

VesselView 403

8M0179548 221 eng



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Declaration of Conformity

Mercury Marine declares that the following product to which this declaration relates is in conformity with the requirements of EU directive 2014/30/EU (Electromagnetic Compatibility), and Section 182 of the Australian Radio communications (Electromagnetic Compatibility) standard 2008, and satisfies all the technical regulations applicable.

The assessment has been carried out in accordance with Annex II of the above directive.

Product	Mercury Marine VesselView 403
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This product has been tested to the following standards.


Standard

Standard	Description
EN 60945:2002 Clause 9 and 10	Maritime Navigation and Radiocommunication Equipment and Systems — General Requirements — Methods of Testing and Required Test Results

Test Report

Laboratory	Report Number
TÜV SÜD AMERICA INC.	SD72119173-0816 Rev.1

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directives and standards for CE marking for sale in the European and Australian communities.

Authorized Representative	
Address	Mercury Marine, W6250 Pioneer Road, P.O. Box 1939 Fond du Lac, WI 54936-1939
Signature	Christopher D. Drees, President, Mercury Marine 
Date	10/01/2017

The attention of the purchaser, installer, or user is drawn to special measures and limitations to use which must be observed when the product is taken into service to maintain compliance with the above directives. Details of these special measures and limitations to use are contained in the appropriate product manuals.

VesselView Overview

IMPORTANT: VesselView is a multifunction display (MFD) that is compatible with products manufactured by Mercury Marine Outboards, Mercury MerCruiser, Mercury Diesel. In addition, the VesselView software can be installed on compatible display devices from Lowrance® and Simrad®. Some of the functions explained in this manual will be disabled depending on the power package it is connected to.

VesselView is a comprehensive boat information center that can display information for up to two gasoline or diesel engines. It continuously monitors and reports operating data including detailed information such as water temperature and depth, trim status, boat speed and steering angle, and the status of fuel, oil, water, and waste tanks. VesselView can be fully integrated with a vessel's global positioning system (GPS) or other NMEA-compatible devices to provide up-to-the-minute navigation, speed, and fuel-to-destination information. VesselView is a display extension for autopilot and joystick operations. All functionality of these piloting features are controlled through Mercury Marine's autopilot control area network (CAN) pad or joystick piloting control. VesselView will show if a mode of control is active or in standby; pop-ups will appear as the vessel arrives at waypoints, prompting response to turns. Additional display text can be used to adjust the engines and drives to achieve maximum efficiency.

Display resolution	320 x 240 – H x W
Display type	LED-backlit optically bonded full-color transfective TFT-LCD
Display size	104 mm (4.1 in.)
Display viewing angle	170 degrees
Operating temperature	–25 °C to 65 °C (–13 °F to 149 °F)
Operating temperature stored	–40 °C to 85 °C (–40 °F to 185 °F)
Water resistance	IPX7
Product width	118 mm (4.64 in.)

Product depth	36.5 mm (1.43 in.)
Product height	115 mm (4.52 in.)
Product weight	0.32 kg (0.7 lb)
Power consumption	2.2 W (maximum)
Power supply	NMEA 2000®
NMEA 2000 load equivalency number	4 network loads

VesselView 403 Front Panel

VesselView 403 utilizes five hard buttons with no touchscreen functionality.



Front controls

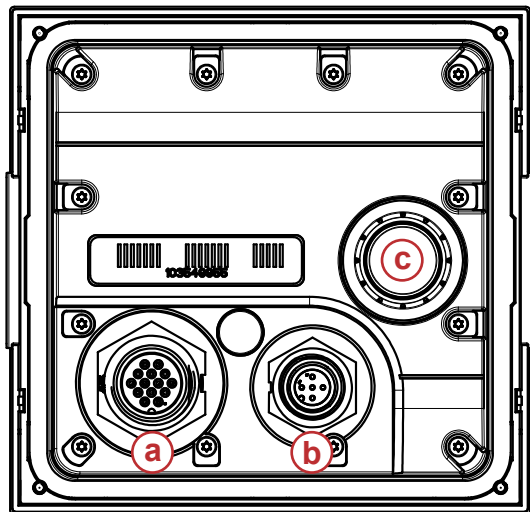
- a** - Menu button
- b** - Down arrow button
- c** - Enter button
- d** - Up arrow button
- e** - Speed control button

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- The **Menu** button provides access to the Mercury menu features.
- The **Down arrow** button provides downward navigation of on-screen options or selections.
- The **Enter** button is used to select, engage, disengage, or to save a selection.
- The **Up arrow** button provides upward navigation of on-screen options or selections.
- The **Speed control** button provides access to speed control features of the VesselView.

VesselView 403 Rear Panel

The wiring connection points on the rear panel of the VesselView allow for the connection of the Mercury SmartCraft network communication cable, and for the unit to communicate over a NMEA 2000 network. There is also an USB port for utilizing a wi-fi dongle, as well as for connecting a portable storage device for updating software, uploading vessel personalities, or downloading screen captures.



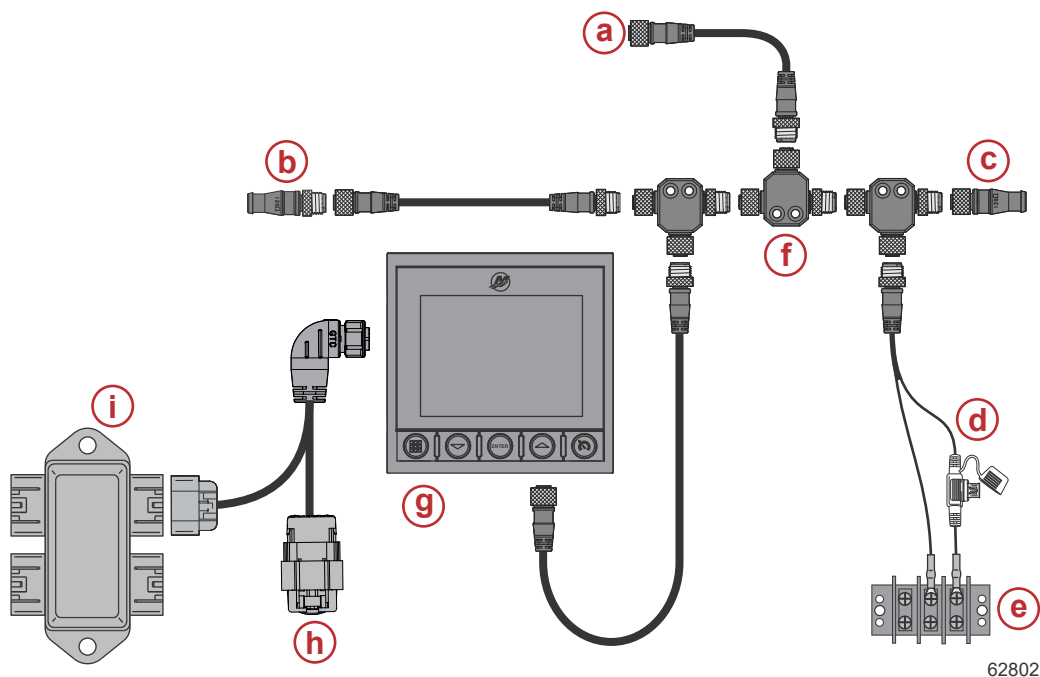
Rear panel

- a - Mercury SmartCraft connection
- b - NMEA 2000 connection
- c - USB port

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Wiring Architecture

The following image depicts a typical wiring architecture for incorporating VesselView into a boat's communication network.



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- a - Optional connection to a chartplotter or multifunction display
- b - 120 ohm termination resistor, male
- c - 120 ohm termination resistor, female
- d - NMEA® 2000 fused power source
- e - Power bus
- f - NMEA® 2000 T-connector
- g - VesselView 403
- h - Weather capped—unused
- i - Junction box

Device Maintenance

IMPORTANT: It is recommended that the supplied white plastic sun cover be installed for protection when the unit is not in service.

Display Screen Cleaning

Routine cleaning of the display screen is recommended to prevent a buildup of salt and other environmental debris. Crystallized salt can scratch the display coating when using a dry or damp cloth. Ensure that the cloth has a sufficient amount of fresh water to dissolve and remove salt deposits. Do not apply aggressive pressure on the screen while cleaning. When water marks cannot be removed with the cloth, mix a 50/50 solution of warm water and isopropyl alcohol to clean the screen. Do not use acetone, mineral spirits, turpentine type solvents, or ammonia based cleaning products. The use of strong solvents or detergents may damage the antiglare coating, the plastics, or the rubber keys. It is recommended that the sun cover be installed when the unit is not in use to prevent UV damage to the plastic bezels and rubber keys.

Media Port Cleaning

The media port cap area should be cleaned on a regular basis to prevent a buildup of crystallized salt and other debris.

Electrical Connections

Routine inspection of the electrical connections should be performed to prevent the buildup of crystallized salt and other debris.

Notes:

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Splash Screen

Upon startup, VesselView will display an initial splash screen. An image of an engine in the lower corner indicates that the engine power on the vessel is emission controlled.



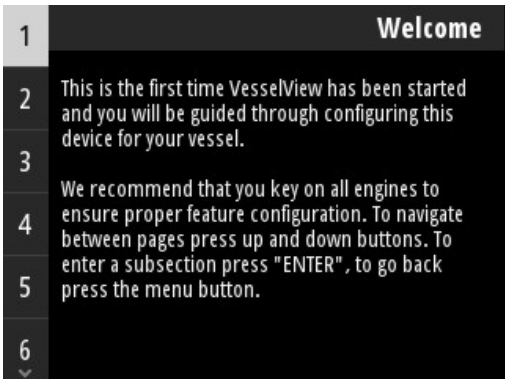
Splash screen

Setup Wizard

Overview

The VesselView Setup Wizard guides you through the first steps of configuring the VesselView. The Setup Wizard can be accessed at any time by pressing the **Menu** button. In the menu screen, use the **Down Arrow** button to navigate to the **Settings** option. In the Settings menu, use the **Down arrow** to navigate to the **System** option and launch **Wizard**.

At the **Welcome** screen, press the **Down arrow** button to begin the Setup Wizard.



Import Configuration

The setup wizard will begin by asking the operator if there is a configuration file that has been saved to the local storage in the unit, or loaded on the USB storage device inserted into the back of the unit. This can be helpful and save setup time if the settings and preferences to be used for this vessel are identical to a vessel which has already been used to create a configuration file. If there is no file to import, press the **Down arrow** button to continue with the wizard. If there is a configuration to import, use the file browser menu option to locate the configuration file. Refer to **Section 3 - File Browser**.



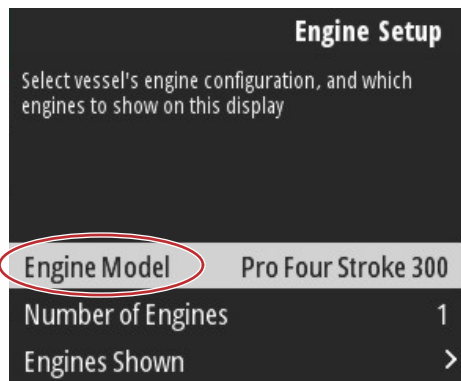
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Engine Setup

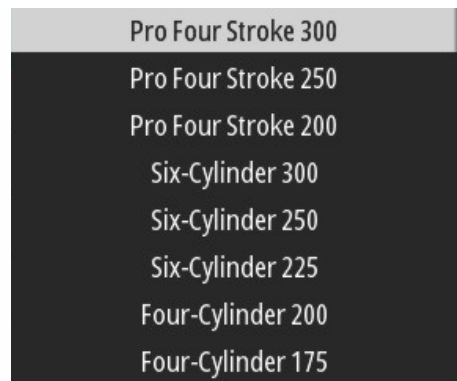
In the engine setup section of the setup wizard, the operator can select the engine model, the number of engines on the vessel, and the number of engines, up to two, which will be displayed on a particular VesselView.

NOTE: VesselView 403 will only display data for two engines. Vessels with three or more engines will require additional VesselView 403 units.

Press the **Enter** button to bring up the selection of engines. Use the arrow buttons to navigate up and down the list. Press the **Enter** button when the correct engine is highlighted.



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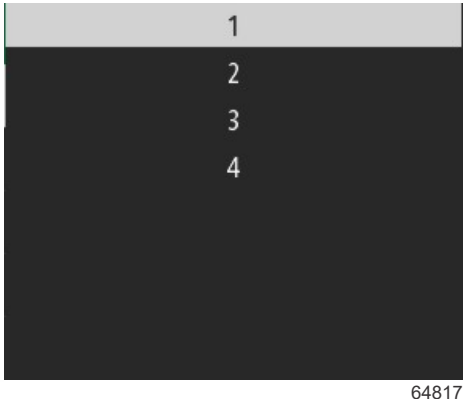
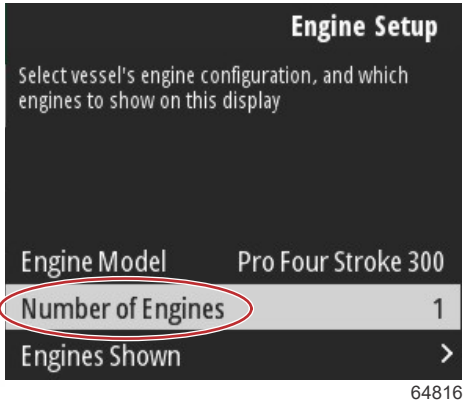


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Engine selection

Section 2 - Initial Screens and Setup Wizard

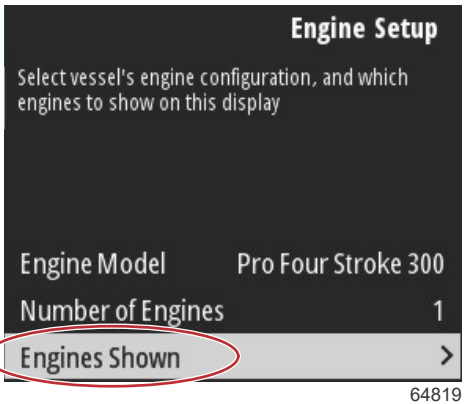
Press the **Enter** button to bring up the Number of Engines screen. Use the up and down arrow buttons to select the correct number of engines on the vessel.



Number of engines

Press the **Enter** button to bring up the Engines Shown selection screen. Depending on the number of engines selected in the previous step, appropriate options will only be shown. For example, if three engines was selected, the operator would be given the options of **Port**, **Starboard**, and **Center**. Use the arrow buttons to highlight an option and press the **Enter** button to activate the check box of the engines that will be displayed on the VesselView. A maximum of two engines can be displayed on a single VesselView 403.

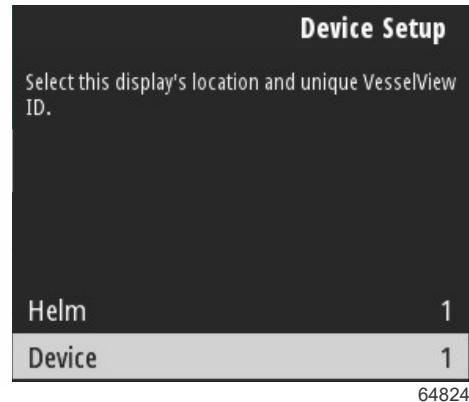
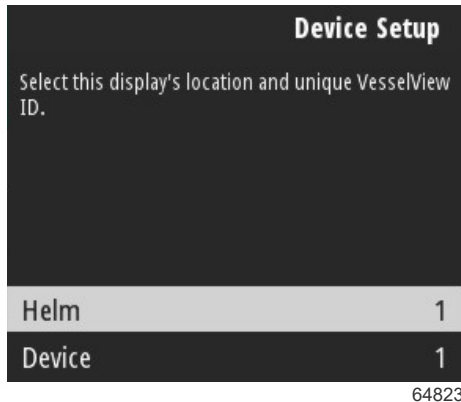
When finished with the Engine Setup portion of the Wizard, press the **Menu** button to return to the Engine Setup screen. Press the **Down arrow** button to continue to the next step of the Wizard.



Engines shown

Device Setup

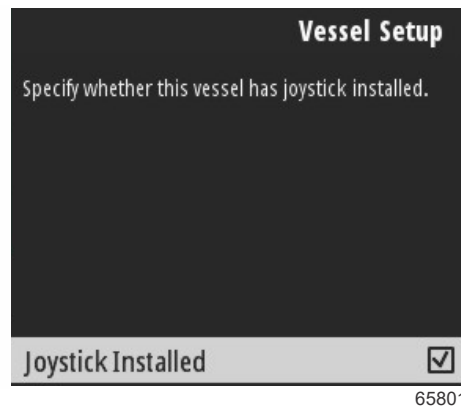
In the Device Setup screen, use the up and down arrow buttons and the Enter button to confirm selection. If using multiple VesselView devices, be sure to assign unique numbers to each unit to avoid data transmission problems. Helm numbers should match the location of the individual VesselView unit. It is common to make the main helm 1 and the secondary helm 2. Press the **Down arrow** button to continue with the Wizard.



Helm and device setup

Joystick Installed

For vessels equipped with Joystick Piloting, highlight and select the Joystick Installed check box option. This will ensure that inputs to the system, initiated by the joystick, will be recognized by the VesselView unit.

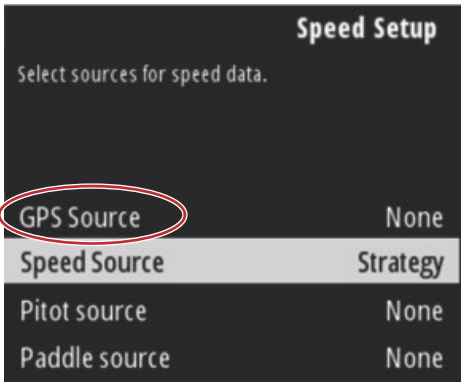


Speed Setup

The speed source determines how speed data is obtained. A strategy utilizes pitot and paddlewheel data to establish the vessel's speed. When strategy is selected, the pitot and paddlewheel data source engine must be selected. GPS utilizes the data coming from the GPS unit to determine speed. When GPS is selected, the proper network BUS must be selected as the source of GPS data to the VesselView.

Use the **Up arrow** and **Down arrow** buttons and the **Enter** button to make selections in the Speed Setup screens.

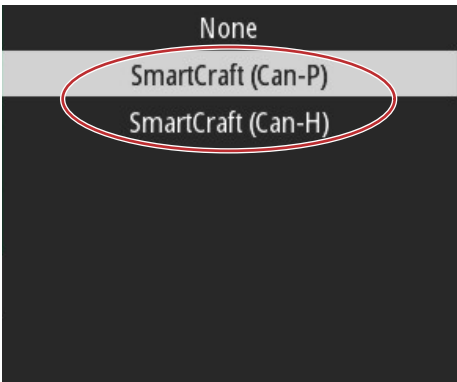
Highlight and select the GPS Source.



