**Workhorse Sentinel 1200 kHz Deployment Setup**

**WinSc Software**

1. Connect ADCP to PC by appropriate cords. Open the WinSC software to begin the connection to the instrument.
2. Select “Configure an ADCP for a new Deployment”. Click “Next”.
3. A planning wizard window will open to being the instrument configuration process. Select “Next”.
4. The PlanADCP Basics window will open. PlanADCP is the planning window for sampling and deployment specifications.
   1. Select “Workhorse Sentinel” --> click “Next”.
   2. Select “1200 kHz” --> “Next”
   3. Batter pact selection is 2 for an equivalent of 900 Whrs. Click “Next”.
   4. Deployment environment. Select “Ocean” --> “Next”.
   5. Application: Select “Wave Gauge” --> “Next”.
   6. Depth range of measurement: Input depth in meters for deployment location (10 m) --> “Next”.
   7. Resolution: The depth cell size can be modified in a later window before exiting PlanADCP --> “Next”.
   8. Data Storage: Internal memory cards are stored in the unit with a capacity of 448 MB --> “Next”.
   9. Wave Gauge Timing: Wave burst duration (20 minutes) & Time between wave bursts (40 minutes) --> “Next”.
   10. Water profile timing: *12* measurements (ensembles)/hour --> “Next”.
   11. Duration: Anticipated duration of deployment (20.5 days) --> “Next”,
   12. Click “Finish” and go to the advanced window to modify and ensure accuracy of deployment plans.
   13. Within Profiling Setup, modify the pings per ensemble to 600, ensure the number of depth cells is +3 meter above deployment depth (30 cells) to account for tidal fluctuations and waves, and depth cell size to 0.5 m. Click “backToSC”. The deployment and sampling configuration is complete.
5. Set ADCP’s Clock: Click “Next”.
6. Compass Verification: Click “Next”. Follow the prompt from the WinSC commands to ensure correct compass verification. The instrument will need to be rotated 360 degrees at an inclination of 10-15 degrees. A total error of < 2.0 degrees.
7. Pre-deployment test: Click “Next”.
8. Zero Pressure sensor: Click “Next”.
9. Erase Recorder Data: Uncheck the box --> “Next”.
10. Deploy the ADCP: Clicking “Next” will start the deployment. Naming the deployment file by clicking “yes” and selecting a file directory along with a directory name. The ADCP should begin to make audible pings.