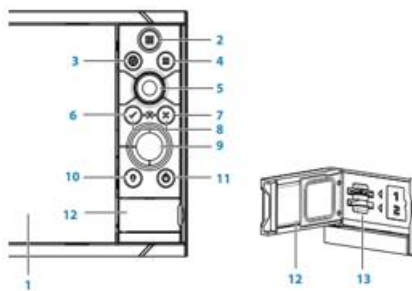


Installation

- We recommend following the Simrad™ 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 <http://downloads.simrad-yachting.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.

NSS evo3 Controls

Front controls



- 1 Touch screen**
- 2 Pages/Home** - press to open the Home page for page selection and setup options
- 3 WheelKey** - user configurable key, refer to "Configuring the WheelKey" on page 19.
 - Default without an autopilot connected to the system
 - Short press: toggles between panels on split screen
 - Long press: maximizes active panel on split screen
 - Default with an autopilot connected to the system
 - Short press: opens the autopilot controller and puts the autopilot in standby mode
 - Long press: toggles between panels on split screen
- 4 Menu key** - press to display the active panel's menu
- 5 Rotary knob** - turn to zoom or scroll the menu, press to select an option
- 6 Enter key** - press to select an option or to save settings
- 7 Exit key** - press to exit a dialog, return to previous menu level, and clear the cursor from the panel
- 8 MOB** - press simultaneously the **Enter** and **Exit** keys to create a MOB at the vessel's position
- 9 Arrow keys** - press to activate the cursor or to move the cursor
Menu operation: press to navigate through menu items and to adjust a value
- 10 Mark key** - press to place waypoint at vessel position or at cursor position when cursor is active
- 11 Power key** - press and hold to turn the unit ON/OFF
Press once to display the System Controls dialog, additional presses to toggle through three default dimming levels.
- 12 Card reader door**
- 13 Dual card reader slots**

Simrad™ NSS evo3 Settings (Recommended)*

- Transducer "Installation"
 - o Press Pages button, select SETTINGS, select ECHO; Select INSTALLATION; Select TRANSDUCER TYPE (check the silver tag on your transducer cable for the model)
- Search Depth = 400 feet
 - o Press Pages button, select SETTINGS, select ECHO; Select INSTALLATION; Select SEARCH DEPTH
- 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.
 - o Press Pages button, select ECHO
- Frequency of Broadband Sonar = 200KHz Mandatory for all three layers – other frequencies will create depth maps only
 - o Press Pages button, select ECHO, press Menu button on unit
- WAAS Differential Correction Enabled on GPS
 - o Press the Pages button, select SETTINGS, select SYSTEM, select SATELLITES, select CONFIGURE, enable WAAS



Quick Reference – Standard Operating Procedure (Updated 01/18/2019)

- Recommended Speed = ≤ 5.5 mph. Faster is ok for slowly changing bottom; go slower during rapid depth changes or through vegetation.
- **Monitor your ECHO page; if signal becomes interrupted at faster speeds, slow down.**
- Maximum Speed = 20 mph (Bathymetry), 10 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:
 - o Press the Pages button, select ECHO, press Menu button on unit, 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:
 - o Select LOG SONAR, select STOP LOGGING
 - o **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 enough 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 Simrad 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 NSS evo3 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.BioBaseMaps.com/> under "Upload Tools" on the right-hand side of the page.
- Time required to upload and process the files will depend on several factors including the size of the file, size of the area surveyed, and internet connection speed. An e-mail 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 Simrad™ NSS evo3 manual or full EcoSound Operator's Guide for additional details on depth finder options. © Navico Inc.*