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Introduction

The SC5000 System View Display is a comprehensive boat information center. System View allows the boat operator to receive a wealth of critical operational information, displayed clearly and instantly at the helm on the LCD display. The System View continuously monitors and reports information ranging from basic operating data to detailed vessel environment information. System View covers water temperature and depth, engine trim status, boat speed, steering angle, system preventive maintenance reminders and systems diagnostics. System View also can be fully integrated with the boat’s GPS, if equipped, to provide up to the minute course, speed, and fuel-to-destination information.

System View Displays Detailed Information in These Important Categories:

NOTE: The detailed information listed which is standard on some models may be optional on others, or may not be available on some models based on engine and system configuration.

Propulsion Information  Section 3

• Engine RPM combined with boat speed
• Trim Engine synchronizer display
• Peak boat speed in conjunction with peak engine RPM
• Engine data
  Engine temperature
  Water pressure
  Oil pressure
  Volts
• Fuel consumption
• Propulsion Information

Vessel Information  Section 4

• Steering angle display
• Fuel tank, oil tank, water tank, and waste water tank level display
• Sterndrive or outboard trim display
• Engine hours

Navigation and Fuel  Section 5

• Direction to target waypoint information shows present course and current speed on a graphic compass rose
• Shows distance, time, speed, and fuel to next waypoint
• Resettable trip history shows miles per hour, miles per gallon, elapsed drive time, and amount of fuel consumed on current trip
• Water depth with depth history graph
• Sea water temperature with temperature history graph

Alarm, Diagnostic, and Maintenance Information  Section 7

• Displays alarms and helpful information concerning alarm causes
• Automatic maintenance reminders and log recorder for periodic propulsion maintenance
INTRODUCTION

Keypad Usage

The System View uses icons and text selection to perform all the functions.

- **ARROW TRACKPAD**: controls up and down and side to side movement for on-screen function prompts.
- **SELECT** key: used to select screen options and confirm data entry.
- **HOME** key: returns the display to the home page and also lets you turn the System View on/off if you do not use the main key switch.
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Starting Up the System View

Turning on the main engine switch will start up the System View. The System View will move through a sequence of start-up screens shown below. Pressing **SELECT** will pause the screen.

### Display Screens

#### Start-Up Screens

The start-up screens can be set to display home page (Step 1) or the last display shown before power off (Step 2). To select a setting, refer to “Setting/Preferences/Start-up Page” menu in Section 6.

1. Start-up screens will appear in sequence ending at the home page.
2. If set by owner, start-up screens will appear in sequence to the last display viewed before powering down.
3. Calibration screen – This screen only appears if initial setup calibration has not been performed. Press **SELECT** to perform calibration procedures. Please refer to “System Calibration” in Section 7.

---

**System View**

- **CONTRAST**
- **LANGUAGE**
- **EDIT**
- **SCROLL**

1. **PLEASE NOTE**
   - System View displays service times based on U.S. gallons only, all measurements shown in U.S. gallons. (If U.S. Gal. option is not selected, fuel and water usage will be in imperial gallons.)
   - Please refer to your owner’s manual for a complete review of necessary routine maintenance.

2. **PLEASE NOTE**
   - System view displays service time in hours, per U.S. gallon, per percentage.
   - Please refer to your owner’s manual for a complete review of necessary routine maintenance.

3. **PLEASE NOTE**
   - System view displays service time in hours, per U.S. gallon, per percentage.
   - Please refer to your owner’s manual for a complete review of necessary routine maintenance.

---

**Last Screen Viewed Before Powering Down**
Display Screens

Home Page Screen

Across the bottom half of the home page you will find six on-screen main directory selections.

Use the trackpad to highlight the directory choice. Press SELECT to accept your choice and to open the directory screen.

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<th>NAV–FUEL (See Section 5)</th>
<th>PROPULSION (See Section 3)</th>
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</thead>
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<tr>
<td>• Direction to target waypoint information shows present course and current speed on a graphic compass rose</td>
<td>• Engine RPM combined with boat speed</td>
</tr>
<tr>
<td>• Shows distance, time, speed, and fuel to next waypoint</td>
<td>• Trim Engine synchronizer display</td>
</tr>
<tr>
<td>• Resettable trip history shows miles per hour, miles per gallon, elapsed drive time and amount of fuel consumed on current trip</td>
<td>• Peak boat speed in conjunction with peak engine RPM</td>
</tr>
<tr>
<td>• Water depth with depth history graph</td>
<td>• Engine temperature</td>
</tr>
<tr>
<td>• Sea water temperature</td>
<td>• Engine Water pressure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VESSEL (See Section 4)</th>
<th>FAVORITES (See Section 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Steering angle display (Sterndrive only)</td>
<td>• Collection of Screens Selected by the User</td>
</tr>
<tr>
<td>• Fuel tank, water tank, and waste water tank level display</td>
<td></td>
</tr>
<tr>
<td>• Sterndrive or outboard trim display</td>
<td></td>
</tr>
<tr>
<td>• Engine hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<td>• Active Alarms</td>
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<td>• Sensors</td>
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<tr>
<td>• Favorites/Page Status</td>
<td>• System Calibration</td>
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Display Screens

Home Page Screen (Continued)

The top half of the home page displays engine data and vessel data. The engine data is received from sensors on the engine and the vessel data is received by vessel sensors.

The initial screen layout takes one of two forms depending on whether one or two engines are installed. Defaults for the engine data include engine RPM and engine temperature. Default for vessel data is water depth.

The data displays can be selected by the user to display the functions. Refer to “Settings/Preferences/Home Page Data” Menu in Section 6.

SINGLE ENGINE DISPLAY

TWIN ENGINE DISPLAY

1 - Engine Line 1 – Refer to Section 6 for selection
2 - Engine Line 2 – Refer to Section 6 for selection
3 - Vessel Data – Refer to Section 6 for selection
4 - Engine gear position or run arrow
5 - Clock – Refer to Section 6 for setting
6 - Flashing Bell Icon – Warning alarm is activated
7 - Flashing Fuel Icon – Low fuel alarm
Display Screens

Data Display Screens

The data display screens can be selected from the main directory menu choices which are selected from the home page.

The current directory menu selection icon is displayed in top-left of the display.

The presentation of information on-screen will be shown in the information window located at the bottom on the screen.

Alarm Notice – When a problem is detected, the name of the offending alarm will appear in the information window and a bell symbol at the bottom of the screen flashes. The bell symbol will continue to flash as long as the alarm condition is still present. If there are multiple alarms, these will cycle on the display screen.

