INTRODUCTION

This guide is an overview of the 5" Touchscreen Display interface and operation.

DISPLAY SCREENS: GENERAL OPERATION

When power is applied to the Seakeeper stabilizer, the display will power up and initialize. The home screen with boat roll angle indicator will be displayed.

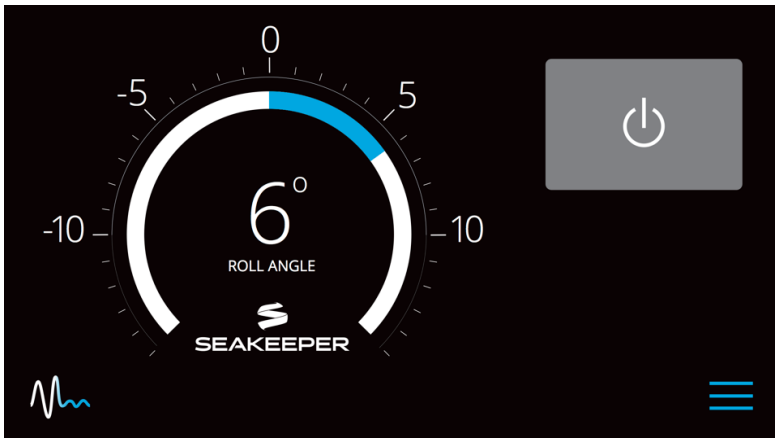

Figure 1: Seakeeper Home Screen

Pressing the grey power icon will start the gyro spool-up sequence, indicated by the icon turning blue and the appearance of the spool-up progress bar.

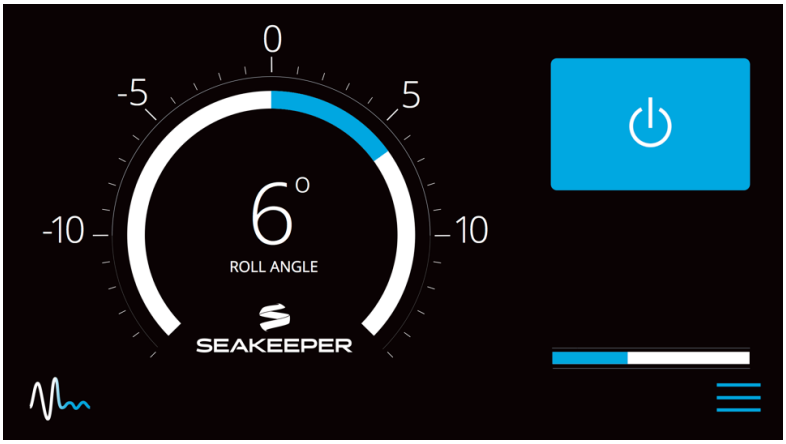

Figure 2: Home Screen during spool-up sequence

Once the gyro reaches 85% of rated RPM, stabilization will become available. This will be indicated by the appearance of the grey stabilization icon (gyro locked/unlocked).

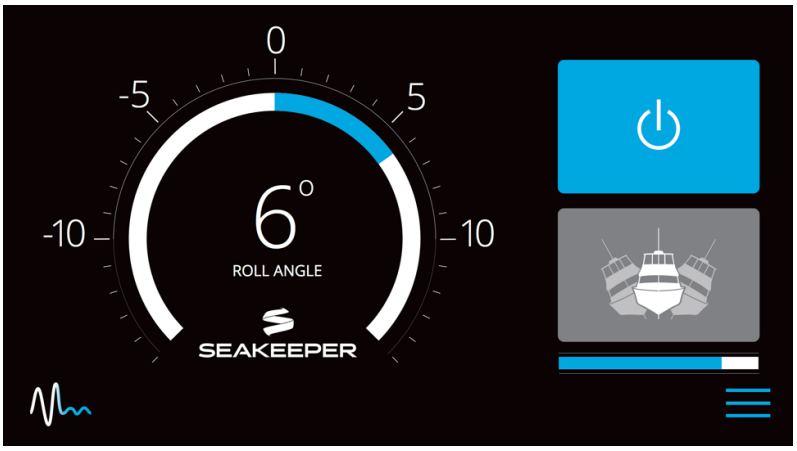

Figure 3: Home Screen with available stabilization

The Seakeeper can be unlocked by pressing on the stabilization icon, which will turn blue to indicate that the Seakeeper is now stabilizing the vessel. The status bar will disappear once the Seakeeper has reached full operating RPM. Stabilization can be toggled on/off by unlocking and locking the Seakeeper via the stabilization icon. The Seakeeper can be powered down by pressing the power icon at any time.

