



Interface for CodaOctopus Ehoscope

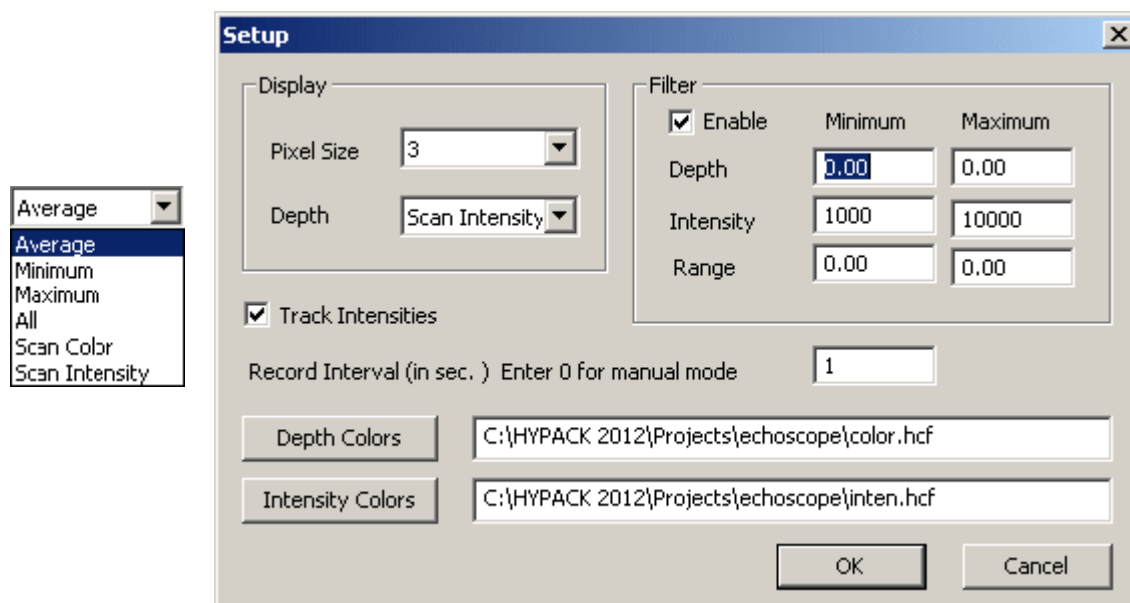
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An “Echoscope” is a sonar device which produces high resolution 3D images of underwater objects in real time. We designed a new device driver that can read and interpret Echoscope messages.

The driver uses a UDP connection (input port 50323). Each packet has up to 500k of binary data that yields up to 16384 soundings. This amount of data poses a real challenge for processing. To date, we have reduced the amount of data using a matrix. It is possible to use the driver without a matrix. In this case, you can see the cloud view of each incoming packet.

We also reduced the amount of data logged to speed up post-processing. The driver creates an ASCII “XYZ+Intensity” file at a user-specified rate. Each file contains up to 16384 soundings that correspond to the most current data packet. Our CLOUD program allows you to post-process these files easily.

FIGURE 1. *Adjust the Display, Filtering, and Record Interval in the Driver Setup Dialog*



If no matrix is present, the first four options in the depth combo box are disabled. In this case, you can only see the CLOUD view of the last scan using either the depth or the intensity color scheme.

Setting the filter minimum value to be greater or equal to maximum value will disable the filter.

Setting the record interval to '0' will disable data logging, but it will enable manual mode.

Every time you press 'S' the last ping will be saved.

The output file name format is “EShhmmss.XYZ” where “hhmmss” is the local time. All output data are located in the project /Sort directory.

