

# LOWRANCE®



## Elite-7 Combo

### Operation manual

**Copyright © 2012 Navico**

**All rights reserved.**

Lowrance® and Navico® are registered trademarks of Navico.

Fishing Hot Spots® is a registered trademark of Fishing Hot Spots Inc.

Navionics® is a registered trademark of Navionics, Inc.

**Navico may find it necessary to change or end our policies, regulations and special offers at any time. We reserve the right to do so without notice. All features and specifications subject to change without notice.**

## **Compliance Statements**

### ***Lowrance Elite 7***

- meets the technical standards in accordance with Part 15.103 of the FCC rules
- complies with CE under RTTE directive 1999/5/EC
- complies with the requirements of level 2 devices of the Radiocommunications (Electromagnetic Compatibility) standard 2008

For more information please refer to our website: [www.lowrance.com](http://www.lowrance.com).

## Warning

The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that of the receiver
- Consult the dealer or an experienced technician for help



**WARNING:** When a GPS unit is used in a vehicle, the vehicle operator is solely responsible for operating the vehicle in a safe manner. Vehicle operators must maintain full surveillance of all pertinent driving and boating conditions at all times. An accident or collision resulting in damage to property, personal injury or death could occur if the operator of a GPS-equipped vehicle fails to pay full attention to travel conditions and vehicle operation while the vehicle is in motion.

# Table of contents

---

<b>Introduction</b> .....	<b>3</b>	Advanced Mode .....	10
Conventional sonar and Downscan.....	4	Standby mode .....	10
<b>Basic Operation</b> .....	<b>5</b>	Restore defaults .....	10
Setup wizard.....	5	<b>Pages</b> .....	<b>11</b>
Pages .....	5	Steer Page.....	11
Selecting Pages.....	5	Sonar Page.....	11
Page menus .....	5	Downscan page .....	12
Working with menus .....	7	Chart Page .....	12
Dialogs.....	7	Combo pages .....	13
Entering text .....	8	Overlay Data.....	14
Fishing Modes .....	8	<b>Sonar Operation</b> .....	<b>16</b>
Cursor.....	9	Trackback .....	16
Goto cursor.....	9	Sonar Menu .....	16

Sensitivity .....	18	<b>Chart Operation .....</b>	<b>30</b>
Colorline .....	18	Chart Menu.....	30
Range .....	18	Waypoints, Routes, Trails .....	31
Frequency .....	19	Routes Screen.....	32
Ping Speed .....	19	Trails Screen .....	36
Fish ID .....	21	Orientation .....	38
Downscan options .....	21	Chart Settings.....	39
Sonar Settings .....	22	Navigation Settings .....	40
Installation .....	24	<b>Settings .....</b>	<b>42</b>
<b>DSI Operation.....</b>	<b>25</b>	Settings menu.....	42
Trackback .....	25	System.....	42
DSI menu.....	25	Alarms .....	44
Ping Speed .....	27	Saving Screenshots.....	44
Downscan options .....	27	<b>Specifications .....</b>	<b>47</b>
		<b>Index .....</b>	<b>48</b>

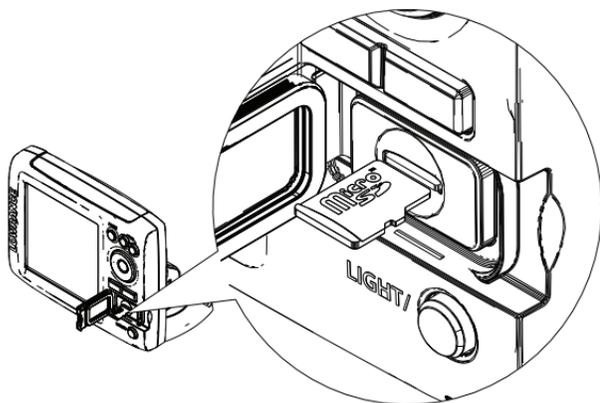
Unit Controls	
	<b>LIGHT/POWER:</b> controls backlight level and turns unit on/off
	<b>KEYPAD:</b> controls cursor & selects items on menus
	<b>PAGES:</b> allows you to select a page to view
	<b>MENU:</b> opens settings, context and page menus
	<b>ENTER:</b> finalizes menu selections; save waypoint at cursor position
	<b>MOB:</b> press and hold both Zoom keys to create a Man Overboard waypoint
	<b>ZOOM Keys:</b> used to zoom in/zoom out
<b>microSD slot:</b> insert a blank microSD card to save screen captures; or insert a microSD mapping card to use mapping data (See illustration on page 2)	

Getting Started	
<b>Turn unit on/off</b>	To turn on/off the unit, press and hold the <b>LIGHT/POWER</b> key for three seconds.
<b>Man Overboard waypoint</b>	Press the <b>ZOOM IN</b> and <b>ZOOM OUT</b> keys at the same time to set a Man Overboard waypoint. Your system will automatically create an active route back to the MOB waypoint. You must cancel navigation to terminate the function.
<b>Adjusting the backlight</b>	This unit has 10 backlight levels. Press the <b>LIGHT/POWER</b> key to switch backlight levels.
<b>Muting Audio</b>	Select <b>Mute Audio</b> from the System menu and press <b>ENTER</b> .
<b>Selecting a GPS Source</b>	Select <b>GPS</b> from the System settings menu. Highlight <b>GPS source</b> and press <b>ENTER</b> . Select the desired source.

## Inserting microSD cards

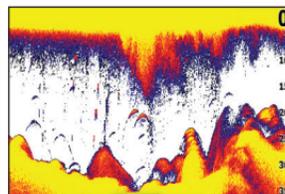
Carefully slide the microSD card into the slot until it clicks into place.

To remove, carefully push in the card until it clicks out of place.

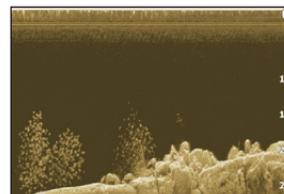


## Conventional sonar and Downscan

This unit supports two types of sonar: Conventional and Downscan.



*Conventional*



*Downscan*

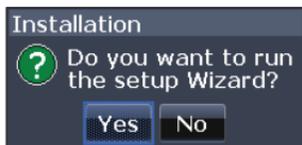
Refer to the Sonar Operation section for information about conventional sonar features and settings.

Downscan features and settings are covered in the Downscan Operation section.

# Basic Operation

## Setup wizard

The Setup wizard will appear when the unit is turned on for the first time. To choose your own settings, do not run the setup wizard. To restart the Setup wizard, restore defaults.



## Pages

This unit has eight pages: Steer, Downscan, Sonar, Chart, Chart/Sonar, Chart/Downscan, Sonar/Downscan and Chart/Sonar/Downscan.



*Pages dialog*



## Selecting Pages

To select a page, press the keypad in the direction of the desired page and press **ENTER**.

## Page menus

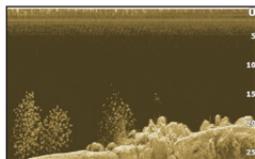
The Steer, Downscan, Sonar and Chart pages have menus that can only be accessed when those pages are displayed.



*Steer page*



*Steer menu*

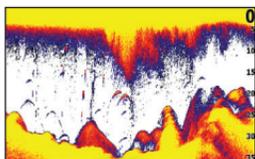


**Downscan page**

MENU



**Downscan menu**

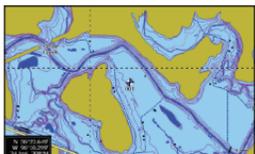


**Sonar page**

MENU



**Sonar menu**



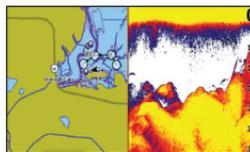
**Chart page**

MENU

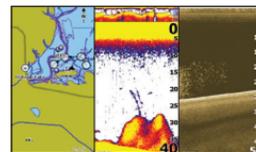


**Chart menu**

## Combo pages



**Two-panel page**



**Three-panel page**

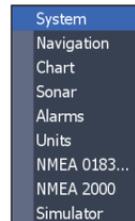
Press the **PAGES** key twice to switch active panels. The page menu for active page will be displayed when the **MENU** key is pressed.

## Accessing the Settings menu

MENU

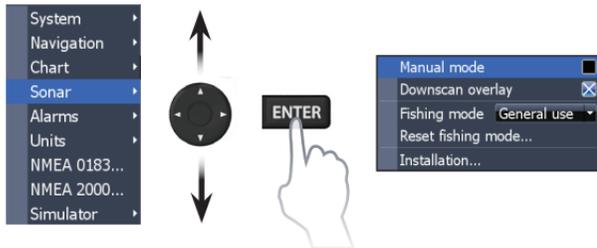


MENU



## Accessing menu items

The keypad and **ENTER** key are used to select menu items and open submenus. Use the keypad to highlight the desired item and press **ENTER**.



## Working with menus

There are several menu types used to make adjustments to options and settings, including scrollbars, on/off features and dropdown menus.

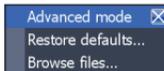
### Scrollbars

Select the scrollbar and press the keypad left (decrease) or right (increase).



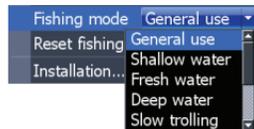
## On/Off features

Select an on/off menu item and press **ENTER** to turn it on/off.



## Dropdown menus

Access the dropdown menu and press the keypad up/down to select the desired item and press **ENTER**.



