

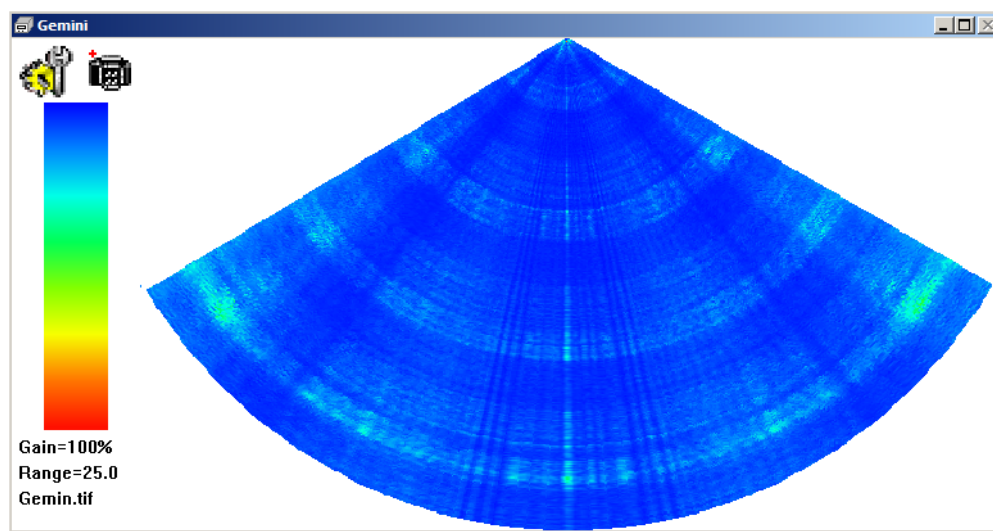


Integrating Tritech Gemini Sonar with HYPACK®

By Lazar Pevac

Gemini is multibeam imaging sonar that provides imagery of the underwater scene ahead.

FIGURE 1. Sample Gemini Device Window

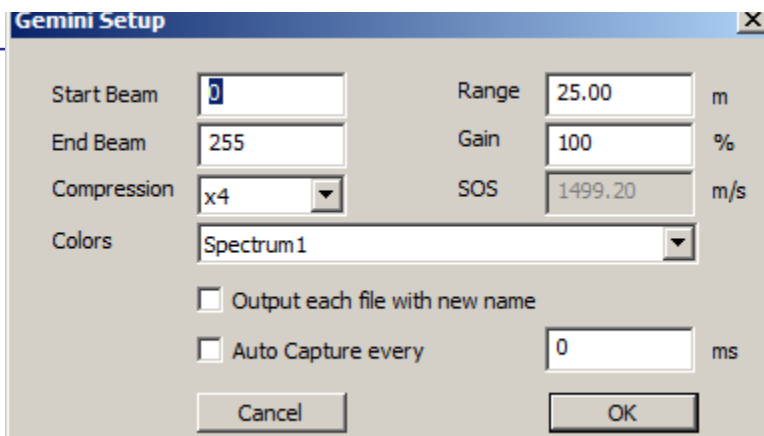


It requires a few things to adjust before you start surveying.

FIGURE 2. Gemini Setup

The same dialog that allows you to do additional adjustments is available while you are surveying:

- **Start Beam and End Beam:** The sonar has 256 beams representing the image from 0 to 120 degrees. If you do not need full view you can limit it selecting appropriate values for start/end beam.
- **Compression:** The sonar sends up to 19000 data per beam. However, it may slow your network down sometimes. To solve this problem, you can compress data 2,4,8, or 16 times.
- **Range:** You can select range from 0 to 50m. The bigger range will generate bigger data set.
- **Gain** parameter (0-100%) will help you to differentiate better surveying object. The value depends on the quality of the dataset.
- **Speed of Sound** is calculated automatically by the sonar and does not need user attention.



-
-
- **Colors:** There are 16 predefined color schemes at your choice.
 - **Auto Capture:** You can capture the image in geotif format. You can do it periodically (like every 5000 ms) or on demand.

The recommended device update rate is 500 ms (to will refresh the screen twice per second).

The sounder does not need any connection setup in HARDWARE, however, you have to set your IP to 196.168.2.100 unless you change factory IP for the sounder.