



Installation

- We recommend following the Lowrance HDS 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 <http://www.lowrance.com/en-US/Software-Updates/>
- **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

Lowrance™ HDS Unit Settings (Recommended)*

- Transducer “Installation”
 - HDS Gen1&2: Press Page, toggle to and select SONAR, press MENU twice, select SONAR Select INSTALLATION; Select your Transducer (check the silver tag on your transducer cable for the model)
 - HDS Gen2&3 Touch: 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)
 - HDS Gen1&2: Press Page, toggle to and select SONAR, press MENU twice, select SONAR
 - HDS Gen2&3 Touch: Press Pages button, select SETTINGS, select SONAR
- Ping Rate = 10-15 pps
 - HDS Gen1&2: Press Page, toggle to and select SONAR, press MENU
 - HDS Gen2&3 Touch: Press Pages button, select SONAR, select ADVANCED
- Sonar Range = Auto (Default); critical for optimal bottom and vegetation detection
 - HDS Gen1&2: Press Page, toggle to and select SONAR, press MENU
 - HDS Gen2&3 Touch: Press Pages button, select SONAR
- Frequency of Broadband Sonar = 200KHz Mandatory for all three layers – other freqs. will create depth maps only
 - HDS Gen1&2: Press Page, toggle to and select SONAR, press MENU
 - HDS Gen2&3 Touch: Press Pages button, select SONAR
- WAAS Differential Correction Enabled on GPS
 - HDS Gen1&2: Press MENU twice, select SYSTEM, select SATELLITES, select CONFIGURE, enable WAAS
 - HDS Gen2&3 Touch: 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 SD 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:
 - HDS Gen1&2: press MENU. Near the bottom of the menu options, select LOG SONAR.
 - HDS Gen2&3 Touch: press the Pages button, select SONAR, select ADVANCED, select LOG SONAR.
- File Format = .sl2, .sl3, .or .slg. Review/select other logging options. Select RECORD.
- Stop recording:
 - HDS Gen1&2: press MENU again, select LOG SONAR and select STOP LOGGING.
 - HDS Gen2&3 Touch: 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 unit.

Data Upload

- Once recorded, files can be saved to the user's local computer or uploaded directly from the SD card.
- Files are uploaded using the BioBase Client Tool that is downloaded from the user's BioBase homepage.
- 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.