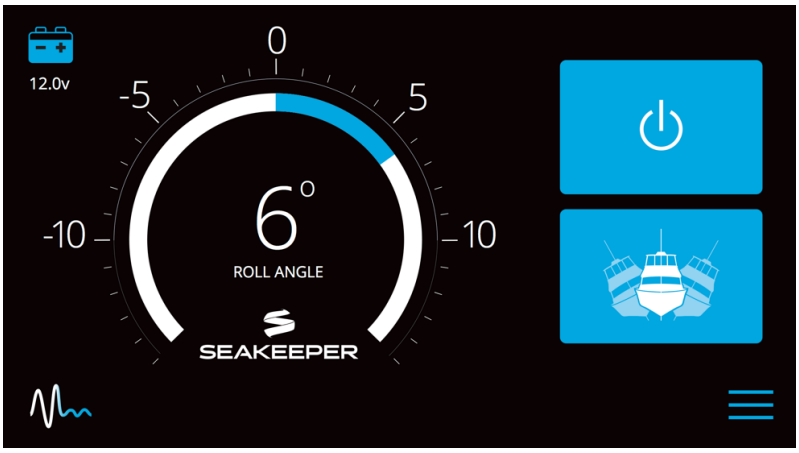

Figure 4: Home Screen at full operating RPM

For the Seakeeper 3, a battery monitor is shown in the upper left corner of the screen, displaying the battery bank voltage, VDC.

During operation, to toggle between the roll angle indicator (as shown above) and the roll angle graph, press the roll angle graph icon located in the bottom left corner.

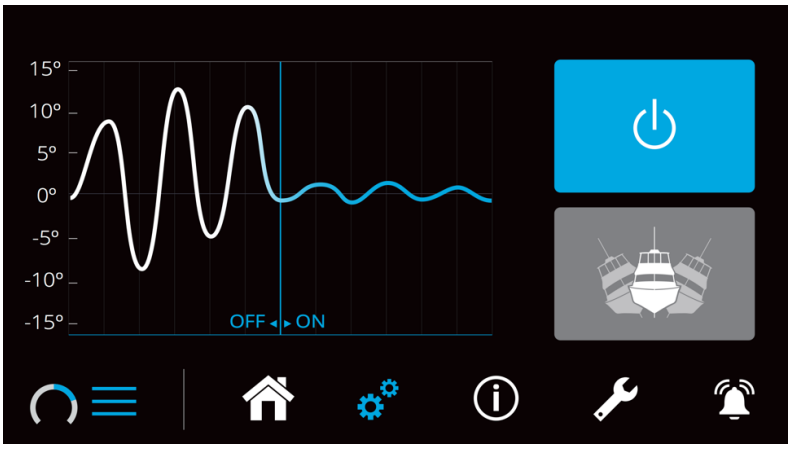

Figure 5: Home Screen showing optional roll angle graph

DISPLAY SCREENS: SUB MENUS

At any time when the display is powered on, the sub menus can be accessed by pressing on the three horizontal lines icon in the bottom right corner of the screen. The sub menu bar can be hidden by pressing on the three horizontal lines.

Figure 6: Sub Menu icons

Home Page

Pressing the **Home Icon** will access the main page, displaying either the roll angle indicator or the roll reduction graph, along with the power and stabilization icons.

Settings Icon

The **Settings Icon** will access the settings page. On the left side of this screen, the user can adjust the screen brightness and set a sleep timer for the display. The top icon on the right side allows the user to toggle which direction the roll angle indicator moves, to match the motion of the boat. This will depend on installation orientation and will only need to be adjusted once. The RPM icons change which speed the gyro will spool up to, toggling between normal operation and low-power operation. The moon/sun icon is used to toggle between day and night modes, and the C/F icon is used to toggle between Celsius and Fahrenheit temperature readouts.

