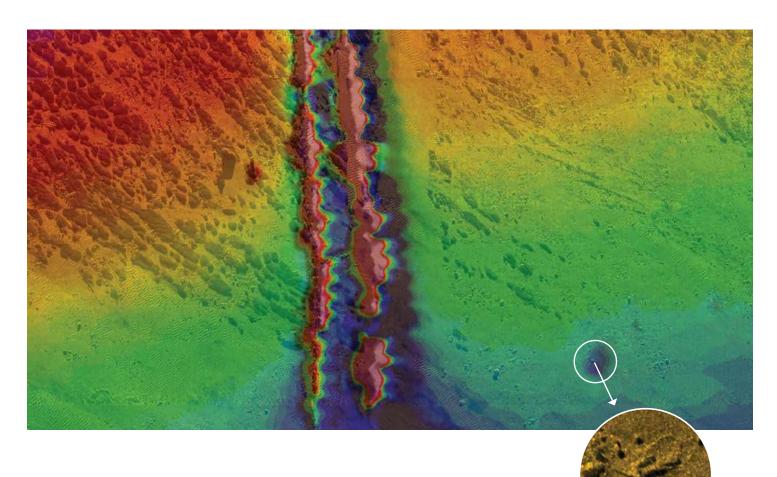
# Side Scan

### Integrations for Synapse, SeaSPY2, SeaQuest2 and Explorer



#### How Does the Side Scan Tow the Mag?

The Side Scan operates as usual, towed by the manufacturer's standard cable. A connector is added to the Side Scan towfish for an electrical connection between the mag and Side Scan. Our integration cable mates to that connector on one end, and the mag on the other. This allows for the entire system to be towed by the Side Scan cable and for the mag to be connected to the Side Scan with the integration cable.

#### **Are There Any Modifications to the Mag?**

No. All of the electronics, and the mechanical connection are on the integration cable. The mag is not modified.

#### What Does the Integration Cable Consist Of?

A lightweight 10m tow cable terminated with a stainless steel housing rated to 3000m. The housing provides an electrical and mechanical tow point for connection between the Side Scan towfish and the mag.

**Above:** pipelines and a small boat anchor detected by both the mag and the Side Scan. Other mag anomalies are not visible in the Side Scan record, indicating that they are buried objects and undetectable by sonar.

The two data types are extremely complimentary and together allow for powerful analysis of many geophysical variables. The data was collected at the same time, by the Iver 2 AUV. The Explorer magnetometer data was then overlaid onto a mosaic of the Side Scan data.

# How Do I Connect the Two?

#### **Electrical Connection**

The electronics provide power conditioning and everything required to interface with the Side Scan. The electronics continuously limit the output power, ensuring that no damage will occur to the mag/grad or Side Scan if the contacts in the integration cable are inadvertently shorted.

#### **Mechanical Tow Point**

The interface tow point connects to an extension bar fastened to the Side Scan. The Side Scan tow cable connects to the top of the bar, and our interface clips directly to the bar with a clevis pin (provided), through a universal link that allows swivel action in two dimensions, while preventing the towfish from rotating.

## How Does the Data Get to Me?

#### **Digital Output**

The digital data output from our products is sent to a data input port on the Side Scan unit. The Side Scan's telemetry is used to relay the magnetometer data to the surface, where it's then decoded from the Side Scan data stream and can be viewed using BOB, our data acquisition software on your PC.

#### **Options**

- Interface housings rated to 6000m
- Longer or shorter integration cable lengths
- Flotation tow cable



During our sea trials, we found that the 10m separation prevented the mag from smashing up against the survey vessel when the Side Scan was being retrieved.

To meet your requirements, shorter or longer cable lengths are available, upon request.

### Who we've integrated with:

	SeaSPY1	SeaSPY2	SeaSPY2 Gradiometer	Explorer	SeaQuest2
C-Max	CM2	CM2	CM2	CM2	_
EdgeTech	DF-1000, DT-1, 4200, 2000-DSS, 2400	DF-1000, DT-1, 4200, 4205, 2000-DSS, 2205, 2400, DSS2050	DF-1000, DT-1, 4200, 4205, 2000-DSS, 2400, DSS2050	DF-1000, DT-1, 4200, 4205, 2000-DSS, 2400	4200, 4205
Falmouth Scientific	HMS625	HMS625	HMS625	HMS625	_
Klein Marine Systems	3000, 3000H, 3900, 4900, 5000, 5000 v2, MA-X View 600, DT3500F	3000, 3000H, 3900, 4000, 4900, 5000, 5000 v2, MA-X View 600, DT3500F	3000, 3000H, 3900, 4000, 4900, 5000, 5000 v2, MA-X View 600, DT3500F	3000, 3000H, 3900, 4000, 4900, 5000, 5000 v2, MA-X View 600, DT3500F	3000
Kongsberg GeoAcoustics	2000, s2049D	2000, s2049D	2000, s2049D	2000, s2049D	_
Marine Sonics	SeaScan HDS, ARC Explorer 1 & 2	SeaScan HDS, ARC Explorer 1 & 2	SeaScan HDS, ARC Explorer 1 & 2	SeaScan HDS, ARC Explorer 1 & 2	-
Teledyne Benthos	SIS-1000, 1500, 1624, 1625, C3D, SIS-1725	SIS-1000, 1500, 1624, 1625, C3D, SIS-1725, TTV190	SIS-1000, 1500, 1624, 1625, C3D, SIS-1725	SIS-1000, 1500, 1624, 1625, C3D, SIS-1725	_
Tritech Int. Ltd, A Moog Inc. Company	SeaKing	SeaKing	SeaKing	SeaKing	_