LOWRANCE®

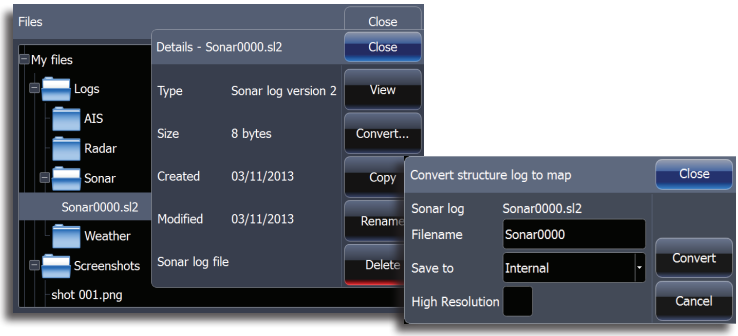
HDS Gen2 Touch 2.0, 2.5 & 3.0 addendum

This addendum documents new features included in the HDS Gen2 Touch 2.0, 2.5 and 3.0 software updates. These features are not described in the HDS Gen2 Touch Operation manual.

HDS Gen2 Touch 2.0 software update

Converting files in high resolution

You can create standard resolution or high resolution StructureMap .smf files. High resolution .smf files capture more detail, but take longer to convert and are larger than standard resolution .smf files.



Check the High Resolution checkbox to convert files in high detail.

Networking

Sonar and Structure

You can now view and control traditional sonar and structure sonar independent of one another on an Ethernet network. That allows you to view traditional sonar from a trolling motor transducer, while viewing StructureScan data from a transducer mounted on the transom.

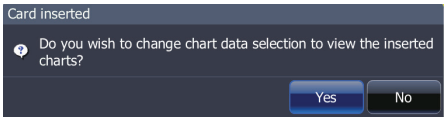
Structure history and standby mode

The StructureScan transducer will continue to record structure history when the unit is in Standby mode. To turn off the transducer, enable the Stop sonar command on the Structure menu.

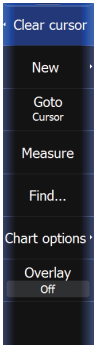
Charting

Sharing Chart data

You can share charts across the Ethernet network. Chart Sharing allows a user to insert a compatible chart card from Lowrance, Navionics, Jeppesen or other provider into a display on the Ethernet network and view the chart information on any other compatible display on the network. Chart sharing allows the user to save money by not requiring the user to purchase a chart card for every unit on the network.



When a SD chart card is inserted into a unit on the network, other units on the network may be prompted to change chart data to view the data on the SD card, if required.



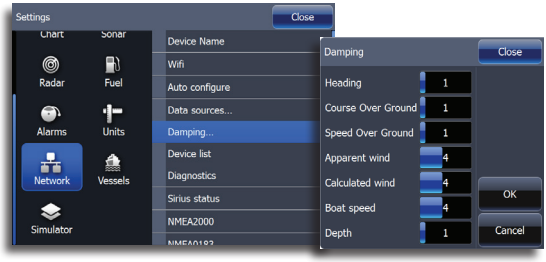
New Navionics features

The 2.0 software update features several new Navionics features that allow the user to customize their on-the-water experience. This includes Dynamic icons, Easy view, Depth range (highlighting), Shallow water highlighting and Rock filtering.

- Dynamic Icons - Changes traditional stations to animated icons showing current direction, strength and tide levels
- Easy view - Increases the size of cartography on the screen, as though user was using a magnifying glass
- Depth range (highlighting) - Allows user to specify a range of depths to be highlighted. Depths will be rounded to the closest contour interval available. The Max depth range value must be greater than the Min depth range value.
- Shallow water highlighting - Displays pink dots for Shallow areas up to 30 foot range.
- Rock filtering - Filters rocks below a certain depth