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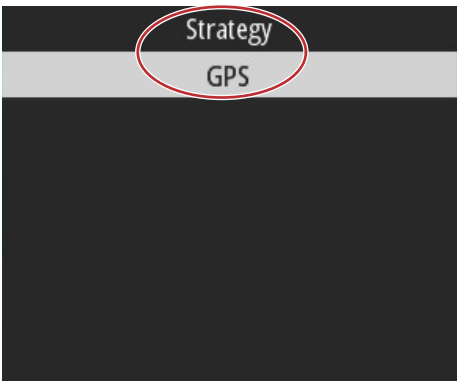
Speed source selection

For GPS speed data, select the CAN Bus that transmits the GPS data over the SmartCraft network.



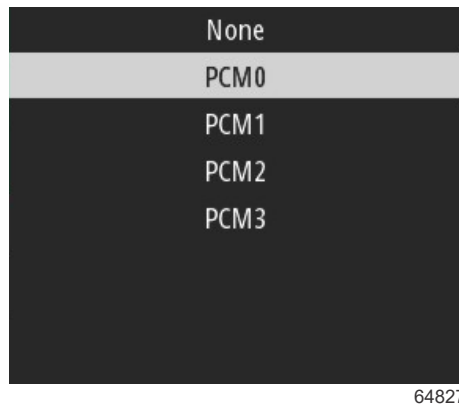
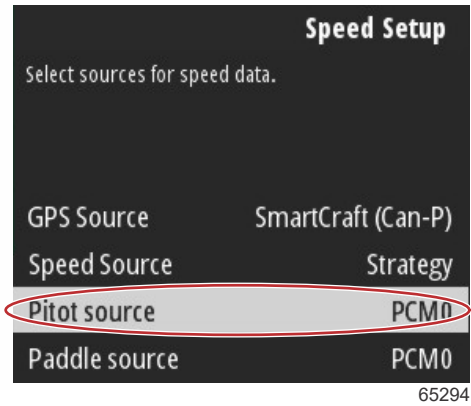
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Highlight and select the Speed Source option.



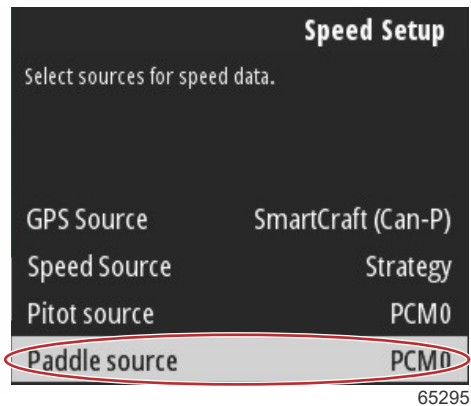
65292

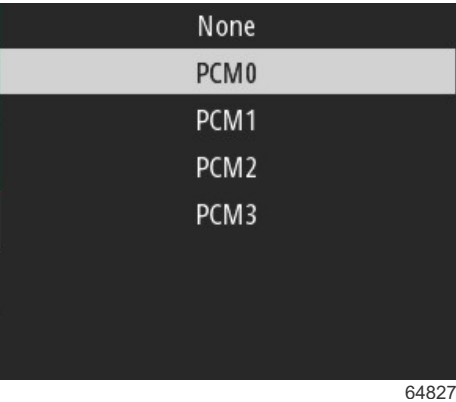
For a speed Strategy, highlight and select the Pitot source option and choose the engine PCM that will report the data from the pitot sensor.



Engine position selection

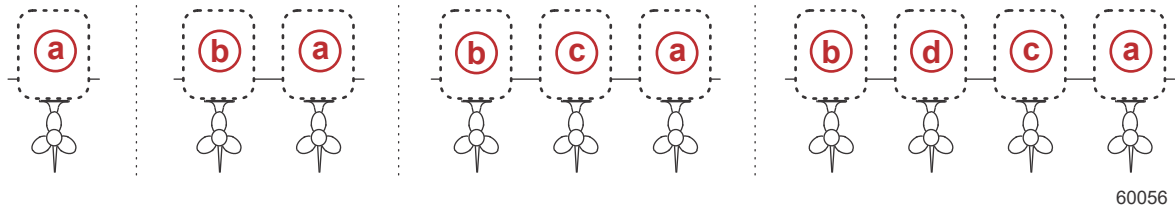
Select the Paddle source option and choose the engine PCM that will report data from the paddlewheel sender.





Engine position selection

The PCM positions for vessels with multiple engines is shown in the following illustration.

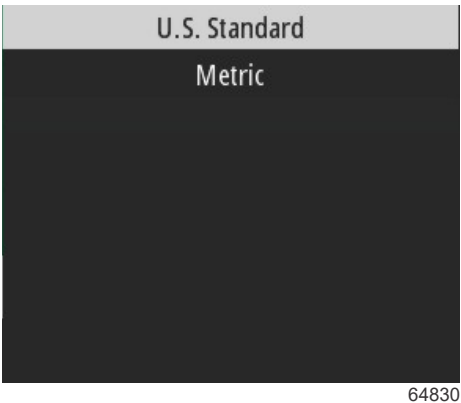
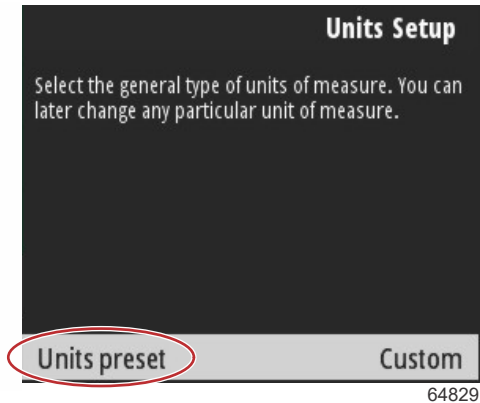


- a**- PCM0 = starboard outer
- b**- PCM1 = port outer
- c**- PCM2 = starboard inner or center
- d**- PCM3 = port inner

When selections are completed in the Speed Setup portion of the Wizard, press the **Down arrow** button to continue to the next step of the Wizard.

Units Setup

VesselView allows the operator to select the units of measure which are displayed. Use the **Up Arrow** and **Down Arrow** buttons and the **Enter** button to make a selection.



Units of measure to display

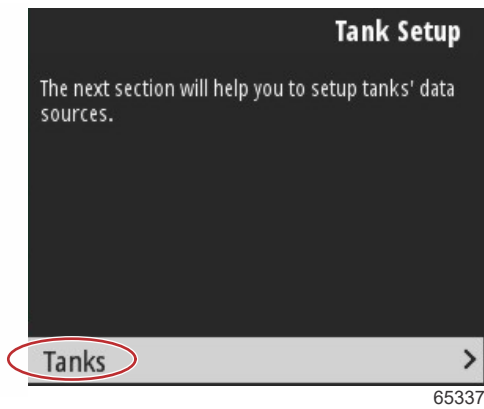
When selections are completed in the Units Setup, press the **Down Arrow** button to continue with the Wizard.

Tank Setup

IMPORTANT: Check that all tank sensors and senders are connected properly to the network before attempting to configure new tanks.

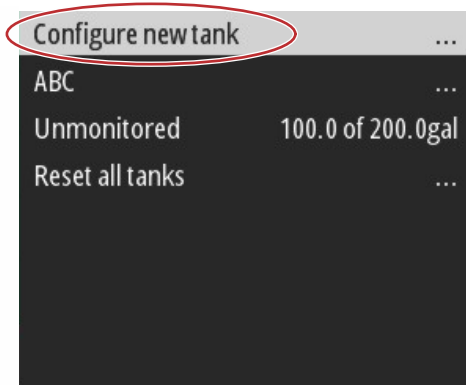
Tank setup allows the operator to select the tank type, set the volume of the tank, and name the tank.

With Tanks highlighted, press the **Enter** button to continue.



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With the Configure new tank highlighted, press the **Enter** button.



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The tank configuration screen contains all of the information that VesselView will require to display accurate tank data.

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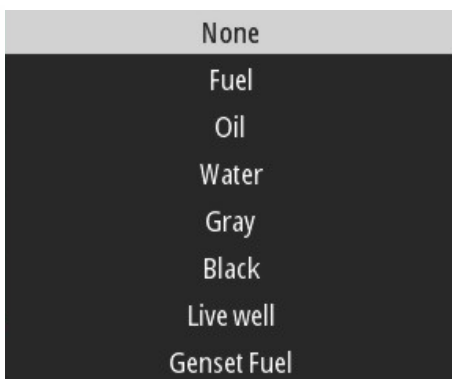
Tank configuration screen

- a** - Detected tank sensor
- b** - Type of tank
- c** - The tank name
- d** - The tank capacity
- e** - Tank reading inversion
- f** - Tank calibration
- g** - Save option

NOTE: Selecting genset fuel as a tank type will not add the volume of the genset tank to the overall volume of the vessel propulsion fuel tanks.

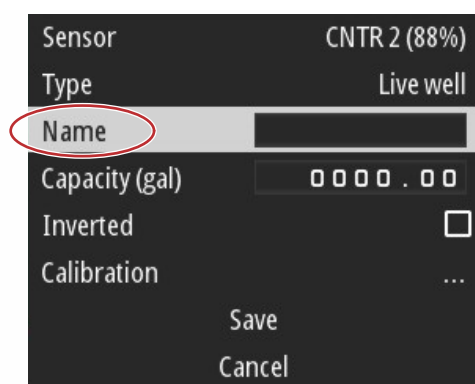
Section 2 - Initial Screens and Setup Wizard

To select the tank type, use the **Up arrow** and **Down arrow** buttons to highlight the desired tank type. With the tank type selected, press the **Enter** button.



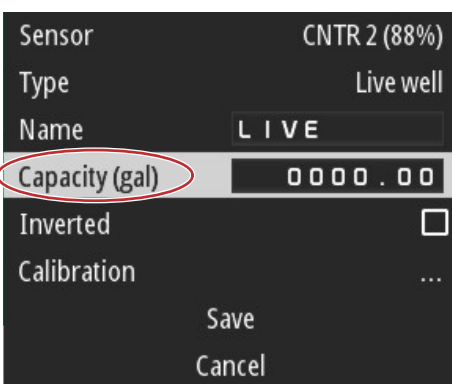
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Enter the name of the tank. Up to nine characters can be entered into the name field. Refer to **Section 3 - Entering Text and Numbers**. When finished entering the name of the tank, press the **Menu** button to continue to the next step.



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Enter the capacity of the tank. Use the same process used in the previous step to complete the entry. When finished entering the capacity of the tank, press the **Menu** button to continue to the next step.



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VesselView gives the operator the ability to invert the volume value of the tanks being monitored. This option is available to accommodate some tank senders that transmit data opposite of traditional standard senders. Standard tank level senders read a 33–240 ohm resistance. A reading of 240 ohms indicating an empty tank and a reading of 33 ohms indicating a full tank. Inverted tank senders typically read 0–180 ohms, with 0 ohms indicating a full tank and a reading of 180 ohms indicating an empty tank.

Sensor CNTR 2 (88%)
 Type Live well
 Name LIVE
 Capacity (gal) 0000.00
 Inverted ☐
 Calibration ...
 Save
 Cancel

65347

Performing tank calibration: There are many situations in which a tank may need calibration; odd shaped tanks, V-bottomed tanks, stepped-sided tanks, and even a tank's aspect when the boat is in the water. Floats and senders can send inaccurate data to the operator, causing problems with fuel and other volume display. The most accurate way to achieve tank calibration is to start with an empty tank with a known capacity. Pump one quarter of the capacity and record the float or sender position. Repeat this procedure in one quarter increments, recording the float or sensor position each time, until the tank is full. Tank calibration allows the operator to adjust the full through empty readings of a tank.

Use the **Up arrow** and **Down arrow** buttons to highlight the calibration rows. With a row highlighted, press the **Enter** button to change the percentage data. Press the **Menu** button to exit the calibration row.

Raw/Calibrated	88.0%	88.0%
1	0.0%	0.0%
2	25.0%	25.0%
3	50.0%	50.0%
4	75.0%	75.0%
5	100.0%	100.0%
Save		
Cancel		

65348

When all fields and selections have been configured, highlight the Save option and press the **Enter** button to save the tank settings into the VesselView.

Raw/Calibrated	88.0%	88.0%
1	0.0%	0.0%
2	25.0%	25.0%
3	50.0%	50.0%
4	75.0%	75.0%
5	100.0%	100.0%
Save		
Cancel		

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Section 2 - Initial Screens and Setup Wizard

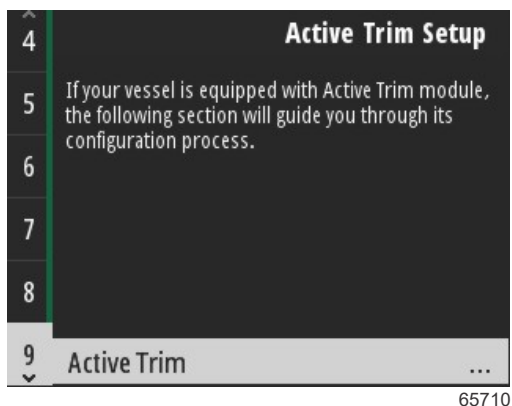
VesselView will return to the Configure new tank screen. If there are no more tanks to configure, press the **Menu** button to return to the Wizard menu and press the **Down arrow** button to continue with the wizard.

Active Trim Setup

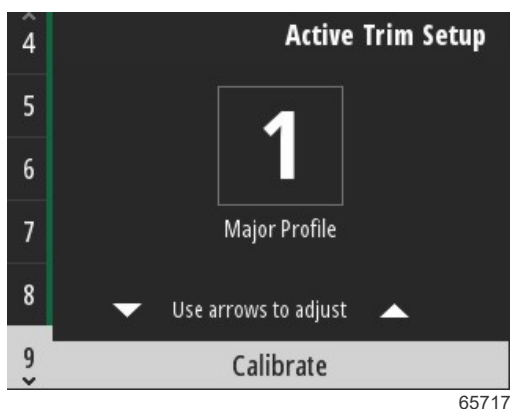
Vessels with Mercury Marine's Active Trim installed can manage trim profiles using the VesselView display. Functionality of the Active Trim keypad will not be affected.

VesselView will guide the operator through several steps in the Active Trim configuration process. Follow all on-screen directions and confirmations to complete the configuration process.

With the Active Trim option highlighted, press the **Enter** button to begin the setup process.



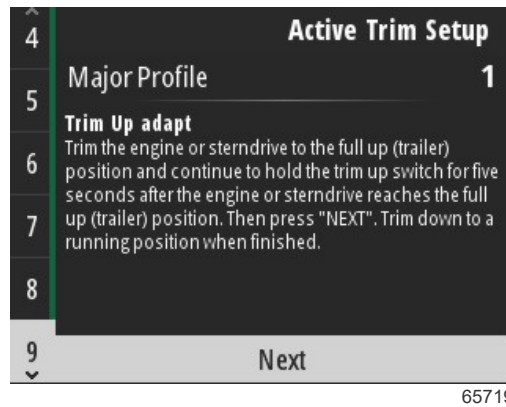
Use the **Up arrow** and **Down arrow** buttons to highlight an active trim profile. The higher the number the more aggressive engine or drive trimming will be at lower speeds. The major trim profile becomes the average of the running profile. The running profile can be adjusted when underway to fine tune the vessel attitude in the water. To find the best major profile for your vessel, the boat should be run at cruising speed. With the Calibrate option highlighted, press the **Enter** button to continue.



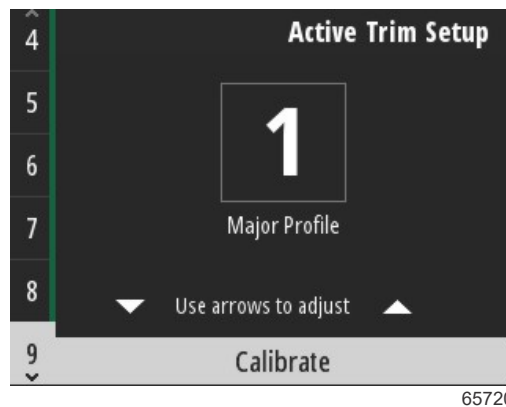
Follow the on-screen instructions to complete the trim down adapt. Press the **Enter** button to continue.



Follow the on-screen instructions to complete the trim up adapt. Press the **Enter** button to continue.



VesselView will display the Major Profile screen when trim down and trim up adapt is complete. There is no need to calibrate each of the five major trim profiles. The trim down adapt and trim up adapt applies the trim readings to all five of the profiles. To exit the active trim portion of the setup wizard, press the **Menu** button.



Active trim setup is complete.

Finishing Setup Wizard

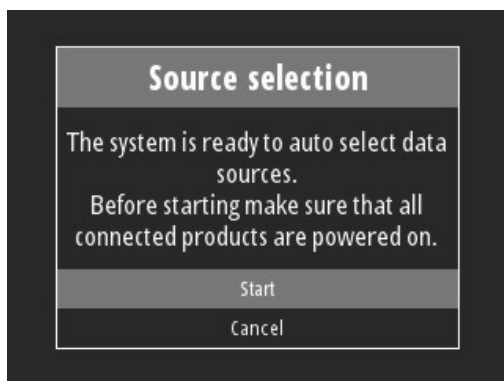
To complete the Setup Wizard process, press the **Enter** button.



Setup wizard complete

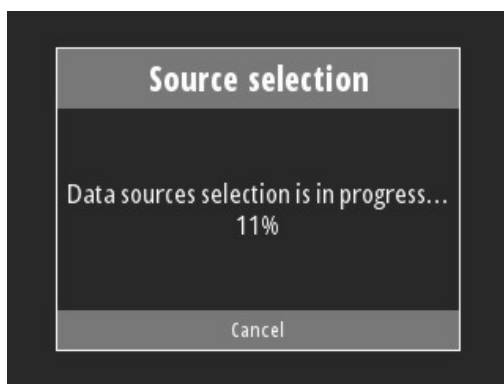
Source Selection Notice

Upon completion of the setup Wizard, a Source selection notice is displayed. Selecting Start, by pressing the **Enter** button, will begin the process of searching the vessel's network for identifiable sensors and senders of data transmitting devices.



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Data source selection in progress. The screen will display the progress from 0 to 100 percent.



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When selection is complete, press the **Enter** button to continue. The VesselView screen will return to the main data display mode.



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Creating Screen Captures

VesselView allows for the creation of screen images during realtime operation.

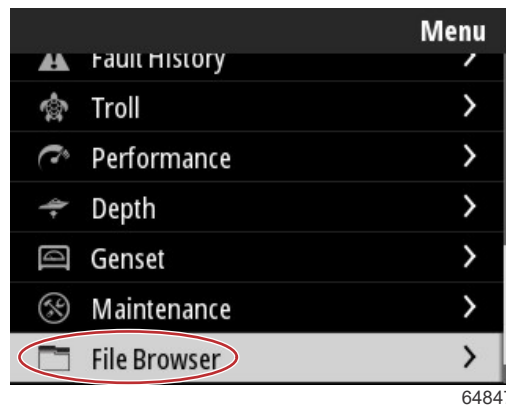
IMPORTANT: Always use caution when diverting your attention away from the water in front of you. Be certain that there are no obstructions or other boats in your path.

To create a screen capture press the **Menu** and **Speed Control** buttons at the same time. A screen capture file name will briefly appear at the bottom of the screen.



