



R2Sonic Compressed Water Column Setup for HYPACK / HYSWEEP

By Mike Kalmbach

This article covers the R2Sonic compressed water column setup for HYPACK® and HYSWEEP® after successful testing with the New England district in Old Saybrook.

Setup is fussy and all must be correct!

SONIC CONTROL SETUP

In the Operator Settings window, TruePix must be enabled in the Sonar tab, and Magnitude + Angle must be selected as TruePix data format in the Imagery tab.

Operation Settings - Sonar Tab

Sonic 2024	Sonar 1	Sonar 2
Frequency (kHz)	300	400
Ping Rate Limit (Hz)	☒ 30	
Sector Coverage (Deg)	140	120
Sector Rotate (Deg)	0	0
Min Range Gate (ft)	0	0
Bottom Sampling	Equiangle quad	
Mission Mode	Down, Bathy Normal	
Roll Stabilize	☒	
Pitch Stabilize	☐	
Dual Head Mode	Single Head	
TruePix Enable	☒	☐
Snippets Enable	☐	☐
Water Column Enable	☐	☐
Intensity Enable	☒	☐

Sonar Power On ☒

Operation Settings - Imagery Tab

TruePix Data Format

☐ Magnitude (440k B/s max)

☒ Magnitude+Angle (690k B/s max)

Gating

☐ Off

☒ Bathy gate max

☐ Bathy gates min & max

Water Column Data Format

☐ Magnitude (35MB/s max)

☒ Magnitude+Phase (70MB/s max)

Video Capture

Save to: Browse

Frame Rate

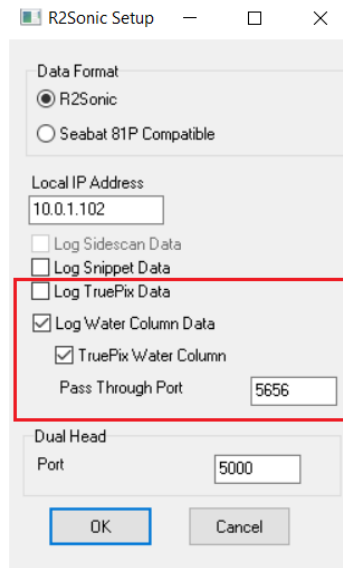
☐ 2 Hz ☐ 10 Hz ☒ 24 Hz ☐ 30 Hz

Snapshot

Save to: Browse

HYPACK HARDWARE SETUP

R2Sonic setup has a few new options which are described below.



The R2Sonic Setup dialog box contains the following settings:

- Data Format:** ☒ R2Sonic, ☐ Seabat 81P Compatible
- Local IP Address:** 10.0.1.102
- Logging Options:**
 - ☐ Log Sidescan Data
 - ☐ Log Snippet Data
 - ☐ Log TruePix Data
 - ☒ Log Water Column Data
 - ☒ TruePix Water Column
 - Pass Through Port:** 5656
- Dual Head Port:** 5000

Buttons: OK, Cancel

- **Log TruePix Data.** This is only for side scan (from TruePix) display and logging. No relevance for water column.
- **Log Water Column Data.** Check this if you wish to display and log R2Sonic water column data.
- **TruePix Water Column.** Check this for compressed water column using TruePix. Uncheck for full water column. Note that full water column requires a different Sonic Control setup.
- **Pass Through Port.** UDP port for HYSWEEP® SURVEY to water column logger pass through. The default 5656 should work in almost all cases. Try 5657 if things are not working.

REAL TIME DISPLAY

Something like this is expected. If you don't see it the data is not being logged. Go back and check Sonic Control and HYPACK® configuration.