FIGURE 2. *Device Window Maximum Option*

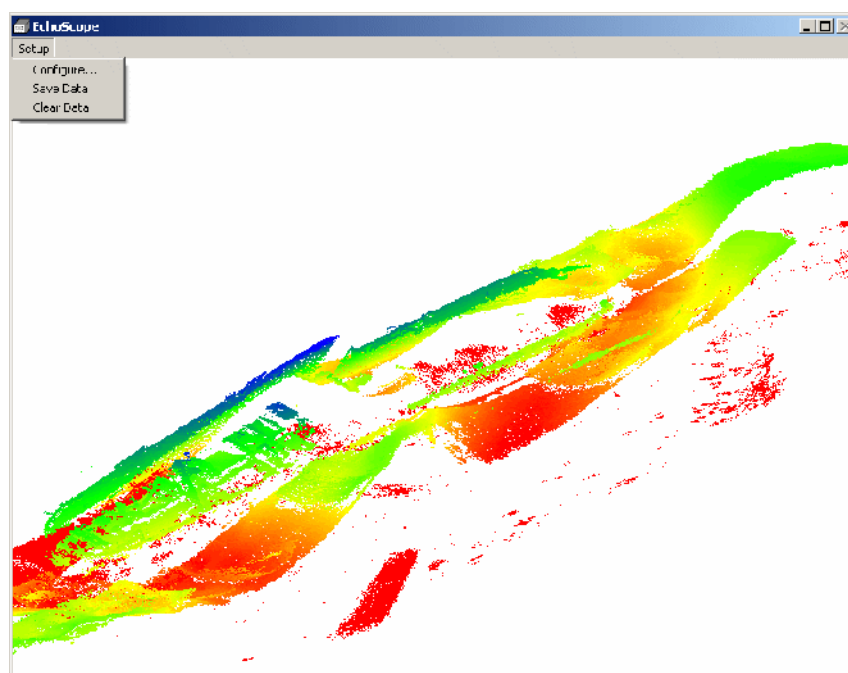


FIGURE 3. *Device Window Scan Color*

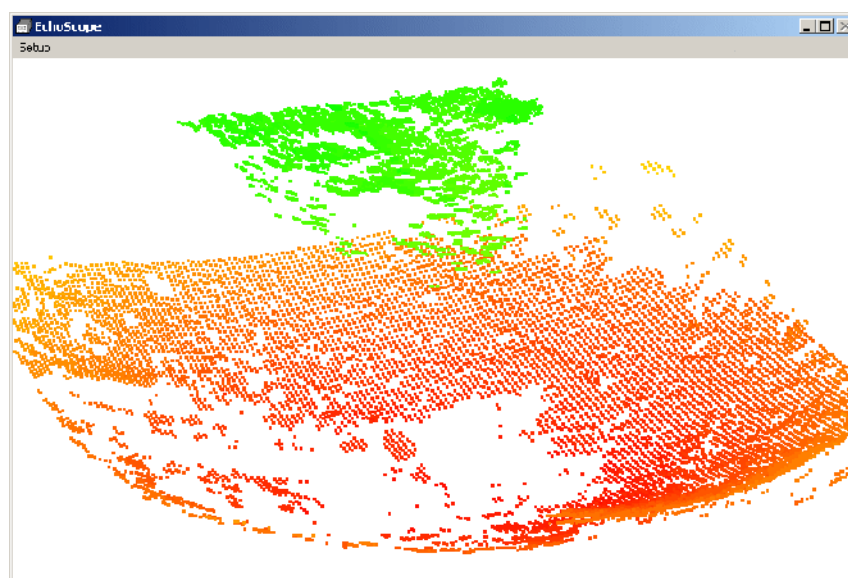


FIGURE 4. Device Window Scan Intensity Option

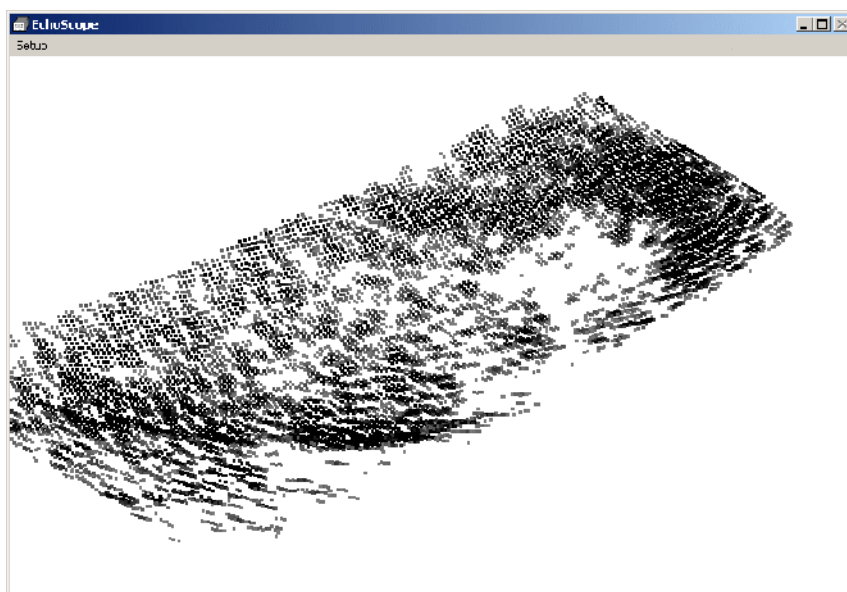


FIGURE 5. Survey Map Window.