Damping

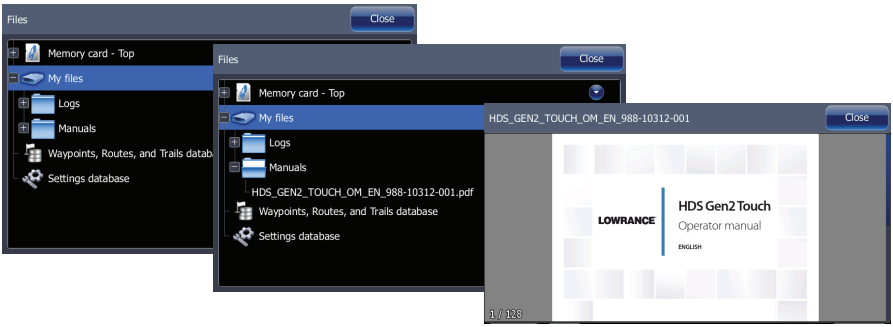
Smooths out fluctuations in data on the display (course over ground, speed over ground, etc.) that occur when navigating at slower speeds.



Damping accomplishes this by averaging the data. The higher the damping level, the more data history will be averaged. As a result, higher damping levels cause a delayed response to changes in the data.

PDF reader

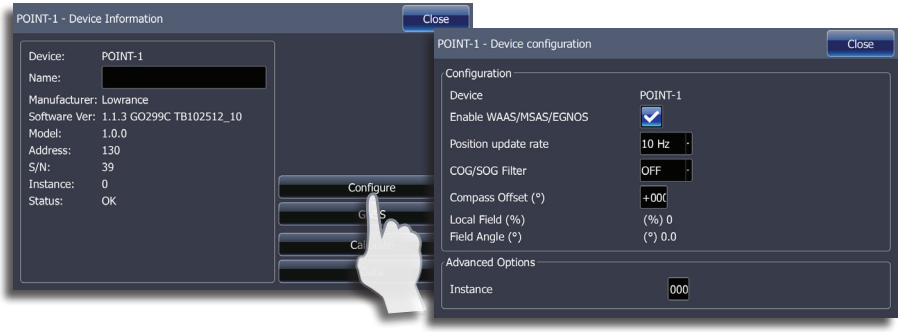
Use the PDF viewer to read manuals and other PDF files on the HDS display. The manuals can be read from an inserted SD card or from the unit's internal memory.



Point 1 antenna configuration

Enabling WAAS/MSAS/EGNOS

Select WAAS/MSAS/EGNOS to use the satellite based augmentation system (SBAS), which can increase accuracy of a GPS fix to within approximately 1m. WAAS covers North America, MSAS covers East Asia (primarily JAPAN), and EGNOS covers Europe.



Position Update

Position update rate may be adjusted to suit your vessel and to minimize unnecessary NMEA 2000 data traffic. For high speed vessels, the maximum update rate will be desired for measuring performance to the highest possible accuracy. On slower vessels, and large networks with a lot of network traffic, it may be preferable to reduce the network load.

COG/SOG Filter

Averages COG/SOG data to smooth out displayed values. The best setting will depend on the type of vessel and user preference.

Configure/Offset

Offset may be applied to correct for small errors seen in the orientation relative to the bow of the vessel. This would typically be the result of the antenna not being physically 100% parallel with the center line of the vessel. To determine a correction value, a reliable hand bearing or fixed magnetic compass should be used for reference.

➔ ***NOTE:*** Ensure calibration of compass is completed prior to adjusting the offset.

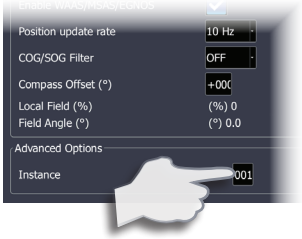
Instance

If more than one device of the same type exists in the network, the instance number may be changed to a unique number to allow easier identification.

You also can disable the heading sensor on the Point 1 antenna by changing the instance value.

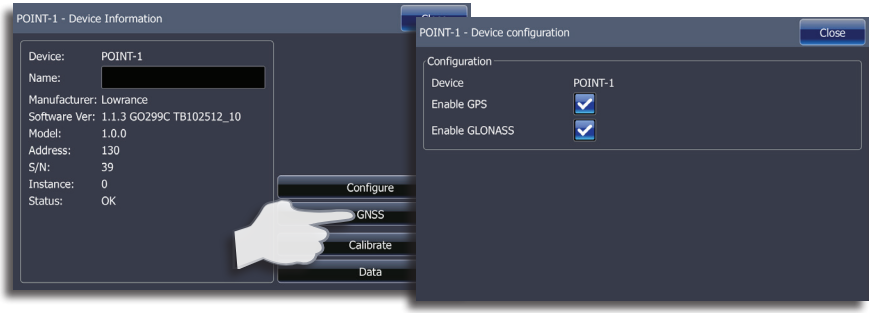
Disabling the heading sensor

Set the Point 1 instance value to 001 to disable the heading sensor. This is useful when more than one Point 1 antenna is installed on the same network and you only want to receive data from one of the heading sensors.