**NOTE:** Press the **MENU** key to Exit menus.

## Dialogs

Dialogs are used for user input or for presenting information to the user. Depending on the type of entry, different methods are used to confirm, cancel or close the dialog.



## Entering text

Some functions, like naming a waypoint, route or trail, will require you to input text.

### To input text:

1. Use the keypad to select the desired character and press **ENTER**.
2. Repeat Step 1 for each character.
3. When entry is completed, highlight **OK** and press **ENTER**.

Switches letters to uppercase/  
lowercase

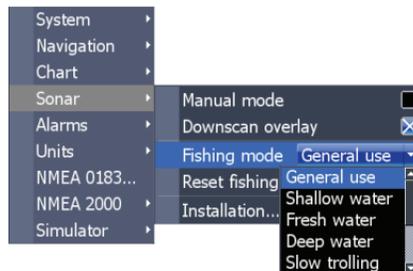
Switches keyboard between Alpha and  
QWERTY layout



## Fishing Modes

### (Conventional sonar only)

Fishing modes enhance the performance of your unit by providing preset packages of sonar settings geared to specific fishing conditions.



Fishing Mode Options		
General Use	1000ft or less	Coastal
Shallow Water	60ft or less	Shallow weedy bottoms
Fresh Water	400ft or less	Inland/Near coastal
Deep Water	1000ft or more	Offshore
Slow Trolling	400ft or less	Inland/Coastal
Fast Trolling	400ft or less	Inland/Coastal
Clear Water	400ft or less	Inland/Coastal
Brackish Water	400ft or less	Fresh-Saltwater mix
Ice	400ft or less	Ice fishing



**NOTE:** Use Fresh Water mode when fishing in less than 100 feet of water; otherwise your unit may not track bottom properly.

## Cursor

The keypad moves the cursor around the display, allowing you to scroll the map, select map items and review sonar history.

Press **MENU** and select *Return to vessel* or *Exit cursor mode* to clear the cursor.

## Goto cursor

Used to navigate to the cursor.

1. Move the cursor to a desired location and press **MENU**.
2. Select *Goto cursor* and press **ENTER**.

## Advanced Mode

Enables advanced features and settings.

The following features are enabled when Advanced mode is turned on:

- Navigation (Enables arrival radius, off-course distance and Bearings setting)
- Alarms (Enables arrival, off course and anchor alarm options)
- NMEA 0183 Output
- Units (Enables distance, speed, depth, temperature, and bearings options)

## Standby mode

Lowers power consumption by turning off sonar and the display.



Press the **PWR/LIGHT** key to access the Backlight dialog.

Select **Standby** and press **ENTER**.

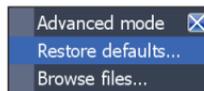
Press any key to resume normal operation.



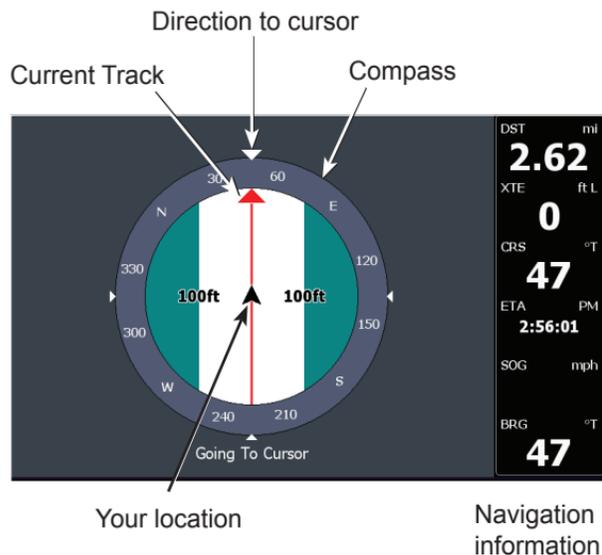
**NOTE:** *Leaving your unit in Standby mode when your boat is not in use will run down your battery.*

## Restore defaults

Resets unit options and settings to defaults.

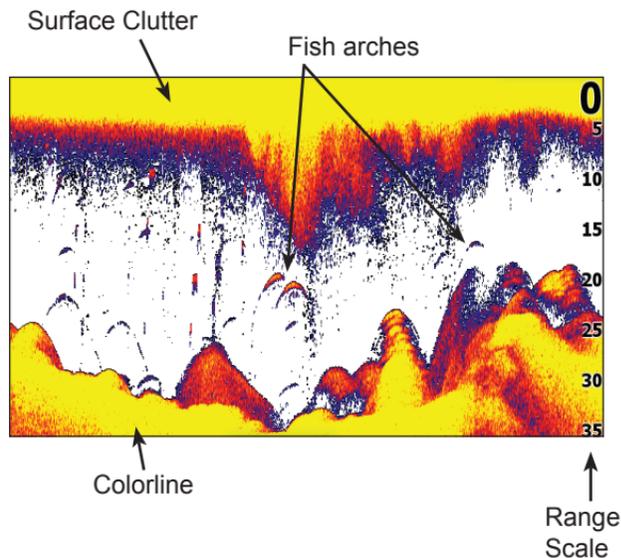


# Pages



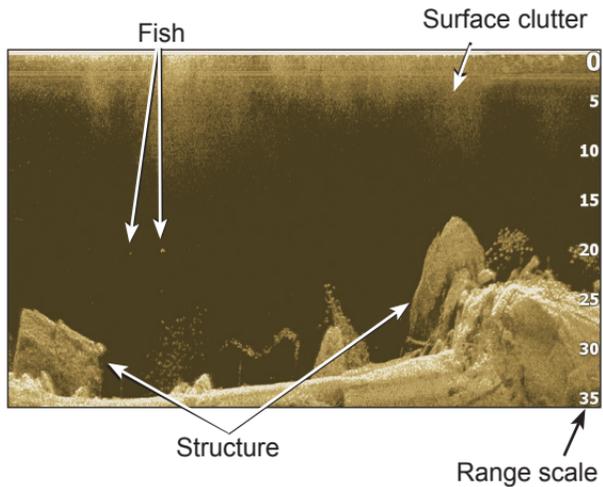
## Steer Page

The Steer page has a compass that shows your current track, the direction to your destination, and a digital data navigation panel.



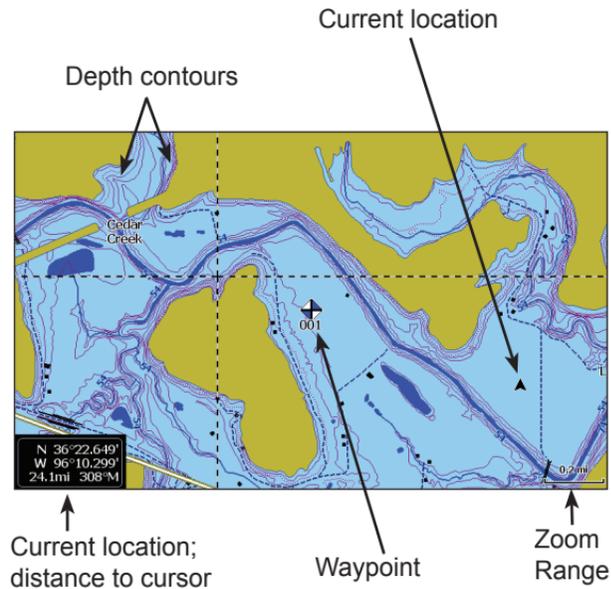
## Sonar Page

Displays the water column moving from right to left on your unit's screen.



## Downscan page

The Downscan page shows the water column moving from right to left. You can overlay downscan sonar on the conventional sonar page by selecting **Downscan Overlay** on the Sonar settings menu.

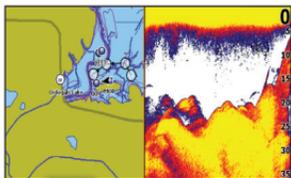


## Chart Page

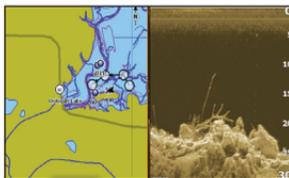
Consists of map that moves in real-time as you move. By default, the map is shown from a birds-eye view with North at the top of the screen.

## Combo pages

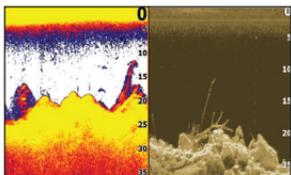
This unit has four pre-configured combo pages.



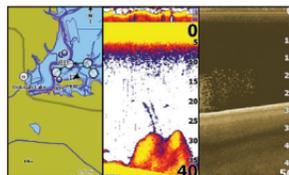
**Chart/Sonar**



**Chart/Downscan**



**Sonar/Downscan**



**Chart/Sonar/Downscan**

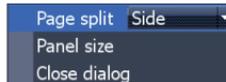


**NOTE:** Press the **PAGES** key twice to switch active panels.



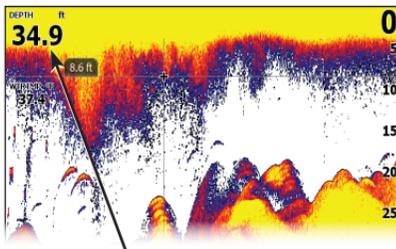
### Customizing combo pages

You can adjust the panel size of combo pages and control how the pages will be arranged on the screen: vertically (side) or horizontally (over).



## Overlay Data

Used to select data shown on the Sonar, Structure and Chart pages.



