# DIGITAL SCIENTIFIC ECHOSOUNDERS

BioSonics, Inc. - World Leader in Digital Scientific Echosounder Technologies



## AQUATIC HABITAT ASSESSMENT AND MAPPING

Assessment of Submersed Aquatic Vegetation (SAV) Substrate Classification – delineate sand, mud, rock Bathymetric Mapping

## **Performance Features**

- Portable, weatherproof, and rugged with storage for cables and transducer
- Precision instrument, calibrated and highly accurate
- Complete with software for data
  acquisition, processing and visualization
- GENERATE MAPS INSTANTLY
- Integrated DGPS sensor to geo-reference
  data
- High resolution. full color echogram

### **Specifications**

- Transmit Power: 105 Watts RMS
- Input power: 12-18 VDC or 85-264 VAC
- Draw: 5 Watts Fuse: 3 amp
- Transmit source level: 213 dB re 1uPa
- Pulse length: 0.4ms
- Ping rate 5Hz
- Range resolution: 1.7cm
- Accuracy: 1.7cm +/- 0.2% of depth
- Depth range: 0-100m
- Operating conditions: 0-50 °C
- DGPS positional accuracy: <3m, 95% typical
- DGPS velocity accuracy: 0.1 knot rms
- DGPS update rate: 1sec

## Dimensions

- Echosounder Unit: 37cm x 26cm x 15cm (14.6" x 10.2"x 6"), Wt. 5.4 kg (12lbs)
- Transducer: 8.4cm L x 4.3cm diam (3.3"x1.7")
  1.36 kg (3lb), Stem threads 1/2" NPS

### Transducer

- Single frequency 204.8 kHz
- Beam angle 8.5 degree conical
- Low side lobes to -18 dB
- Heavy duty stainless steel housing

#### Interfaces

- 1 x Ethernet (system control)
- 2 x RS232 (GPS in/out)
- 1 x BNC (external trigger)

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## **MX Series Technical Specifications and Features**

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ECHOSOUNDER QUICK START GUIDE

STEP 2

## **Data Analysis Software Features**

Visual Habitat - A complete analysis package that provides processing for:

- SAV canopy height, % cover, biomass
- Bathymetry produce highly accurate maps and depth charts
- Substrate classification delineate areas of rock, sand, mud

Export results as CSV or KML files

Quickly generate maps showing transect lines with bathymetry, bottom type, and vegetation presence



