# VESSELVIEW 7 INSTALLATION INSTRUCTIONS

NOTE: *After completing installation, place these instructions with the product for the owner's future use.*

IMPORTANT: This document guides our dealers, boatbuilders, and company service personnel in the proper installation or service of our products. If you have not been trained in the recommended servicing or installation procedures for these or similar Mercury Marine products, have the work performed by an authorized Mercury Marine dealer technician. Improper installation or servicing of the Mercury product could result in damage to the product or personal injury to those installing or operating the product.
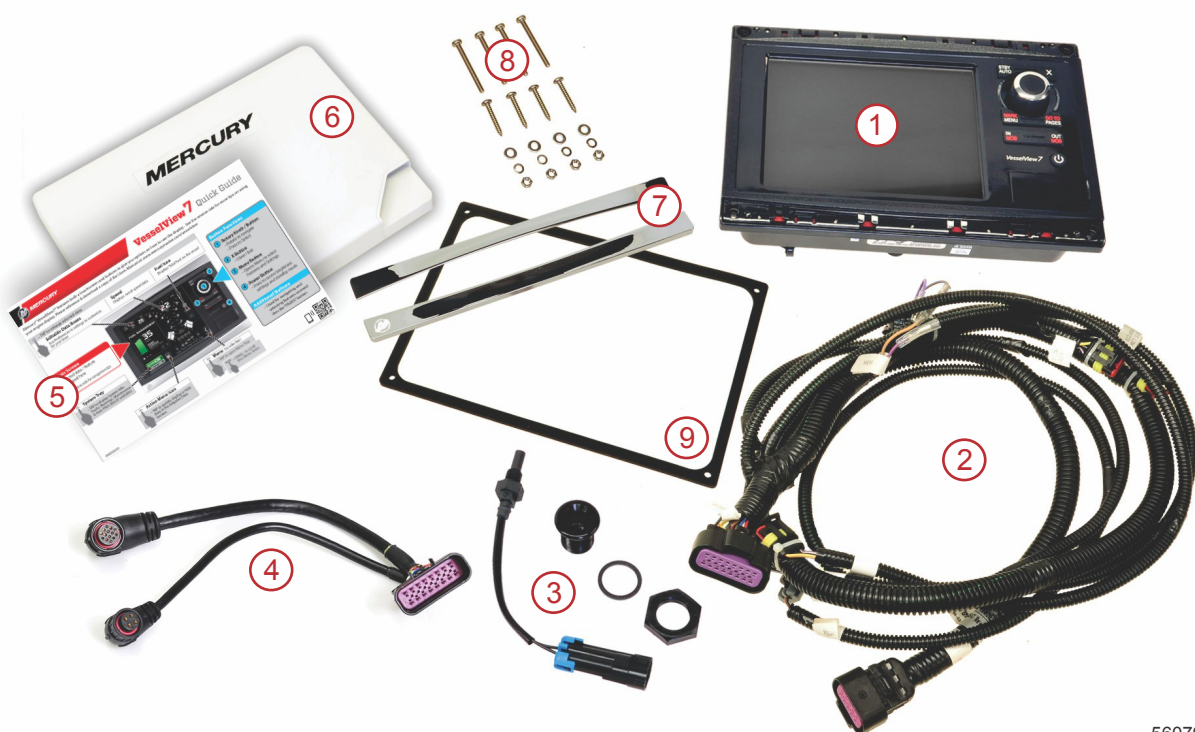
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Ref.	Qty.	Description
1	1	VesselView 7
2	1	Multifunction display (MFD) harness assembly
3	1	Air temperature sensor and mounting hardware
4	1	VesselView 7 adapter harness
5	1	Quick Start Guide
6	1	Sun cover
7	2	Trim bezel
8	1	Mounting hardware
9	1	Gasket

VesselView 7 Installation

Wiring

- Never attempt to connect, network, tie into, switch, sink source voltage or current from the DTS wiring harnesses.
- Never attempt to connect any type of communication or navigation equipment into the DTS wiring harnessing other than at the designated connection point.
- Always install boat accessory equipment using an appropriate power source connection, such as a fuse panel or junction box.

- Never attempt to tap directly into any of the DTS electrical wiring harnesses for a source of power.

⚠ WARNING
Splicing or probing will damage the wire insulation allowing water to enter the wiring. Water intrusion may lead to wiring failure and loss of throttle and shift control. To avoid the possibility of serious injury or death from loss of boat control, do not splice or probe into any wire insulation of the DTS system.

## Wiring Guidelines for Electrical Boat Accessories

⚠ WARNING
Excessive voltage drop may compromise the DTS system, leading to serious injury or death from loss of throttle and shift control. Do not wire any electrical accessory into the 12-volt ignition key switch circuits of the DTS system.

IMPORTANT: Do not connect boat accessories to the ignition key switch. Use a separate, switched 12-volt source for wiring boat accessories.

IMPORTANT: The DTS system requires a consistent 12-volt power source. Splicing or connecting accessories to the 12-volt or ignition key switch DTS circuits (purple, purple/white, or red wires) could blow a fuse or overload circuits, causing intermittent or complete loss of operation.

Electromagnetic Interference

1.5 m (5 ft)

2 m (6.5 ft)

1 m (3.3 ft)

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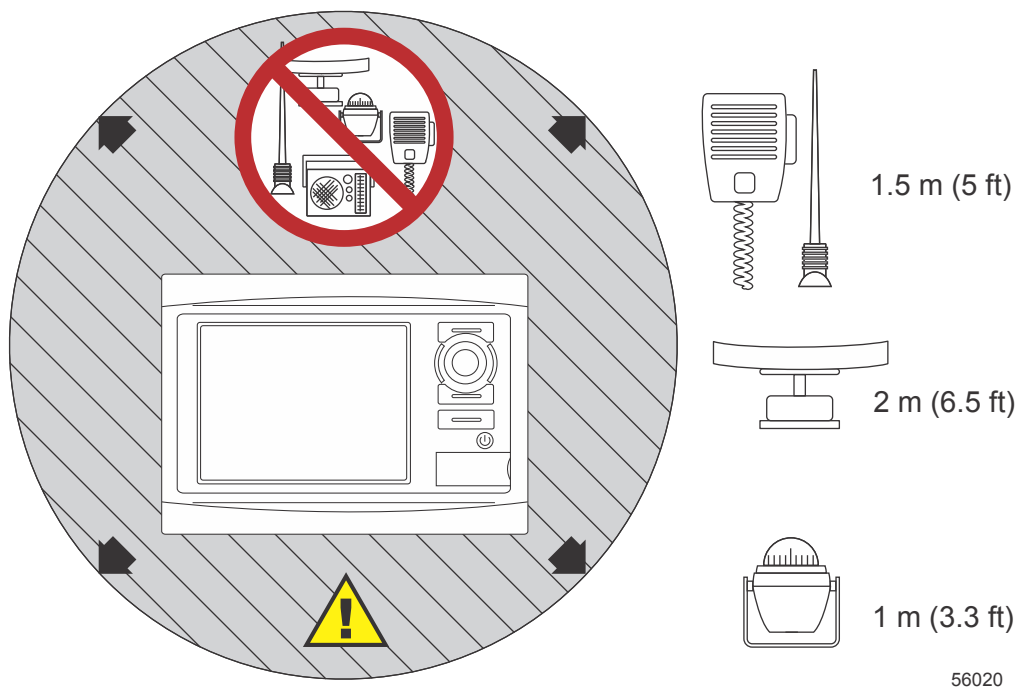
Minimum distances from VesselView

