

User Interface Software:

A new, easy to use, Wave Staff XB Interface Program is available to download from our web site. We recommend using the program to configure the Wave Staff XB for your particular requirements. It can also be used to display and analyze wave data. Sampled data can be saved to a file for future analysis with the Interface Software or other analysis software. Up to 8 Wave Staff XBs may be connected to the Interface Program at one time. Right click on any object while running the Interface Program for help.

Output Plotting Tab:

The Output Plotting Tab can be used to plot data from Wave Staff XBs or from a saved file. All data is time tagged and plotted in real time. Vertical Line Cursors can be used to select a portion of the plot for analysis.

Com Port Control

Select Serial Com Port: ASRL12 (COM12 - USB Serial Port) | Local PAN ID (XSTICK): 0000000011111111 | Auto Time Sync: Off | Broadcast Power: On

Read File Control

Open File Name: | File Read Speed: 1.00 KBytes Per Second | Position KBytes: 0 | File Position in KB: 0

Wave Staff XB Device

Power Status	Network Address	Number	Rate	Date and Time	Offset mSec	Data meters
ON	0013A2004066B373	1	16	2014-04-08T20:56:08	2000	00.4595
ON	0013A2004066B375	2	16	2014-04-08T20:56:06	2000	01.4407
ON	0013A20040995FE5	8	16	2014-04-08T20:56:08	2000	07.4634
ON	0013A2004099605A	7	16	2014-04-08T20:56:08	2000	06.6585
ON	0013A2004099611F	5	16	2014-04-08T20:56:06	2000	04.4700
ON	0013A2004099624E	6	16	2014-04-08T20:56:08	2000	05.4642
ON	0013A2004099B794	3	16	2014-04-08T20:56:06	2000	02.4256
ON	0013A20040A01F0D	4	16	2014-04-08T20:56:04	2000	03.4343

Output Data Monitoring

Power Status	Network Address	Number	Rate	Date and Time	Offset mSec	Data meters
ON	0013A2004099611F	5	16	2014-04-08T20:56:06	2000	04.4700
ON	0013A2004099624E	6	16	2014-04-08T20:56:08	2000	05.4642
ON	0013A2004099B794	3	16	2014-04-08T20:56:06	2000	02.4256
ON	0013A20040A01F0D	4	16	2014-04-08T20:56:04	2000	03.4343

Plotting Data | Spectral Analysis | Configure Wave Staff XB

Plot Control

Start Plotting | Trace 1 Device No.: 2 | Trace 2 Device No.: 4 | Trace 3 Device No.: 1 | Trace 4 Device No.: 5 | Trace 5 Device No.: 3 | Trace 6 Device No.: 6 | Trace 7 Device No.: 8 | Trace 8 Device No.: 7

Output Plotting

Y-axis: 0.00 to 9.00 | X-axis: 0.00 to 16.00 (Relative Time in Seconds)

Bottom Panel:

Date and Time: 2014-04-08T20:55:54 | Plot Scale, Meters: Y Axis Offset: 0.00, Y Axis Range: 9.00, X Axis - Full Scale: 16 seconds | Cursor (circle): X Axis: 1.64, Y Axis: 4.57 | Cursors (square): X Axis: 10.62, Y Axis: 2.49 | Stop Plot if Full to Analyze: Off

Spectral Analysis Tab:

Plotted Data can be Spectral Analyzed with this tab, with various window operations, data format and scaling. The Mean Water Level and Significant Wave Height are also displayed.

The screenshot displays the 'Ocean Sensor Systems - Wave Staff XB' software interface. The 'Spectral Analysis' tab is active, showing a spectral plot of wave data. The plot's Y-axis is labeled 'Y-Axis Units' and set to 'Mrms', with a scale from 0.000 to 0.091. The X-axis is labeled 'X-Axis - Max Freq' and set to '1 Hz', with a scale from 0.00 to 1.00. The plot shows a red line representing the spectral density, with a prominent peak at approximately 0.25 Hz. Below the plot, the 'Mean Water Level' is displayed as 1.693 meters and the 'Significant Wave Height (Hmo)' is 0.699 meters. The interface also includes sections for 'Com Port Control', 'Read File Control', and 'Wave Staff XB Device' monitoring, each with various status indicators and controls.

Configure Wave Staff XB Tab:

Use this tab to select and configure the Wave Staff XB for your particular requirements.

Com Port Control

Select Serial Com Port: ASRL12 (COM12 - USB Serial Port) | Local PAN ID (KSTICK): 000000011111111 | Auto Time Sync: Off | Broadcast Power: On

Read File Control

Open File Name: | File Read Speed: KBytes Per Second: 1.00

Position KBytes: | File Position in KB: 0.00

Wave Staff XB Device

Power Status	Network Address	Number	Rate	Date and Time	Offset mSec	Data meters
ON	0013A2004066B373	1	16	2014-04-08T22:53:02	2000	01.0919
ON	0013A2004066B375	2	16	2014-04-08T22:53:02	2000	01.9770
ON	0013A20040995FE5	8	16	2014-04-08T22:53:00	2000	07.9468
ON	0013A2004099605A	7	16	2014-04-08T22:53:02	2000	06.9384
ON	0013A2004099611F	5	16	2014-04-08T22:53:02	2000	04.9587
ON	0013A2004099624E	6	16	2014-04-08T22:53:00	2000	05.9827
ON	0013A2004099B8794	3	16	2014-04-08T22:53:00	2000	02.9325
ON	0013A20040A01F0D	4	16	2014-04-08T22:52:52	2000	03.9799

Output Data Monitoring

Plotting Data | Spectral Analysis | **Configure Wave Staff XB**

Select Device To Configure

Enter Device Number: 1
or Network Address: 0013A2004066B373
Status: Connected
Re-Scan

Changing The Remote PAN

Wave Staff XB PAN ID: 000000011111111
Save Remote PAN ID

Device Information

Device Number: 1 | Device Part Number: OSS1-010-027A | Serial Number: 13-04-22-001 | Version: 01.00

Sampling

Sample Rate: 16 Hz | Burst Length: 0 | Burst Interval: 2 | Filter: Off | Data Format: Float 32 Samples

Start Time

Start Time: Off | Year: 2014 | Month: 4 | Day: 8 | Hour: 22 | Minute: 53 | Set Start Time

Clock

Year: 2014 | Month: 4 | Day: 8 | Hour: 22 | Minute: 52 | Second: 56 | Delta Seconds: | RTC Cal Value: 0
Manually Set Clock Time | Read | Synchronize Clock to Computer | Compare Time

Power

Power: Off | Battery Voltage: 2.64 | Read

Calibrate

Staff Type: Rod | Length meters: 1.00 | Gain: 1.0000 | Offset: 3.0000 | Low Point: 0.200 | High Point: 0.800
Current Mode: Normal | High | Factory Default | Auto Low | Auto High

Ocean Sensor Systems, Inc. Wave Staff XB Interface Program
Note: Right click on objects for help