



Magnetometer Driver

By Jerry Knisley

The interface for most magnetometers in the HYPACK® software a single device driver, the magnetometer.dll. This allows all magnetometers to share the same display graphics and logging abilities.

The primary display for the magnetometer is the strip chart. It works like a fathometer scroll on its side. New data arrives at the top of the scroll and is moved down the chart as it is replaced. The higher the gamma reading the farther to the right the charted line is. The gamma reading is charted at two scales in the same strip chart.

FIGURE 1. Magnetometer device Window in Survey

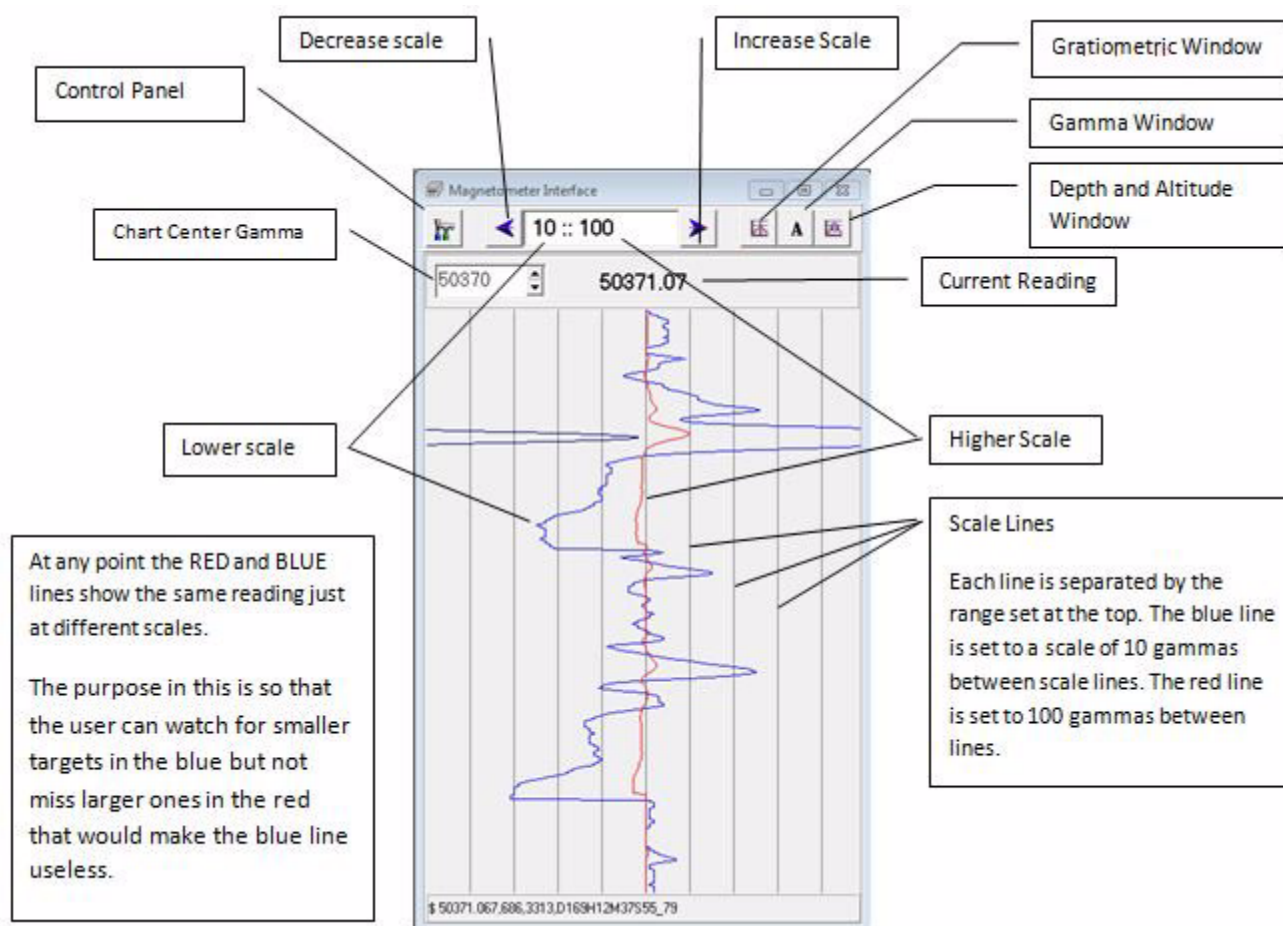


TABLE 1. The Current List of Supported Magnetometers:

Geometrics 881	SMM II
Geometrics 882	UC MAG
Marine Magnetics Seaspy (Standard)	Geometrics G-858 Mag Mapper
Marine Magnetics Seaspy (Compact)	IXSEA Magis
Scintrex Envirograd	Marine Magnetics Seaquest (+ Compass)
J.W. Fisher Proton 4	Marine Magnetics Seaquest (no Compass)
DF 1000 (Serial Mag)	Insight Marine Geometrics 881 (dual Mag)

SETUP DIALOG

The Setup Dialog provides several key items that must be configured to read the appropriate message from the magnetometer.