Harness Installation Guidelines

- Locate an appropriate path for routing the harness connections to their installation points.
- Inspect the routing path to ensure that surfaces are free of any sharp edges or burrs that could cut the harness.
- Fasten and support the harness with clamps or cable ties every 45.8 cm (18 in.) along the routing path. A clamp or cable tie must be used within 25.4 cm (10 in.) of any connection in a DTS system.
- Ensure that all connections are tight. Seal all unused connectors with weather caps.

Connections and Clearances

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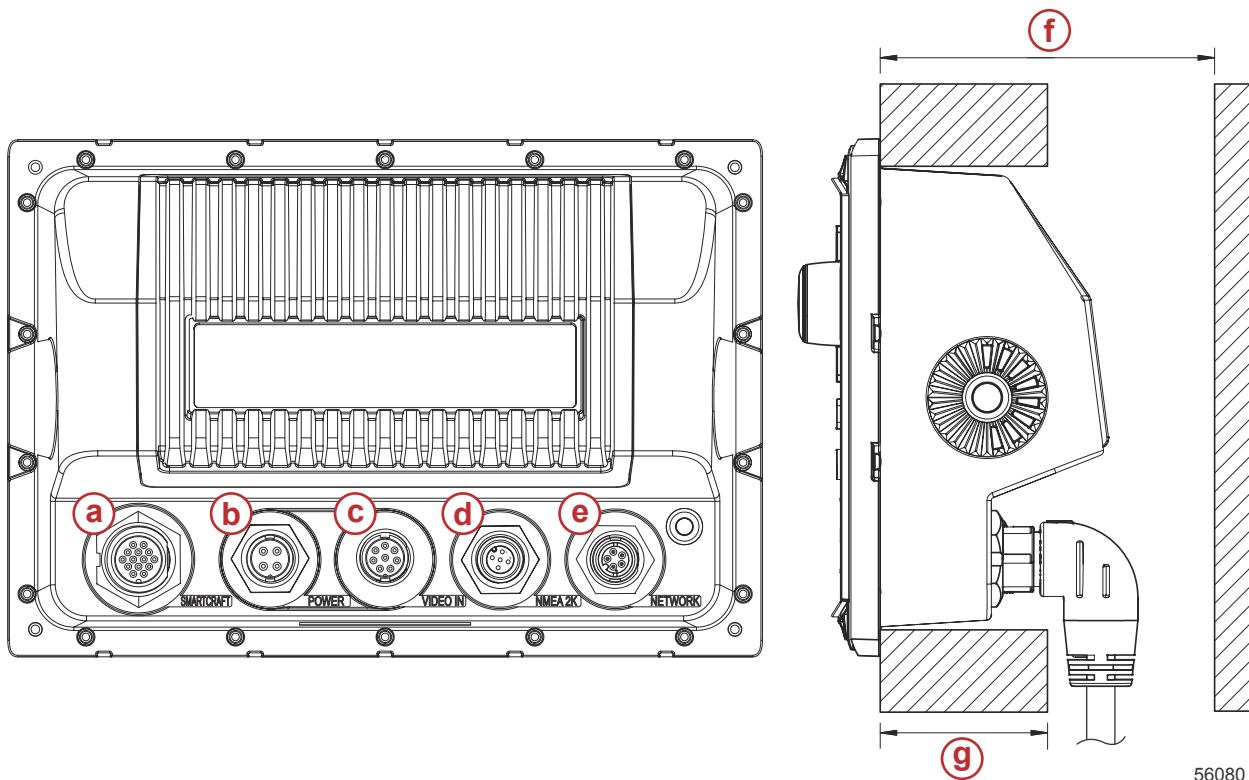
a - SmartCraft connection
b - Power
c - Video in
d - SIMNET/NMEA 2000
e - Network
f - No less than 101.6 mm (4.00 in.)
g - No more than 50.8 mm (2.00 in.)

Mounting Location

The mounting location must be carefully chosen before you drill or cut. VesselView must be mounted so that the operator can use the controls and clearly see the display screen. The display screen has high-contrast and antireflective properties that allow viewing in direct sunlight. For best results, mount the display out of direct sunlight and where there is minimal glare from windows or bright objects.

Verify that there are no hidden electrical wires or other parts behind the panel before cutting.

Do not install where it can be used as a handhold, where it might be submerged, or where it will interfere with the operation of the boat.
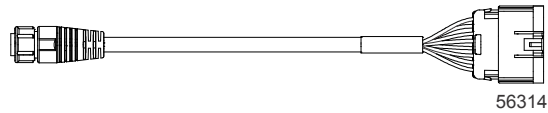
Ensure that there is sufficient clearance space to connect all relevant cables.

Good ventilation must be considered when identifying a mounting location. Poor ventilation can cause the display to overheat.


−15 to +55 °C (+5 to 131 °F)
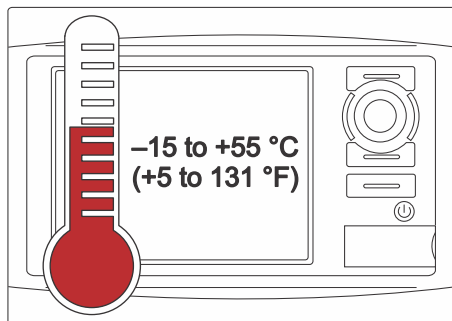
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These installation instructions have been written for the harnesses included with the VesselView. The 90° harness connector may not allow VesselView to be installed when the dashboard thickness is greater than the dimension listed. Straight connector, part number 8M0075080, should be ordered when the dashboard exceeds the maximum allowable thickness.

