

ARC Explorer

Towed Side Scan Sonar

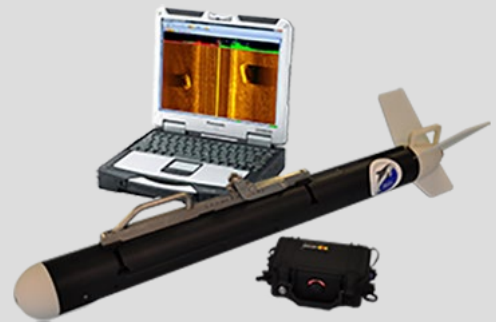
Marine Sonic Technology



Sea Scan[®] ARC Explorer

Adaptive CHIRP | Billet Aluminum | Interchangeable Transducers

Marine Sonic Technology is innovating the side-scan sonar market yet again with the Sea Scan ARC towed system. Our ARC Generation systems utilize our latest proprietary technology, Adaptive CHIRP. This technology provides extended ranges, minimal power consumption, and more accurate results for faster surveys, both critical components of side-scan sonar missions. The Sea Scan ARC Explorer tow fish is constructed using hard anodized billet aluminum, stainless steel, and durable polymers. It features a built in Variable Angle Tow Point for ultimate imaging flexibility. Field replaceable transducers allow the user to quickly adapt the sonar to various conditions without compromising range or resolution. Up to four frequencies can be installed on the same tow fish at any time. Modular construction minimizes the maintenance costs and maximizes upgrade capability.



Marine Sonic Technology is excited about our new Sea Scan ARC technology, and we are looking forward to employing it in our new systems for years to come. Marine Sonic Technology's Sea Scan ARC Explorer tow fish will include removable fins. With only one screw, you can remove all four back fins providing a slimmer profile to fit a smaller case. This allows better portability in the same rugged style as before. We're also introducing our first tow fish with a wet-mate tow cable connector for added system safety! As with all Marine Sonic Technology systems, it comes with our unparalleled customer-service experience including a standard 1 day in-house training (on-location also available for an additional fee), a 3-year limited warranty, and TRUE 24/7 technical support for those late night missions where time is of the essence.

Applications

- Search & Recovery (Victim & Evidence)
- Security Scans for Piers, Docks, & Bridges
- Civil Infrastructure Inspection
- Salvage, Treasure, & Diving Surveys
- Terrain Mapping & Obstruction Surveys
- Offshore Infrastructure Inspection
- Archaeological & Biological Surveys

Key Features

- Adaptive CHIRP
- Interchangeable Transducers
- Billet Aluminum Construction
- Built in Variable Angle Bracket
- Detachable Fins
- 100 m & 30 m Cables Standard
- One Man Portable



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Sea Scan® ARC Explorer

Detachable Fins | Variable Angle Bracket | Quick Release Mechanism

Towfish Specifications

Construction	Marine Grad Aluminium
Dimensions	Diameter 10.1 cm / 4.0 in x Length 115.6 cm / 45.5 in
Weight	20.5 kg / 45 lbs
Depth Rating	300 m / 984 ft

Tow Cable Specifications

Construction	Single Coax with Kevlar Strength Member
Length Options	30 m to 300 m / 98 ft to 980 ft
Bend Radius	10 cm / 4 in
Strength	340 kg / 750 lbs, Safe Working Load

Topside Communications Unit Specifications

Construction	IP68 Watertight Enclosure
Dimensions	24 cm x 16.5 cm x 9 cm / 9.5 in x 6.5 in x 3.5 in
Connections	Ethernet / Towfish / Power
Power	10V - 36V DC, 100V - 200V AC with Adapter

Acoustic Specifications

Across Track Resolution	0.5 cm to 1.5 cm
Horizontal Beam Angle	0.4° (one-way), < 0.3° (two-way)
Vertical Beam Angle	24° (two-way)
Transmit Pulse Technology	Marine Sonic Technology Adaptive™ CHIRP
Transmit Pulse Bandwidth	50 to 200 kHz
Transmit Pulse Length	< 0.5 ms
Data Collection Speed	5.3 Knots Max. (4.7 Knots @ 100 m Range)

Frequency Specifications

Frequency	Max Range (per side)	Along Track Resolution
150 kHz	500 m / 1640 ft	60.8 cm
300 kHz	250 m / 820 ft	30.4 cm
600 kHz	140 m / 460 ft	15.2 cm
900 kHz	80 m / 262 ft	10.0 cm
1200 kHz	45 m / 148 ft	7.5 cm
1800 kHz	25 m / 82 ft	5.0 cm

The system is powered by AC or DC voltage, and as standard with our previous models, the Sea Scan ARC Explorer comes with a quick-release mechanism to prevent the loss of the tow fish should it strike an object during the survey. The ARC Generation will continue to use the highly praised Sea Scan Survey acquisition and review software which is designed for Windows-based PC's and is widely known for its ease of use. The system components are packaged in rugged, hardened, and watertight cases to provide the utmost in protection during shipping and storage.



The above image of the *Betsy*, known as YO88 sunk in 1781, Yorktown River, was taken with the ARC Explorer using 1200 kHz transducers at a 40 m Range. The corrugated steel cofferdam is clearly visible around the wreck highlighted by the density of the steel. The less dense elongated concrete blocks protecting the top of the wreck resemble the ship's deck and can be distinguished from the steel.

We Pride ourselves on our Customer Support.

- Free 24hr Tech Support
- Free Factory Training
- Free Software Upgrades
- 3-year limited warranty

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