

## DESCRIPTION

Seakeeper and Raymarine have teamed up to make your boating experience an even better one. We are now able to control and monitor Seakeepers using Axiom, Axiom Pro, and Axiom XL series Raymarine MFDs. Software and hardware requirements for enabling this feature can be found below.

## COMPATIBLE RAYMARINE AND SEAKEEPER HARDWARE

1. Raymarine Hardware: Axiom, Axiom Pro, and Axiom XL series units
2. Seakeeper Hardware: any Seakeeper series model with a 5" Touch Display (P/N 30298) or ConnectBox (P/N 20415)

**NOTE:** A display upgrade kit is available for some Seakeepers currently utilizing older displays.

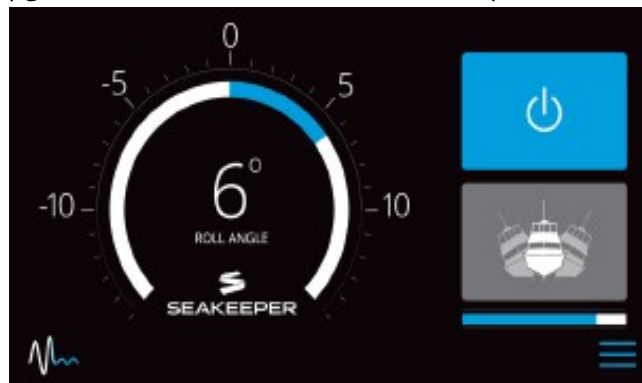


Figure 1: Seakeeper 5" Touch Display Home Screen

## SOFTWARE REQUIREMENTS

1. Raymarine Software version 3.7.70 or later is required. Raymarine Lighthouse software can be downloaded at: <http://www.raymarine.com/software-updates/>  
**NOTE:** Seakeeper is not responsible for updating Raymarine software.
2. Seakeeper 5" Touch Display software 7.29.1 or later.
3. Seakeeper ConnectBox software 1.2 or later is required.

The most recent software release is always recommended. Contact [Contact@seakeeper.com](mailto:Contact@seakeeper.com) or your local Seakeeper dealer for software update information. Visit <https://seakeeper.com/find-us/> for a complete listing of Seakeeper dealers.

## TYPE OF CONNECTION

- Raymarine MFD port: Ethernet (RayNet twist pin connector)
- Seakeeper 5" Touch Display port: M12, male, straight, D, circular connection
- Seakeeper ConnectBox Port: M12, male, straight, D, circular connection

## CONNECTING TO A SEAKEEPER 5" TOUCH DISPLAY

1. Connect the Seakeeper 5" Touch Display to the Raymarine MFD Ethernet port using a custom Seakeeper-to-RayNet cable. Seakeeper cables (Seakeeper P/N 20380 "Raymarine Ethernet Cable Assembly") are currently available for purchase from Seakeeper and are 3 m (10 ft) long.

**NOTE:** If a longer cable is needed to connect the Raymarine MFD to the Seakeeper 5" Touch Display, Seakeeper offers a 10 m cable extension (Seakeeper P/N 30330) that should be plugged into the back of the Seakeeper 5" Touch Display and the Raymarine Ethernet Cable.




Figure 2: Port for Seakeeper 5" Touch Display to MFD Connection

2. The Seakeeper end (4 pins) of the 'Raymarine Ethernet Cable Assembly' connects to the back of the Seakeeper 5" Touch Display in the port shown in Figure 2. The RayNet end (Ethernet) of the cable should connect to a "Network" port, shown in Figure 3.



Figure 3: Connect Cable 20380 to a "Network" Port on the Back of the MFD

3. Once hardware is connected, cycle power to the Seakeeper display and MFD off and then back on. Press the Settings button  on the Seakeeper 5" Touch Display and choose "Raymarine" from the MFD dropdown list, as seen in Figure 4 below.
4. The display will ask if the user wants to apply these changes. Select "Yes" and the display will reboot.

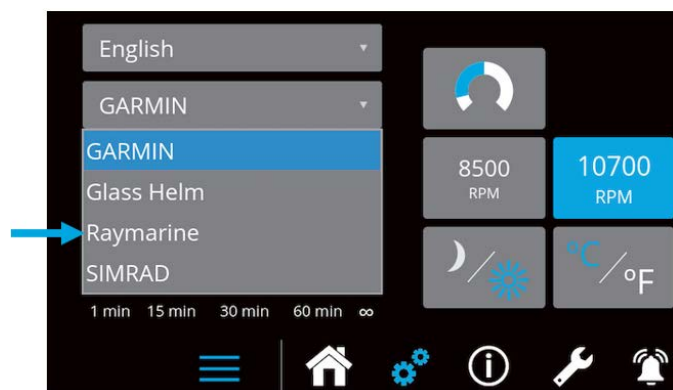


Figure 4: Seakeeper Display's Settings Screen Showing Raymarine in the MFD Dropdown Menu