GNSS Configuration

The GPS and GLONASS options may be enabled simultaneously, or individually. Generally, GPS offers the highest accuracy, but in certain circumstances a better fix may be achieved with both or only GLONASS enabled.



➔ ***NOTE:*** When the Point-1 detects another heading source in the network, it will automatically disable its own heading output in preference of the other source.

Calibrate

With the Point 1 mounted securely in its permanent location, follow the on-screen instructions to calibrate the compass.

GoFree™ wireless

With a WIFI-1 unit connected to an HDS unit you can use a wireless device to view or remotely control the HDS display. Displaying HDS data on a wireless device requires a corresponding app. Please check the appropriate Apple or Android store for your device.

→ ***Note:*** In this document we have used the term **wireless devices**, and graphics from iPad and app Store are used as examples. The wireless functionality, however, is provided for other vendor's tablets or smartphones. Tablets can be used for viewing and controlling the HDS unit when relevant apps are available. Smartphones can only be used as an HDS viewer.

→ ***Note:*** Installation and wiring for the WIFI-1 unit is described in the separate WIFI-1 Installation Guide.

→ ***Note:*** GoFree wireless is not compatible with HDS Gen1 units. If an HDS Gen1 unit is on the same network as a GoFree module, networking will no longer be functional.

Setting HDS device name

You will only need to change your unit's name when HDS units on the network have the same default device name.

Setting up the WIFI-1

Connect the WIFI-1 unit to the HDS unit with the Ethernet cable supplied with the WIFI-1 unit

- The WIFI-1 access point will now be listed in the HDS Network menu

Downloading the GoFree app

Download the Lowrance GoFree Controller & Viewer app to your wireless device from the Apple Appstore or Android Google Play app store.

Connecting the wireless device to the WIFI-1

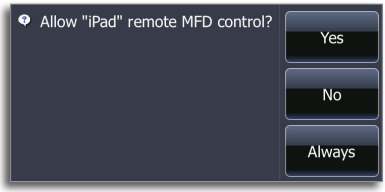
Set up the wireless device's network to be the WIFI-1 defined as primary access point.

Enable/disable wireless control of HDS

Start the app, and tap the HDS unit icon in the GoFree Controller page to request remote control of the HDS unit.

➔ ***Note:*** Older versions of the Android operating system do not support display unit autodiscovery. If no units appear on the Lowrance GoFree Controller screen, follow the onscreen instructions.

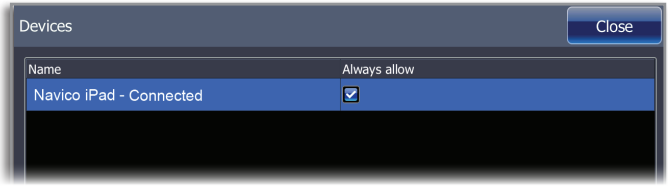
The first time you request control from the wireless device, the HDS unit will prompt you to confirm remote control from this device.



When control is confirmed, the connection will be immediately established.

→ ***Note:*** If control is rejected the wireless device will mirror the HDS screen, but no operation will be allowed from the remote device.

All connected wireless devices will be listed in the HDS dialog, and you can change the access level for all connected devices.



Operating the HDS with a wireless device

When remote control is accepted, the HDS page will be mirrored to the wireless device.

The HDS image includes softkeys. Tapping these keys works as operating the similar hard keys on the HDS screen.

Lets you select which unit to control if more than one is connected to the active WIFI-1 unit

Returns to the GoFree Controller page.

HDS Gen2 Touch 2.5 software update

The HDS RTM 2.5 software update enables support for the SonarHub sonar module, SpotlightScan sonar and Fusion-Link.