Overlay data

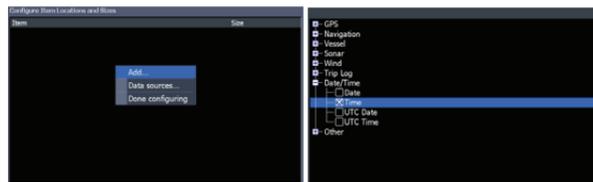
### Show

Enables/disables the display of overlay data, allowing you to remove overlay data from the screen without deleting the current overlay data configuration.



### Configure

Allows you to select/customize overlay data.



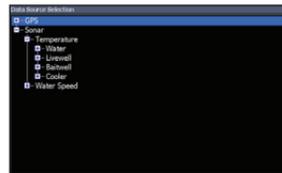
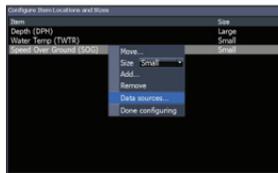
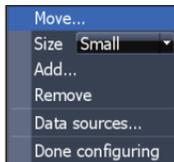
### To add overlay data:

1. From the Sonar, Chart or Dowscan page, press **MENU**.
2. Select *Overlay data* and press **ENTER**.
3. Select *Configure* and press **ENTER**.
4. Press *Menu* and select *Add*. Press **ENTER**.
5. Select a data category and press **ENTER**.
6. Select the desired data and press **ENTER**.
7. Press **MENU** and select *Return to Overlays*. Press **ENTER**.
8. Press **MENU**, select *Done Configuring* and press **ENTER**.

## Customizing Overlay Data

You can select a data source, add/remove data and adjust the size and position of overlay data on the screen.

Select the desired overlay data from the Configure Item Locations and Sizes dialog and press **MENU**. The configuration menu will appear.



### To select a data source:

1. Select *Data sources* and press **ENTER**.
2. Select the data type and press the keypad to the right.
3. Highlight the desired data source and press **ENTER**.

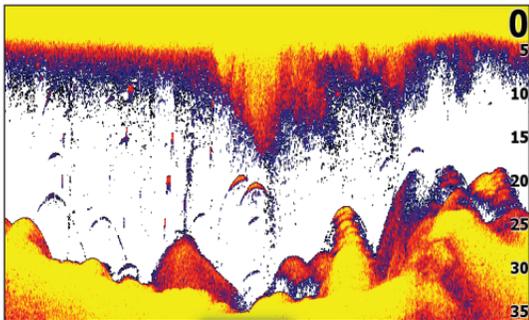
## Data sources

Used to select the network device that will supply source data for a selected data type.

# Sonar Operation

---

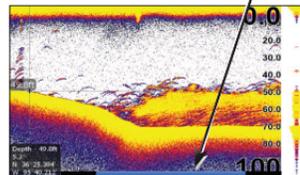
This unit supports two types of sonar: Conventional and Downscan.



The features described in this section are for conventional sonar.

Refer to the Downscan operation section for information on Downscan features.

Blue sonar history bar



## Trackback

You can review your recent sonar history by moving the cursor to the left until the screen starts to move in reverse.

Move the sonar history bar all the way to the right to resume normal sonar scrolling, or press **MENU** and select *Exit cursor mode*.

## Sonar Menu

Press **MENU** from any sonar page to access the Sonar menu.



## New Waypoint

Places a waypoint at your current position or at the cursor position. From the new waypoint menu, you can input a waypoint name, select an icon and input a desired latitude/longitude.

The diagram illustrates the **Sonar Menu (Advanced Mode)** and its various options. The main menu includes:

- Adjust Sonar
- Auto sensitivity 0%
- Colorline 48%
- Downscan 48%
- Contrast 48%
- Overlay 0%

The **New waypoint...** menu is expanded, showing options for:

- Adjust...
- Auto sensitivity (Auto)
- Range
- Frequency (200 kHz)
- Ping speed (Fastest)
- Sonar options
- Downscan options
- Stop sonar
- Log sonar...
- Overlay data
- Settings...

Sub-menus for **New Waypoint at Vessel** and **Adjust** are also shown:

- New Waypoint at Vessel:** Name (001), N 36°08.971', W 095°50.579', Save, Cancel.
- Adjust:** Noise rejection (Low), Surface clarity (Off), Split zoom, Split flasher, Color (White w/ bottom track), Amplitude scope, Fish ID.
- Frequency:** 455 kHz, Noise rejection (On), Surface clarity (Off), Color (Purple).

Other options include a list of frequencies (200 kHz, 50 kHz, 83 kHz, 83/200kHz, 50/200kHz), ping speeds (Fastest, Slowest, Slow, Normal, Fast), and a system menu (System, Navigation, Chart, Sonar, Alarms, Units, NMEA 0183..., NMEA 2000, Simulator).

Labels: "Used to record sonar logs" points to the ping speed options. "(Options active with Downscan overlay turned on)" points to the Adjust and Frequency sub-menus.

The diagram illustrates the **New Waypoint menu** and the **Adjust** menu. The **New Waypoint menu** includes:

- Enter Latitude/longitude
- Name (001)
- N 36°08.971' W 095°50.579'
- Save, Cancel

The **Adjust** menu includes:

- Adjust Sonar
- Auto sensitivity 0%
- Colorline 48%
- Downscan 48%
- Contrast 48%
- Overlay 0%

Other elements shown include a keypad for entering coordinates and a toolbar with various icons.

## Adjust

Used to make adjustments to Sensitivity and Colorline.

## Sensitivity

Controls the level of detail shown on the display. Too much detail will clutter the screen. If Sensitivity is set too low, desired echoes may not be displayed.



**NOTE:** You can make minor (+/-4%) changes to sensitivity with Auto Sensitivity turned on. You will have to turn it off to make significant adjustments.

## Colorline

Separates strong sonar echoes from weak sonar echoes. That makes it easier for you to distinguish fish or structure from the bottom. A hard return will be shown as a wide, bright yellow area, whereas a soft return will be a narrow reddish-blue area.

## Auto Sensitivity

Keeps sensitivity at a level that works well under most conditions, reducing the needs for adjustments. Auto Sensitivity is turned on by default.

## Range

Selects the deepest range shown on the display. Range settings display the section of the water column from the water surface to the selected depth range.



If you select too shallow a depth range, the unit will not be able to lock onto the bottom.

## Custom Range — Upper and Lower Limits

Used to select the upper limit and lower limit of a section of the water column. That allows you to view a section of the water column that does not include the water surface. Upper and lower limits must be at least 6.5 ft (2m) apart.



### **Custom range menu**



**NOTE:** *When using a custom range, you may not receive any digital depth readings, or you may receive incorrect depth information.*

## **Frequency**

Controls the transducer frequency used by the unit. This unit supports three conventional sonar frequencies: 50kHz, 83kHz and 200kHz.

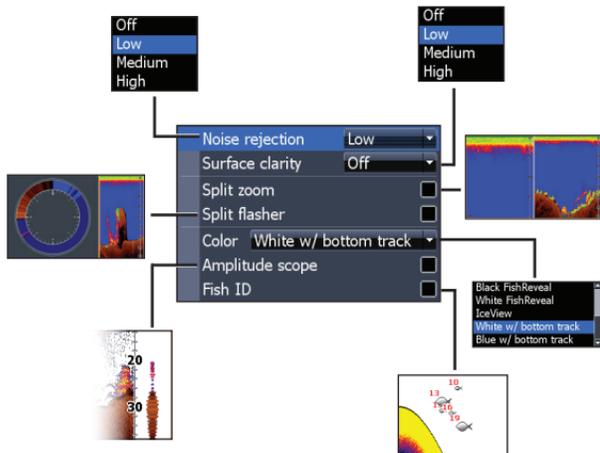


200 kHz has the highest sensitivity and best target discrimination in shallow water. 83 kHz offers a wider cone angle for more water coverage.

## **Ping Speed**

Controls the rate the transducer uses to send sonar waves into the water. Ping speed adjustments can help reduce interference from other transducers. When using fishing modes, ping speed settings are optimized for the selected fishing conditions, so in most cases, adjustments are not necessary.

## Sonar Options

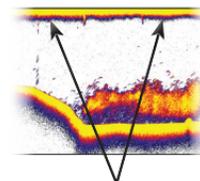


### Noise Rejection

Uses advanced signal processing to monitor the effects noise (boat pumps, water conditions, engine ignition systems, etc.) has on your display, and then filters out undesired signals.

### Surface Clarity

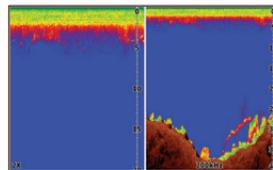
Surface Clarity reduces surface clutter by decreasing the sensitivity of the receiver near the surface.



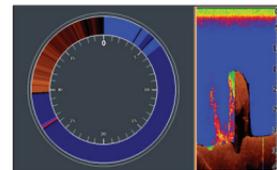
**Surface Clutter**

### Split Zoom and Split Flasher

Switches the sonar display from full screen sonar to a split screen view.



**Split Zoom**



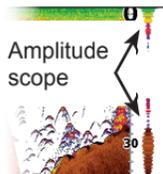
**Split Flasher**

### Color

Allows you to change the look of the display using palettes with varying degrees of color/brightness.

## Amplitude Scope

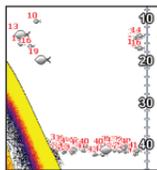
Displays the amplitude of the most recent echo.