5. The Seakeeper App will now be populated in the Lighthouse 3 "Installed Apps" screen, as seen below in Figure 5.

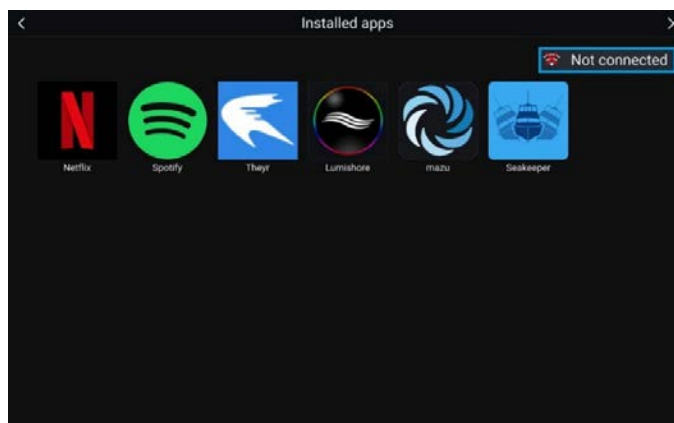


Figure 5: Raymarine MFD Screen – With Seakeeper Application Icon

### **CONNECTING TO A SEAKEEPER CONNECTBOX**

1. Connect the Seakeeper ConnectBox to the Raymarine MFD Ethernet port using two Seakeeper cables. Seakeeper-to-RayNet cable "Raymarine Ethernet Cable Assembly" (Seakeeper P/N 20380) is currently available for purchase from Seakeeper. "Seakeeper Adapter Cable" (Seakeeper P/N 30330) comes standard with the Seakeeper 1.
  - 1.1. The Raymarine Ethernet Cable is 3 m (10 ft) long and the Seakeeper Adapter Cable is 10 m long. If a total cable length of 13 m is not sufficient to reach between the Seakeeper ConnectBox and Raymarine MFD, then a second Seakeeper Adapter Cable can be purchased and added to the assembly to provide an additional 10 m of length.
  - 1.2. The Seakeeper Adapter Cable is required to be plugged into the ConnectBox. The connection on the Raymarine Ethernet Wire Harness Cable terminal does not fit on the back of the ConnectBox.
2. The Seakeeper Adapter Cable connects to the back of the Seakeeper ConnectBox using the Ethernet port highlighted in Figure 6.
3. The RayNet end (Ethernet) of the cable should connect to a "Network" port, shown in Figure 7.



Figure 6: Port for Seakeeper 5" Display to MFD Connection



Figure 7: Connect Cable 20380 to a "Network" Port on the Back of the MFD

- Once hardware is connected, cycle power to the Seakeeper and MFD off and then back on. Seakeeper ConnectBoxes are preprogrammed to be configured for Raymarine MFD's.
- The Seakeeper App will now be populated in the Lighthouse 3 "Installed Apps" screen, as seen below in Figure 8.

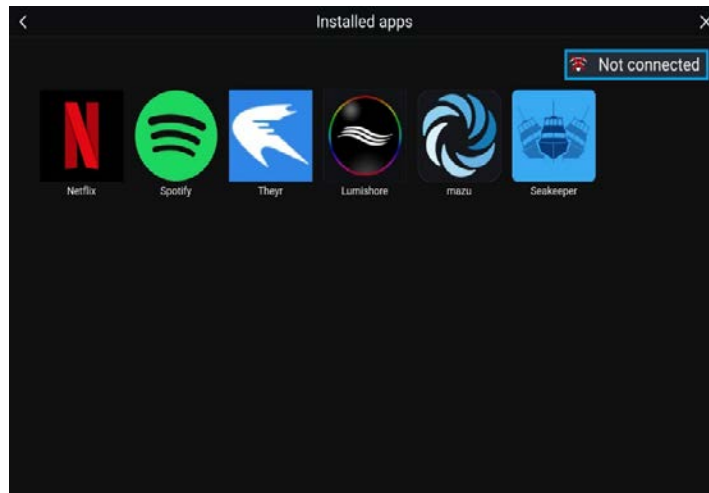



Figure 8: Raymarine MFD Screen – With Seakeeper Application Icon

## MULTI-SEAKEEPER SUPPORT

1. Raymarine hardware required: HS5 RayNet Network Switch - 5 ports (P/N: A80007).
  - 1.1 The network switch allows you to connect multiple Seakeepers over the Raymarine network:  
<http://www.raymarine.com/view/?id=3838>.
2. For Seakeeper software between 7.29.1 and 7.30.3.1821:
  - 2.1 Start by checking that the each Seakeeper 5" Touch Display onboard has a unique Seakeeper ID.
  - 2.2 Seakeeper ID can be checked/changed by holding the Settings Button  on the Seakeeper 5" Touch Display for 5 Seconds, then selecting the Seakeeper ID drop-down menu.  
**NOTE:** "DHCP Server" setting should be in its default "off" setting.
3. For Seakeeper software 7.40.0.1951 or later:
  - 3.1 The Seakeeper ID can be checked and changed by holding the Settings button on the Seakeeper 5" Touch Display for five (5) seconds, then selecting the Seakeeper ID drop-down menu shown in Figure 9. One Seakeeper unit must have the designation Seakeeper ID "1" and the other units should be identified with increasing ID numbers (2, 3, ...). For the use of a single Seakeeper unit, the ID must be Seakeeper ID "1".

