LOWRANCE®

Elite-4x, Elite-5x, Elite-7x & Elite-9x

Operation manual

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Compliance Statements

Lowrance Elite-4x, Elite-5x, Elite-7x and Elite-9x

- 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.

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

NOTE: *This manual covers Elite-4x, Elite-5x, Elite-7x and Elite-9x units. As a result, screenshots of menus and dialogs may not match the look of your unit.*

Table of contents

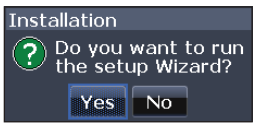
Unit Controls	
	**LIGHT/POWER:** controls backlight level and turns unit on/off
	**KEYPAD:** controls cursor & selects items on menus
	**PAGES**: allows you to select a page to view
	**MENU:** opens settings, context and page menus
	**ENTER:** finalizes menu selections
	**ZOOM Keys:** used to zoom in/zoom out

Getting Started	
Turn unit on/off	To turn on/off the unit, press and hold the **LIGHT/POWER** key for three seconds.
Adjusting the backlight	This unit has 10 backlight levels. Press the **LIGHT/POWER** key to switch backlight levels.
Muting Audio	Select ***Mute Audio*** from the System menu and press **ENTER**.

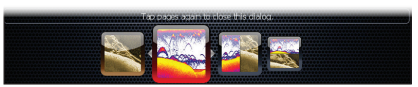
Basic Operation

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.

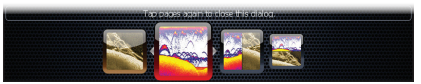


Pages



Pages dialog

NOTE: *Available pages vary depending on the unit and the connected transducer.*

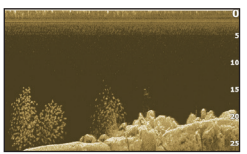


Selecting Pages

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

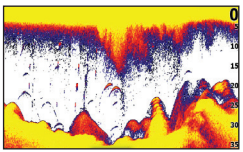
Page menus

The DownScan and Sonar pages have menus that can only be accessed when those pages are displayed.

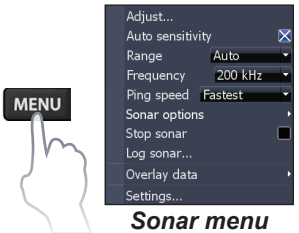


DownScan page

DownScan menu

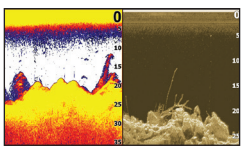


Sonar page

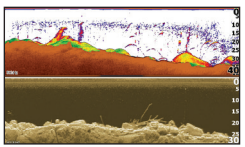


Sonar menu

Combo pages



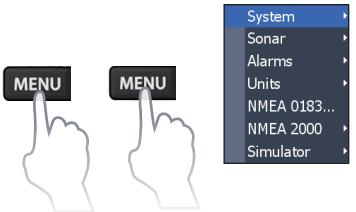
Two-panel page



Horizontal panel

Press the **PAGES** key twice to switch active panels. The page menu for active page will be displayed when the **MENU** key is pressed. The active panel is denoted by an orange border.

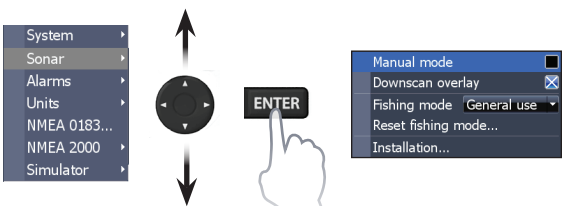
Accessing the Settings menu



NOTE: *Only Elite-7 and Elite-9 units support NMEA 2000.*

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

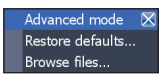
There are several menu types used to make adjustments to options and settings, including scrollbars, on/off features and dropdown menus.

Scrollbars

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

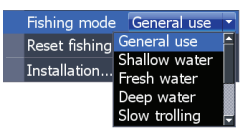
On/Off features

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



Dropdown menus

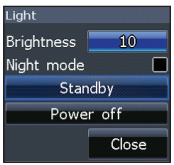
Access the dropdown menu and press use the keypad to select the desired item and press **ENTER**.



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.

