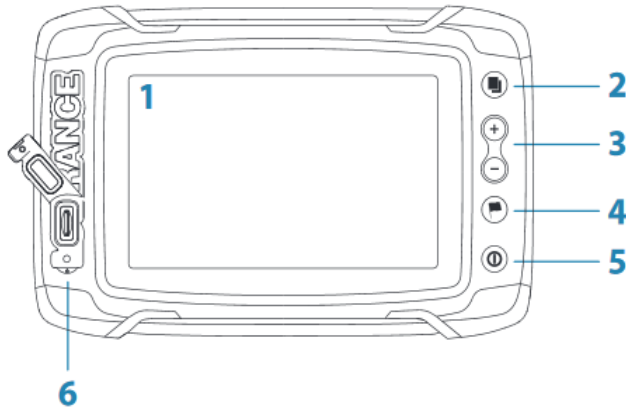


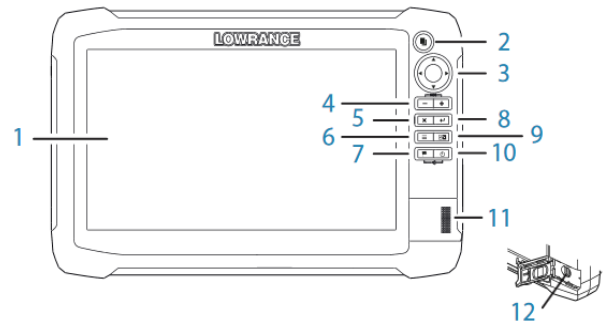
Installation

- We recommend following the Lowrance™ HDS and Elite Ti unit installation instructions that accompany the unit. Failing to install the transducer correctly may interfere with the sonar signal, and prevent the gathering of accurate data.
- Please ensure your unit has the latest firmware – see <https://downloads.lowrance.com>
- **Always ensure a clear signal (both Sonar and GPS) prior and during logging.** Periodic disruptions due to various causes are ok; sustained disruptions of signal will result in inaccurate or no data. Always monitor the 200 kHz page

Front controls



- 1 Touch screen**
- 2 Pages**
- 3 Zoom out / Zoom in (combined press = MOB)**
- 4 New waypoint (long press = Find dialogue)**
- 5 Power button**
Press and hold to turn the unit ON/OFF.
Press once to display the System Controls dialog.
- 6 Card reader** (behind logo)



No.	Key	Function
1	Touchscreen	
2	Pages key	Activates the home page
3	Cursor keys	Pans the cursor, moves through menu items and adjusts values
4	Zoom out/ Zoom in keys	Zooms the screen; press keys simultaneously to save a Man Overboard (MOB) waypoint
5	Exit (X) key	Exits dialogs, returns user to the previous menu level and removes the cursor from the screen
6	Menu key	Activates the panel menu; press twice to access the Settings menu; press and hold to hide the panel menu
7	Waypoint key	Opens the new waypoint dialog; press twice to save a waypoint; press and hold to access the Find menu
8	Enter key	Confirms selections and saves settings
9	Panel key	Switches the active panel on a multiple-panel display; press and hold to expand the active panel to a full-page panel
10	Power key	Opens the System Controls dialog, adjusts the backlight level and powers the unit on/off
11	Card reader door	
12	microSD card readers	

Elite Ti Controls

HDS Controls

Lowrance™ HDS and Elite Ti Unit Settings (Recommended)*

- Transducer "Installation"
 - Press Pages button, select SETTINGS, select SONAR; Select INSTALLATION; Select Transducer (check the silver tag on your transducer cable for the model)
- Fishing Mode = Shallow Water (for vegetation detection or depths < 60ft, if deeper, use Fresh Water setting)
 - Press Pages button, select SETTINGS, select SONAR
- Sonar Range = Auto (Default); critical for optimal bottom and vegetation detection in lakes deeper than 15 ft (4.6 m). Fixing the range to twice the max bottom depth might aid bottom tracking in very shallow ponds.
 - Press Pages button, select SONAR
- Frequency of Broadband Sonar = 200KHz Mandatory for all three layers – other freqs. will create depth maps only
 - Press Pages button, select SONAR
- WAAS Differential Correction Enabled on GPS
 - Press the Pages button, select SETTINGS, select SYSTEM, select SATELLITES, select CONFIGURE, enable WAAS
- Recommended Speed = ≤ 5.5 mph. Faster is ok for slowly changing bottom, go slower during rapid depth changes
- **Monitor your SONAR page; if signal becomes interrupted at faster speeds, slow down.**
- Maximum Speed = 20 mph (Bathymetry), 12 mph (Vegetation), 10 mph (Bottom Composition).
- Bytes per sounding = Default 3200

Recording Sonar

- We recommend carrying two 8-32 (not 64) gb microSD cards. We recommend logging no longer than one hour per file. **Ensure SD card compatibility/function prior to recording sonar by ensuring the card is recognized in the Log Sonar menu dialog**
- Logging sonar:
 - Press the Pages button, select SONAR, select ADVANCED, select LOG SONAR.
- File Format = .slg (Sonar only, smallest file, min needed for EcoSound maps), .sl2 (Sonar + Structure med sized file - RECOMMENDED), .or .sl3 (Sonar + 3D Structure largest file). Review/select other logging options. Select RECORD.
- Stop recording:
 - Select LOG SONAR, select STOP LOGGING
 - **DO NOT select STOP/START SONAR during recording** – this will only stop/start pinging, not recording and may corrupt your file resulting in lost data
- Do not split both 83 & 200 kHz frequencies or adjust SONAR file/frequency/logging settings. If adjustments need to be made, stop the file, make the adjustment, and then resume logging a new file. Changing displays and zoom levels is ok

Transects

- Transects can be any spacing and depends on the user coverage needs. Users can adjust the buffer in BioBase. 40-m spacing is sufficient for most needs
- Use a design (perpendicular to shore, parallel, concentric) that results in the most efficient coverage of water and maps features to your acceptable level of detail
- Monitor your Lowrance Chart and record a trail to monitor coverage. For pre-planning purposes, transects can be created in GIS, saved to a .gpx file, and then imported into your HDS or Elite Ti unit.

Data Upload

- Once recorded, files can be saved to the user's local computer or uploaded directly from the SD card using the BioBase upload client or web upload tool available [at http://www.cibiobase.com/](http://www.cibiobase.com/) under "upload tools" on the right-hand side of the page.
- Time required to upload and process the files will depend on a number of factors including the size of the file, size of the area surveyed, and internet connection speed. An email will be sent to you once processing is complete.
- Prior to merging trips, we recommend users review and verify individual trips with the sonar log. Sonar logs are not generated with merged trips

**Refer to the Lowrance™ HDS and Elite Ti manuals or full EcoSound Operator's Guide for additional details on depth finder options. © C-MAP USA Inc.*