## Fish ID

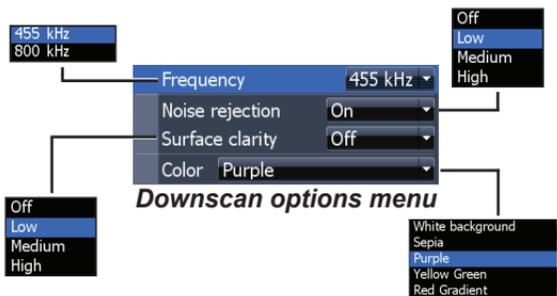
Displays fish echoes as fish symbols instead of fish arches.

Fish ID is not the most accurate method of fish detection since structure and suspended debris may be shown as a fish symbol on the display.



## Downscan options

You can make adjustments to Downscan overlay settings from the sonar page. Downscan options are covered in more detail in the DSI section.



**NOTE:** *The Downscan options menu will only be available when Downscan overlay is enabled.*

## Stop Sonar

Pauses the unit's sonar, allowing you to get a closer look at suspended targets. Stop Sonar also can be used to prevent/stop interference between two sonar units running on the boat at the same time.

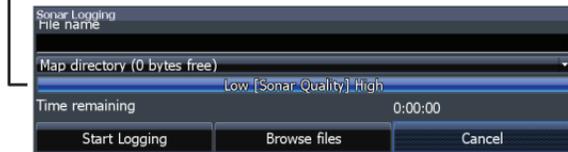


**NOTE:** *Sonar history will not be recorded when sonar is stopped.*

## Logging Sonar

You can record sonar data and save the file on a microSD card inserted into the unit's card reader.

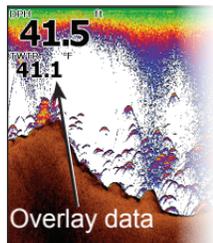
Controls the quality of sonar logs. Higher quality logs will use more memory.



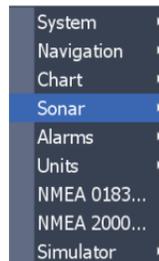
View previously saved sonar logs

## Overlay Data

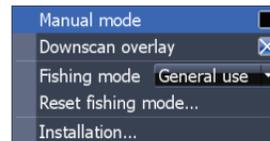
Allows you to select data to be displayed on top of the Sonar page. Overlay data setup is covered in the Pages section.



## Sonar Settings



ENTER

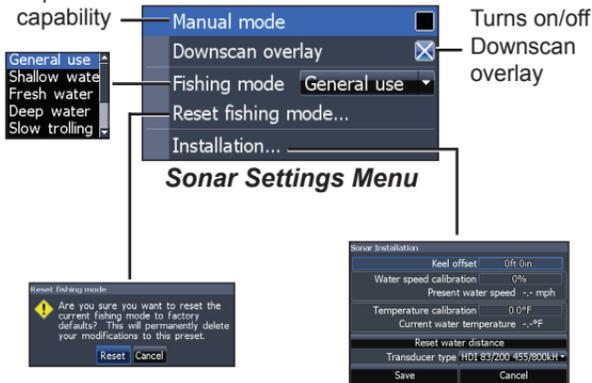


## Conventional settings/Downscan Settings

You can adjust settings for both Conventional sonar and Downscan sonar modes from the Sonar Settings menu.

Only adjustments made to conventional sonar settings will be visible on the sonar page.

Restricts unit's digital depth search capability



## Manual Mode

Restricts digital depth capability, so the unit will only send sonar signals to the selected depth range. That allows the display to continue smooth scrolling if the bottom depth is out of transducer range.

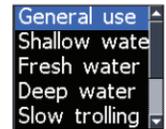


**WARNING:** Manual mode should only be used by advanced sonar users.

When the unit is in manual mode, you may not receive any depth readings, or you may receive incorrect depth information.

## Fishing Mode

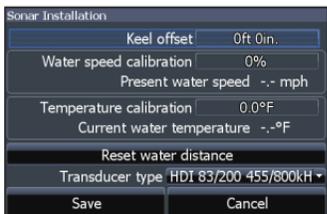
Enhances the performance of your unit by providing preset packages of sonar settings geared to specific fishing conditions. For more information about fishing modes, refer to the Basic Operation section.



## Reset Fishing Mode

Resets selected fishing mode to default settings. That is useful when you want to clear settings adjustments made while using a fishing mode.

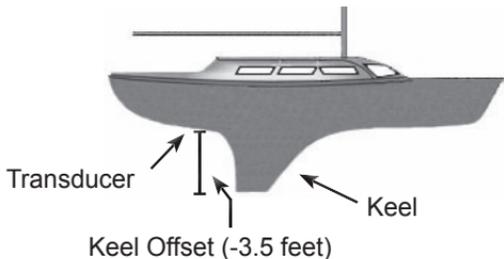
## Installation



### *Installation menu*

### *Keel Offset*

All transducers measure water depth from the transducer to the bottom. As a result, water depth readings do not account for the distance from the transducer to the keel or from the transducer to the water surface. Before setting keel offset, measure



the distance from the transducer to the lowest part of the keel. If, for example, the keel is 3.5 feet below the transducer, it will be input as  $-3.5$  feet.

### *Water speed calibration*

Calibrates a paddlewheel speed sensor with speed data from a GPS source.

### *Temperature calibration*

Calibrates data from the transducer temperature sensor with data from a known temperature source to ensure the accuracy of temperature information.

### *Reset water distance*

Reset Water Distance to zero.

### *Transducer Type*

Selects the type of transducer model attached to your unit.

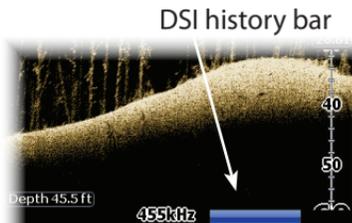
# DSI Operation

This unit supports two types of sonar: Conventional and Downscan.

The features described in this section are for Downscan sonar. Refer to the Sonar operation section for information on conventional sonar features.

## Trackback

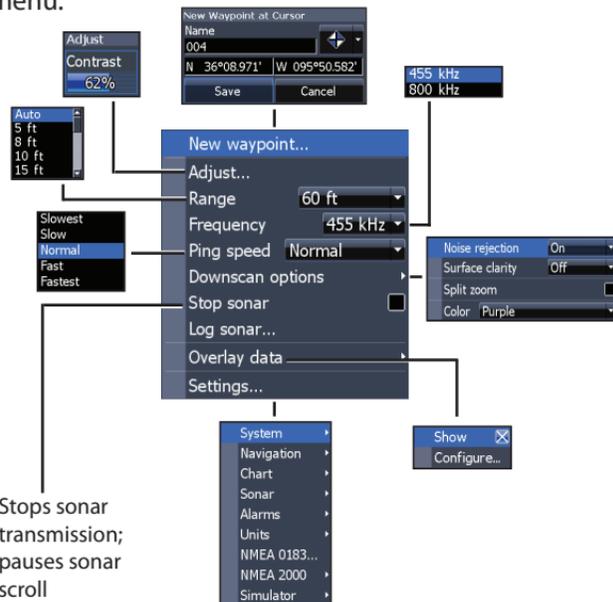
You can review your sonar history by pressing the keypad to the left until the screen starts to move in reverse and the sonar history bar appears at the bottom of the screen.



Move the sonar history bar all the way to the right to resume normal sonar scrolling, or press **MENU** and select *Exit cursor mode*.

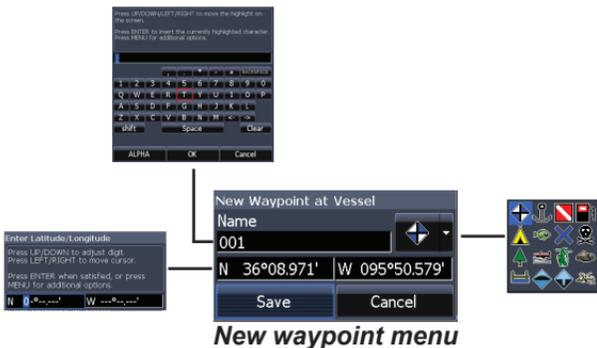
## DSI menu

Press **MENU** from the DSI page to view the DSI menu.



## New Waypoint

Places a waypoint at your current position or at the cursor position. From the new waypoint menu, you can input a waypoint name, select an icon and input a desired latitude/longitude.



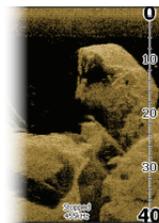
## Adjust

Accesses the Contrast adjustment scrollbar, allowing you to adjust contrast settings.

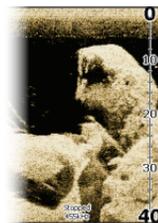


## Contrast

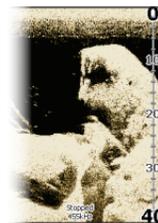
Adjusts the brightness ratio between light and dark areas on the screen, making it easier to distinguish suspended objects from the background.



Contrast set to 40



Contrast set to 60



Contrast set to 80

DSI units do not have a Sensitivity setting like traditional sonar units. Contrast functions as the sensitivity setting for DSI units.

## Range

Range settings display the section of the water column from the water surface to the selected depth range.



## Custom Range — Upper and Lower Limits

Used to select the upper limit and lower limit of a section of the water column. That allows you to view a section of the water column that does not include the water surface.



Upper and lower limits must be at least 6.5 ft (2m) apart.



**NOTE:** When using a custom range, you may not receive any digital depth readings, or you may receive incorrect depth information.