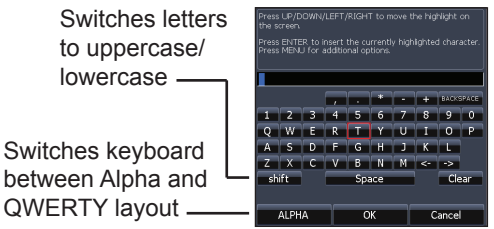


Entering text

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

To input text:

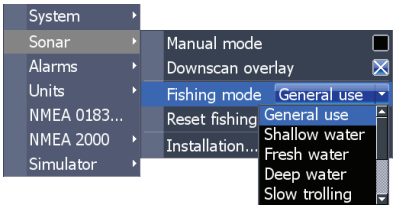
1. Use the keypad to select the desired character and press **ENTER**.
2. Repeat Step 1 for each character.
3. When entry is completed, highlight ***OK*** and press **ENTER**.



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.

Advanced Mode

Enables advanced features and settings.

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

- Units (Enables distance, speed, depth, temperature, and bearings options)
- NMEA 0183 Output
- NMEA 2000 (Elite-7x and Elite-9x only)

Standby mode

Lowers power consumption by turning off sonar and the display.

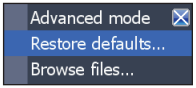
Press the **PWR/LIGHT** key to access the Backlight dialog.

Select ***Standby*** and press **ENTER**. Press any key to resume normal operation.

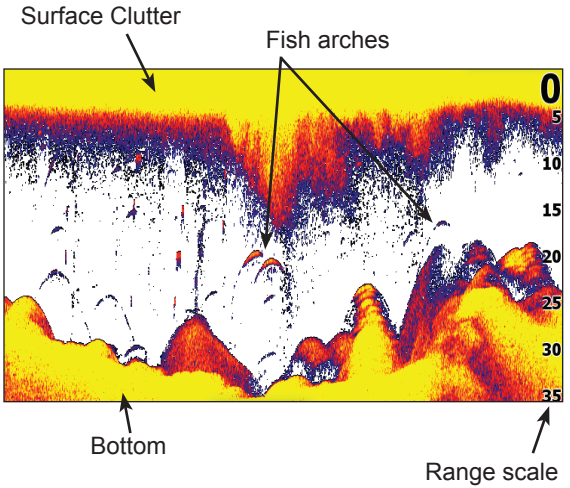
NOTE: *Leaving your unit in Standby mode when your boat is not is use will run down your battery.*

Restore defaults

Resets unit options and settings to defaults.

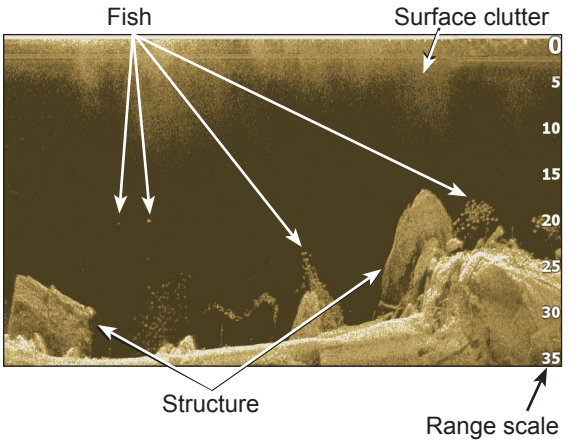


Pages



Sonar Page

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

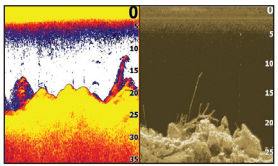


DownScan page

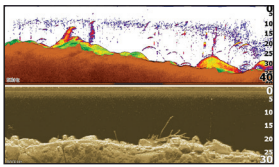
The Downscan page shows the water column moving from right to left. You can overlay downscan sonar on the conventional sonar page by selecting ***DownScan Overlay*** on the Sonar settings menu.

Combo pages

This unit has two pre-configured combo pages.



Sonar/DownScan

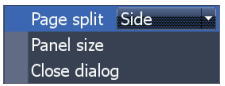


Sonar/DownScan horitzontal

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).

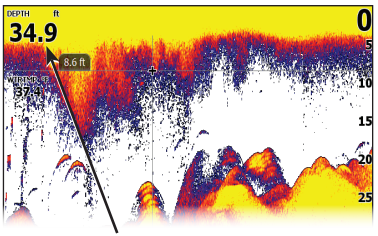


To make adjustments to combo page panels, select a combo page from the Pages carousel and press **MENU**.