1 - Directory identification icon
2 - Alarm window
3 - Information window
4 - Display screen
### Display Screens

### Data Display Screens

#### Glossary

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<th>Data</th>
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</thead>
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<td><img src="image" alt="Screen" /></td>
<td>PROPULSION</td>
</tr>
<tr>
<td>Engine data screen(s) is a group of displays showing various engine data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Engine RPM and Speed</strong></td>
<td><img src="image" alt="Screen" /></td>
<td>PROPULSION</td>
</tr>
<tr>
<td>Displays engine RPM and boat speed.</td>
<td></td>
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</tr>
<tr>
<td><strong>Engine RPM Synchronizer</strong></td>
<td><img src="image" alt="Screen" /></td>
<td>PROPULSION</td>
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<tr>
<td>Twin Engines – Displays the difference in engine speed (RPM) between the port and starboard engines</td>
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<td></td>
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<tr>
<td><strong>Peak Speed at RPM</strong></td>
<td><img src="image" alt="Screen" /></td>
<td>PROPULSION</td>
</tr>
<tr>
<td>This screen records the top speed the boat reached and associated engine RPM as measured since the last reset.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trim Position</strong></td>
<td><img src="image" alt="Screen" /></td>
<td>PROPULSION</td>
</tr>
<tr>
<td>Display indicates the propulsion unit position achieved by setting trim and trailer position.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Troll Control</strong></td>
<td><img src="image" alt="Screen" /></td>
<td>PROPULSION</td>
</tr>
<tr>
<td>Maintain a trolling speed without using the throttle.</td>
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# Display Screens

## Data Display Screens

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<td><img src="image1.png" alt="Screen Image" /></td>
<td>VESSEL</td>
</tr>
<tr>
<td>Displays steering position in degrees.</td>
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<td></td>
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<td><strong>Tank Status</strong></td>
<td><img src="image2.png" alt="Screen Image" /></td>
<td>VESSEL</td>
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<td>Shows level of the vessel’s tanks.</td>
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<tr>
<td><strong>Tank Levels</strong></td>
<td><img src="image3.png" alt="Screen Image" /></td>
<td>VESSEL</td>
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<tr>
<td>Displays the level of each tank.</td>
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<tr>
<td><strong>Vessel Status</strong></td>
<td><img src="image4.png" alt="Screen Image" /></td>
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<td>Air temperature</td>
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<tr>
<td><strong>Depth</strong></td>
<td><img src="image5.png" alt="Screen Image" /></td>
<td>NAV-FUEL</td>
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<tr>
<td>Displays the depth of water.</td>
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<td><strong>Trip History Log</strong></td>
<td><img src="image6.png" alt="Screen Image" /></td>
<td>NAV-FUEL</td>
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<tr>
<td>Displays average fuel economy, average boat speed, total drive time, along with a corresponding distance traveled and fuel used.</td>
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### Display Screens

#### Data Display Screens

#### Glossary

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<th>Screen</th>
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</thead>
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<td><strong>Depth Plot Line</strong>&lt;br&gt;Displays a plot line of depth vs. time as recorded over the last 16 seconds.</td>
<td><img src="image" alt="Screen" /></td>
<td>NAV–FUEL</td>
</tr>
<tr>
<td><strong>Environment</strong>&lt;br&gt;Displays speed, depth, air temperature, and sea water temperature.</td>
<td><img src="image" alt="Screen" /></td>
<td>NAV–FUEL</td>
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<tr>
<td><strong>Estimated Fuel Range</strong>&lt;br&gt;Displays estimated range and fuel remaining, as well as current total fuel flow.</td>
<td><img src="image" alt="Screen" /></td>
<td>NAV–FUEL</td>
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<tr>
<td><strong>Navigation Screen 1</strong>&lt;br&gt;Displays a compass and shows direction to a targeted waypoint.</td>
<td><img src="image" alt="Screen" /></td>
<td>NAV–FUEL</td>
</tr>
<tr>
<td><strong>Navigation Screen 2</strong>&lt;br&gt;Displays navigating data to a waypoint.</td>
<td><img src="image" alt="Screen" /></td>
<td>NAV–FUEL</td>
</tr>
<tr>
<td><strong>Seawater Temperature Plot Line</strong>&lt;br&gt;Displays a plot line of seawater temperature vs. time as recorded over the last 80 seconds. Also displays the current water temperature.</td>
<td><img src="image" alt="Screen" /></td>
<td>NAV–FUEL</td>
</tr>
</tbody>
</table>
Display Screens

Alarm Message Screens

When a problem is detected, the System View will alert the operator. Use the following steps to determine the cause of the problem:

1. A pop-up screen will appear displaying an alarm message. If there are multiple alarms, the display will show the last alarm activated.

2. Press **SELECT** to clear the pop-up screen(s) and return back to the display screen that was being viewed. Bell icon will now be flashing and alarm message will be displayed on the bottom of the screen.

3. A number of different problems may be grouped together under one alarm message. To determine the exact cause of the problem, return back to the home page and access the **SYSTEM** directory. The **SYSTEM** directory will show the active alarm(s) causing the problem.

4. Refer to the “Active Alarms” in Section 7 or the *Engine Operation, Maintenance Manual* for further explanation of the problem and the correct action to take.

If the problem can cause immediate engine damage, the engine guardian system will respond to the problem by limiting engine power.
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Propulsion Information

This Section will give a complete description of the display screens in the PROPULSION directory of the System View.

Some of the propulsion functions are:

- Troll control
- Engine RPM combined with boat speed
- Trim engine synchronizer display
- Peak boat speed in conjunction with peak engine RPM
- Fuel consumption
- Propulsion Information
- Vessel Information

Entering the Propulsion Directory

To access the PROPULSION directory, use the trackpad to highlight the PROPULSION directory from the menu choice. Press SELECT to accept and to open the directory.
**Propulsion Data Screens**

**Engine RPM/Speed**

This screen displays engine speed (RPM) and boat speed.

**SINGLE ENGINE**

- **RPM**: 0
- **Speed**: 0.0 MPH

**TWIN ENGINE**

- **RPM**: 0
- **Speed**: 0.0 MPH

1 - Speed Sensors – This window shows the sensor that is currently sending the speed signal. The speed sensor is automatically selected based on what sensors are available.

**Peak Speed at RPM**

This screen records the top speed the boat reached and associated engine RPM as measured since the last reset.

To **Reset** the Peak Speed and corresponding RPM, press and hold the **SELECT** button momentarily.

**SINGLE ENGINE**

- **Speed**: 0.0 MPH
- **Peak Speed at RPM**: 0
- **At Peak Speed**: 0.0 MPH

**TWIN ENGINE**

- **Speed**: 0.0 MPH
- **Peak RPM**: 0
- **At Peak Speed**: 0.0 MPH

1 - Speed Sensors – This window shows the sensor that is currently sending the speed signal. The speed sensor is automatically displayed based on what sensors are available.
Propulsion Data Screens

Engine RPM Synchronizer – Twin Engine

This screen displays the difference in engine speed (RPM) between the port and starboard engines. Allows throttle adjustments to keep each engine running uniformly.

![Engine RPM Synchronizer Diagram]

Engine Data Screen(s)

Engine data screen(s) is a group of displays showing various engine data.

