

## **IMAGENEX MODEL 878 "RGB" SIDESCAN SONAR**

The Imagenex Model 878 "RGB" Sidescan Sonar is the next generation in high resolution sidescan sonar. The unit runs three simultaneous sonars on each side at different sound wavelengths, providing enhanced image clarity and now, for the first time, the ability to discriminate targets based on their acoustic "colour". Just as your eyes see in colour, the RGB sonar uses different wavelengths of sound, translating them directly to colours on the display on a Windows™ based laptop or desktop PC.

The three individual sonars on each side are synchronized and beam pattern matched. Displaying the data using 24 bit colour (one sonar red, one green and one blue) provides a combination of overall reflectivity (brightness) and differential reflectivity (colour) for every data point on the screen. This is a new dimension of information unseen by any other sonar. The human eye is very sensitive to colour, so previously undiscovered data features and trends are readily observed. To further enhance these unique sonar capabilities, the towfish is equipped with an echo sounder and a built-in orientation module as well as depth and temperature sensors.

The Model 878 system is run with a mature (based on the popular Yellowfin sidescan software package) Microsoft Windows™ based software package for real time operation and data playback. Data from each individual sonar can also be displayed independently in real time or playback such that the unique advantages of each sound wavelength (or frequency) are also available. The software interfaces with an included surface interface box using a standard high speed Ethernet connection. This surface interface box also contains an integrated towfish power supply and a built-in internal GPS receiver.

The Model 878 system comes as a completely integrated package, including towfish, tow cable, surface interface box, and software, thus providing a complete, easy to use, but highly advanced acoustic bottom visualization system.