NOTE: *To adjust panel size, access the customize menu after selecting a combo page for display.*

Overlay Data

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



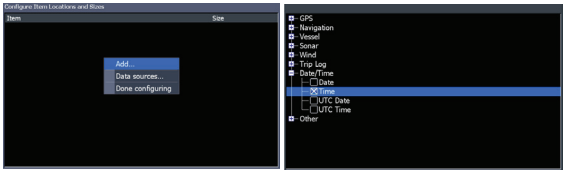
Overlay data

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.



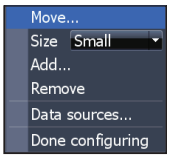
To add overlay data:

1. From the Sonar, Chart or DownScan 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

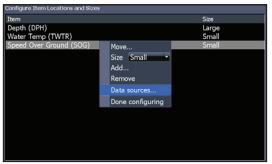
You can select a data source, add/remove data and adjust the size and position of overlay data on the screen.

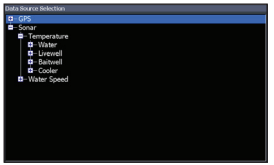
Select the desired overlay data from the Configure Item Locations and Sizes dialog and press **MENU.** The configuration menu will appear.



Data sources

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



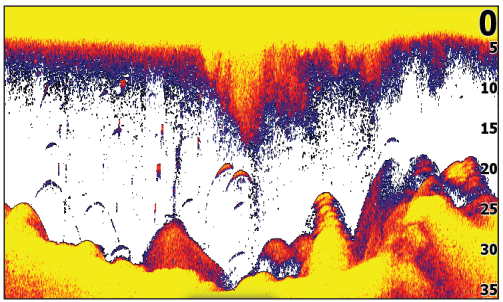


To select a data source:

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**.

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.

CHIRP

A CHIRP (Compressed High Intensity Radar Pulse) transducer transmits a modulated pulse of all frequencies within the bandwidth of the selected transducer type.

This results in better image quality, better target separation and greater depth penetration.

This unit supports High CHIRP, Medium CHIRP and Low CHIRP, depending on the transducer.

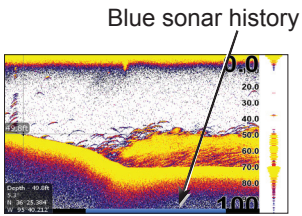
CHIRP can be used with Lowrance conventional sonar transducers.

- 50/200 kHz (Low/High CHIRP)
- 83/200 kHz (Medium/High CHIRP)

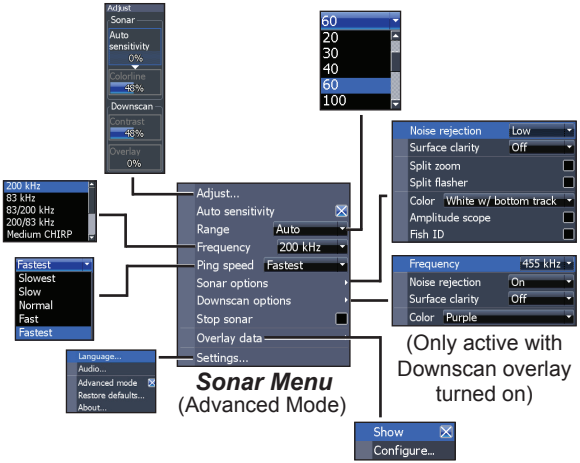
To use CHIRP, select the desired CHIRP frequency from the Frequency menu.

Trackback

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

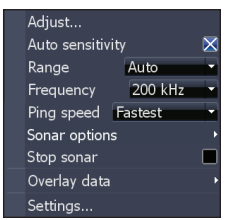


Move the sonar history bar all the way to the right to resume normal sonar scrolling, or press **MENU** and select ***Exit cursor mode***.



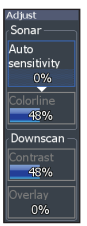
Sonar Menu

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



Adjust

Used to make adjustments to Sensitivity and Colorline/Grayscale.