*NOTE: Not all screens listed may be available for your type of engine.*

1. **ENGINE TEMP (Temperature)** – Displays engine temperature. The temperature will vary with air temperature, water temperature and operating conditions.
2. **H₂O PRESSURE (Water)** – Displays engine water pressure when engine is running.
3. **BATTERY** – Displays battery voltage level (condition) of battery.
4. **FUEL FLOW** – Displays current estimated engine fuel consumption in U.S. Gallons per hour (Gal/hr) or Liters per hours (Ltr/hr).
5. **OIL PRESSURE** – Displays engine oil pressure when the engine is running. The oil pressure may vary with engine speed, outside temperature and oil viscosity. While the engine is warming up, the oil pressure will be higher than when the engine is at normal operating temperature.
Propulsion Data Screens

Trim Position

Display indicates the propulsion unit position achieved by setting trim and trailer position.

**SINGLE ENGINE**

![Single Engine Trim Screen]

- 0 = Trimmed Down
- 10 = Trimmed Up
- 25 = Maximum Trailer

**TWIN ENGINE**

![Twin Engine Trim Screen]

- 0 = Trimmed Down
- 10 = Trimmed Up
- 25 = Maximum Trailer
Troll Control

**NOTE:** Depending on your engine type, Troll Control feature may not be available.

**BASIC OPERATION**

**IMPORTANT:** User must maintain constant helm control while using troll control to avoid obstacles.

With troll control, you can maintain a trolling speed within a range specific to engine type without using the throttle. See **NOTE:** following.

You must stay in the troll control screen while using troll control. If you leave the troll control screen, troll will automatically disengage.

You can shut off troll control anytime by pushing **SELECT**, moving the throttle, or shifting engine into neutral.

**NOTE:** Avoid using a very low rpm trolling speed for an extended period of time. Doing so could result in a low-battery voltage condition.

**SETTING TROLL CONTROL**

1. Press `>` to display the **TROLL CONTROL** display screen.
2. With the engine running, shift engine into gear.
3. Set engine speed at idle.
4. **Single Engine** – Press **SELECT** to engage (turn on) the troll control. **Twin Engine** – Press **SELECT** to choose which engine(s) are to be in troll control. Press `>` to select **STBD**, **PORT**, or **BOTH**. Flashing “Setpoint” indicates chosen engine(s). Press **SELECT** a second time to engage troll control.
5. Press `▲▼` to set desired RPM.

**NOTE:** On dual station installations (2 System Views), you can hand-off the current troll control configuration from the troll control screen from one unit to the other by pressing **SELECT** to engage on the opposite unit.

**TURNING OFF TROLL CONTROL**

There are three ways to turn off the troll control:

- Press **SELECT**
- Move the throttle to a different speed
- Shift engine into neutral
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**VESSEL**

**Vessel Information**

This Section will give a complete description of the display screens in the VESSEL directory of the System View.

Some of the vessel functions are:
- Steering angle position
- Tank status for fuel, oil, waste, and water
- Vessel status

**Entering the Vessel Directory**

To access the VESSEL directory, use the trackpad to highlight the VESSEL directory from the menu choice. Press SELECT to accept and to open the directory.
Vessel Data Screens

Steering Position

This screen displays steering position in degrees.

NOTE: Depending on your type of engine, this feature may not be available.

![Steering Position Screen]

NOTE: If steering angle position is opposite the direction that it should be, it can be reversed so it is displayed properly. Refer to “Settings/Sensors/Invert Steering” Menu in Section 6.

Tank Status

NOTE: If your vessel installation includes tank level sensors, System View will display fullness level that is provided by the sensors.

The display screens show the level of the vessels tanks. The bar gauges and digital readouts indicate the level of fullness of each tank.

![Tank Status Screens]
**VESSEL**

**Vessel Data Screens**

**Fuel Tanks**
Displays the level of each tank.

![Fuel Tanks](image)

**Water and Waste Tanks**
Displays the level of each tank.

![Water and Waste Tanks](image)
Vessel Data Screens

Vessel Status

Displays the current vessel information.
1. Displays run time in hours.
2. Displays the total fuel remaining.
3. Displays additional tank levels. Fresh water and waste water if connected.
4. Displays air temperature at sensor.

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Navigation/Fuel Information

This Section will give a complete description of the display screens in the NAV–FUEL directory of the System View.

Some of the navigation/fuel functions are:
- Navigation screens
- Next waypoint data
- Trip history log
- Depth
- Depth plot line
- Depth, speed, air temperature, and water temperature
- Seawater plot line
- Estimated fuel range

Entering the Navigation/Fuel Directory

To access the NAV–FUEL directory, use the trackpad to highlight the NAV/FUEL directory from the menu choice. Press SELECT to accept and to open the directory.
Navigation/Fuel Data Screens

Navigation Screens

IMPORTANT: This device is intended as a navigation aid and should not take the place of paper charts. A careful navigator never relies on one method to obtain position information.

NOTE: For use of the navigation screens, your vessel must include a GPS receiver with NMEA 0183 V1.5 or V2.0+ output and be connected to the System View.

The System View features two different navigation screens: Vessel Course and Next Waypoint Data. Next Waypoint Data provides course guidance to a destination waypoint, if programmed into your GPS navigation electronics.

SCREEN # 1 – VESSEL COURSE – COURSE UP

This vessel course – course up screen has a rotating compass ring that not only shows your direction of travel, but also the direction to a targeted waypoint. When you are not navigating to a waypoint, the compass will show your direction of travel. The boat pointer in the center of the compass ring shows current direction.

When a waypoint is set using a separate GPS unit, an X mark will appear on the compass ring. This X mark will indicate your waypoint. For instance, if the X mark lines up with the center of the boat pointer, you are going directly to the waypoint. If the boat pointer does not line up with the X mark, steer toward the X mark until it lines up with the center of the boat pointer—then continue in this direction until you reach your current target waypoint.

The middle of the compass shows the current cross track error (XTE). This is the distance you are off-course relative to the desired course.

Anytime a compatible GPS is connected, the current Speed Over Ground (SOG) as well as the Course Over Ground (COG) are displayed on the screen.

1 - Compass ring
2 - Boat pointer
3 - X – Mark (Gives the Direction to Steer)
4 - Cross track error
5 - Course over ground (COG)
6 - Speed over ground (SOG)
7 - GPS Heading – True or Magnetic – Refer to “Settings/Preference/GPS Heading” Menu in Section 6
Navigation/Fuel Data Screens

Navigation Screens

SCREEN # 2 – NEXT WAYPOINT DATA

When navigating to a waypoint, this screen will give you the following navigation information:

1. **DIST TO GO** – Remaining distance to the next waypoint.
2. **TIME TO GO** – Is the time that it will take to reach your waypoint at your present speed.
3. **FUEL TO GO** – Is the fuel it will take to get to your waypoint.
4. **SPD TO WPT** – Is the speed you are making towards your waypoint.

![NEXT WAYPOINT DATA Screen]

**Trip History Log**

This screen tracks your boat’s progress since last reset. Displays average fuel economy, average boat speed, total drive time, along with a corresponding distance traveled and fuel used.

To **Reset** trip history log, press and hold down **SELECT** for 5 seconds.

1. Displays the average distance per U.S. gallon or liter of fuel since the unit was last reset.
2. Displays the average speed of the boat since the unit was last reset.
3. Displays the time in hours of the engine usage since the unit was last reset.
4. Displays the total distance traveled since the unit was last reset.
5. Displays the total fuel used since the unit was last reset.