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Optional straight connector

1. Verify that there is sufficient clearance for the VesselView harness connections.
2. Secure the cutout template to the mounting surface with adhesive tape.
3. Drill four 4.5 mm (#16 drill bit) mounting holes when using the threaded screws and nuts with washers.
4. Drill four 3.5 mm (#29 drill bit) mounting holes when using the pan head sheet metal screws.
5. Use an appropriate size drill bit or hole saw to cut out the four 25.4 mm (1 in.) corners of the gray cutout area.
6. Remove the remaining gray area with a saw or other device.
7. Use a file to remove any sharp edges.
8. Verify that VesselView fits into the opening. Remove material from the opening if there is any interference.
9. Remove the adhesive protection backing from the gasket and install onto the mounting contact surface of the VesselView.
10. Connect all of the cables to the rear of the unit before inserting into the opening.
11. Secure the unit with the mounting hardware.
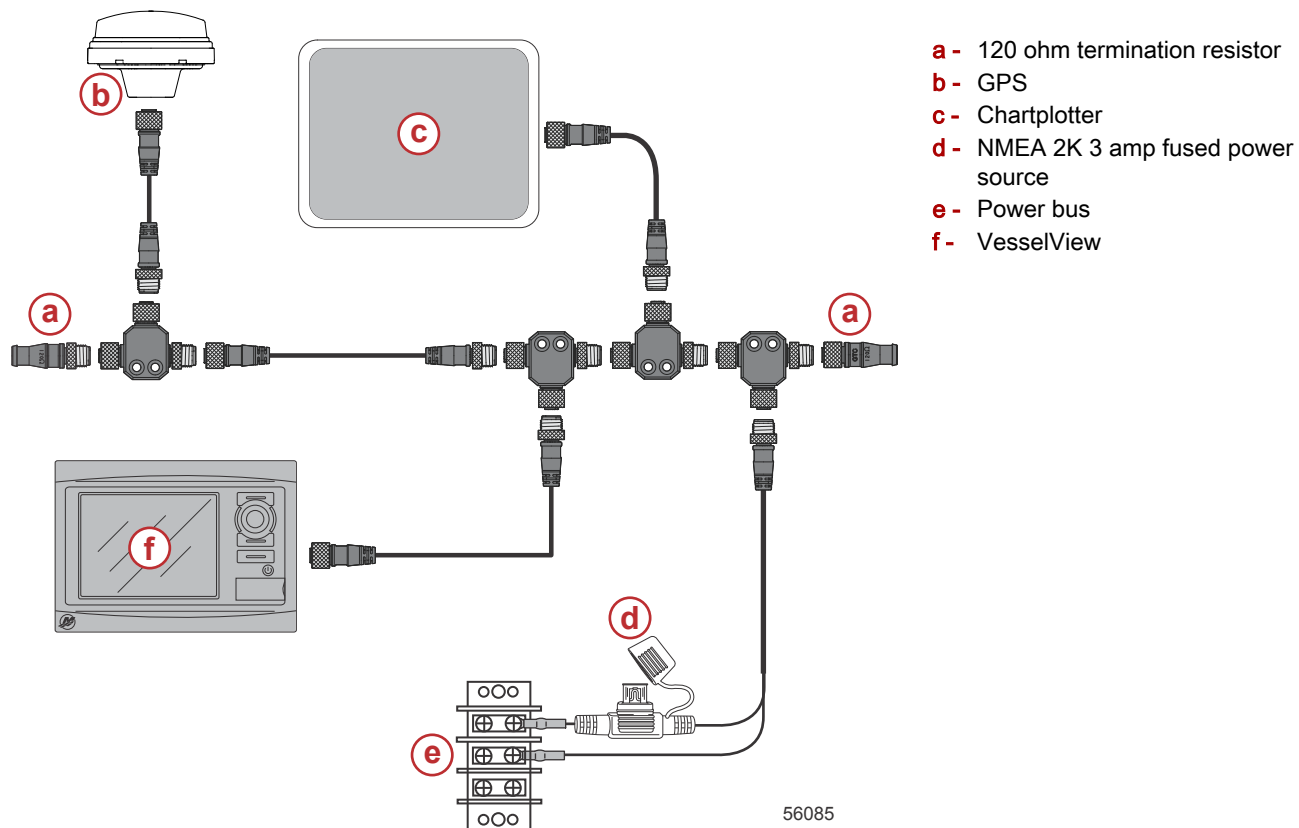12. Install the upper and lower bezel trim.

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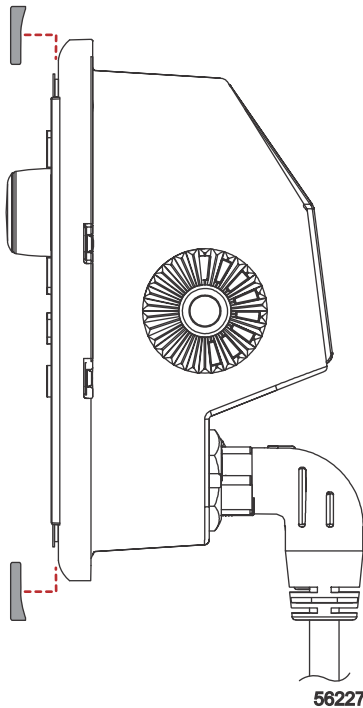
Bezel trim installation

VesselView 7 SmartCraft Wire Harness

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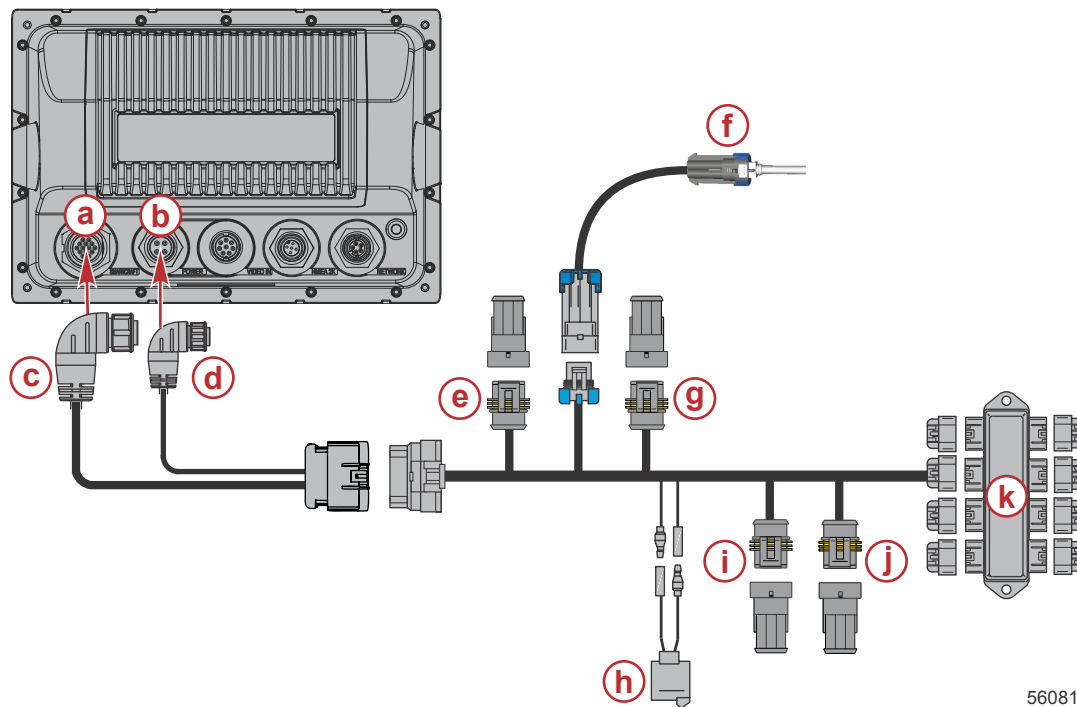
a - SmartCraft network connection
b - Power connection
c - SmartCraft harness connector
d - Power harness connector
e - System Link port center
f - Air temperature sensor
g - System Link starboard center
h - Horn
i - System Link port
j - System Link starboard
k - Junction box

An optional power-only harness is available. This optional harness is used when additional VesselView MFDs are installed.