Menu and Speed Control buttons

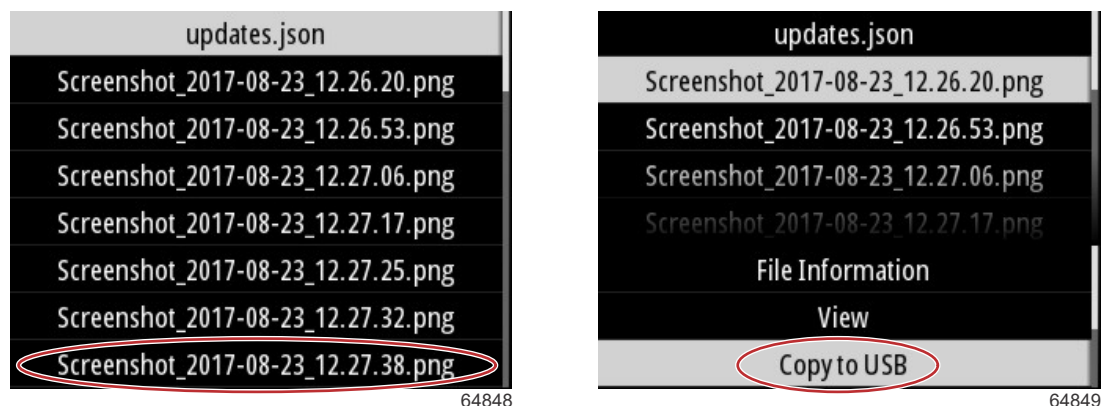
All screen captures are located within the **File Browser** folder, which is in the main menu.



Screen captures can be selected one at a time for viewing, transferring to USB, or Deleting.

Section 2 - Initial Screens and Setup Wizard

NOTE: In order to see the Copy to USB option, a properly formatted USB drive must be plugged into the back of the VesselView unit. The USB connection is located under the large cap on the rear of the unit.



Screenshots copied to USB drive

A confirmation screen will appear informing the operator that the screenshot was successfully copied to the USB drive. Press the **Enter** button to confirm OK and return to the screenshots folder.



Section 3 - Main Menu Selections

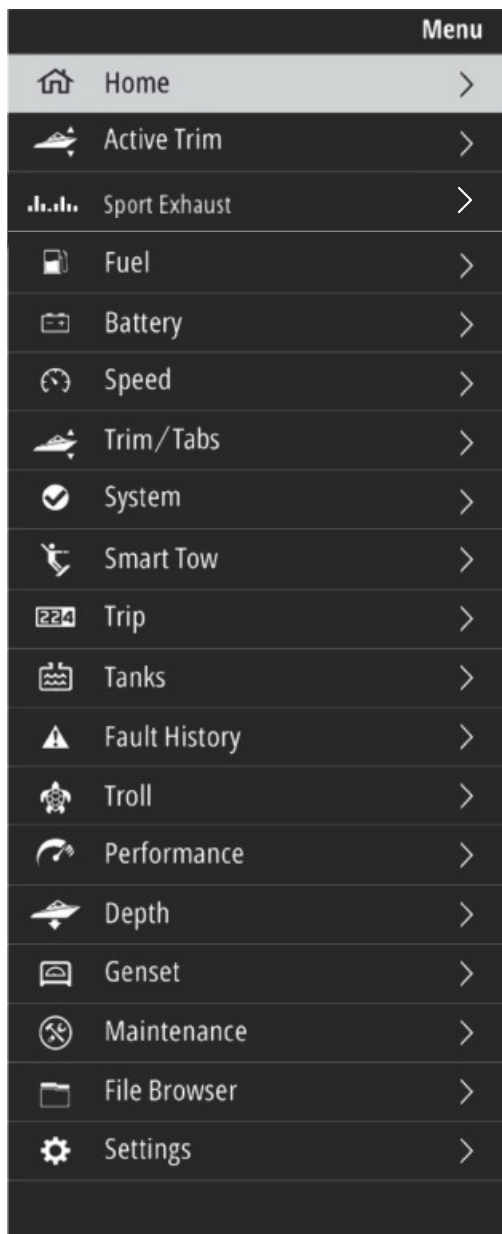
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Overview

Pressing the **Menu** button will bring up the main Menu screen. Use the **Up arrow** and **Down arrow** buttons to navigate and highlight the desired menu item.

Anytime a selection is made from the main Menu screen, pressing the **Menu** button will take the operator out of the selection and back to the main Menu screen.



64976

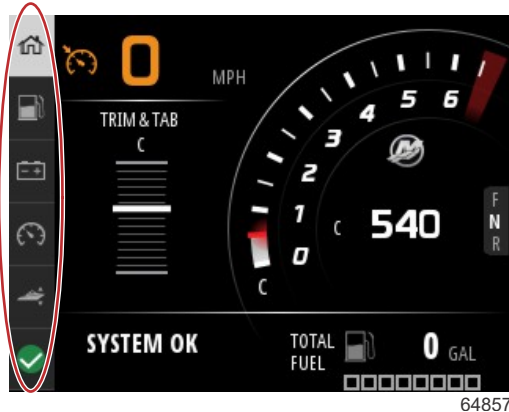
Enlarging Data Screens

There are six preset data items in the left-hand side System Panel. When the vessel display screen is active, use the **Up arrow** and the **Down arrow** to select items in the System Panel. Selection of any of the six presets will display that selection's data full screen. The six panels are:

1. Home
2. Fuel
3. Battery
4. Speed
5. Trim/Tabs

6. System

Pressing the **Up arrow** button until the **Home** icon is highlighted will return the VesselView to the active display screen.

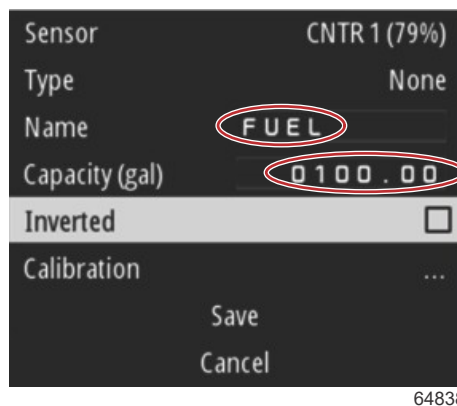


System Panel

Additional enlarged data screens can be accessed by pressing the **Menu** button and using the **Up arrow** or **Down arrow** to select any of the menu items. Depending on the power package of the vessel, some options may not be available.

Entering Text and Numbers

Entering text and numbers in active fields can be accomplished through the use of the **Up arrow** button, **Down arrow** button, the **Enter** button, and the **Menu** button.



Active fields

1. Use the **Up arrow** and the **Down arrow** buttons to highlight the desired item or field.
2. Press the **Enter** button to activate the cursor in the data field.
3. Press the **Enter** button one more time to highlight the individual character/number position.
4. Use the **Up arrow** and **Down arrow** buttons to change the character/number.
5. When the desired character/number is entered, press the **Enter** button to deactivate the character/number position.
6. Press the **Up arrow** button to proceed to the next character/number position. The **Down arrow** button can be used to return to previous character/number positions.
7. When an active data field is complete, press the **Menu** button to utilize the **Up arrow** and **Down arrow** buttons to navigate on-screen to the next field, either up or down.
8. Use the previous list of instructions to complete additional active fields for various screens throughout VesselView.
9. When all fields are completed on a screen, select **Save** to ensure any changes or additions are kept intact.

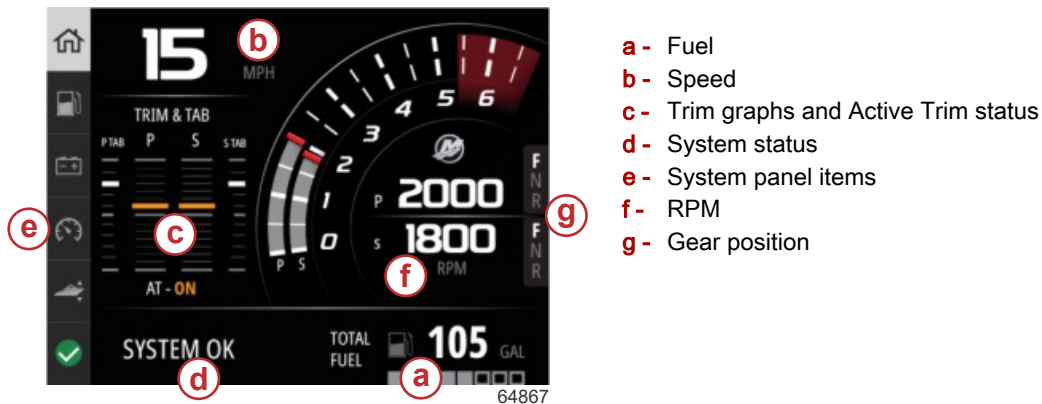
Home

The VesselView **Home** screen contains the following data:

- Fuel
- Speed
- Trim graphs and Active Trim status

Section 3 - Main Menu Selections

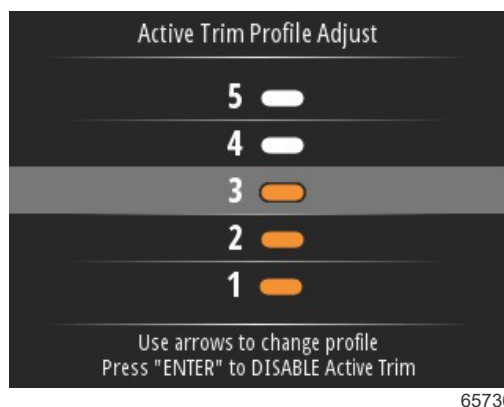
- System status
- Autopilot status
- RPM
- Gear position



To return to the Home screen from any data level or feature screen, press the **Menu** button. Depending on the nested level you are in, it may require that the **Menu** button be pressed several times.

Data items shown in the left-hand side System Panel can be customized by navigating to: Settings>Preferences>Interface>System. A maximum of five data selections can be made.

Active Trim

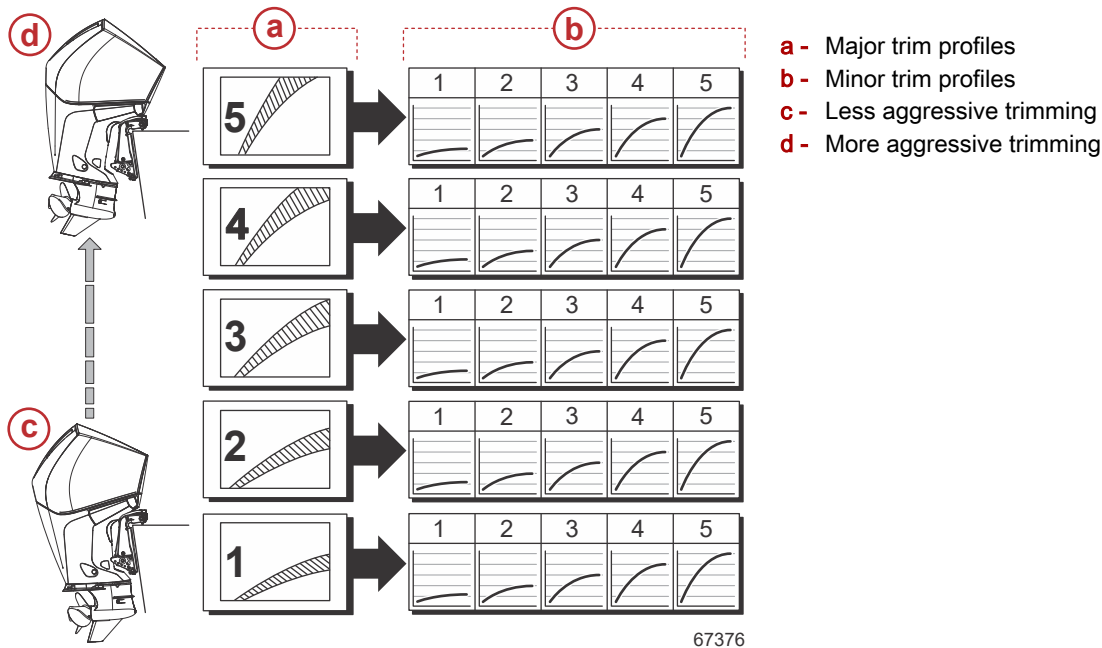


Additional hardware for your vessel may be required for the Active Trim features to function. See your authorized Mercury Marine dealer for information on required hardware.

At boat startup, Active Trim resumes the on/off state from the previous shut down. For example, if Active Trim was on at the previous shut down, it will be on at the next startup.

Major Trim Profiles: There are five major trim profiles. The lower the number, the less aggressive the trim position of the outboard or drive will be at a lower boat speed. As the major trim profile number is increased, the more aggressive the outboard or drive trim angle will be at lower boat speeds. Finding the proper major trim profile ultimately results in the boat running on plane, where the bow is at a desirable attitude to the water surface and the outboard or drive is perpendicular to the water surface. For most applications, a major trim profile will be 2, 3, or 4. Select a running major trim profile and increase the major profile until the boat begins to porpoise, then back down one major trim profile.

Minor Trim Profiles: Once a desirable major trim profile has been selected, select a minor trim profile. Slight variations in the minor trim profiles can be made to help compensate for boat loading—passenger or gear distribution, changes in ballast or fuel tank levels, weather, propping, and operator preference. Select a minor trim profile between 1 and 5 to find the ideal trim position for running on plane.



Introduction to Active Trim

Active Trim is Mercury Marine's patented GPS-based automatic trim system. This intuitive, hands-free system continually adjusts engine or drive trim for changes in operating conditions to improve performance, fuel economy, and ease of operation. It responds to boat maneuvers with precision and delivers a better overall driving experience. No knowledge of trimming an engine or drive is needed to take advantage of Active Trim.

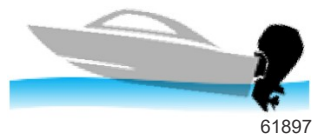
- As the boat accelerates, the engine or drive will trim out.
- As the boat decelerates, for example, while making a turn, the engine or drive will trim in.
- Active Trim can be overridden at anytime by using the regular, manual trim buttons.
- Active Trim allows the boat operator to compensate for changes in boat load, driver preferences, and weather conditions while maintaining full automatic control.

The Active Trim system has four modes of operation:



1. Idle speeds

Maintains the existing trim position.



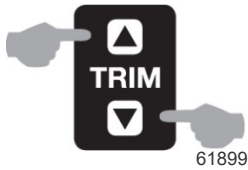
2. Acceleration (hole shot)

Tucks the engine or drive under to minimize bow rise and improve time-to-plane.



3. Planing speeds

Progressively trims the engine or drive based on GPS speed to maintain the most efficient running attitude.



4. Override

When the boat operator uses manual trim, the Active Trim system is immediately overridden, returning full control to the operator.

Active Trim Operation

- Active Trim automatically controls trim to maintain the optimum engine or drive position based on engine RPM and boat speed.
- Active Trim progressively trims out the engine or drive to maintain an efficient running attitude.
- Active Trim will maintain the last known trim position when operating at speeds in excess of 80 km/h (50 mph).
- Operation above 80 km/h (50 mph) may require trim adjustments using the panel mounted or control handle trim position switch.
- Active Trim will gradually return the engine or drive to the down position during deceleration.
- Active Trim will only function when the engine or drive is in the normal trim range.

GPS

Active Trim uses a GPS signal to determine vessel speed. The Active Trim system will not automatically control trim until the GPS unit has acquired a signal.

Resume Functionality

If the boat operator overrides the Active Trim system at planing speeds using the trim button, or exceeds 80 km/h (50 mph), the system will stop controlling the trim. Active Trim will resume automatically under the following conditions:

- Override occurred above 80 km/h (50 mph) and the boat operator then decelerates to below 80 km/h (50 mph).
- Override occurred above 80% of the rated engine RPM and the boat operator then decelerates to below 80% of the rated engine RPM.
- Override occurred in the cruising speed range and then the boat operator decelerates to idle. Active Trim will become active on the next acceleration.

Shallow Water Operation

Active Trim cannot detect water depth and will not trim up automatically in shallow water. The boat operator will need to override Active Trim by trimming the engine or drive manually or pressing the OFF selection.

Trailer Position

Placing the engine or drive in trailer position—over 50% of the adapted trim range, will prevent Active Trim from engaging. Any time the engine or drive is trimmed above its normal range—to navigate shallow water, launch the boat from a trailer, or load the boat onto a trailer, for example—you must manually trim down before Active Trim will function. This safety feature is meant to prevent the engine or drive from automatically trimming down and hitting something.

Setup and Configuration

Refer to **Settings - Active Trim**, for setup and configuration instructions.

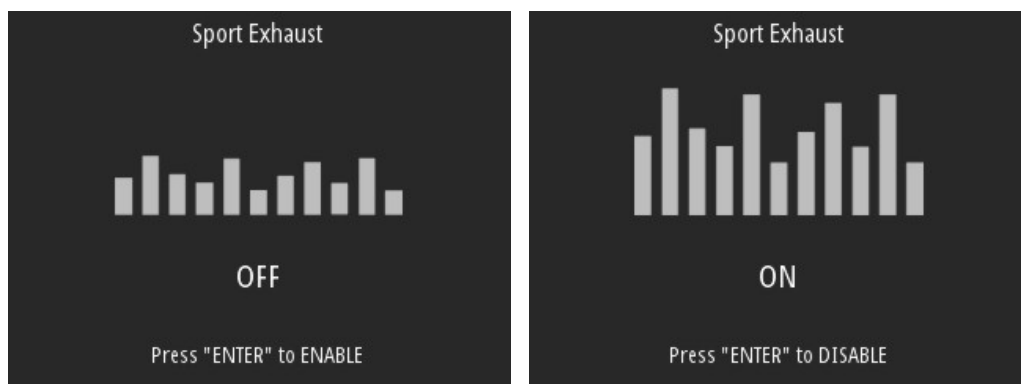
Sport Exhaust

NOTE: *Sport Exhaust is only available on certain outboard models.*

The Sport Exhaust feature allows the operator to change the sound of the outboard idle relief exhaust volume. Enabling the Sport Exhaust feature opens an exhaust passage, allowing a more deep exhaust sound.

The Sport Exhaust screen will allow the operator to change the status of the Sport Exhaust option. Sport Exhaust will be in the **OFF** state until the operator engages Sport Exhaust by pressing the **ENTER** button on the display.

Pressing the **ENTER** button with the Sport Exhaust in the ON mode will disable the feature.

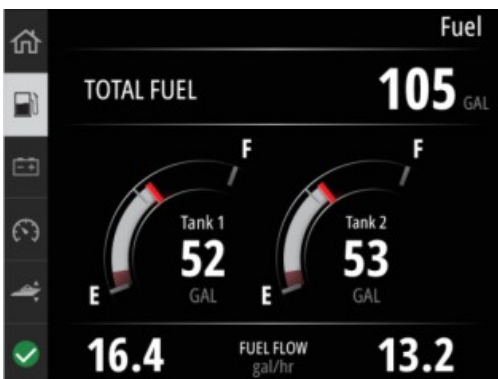


67617

Fuel

The VesselView Fuel screen displays the total fuel based on the current tank data entered in the tank configuration through the tanks menu or the setup wizard.