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 (+/-40%) changes to sensitivity with Auto Sensitivity turned on. You will have to turn it off to make significant adjustments.*

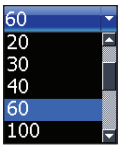
Colorline

Helps distinguish fish or structure from the bottom by showing hard returns as light colors and soft returns as darker colors. A lower colorline setting will display only the hardest returns, shown in light colors.

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

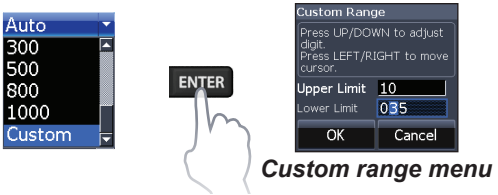


Selects the deepest range shown on the display. Range settings display the section of the water column from the water surface to the selected depth range.

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 or the bottom. 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 conventional, CHIRP and DownScan sonar frequencies.

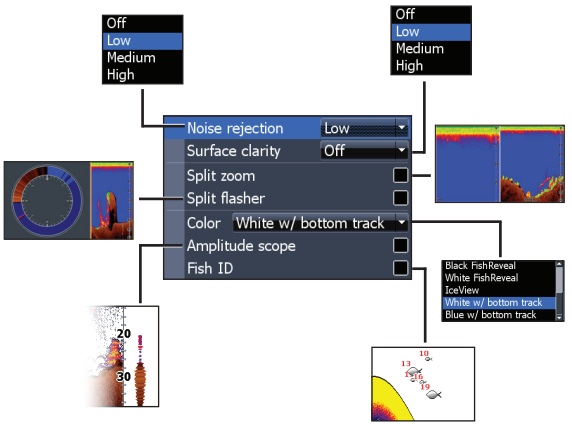
Only frequencies supported by your transducer will appear on the Frequency menu.

Sonar Frequencies	
50 kHz	Best depth penetration with lower resolution
83 kHz	Wider cone angle provides more bottom coverage and easy lure tracking
200 kHz	Highest sensitivity and best target separation in shallow water
Low CHIRP	Provides the best depth penetration with lower resolution
Medium CHIRP	Better depth penetration than High CHIRP with minimal loss of target separation
High CHIRP	Better resolution in shallow water than Medium CHIRP
Custom high	Selects a custom single frequency from within High or Low frequency ranges to help reduce/eliminate interference from other CHIRP transducers
Custom medium	

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

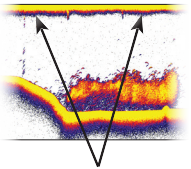


Noise Rejection

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

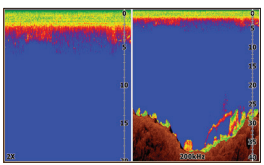
Surface Clarity reduces surface clutter by decreasing the sensitivity of the receiver near the surface.



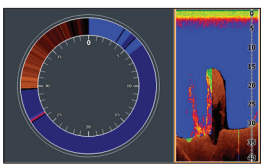
Surface Clutter

Split Zoom and Split Flasher

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



Split Zoom



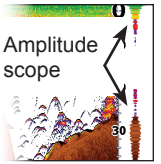
Split Flasher

Color

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

Amplitude Scope

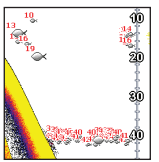
Displays the amplitude of the most recent echo.



Fish ID

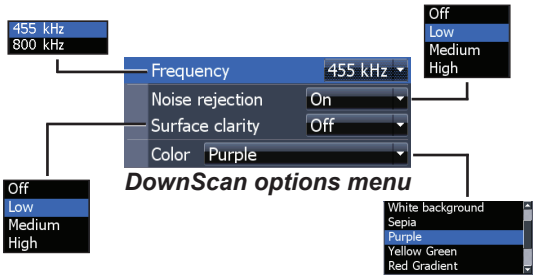
Displays fish echoes as fish symbols instead of fish arches.

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 DownScan operation section.



DownScan options menu

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

Stop Sonar

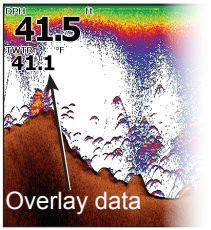
Prevents the transducer from transmitting to reduce/eliminate interference between two sonar units running on the boat at the same time.