VesselView NMEA 2K Connections (Optional)

a - 120 ohm termination resistor
b - GPS
c - Chartplotter
d - NMEA 2K 3 amp fused power source
e - Power bus
f - VesselView

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Button Identification

Front Controls

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a - Touch screen
b - MARK–MENU button
c - STBY–AUTO button
d - Exit button
e - Rotary knob (press for enter function)
f - GO TO–PAGES button
g - IN/OUT Zoom, MOB (man overboard)
h - Power–Brightness
i - Card reader door

Front Control Operations

Touch screen: The screen on VesselView 7 has numerous districts that are touch sensitive and operated with a touch, or with a vertical or horizontal swipe.

MARK–MENU: The MARK–MENU has two functions and is dependent on which screen mode is active. Press the MARK–MENU button while the chartplotter is visible to access waypoints and other functions. Press the button while SmartCraft information is visible to open the scroller bar.

STBY–AUTO: Allows the operator to suspend (standby) or engage Navico® systems operation.

Exit: Closes a menu and removes the cursor from the screen.

Rotary knob: Used for maneuvering in menus, zooming in charts, and can be pressed to enter a selection.

GO TO–PAGES: A short press displays the home panel pages and can be pressed multiple times to toggle through the home page menus. A long press displays the GO TO menu options.

IN OUT–MOB: Zoom buttons for various NMEA backbone components. Pushing the IN and OUT buttons at the same time will mark the position of the vessel with a man overboard (MOB) icon (if additional equipment is installed).

Power–Brightness: Press once to access the power mode or change the backlighting of the unit or go to night mode.

Card reader: Allows VesselView software to be upgraded, to have navigation charts uploaded, and waypoints and settings to be saved.

Setup Wizard

IMPORTANT: Do not rush VesselView by pressing buttons while the system is booting up to acquire vessel and engine data. When VesselView is initially started or after a factory reset, the system will take a few seconds to complete the boot up process.

The VesselView setup wizard guides you through the first steps of configuring the VesselView. The setup wizard can be accessed at any time through the SETTINGS icon in the scroller menu. Touch the scroller bar arrow and swipe to the Settings icon. To start the setup wizard, navigate to Settings/System/Setup Wizard. Touch Next to continue.
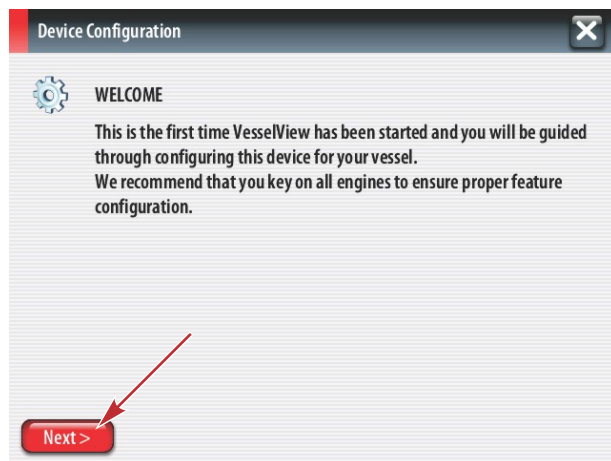
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Import Configuration

To import an existing vessel configuration, inset a micro SD card with the configuration file and select this file in the drop-down menu. If there is no import file, touch Next to continue.
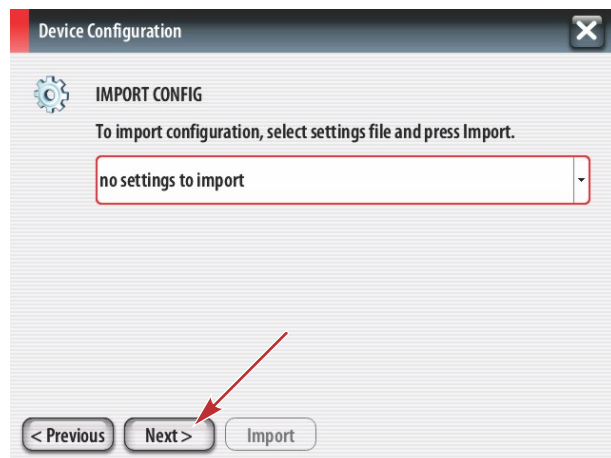
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Engine Setup

1. In the Engine Setup screen, use the rotary knob or touch the menu fields to select the correct option.
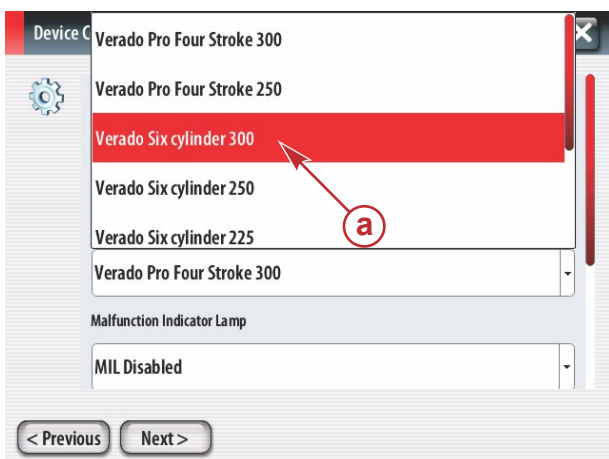
2. Complete selections in the Engine Setup screen.
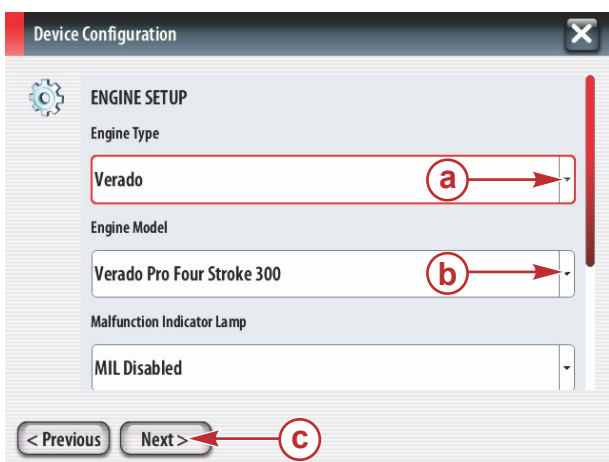
a - Engine Type menu
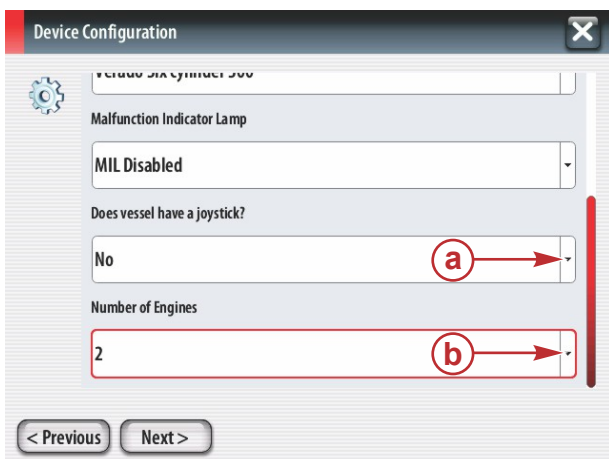b - Engine Model menu
c - Touch Next to continue

