

LOWRANCE







Elite 5 DSI, Elite 4 DSI & Mark 4 DSI

Operation manual



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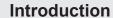
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Unit Controls		
0	LIGHT/POWER: controls backlight level and turns unit on/off	
	KEYPAD: controls cursor & selects items on menus	
	PAGES : allows you to select a page to view	
MENU	MENU: opens settings, context and page menus	
ENTER	ENTER: finalizes menu selections; save waypoint at cursor position	
(ZOOM Keys: used to zoom in/zoom out	
(MOB: press and hold both Zoom keys to create a Man Overboard waypoint	
microSD slot: 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	
Turn unit on/off	To turn on/off the unit, press and hold the LIGHT/POWER key for three seconds.
Man Overboard waypoint	Press the ZOOM IN and ZOOM OUT 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.
Adjusting the backlight	This unit has 10 backlight levels. Press the LIGHT/POWER key to switch backlight levels.
Muting Audio	Select <i>Mute Audio</i> from the System menu and press ENTER .
Selecting a GPS Source	Select <i>GPS Source</i> from the System menu and press ENTER . Select <i>internal</i> or <i>external</i> and press ENTER . (Elite-5 DSI only)

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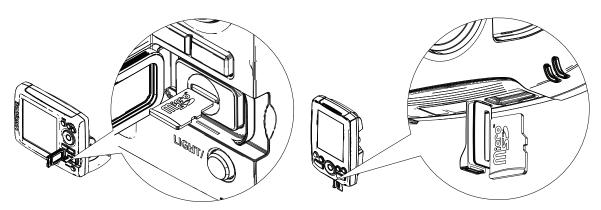




Inserting/Removing microSD cards

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.



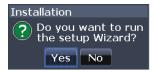






Setup wizard

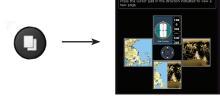
The Setup wizard will appear when the unit is turned on for the first time. To choose your own settings, do not run the setup wizard.



To restart the Setup wizard, restore defaults.

Pages

This unit has four pages: Steer, Chart, Chart/DSI and DSI.



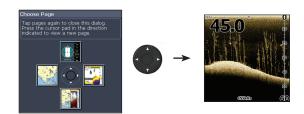
Pages menu

NOTICE

This manual covers several units. Some screenshots may differ from what you see on your screen. Your unit, however, will function in a similar manner.

Selecting Pages

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

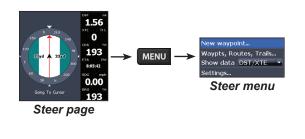


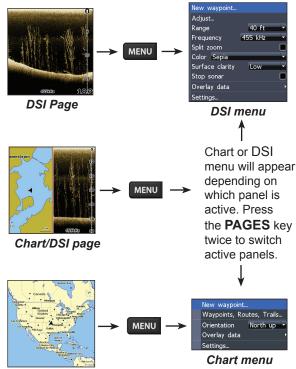




Page menus

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



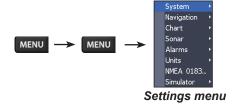


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Chart page



Accessing the Settings 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

After accessing the dropdown menu, press the keypad up/down to select the desired item and press ENTER.



NOTE: Press the Menu key to Exit menus.

Dialogs

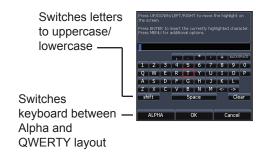
Dialogs are used for user input or for presenting information to the user.

Depending on the type of information or 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:

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







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

Allows you to navigate to the cursor.

- 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:

- 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.



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

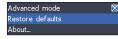




NOTE: Leaving your unit in Standby mode when your boat is not is use will run down your battery.

Restore defaults

Resets unit options and settings to defaults.