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

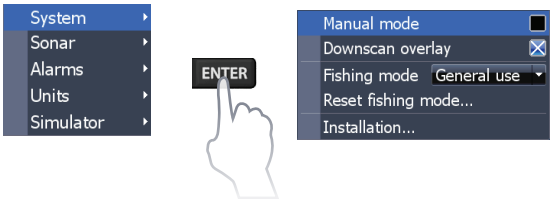
Overlay Data

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

Overlay data setup is covered in the Pages section.



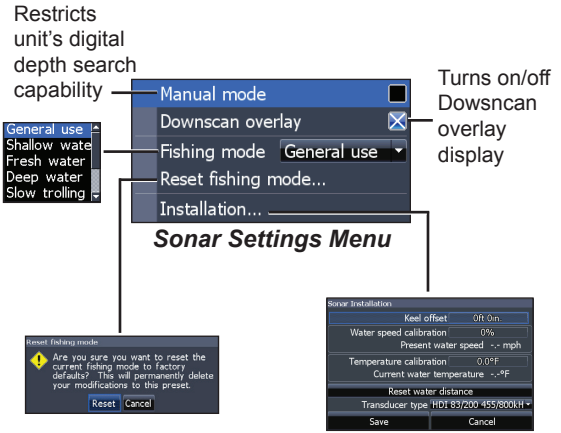
Sonar Settings



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.



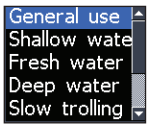
Manual Mode

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

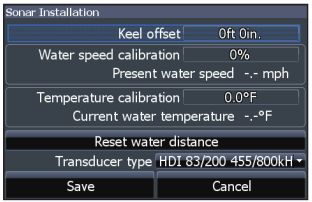


Enhances the performance of your unit by providing preset packages of sonar settings geared to specific fishing conditions. For more information about fishing modes, refer to the Basic Operation section.

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.

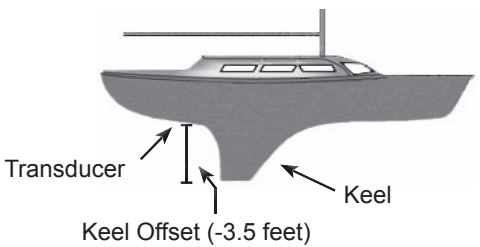
Installation



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

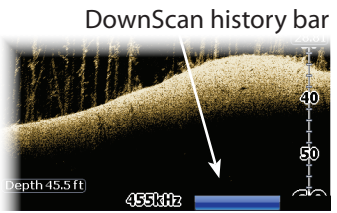
Selects the type of transducer model attached to your unit.

DownScan Operation

Features described in this section are for DownScan sonar. Refer to the Sonar operation section for information on conventional sonar.

Trackback

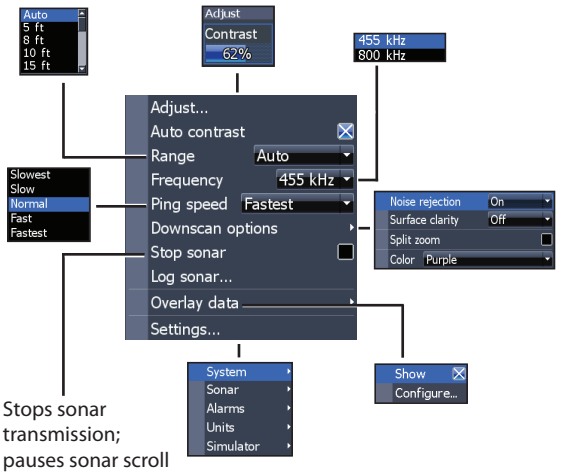
You can review your sonar history by pressing the keypad to the left until the screen starts to move in reverse and the sonar history bar appears at the bottom of the screen.



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

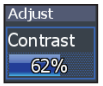
DownScan menu

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



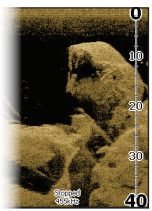
Adjust

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

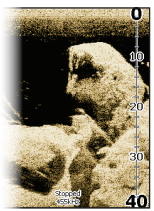


Contrast

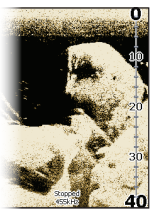
Adjusts the brightness ratio between light and dark areas on the screen, making it easier to distinguish suspended objects from the background.