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3. Open and select the appropriate option in the remainder of menu fields in the Engine Setup screen. When finished making selections, touch Next to continue.
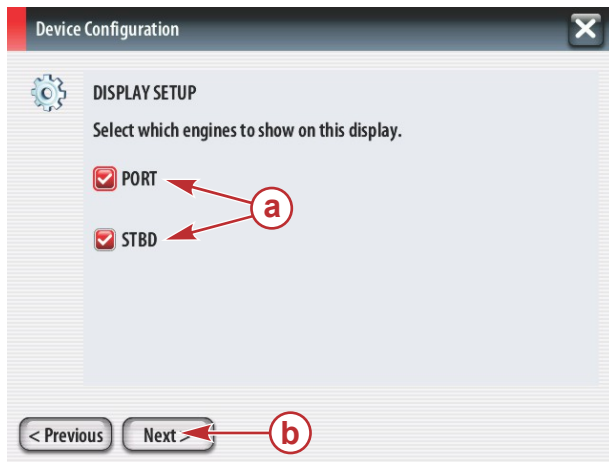

a - Engine Model option field

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a - Joystick option field
b - Number of Engines field

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Display Setup

Depending on the number of engines indicated in the Engine Setup screen, select the engines to be displayed by this VesselView unit. Up to four engines can be selected.


a - Engines selected to be displayed
b - Touch Next to continue

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Device Setup

In the Device Setup screen, use the rotary knob or touch the menu fields to select the proper options. If using multiple VesselView devices, be sure to assign unique numbers to each unit, to avoid data problems. Helm numbers should match the location of the individual VesselView unit. Touch Next to continue.
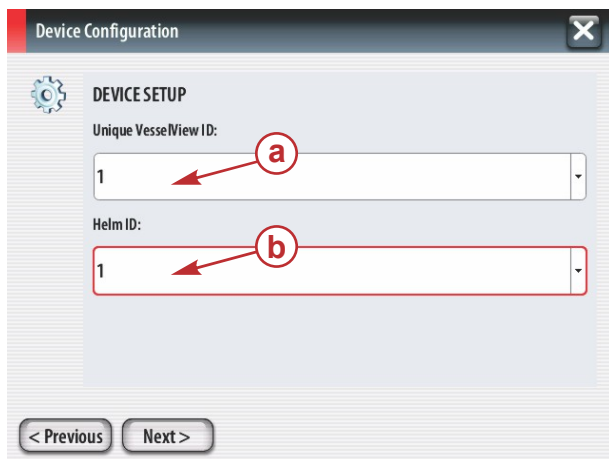
a - VesselView option field
b - Helm option field

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Units Setup

Select the units of measure that VesselView will display on-screen data: speed, distance, and volumes. Particular units of measure can be changed later.

a - Units of measure option field

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Tank Configuration

Select the number of fuel tanks on the vessel in the drop-down field. Touch Next to continue.

a - Number of tanks option field

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Use the rotary knob or touch the menu fields to select the Tank source, Tank type, and Tank capacity. Use the on-screen keypad to enter the capacity. When finished entering Tank capacity data, touch OK to close keypad.

a - Tank position option field
b - Tank type option field
c - Tank capacity entry field

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a - Tank capacity entry field
b - On-screen keypad
c - Touch Next to continue
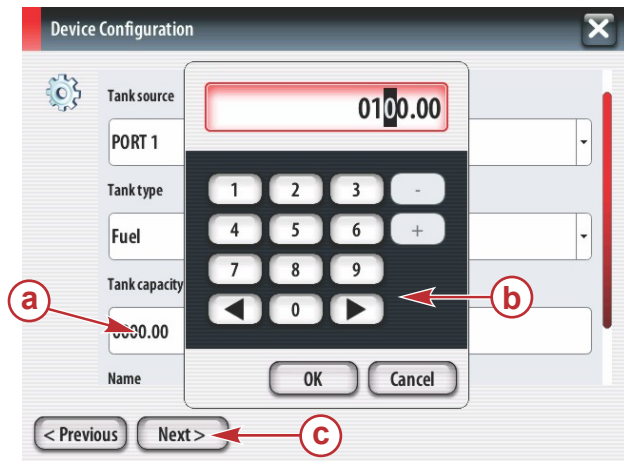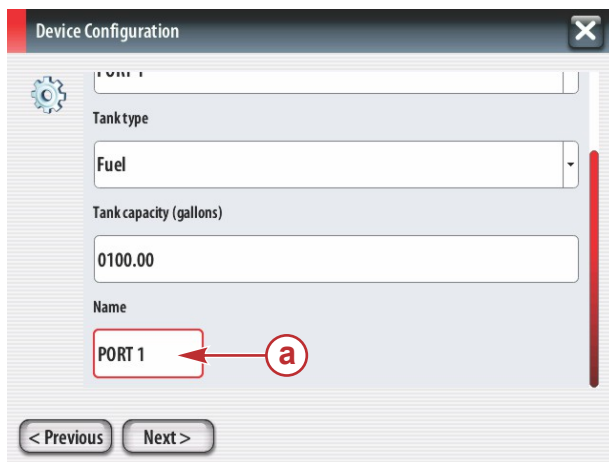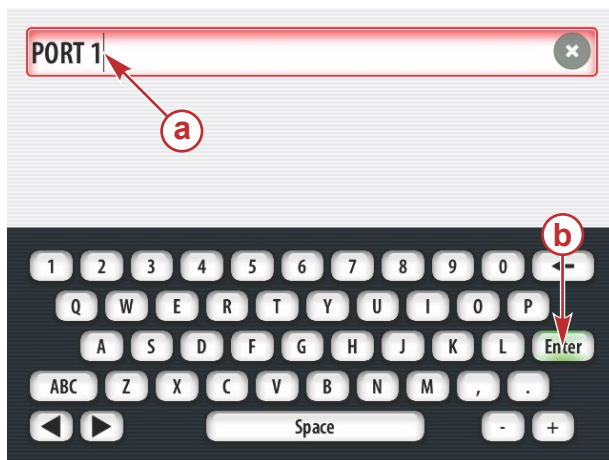
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The tank name will populate the Name field. To change the name of the tank, touch the field and use the on-screen keypad to customize the tank name.

a - Tank Name field

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a - Tank name entry
b - Enter key to complete entry

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Based on the number of tanks entered during configuration, the screen will return to the Tank source screen. All menu fields need to be filled in with the appropriate information for each additional tank. When all menu fields are completed, touch the Next field to continue.