## Frequency

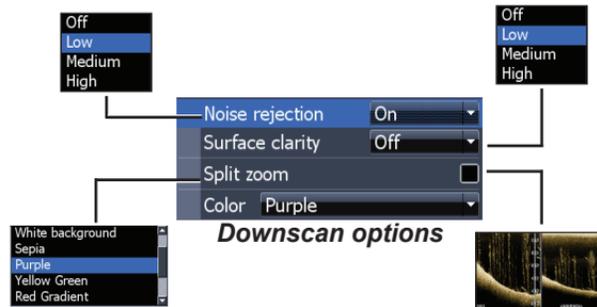
Controls the transducer frequency used by the unit. 800 kHz offers the best resolution, while 455 kHz has greater depth coverage.



## Ping Speed

Controls the rate the transducer uses to send sonar waves into the water. Ping speed adjustments can help reduce interference from other transducers.

## Downscan options

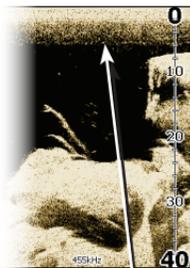


## Noise Rejection

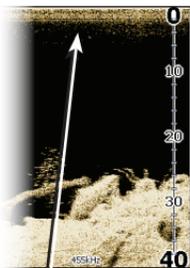
Uses advanced signal processing to monitor the effects noise (boat pumps, water conditions, engine ignition systems, etc.) has on your display, and then filters out undesired signals.

## Surface Clarity

Surface Clarity reduces surface clutter by decreasing the sensitivity of the receiver near the surface.



**Surface Clarity  
set to Low.**



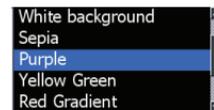
**Surface Clarity  
set to High.**

## Split Zoom

Changes the display to a split zoom view.

## Color

Allows you to select a color palette best suited to your fishing conditions.



The white background palette works well for suspended targets. Purple is useful for viewing structure detail and determining bottom hardness. Sepia is best for looking at bottom detail.

## Stop Sonar

Stops sonar transmission and pauses the sonar chart, allowing you to get a better look at suspended targets and structure.

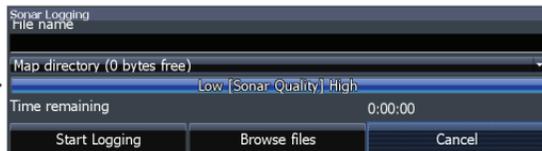


**NOTE:** *Sonar history (Trackback) will not be recorded when sonar is stopped.*

## Logging Sonar

You can record sonar data and save the file on a microSD card inserted into the unit's card reader.

Controls the quality of sonar logs. Higher quality logs will use more memory.

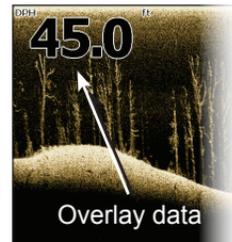


View previously saved sonar logs

## Overlay Data

Allows you to select data to be displayed on top of the DSI page.

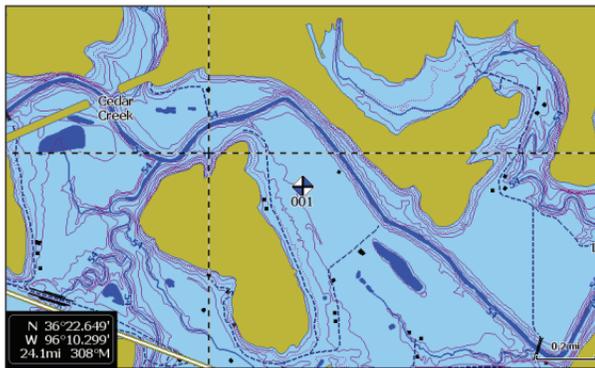
Overlay data setup is covered in the Pages section.



## Settings

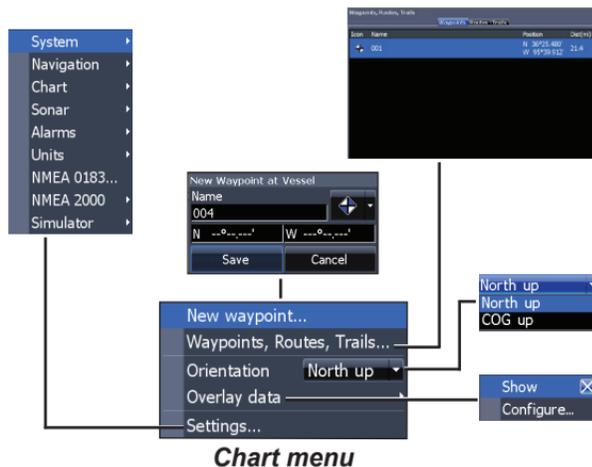
Accesses the Settings menu. Refer to "Sonar Settings" on page 22.

# Chart Operation



## Chart Menu

Press **MENU** from any Chart pages to open the Chart menu.



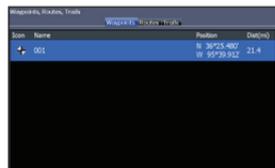
## *New Waypoint*

Creates a waypoint at your current location or at the cursor position. When the cursor is on the screen, waypoints will be saved at the cursor position; conversely, if the cursor is not displayed onscreen, waypoints will be saved at your current position.

## Waypoints, Routes, Trails

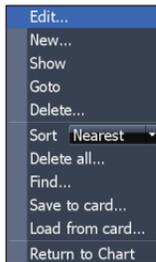
Used to create, edit, navigate and delete waypoints, routes and trails.

Press the keypad left/right to toggle between waypoint, routes and trails tabs.

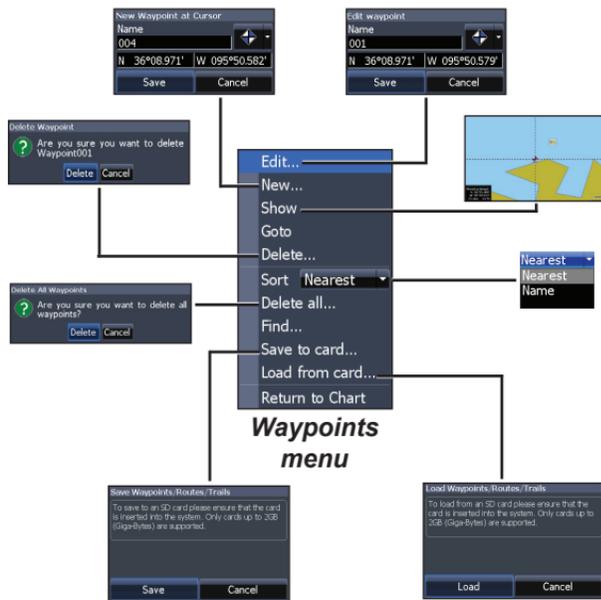


Waypoints Screen

MENU



Waypoints menu



### Edit

Allows you to edit the name, icon and latitude/longitude of a selected waypoint.



## New

Creates a new waypoint at the cursor or vessel position. You can also select waypoint name, icon and latitude/longitude from the new waypoint menu.



## Show

Displays the selected waypoint on the map.



## Goto

Allows you to navigate to a waypoint.

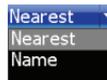
## Delete and Delete All

Delete is used to delete a selected waypoint. Delete All deletes all waypoints.



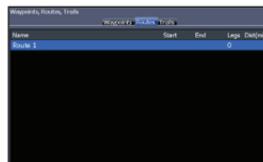
## Sort

Controls how the waypoints list will be sorted — by name or by nearest.

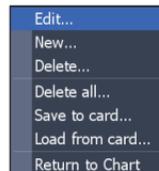


## Routes Screen

Used to create, edit, navigate and delete routes. Use the keypad to highlight the Routes tab to access the Routes screen.



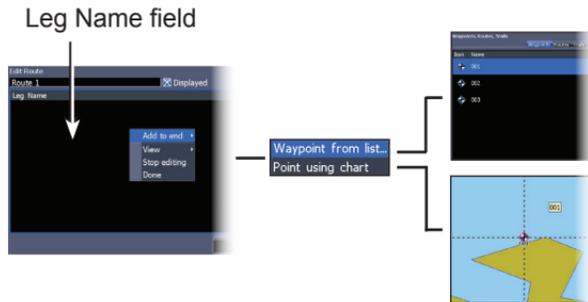
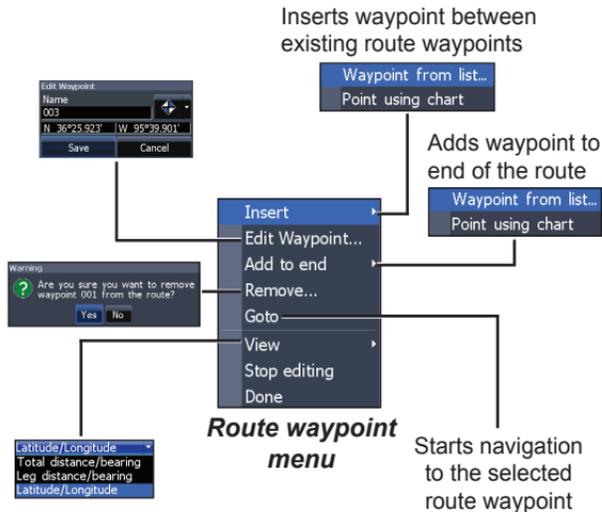
*Routes screen*



*Routes menu*

## Creating a route

Routes can be created by inserting waypoints from the waypoints list or by using the cursor to position new points on the chart. You also can add waypoints to a route by selecting them from the chart screen.



