**Standard Operating Procedure for Use of the Lowrance HDS5 GPS Unit**

**A. Getting Started**

1. Attach two (2) black cords together (ends are square rubber, have four prongs for attaching).
2. Turn GPS unit on by pressing the Light/POWER button.
3. Accept the warning by pressing ENTER.
4. You will see a split screen with Sonar and Chart (GPS map).
	1. Sonar displays depth, temperature, and sonar map displaying vegetation, fish, and bottom of lake
	2. Chart displays speed, map of lake, location, GPS coordinates, compass directions, scale of map

**B. Highlighting a Screen for Manipulation**

1. Press PAGES
2. If you want to highlight Sonar Page:
	1. Toggle either left or right to Sonar
	2. Make sure Chart is highlighted (to also view GPS map) and press ENTER
3. If you want to highlight Chart Page:
	1. Toggle either left or right to Chart
	2. Make sure Sonar is highlighted (to also view Sonar map) and press ENTER

**C. Logging Sonar Data**

1. Make sure that the sonar radar is secured in place on the boat.
	1. Clean the area of the boat that is to be suctioned with the sonar radar (back of boat, silver barrel that is under water next to grey barrel).
	2. Suction sonar radar to position in which the cylindrical sonar radar is completely horizontal and underwater.
	3. Tie black cord around metal loop on boat for extra safety in case the suction breaks (if suction breaks, you can no longer log radar but you will not have lost the sonar radar).
2. Make sure Sonar is highlighted
3. Press MENU.
4. Toggle down to Log Sonar and press ENTER.
5. Type in a file name (I suggest the date of testing).
6. Select where you would like the file to save to (Memory Card).
7. Select Bytes per sounding (3200 as default, highest bytes).
8. Check log all channels.
9. Make sure to look at how much time the GPS unit can record information.
	1. If you need more time, reduce the bytes per sounding, but this will reduce the detail of the sonar data.
10. Press ENTER once Record is highlighted.
11. You should now see a red flashing dot at the top left corner of the screen.

**D. Stop Logging Sonar Data**

1. Make sure Sonar is highlighted.
2. Press MENU.
3. Toggle down to Stop Sonar, press ENTER.
4. You should now see the word “Stopped” on the left split screen.
	1. This pauses the logging, but does not completely exit the log sonar.
5. Press EXIT to again view both split screens.
6. To fully stop logging, press MENU.
7. Toggle down to Log Sonar and press STOP.

**E. Viewing Sonar History**

1. Press left arrow to toggle back through the sonar.
2. Press right arrow to get back to present or press EXIT.

**F. Viewing the Sonar File**

1. Press PAGES.
2. Toggle right to last option.
3. Toggle down to Files, press ENTER.
4. Select My files.
5. Select Logs.
6. Select Sonar.
7. Then select the file you wish to view.
8. From this screen you can either View, Copy, or Close.
9. To get back to split screen:
	1. Press Close, then EXIT.
	2. Toggle left to Sonar, select Chart.

**G. Creating a Waypoint at the Cursor’s Position**

1. Make sure that Chart is highlighted.
2. Place cursor on the chart page where you want to set the waypoint.
3. Press ENTER.
4. Title the waypoint (Press ENTER on first highlighted box, choose name from keyboard).
5. Choose icon for waypoint.
6. Select Save from the New Waypoint menu.

**H. Creating a Waypoint at the Vessel’s Position**

1. Make sure that Chart is highlighted.
2. Press MENU.
3. Select New Waypoint.
4. When the New Waypoint at Vessel menu appears, select Save.

**I. Viewing Recorded Waypoints**

1. Press PAGES.
2. Toggle all the way left.
3. Select Waypoints, routes, trails.
4. If you want to Navigate to a particular saved waypoint:
	1. Highlight desired waypoint and press MENU.
	2. Select Go to.
5. If you want to find a particular saved waypoint:
	1. Press MENU.
	2. Select Find.
	3. Type in desired waypoint name.

**J. Turning Off the Unit**

1. Press LIGHT/ Power.
2. Select Power off.
3. Wait for machine to go blank before unplugging black cords that you used to turn the GPS Unit on (MUST DO THIS OR BATTERY WILL RUN DOWN!).
4. You are done! The memory card is located in the slot on the bottom right hand corner of machine face, labeled HDS5 Lake Insight
	1. Press card up to release spring.