Contrast set to 40



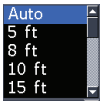
Contrast set to 60



Contrast set to 80

Range

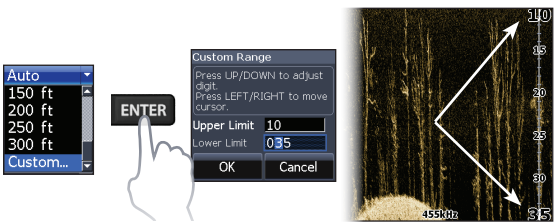
Range settings display the section of the water column from the water surface to the selected depth range.



NOTE: *Auto range is the preferred setting for most fishing conditions.*

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.



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.*

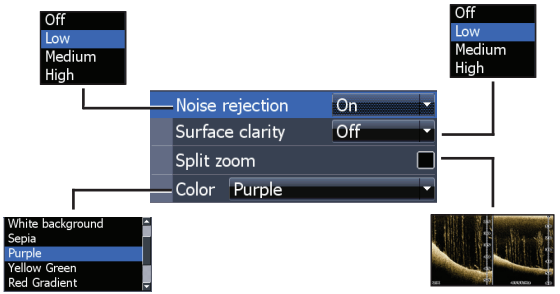
Frequency

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

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

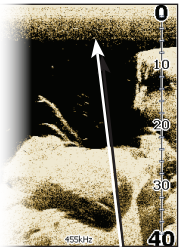


Noise Rejection

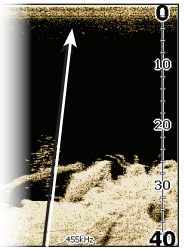
Uses advanced signal processing to monitor the effects noise (boat pumps, water conditions, engine ignition systems, etc.) has on your display, and then filters out undesired signals.

Surface Clarity

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



Surface Clarity set to Low.



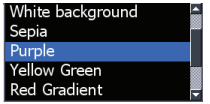
Surface Clarity set to High.

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

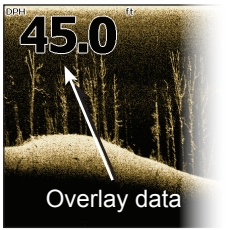
Prevents the transducer from transmitting to reduce/eliminate interference between two sonar units running on the boat at the same time.

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

Overlay Data

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

Overlay data setup is covered in the Pages section.



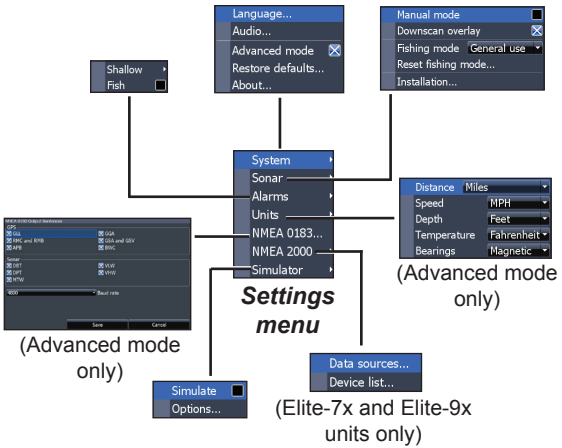
Settings

Accesses the Settings menu. Refer to “Sonar Settings” on page 21.

Settings

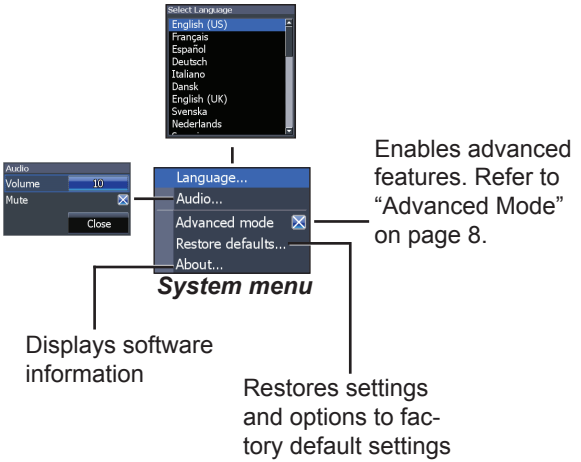
Settings menu

Accesses installation and configuration settings for your unit.



System

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



Set Language

Selects the language used on menus and dialogs.

Audio

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

Advanced Mode

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

Restore Defaults

Switches the unit back to default settings.

