



R2Sonic TruePix in HYPACK® 2013: Updated and Revised Driver and Settings

By Joe Burnett and Dave Maddock

In the HYPACK® 2013 release, the capability to collect and process R2Sonic TruePix is available.

IN THE R2SONIC SONIC CONTROL 2000 PROGRAM

1. **Select SETTINGS – SONAR SETTINGS.**
2. **In the Sonar Settings Window, select the TruePix Enable and Snippets Enable options.**

Note: You can enable TruePix or Snippets or both. (See [IMPORTANT NOTE](#) below for additional details.)

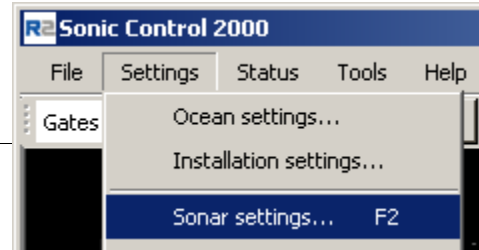


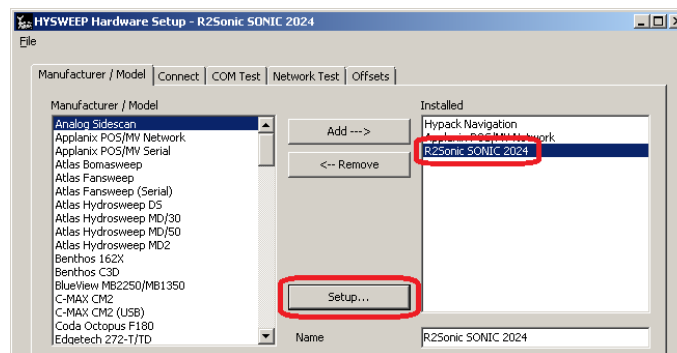
FIGURE 1. *Selecting Options in the Sonar Settings Window*

Dual Head Mode	Single head	
TruePix Enable	☒	☐
Snippets Enable	☒	☐
Water Column Enable	☐	☐

IN HYSWEEP® HARDWARE

Highlight R2Sonic SONIC 2024 and click [Setup].

FIGURE 2. *Accessing the Setup Dialog for the R2Sonic Sonic 2024*

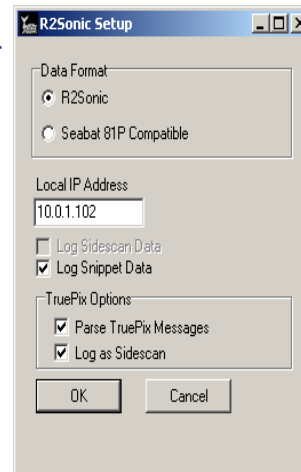


To collect the data, there are a few options to select. The following sections describe them.

HYSWEEP® SURVEY VERSION 13.0.6.0 AND EARLIER

FIGURE 3. R2Sonic Setup Dialog

- **Log Snippet Data:**
 - Records both Snippets and/or TruePix data in *.R2S files. (It records one or the other, or both, dependent upon how the R2Sonic's Sonic Control 2000 software is set up.)
 - It can record both Snippets and TruePix simultaneously, although, it is not recommended.
 - Snippets data is displayed in the Intensity Waterfall Window, *if TruePix data is not being sent simultaneously.*
- **Parse TruePix Messages:**
 - Displays the **TruePix** Average Intensity value for each beam in the Intensity Waterfall Window.



Note: This is a lower resolution, real-time image of the TruePix data.

- **Log as Side scan:**
 - Records the TruePix data in the RSS records of the HSX files. (This records the data as native Side Scan data and creates much larger HSX files.)
 - Displays the TruePix data in the Side scan Waterfall Window.

Note: This is a higher resolution, real-time image of the TruePix data.

- Useful to our programming Staff for debugging .

Important: Using the '**Log as Sidescan**' option works for TruePix data *only* when the Sector Coverage inside the Sonic Control 2000 software is set to 120 degrees or less. If you set it to a value larger than 120 degrees or a longer Range (approximately 75 meters or larger), the HYSWEEP® SURVEY program will crash. Please use HYSWEEP® SURVEY version 13.0.7.0 or newer to resolve this issue.

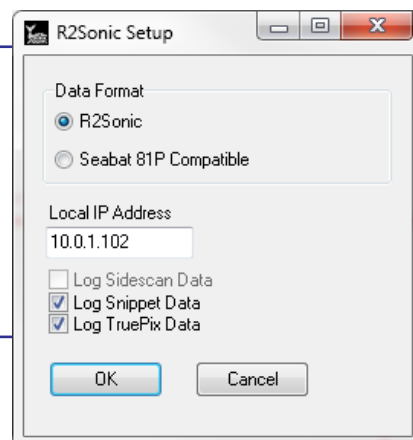
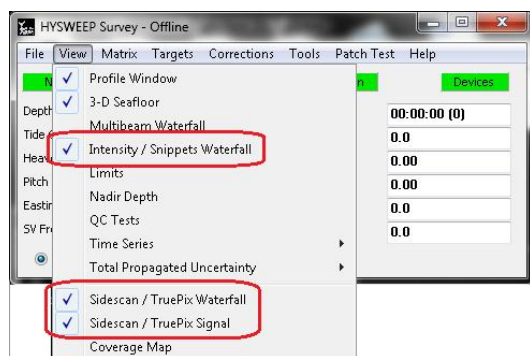
HYSWEEP® SURVEY VERSION 13.0.7.0 AND NEWER

FIGURE 4. R2Sonic Setup Dialog

- **Log Snippet Data**

- Records Snippets data in the *.R2S files.
- Displays the Snippets data in the Intensity/Snippets Waterfall Window in real-time.

FIGURE 5. Viewing Windows that Display Snippets Data in HYSWEEP® SURVEY



- **Log TruePix Data**

- Records TruePix data in the *.R2S files and RSS records in the HSX file.
- Displays TruePix data in the Side scan/TruePix Waterfall and Side scan/TruePix Signal Windows in real-time.
- Displays the TruePix Average Intensity value for each beam in the Intensity/Snippets Waterfall Window

If both the 'Log Snippet Data' and 'Log TruePix Data' options are selected, both Snippets and TruePix data is logged in the *.R2S file.

Important: Even though the R2Sonic can output both Snippets and TruePix data simultaneously, and HYSWEEP® SURVEY can record both in the *.R2S files, it is *not* recommended that you do this.

If both TruePix and Snippets reside in the same *.R2S files, GEOCODER™ is not capable of parsing TruePix or Snippets, separately (and more than likely, it never will). When you process such data through the GEOCODER™ program, GEOCODER™ prioritizes reading the TruePix data, over the Snippets data.

To do a comparison between Snippets and TruePix, run the same lines twice, once collecting only Snippets, and once collecting only TruePix.

Important: Version 13.0.7.0 of HYSWEEP® SURVEY and newer can handle the larger sector coverage angles and longer ranges for TruePix without crashing the

HYSWEEP® SURVEY program. Please upgrade to this version of HYSWEEP® (or newer) to avoid any issues in the program when collecting TruePix data.

PROCESSING

You can display and mosaic TruePix data in the GEOCODER™ program in the same manner as the processing of the Snippets data in GEOCODER™. See http://www.hypack.com/new/portals/1/PDF/sb/07_11/Snippets.pdf.