### To create a route from waypoint list:

1. Press **MENU** from the Routes screen.
2. Select *New...* and press **ENTER**.
3. Press the keypad down to select the Leg Name field and press **ENTER**.
4. Press **MENU**, select *Add to End* and press **ENTER**.

5. Highlight *Waypoint* from list and press **ENTER**.
6. Select the desired waypoint and press **ENTER**.
7. Press **MENU** and select *Add to end* to add another waypoint to the route.
8. When the route is complete, press **MENU**, select *Stop Editing* and press **ENTER**.
9. Select *Save* and press **ENTER**.

## Creating a route using points from chart:

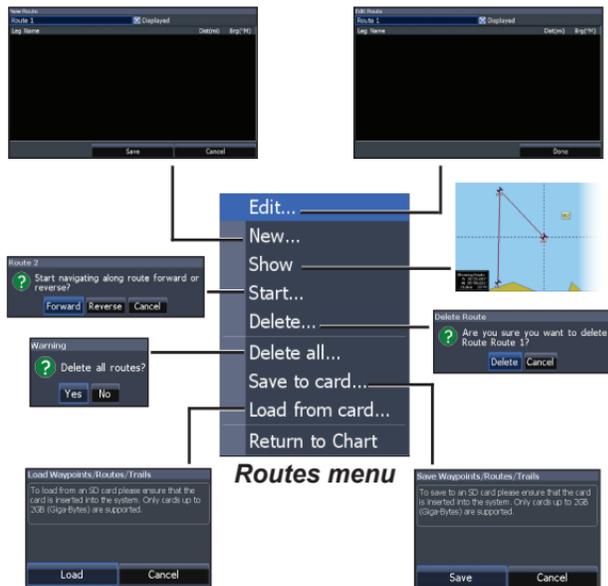
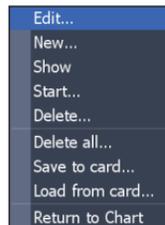
1. Repeat Steps 1-4 from the instructions for Creating a route from waypoint list.
2. Select *Points from chart* and press **ENTER**. The chart page will appear.
3. Move the cursor to the desired location. Press **ENTER** to set a waypoint.
4. Repeat Step 3 to add more route waypoints.
5. Press **MENU** and select *Stop adding*. Press **ENTER**.
6. Highlight the *Save* button and press **ENTER**.

## Navigating a route

Routes can be navigated in forward or reverse.

1. Select the desired route on the Route screen and press **MENU**.

2. Select *Start* and press **ENTER**.
3. Select *Forward* or *Reverse* and press **ENTER**.
4. Press **MENU** and select *Return to Chart*. Press **ENTER**.

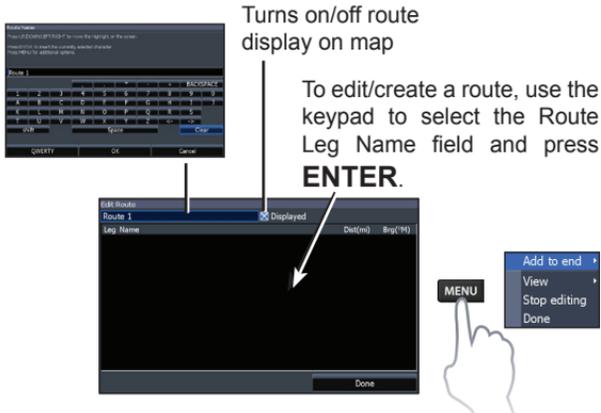


### To cancel navigation:

1. Press **Menu** from the chart screen.
2. Select **Navigation** and press **ENTER**.
3. Highlight **Cancel** and press **ENTER**.
4. Select **Yes** and press **ENTER**.

### Edit and New Route menus

Used to edit/create routes, route names and to turn on/off the route display.



To access the Edit or New Route menu, select **Edit** or **New** on the Routes menu and press **ENTER**.

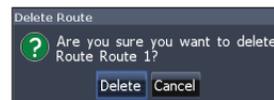
To finalize changes on the Edit or New Route menus, highlight the **Accept** button and press **ENTER**.

### Displayed

Used to show/hide a route on the display, which prevents the screen from being cluttered by too many routes

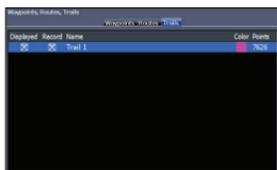
### Delete and Delete All

Delete is used to delete individual routes. Delete All, removes all routes.

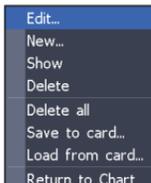


## Trails Screen

Used to create, edit, navigate and delete trails. Use the keypad to highlight the Trails tab to access the Trails screen.



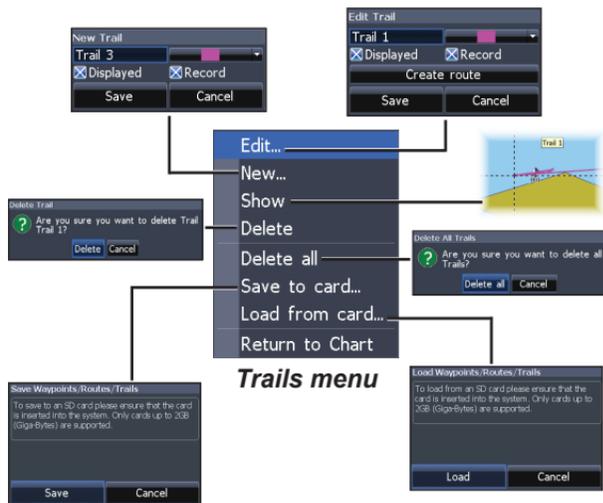
Trails screen



Trails menu

### Creating trails

When creating a trail you can customize the trail name and color from the New Trail.



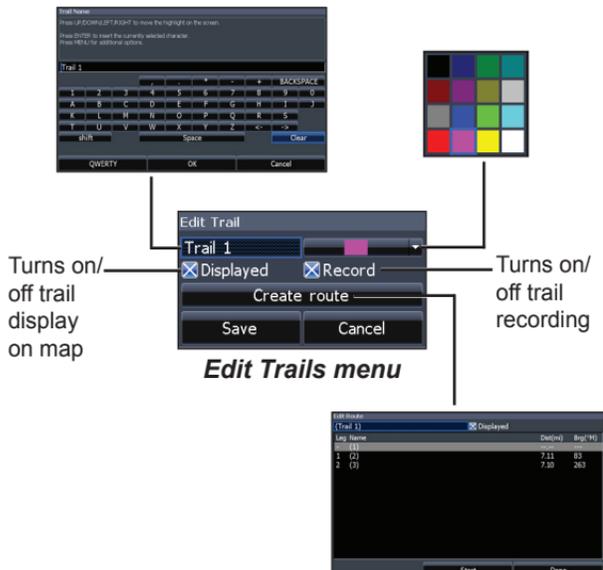
Trails menu

### To create a trail:

1. Select *New* and press **ENTER**. The New Trail dialog will appear.
2. Select *Save* and press **ENTER**.

## Edit and New Trail menus

Allows you to edit/create trails, select trails names, trail color, trail display and the trail being recorded. You can also convert a trail into a route from the Edit Trail menu.



## Navigating a trail

A trail must be saved as a route before it can be navigated.

### To save a trail as a route:

1. Highlight the desired trail on the Trails screen and press **ENTER**. The Edit Trail menu will appear.
2. Highlight *Create Route* and press **ENTER**. The Edit Route menu will appear.
3. Highlight *Done* and press **ENTER**.
4. For navigation instructions refer to the Navigating a route segment.

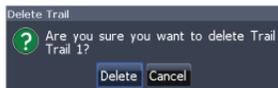
## Displayed and Record

Displayed allows you to show/hide trails on the map display, preventing the screen from being cluttered with trails.

The Record command allows you to record or resume recording a desired trail.

### **Delete and Delete All**

Delete is used to remove individual trails. Delete All removes all trails.

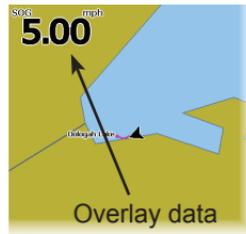


### **Orientation**

Allows you to select North Up or Course Over Ground (COG) as the map orientation.

### **Overlay Data**

Allows you to select data (course over ground, etc) to be displayed on top of the Chart page.



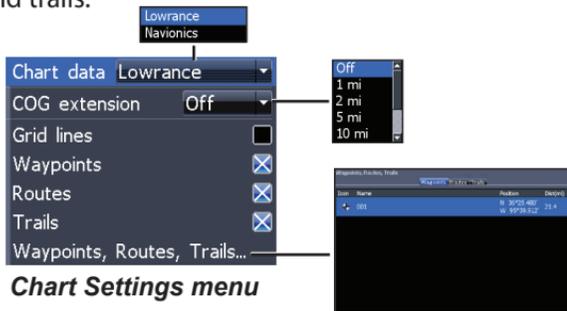
Overlay data setup is covered in the Pages section.

### **Settings**

Accesses the Chart settings menu.

## Chart Settings

Controls map data used on the chart screen as well as display settings like grid lines, waypoints, routes and trails.



### Chart Data

Selects map data that will be used on the Chart display (Lowrance or Navionics regional map). Go to [Navionics.com](http://Navionics.com) to see a full selection of available charts.

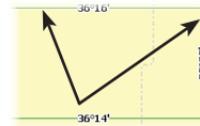
### COG Extension

A line extending from the front of the current position icon that estimates the time and distance to areas in front of you.



