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TECHNICAL DATA SHEET



Scan-650A
for larger ROV's

Scan-650B
for smaller ROV's

Surface Sonar Processor Included

TWO DIFFERENT PACKAGES, SAME HIGH PERFORMANCE UNIT

- HIGH RESOLUTION PICTURE OF SEA BOTTOM
- FAST SCAN EVEN ON 1/2 DEG STEPS (uses A/D supplied board)
- 1/2, 1, 1 1/2, OR 2 DEGREE STEPS
- 360 DEG CONTINUOUS SWEEP, OR ANY PORTION OF 360 DEG
- TARGET SIZING
- 256 COLORS
- FOR LAPTOP OR DESKTOP
- 2 YEAR WARRANTY



MOUNTS ON ANY ROV

SCAN-650 Scanning Sonar

Scanning sonar is an ideal tool for underwater search because it produces a "picture" of the underwater environment regardless of the water visibility. It does this by sending out a sound wave that reflects off objects on the bottom or in the water column. The reflected wave returns to the sonar head where it is received and sent to the surface for display. The reflected sonar image is displayed on a laptop computer.

Fishers SCAN-650 is a high performance scanning sonar system that can be mounted on an ROV or pole-mounted for use from a small boat in shallow water. The scanning sonar serves as an obstacle avoidance system and provides target identification. The sonar beam sweeps in a 360 degree circle (or any portion of 360) allowing any object in the sonars "field of view" to be seen and displayed on the computer monitor.

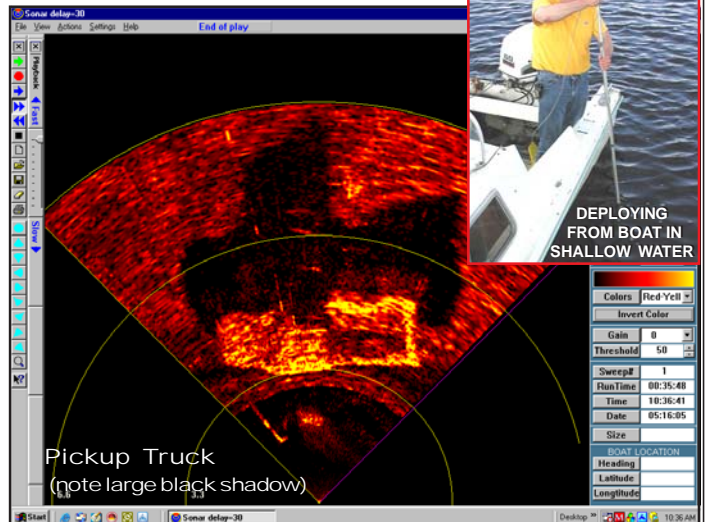
In a typical application the sonar head or transducer is mounted on top of an ROV. The head scans a circle around the ROV and "sees" targets in all directions, including those that are well beyond camera range. The sonar images are displayed on the topside computer. The operator, using the sonar for direction bearings, drives the ROV to the various targets for identification and videotaping.

Scanned data files are stored on the PC's hard drive along with boat's GPS position, time, date, and other pertinent data. The recorded files can be played back at anytime. Software is provided to allow post-processing of data including editing and merging of files. Small file sections, including screenshots, can be edited out and copied to a small file for emailing. A sizing tool is included in the software which allows the operator to determine the size of the targets on the screen.

The system package includes the sonar head with "downstairs" electronics, cable to the surface, surface sonar processor, USB cable to your computer, and software.

The SCAN-650 uses a unique data transfer technique when transferring data between the scanning head and the upstairs sonar processor that cuts the time to complete a scan by as much as 50% over other manufacture's units; and it does it without any loss of data. Operating at twice the scan speed is very important when having to search large areas.

Fishers SCAN-650 is ruggedly built for commercial operations, and is covered by a full 2 year warranty. (continued on back)



DEPLOYING FROM BOAT IN SHALLOW WATER

Pickup Truck
(note large black shadow)

SPECIFICATIONS

PERFORMANCE/DESCRIPTION:

- Frequency 650 kHz.
- Beamwidth - horizontal x vertical 2.4 deg by 40 deg.
- Ranges: 5, 10, 20, 40 meters.
- Max depth 300 m (1,000 ft).
- Input voltage
 - Sonar Processor 9-12 vdc or 120/220 vac (5 watt).
 - Sonar Head from Sonar Processor or 9-36 from ROV (7 watt).
- Cable 2 or 4 conductor.

DIMENSIONS/WEIGHT:

- Sonar Processor Box 8"Wx9"Dx2.5"H 2 lbs.
- Cable 150 - 2,000 feet 7 - 90 lbs.

650A:

- Sonar head and housing 3.5"Dia x 10.5"L 3.6/0 lbs.

650B:

- Sonar head 3.5"Dia x 4.25"L 1.4 lbs/6oz.
- Housing 3.5"Dia x 9"L 2.8/0 lbs.

OPTIONS

- up to 2,000 feet of cable
- Carrying case