SonarHub

You can use the SonarHub to view data from CHIRP, broadband and StructureScan HD transducers.

→ ***Note:*** When the SonarHub is in CHIRP mode, you cannot use StructureScan mode.

CHIRP

A CHIRP (Compressed High Intensity Radar Pulse) transducer sends out an elongated pulse that broadcasts all frequencies within the bandwidth of the selected transducer type (Low CHIRP, Medium CHIRP, High CHIRP). This results in better image quality, better target separation and greater depth penetration.

CHIRP frequencies	
Low CHIRP	Provides the best depth penetration with lower resolution images
Medium CHIRP	Better depth penetration than High CHIRP, but with minimal loss of target definition
High CHIRP	Offers high resolution images in shallow water

Selecting a frequency

You can view CHIRP or broadband sonar by selecting the desired frequency from the sonar frequency menu.

→ ***Note:*** Available frequencies are determined by the installed transducer and the selected transducer type.

Viewing StructureScan

You cannot view StructureScan data with a CHIRP frequency selected on the sonar frequency menu.

1. Select a broadband frequency **(50/83/200)** on the sonar frequency menu
2. Display the Structure page
3. Turn off **Stop Sonar**

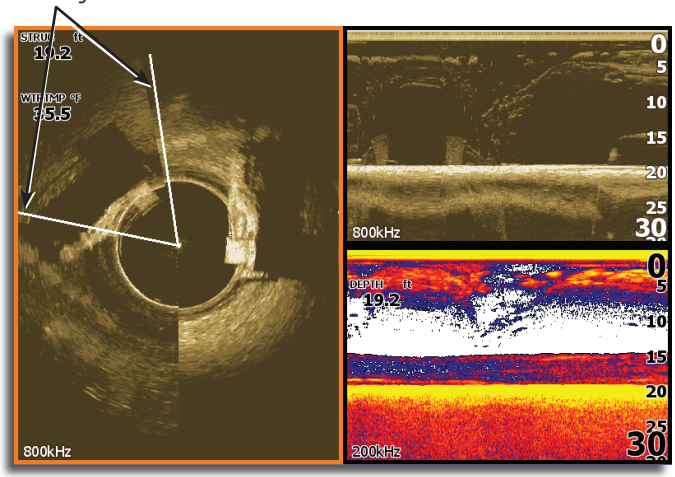
SpotlightScan™

SpotlightScan Sonar shows structure and fish targets ahead and around the boat without disturbing these areas before you have a chance to fish them.

The SpotlightScan transducer can also be used for DownScan imaging or as a conventional broadband transducer.

➔ ***Note:*** SpotlightScan is compatible with HDS Gen2 Touch units and HDS Gen2 non-touch units. HDS Gen2 non-touch units require a SonarHub for compatibility with the SpotlightScan transducer.

Twin scanning beams

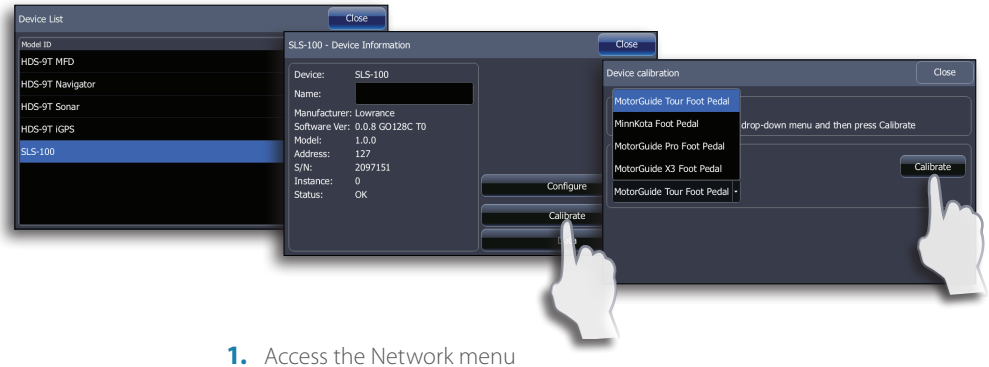


SpotlightScan comes with a trolling motor position sensor that ensures SpotlightScan returns match up correctly with the orientation of your trolling motor.