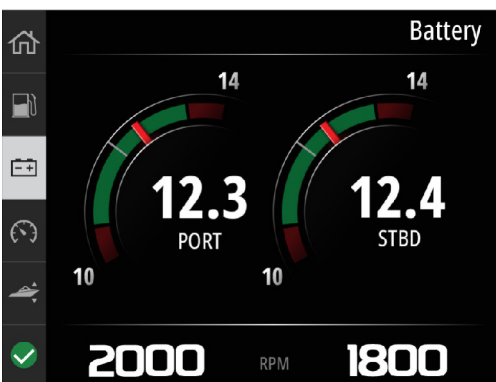
The lower portion of the screen will show the fuel flow, or fuel consumption in volume per hour. The volume will be dependent on the units of measure that was selected during the setup wizard process. Units of measure can be changed at any time by navigating to Menu>Settings>Preferences>Units.



64884

Battery

The Battery data screen displays the battery voltage in a numeric value as well as a red indicator on a dial type gauge sweep. Engine RPM will display in the lower portion of the screen.

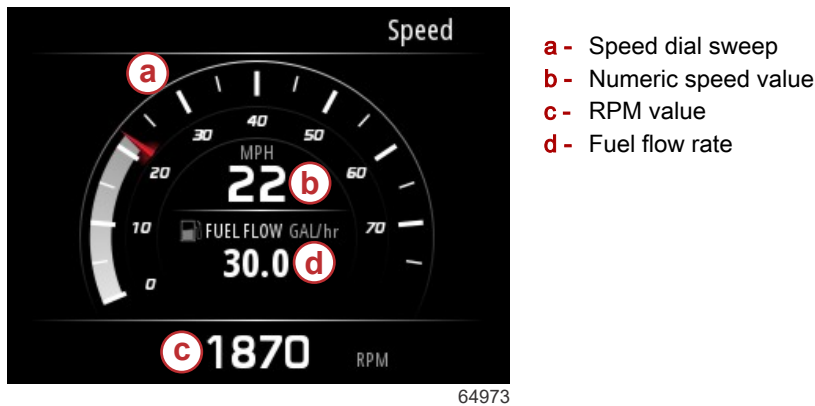


64971

Battery screen example

Speed

The Speed data screen contains the speed dial sweep, the numeric speed value, the RPM value, as well as the fuel flow rate of the engines.

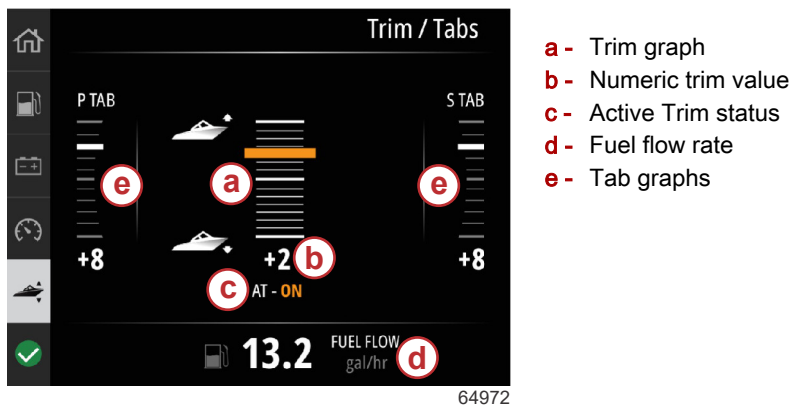


64973

Trim/Tabs

The following data is displayed on the Trim/Tabs data screen:

- Trim graph
- Tab graph
- Numeric trim values
- Active Trim status
- Fuel flow rate



64972

System

The System screen can be customized with up to five vessel and engine data items. The engine RPM will always be present on the screen.

System	
CNTR	
RPM	1550 rpm
Engine Hours	55 hrs
Water Pressure	11.55 PSI
Coolant Temp	144 °F
Oil Pressure	46.89 PSI
Vessel fuel rate	28.70 GAL/hr

64883

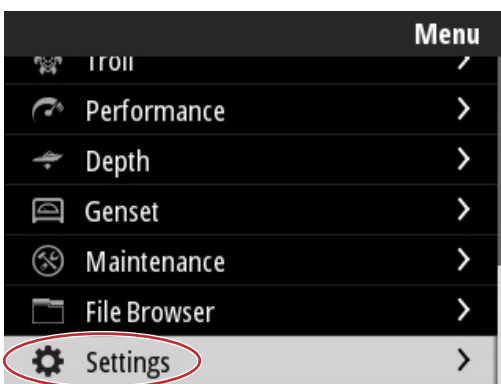
NOTE: Depending on the vessel power package, not all of the vessel and engine data options will be available.

The following is a list of vessel and engine data available for selection.

- Coolant pressure
- Coolant temperature
- Boost pressure
- Oil pressure
- Engine hours
- Fuel flow rate
- Intake temperature
- Throttle percent
- Load percent
- Transmission oil temperature
- Transmission oil pressure
- Total fuel used—lifetime

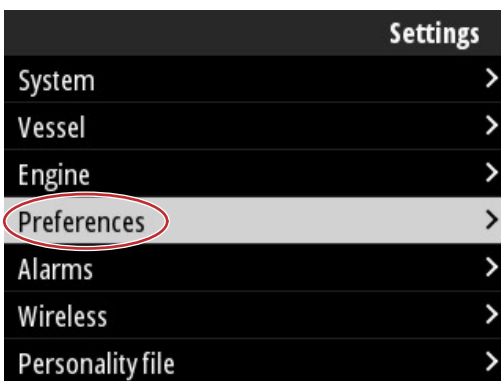
To select data items to be displayed in the System screen, navigate to the Menu.

In the main Menu, use the arrow buttons to highlight the Settings option and press the **Enter** button.



64959

Use the arrow buttons to highlight the Preferences option and press the **Enter** button.



64960

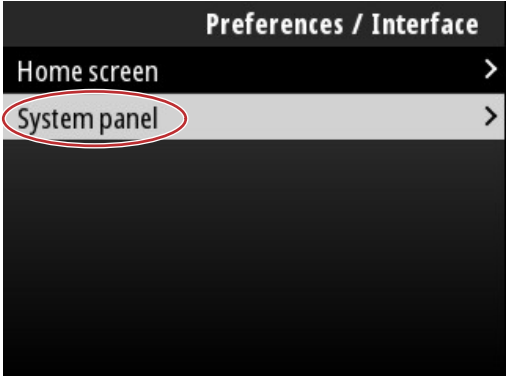
Section 3 - Main Menu Selections

Use the arrow buttons to highlight the Interface option and press the **Enter** button.



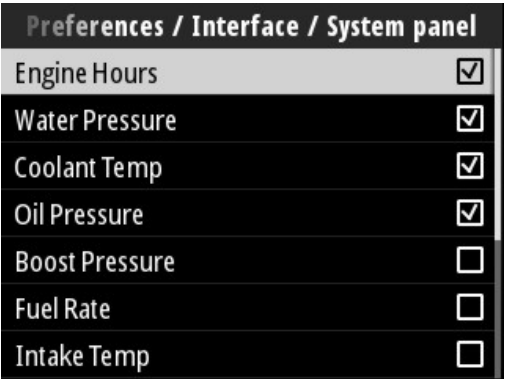
64961

Use the arrow buttons to highlight the System panel option and press the **Enter** button.



64962

In the System panel screen there are data display options. Use the arrow buttons to highlight a desired data selection. Press the **Enter** button to check or uncheck a selection. Up to five selections can be checked.



64963

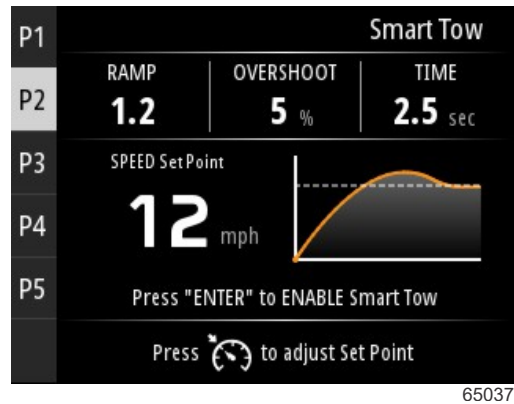
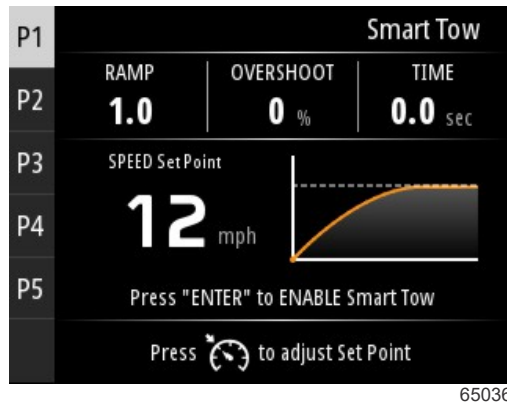
Press the **Menu** button to navigate out of the System panel screen when all of the selections have been made. The System screen will now display the current selections.

Smart Tow

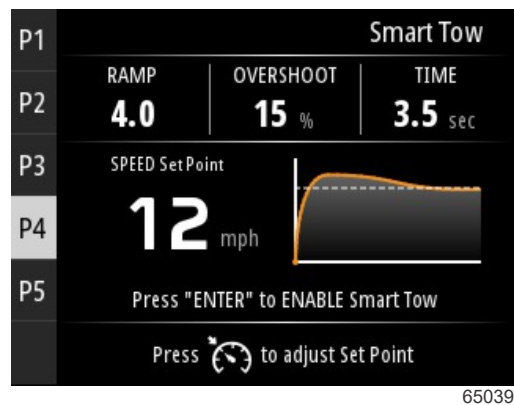
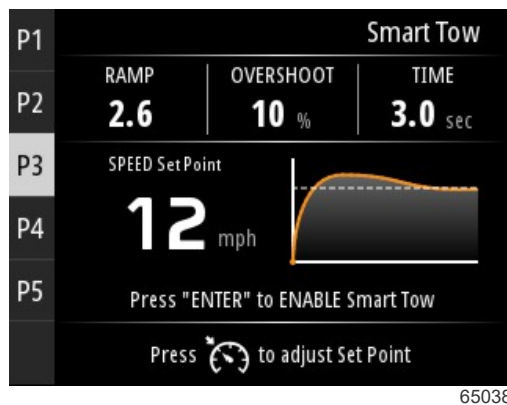
Smart Tow is an easy to use program to manage boat acceleration and target speed goals for pulling skiers, tubers, or water sport equipment of all varieties. Smart Tow takes the guesswork out of acceleration problems like too much hole shot, too much overshoot, deceleration, and constant speed targets. Select a profile, select enable, and place the control handle to wide-open throttle, Smart Tow will do the rest.

Smart Tow is based on the engine RPM unless the vessel has a GPS installed and connected to the control area network.

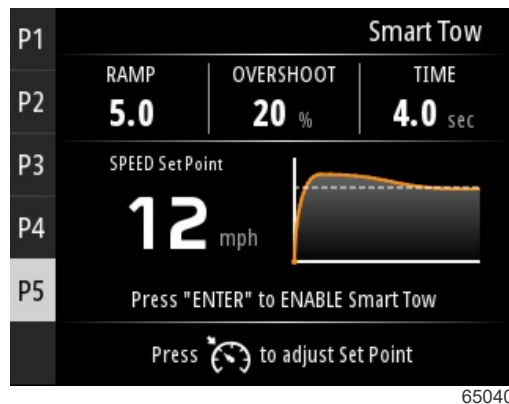
Smart Tow offers five factory preset launch profiles, shown on the left side of the display as P1 through P5. Use the **Up arrow** and **Down arrow** buttons to scroll through and highlight the profiles.



Profiles 1 and 2



Profiles 3 and 4

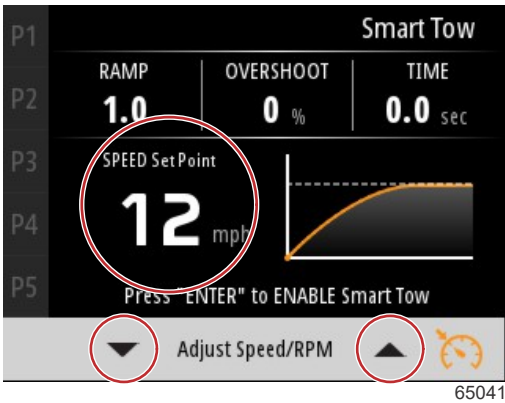


Profile 5

The Smart Tow screen allows you to modify the set point for each profile. Changing the set point can be helpful when there are people onboard with varying levels of experience with water sports equipment. The operator can create more aggressive launches for experienced skiers, as well as mild launches for children or inflatables towing.

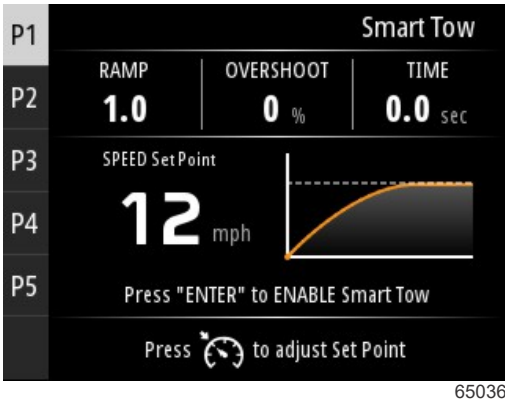
Section 3 - Main Menu Selections

Pressing the **Speed Control** button will show the **Up arrow** and **Down arrow** button icons for adjusting the set point.



Set point and adjustment indicators

To activate any Smart Tow launch profile, press the **Enter** button.

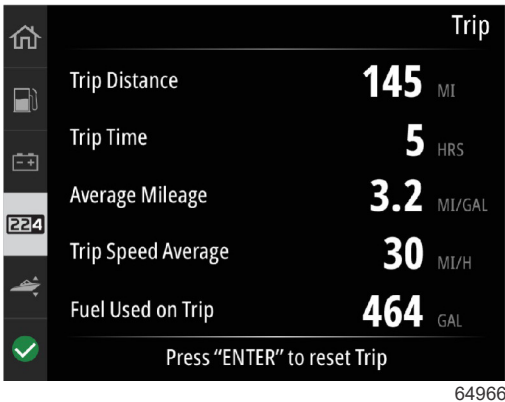


To disable Smart Tow, press the **Enter** button. The display will exit the launch profile and return to where different profiles can be highlighted and launched.

Trip

The Trip data screen displays the following items:

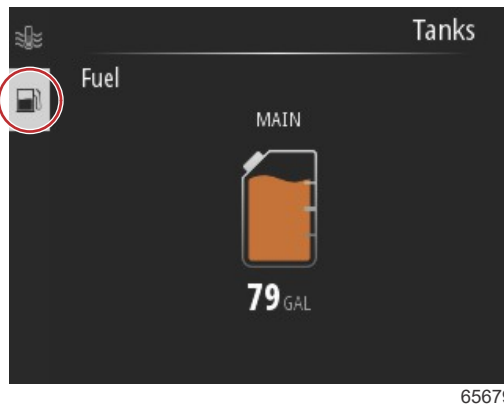
- Trip distance
- Trip time
- Average mileage
- Trip speed average
- Fuel used on trip
- Trip reset option



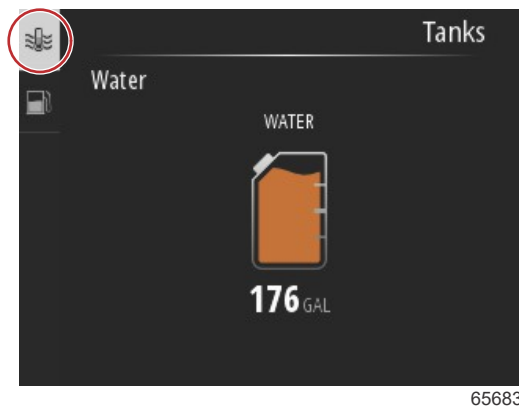
Pressing the **Enter** button will reset the Trip screen values.

Tanks

The Tanks data screen consists of an image of a tank with a colored portion of the tank representing the remaining volume of the tank. A numeric value is displayed beneath the tank image.



If there is more than one tank configured for the vessel, use the **Up arrow** or **Down arrow** buttons to highlight the additional tanks. Each configured tank will be represented by an icon relating to the tank contents. These tank icons can be found on the left side of the screen.



Faults History

All Mercury warnings, faults, and alarms will be shown regardless of what screen is displayed at the time of the alarm. When an alarm is activated, the screen will display a window showing the alarm text and warning, along with a brief description of what action should be taken.

Critical alarms are usually accompanied with a response from the Mercury Engine Guardian System, which can include reduced power, reduced maximum RPM, or a forced idle condition. All critical faults give an audible notice to the operator. A critical fault will sound the warning horn for a continuous six seconds.

Noncritical alarms will display like critical alarms, but are accompanied by six short beeps from the warning horn.

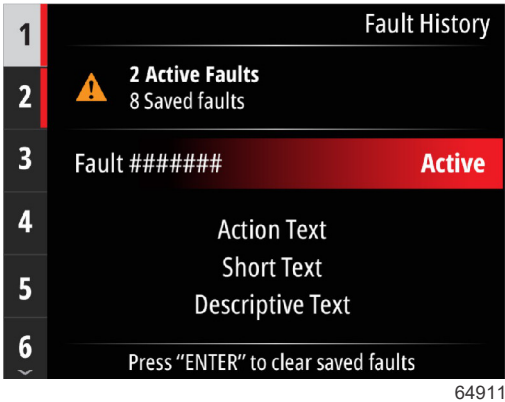
Section 3 - Main Menu Selections

Fault pop-ups allow the operator to get additional information regarding the individual faults. Select the View option to see a more descriptive explanation of the fault.

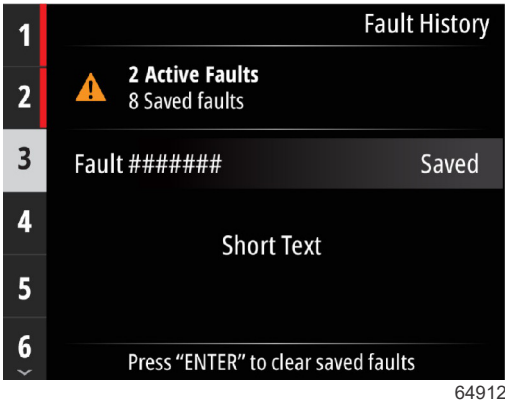


Fault pop-up sample

To clear an active fault, the faulty part must be identified. Inspect, repair, or replace the faulty part. Start the engines and allow VesselView to go through the system start-up scan. If the vessel passes the start-up scan, the Mercury tab on the left-hand side of the screen will display in green. The alarm history can always be viewed by selecting the main Menu screen, then choosing the Alarms option. Here, the fault history can be viewed.