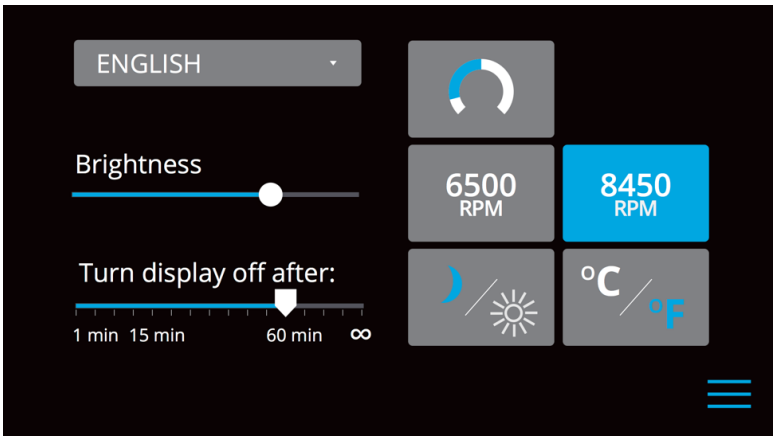

Figure 7: Settings Page

Information Icon

The **Information Icon** will access the information page. This page provides information on the Seakeeper and Seakeeper display. This includes – model & serial numbers, current software versions, and run & sea hours.

Figure 8: Information Page

Service Icon

The **Service Icon** will access the service page. This page provides real-time operating information on the Seakeeper. This includes – motor speed, sphere angle, enclosure vacuum level (torr), drive temperature, Seakeeper current draw (amps), and battery voltage level (VDC). From this page, the gyro can also be turned on/off, or locked/unlocked.

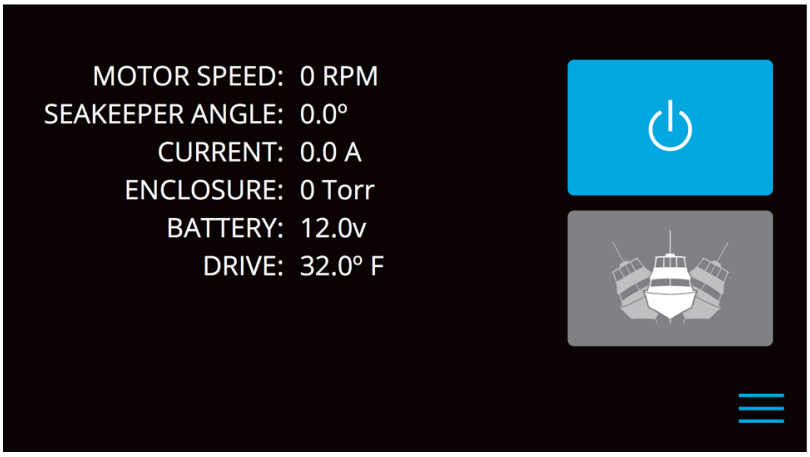

Figure 9: Service Page

An additional **Service Page** is accessed by pressing and holding on the Service Icon for 3 seconds. This page provides overrides for the brake system, for the glycol system and for the seawater pump power supply. These features are not to be used during normal operation and are only available for installation, maintenance and troubleshooting. These features cannot be activated until the Seakeeper's flywheel has come to a complete stop (0 RPM).

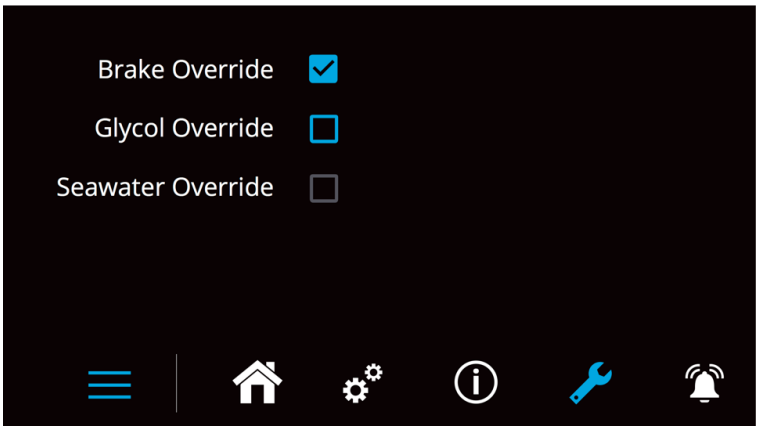

Figure 10: Additional Service Page

Alarm Icon

The **Alarm History Page** is accessed by pressing the **Alarm Icon** at the right side of the sub menu bar. This page will show any alarms that have been experienced by the Seakeeper.