### Grid Lines

Displays base values for latitude and longitude, making it easier to get a general idea of your location on the latitude/longitude scale.



## Waypoints, Routes and Trail displays

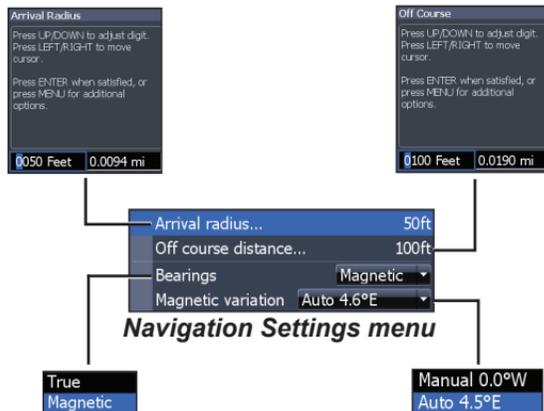
From the Chart Settings menu, you can turn on/off waypoint, route and trail display properties. Turning off display properties allows you to get a better view of the map, if the screen becomes cluttered with waypoints, routes and/or trails.

## Waypoints, Routes, Trails

Accesses the Waypoints, Routes & Trails screen. Waypoints, Routes and Trails are covered in the Chart section.

## Navigation Settings (Advanced mode only)

Controls Arrival Radius and Off Course distance settings and is used to turn on/off WAAS/MSAS/EGNOS.



### **Arrival Radius**

Sets the arrival radius threshold for the Arrival alarm. The arrival alarm will sound when your vessel comes within a selected distance (arrival radius) of the destination waypoint.

### **Off Course Distance**

Sets Off Course Distance threshold for the Off Course alarm. When the selected off course distance is exceeded, the Off Course alarm will sound when the alarm is enabled.

### **Bearings**

Controls whether bearing will be calculated using True North or Magnetic North. Magnetic North should be used when navigating with a compass course or heading; otherwise use the default setting, True North.

### **Magnetic Variation**

Controls whether magnetic variation will be calculated using Automatic or Manual settings. Magnetic variation is the angle between magnetic north and true north. The automatic setting reconciles the variation for you.

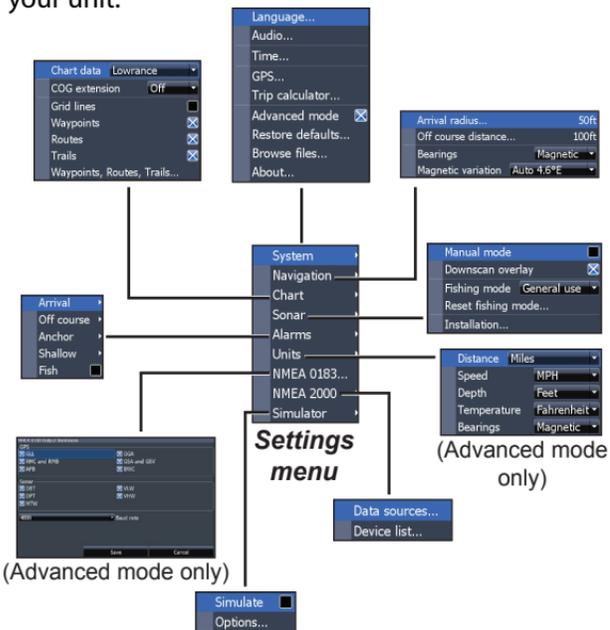


**WARNING:** *You should only use the Manual magnetic variation setting if you have variation information from a verified source.*

# Settings

## Settings menu

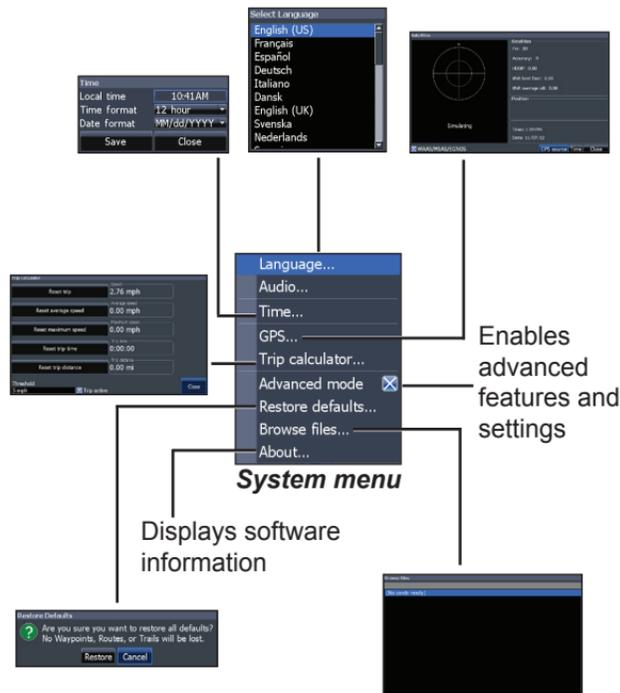
Accesses installation and configuration settings for your unit.



(Advanced mode only)

## System

Adjusts unit settings like language, mute audio and advanced mode.



Displays software information

Enables advanced features and settings

## Set Language

Selects the language used on menus and text boxes.

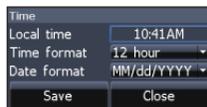


## Audio

Adjusts volume and turns on/off unit audio, like key beeps, alarm sounds, etc.

## Time

Used to set local time, and time and date formats for your unit.



## GPS

Monitors the location of satellites in view and the quality of the unit's satellite lock-on.



## Trip Calculator

Tracks trip time, speed and distance when you are moving faster than the selected threshold.



## Advanced Mode

Enables features and settings only available with unit in Advanced Mode.

## Restore Defaults

Switches the unit back to default settings.



## Browse Files

Allows you to view a list of the files saved to the microSD card.

## Saving Screenshots

You can save screenshots to a microSD card by inserting a microSD card into the card slot and pressing Power and then Zoom (+).

You must view files on a computer or other microSD compatible device.



**NOTE:** You cannot save screenshots to a Navionics card or other mapping cards.

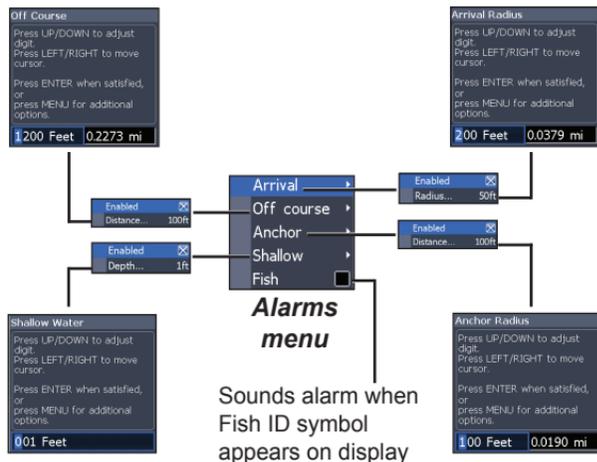
## About

Displays software information about this unit. Before attempting a software update, you can check the version of software your unit is using by accessing the About screen.

Lowrance periodically updates unit software to add features and improve functionality. To see the latest available software version go to [www.lowrance.com](http://www.lowrance.com).

## Alarms

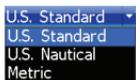
Enables alarms and selects alarm thresholds. Arrival, Off Course and Anchor alarms are only available in Advanced mode.



Alarms	
<b>Arrival</b>	sounds alarm when you are within a selected distance of your destination ( <b>Advanced Mode only</b> )
<b>Off Course</b>	sounds alarm when course exceeds a selected off-course threshold ( <b>Advanced Mode only</b> )
<b>Anchor</b>	sounds alarm when vessel moves a selected distance ( <b>Advanced Mode only</b> )
<b>Shallow</b>	sounds alarm when vessel enters water shallower than the selected shallow threshold
<b>Fish</b>	sounds alarm when a fish symbol (Fish ID) appears on the sonar screen

## Units

Allows you to select the unit of measure used by the unit. Unit options vary depending on whether the unit is in basic or advanced mode.



**Basic Mode**

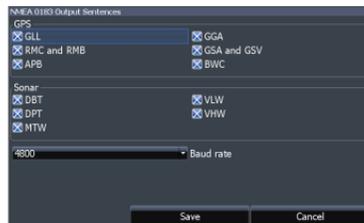


**Advanced Mode**

## NMEA 0183 Output

You can select the NMEA 0183 sentences the unit will use when connected to a VHF radio or other NMEA 0183 device.

You can also adjust the Baud rate, but the default setting works best under most conditions.



## NMEA 2000

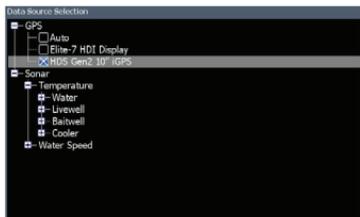
With the unit connected to a NMEA 2000 network, you can select a GPS antenna on the network as your GPS source, and share newly created waypoints with other display units on the network.

You will not be able to share existing waypoints. Only waypoints created while the unit is connect-

ed to a NMEA 2000 network can be shared, and only with units on that network.

### ***Simulator***

Simulates GPS and/or sonar activity. Simulations can be customized on the Simulator options menu.



***Selecting a GPS source***

### ***Data sources***

Allows you to select the source this unit will use for GPS data.

### ***Device list***

Used to view data for devices connected to your NMEA 2000 network.