![TRIP HISTORY LOG Screen]
**Navigation/Fuel Data Screens**

**Depth**

DEPTH displays the depth of water.  

*NOTE:* To set depth and shallow water alarm levels, refer to “Settings/Sensors” Menu in Section 6.

![Depth Screen](image)

**Depth Plot Line**

DEPTH PLOT displays a plot of depth vs. time as recorded over the last 16 seconds.  

*NOTE:* To set depth and shallow water alarm levels, refer to “Settings/Sensors” Menu in Section 6.

1. Displays depth plot line.  
2. Displays current water depth.  
3. Displays low water alarm setting.
Navigation/Fuel Data Screens

Environment

This screen displays speed, depth, air, and sea water temperature.
1. Displays depth of water.
2. Displays speed of the boat.
3. Displays the air temperature.
4. Displays the sea water temperature.

Seawater Temperature Plot

**SEAWATER TEMP PLOT** displays a plot of seawater temperature vs. time as recorded over the last 80 seconds. Also displays the current water temperature.
1. Displays sea water plot line.
2. Displays current water temperature.
Estimate Fuel Range

**ESTIMATED FUEL RANGE** displays estimated range and fuel remaining, as well as current total fuel flow.

1. The estimated fuel range is based on boat speed, fuel consumption, and fuel remaining in the tank. The number displayed indicates an estimate of the distance you can travel on the remaining fuel. Speed input required (paddle wheel, pitot pressure, or GPS).

2. Displays the current vessel fuel consumption in U.S. gallons per hour or liters per hour.

3. Displays amount of fuel remaining.
SETTINGS
Section 6

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Settings Information

This Section will give a complete description of the Settings screens in the SETTINGS directory of the System View.

In this Section you can configure your System View to display the information the way you prefer.

Some of the Settings functions are:

- Customizing the home page data
- Contrast/Lighting/Clock
- Units/Language/Offsets
- Sensor settings
- Favorites/Page status

Entering the Settings Directory

To access the SETTINGS directory, use the trackpad to highlight the SETTING directory from the menu choice. Press SELECT to accept and to open the directory screen.

Settings Directory Screen
Settings Options

Contrast/Lighting/Clock

To adjust a setting:
1. Press ▲▼ to highlight the desired menu selection.
2. Press ◀ to edit the menu box.
3. Press SELECT to accept settings.

**CONTRAST** – Provides a slide bar to adjust the display screen contrast to compensate for changes in temperature or lighting conditions.

**BRIGHTNESS** – Provides a slide bar to adjust the display screen lighting level.

**TWILIGHT** – The twilight setting is a light sensor setting that adjusts the amount of light needed to automatically turn on the System View backlighting and the System Link gauge lighting. You can manually control when the backlighting turns on by adjusting the slide bar.

**TIME** – If no GPS is connected, press the horizontal arrows to set the current time. If GPS is connected, follow time zone setting below.

**TIME ZONE** – Time zone setting is how many hours you are behind or ahead of Greenwich Mean Time (GMT). The chart below gives approximate GMT time zone settings for various longitudinal zones. Add one hour to the setting for daylight savings time.

**CLOCK MODE** – Select 12 hour or 24 hour clock set.

<table>
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<th>Longitudinal Zone</th>
<th>Time Zone Setting</th>
<th>DayLight Saving Time Zone Setting</th>
<th>Longitudinal Zone</th>
<th>Time Zone Setting</th>
<th>DayLight Saving Time Zone Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>W180.0° to W172.5°</td>
<td>–12</td>
<td>–11</td>
<td>E097.5° to E122.5°</td>
<td>+1</td>
<td>+2</td>
</tr>
<tr>
<td>W172.5° to W157.5°</td>
<td>–11</td>
<td>–10</td>
<td>E022.5° to E037.5°</td>
<td>+2</td>
<td>+3</td>
</tr>
<tr>
<td>W157.5° to W142.5°</td>
<td>–10</td>
<td>–9</td>
<td>E037.5° to E052.5°</td>
<td>+3</td>
<td>+4</td>
</tr>
<tr>
<td>W142.5° to W127.5°</td>
<td>–9</td>
<td>–8</td>
<td>E052.5° to E067.5°</td>
<td>+4</td>
<td>+5</td>
</tr>
<tr>
<td>W127.5° to W112.5° (Pacific Standard Time)</td>
<td>–8</td>
<td>–7</td>
<td>E067.5° to E083.5°</td>
<td>+5</td>
<td>+6</td>
</tr>
<tr>
<td>W112.5° to W097.5° (Mountain Standard Time)</td>
<td>–7</td>
<td>–6</td>
<td>E082.5° to E097.5°</td>
<td>+6</td>
<td>+7</td>
</tr>
<tr>
<td>W097.5° to W082.5° (Central Standard Time)</td>
<td>–6</td>
<td>–5</td>
<td>E097.5° to E112.5°</td>
<td>+7</td>
<td>+8</td>
</tr>
<tr>
<td>W082.5° to W067.5° (Eastern Standard Time)</td>
<td>–5</td>
<td>–4</td>
<td>E112.5° to E127.5°</td>
<td>+8</td>
<td>+9</td>
</tr>
<tr>
<td>W067.5° to W052.5°</td>
<td>–4</td>
<td>–3</td>
<td>E127.5° to E142.5°</td>
<td>+9</td>
<td>+10</td>
</tr>
<tr>
<td>W052.5° to W037.5°</td>
<td>–3</td>
<td>–2</td>
<td>E142.5° to E157.5°</td>
<td>+10</td>
<td>+11</td>
</tr>
<tr>
<td>W037.5° to W022.5°</td>
<td>–2</td>
<td>–1</td>
<td>E157.5° to E172.5°</td>
<td>+11</td>
<td>+12</td>
</tr>
<tr>
<td>W022.5° to W007.5°</td>
<td>–1</td>
<td>0</td>
<td>E172.5° to E180.0°</td>
<td>+12</td>
<td>+13</td>
</tr>
<tr>
<td>W007.5° to E007.5°</td>
<td>0</td>
<td>+1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