FIGURE 2. Magnetometer Driver Configuration in HYPACK® HARDWARE

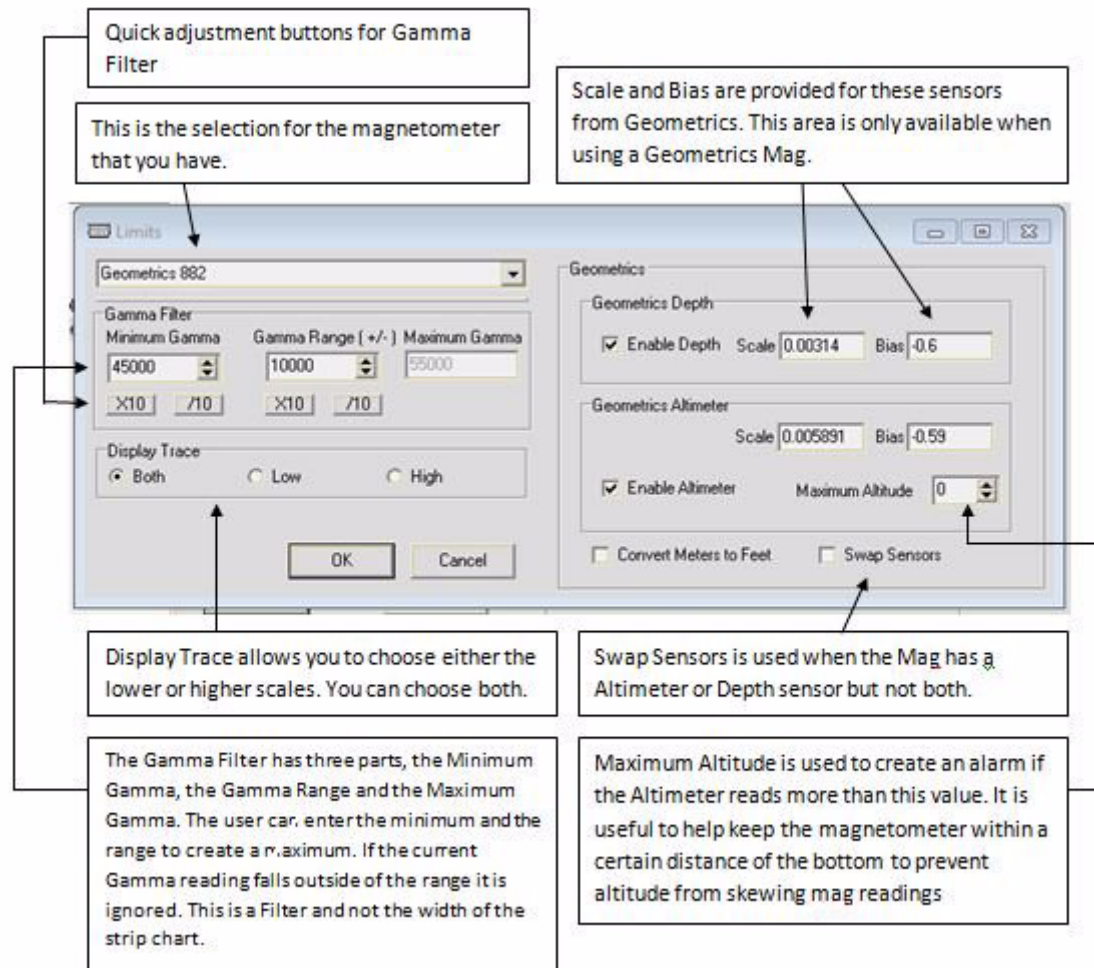


FIGURE 3. Events are time-based

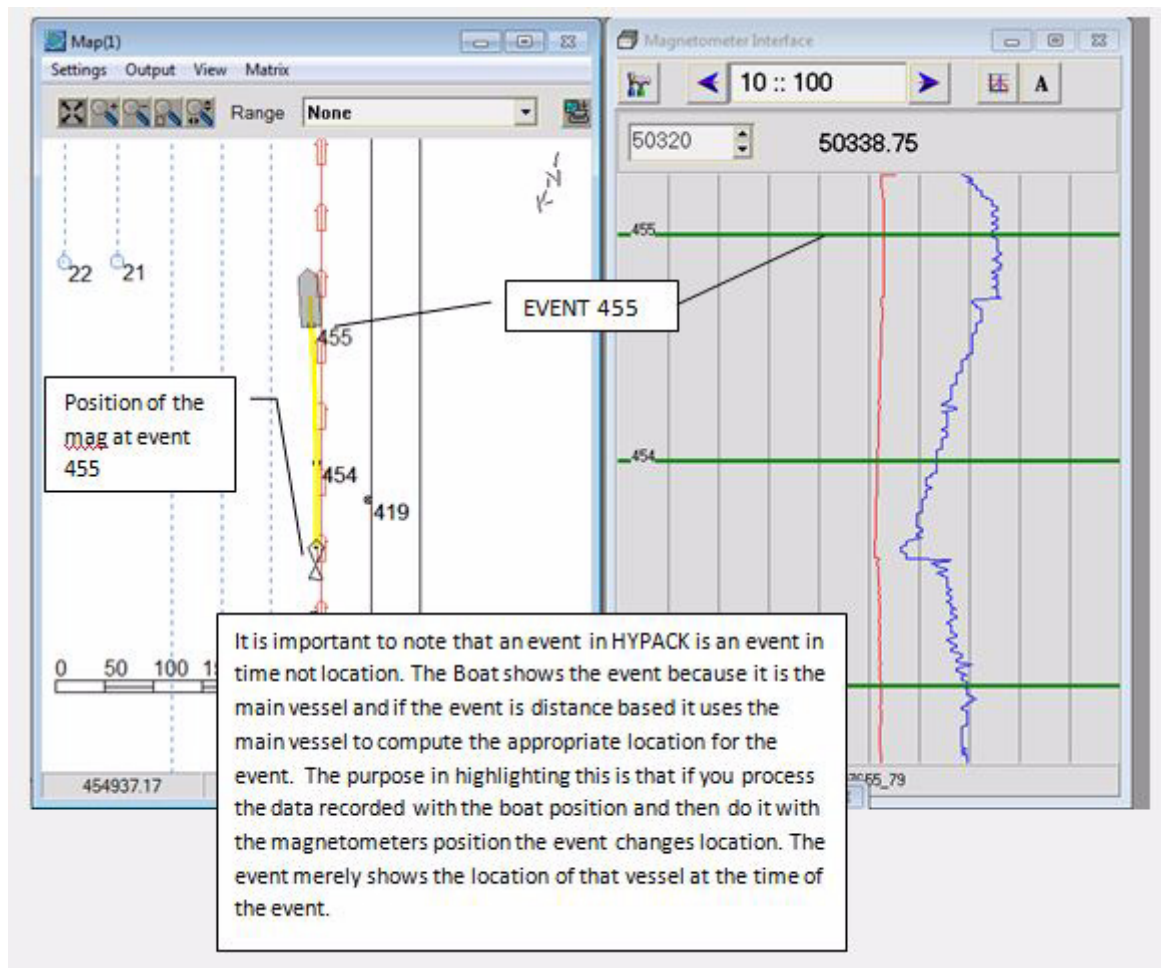