A Vessel fuel capacity screen will display the total capacity based on input data.

a - Vessel fuel capacity field
b - Touch Next to continue

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Speed Setup

In the Speed Setup screen, there are three options for determining how VesselView will acquire speed information. If the vessel is equipped with a GPS, the drop-down menu will allow selection of available devices. If the vessel is equipped with a pitot sensor, this option will be selected. If the vessel is equipped with a paddle wheel, then an option to select will drop down. After the speed source has been selected, touch Next to continue.

a - GPS source field
b - Pitot source field
c - Paddle wheel source field

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If the pitot source was selected, a Pitot Speed Sensor screen will appear. Use the Pitot Sensor Type drop-down to select the appropriate option. Most engines utilize a 100psi pitot. Products from Mercury Racing will utilize the 200psi pitot. After selection, touch Next to continue.

a - Pitot pressure field

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If the paddle wheel source was selected, the Paddle Wheel Sensor screen will appear. Use the Paddle Wheel Sensor Type drop-down to select the appropriate option. After selection, touch Next to continue.
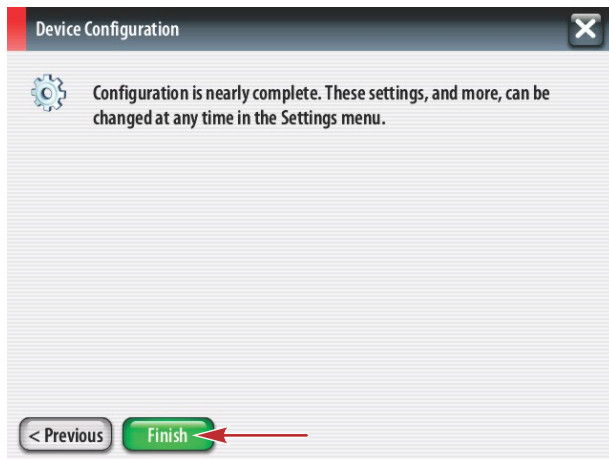

a - Paddle Wheel Sensor Type field

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Finishing Setup Wizard

Touch Finish to complete the Setup Wizard on the VesselView. Do not power off the unit until the Finish screen is replaced by the vessel activity screen.
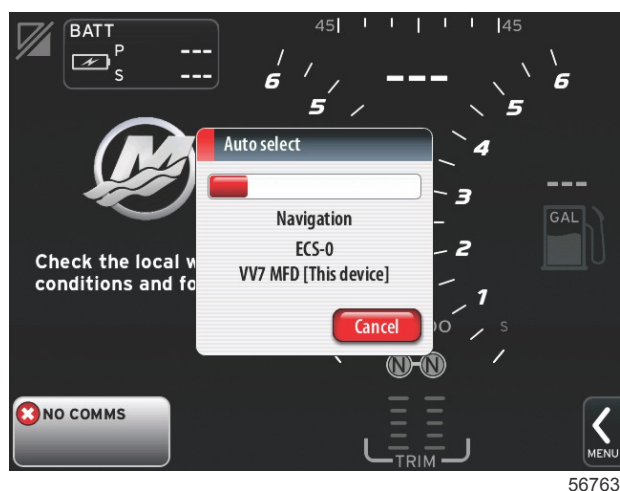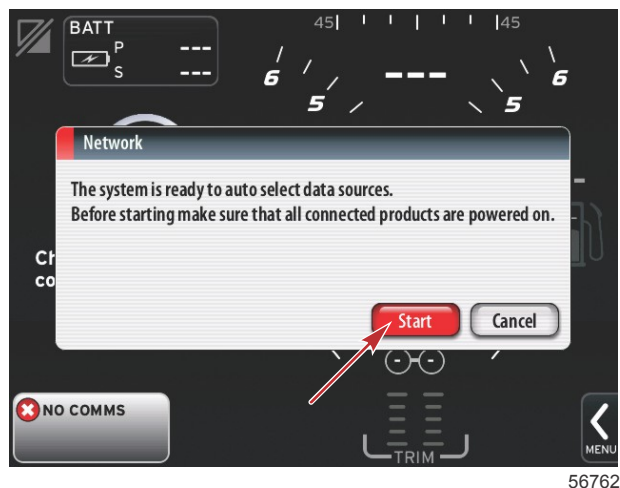

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Data Source Setup

VesselView will ask to setup detectable data sources. Touch OK to continue.

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Power on all products and key on all engines to ensure all data generating sources can be detected. Touch Start to begin the process.

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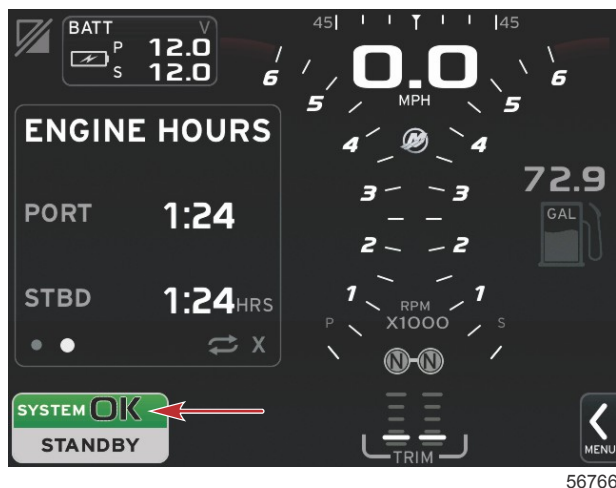When Auto select is complete, touch Close.

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a - Close button

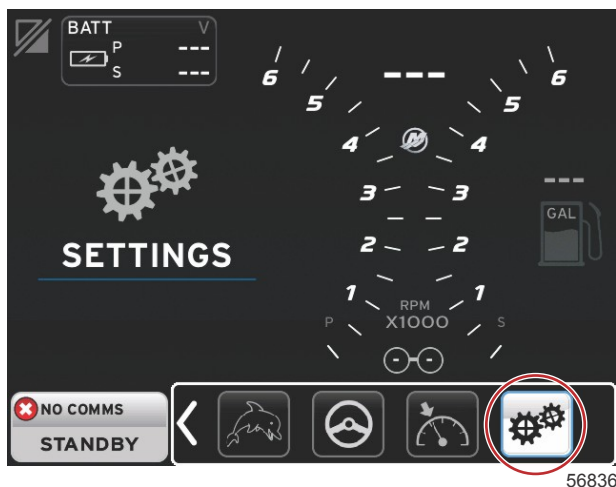VesselView will display the System screen. Systems operating within established parameters will display in green.