**Settings**

**Settings Options**

**Units/Language/Offsets**

To adjust a setting:
1. Press ▲▼ to highlight the desired menu selection.
2. Press ◄► to edit the menu box.
3. Press SELECT to accept settings.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITS ENG</td>
<td>Lets you select English or metric format for unit measurements.</td>
</tr>
<tr>
<td>UNITS SPD</td>
<td>Lets you select the units at which speed is displayed. You may select from MPH (Miles Per Hour), KM/H (Kilometers Per Hour) or Knots.</td>
</tr>
<tr>
<td>LANGUAGE</td>
<td>System View displays only English at this time.</td>
</tr>
<tr>
<td>DEPTH OFFSET TO</td>
<td>Normally, this unit measures water depth from the face of the transducer (sensor). Since the transducer is below the water, this distance is not the exact water depth. You can change the depth reading using this depth offset feature. You have three depth offsets selections: 1. SENSOR – Will measure water depth from the face of the transducer. No setting to depth offset is necessary. 2. WATERLINE – Will give water depth from the surface of the water. You will need to change the depth offset setting below. Measure the distance between the face of the transducer and the water line. Add this measurement into depth offset menu box below. 3. KEEL – Will give water depth from the keel of the boat. You will need to change the depth offset setting below. Measure the distance between the transducer and the lowest part of the boat. Place this measurement into depth offset menu box below. This offset will be a negative value.</td>
</tr>
<tr>
<td>DEPTH OFFSET</td>
<td>Activate the depth offset feature by adding the measurement taken above to compensate for waterline or keel offset.</td>
</tr>
<tr>
<td>SEA TEMP OFFSET</td>
<td>The sea water temperature sensor can be calibrated to match actual sea water temperature. Calculate the different in degrees that the sea water temperature is off and enter it into the menu window.</td>
</tr>
<tr>
<td>STEERING OFFSET</td>
<td>The steering sensor can be calibrated to compensate for inaccuracies. Calculate the different in degrees that the steering sensor is off and enter it into the menu window.</td>
</tr>
</tbody>
</table>
Settings Options

Home Page Data

4. Look at the HOME PAGE DATA and determine if there is any data that you would like to change. Press ▲▼ to select function. Press ◀▶ to edit the function.
**Settings**

### Settings Options

#### Sensors

To adjust a setting:

1. Press ▲▼ to highlight the desired menu selection.
2. Press ←→ to edit the menu box.
3. Press SELECT to accept settings.

---

<table>
<thead>
<tr>
<th>Settings</th>
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<tbody>
<tr>
<td><strong>PITOT SENSOR</strong> – Select the PSI input of the Pitot water pressure sensor on the engine. <strong>NOTE:</strong> The standard speed input on production Mercury engines is 100 PSI. Certain High Performance applications may require a 200 PSI input.</td>
<td></td>
</tr>
<tr>
<td><strong>PITOT MULT (Multiplier)</strong> – The pitot pressure sensor can be calibrated for correcting display readings that read to high/low. Calculate the percentage that the speed is off and enter it into the menu window.</td>
<td></td>
</tr>
<tr>
<td><strong>PADDLE FREQ</strong> – Frequency can be changed to match requirements of different sensors. 4.9 Hz per mile or 5.7 Hz per knot is the frequency of the paddle wheel speed sensor provided by Mercury Marine.</td>
<td></td>
</tr>
<tr>
<td><strong>TRANSITION SPD</strong> – Transition speed is the boat speed at which System View stops looking at the paddle wheel and starts using the pitot or GPS (GPS is priority for high speed if connected) to measure boat speed. Default setting is 25 MPH. If desired, this transition speed can be changed.</td>
<td></td>
</tr>
<tr>
<td><strong>TRANS SPD TOL (Transition Speed Tolerance)</strong> – Adjust for differences in sensor tolerances between the paddle wheel, GPS, and pitot.</td>
<td></td>
</tr>
<tr>
<td><strong>INVERT STEERING</strong> – If steering angle displayed is opposite of the direction that it should, the signal can be inverted so the steering angle can be displayed properly.</td>
<td></td>
</tr>
<tr>
<td><strong>SHALLOW ALARM</strong> – The shallow water alarm can be set to sound a warning at a depth determined by the user. Activate the shallow water alarm by inputting the desired depth into the menu box. The depth range can be from 0.0 – 650.0 feet. Deactivate the shallow alarm by setting the shallow alarm to “0”. For the alarm to operate, the alert horn setting will have to be activated. Refer to “Setting/Preferences” Menu Section 6</td>
<td></td>
</tr>
<tr>
<td><strong>DEPTH ALARM</strong> – The deep water alarm can be set to sound a warning at a depth determined by the user. Activate the depth alarm by inputting the desired depth into the menu box. The depth range can be from 0.0 – 650.0 feet. Deactivate the depth alarm by setting the depth alarm to “0”. For the alarm to operate, the alert horn setting will have to be activated. Refer to “Setting/Preferences” Menu Section 6</td>
<td></td>
</tr>
</tbody>
</table>
**Settings Options**

**Preferences**

To adjust a setting:

1. Press ▲▼ to highlight the desired menu selection.
2. Press ◄► to edit the menu box.
3. Press SELECT to accept settings.

---

**Alert Horn Mute** – The System View has a warning horn alarm. You can set an alarm to sound a warning tone for various fault alarms and shallow or deep water depth warning. To use this alarm, press the right arrow to **DISABLE** the mute.

**Start-up Page** – You have two options for what start-up page you want to view. You can select the home page or you can select the last page that’s showing at power off. Press the right arrow to select **HOME** or **Last Page**.

**Favorite Slide Show** – This feature if desired, will automatically scroll through your selection of favorite screens. This allows the user to view each screen for the pause time selected below. Hold **SELECT** button for 3 seconds to stop the scrolling.

**Favorite Slide Pause** – Select the pause time you would prefer for viewing each favorite screen in the **Favorite Slide Show**. Select between 5 and 30 seconds.

**GPS Heading** – Choose **True** or **Magnetic** for the GPS Heading display.

**NOTE:** To receive BTW in both **True** and **Magnetic**, System View must see a valid BWC sentence. If System View sees an RMB sentence, System View will display **True** BTW only.
Settings Options

Favorites/Page Status

The favorites/page status allows you to select one of the two following options:

1. Allows you to choose your preferences screens and place them into the FAVORITES directory for quick viewing. Screens will still be shown in their respective menus.

2. Allows you to turn off any unwanted screens from all directories in System View.

To adjust a setting:

1. Press \[\text{ADC} \text{0089}\text{AP}0066\] to scroll through the list of screens.
2. Press \[\text{ADC}0065\text{AP}0034\] to edit the setting as follows:

♥ Flagging the selected screen with a heart will add the screen to the FAVORITES directory. It will also be available in its directory.

✔ Flagging the screen selection with a check mark will turn the screen on in its directory and off in the FAVORITES directory.

✗ Flagging the screen selection with a “X” mark will turn the screen off in its directory and also off in the FAVORITES directory.
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<td>Active Alarms</td>
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<tr>
<td>Active Alarms</td>
<td>7-15</td>
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<td>Alarm History</td>
<td>7-18</td>
</tr>
<tr>
<td>Alarm History</td>
<td>7-18</td>
</tr>
</tbody>
</table>
System Information

This Section will give a complete description of the screen settings in the SYSTEM directory of the System View.

Some of the system functions are:

- Maintenance log
- Active alarms
- Alarm history
- System calibration

Entering the System Directory

To access the SYSTEM directory, use the trackpad to highlight the SYSTEM directory from the menu choice. Press SELECT to accept and to open the directory.

System Directory Screen
System Calibration

The system calibration consists of the following menus:
- Vessel configuration
- Engine location
- Tank configuration
- Trim calibration
- Factory defaults
- User keyless code

Entering into System Calibration

**IMPORTANT:** Entering into the system calibration menus will require you to shut down the engine(s) in order to reactivate the System View.
System Calibration

Vessel Configuration

To adjust a setting:

1. Open the VESSEL CONFIGURATION menu.
2. Assign 1 for all first station installations (most common choice). Only assign 2 if you are using the System View as a second System View in a dual station installation. Press SELECT to continue.
3. Select the engine configuration for the System View. Press **SELECT** to continue.
System Calibration

**Tank Configuration**

**NOTE:** System View allows you to choose the name of the tanks you want to appear on the screen. You can choose two tanks per engine.