FIGURE 4. Magnetometer Depth + Altitude = Water Depth

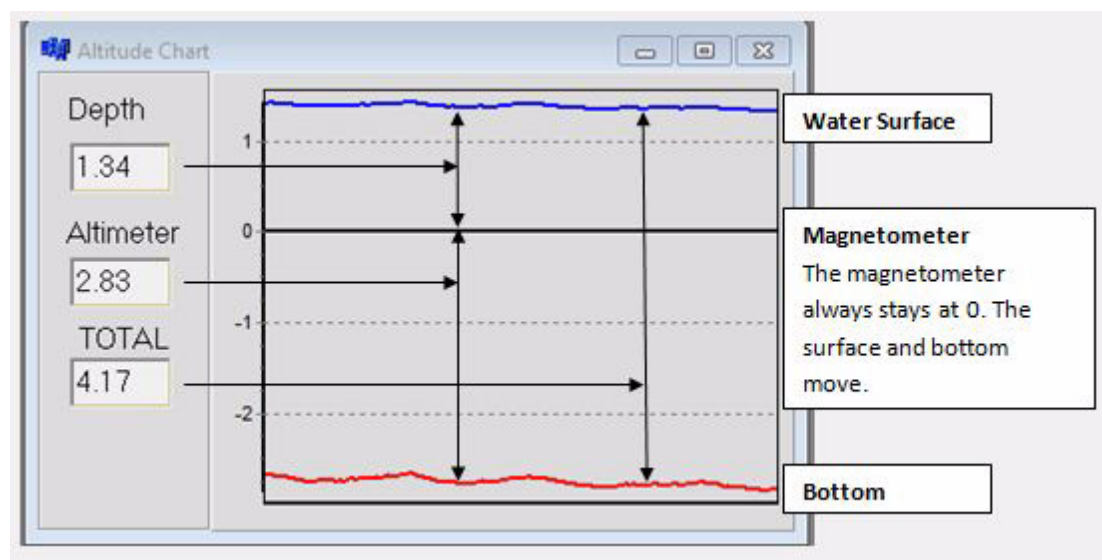


FIGURE 5. Calculating target size in the Magnetometer Interface