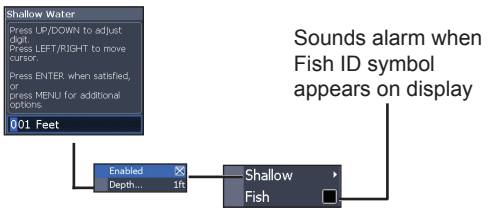
About

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.

Alarms

Enables alarms and selects alarm thresholds.

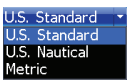


Alarms menu

Alarms	
Shallow	sounds alarm when vessel enters water shallower than the selected shallow threshold
Fish	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

You can select the NMEA 0183 sentences the unit will use when connected a NMEA 0183 device. You can also adjust the Baud rate.

NMEA 2000 (Elite-7x and Elite-9x only)

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.

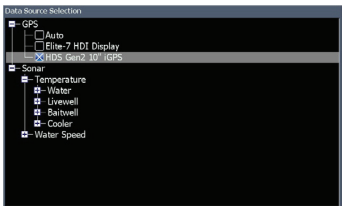
You will not be able to share existing waypoints. Only waypoints created while the unit is connected to a NMEA 2000 network can be shared, and only with units on that network.

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.



Selecting a GPS source

Simulator

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

Elite -4x & Elite-5x	
General	
Case Size	**Elite 4x**: 6.6″ H (168 mm) x 3.6″ W (96 mm); 7.5″ H (189 mm) with bracket **Elite-5x:** 5.4″ H (136 mm) x 6.9″ W (174 mm); 5.9″ H (151 mm) with bracket
Display	**Elite-4x**: (4.3″ diagonal) 16-bit color TFT LCD **Elite-5x**: (5″ diagonal) 16-bit color Full color VGA Solar MAX™ Plus TFT
Waterproof standard	IPX7
Backlight	LED (11 levels)
Communications	NMEA 0183 Output
Declaration of Conformity	Part 15.103 FCC rules & CE RTTE directive 1999/5/EC

Power	
Transmit Power	250W RMS; 30,000 PTP
Power Requirement	12V
Voltage Input	10 to 17V
Current drain	Typical: 1.1A
Fuse type	3-amp Automotive
Sonar	
Max depth	300ft (91m) 455/800Khz 1000ft (305m) 83/200kHz 2500ft (762m) 50/200kHz
Transducer Frequency	455/800kHz 50/83/200kHz High/Medium/Low CHIRP
Max speed	70mph
Transducer	HDI 50/200kHz (Low/High CHIRP) HDI 83/200kHz (Medium/High CHIRP 83/200kHz (Medium/High CHIRP)
Transducer cable	20ft (6m)

Elite -7x & Elite-9x	
General	
Case Size	**Elite 7x**: 5.3″ H (234mm) x 9.2″ W (136mm); 5.9″ H (151mm) with bracket **Elite-9x:** 6.16″ H (157 mm) x 11.06″ W (281 mm); 6.2″ H (156.5 mm) with bracket
Display	**Elite-7x**: (7″ diagonal) 16-bit color Full VGA Solar MAX™ color TFT **Elite-9x**: (9″ diagonal) 16-bit color Full color VGA Solar MAX™ Plus TFT
Waterproof standard	IPX7
Backlight	LED (11 levels)
Communications	NMEA 2000, NMEA 0183 Output
Declaration of Conformity	Part 15.103 FCC rules & CE RTTE directive 1999/5/EC
Power	
Transmit Power	Elite-7: 250W RMS Elite-9: 500W RMS
Power Requirement	12V

Voltage Input	10 to 17V
Current drain	Typical: 1.1A
Fuse type	3-amp Automotive
Sonar	
Max depth	**Elite-7** 300ft (91m) 455/800Khz 1000ft (305m) 83/200kHz 2500ft (762m) 50 kHz **Elite-9** 300ft (91m) 455/800Khz 1000ft (305m) 83/200kHz 3000ft (914 m) 50 kHz
Transducer Frequency	455/800kHz 50/83/200kHz High/Medium/Low CHIRP
Max speed	70mph
Transducer	HDI 50/200kHz (Low/High CHIRP) HDI 83/200kHz (Medium/High CHIRP 83/200kHz (Medium/High CHIRP)
Transducer cable	20ft (6m)

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)

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