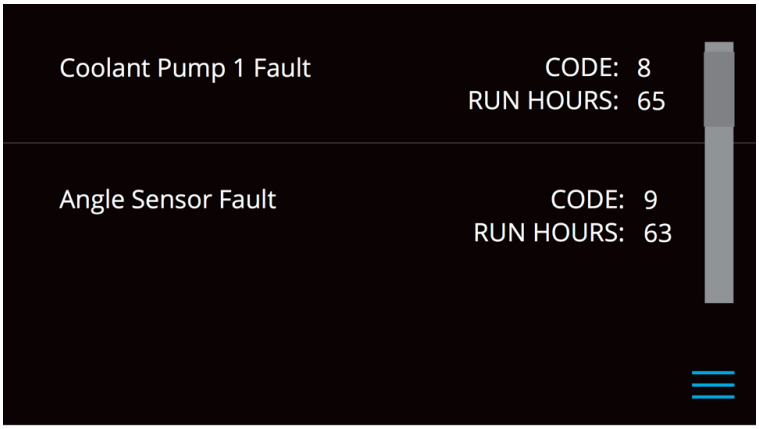

Figure 11: Alarm History Page

DISPLAY SCREENS: ALARMS

When the Seakeeper detects a fault in the system, the Seakeeper will lock, begin spooling down, and will alert the user with an alarm pop up on the display. The alarm will include an alarm code for reference, as well as suggested troubleshooting steps to be taken to resolve the issue. Should no troubleshooting steps be available, the 24/7 Seakeeper Service telephone number will be displayed so the user can contact Seakeeper Service to resolve the issue. The "Reset Alarm" button can be pressed to return to the previous screen, where the Seakeeper can be re-started. If the fault still exists, the pop-up will remain until it is resolved.

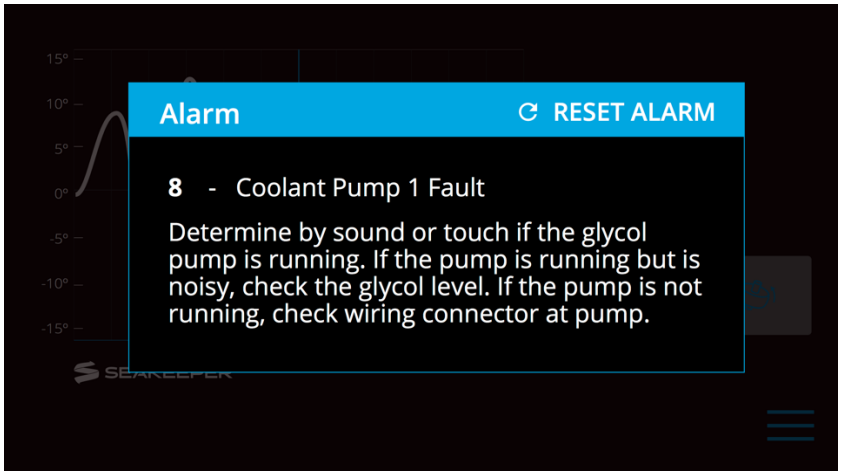

Figure 12: Seakeeper Alarm pop-up

Additional pop-up alerts include Reminders, Notices and Warnings. Reminders are based on the Seakeeper's run hours, and will notify the user to perform scheduled maintenance (example: replacing the heat exchanger zinc anode – if equipped). Notices will appear if there is a condition that will prevent the Seakeeper from operating (example: DC input voltage low). Warnings, like alarms, appear when the Seakeeper detects a fault somewhere in the system. Unlike an alarm, a warning pop-up will not automatically lock and power-down the Seakeeper. Both alarms and warnings will be stored in the Alarm History Page.