<b>Elite 7</b>	
<b>General</b>	
<b>Case Size</b>	5.3" H (234 mm) x 9.2" W (136 mm); 5.9" H (151 mm) with bracket
<b>Display</b>	(7" diagonal) 16-bit color Full VGA Solar MAX™ 800x480 color TFT
<b>Waterproof standard</b>	IPX7
<b>Backlight</b>	LED (10 levels)
<b>Communications</b>	NMEA 2000 NMEA 0183 Output
<b>Declaration of Conformity</b>	Part 15.103 FCC rules & CE RTTE directive 1999/5/EC
<b>Power</b>	
<b>Transmit Power</b>	250W RMS
<b>Power Requirement</b>	12V
<b>Voltage Input</b>	10 to 17V
<b>Current drain</b>	Typical: 1.1A
<b>Fuse type</b>	3-amp Automotive

<b>Sonar</b>	
<b>Max depth</b>	300ft (91 m) 455/800Khz 1000ft (305 m) 83/200kHz 2500ft (762 m) 50/200kHz
<b>Transducer Frequency</b>	455/800kHz and 83/200kHz or 50/200kHz
<b>Max speed</b>	70mph
<b>Transducer</b>	HDI 50/200kHz HDI 83/200kHz 83/200kHz
<b>Transducer cable</b>	20ft (6m)
<b>GPS</b>	
<b>Mapping card slot</b>	microSD and microSDHC
<b>GPS Antenna</b>	16 parallel channel (internal); optional external GPS antenna sold separately
<b>Mapping compatibility</b>	Fishing Hot Spots & Navionics (Hotmaps, Premium and Gold)
<b>Waypoints, Routes &amp; Trails</b>	Up to 3000 waypoints, 100 routes and 100 retraceable plot trails

# Index

---

- A**
  - About 44
  - Adjust menu 17
  - Advanced Mode 10
  - Alarms 44
  - Amplitude Scope 21
  - Anchor alarm 45
  - Arrival alarm 45
  - Arrival Radius 41
  - Auto Sensitivity 18
- B**
  - Bearings 41
  - Browse Files 43
- C**
  - Cancel navigation 35
  - Chart 39
  - Chart Data 39
  - Chart menu 39
  - Chart Page 12
  - COG Extension 39
  - Color 20, 28
  - Colorline 18
  - Contrast 26
  - Creating a route 32
  - Creating trails 36
  - Cursor 9
  - Custom Range 18, 27
- D**
  - Data Port 43
  - Depth Range 26
  - Dialogs 7
  - Dropdown menus 7
  - DSI menu 25
- E**
  - Editing waypoints 31
- F**
  - Fish alarm 45
  - Fish ID 21
  - Fishing Mode 8
  - Fishing Modes
    - Reset 23
  - Frequency 19, 27
- G**
  - Goto cursor 9
  - Goto waypoint 32
  - GPS Source 43
  - GPS Status 43
  - Grid Lines 39
- I**
  - Ice Mode 21
  - Installation menu 24
- K**
  - Keel Offset 24
- L**
  - Language 43
- M**
  - Magnetic Variation 41
  - Man Overboard waypoint 3
  - Man Overboard waypoint 3
  - Manual Mode 23
  - microSD cards 4
  - Mute Audio 43
- N**
  - Navigating a route 34

- Navigating a trail 37
- Navigation 40
- Navigation menu 40
- New Waypoint 30
- NMEA 0183 45
- NMEA 2000 45
  - Data sources 46
- Noise Rejection 20, 28

## O

- Off Course alarm 45
- Off Course Distance 41
- On/Off features 7
- Orientation 38
- Overlay Data 14, 29, 38
  - Configure 14
  - Customizing 15
  - Show 14

## P

- Page menus 5
- Page selection 5

- Ping Speed 19

## R

- Range 26
- Reset Fishing Mode 23
- Reset water distance 24
- Route display 40
- Routes Screen 32

## S

- Saving Screenshots 44
- Scrollbars 7
- Sensitivity 18
- Setup wizard 5
- Shallow alarm 45
- Software Updates 44
- Sonar Installation 24
- Sonar Menu 16
- Sonar Options 20
- Sonar Page 11
- Sonar settings 22
- Sort waypoints 32

- Split Flasher 20
- Split Zoom 20
- Standby mode 10
- Steer Page 11
- Stop Sonar 21, 29
- Surface Clarity , 20
- System settings 42

## T

- Temp calibration 24
- Text entry 8
- Time 43
- Trackback 25
- Trail display 40
- Trails Screen 36
- Turn unit on/off 3

## U

- Unit Controls 3

- Units 45
- Upper and Lower Limits 18, 27

## W

- Waypoint display 40
- Waypoints, Routes, Trails 31
- Working with menus 7



## Navico Databases License Agreement

THIS IS A LEGAL AGREEMENT BETWEEN THE END-USER WHO FIRST PURCHASES THIS PRODUCT AS A CONSUMER ITEM FOR PERSONAL, FAMILY, OR HOUSEHOLD USE ("YOU") AND NAVICO, THE MANUFACTURER OF THIS PRODUCT ("WE", "OUR", OR "US").

USING THE PRODUCT ACCOMPANIED BY THIS LICENSE AGREEMENT CONSTITUTES ACCEPTANCE OF THESE TERMS AND CONDITIONS.

IF YOU DO NOT ACCEPT ALL TERMS AND CONDITIONS, PROMPTLY RETURN THE PRODUCT WITHIN 30 DAYS OF PURCHASE. PLEASE RETURN USING THE ENCLOSED UPS SHIPPING LABEL AND INCLUDE: PROOF OF PURCHASE, NAME, ADDRESS, AND PHONE NUMBER. YOUR PURCHASE PRICE AND ANY APPLICABLE TAXES WILL BE REFUNDED. PLEASE ALLOW 4-6 WEEKS TO PROCESS YOUR REFUND.

1. This License Agreement applies to the one or more databases that your product may contain. We refer to these singly as a "Database" and together as the "Databases." Your product may thus include the "WBS Database" which contains worldwide background surface mapping data, the "Indigo Database" which contains inland mapping data, or other Databases.
2. The Databases that your product may contain are licensed, not sold. We grant to you the nonexclusive, nonassignable right to use these Databases for supplemental navigation reference purposes, but only as long as you comply with the terms and conditions of this License Agreement. We reserve the right to terminate this license if you violate any aspect of this License Agreement. You are responsible for using official government charts and prudent navigation for safe travel.
3. The Databases housed in your product are protected by the copyright notices appearing on the product or its screen(s). You may NOT modify, adapt, translate, reverse engineer, decompile, disassemble, rent, lease, or resell any Database, and you may NOT create derivative works based upon any Database or its contents. Any unauthorized reproduction, use, or transfer of a Database may be a crime and may subject you to damages and attorney fees.
4. This License Agreement will terminate immediately without prior notice from us if you fail to comply with or violate any of the provisions of this Agreement. Upon termination, you will promptly return all products containing one or more Databases to us.
5. Prices and programs are subject to change without notice.
6. This License Agreement shall be governed by the laws of the State of Oklahoma and comprises the complete and exclusive understanding between you and us concerning the above subject matter.

## Databases Limited Warranty

"We", "our", or "us" refers to Navico, the manufacturer of this product. "You" or "your" refers to the first person who purchases the product as a consumer item for personal, family, or household use. The Databases Limited Warranty applies to the one or more databases that your product may contain. We refer to each of these as a "Database" or together as the "Databases." Your product may thus include the "WBS Database" which contains worldwide background surface mapping data, the "Indigo Database" which contains inland mapping data, or other Databases.

We warrant to you that we have accurately compiled, processed, and reproduced the portions of the source material on which the Databases are based. However, we are under no obligation to provide updates to the Databases, and the data contained in the Databases may be incomplete when compared to the source material. WE MAKE NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND ABOUT THE ACCURACY OF THE SOURCE MATERIAL ITSELF, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

If there is a defect in any Database, your exclusive remedy shall be, at our option, either a refund of the price you paid for the product containing the defective Database or a replacement of such product. WE WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO ANYONE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR OTHER INDIRECT DAMAGE OF ANY KIND.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty does NOT apply in the following circumstances: (1) when the product has been serviced or repaired by anyone other than us; (2) when the product has been connected, installed, combined, altered, adjusted, or handled in a manner other than according to the instructions furnished with the product; (3) when any serial number has been effaced, altered, or removed; or (4) when any defect, problem, loss, or damage has resulted from any accident, misuse, negligence, or carelessness, or from any failure to provide reasonable and necessary maintenance in accordance with the instructions of the owner's manual for the product.

We reserve the right to make changes or improvements in our products from time to time without incurring the obligation to install such improvements or changes on equipment or items previously manufactured.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

Your remedies under this warranty will be available so long as you can show in a reasonable manner that the defect occurred within one (1) year from the date of your original purchase, and we must receive your warranty claim no later than 30 days after such 1-year period expires. Your claim must be substantiated by a dated sales receipt or sales slip.

## **Contact information**

**Customer Service:**

**1-800-628-4487**

(8 a.m. to 5 p.m. Central Standard Time, M-F)

**(Canada)**

**1-855-361-1564**

**canada@navico.com**

(8 a.m. to 5 p.m. Eastern Standard Time, M-F)

## **Ordering Accessories**

<http://store.navico.com/>

## **Visit our website**

[www.lowrance.com](http://www.lowrance.com)

Visit our website:

[www.lowrance.com](http://www.lowrance.com)