1. If you would like to change the name of the tank(s), highlight the tank you would like to change. Press `/` to display the list of names of available tank types. Select a name. Press SELECT to continue.

2. Enter the capacity of the tanks. Select the tank and press `/` to enter the tank capacity. Press SELECT to continue.

---

**TANK CONFIGURATION**

1. Choose the type of tank for each level sensor.
   - SELECT to Continue

2. Enter The Capacity for the following:
   - SELECT to Continue
System Calibration

NOTE: The fuel tank will have to be calibrated in order for System View to display fuel range.

3. There are two methods for calibrating fuel tank level:
   a. **Method 1** – Select **DEFAULT** – The System View will automatically supply an estimated range value based on default sensor values. This mode does not factor in irregular tank shapes. Press **SELECT** to save.

   b. **Method 2** – Select **ADD FUEL** – This method requires adding fuel at certain calibration points. System View will display an estimated range value that factors in the tank shape.

   **NOTE:** You will have to start with an empty fuel tank and manually fill the tank to the values given per instruction.

4. If using **Method 2**, add fuel as shown in illustration below.

![Diagram showing fuel tank configuration and calibration process]
CALIBRATING THE TRIM SENSOR

To calibrate trim:

1. Open the TRIM CALIBRATION menu.
2. TRIM ENG DOWN: Press the SELECT key to open the DOWN screen. Trim the engine all the way down. Press SELECT to save and move to next screen.
3. TRIM ENG UP: The TRIM ENG UP screen should be open. Trim the engine all the way up. Press SELECT to save and move to next screen.
4. TRIM ENG MAX TRAILER: the TRIM ENG MAX TRAILER screen should be open. Trim the engine to maximum trailer position. Press SELECT to save.

NOTE: If trim calibration is correct, trim range should be displayed in units from 0.0 to 10.0 and 10.1 to 25.0 will correspond to the trailer range.
NOTE: MULTI ENGINE FAULT MESSAGE – If the System View should ever detect an incorrect engine location, it will alert you by displaying a multi engine fault message. If this should happen, follow one of the methods for setting engine location following.

In multiple engine applications, each engine must first be assigned a location (starboard, port, starboard 2 or port 2) using the following System View procedure or with a Quicksilver Diagnostic Tool. This is required for the correct engine data to be transmitted to the System View.

There are two methods for setting engine location:

1. Set the engine locations using the Quicksilver Digital Diagnostic Terminal (DDT) along with SmartCraft Engine Diagnostic Cartridge Version 1.0 or newer.

2. Set engine location using the following System View procedures.

There are 4 assigned engine locations available:

- Starboard STBD
- Port PORT
- Starboard Inside STBD 2
- Port Inside PORT 2

![ENGINE ASSIGNED LOCATION Diagram]
System Calibration

Engine Location

SYSTEM VIEW SET-UP FOR ENGINE LOCATION

Twin Engine Installations – Where System View is displaying a multiple starboard engines fault

**NOTE:** Engines shipped from the factory are setup for starboard engine location.

1. Turn the power off to the System View.
2. Disconnect the SmartCraft harness from the starboard engine harness.
3. If the 3 wire plug has been disconnected from the port engine harness, temporarily reconnect it.
4. Turn the ignition on to the engines and power up the System View. Open the SYSTEM directory and select System Configuration Menu.
5. Open the ENGINE LOCATION menu. Set the desired location for the current engine to read PORT. Press SELECT to save.
6. Setting should be complete.
7. Reconnect the SmartCraft harness to the starboard engine harness.
8. Disconnect the 3 wire plug if connected in step 3.

Continued on next page.
System Calibration

Engine Location
SYSTEM VIEW SET-UP FOR ENGINE LOCATION

Twin Engine Installations – Where System View is displaying a multiple port engines fault

1. Turn the power off to the System View.
2. Disconnect the SmartCraft harness from the port engine harness.
3. If the 3 wire plug has been disconnected from the starboard engine harness, temporarily reconnect it.
4. Turn the ignition on to the engines and power up the System View. Open the SYSTEM directory and select SYSTEM CALIBRATION menu.
5. Open the ENGINE LOCATION menu. Set the desired location for the current engine to read STBD. Press SELECT to save.
6. Setting should be complete.
7. Reconnect the SmartCraft harness to the port engine harness.
8. Disconnect the 3 wire plug if connected in Step 3.
System Calibration

Factory Defaults

RESET SETTINGS DIRECTORY

Restores all settings back to System View's original setup values.

To restore settings back to original setup values:
1. Open FACTORY DEFAULTS menu.
2. Press ▲▼ to highlight RESET SETTINGS DIRECTORY selection.
3. Select YES to reset or NO if you want to cancel.

RESET SENSOR DETECTION

At first power up, the System View will automatically detect all the sensors connected to it. If you would like the System View to re-start this sensor detection process over again, use the following procedure.

To reset sensor detection:
4. Open FACTORY DEFAULTS menu.
5. Press ▲▼ to highlight RESET SENSOR DETECTION selection.
6. Select YES to reset or NO if you want to cancel.
System Calibration

User Keyless Code

A keyless code can be set to prevent unintentional power-up of the System View when using the **HOME** (Power) button. Once a keyless code has been set, the System View will require the code number to be entered when powering-up the System View using the **HOME** (Power) button.

**NOTE:** If you would like to set a security blind to keep others from viewing your on-screen code entry, press **HOME** button momentarily after viewing the keyless entry screen during power up. This will change the code entries to (+) symbols and will allow you to enter your keyless code without viewing the digits.

Creating or Changing Your Keyless Code Number

1. Open the **USER KEYLESS CODE** menu.
2. Enter your existing key code number as follows:
   
   **NOTE:** For first time entries, enter **0000** for the key code number.
   
   a. Press **/>** to move the highlight box to each digit.
   b. Press **/>** to select each digit.
   c. After the 4 digit number has been placed, Press **SELECT** to confirm the number and move to the **ENTER NEW KEY CODE** screen.

3. Enter a new 4 digit Key Code number as follows:

   **NOTE:** Entering 4 zeros (0000) will turn off **KEY CODE ENTER** screen.
   
   a. Press **/>** to move the highlight box to each digit.
   b. Press **/>** to select each digit.

4. Press **SELECT** key. This confirms the new key code number.
RECORDING RUN TIME

The maintenance log allows you to record the current engine run time at each service interval. Service intervals should be performed at the time periods specified in your Engine Operation, Maintenance Manual.

Recording engine run time at maintenance intervals:

1. Open the MAINTENANCE LOG directory.

2. Use the trackpad to select the desired RUN-TIME interval box. The engine run time in the box you selected will be blinking. If this is the desired interval you want to record current engine run time, press SELECT to save. If you are trying to overwrite a previously recorded interval, you will be asked to confirm your intent.
Active Alarms

The **ACTIVE ALARMS** screen displays all active alarms. The active alarm message will alert the operator to the potential problem.