Fault history screen sample





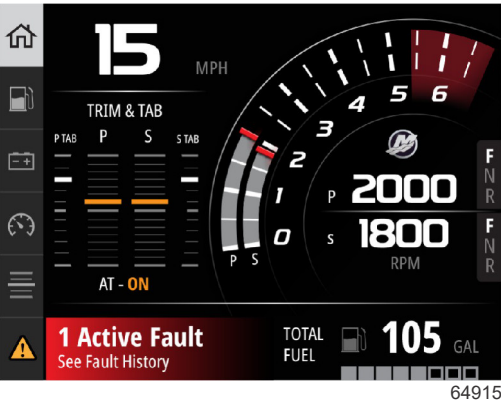
64913



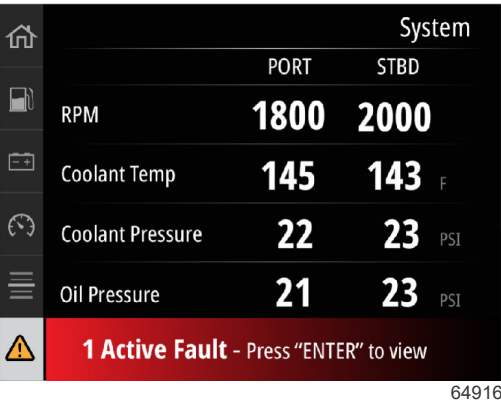
64914

No faults in Fault History

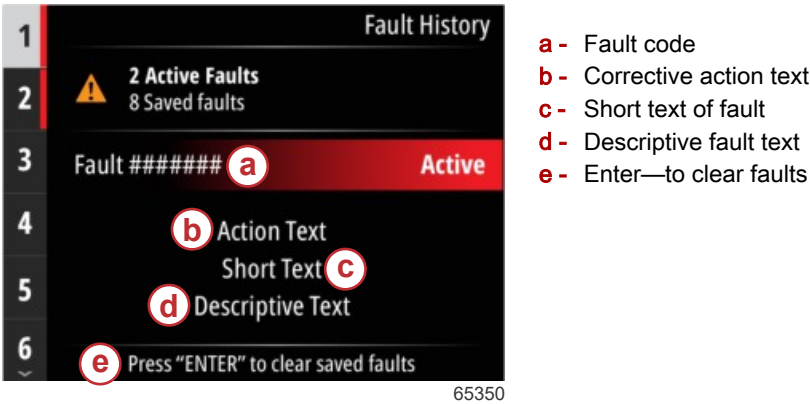
When an active fault alert appears at the bottom of the screen, press the **Enter** button to view the fault information.



64915

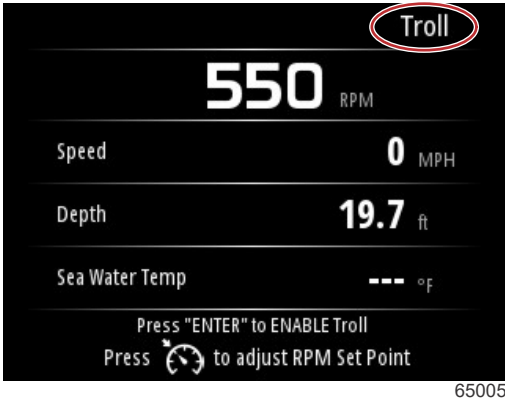


64916



Troll

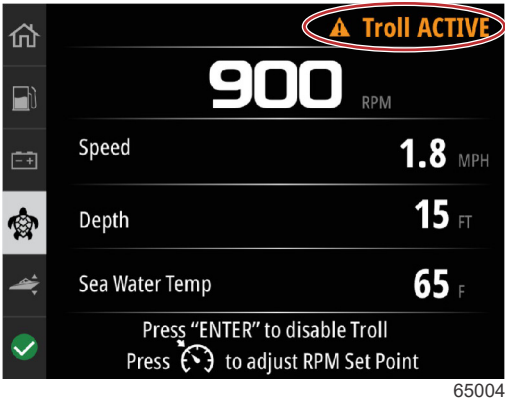
Troll RPM ranges are power package dependent. The maximum troll RPM for all engines or outboards is 1000 RPM.



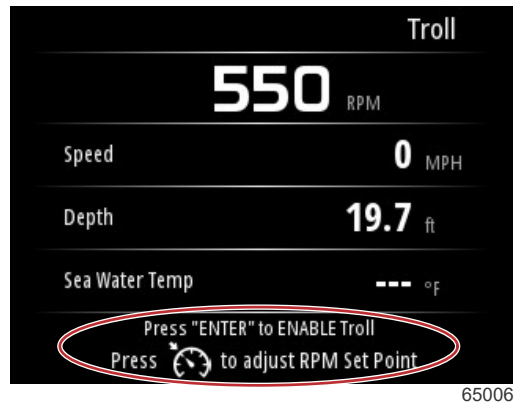
The vessel must be in gear and the throttle must be at idle. If the vessel does not meet these conditions, a warning icon and accompanying text will instruct the operator on how to make troll control available.

When the desired RPM value has been chosen, press the **Enter** button to enable troll. This will start troll control and the engines will rev to the desired RPM.

The top of the VesselView screen will display a warning symbol and the text troll active.

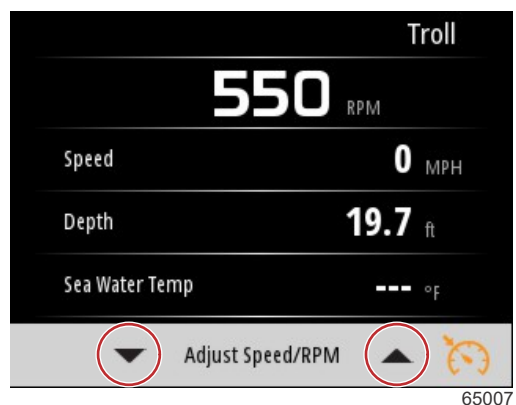


Follow the on-screen instructions at the bottom of the display. Pressing the **Enter** button will disable troll. Pressing the **Speed Control** button will allow for adjustments to the RPM set point.



65006

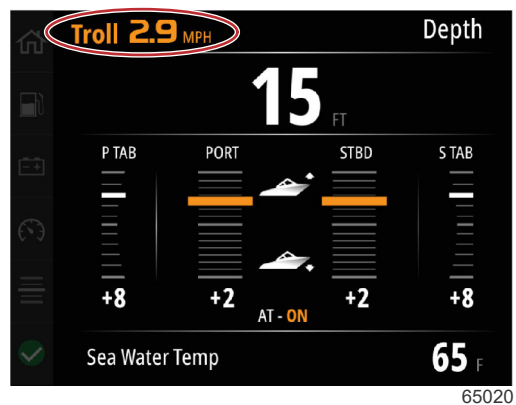
Onscreen instructions



65007

RPM adjustment button indicators

Press the **Speed Control** button to exit out of the Adjust Speed/RPM window and return to the Troll screen. If troll is active, navigation to other screens cannot be done. Press the **Enter** button to disable troll.

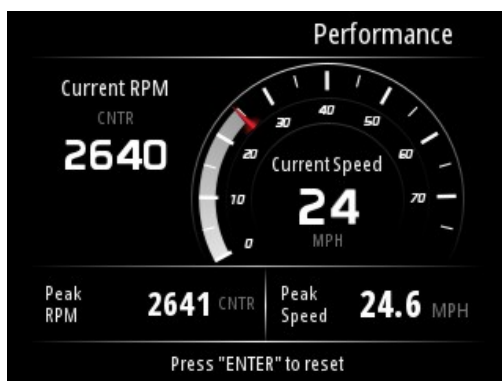


65020

Troll shown as active

Performance

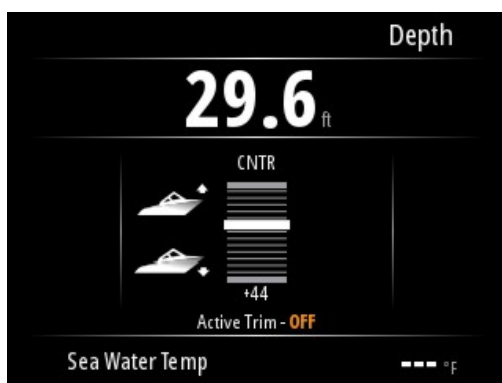
The Performance screen will display the boat's peak speed, peak RPM, the current speed, and the current RPMs for up to two engines.



64882

Depth

The Depth screen displays the water depth, along with the current trim position and water temperature.



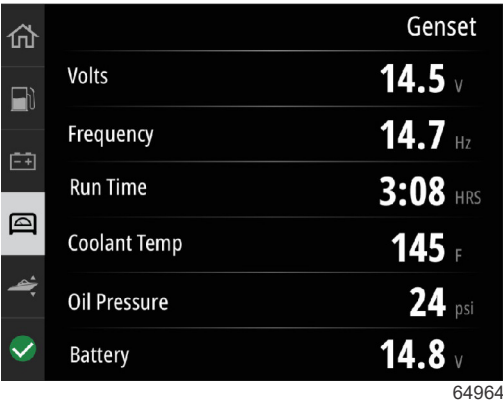
64881

Genset

The Genset data screen will display the following items:

- Genset voltage
- Genset frequency
- Genset runtime in hours
- Genset oil pressure
- Genset coolant temperature
- Genset battery voltage

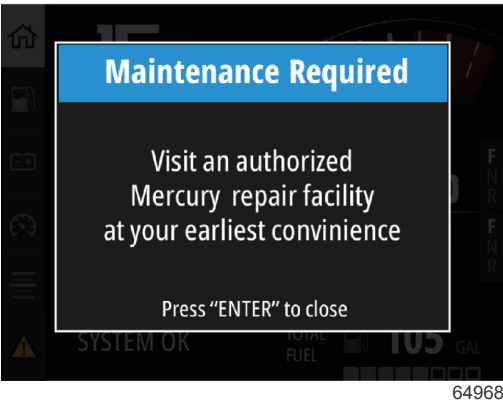
- Genset fuel—if defined in **Tanks** as a **Genset tank**



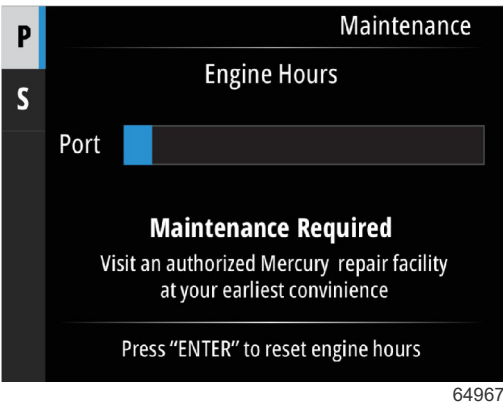
Genset data screen

Maintenance

If a maintenance reminder is detected during a system scan, a pop-up will appear on the screen in the color blue. Use common sense to protect your investment and check your engine oil on a regular basis, preferably before each use.



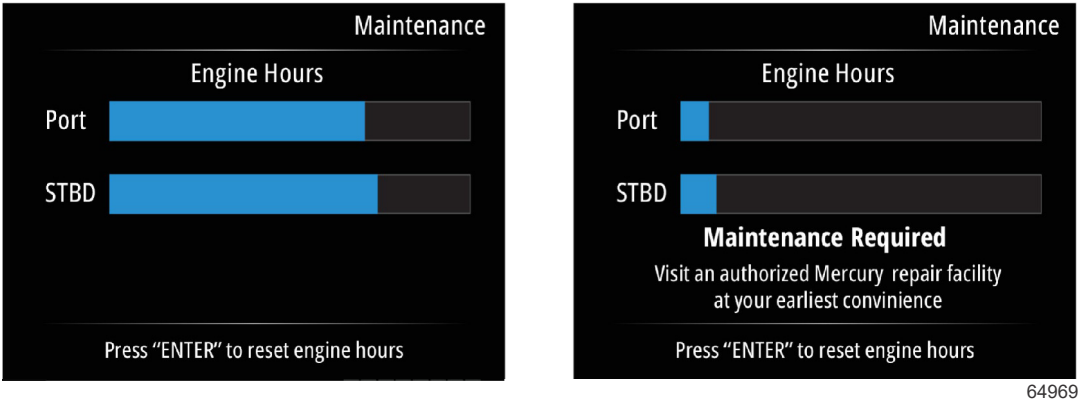
When the scheduled maintenance time is fully depleted, a maintenance pop-up will appear after the start-up scan. The operator can close the pop-up, but the reminder will appear at every key-on of the vessel. Acknowledgement of the maintenance reminder will reset the maintenance time frame in VesselView. Users can view the maintenance bar at any time to view the depletion status. This can help in scheduling future appointments with your dealer, if the maintenance is not performed by the owner.



Maintenance screen example

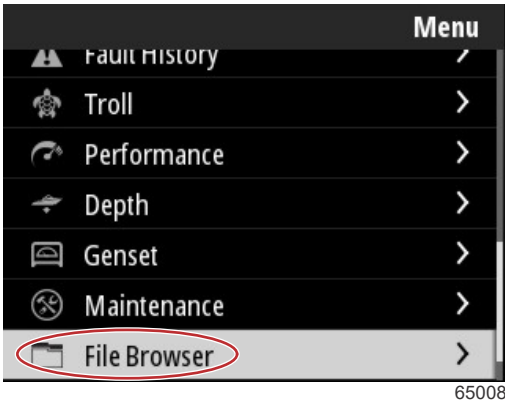
Section 3 - Main Menu Selections

The more blue shown in the bar represents a longer time before maintenance is required. The shorter the blue bar—depletion, indicates that scheduled maintenance will soon be required. The following images show a no maintenance required condition on the left and a maintenance required condition on the right.



File Browser

Use the **Up arrow** and **Down arrow** buttons to highlight the File Browser option in the main Menu.

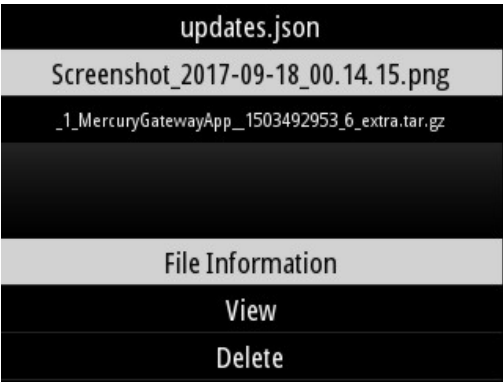


Press the **Enter** button to display the contents of the file browser.



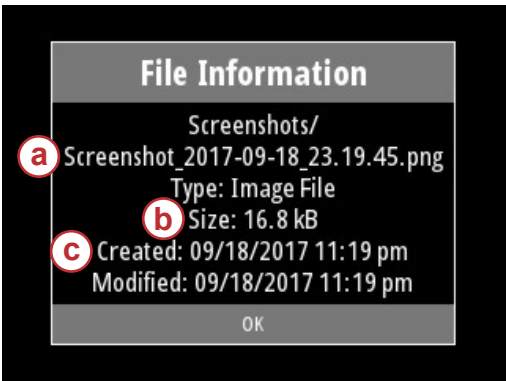
File browser contents

There are the options of reviewing the File Information, viewing the file, or deleting the file.



65010

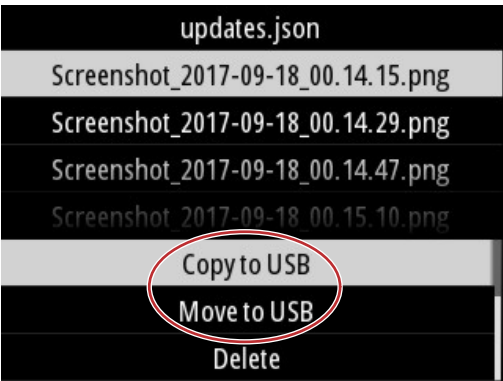
Viewing the File Information will show the name of the file, the size of the file, and date and time which the file was created.



65027

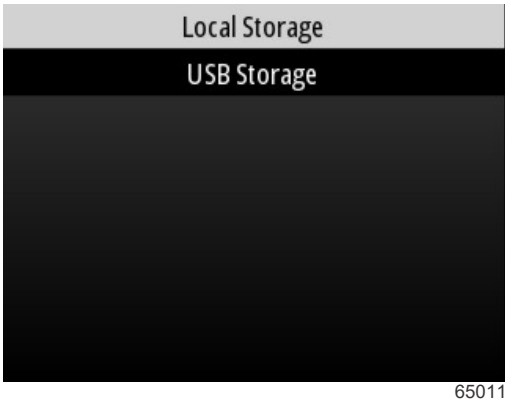
- a** - File name
- b** - File size
- c** - Date and time of file creation

Plugging in a USB drive into the VesselView will add two more options that can be done with a file, copy to USB and move to USB. With the USB drive inserted, the operator has the choice of accessing files on the VesselView—Local Storage, or the USB drive—USB Storage.



65012

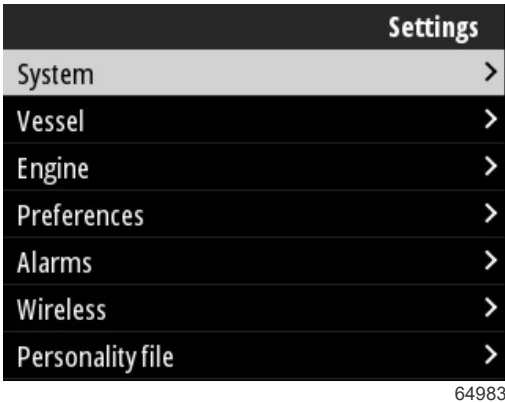
Additional USB options



Local and removable storage locations

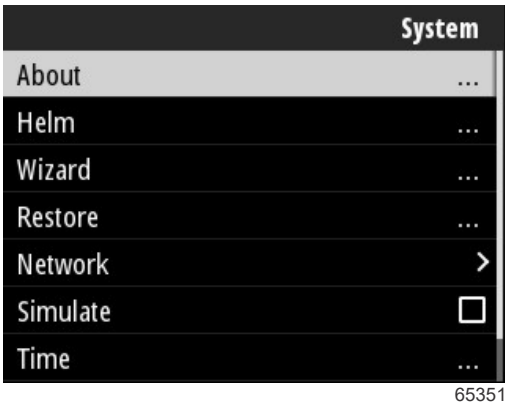
Settings

Within the Settings menu there are seven categories for setting or changing display data on the VesselView. Many of the settings are determined by selections made during the Setup Wizard, but these selections can be changed at any time by highlighting a category and selecting one of the associated options.



System

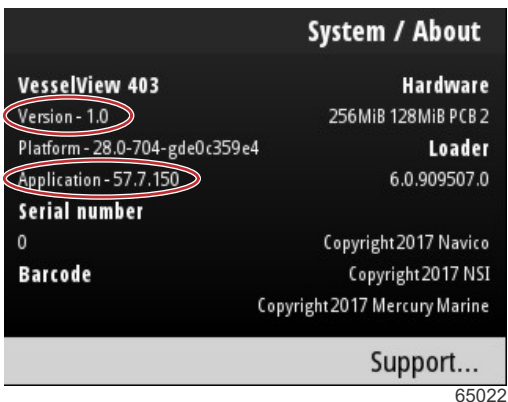
Within the System settings are: About, Helm, Wizard, Restore, Network, Simulate, Time, and Check for Updates.



About

Highlighting the About option and pressing the **Enter** button will show a screen which contains the software version and application revision, the hardware capacity, serial number, and copyright information.

The Support... option at the bottom of the screen describes how to make a screen capture of the About screen. Capturing a screen is also covered in **Section 2 - Creating Screen Captures**.