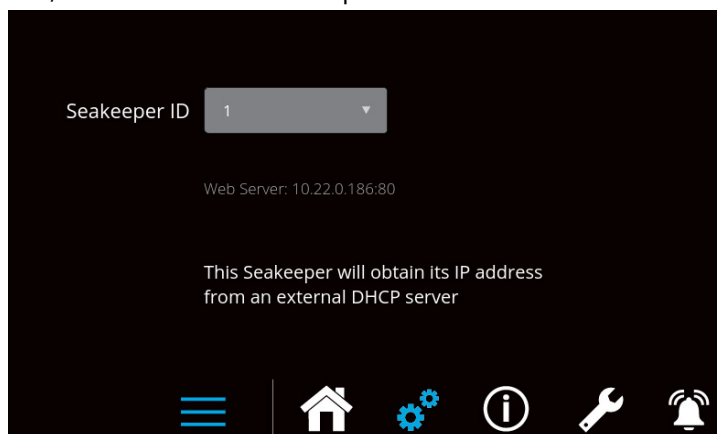


Figure 9: Raymarine Multi-Seakeeper Server Settings Screen for Seakeeper ID 1

4. Multi-Seakeeper display screens can be seen in Figure 10. The Seakeepers can all be powered on and locked and unlocked in the home screen. Toggle arrows at the top of the screen can be used to navigate to each Seakeeper's respective home screen, where specific details for each Seakeeper can be found.

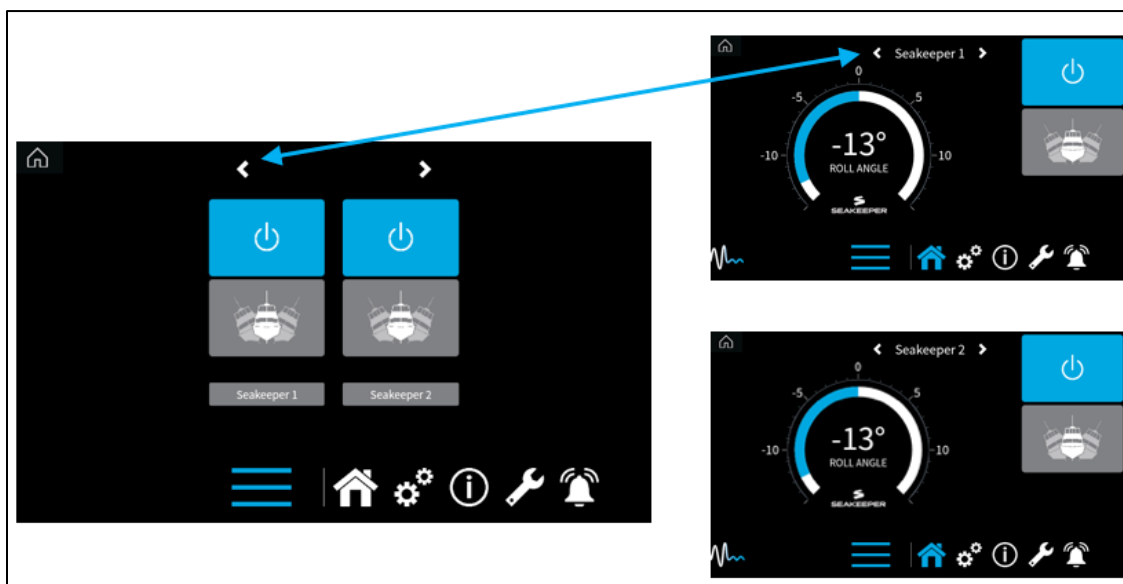


Figure 10: Multi-Seakeeper Home Page (left) Showing Seakeeper Toggle Arrows. Seakeeper 1 Home Page (top right). Seakeeper 2 Home Page (bottom right)

## TROUBLESHOOTING

1. If the Seakeeper app does not load onto the Raymarine MFD once connected, the following steps should be taken:
  - 1.1 Check physical cable connections at the back of the Seakeeper display, the MFD, and any connectors and hubs.
  - 1.2 Restart both the MFD and Seakeeper display.
  - 1.3 Update both the MFD and Seakeeper software to the most up-to-date versions.
  - 1.4 For the use of a single Seakeeper unit application, check that the Seakeeper ID is "1". For multi-Seakeeper applications, check that a Seakeeper is designated as Seakeeper ID "1" and the other units are identified with increasing ID numbers (2, 3, ...).
2. For additional support call or email Seakeeper Technical Support at +1-240-718-6440 or [Support@seakeeper.com](mailto:Support@seakeeper.com).