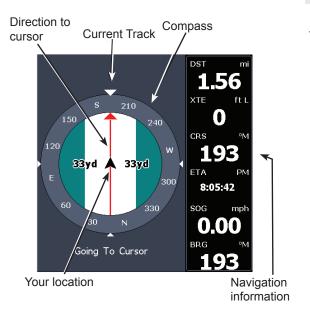


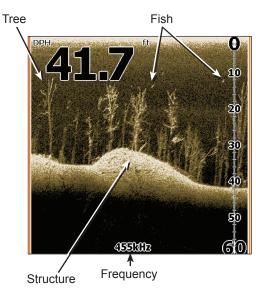
Adjusting the display

You can make adjustments to the display using Contrast and Color settings. Both are covered in the DSI section.







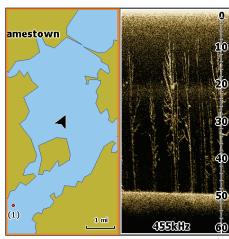


Steer Page

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

DSI Page

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



Chart/DSI Page

Chart/DSI page

Consists of a Chart/DSI splitscreen. Press the Pages key twice to switch active panels. The active panel will have an orange border.

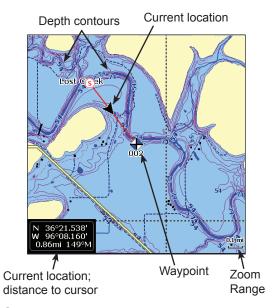


Chart Page

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

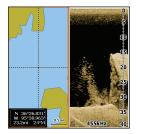


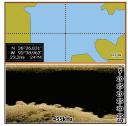


Chart/Sonar split

Allows you to change the way the panels are displayed when viewing the Chart/Sonar page.







Press the Pages key twice to switch active panels.

Overlay Data

Displays selected overlay data on the sonar page.



Show

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



Configure

Used to select overlay data to be displayed on the screen.





To select overlay data:

- 1. From the DSI or chart page, press **MENU**.
- 2. Select *Overlay data* and press **ENTER**.
- 3. Select *Configure* and press **ENTER**.
- Press Menu and select Add. Press ENTER.
- 5. Select a category from the Configure Items to show screen. Press **ENTER**.
- 6. Press **MENU** and select *Return to overlay*.
- 7. Press **MENU**, select *Done Configuring* and press **ENTER**.



Customizing Overlay Data

Access the Overlay Data configuration menu to make adjustments to the size and/or location of overlay data on the display.

Press Menu from the Configure Item Locations and Sizes screen to access the menu.

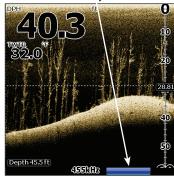






Using DSI

DSI history bar



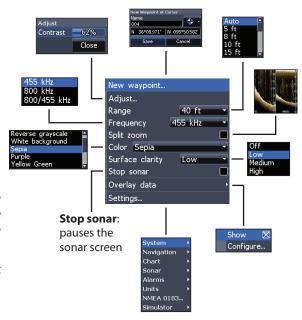
Trackback

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 any DSI page to view the DSI menu.







DSI

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.



New waypoint 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 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

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.





DSI



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 recieve 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.



Split Zoom

Changes the display to a split zoom view.



Color

Used to change the unit's color palette. The Color setting allows you to select a palette best suited for 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. Mono-

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DSI

chrome units only support Grayscale and Reverse Grayscale color settings.

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.

Overlay Data

Allows you to select data (water temperature, depth, etc) to be displayed on top of the DSI screen.



Overlay data setup is covered in the Pages section.

Settings

Accesses the settings menu.

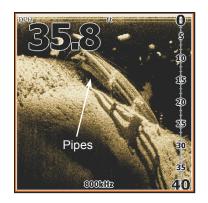
Stop Sonar

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

DSI Interpretation



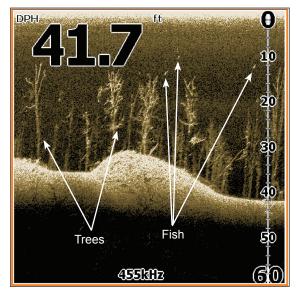


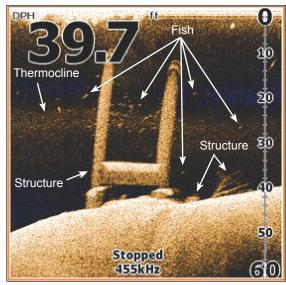




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DSI Interpretation









Using your Chart

This section covers chart operation, which includes saving, loading and navigating, waypoints, routes and trails and using chart menus, context menus and submenus.



