue | Clutch (-)<br>White | Notes  |
|---------------------|------------------|--------------------|--------------------|---------------------|--|
| Raymarine®          | Red              | Black              | Red                | Blue                |  |
| Octopus™            | Red              | Black              | Green              | White               |  |
| Jefa™               | Red              | Black              | Red                | Black               |  |
| Hy-Pro™             | Red              | Black              | Red                | Black               |  |
| Lecomble & Schmitt™ | Red              | Purple             | N/A                | N/A                 | Clutch requires a Lecomble & Schmitt connector |
| Lewmar™             | Blue             | Black              | Blue               | Brown               |  |

## 3-Wire Rudder Feedback Units

| Manufacturer           | 5 Vdc<br>Red | Ground<br>Black | Feedback Signal<br>Yellow | Notes  |
|------------------------|--------------|-----------------|---------------------------|--|
| Raymarine              | Red          | Green           | Blue                      |  |
| Octopus                | Red          | Black           | White                     |  |
| Simrad™ SLF 12         | See notes    | Black           | Red                       | The SLF 12 unit requires a 12 Vdc supply. You must connect the red wire on the SLF 12 unit to an external 12 Vdc power source.   |
| VETUS™                 | See notes    | See notes       | See notes                 | To use a VETUS feedback unit, you must remove the circuit board and connect the Garmin rudder-feedback cable directly to the potentiometer on the VETUS feedback unit. |
| TMQ™                   | Red          | Blue            | Green                     |  |
| Teleflex™ Smart-stick™ | Red          | Black           | White                     |  |
| Lecomble & Schmitt     | Blue         | Brown           | Yellow                    | You must set all switches on the Lecomble & Schmitt feedback unit to <b>ON</b> .   |

## 2-Wire Rudder Rheostat Considerations

To use a 2-wire rheostat ① for rudder feedback, you must add an external resistor ② of equal resistance to the feedback unit as shown.



| Wire | Color  |
|------|--------|
| ①    | Black  |
| ②    | Yellow |
| ③    | Red    |

## 2-Wire Rudder Feedback Rheostat Units

| Manufacturer | Resistor Needed |
|--------------|-----------------|
| VDO™         | 180 ohms        |

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