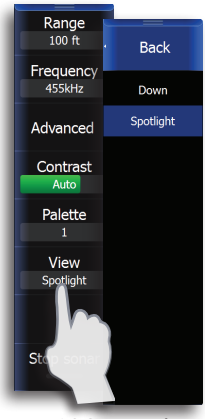
The SpotlightScan transducer works with most MotorGuide and Minn Kota cable steer trolling motors. Its scanning speed is controlled by how fast the trolling motor is rotated with the foot pedal.

➔ ***Note:*** For the best results, rotate the trolling motor at a slow, constant speed. Rotating the trolling motor too quickly will result in blurred images.

Selecting a trolling motor type



1. Access the Network menu
2. Select **Device list**
3. Select the position sensor **(SLS-100)** from the device list
4. Select **Calibrate** on the device information dialog
5. Select your trolling motor type
6. Select **Calibrate**
7. Select **OK** on the confirmation dialog



HDS Gen2 Touch

Displaying SpotlightScan view

SpotlightScan images are viewed on the Structure page. You can set up combo pages to view SpotlightScan images, broadband sonar and DownScan images at the same time.

FUSION-Link support

FUSION-Link devices connected to a NMEA 2000 compatible network can be controlled by a HDS unit.

The integration is currently limited and does not support the following features:

- Multiple FUSION-Link device connectivity
- Sirius weather controls via FUSION-Link devices

→ ***Note:*** Refer to your FUSION manual for instructions covering the installation of a FUSION radio on a NMEA 2000 network.

FUSION-Link setup

Audio must be enabled on your HDS unit before setting up your FUSION-Link device.

Audio server selection

If you have more than one audio server, like a SonicHub and a FUSION radio, select the FUSION radio as the audio server.

1. Tap **Options** on the audio menu
2. Tap **Audio server**
3. Select your Fusion radio

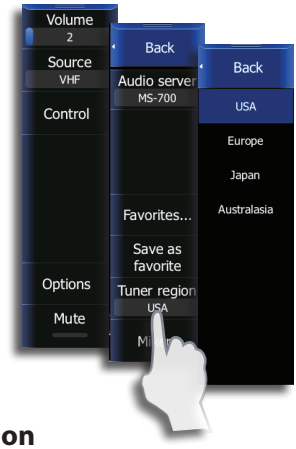
Selecting a source

Audio sources supported by the SonicHub and FUSION-Link are controlled in the same manner. Refer to your HDS manual for information about IPOD, Sirius radio, USB or AM/FM radio operation.

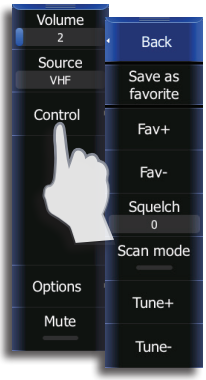
FUSION-Link also supports VHF radio and DVD playback.

VHF setup

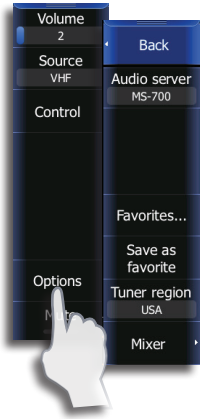
1. Select **VHF** as the Source
2. Tap **Options** on the audio menu
3. Tap **Tuner region**
4. Select your region



VHF operation



VHF control	
Save as favorite	Adds current channel to favorite's list
Fav +/Fav -	Toggles through favorite's list
Squelch	Controls squelch level
Scan mode	Scans preset VHF channels for transmissions
Tune +/Tune -	Toggles through available channels



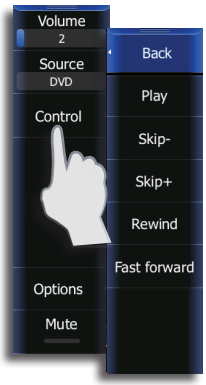
VHF options	
Audio server	Selects audio server
Favorites	Displays list of favorite channels
Save as favorite	Adds current channel to favorites list
Tuner region	Selects region where VHF radio is located
Mixer	Controls settings for audio zones

DVD operation

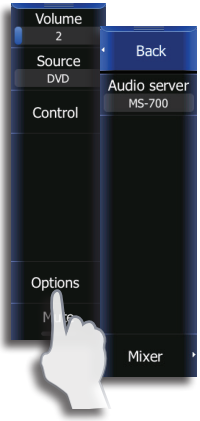
You can view DVD video on HDS Gen2 Touch 9" and 12" units with a HDS Gen2 Video Adapter cable (000-11010-001), sold separately. You cannot view DVD video on HDS Gen2 Touch 7" units.