Chart Menu

Press Menu from any Chart pages to open the Chart menu.

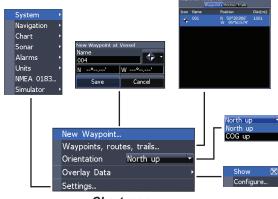


Chart menu

New Waypoint

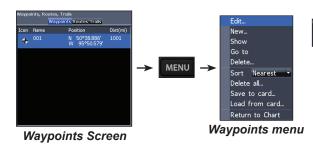
Creates a waypoint at your current location or at the cursor position. When the cursor is on the screen, waypoints will be saved at the cursor position; conversely, if the cursor is not displayed onscreen, waypoints will be saved at your current position.

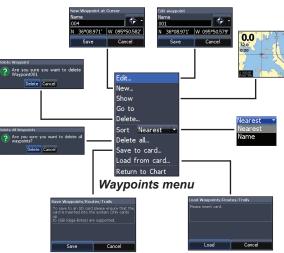


Waypoints, Routes, Trails

Used to create, edit, navigate and delete way-points, routes and trails.

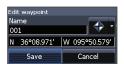
Press the keypad left/right to toggle between waypoint, routes and trails tabs.





Edit

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









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.



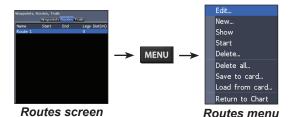
Sort

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.



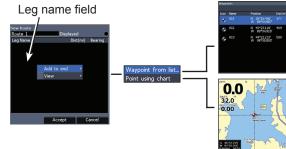
Creating a route

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:

- 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**.



- Press MENU, select Add to End and press ENTER.
- 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.





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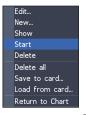
Creating a route using points from chart:

- 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 screen 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.
- Press MENU and select Stop adding. Press ENTER.
- Highlight the Save button and press EN-TER.

Navigating a route

Routes can be navigated in forward or reverse.

 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:

- 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. That allows you to display only desired routes on the map.

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

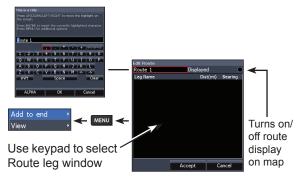
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Used to show/hide a route on the display, which prevents the screen from being cluttered by too many routes

Delete and Delete All

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

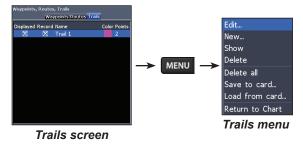






Trails Screen

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



Creating trails

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



To create a trail:

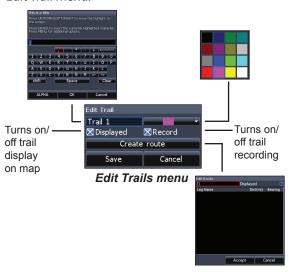
- 1. Select *New* and press **ENTER**. The New Trail will appear.
- Use the keypad to highlight *Record* and press **ENTER** to make the trail active/ inactive.
- 3. Select Save and press ENTER.





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

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

To save a trail as a route:

- 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.



North Up



Overlay Data

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



Overlay data setup is covered in the Pages section.

Settings

Accesses the Chart settings menu.