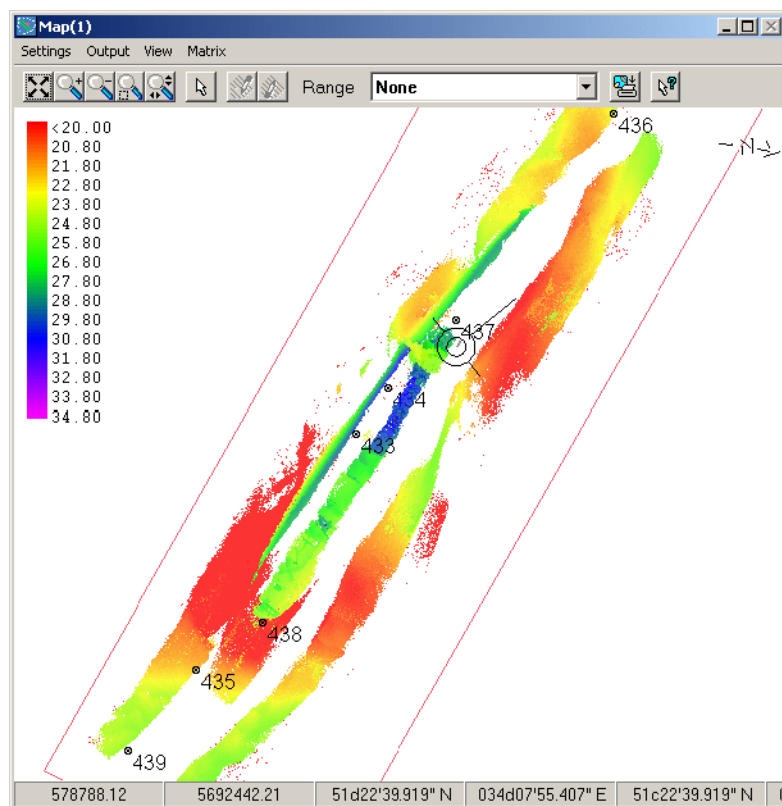


FIGURE 6. *Survey 3D Matrix Window.*

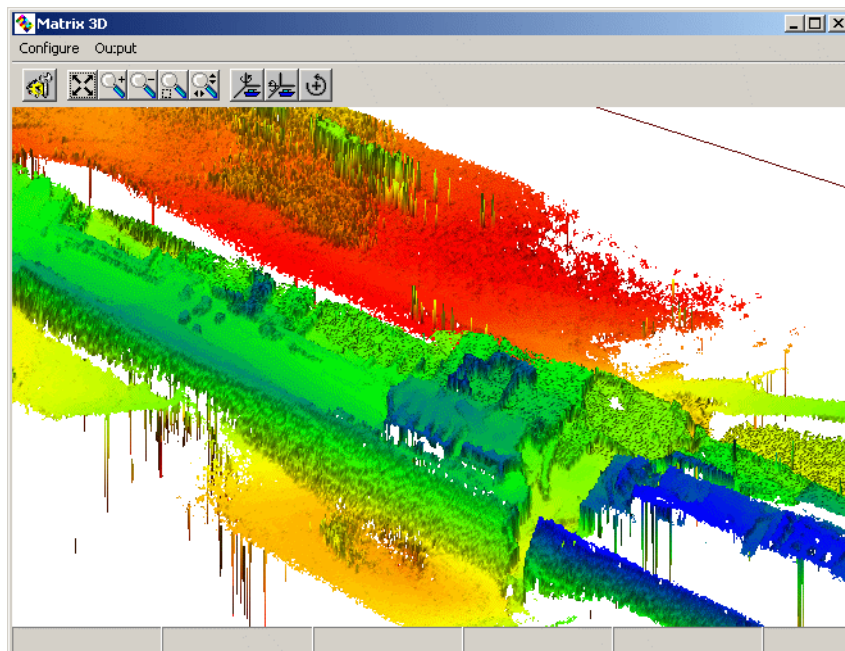


FIGURE 7. *Cloud Editor*