When a problem is detected with the system, the System View will alert the operator to the potential problem by displaying the alarm data in the information window, located at the bottom of the view screen. Refer to the *Engine Operation, Maintenance Manual* for explanation of the problem and the correct action to take.

If problem can cause immediate engine damage, the Engine Guardian System will respond to the problem by limiting engine power. Immediately reduce throttle speed to idle. Refer to the *Engine Operation, Maintenance Manual* or alarm messages following, for further explanation of the problem and the correct action to take.

**To view active alarms:**

1. Open the **ACTIVE ALARMS** directory. The directory will displays all active alarms.

<table>
<thead>
<tr>
<th>Alarm Message (Pop-Up Screen)</th>
<th>Helm Active Alarm</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUMP ALARM</td>
<td>OIL PUMP OUTPUT</td>
<td>The oil pump has stopped functioning electrically (2-cycle outboards). No lubricating oil is being supplied to the engine.</td>
</tr>
<tr>
<td>INJECTOR ALARM</td>
<td>DINJ 1–6 OPEN/SHORT FINJ 1–6 OPEN/SHORT</td>
<td>Engine problem occurred. Have the engine checked by your dealer.</td>
</tr>
<tr>
<td>SENSOR ALARM</td>
<td>Active alarm will display the sensor that is at fault</td>
<td>Engine problem occurred. Have the engine checked by your dealer.</td>
</tr>
<tr>
<td>IGNITION ALARM</td>
<td>Active alarm will display the ignition component that is at fault</td>
<td>Engine problem occurred. Have the engine checked by your dealer.</td>
</tr>
</tbody>
</table>

Continued on next page.
### Active Alarms

<table>
<thead>
<tr>
<th>Alarm Message (Pop-Up Screen)</th>
<th>Active Alarm</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRT/STRB COOL OVRHT COMP TMP OVRHT BLK PSI LO</td>
<td>The engine has overheated. Refer to the <em>Engine Operation and Maintenance Manual</em> for information on overheating.</td>
<td></td>
</tr>
<tr>
<td>HORN OUTPUT</td>
<td>The warning horn is not functioning correctly. Have the system checked by your dealer.</td>
<td></td>
</tr>
<tr>
<td>BATTERY VOLTS HI/LO</td>
<td>The electrical system is not charging or the battery charge is low. If the alarm appears immediately after starting, it is possible that the engine alternator can recharge the battery after operating awhile. If this alarm appears while driving or comes on after starting and continues to be displayed, have the electrical system checked by your dealer to determine the cause of the problem and to avoid being stranded with a dead battery. To help the alternator recharge the battery quickly, reduce the load on the electrical system by turning off any unneeded accessories.</td>
<td></td>
</tr>
<tr>
<td>MPRLY OUTPUT/FEEDBACK</td>
<td>Main power relay is not functioning correctly. Have the engine checked by your dealer.</td>
<td></td>
</tr>
<tr>
<td>ENGINE POWER LIMITED</td>
<td>OVERSPEED</td>
<td>Engine speed exceeded the maximum allowable RPM. The system will automatically reduce the engine speed to within the allowable limit.</td>
</tr>
</tbody>
</table>

Continued on next page.
## Active Alarms

### Alarm Message (Pop-Up Screen) | Active Alarm | Description
--- | --- | ---
SWITCH ACTIVITY | H₂O IN FUEL | Water in the engine water-separating fuel filter reached the full level. Water can be removed from the filter. Refer to the *Engine Operation and Maintenance Manual.*

| RSVR OIL LO |  | Oil level is critically low in the engine mounted oil reservoir tank (2-cycle engines). The engine mounted oil reservoir tank along with the remote oil tank will have to be refilled. Refer to the *Engine Operation and Maintenance Manual.*

MULTIPLE ENGINES

| MULTIPLE STBD ENGINES | MULTIPLE PORT ENGINES | MULTIPLE STBD2 ENGINES | MULTIPLE PORT2 ENGINES | System View is recognizing an incorrect engine location in a multiple engine application. Each engine must first be assigned a position (starboard, port, starboard 2 or port 2). Refer to Engine Location in this Section.

| COMMUNICATION LOST TO ENGINE | STBD/PORT ETCRSC HEALTH | STBD/PORT BKUP ETCRSC HTH | STBD MED/LOW SPD HEALTH | PORT MED/LOW SPD HEALTH | System View does not see the engine computer. Usually indicates that no data is being transferred from the engine’s computer to System View. Check wiring, also make sure both terminator resistors are installed in the bus.
Alarm History

The **ALARM HISTORY** displays all alarms that are, or have been active since last engine key-up.

**To view alarm history:**
1. Open the **ALARM HISTORY** directory. The directory will display alarm history.
# INSTALLATION

## Section 8

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<td>Single Engine – Dual Station</td>
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Components:

1. Cover
2. System View (12-879925)
3. Seal (11-879900)
4. Screw (10-66687)
5. Flat Washer (12-56681)
6. Wing nut (11-816874)
7. Outside Air Temperature Sensor Assembly (56-820386-A76)
8. Display Harness (882755A1)

Special Instructions

Clean lens with water only.

Installation Information

**WARNING**

Disconnect both battery cables at battery before attempting to install gauges

Before cutting any holes, check area behind dashboard for obstructions (braces, cables, wiring, etc.)

**CUTTING TIPS**

- **Fiberglass** – Apply masking tape to area to be cut to prevent dashboard from cracking.
- **Vinyl Covered** – Remove vinyl from area to be cut with razor blade to keep vinyl from tearing.

**System View Installation**

1. Select a location for the System View that affords good visibility and accessibility from behind dashboard.
2. Cut out mounting hole to the given dimensions.

3. Place System View along with seal into dashboard and secure with 4 screws.

4. Install the outside air temperature sensor as follows:
   a. Mount the sensor where it will be exposed to outside air and will not be in direct sunlight.
   b. Select a location and drill a 3/4 in. (19.0 mm) mounting hole.
   c. Install the mounting adaptor as shown.
   d. Thread the air temperature sensor into the mounting adaptor.

- Screw (4)
- Flat washer (4)
- Wing nut (4)

Metric Conversion
- 7/32 = 5 mm
- 1/2 = 12.7 mm
- 9/16 = 14.4 mm
- 3/4 = 19.0 mm
- 2-1/2 = 63.5 mm
- 4.0 = 101.6 mm
- 5-9/16 = 141.2 mm
- 6-11/16 = 169.67 mm
Wiring Information for SmartCraft

REQUIREMENTS

SmartCraft communications are via the Controller Area Network (CAN), electrically implemented on a twisted pair of wires. signals. Note: SmartCraft harnesses include other signals besides CAN.

The maximum distance between any two modules on the SmartCraft bus is 130 ft (40 meters). This distance is calculated as the total harness length between the modules (trunk length plus drop lengths).

There must be exactly two termination resistors on the CAN bus.