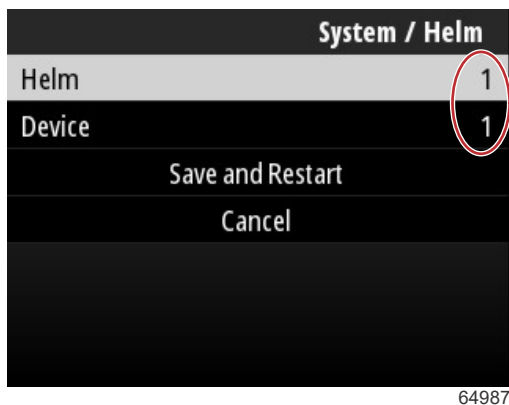


Current software version and application revision

Helm

The Helm option allows the operator to assign a location identification number to the VesselView device and to the helm at which it is installed. This identification number is important when there is more than one helm on a vessel. Assigning different identification numbers keeps the network from experiencing communication errors.

Assigning new identification numbers will require a restart of the VesselView.



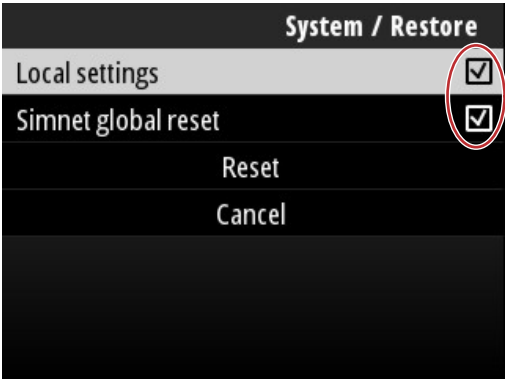
Location identification numbers

Wizard

The setup Wizard is a several step process in which the operator inputs specific information about the engine and vessel in order for the VesselView to function properly. Typically the first time that the VesselView is started up, the operator is guided through the setup wizard process. Changes to the setup wizard can be done at any time. Follow the instructions and on-screen prompts to make changes and complete the setup wizard.

Restore

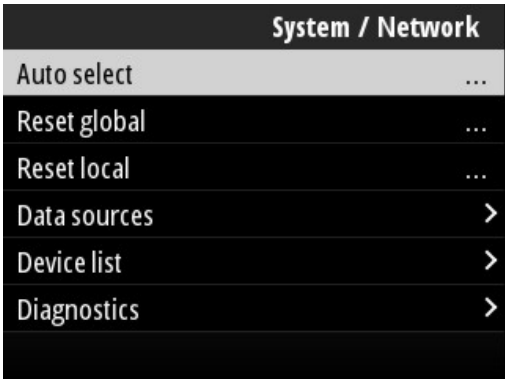
Restore will reset all of the customized settings on the VesselView. Checking the Local settings option will restore the settings on only the VesselView unit that is being used by the operator. Checking the Simnet global reset will reset all of the Simrad and Navico devices, as well as all of the VesselView units connected to the NMEA 2000 network.



64988

Network

Selecting the Network option allows the operator to auto select devices on the SmartCraft and NMEA 2000 networks, reset local or global settings, define data source communication paths, display the current device list and perform diagnostics.



64992

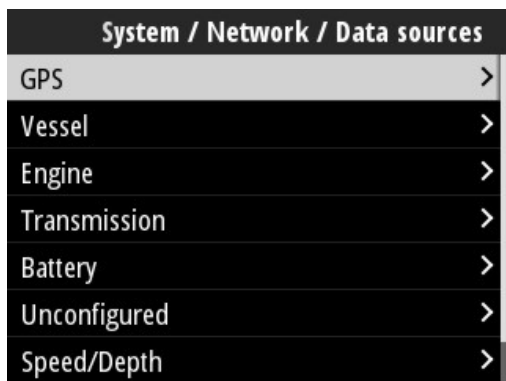
Network options

Within the Network settings is the Data sources tab.
Using the **Down arrow** button scroll to the Data sources option.



64855

This will show a screen with devices and data sensors associated with the engine and vessel. Depending on the vessel's power package, some of the options will not apply. Press the **Enter** button to show a selection of sources for transmitting a device or sensor's data. Use the **Up arrow** and **Down arrow** buttons to scroll through selections.



64856

Within the Device list option, highlighting and selecting the Refresh tab can be helpful if a new device has been installed. **Refresh** will query the network and display all of the devices that are properly responding to the query.



64990

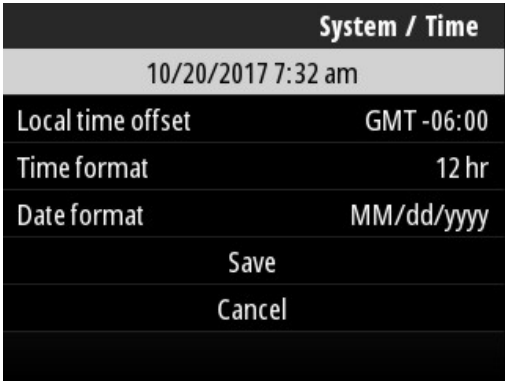
Selecting Diagnostics shows the operator the current activity on all of the active CAN buses. Transmit and receive rates can be viewed in real time. This feature can be helpful in troubleshooting network problems.

Simulate

Simulate is used at a dealer level, to show consumers the display characteristics of the VesselView. When the unit is in Simulate mode, the data shown on the screen should not be used as navigation information. All data shown during Simulate is randomly generated.

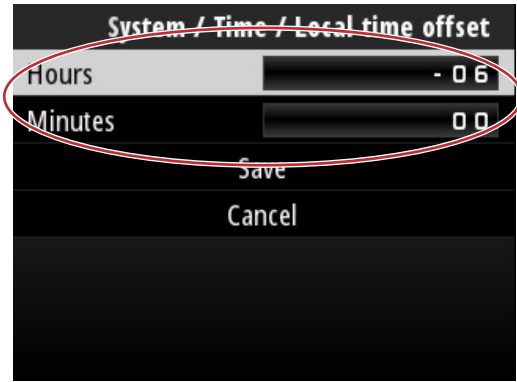
Time

Time is controlled by the vessel's GPS unit. When a GPS fix is established, the time display will be updated automatically. A local time offset can set the time from the time zone of departure, or the time zone of arrival if needed. In the time offset screen, use the buttons to navigate through the active data fields and apply the desired time offset. Highlight Save and press the **Enter** button to keep the changes. For detailed instructions of activating the data fields, refer to **Entering Text and Numbers**. Time format can be selected as 12 or 24 hour display. Date format can be changed according to an operator's preference. This can be important when viewing a list of faults, where the date and time of the fault is recorded and displayed. Highlight the Save option and press the **Enter** button to save all selections.



65278

Time and date options

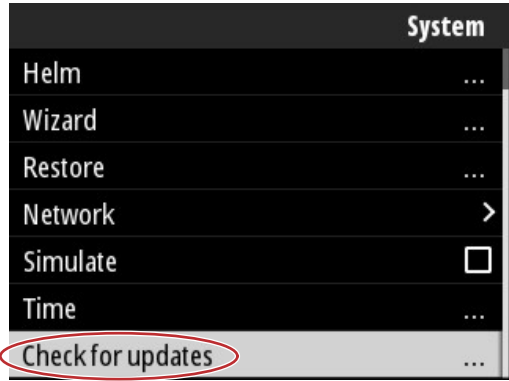


65283

Time offset in hours and minutes

Check for Updates

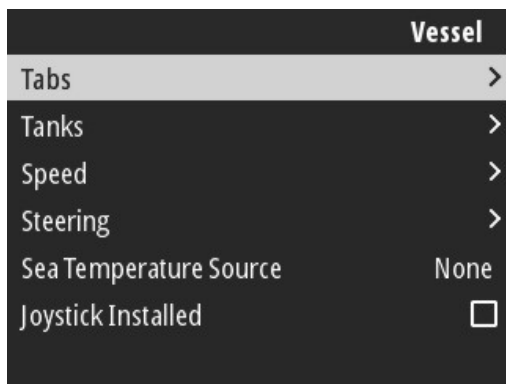
Check for updates will query the internet for VesselView software updates. For detailed instructions refer to **Section 4 - Updating through a Wi-Fi Connection**.



65285

Vessel

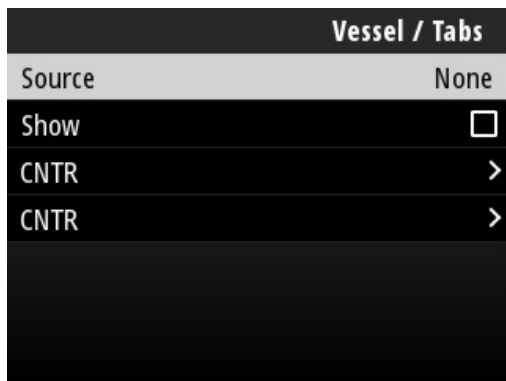
Vessel settings apply to sensors and senders on the boat that are separate from the engine package. Depending on how the vessel is rigged, some options may not be active. Items in the vessel settings include: Tabs, Tanks, Speed, Steering, Sea Temperature Source, and Joystick Installed.



64991

Tabs

The Tabs option allows the operator to select the CAN bus that will transmit tab data, as well as selecting the engine which controls the tabs through the helm controls.

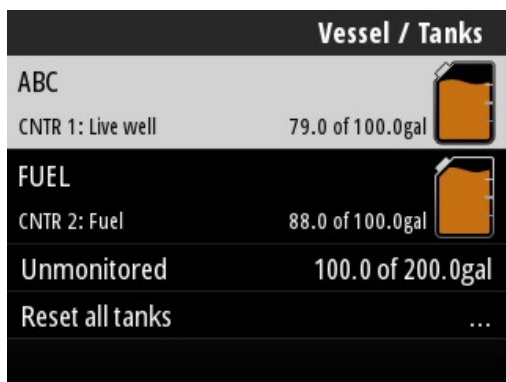


65353

Checking the **Show** option will display tab position on the screen.

Tanks

Tank configuration is covered in the setup wizard, but changes to the number, volume, and type of tanks, can be changed at any time.



65354

Speed

Speed data is covered during the setup wizard process, but changes to the way that VesselView obtains speed data can be made at any time. Selection of the CAN bus that transmits speed data can be changed. A speed strategy using pitot and paddlewheel sensors can be used on vessels that do not have a GPS receiver.

Vessel / Speed	
Speed Source	GPS
GPS Source	SmartCraft (Can-P)
Pitot	>
Paddle	>

65355

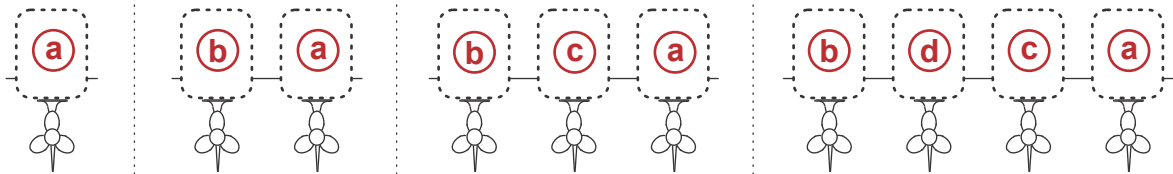
The speed source determines how speed data is obtained. A strategy utilizes pitot and paddlewheel data to establish the vessel's speed. When strategy is selected, the pitot and paddlewheel data source engine must be selected. GPS utilizes the data coming from the GPS unit to determine speed. When GPS is selected, the proper network BUS must be selected as the source of GPS data to the VesselView.

Steering

Steering source data can be selected to come from either the PCM or the TVM—thrust vector module, with options to display the data on-screen, to invert steering input, and to establish a steering offset degree.

Vessel / Steering	
Steering Angle Source	TVM
Invert Steering	<input type="checkbox"/>
Offset	...

65356

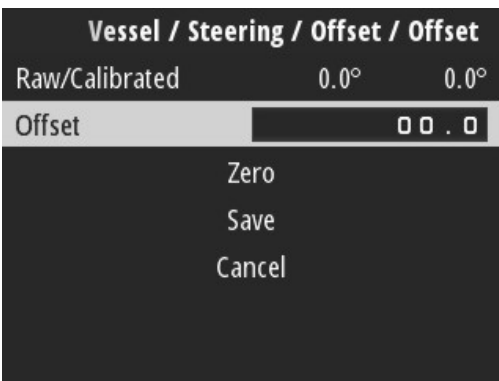


60056

- Drive assignment options**
- a**- PCM0 = starboard or starboard outer
 - b**- PCM1 = port or port outer
 - c**- PCM2 = starboard inner or center
 - d**- PCM3 = port inner

The Invert Steering option is helpful when there is a VesselView which is rear-facing. In this case the steering data will match the operator's point of view.

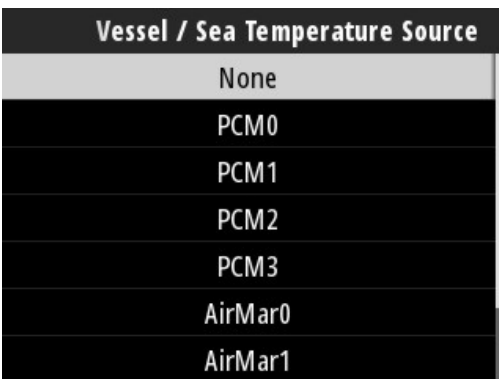
Steering Offset is used to align the outboard, sterndrive, or inboard to zero degrees. When the drive is positioned perpendicular to the hull, the steering angle displayed on-screen may not match the steering sensor on the drive. To adjust for this variance, select the Offset window. The Steering Angle Calibration box appears. Selecting the Calibrated row Zero button will apply the offset. Note that the offset does not change on the display screen until the Save button is selected.



67992

Sea Temperature Source

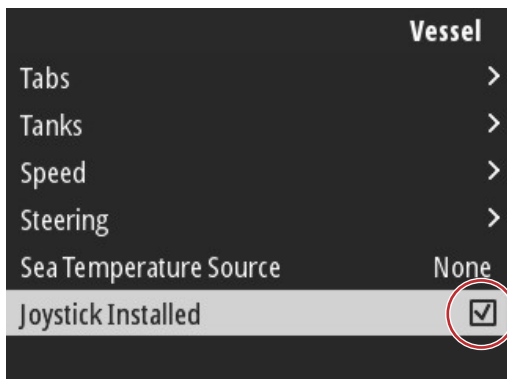
Selection of the engine or drive that transmits water temperature data can be changed. Refer to **Steering** in this section for engine or drive PCM positions. Additional selections for AirMar® senders can be chosen as well.



65357

Joystick Installed

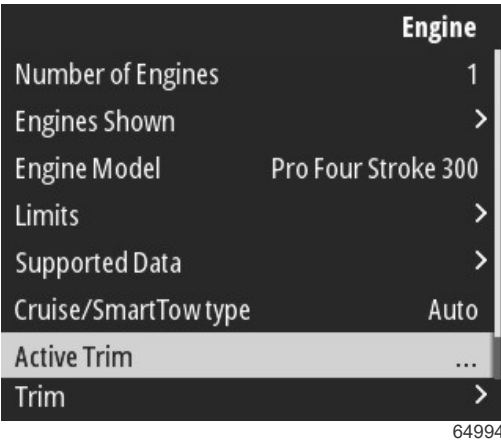
For vessels equipped with Joystick Piloting, highlight and select the Joystick Installed check box option. This will ensure that inputs to the system, initiated by the joystick will be recognized by the VesselView unit.



65692

Engine

Several of the settings options under the Engine tab were set during the setup wizard process, but changes to the engine settings can be made at any time.



Number of Engines

This number represents the total number of engines on the vessel.

Engines Shown

This number represents the number of engines that will be displayed on this particular VesselView unit.

Engine Model

Highlighting and selecting the engine model will bring up a list of Mercury outboards and MerCruiser engines to choose from.

Limits

Limits helps set specific ranges for many engine data parameters such as: RPM, coolant temperature, oil temperature, battery voltage, and boost pressure. Changes made to limits will not affect the engine package or the operation of Mercury's Engine Guardian programming. The actual engine limits are determined by the factory programmed control module on the engine.

Setting	Description
Min:	The value of the base of the on-screen graph
Max:	The value of the top of the on-screen graph
Warning low:	The value at the top of the lower color section of the on-screen graph
Warning high:	The value at the bottom of the upper color section of the on-screen graph

The default minimums and maximums are factory preset to the engine package chosen during the Setup Wizard or the Engines Setting menu. Increasing or decreasing the warning minimums and maximums is generally regarded as the boater's personal preference.

Supported Data

Supported Data allows the operator to select the types of data that the VesselView will display. The list of data sources is dependent on the power package selected during the Setup Wizard. Select the check box for each data item you want VesselView to be able to display.

Cruise/Smart Tow Type

The Cruise/Smart Tow type setting allows the operator to select the sensor from which the Cruise autopilot program and the Smart Tow program launch profiles get their speed data. Engine RPM or GPS speed data are the options. Selecting Auto will make VesselView query the network for a source of speed based data and use that selection for the Cruise and Smart Tow features.

Active Trim

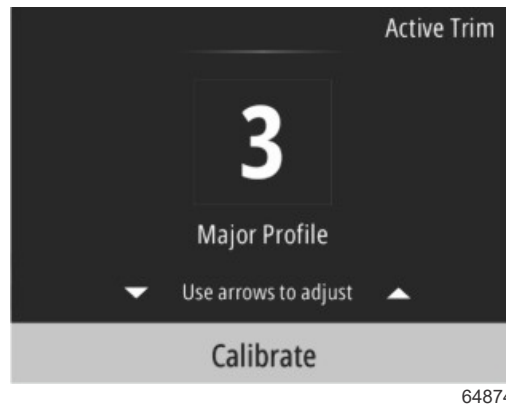
Active Trim setup is covered during the Setup Wizard process, **Section 2 - Setup Wizard**, but changes can be made at any time. Follow the on-screen messages and prompts to change and complete the Active Trim setup. Additional information on the Active Trim feature can be found in **Active Trim**.

Setup and Configuration

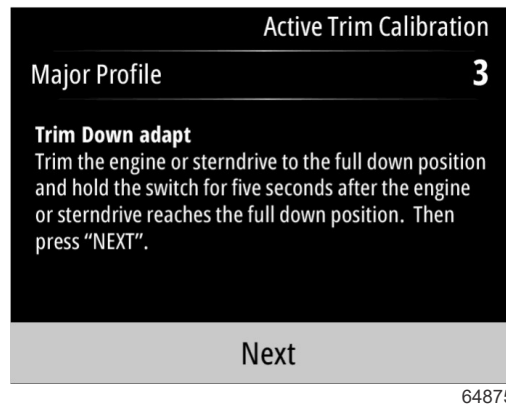
IMPORTANT: Always configure Active Trim with a major profile that will allow the operator to select an adjustable profile with additional trim in; avoid selecting a major profile that results in normal operation in adjustable trim profile 1. This will ensure that the operator can always bring the bow down to correct porpoising without having to manually trim the engine or drive.

The VesselView will search the network for the Vessel Control Module. If the Vessel Control Module software is not up-to-date, or if it cannot be found on the network, the Active Trim setup will not allow the operator to continue.