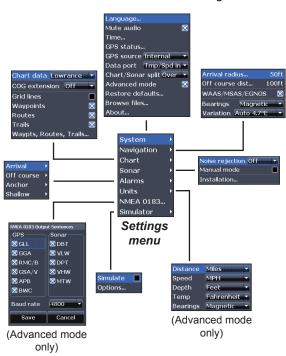






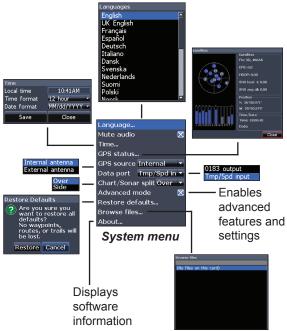
Settings Menu

Press Menu twice to access the Settings menu.



System

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





Set Language

Selects the language used on menus and text boxes.



Mute Audio

Turns on/off unit audio, like key beeps, alarm sounds, etc.

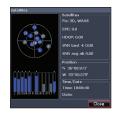
Time

Used to set local time, and select the time and date format.



GPS Status

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



GPS Source (Elite-5 DSI only)

Selects the antenna your unit will use for GPS. You will use the built-in GPS antenna unless you have a



in GPS antenna unless you have a LGC-16W external antenna (p/n: 000-00146-001).

Data Port

Selects the type of device connected to the unit's Data port. The port Tmp/Spd input can be configured for use as a NMEA 0183 port or a secondary speed/temp sensor.

Chart/Sonar Split

Allows you to display the Chart/ Sonar combo page with with pages split vertically or horizontally. Chart/Sonar split is covered in the pages section.







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 (+).



NOTE: You cannot save screenshots to a Navionics card.

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

About

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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.

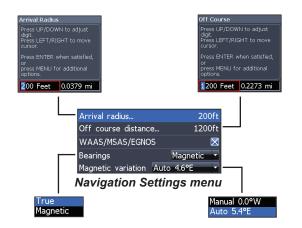
Lowrance periodically updates unit software to add features and improve functionality. To see the latest available software version go to www.lowrance.com.





Navigation

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.



WAAS/MSAS/EGNOS

Turns on/off the Wide Area Augmentation System (WAAS), Multi-Functional Satellite Augmentation System (MSAS) and European Geostationary Navigation Overlay Service (EGNOS).

All three systems help increase GPS accuracy for different parts of the world.





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.

Chart

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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 to see a full selection of available charts.





COG Extension

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



Grid Lines

Displays base values for latitude and longitude, making it easier to estimate your location on the latitude/longitude scale.



Waypoints, Routes and Trail displays

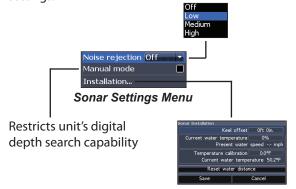
From the Chart Settings menu, you can turn on/off waypoint, route and trail display properties. Turning off display properties allows you to get a better view of the map, if the screen becomes cluttered with waypoints, routes and/or trails.

Waypoints, Routes, Trails

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

Sonar

Used to make adjustments to Sonar options and settings.







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 the undesired signals.

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.

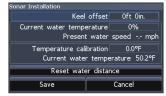


WARNING: Manual mode should only be used by advanced sonar users.

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

Installation

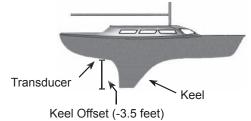
Provides access to Keel Offset and Temp Calibration settings.



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.

Temperature calibration

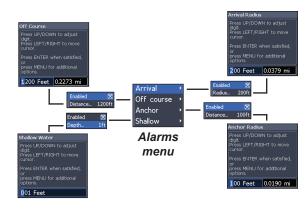
Calibrates data from the transducer temperature sensor with data from a known temperature source to ensure the accuracy of temperature information.

Reset water distance

Reset Water Distance to zero.