Viewing DVD video

1. Insert a DVD into the FUSION-Link device
2. Select **DVD** as the source on the HDS audio menu
3. Display the Video page
4. Press **Play** on the HDS DVD control menu



DVD control	
Play	Plays the DVD
Skip -/Skip +	Skips to previous/next scene
Rewind	Rewinds the DVD
Fast forward	Fast forwards the DVD

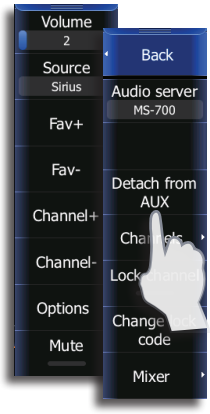


DVD options	
Audio server	Selects audio server
Mixer	Controls settings for audio zones (4)

Sirius

If SiriusXM radio is connected to your FUSION radio, the AUX source on the HDS unit automatically will be attached to the Sirius feed. It will appear as "Sirius" in the Source list.

➔ ***Note:*** SiriusXM will also be shown in the Source list, but can only be used with an optional SiriusXM tuner connected to your FUSION radio.



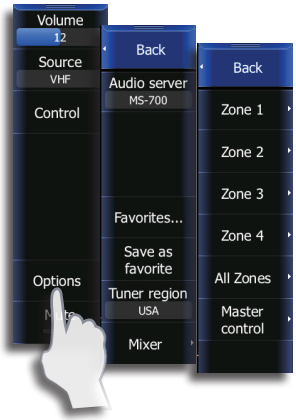
To use the auxiliary source on your FUSION radio for a different device, detach Sirius from the AUX source on the HDS unit.

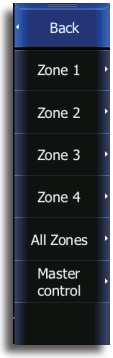
1. Connect the desired device to the auxiliary input on the FUSION radio
2. Tap **Options** on HDS audio menu
3. Tap **Detach from AUX**

Repeat Steps 2-3 to Attach Sirius.

Mixer

Your unit supports FUSION-Link devices with up to four audio zones that can be controlled independently.





Mixer	
Zone 1, 2, 3, 4	Controls volume, volume limit, balance and sub levels of each zone
All Zones	Controls low pass filter, bass, middle (mid-range) and treble for all zones
Master control	Turns on/off zones individually

HDS Gen2 Touch RTM 3 software update

The HDS RTM 3 software update enables support for the Navionics Autorouting, Jeppesen Easy Routing and Jeppesen dynamic tides and currents.

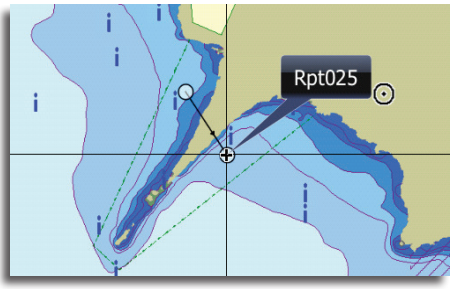
➔ ***NOTE:*** HDS units designed for sale in the Americas region will not have Autorouting or Easy Routing capabilities. Autorouting and Easy Routing features are disabled on all non-Americas units when used in US territorial waters.

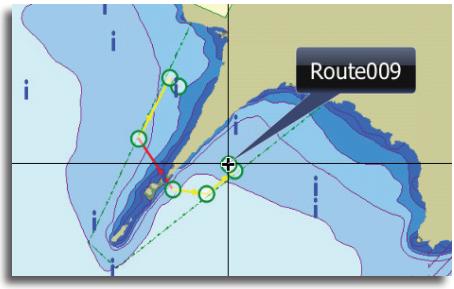
Autorouting and Easy Routing

Navionics Autorouting and Jeppesen Easy Routing features make creating a route faster and easier. Both routing features can automatically create routes using user-selected routepoints.