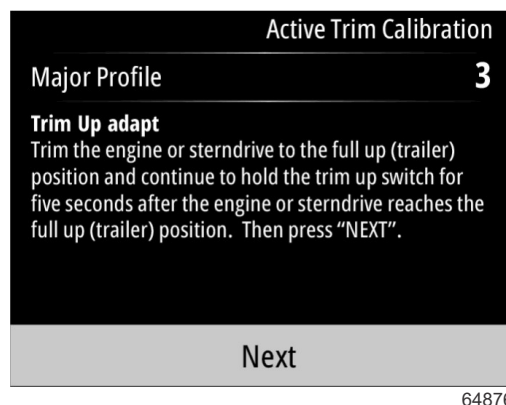
Highlight the Calibrate option and press the Enter button. Follow the on-screen directions for each step in the calibration process. Highlight the Next option following the completion of each step to continue onto the next step. When all steps have been completed, press the Enter button to save the calibration procedure.



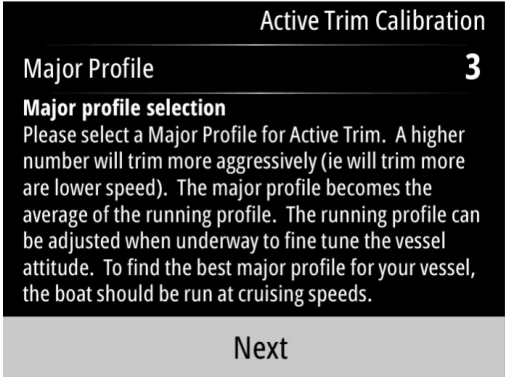
Initial calibration screen



Trim down adapt screen



Trim up adapt screen



64878

Major profile selection screen

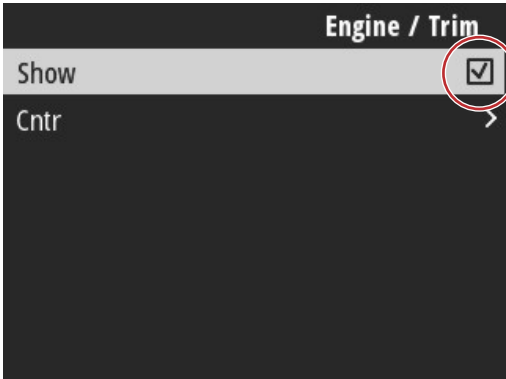


64879

Calibration save screen

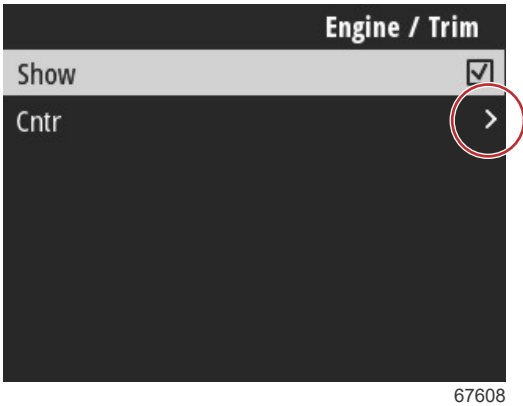
Trim

Trim settings allow the operator to enable the Show check box, to display the trim status graphic on the screen.

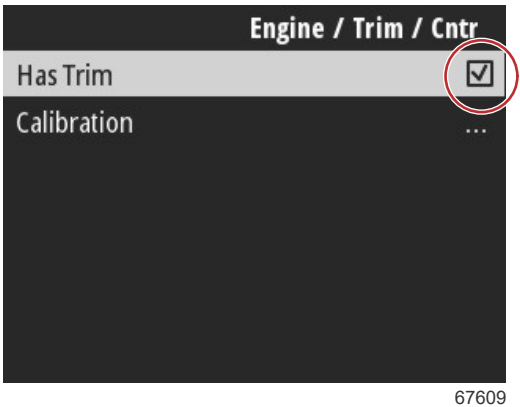


67607

Depending on the number of engines selected in the Setup Wizard, engine positions will be displayed. Select an engine position and press the **ENTER** button to continue.



Select the **Has Trim** option by highlighting and pressing the **ENTER** button.



Trim calibration allows the operator to position the trim to the innermost and outermost positions and record the percentages. This is useful for determining the true 0° trim position—the point at which the trim is parallel with the bottom of the vessel. Correctly calibrated trim will show an accurate position of the sliders on the screen.

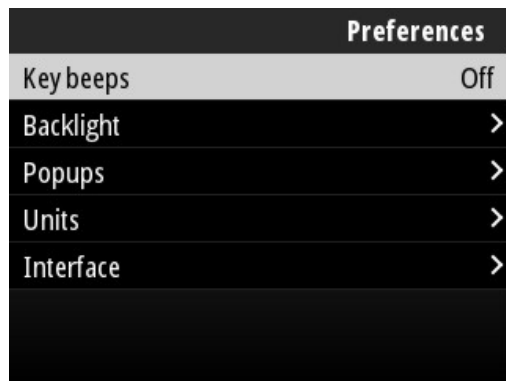
To calibrate the trim, trim the engines all the way in and record the reading—row 1, this will be the trim actual 0%. Trim the engines all the way out, record the reading—row 3, this will be the trim actual 100%. The Zero point is when the engines are positioned parallel with the bottom of the vessel, record that position. Select Save to keep the new trim calibrated data.

Engine / Trim / Cnt / Calibration		
Raw/Calibrated	0.0%	0.0%
1	0.0%	0.0%
2	50.0%	43.0%
3	100.0%	100.0%
Zero point	0.0%	0.0%
Save		
Cancel		

67610

Preferences

The Preferences options in the **Settings** menu covers the visual and audible aspects of the VesselView unit.



64996

Key Beeps

Every time a button is pressed on the unit there will be an accompanying beep to let the user know the button press has been recognized. There are options to set the key beeps to off, quiet, normal, or loud.

Backlight

The light level of the display can be changed in ten percent increments from 10 to 100 percent. This percentage will apply to all other SmartCraft displays and link gauges on the Vessel.

To make the backlighting level of the VesselView unit be either dimmer or brighter than the other instruments, the Local gain can be changed to make viewing the VesselView screen more comfortable in varying lighting conditions.

Pop-ups

Pop-ups for trim status can be turned on or off by either checking or unchecking the trim pop-up box.

For trim pop-ups, the duration that the pop-up will remain on-screen can be set to two, five, or ten seconds.

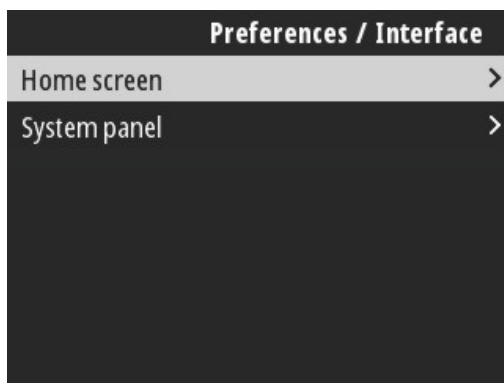
Units

Individual data items can be customized to display in different units of measure. The following chart shows the units of measure options for each data item.

Data	Units
Distance	nm, km, or mi
Distance—small	ft, m, or yd
Speed	kn, kph, or mph
Wind speed	kn, kph, mph, or m/s
Depth	m, ft, or fathoms
Altitude	m or ft
Altitude Datum	Geoid or WGS-84
Heading	°M or °T
Temperature	°C or °F
Volume	L or gal
Economy	Distance/Volume, Volume/Distance, mpg, g/mi, km/L, or L/100km
Pressure	in. Hg, bar, psi, or kPa
Barometric Pressure	in. Hg, mb, or hPa

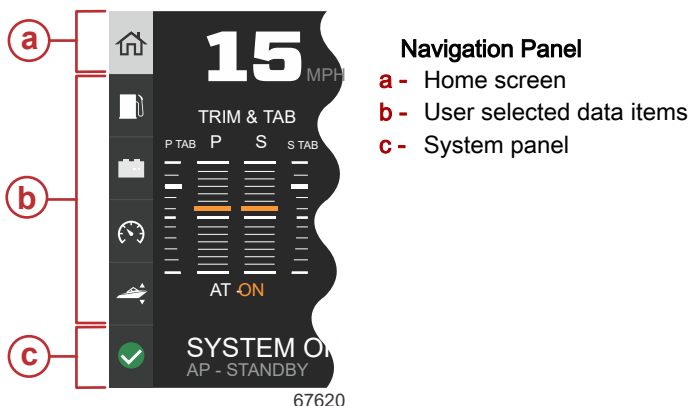
Interface

Home Screen and System Panel



67979

The area of the screen that contains both the Home screen items and the System panel is called the Navigation Panel. The Interface settings controls what data items will be shown in the Navigation Panel.



67620

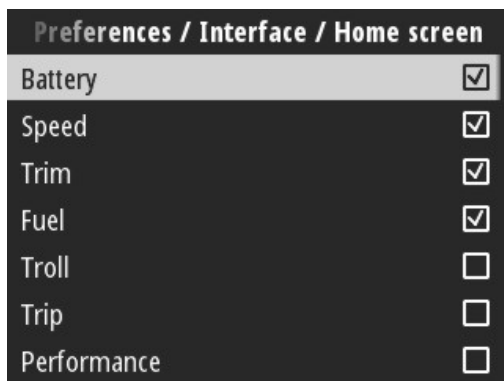
Navigation Panel

- a** - Home screen
- b** - User selected data items
- c** - System panel

To view the item on the Home screen, use the **Up arrow** or **Down arrow** to highlight the desired data icon on the left side of the screen. The Home screen will change to the highlighted data item shown full-screen.

Customization

Highlighting the Home screen, at the top of the Navigation Panel, will bring up a list of data items. To have a data item appear on the main VesselView screen, check the corresponding box for that item. A maximum of four items can be checked for display.

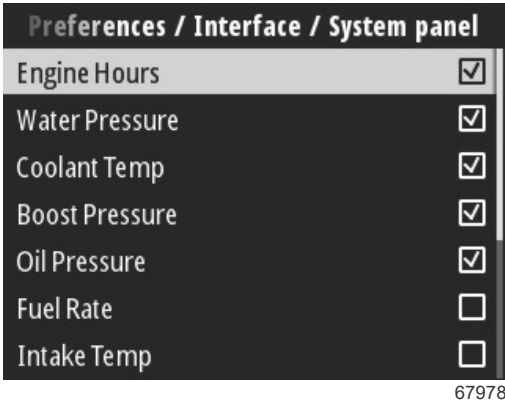


67619

Home screen selections

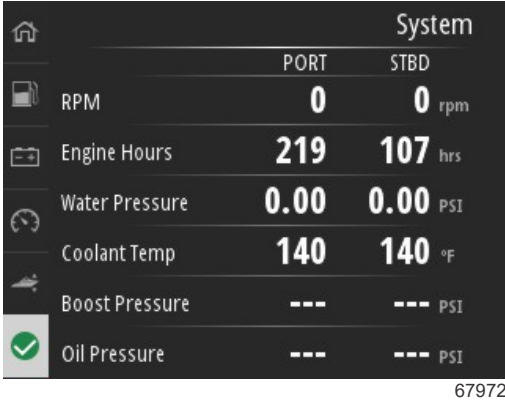
The selected items will show as icons in the Navigation Panel on the left side of the screen.

System panel items are selected the same way as the Home screen items.



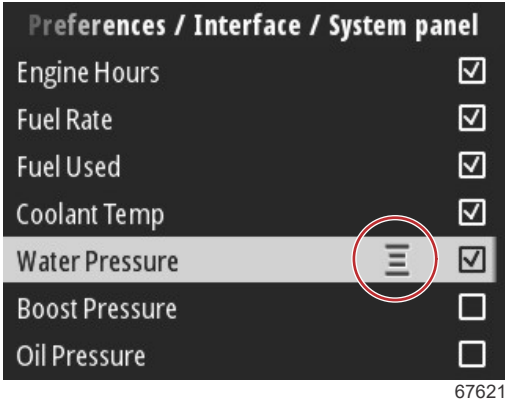
System panel selections

When all desired items have been selected and put in order by the operator, use the arrow buttons to highlight the System panel icon—check mark in the green circle. The System panel screen will display on the VesselView.

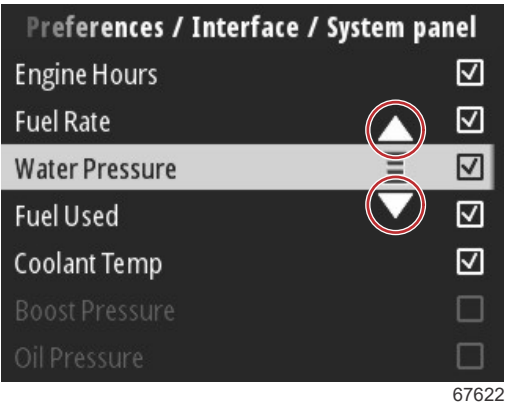


System panel screen

The order of the selected items in either the Home screen or System panel can be changed. With the desired item to be moved either up or down the hierarchy of the list, select the item and press the **ENTER** button one more time. This will display a list graphic for the selected item. Use the **Up arrow** or **Down arrow** buttons to move the item.



List graphic



Up or down movement arrows

Alarms

The Alarms setting allows the operator to view all existing and previous faults and alarms, as well as select which faults will display as on-screen pop-ups.

History

VesselView archives all faults in the History fault list. An option to clear all faults will delete the History of faults.

Settings

The Settings option covers water depth and fuel remaining faults. Faults that can be customized include:

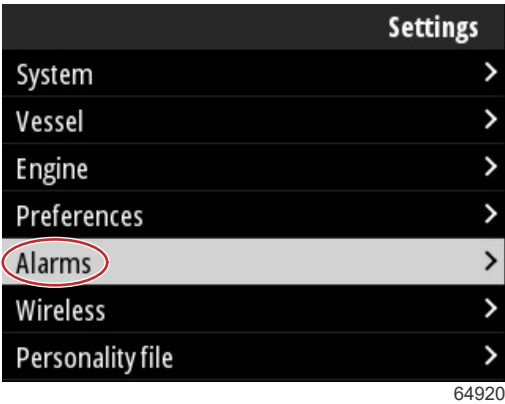
- Shallow water
- Deep water
- Speed through water rationality fault
- Fuel remaining low
- Fuel remaining high

Water depth faults and fuel volume faults can be changed in terms of the depths or volumes that will trigger the faults. Checking the Enable box will activate the faults as active pop-ups. Uncheck the Enable box to prevent the VesselView from generating pop-up faults.

For noncritical faults such as Shallow water and Low fuel, the six short beeps will sound and a pop-up will appear on-screen with a brief text description of the fault.

These types of faults will not turn the Mercury tab to red. Instead, the upper header bar will turn red and display the international warning symbol.

In the Settings menu, select the Alarms option.

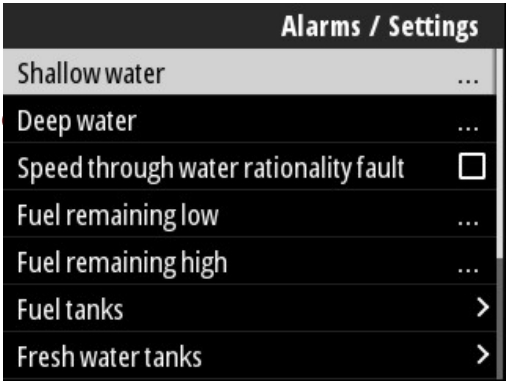


Press the **Enter** button. Select the Settings option within the Alarms screen.



64921

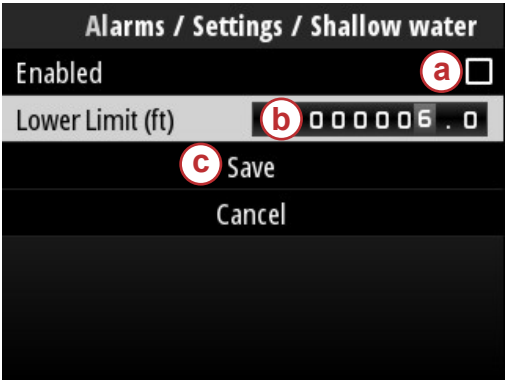
In the Alarms/Settings screen there are numerous data items that can be customized by the operator. To select a data item, use the **Up arrow** and **Down arrow** buttons to highlight an item. With the item desired and highlighted, press the **Enter** button.



64922

In the data item settings screen, there will be several fields:

- Enable—allows VesselView to monitor this data value
- Data Value—allows an increase or decrease in the value that will trigger a fault
- Save—stores any changes to the fault monitoring and data value



- a - Enable
- b - Data value
- c - Save

64923

Siren Enabled

The Siren Enabled option will activate the horn in the VesselView to accompany the on-screen pop-up fault. Unchecking this box will disable the horn for fault pop-ups.

Wireless

The Wireless setting allows the operator to connect the VesselView unit to the internet via a wireless dongle which is inserted into the USB port on the rear of the display. Refer to **Section 4 - Updating through a Wi-Fi Connection**.

Personality File

The Vessel Personality is made up of all of the selections and preferences that are set within the VesselView unit. This personality can be saved on the internal storage or downloaded to an external device for use on other vessels with the same general vessel characteristics.

Importing a vessel personality is achieved by inserting a USB drive into the back of the unit and selecting the personality file.

Exporting the personality file is achieved by selecting the export option and choosing the destination for the file, either on the internal storage or to a USB drive connected to the VesselView unit.

Notes:

Section 4 - Software Update Procedure

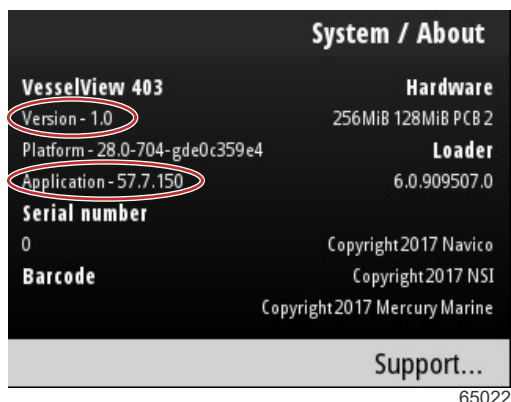
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Checking the Current Software Version

The latest software for the VesselView is available on-line for general download at Mercury's website; <https://www.mercurymarine.com>. To understand what software version is in VesselView, power up VesselView. If VesselView is already powered up, navigate to the System Controls menu. Select Settings>System>About, to see the current operating version of VesselView software.



Current software version and application revision

Downloading the Current Software

All VesselView software updates can be found on the Mercury Marine website at: <https://www.mercurymarine.com>. Download the file to a 1GB or higher capacity USB drive. Make certain that the file resides on the root level of the USB drive. The root of the drive is the topmost level, where the file is not placed into a folder.