Alarms

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



Alarms		
Arrival	sounds alarm when you are within a selected distance of your destination (Advanced Mode only)	
Off Course	sounds alarm when your course exceeds a selected off-course threshold (Advanced Mode only)	
Anchor	sounds alarm when vessel moves a selected distance (Advanced Mode only)	
Shallow	sounds alarm when vessel enters water shallower than the selected shallow threshold	





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.





le Advanced Mode

NMEA 0183 Output

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

Simulator

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







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Specifications

Elite 5 DSI		
General		
Case Size	5.4" H (134mm) x 6.8" W (174mm); 6" H (152mm) with bracket	
Display	(5″ diagonal) Enhanced Solar MAX™ 480x480 256 color TFT LCD	
Backlight	Cold cathode fluorescent lamp (10 levels)	
Communications	NMEA 0183 Output	
Shared devices supported	VHF and Autopilot through NMEA 0183	
Power		
Transmit Power	4000W PTP; 500W RMS	
Power Requirement	12 Volts DC	
Voltage Input	10 to 17V	
Current drain	13.5V (630mA)	
Fuse type	3-amp Automotive (not supplied)	

	DSI Sonar
	DSI Sonar
Max depth	250 ft (76m)
Transducer Frequency	455/800kHz
Max speed	50 mph (80 kph) 2-8 mph (3-12 kph) optimal for imaging
Transducer	DSI (Downscan) transducer
Transducer cable	20ft (6m)
GPS	
Mapping card slot	microSD (up to 2GB); microSDHC high capacity cards are not compatible
GPS Antenna	16 parallel channel (internal); optional external GPS antenna sold separately
Mapping compatibility	Fishing Hot Spots, NauticPath & Navionics (HotMaps, Premium & Gold)
Waypoints, Routes & Trails	Up to 3000 waypoints, 100 routes and 100 retraceable plot trails







Specifications

Elite 4 DSI & Mark 4 DSI		
General		
Case Size	5.6" H (144mm) x 3.7"W (94.3mm); 6.4" H (164mm) with bracket	
Display	Elite 4: (3.5" diagonal) 320x240 (256 color) TFT LCD Mark 4: (3.5" diagonal) 320x240 monochrome TFT LCD	
Backlight	White LED (10 levels)	
Communications	NMEA 0183 Output	
Shared device supported	VHF and Autopilot through NMEA 0183	
Power		
Transmit Power	2800W PTP; 350W RMS	
Power Requirement	12V	
Voltage Input	10 to 17V	
Current drain	at 13.5V (250mA)	
Fuse type	3-amp Automotive (not supplied)	

DSI Sonar		
Max depth	200 ft (76m)	
Transducer Frequency	455/800kHz	
Max speed	50 mph (80 kph) 2-8 mph (3-12 kph) optimal for imaging	
Transducer	DSI (Downscan) transducer	
Transducer cable	20ft (6m)	
GPS		
Mapping card slot	microSD (up to 2GB); microSDHC high capacity cards are not compatible	
GPS Antenna	16 parallel channel (internal); optional external GPS antenna sold separately	
Mapping compatibility	Fishing Hot Spots, NauticPath & Navionics (HotMaps, Premium & Gold)	
Waypoints, Routes & Trails	Up to 3000 waypoints, 100 routes and 100 retraceable plot trails	







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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.







How to Obtain Service... ... in the USA:

Contact the Factory Customer Service Department. Call toll-free:

800-324-1356

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800-661-3983 905-629-1614 (not toll-free)

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

...outside Canada and the USA:

Contact the dealer in the country where you purchased your unit. To locate a dealer near you, see the instructions in paragraph number 1 below.

Accessory Ordering Information

LEI Extras is the accessory source for sonar and GPS products manufactured by Lowrance Electronics. To order Lowrance accessories, please contact:

- 1) Your local marine dealer or consumer electronics store. To locate a Lowrance dealer, visit the web site, www.low-rance.com, and look for the Dealer Locator; or, consult your telephone directory for listings.
- 2) U.S. customers visit our web site www.lei-extras.com.
- **3)** Canadian customers: Lowrance Canada, 919 Matheson Blvd. E. Mississauga, Ontario L4W2R7 or fax 905-629-3118.

Call toll free in Canada, 800-661-3983, or dial 905 629-1614 (not toll free), 8 a.m. to 5 p.m. Eastern Standard Time, M-F.







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