No more than 20 modules may be connected to the bus. This is the maximum number of connections supported by the engine control module software.

INSTALLATION GUIDELINES

SmartCraft installations should use Mercury Marine harnesses and junction boxes. This assures a robust mechanical implementation as well as proper connection of all signals.

The ideal installation uses a single trunk line with short drops to individual modules. Two termination resistors, one at each end of the trunk line, minimize signal reflections. Signal reflections can increase radio frequency interference and the potential for bit errors on the bus.

The trunk line is not defined by junction boxes. The trunk should be considered to be the distance between the termination resistors. Drops may be at the ends of the trunk line or anywhere else that is convenient for the installation. Note that the trunk line can “loop-back” in some installations.

- The single engine System View example on page 8-6 illustrates a trunk line with one zero length drop at the engine and one 3 ft (drop at the gauges).
- The twin engine examples on page 8-6 illustrates a 60 ft trunk line with two zero length drops at the engines and two (or three) three foot drops at the gauges.
- The triple engine example on page 8-7 illustrates a 45 ft trunk line with a zero length drop at one engine, two 10 foot drops (at the other engines), and four three foot drops at the gauges.
- The trunk line in the single engine dual station example on page 8-8 is the length of “a” plus the length of “f” There is a zero length drop at the engine and two three foot drops to the System Views.
**Wiring**

*NOTE:* Extension Wiring Harnesses for the System Link gauges are available in 3 ft, 10 ft and 30 ft lengths (84-880756b-3,10,30).

- a - System view
- b - Display harness
- c - System link gauge connection – single engine
- d - System link gauge connection – twin engine
- e - GPS (Optional) connection
- f - Horn – (Provided with display harness)
- g - Terminator
- h - Weather cover
- i - Junction box
- j - SC data cable
- k - Air temperature sensor – (Provided with display harness)

**Connecting Optional GPS Unit to the System View**

*NOTE:* The GPS unit must comply to the National Marine Electronic Association NMEA 0183 Interface Standard V1.5, V2.0+ or later compatible version.

First, look at the GPS wiring diagram and determine what two leads are the GPS output leads. Locate the White and Blue wires coming from the System View display harness (see Wiring). Connect the GPS output leads to the white and blue wires. If no data is received, switch the wire connections around. If no data is still received, refer the GPS owner’s manual and see if the GPS has to be calibrated to turn on the output signal or needs to be grounded differently.
Typical Installation Configurations of the System View

**NOTE:** The typical installation configurations shown on this page and the next few pages are the lowest cost solutions. Other solutions are also possible. See Installation Guidelines.

### SINGLE ENGINE APPLICATIONS

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Part Number</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>879981T_</td>
<td>Wiring Harness SC1000-2RSL (20,30 ft)</td>
<td>1</td>
</tr>
<tr>
<td>b</td>
<td>859318T1</td>
<td>Terminator/Resistor</td>
<td>1</td>
</tr>
<tr>
<td>c</td>
<td>878492T_</td>
<td>Junction Box (4,6,8)</td>
<td>1</td>
</tr>
<tr>
<td>d</td>
<td>859318T2</td>
<td>Weather Cap</td>
<td>1</td>
</tr>
<tr>
<td>e</td>
<td>882755A1</td>
<td>Display Harness SC5000 System View</td>
<td>1</td>
</tr>
<tr>
<td>f</td>
<td>879875K2</td>
<td>System View</td>
<td>1</td>
</tr>
</tbody>
</table>

### TWIN ENGINE APPLICATIONS

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Part Number</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>879981T_</td>
<td>Wiring Harness SC1000-2RSL (20,30 ft)</td>
<td>2</td>
</tr>
<tr>
<td>b</td>
<td>859318T1</td>
<td>Terminator/Resistor</td>
<td>1</td>
</tr>
<tr>
<td>c</td>
<td>878492T_</td>
<td>Junction Box (4,6,8)</td>
<td>1</td>
</tr>
<tr>
<td>d</td>
<td>882755A1</td>
<td>Display Harness SC5000 System View</td>
<td>1</td>
</tr>
<tr>
<td>e</td>
<td>879875K2</td>
<td>System View</td>
<td>1</td>
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</tbody>
</table>
### TRIPLE ENGINE APPLICATIONS

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Part Number</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>879981T_</td>
<td>Wiring Harness SC1000-2RSL (20,30 ft)</td>
<td>1</td>
</tr>
<tr>
<td>b</td>
<td>879968T10</td>
<td>Wiring Harness</td>
<td>2</td>
</tr>
<tr>
<td>c</td>
<td>879968T30</td>
<td>Wiring Harness</td>
<td>1</td>
</tr>
<tr>
<td>d</td>
<td>878492T_</td>
<td>Junction Box (4,6,8)</td>
<td>2</td>
</tr>
<tr>
<td>e</td>
<td>859318T1</td>
<td>Terminator/Resistor</td>
<td>1</td>
</tr>
<tr>
<td>f</td>
<td>882755A1</td>
<td>Display Harness SC5000 System View</td>
<td>2</td>
</tr>
<tr>
<td>g</td>
<td>879875K2</td>
<td>System View</td>
<td>2</td>
</tr>
</tbody>
</table>

### FOUR ENGINE APPLICATIONS

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Part Number</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>879981T_</td>
<td>Wiring Harness SC1000-2RSL (20,30 ft)</td>
<td>1</td>
</tr>
<tr>
<td>b</td>
<td>879968T10</td>
<td>Wiring Harness</td>
<td>2</td>
</tr>
<tr>
<td>c</td>
<td>879968T30</td>
<td>Wiring Harness</td>
<td>1</td>
</tr>
<tr>
<td>d</td>
<td>878492T4</td>
<td>Junction Box</td>
<td>1</td>
</tr>
<tr>
<td>e</td>
<td>878492T6</td>
<td>Junction Box</td>
<td>1</td>
</tr>
<tr>
<td>f</td>
<td>859318T2</td>
<td>Weather Cap</td>
<td>1</td>
</tr>
<tr>
<td>g</td>
<td>859318T1</td>
<td>Terminator/Resistor</td>
<td>1</td>
</tr>
<tr>
<td>h</td>
<td>882755A1</td>
<td>Display Harness SC5000 System View</td>
<td>2</td>
</tr>
<tr>
<td>i</td>
<td>879875K2</td>
<td>System View</td>
<td>2</td>
</tr>
</tbody>
</table>
INSTALLATION

SINGLE ENGINE – DUAL STATION

Terminator/Resistor On This End

Ref. | Part Number  | Description                                    | Qty. |
-----|--------------|------------------------------------------------|------|
  a  | 879981T_     | Wiring Harness SC1000-2RSL (20,30 ft)           | 1    |
  b  | 859318T1     | Terminator/Resistor                             | 1    |
  c  | 878492T_     | Junction Box (4,6,8)                            | 2    |
  d  | 859318T2     | Weather Cap                                     | 2    |
  e  | 879875K2     | System View                                     | 2    |
  f  | 879968T10    | Wiring Harness                                  | 1    |
  g  | 882755A1     | Display Harness SC5000 System View              | 2    |