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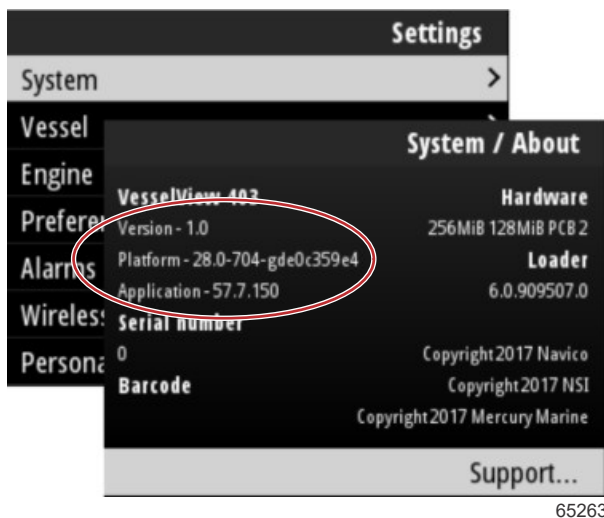
Updating through a Wi-Fi Connection



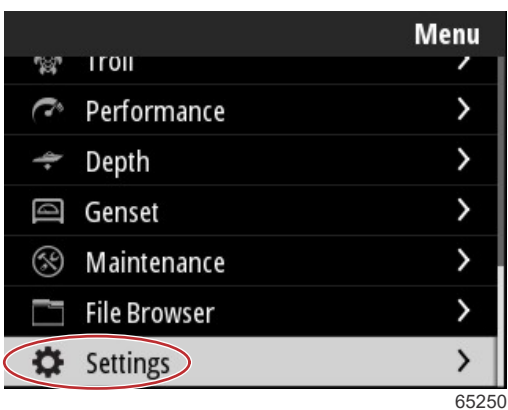
65247

IMPORTANT: Wireless software updates for the VesselView are accomplished through the USB port wi-fi dongle. The dongle must be properly inserted into the USB port in order to utilize the wireless feature.

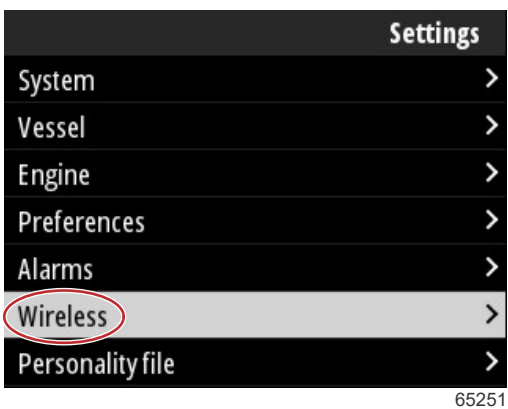
To identify the Version and Application numbers of the current VesselView software, navigate to the Settings menu and highlight and select the System option. Highlight and select the About option to view the information.



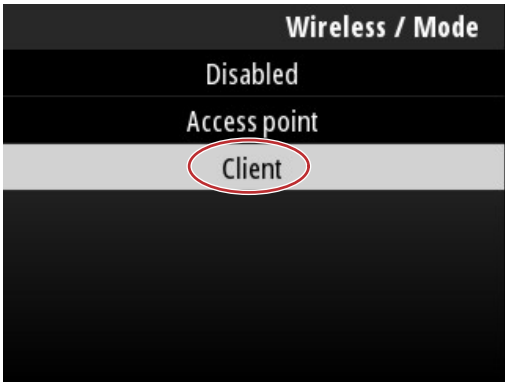
To update the VesselView software navigate to the Settings menu.



Highlight and select the Wireless option.



For the majority of operators, the Client option can be used to connect to a wireless internet source.



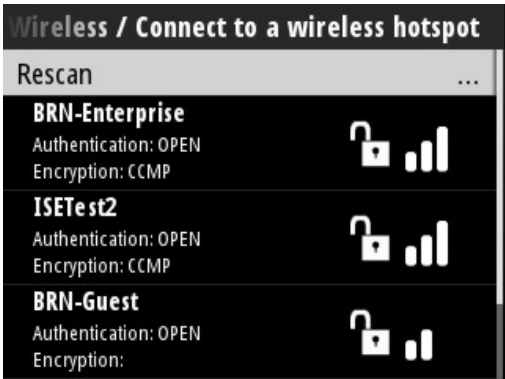
65253

Select the Connect to a wireless hotspot option.



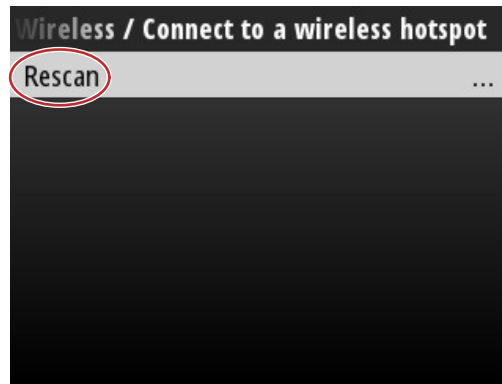
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A screen showing all available wireless hotspots will be displayed. Use the **Up arrow** or **Down arrow** buttons to highlight and select the desired hotspot by pressing the **Enter** button.



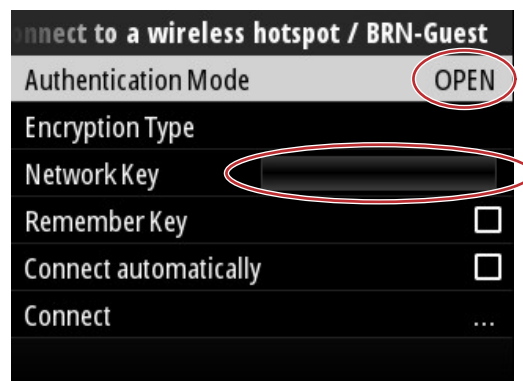
65256

If no wireless hotspots are detected, select the Rescan option to begin a fresh query of available hotspot options in the area.



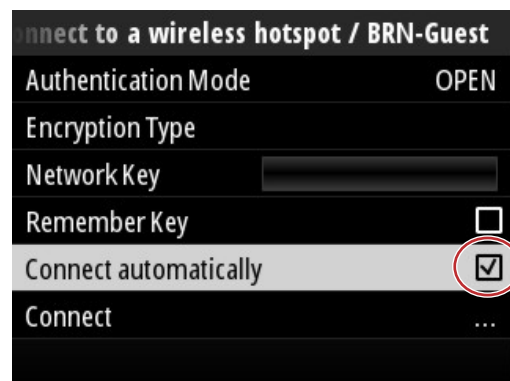
65265

After a hotspot is selected, the operator will need to set the Authentication Mode to OPEN, and enter the Network Key or password if the hotspot connection is secured to complete the connection.



65257

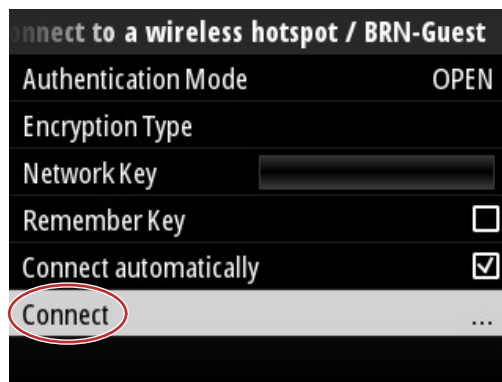
Highlight and check the Connect automatically option.



65259

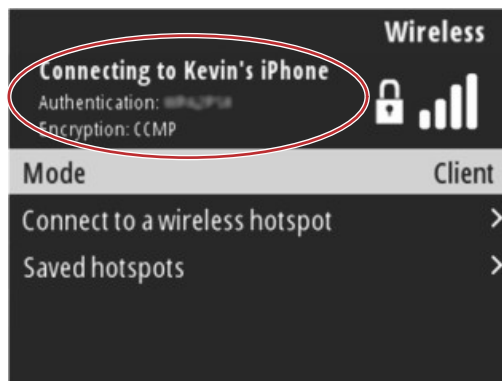
Section 4 - Software Update Procedure

Highlight and select the Connect option by pressing the **Enter** button.



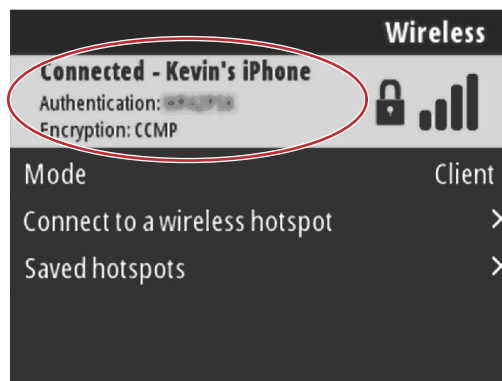
65260

The screen will display the connecting to data at the top. It may take up to a minute to establish the connection.



65261

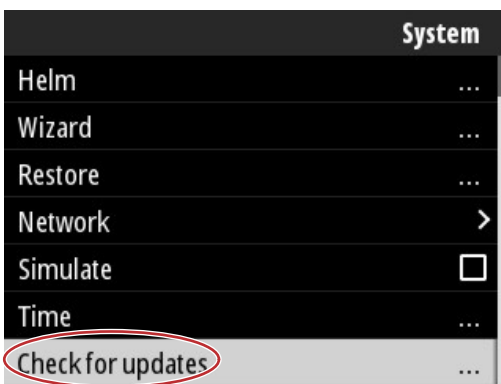
When the wireless connection has been established the screen will display the connected information at the top.



65262

In the System setting screen is the Check for updates option. Use the **Down arrow** to highlight Check for updates and press the **Enter** button to query the internet for current software files.

IMPORTANT: Ensure that the wi-fi dongle is inserted into the VesselView unit and a hotspot is accessible.



65264

If a newer version of the operating software is found, VesselView will prompt the operator to download the file or to ignore the update.



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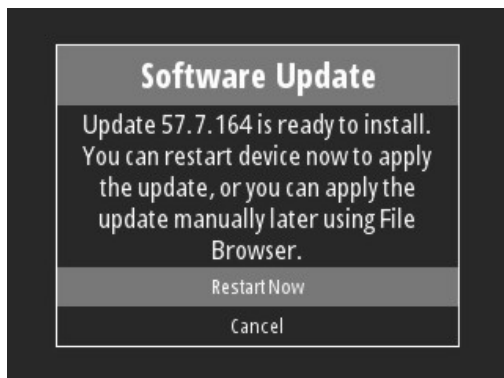
After selecting the Download option, the downloading screen will appear informing the operator that the file is in the process of being transferred to the VesselView.



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Section 4 - Software Update Procedure

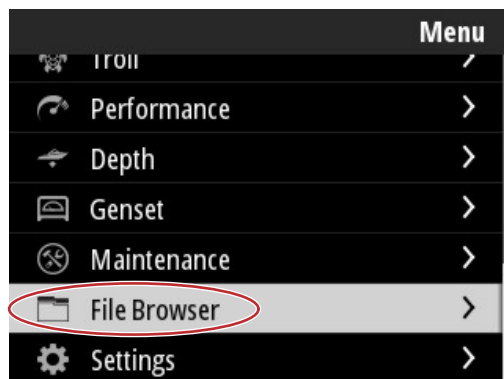
When the update download is complete, the operator will be informed that the file is ready to be installed. The operator can highlight and select the Restart Now option to install the update immediately, or highlight and select the Cancel option and install the update at a later time by going to the File Browser menu and locating the file.



65689

Updating through the USB Port

1. Download the current software release from the Mercury website. Copy the file to a USB drive with sufficient space.
2. Turn the ignition key on and verify that the VesselView is on. Wait for a complete startup of the VesselView.
3. Insert the USB drive into the VesselView card port all the way.
4. Push the **Menu** button on the VesselView unit to bring up the main Menu screen.
5. Press the **Up arrow** or **Down arrow** buttons to navigate to the File Browser option.



64935

6. Select USB Storage from the options shown.



64936

7. Select the update file that was loaded onto the USB drive. With the desired file highlighted, press the **Enter** button.

NOTE: The following image is for illustrative purposes. The actual name of the update file will vary.



64937

8. VesselView will give the operator a prompt and an advisory screen. Do not power the unit off during the update process. Wait for the progress bar to show completion of the update.
9. A prompt to remove the USB device will appear when the update is ready to finish.

Notes:

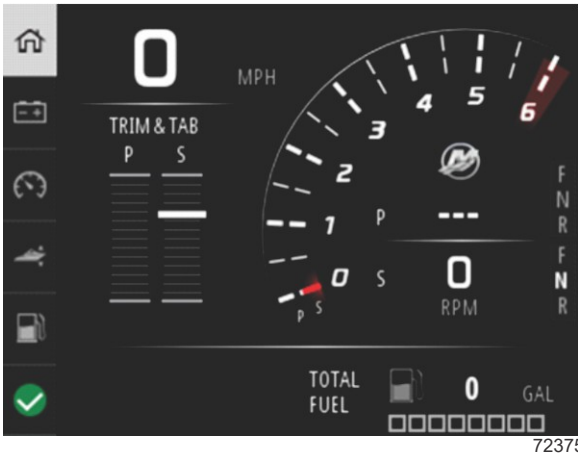
Section 5 - Troubleshooting

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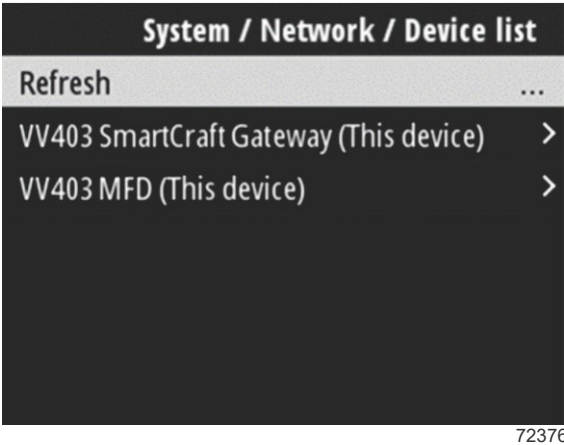
VesselView 403 Communication Error or Missing Data

The problem: there is a communication error or missing data (---) on VesselView 403 multifunction device (MFD).

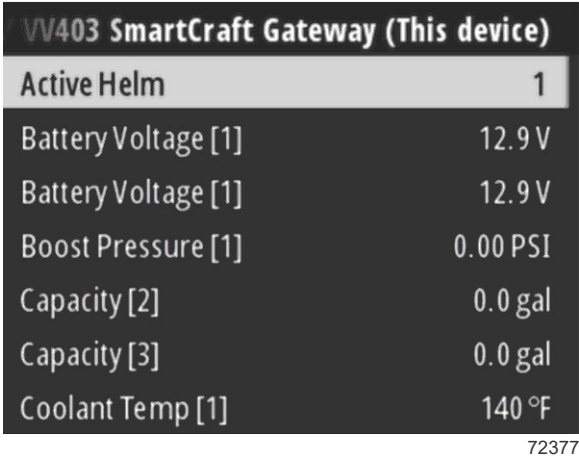


VesselView 403 communication error --- on screen

- 1. Verify the engine data is coming into VV 403.
 - a. Go to **Settings>System>Network>Device List**. Make sure there are no other Mercury gateway sources listed here. Conflicting gateway sources can lead to data issues.

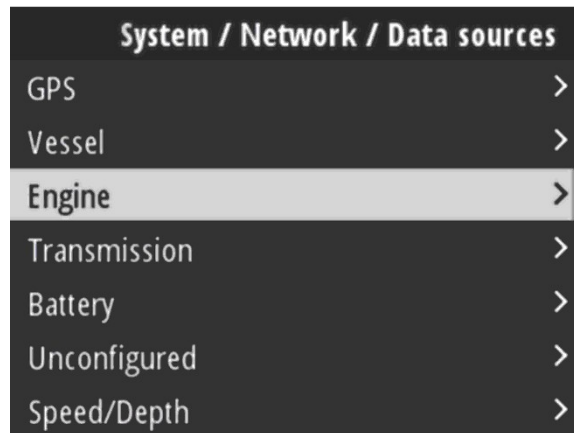


- b. Select **VV403 SmartCraft Gateway** and then select **Data**. You should see all the engine data (RPM, temp, battery voltage, etc.) coming into the VV403. If any engine data is present, VV403 is communicating with the SmartCraft bus. If a certain data item is missing, the data is not present or the VV 403 is not configured properly.



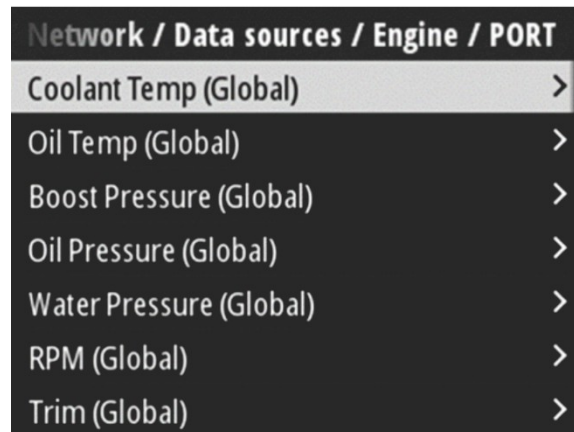
- 2. Verify the engine data source is properly configured through the MFD.

- a. Go to **Settings>System>Network>Auto Select**. Select **Start** to auto select all data sources. This may solve the issue, but if it does not, proceed to the next step.
- b. Go to **Settings>System>Network>Data Sources**. Select the category of data that you are trying to troubleshoot. For engine data, select **Engine** and the **Engine Location**.



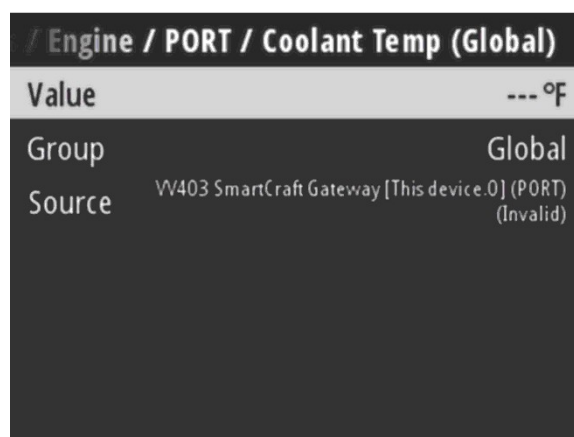
72378

- c. You should see line items for every available source. Pick the data source that you are trying to troubleshoot. For engine data, select the engine location of the data.



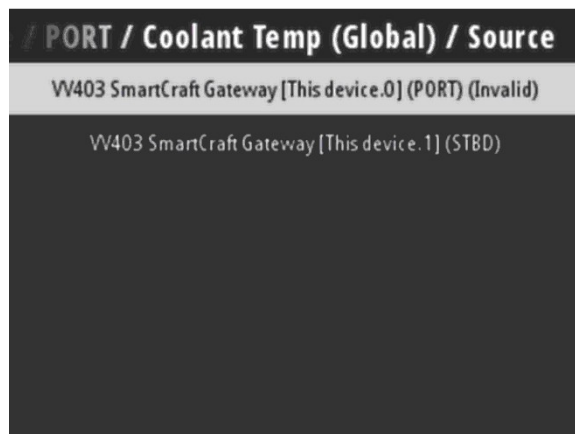
72380

- d. The Value line item will display the data. If you see three dashes (- - -), there is no data available. Select **Source** to see what sources are available.



72381

- e. Make sure the source is powered up and valid; if no valid source is found, then it cannot be set up in VV 403. Any selection of an invalid source will continue to give you three dashes.



72382