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Touch System OK to display engine hours.


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Settings Menus

Changes in any of the settings can be made at any time using the Settings menu. All drop-down and fly-out menus can be navigated by touching the screen or by using the rotary knob. The Settings menus can be accessed using the scroller bar at the bottom right of the screen.
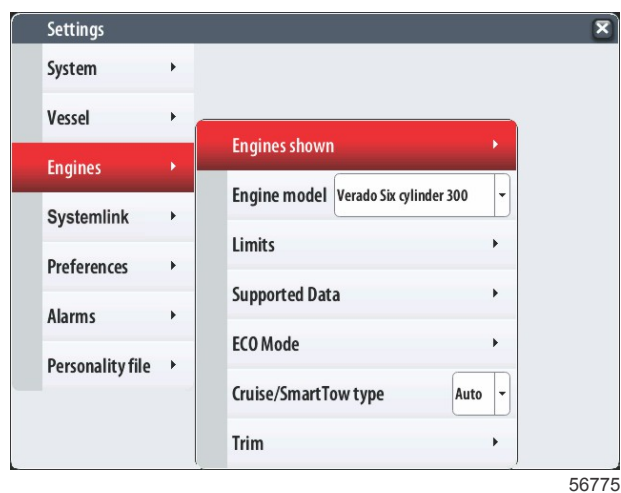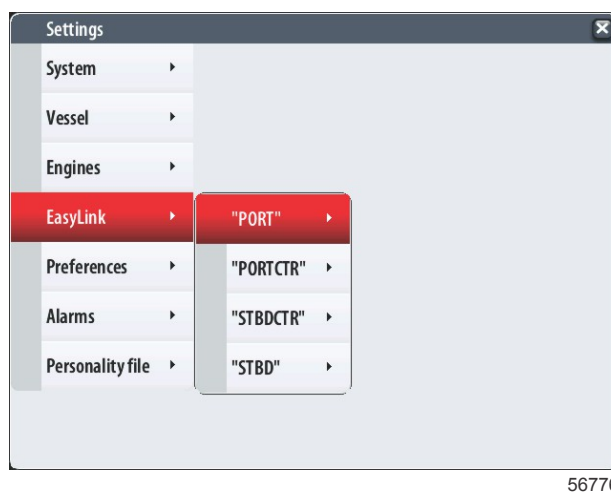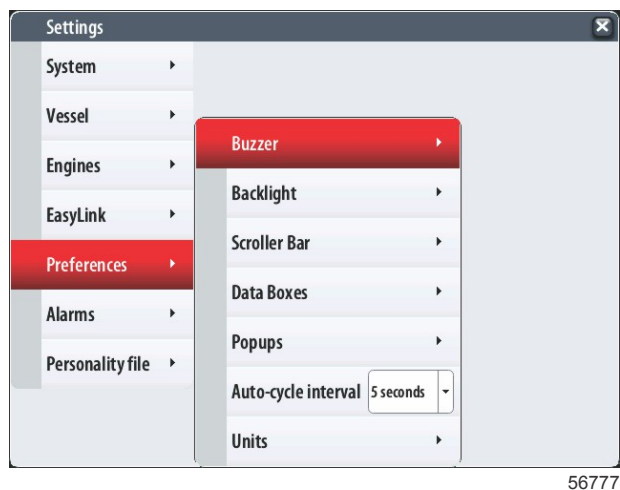

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1. System menu

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2. Vessel menu

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3. Engines menu
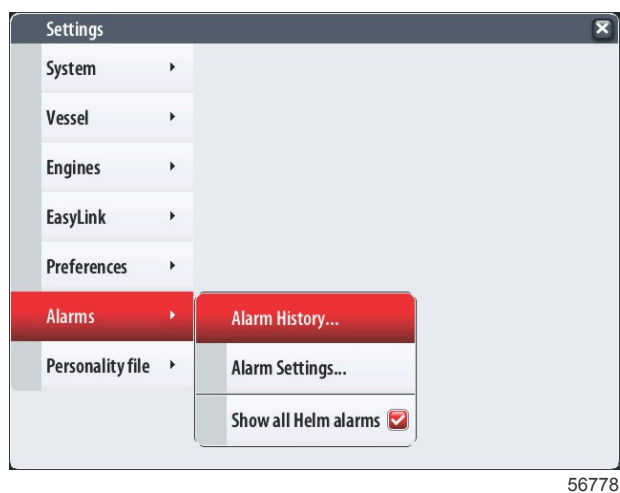

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4. EasyLink menu

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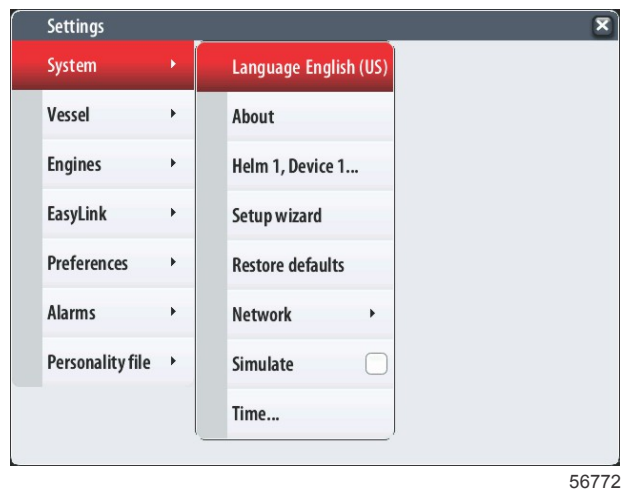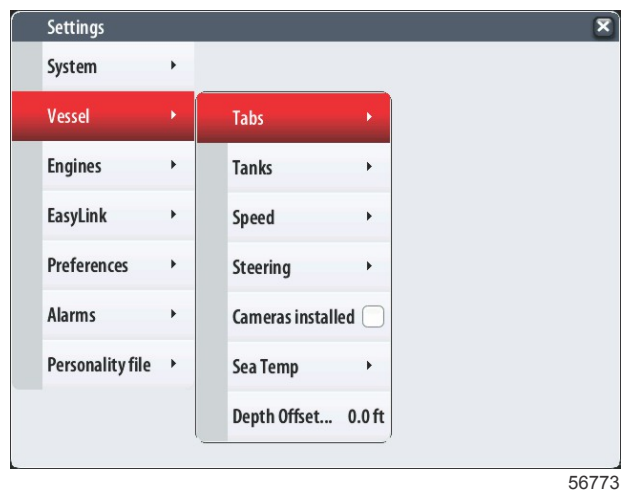
5. Preferences menu

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6. Alarms menu

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7. Personality file menu

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How to Update Your VesselView 7 Software

The following instructions explain how to upgrade the VesselView 7 software. Internet access is required along with a communication port used to transfer the file to a FAT or FAT32 micro SD card.