Routes can be created in Entire Route mode or Selection mode. Entire Route mode creates a completely new route. Selection mode creates a new route from two or more routepoints of an existing route.

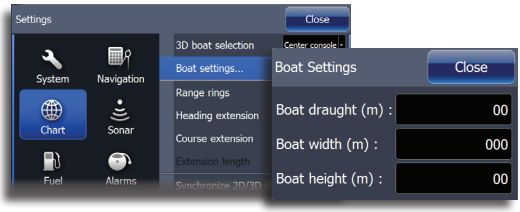
➔ ***Note:*** Compatible cartography includes Jeppesen CMAP MAX-N+, Naviconics+, Navionics Updates and Navionics Platinum.





Boat setup

The boat draught, beam (width) and height must be input to use Autorouting/Easy Routing features. Access the Boat settings dialog from the Chart settings menu to complete Boat Setup.

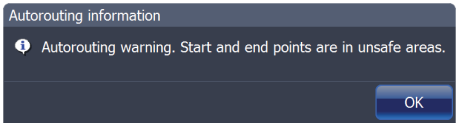


Creating Autoroutes/Easy Routes — Entire route mode

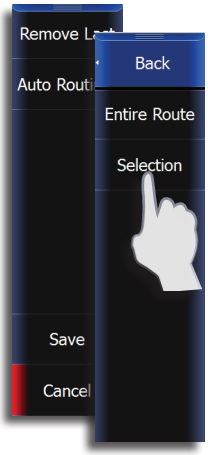
1. Activate the cursor and select **New** on the Chart menu
2. Select **New route**
3. Tap the screen to place routepoints
4. Tap **Autorouting (Navionics)** or **Easy Routing (Jeppesen)**
5. Tap **Entire Route**
   - The route will appear in preview mode, allowing you to move any desired routepoints

➔ ***Note:*** In preview mode, Autoroutes and Easy Routes use colors to highlight safe and unsafe areas in a route. Autoroutes use red (unsafe) and green (safe). Easyroutes use red (unsafe), yellow (dangerous) and green (safe).

➔ ***Note:*** A warning dialog will appear if any user-entered routepoints are in unsafe areas. To relocate an unsafe routepoint, move the point and repeat Steps 3 and 4 from Autoroute/Easy Route setup.



6. Tap **Keep**
7. Tap **Save**
8. Input the route name in the Edit route dialog



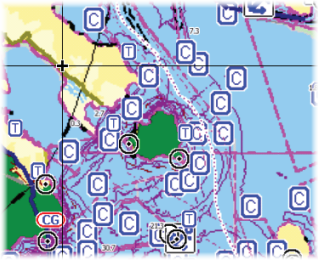
Creating Autoroutes/Easy Routes — Selection mode

1. Select an existing route from the screen
2. Tap **Edit**
3. Tap **Autorouting** or **Easy Routing**
4. Tap **Selection**
5. Select the desired routepoints from the existing route
   - routepoints will turn red when selected
6. Tap **Accept**
7. Tap **Keep**
8. Tap **Save**

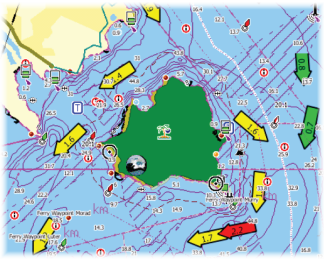
Jeppesen dynamic tides and currents

Select a Tides icon to view past and present tidal information for that location. Current data can be viewed by selecting the current icon or by zooming inside a 1-nautical mile zoom range.

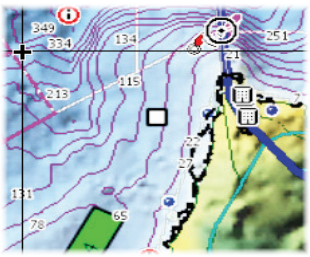
At that range, the Current icon changes to an animated, dynamic icon that shows the speed and direction of the current.



Current icons



Current dynamic icons



Zero current shown as a white, square icon.

Dynamic icons will be colored in red (high), yellow (medium) or green (low), depending on the speed of the current in that location.

For information about Tides and Currents, refer to your operation manual.

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