Backup Your Waypoints, Routes, and Tracks

Although waypoints, routes, and tracks should not be affected, it is recommended that these are backed up before starting the upgrade. The backup process copies all waypoints, routes, and tracks to a micro SD card. The card can be the same one that has the upgrade files. Depending on the amount of information you will backup, the card must have the capacity to store it.

1. Turn the ignition key on and verify that the VesselView is on.
2. Insert the micro SD card into the card reader port all the way until it clicks and stays in place.
3. Press the PAGES button below the rotary knob.
4. Select Tools; then select Files.
5. Select Waypoints, Routes, and Tracks.

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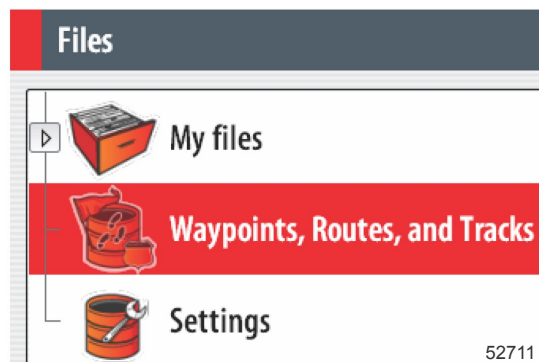
6. Select the desired file format and then press Export.

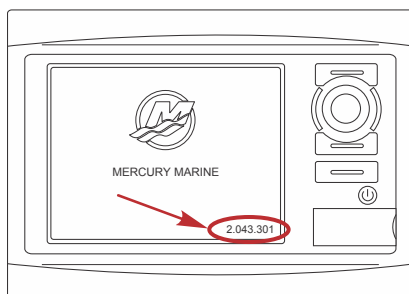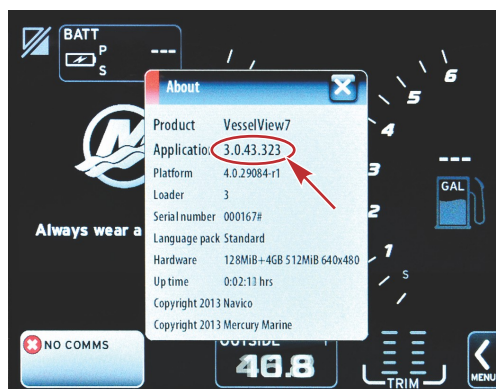7. Select the micro SD card as the destination and select OK.

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8. Name the backup file using the on-screen keyboard and then press Enter.

Obtaining the Latest Software

1. The latest software for the display is available on-line for general download at Mercury's website; www.mercurymarine.com/vesselview. To understand what software version is in VesselView, power up VesselView. While the system boots up, the screen will show the software version in the lower right-hand corner. If VesselView is already powered up, select Settings>System>About to see the current operating version of VesselView software.

MERCURY MARINE

2.043.301

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About

Product	VesselView7
Application	3.0.43.323
Platform	4.0.29084-r1
Loader	3
Serial number	000167#
Language pack	Standard
Hardware	128MiB+4GB 512MiB 640x480
Up time	0:02:13 hrs

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Always wear a

NO COMMS

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2. Select the VesselView 7 product and click on DOWNLOAD UPGRADE.

3. Depending on your computer's security settings, a security warning may appear. Click Allow to continue.

4. Create a folder on your hard drive and save the file in this folder.

5. If you are asked to SAVE or RUN, select SAVE and save to your hard drive.

    NOTE: The file is typically 70–100 MB in size.

    IMPORTANT: Some browsers may change the file extension. Verify that the filename and extension have not changed. The correct extension after the filename should be .upd. Do not rename the file or change the extension.

6. After the file is saved to the hard drive, copy the file to a 512 MB or higher capacity blank FAT or FAT 32 micro SD card root. The root of the drive is the topmost level, where the file is not placed into a folder.

Upgrading Vesselview

Important considerations before and during the upgrade process:

- Have you backed up your waypoints, routes, and tracks?
- Each display must be upgraded individually; there is no automatic network feature to upgrade multiple VesselViews simultaneously.
- Do not turn off the display or disrupt the power during the upgrade process.
- Do not remove the micro SD card during the upgrade process.

1. Verify that the ignition key is off and that VesselView is not turned on.

   NOTE: *Some installations may have the VesselView powered up with a dedicated circuit, rather than by the ignition key-on circuit.*

   IMPORTANT: VesselView must be turned off for at least 30 seconds before upgrading the software.

2. Insert the micro SD card into the card reader port all the way until it clicks and stays in place.
3. Turn the ignition key on and verify that the VesselView is on.
4. Allow the system to boot up. A screen will prompt you to upgrade or cancel.
5. Use the rotary knob to highlight the upgrade file and press the knob to confirm.

> **Select update to run**
>
> **0: Cancel (Do not run updater)**
>
> ***1: VesselView 7-X.0.XX.XXX-XXXXX**

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6. Do not turn the ignition key off, turn VesselView off, or remove the micro SD card while the software is uploading. The upgrade process may take several minutes to complete.

> **Installing update. Please wait...**
> **Do not turn off during update,**
> **as this may damage your device.**

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7. When the upload is finished, remove the micro SD card and the system will automatically reboot to complete the upgrade.

> **Update complete.**
> **Please remove the SD card to finish.**

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8. Verify that the software version upgraded is the correct version. Press the Go To button, press Settings, select Systems and rotate knob to About. Press the knob to verify. The current software version is shown. Keying the vessel off for 30 seconds, then keying on will also display the software version in the lower right-hand corner of the initial boot up screen.

Touch-Screen Calibration

1. Turn the unit off.
2. Press and hold the MENU button, then turn the unit on.

3. Hold the MENU button down during power on, until the calibration utility screen comes up (approximately 15 seconds).
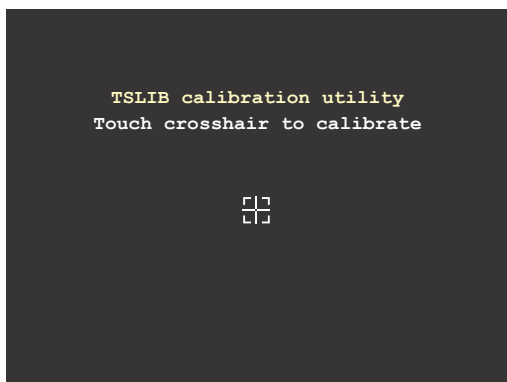
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Calibration utility screen

4. Touch crosshair shown on screen to perform nine points of calibration.
5. After successful calibration, the unit will return to the normal application screen.

Products of Mercury Marine
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