



## WORLD CLASS UNDERWATER TECHNOLOGY

The **SV4000** is a fully field tested, long range sonar, capable for ranges up to 300m from Sonavision and is the only miniature sonar with the performance of a high resolution sonar. The **SV4000** is designed for use, without compromise to quality of resolution.

### Clarity without compromise.

The **SV4000** is manufactured as standard in a titanium pressure housing for use up to 1000m water depths.

**SV4000** exhibits outstanding acoustic performance over a wide frequency range in 1kHz steps. It has excellent long range performance at 600kHz and extremely high resolution at 1.2MHz.

Sonavision, with twenty years experience in designing scanning sonars, was the first commercial user of Composite PZT in scanning sonars.

**SV4000** uses a special wideband 1:3 Piezo Composite Transducer, enclosed in a fluid filled head. The benefits of using composite transducers are enhanced beam control, optimisation of transmit and receive and suppressed side-lobes to reduce false returns.

**SV4000** has a titanium shelled underwater mating connector and built-in electronics for on-time servicing. The dual seals can be checked visually for seal integrity without having to open up unit.

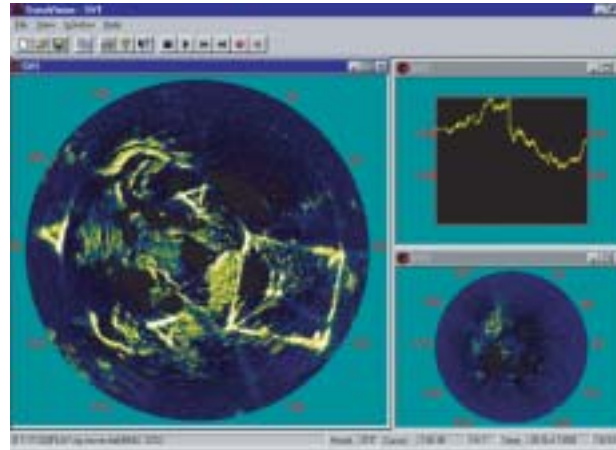
Communication is by RS232 or RS485 and **SV4000** can be used with PC, laptop or Minerva SCU with Sonavision Software, which is available from the web and does not require user licence or key. The **SV4000** is also backward compatible with SV2050, 2055 and 2060 Surface Units.

## APPLICATIONS

- **Workclass ROV Navigation**
- **Ploughs / Crawlers / Pipelaying Vehicles**
- **Rig Positioning & Underwater Civil Engineering**
- **Long Range Debris Monitoring / Mapping**

# SV4000 Sonar

CLARITY WITHOUT COMPROMISE



View of rig legs



## FEATURES

- **Solid and Rugged Construction**
- **Dual Transducer - Tx & Rx for Low Noise**
- **High Acoustic Performance**
- **True Acoustic Zoom**
- **Can be PC Driven on Interface**
- **Supplied with Non-Licensed Sonavision Software**
- **Automatic Software Controlled Adjusting Receiver, for Best Range Performance**

## SUBSEA UNIT SPECIFICATIONS

Height	390mm
Diameter	107mm
Weight (in Air)	7.7kg
Weight (in Water)	2.5kg
Temperature: Operating Storage	0°C to +40°C -20°C to +50°C
Construction	Titanium Body, UPVC Transducer
Depth Rating	1,000m (Standard) Deeper Housings Available - SV3000, SV6000
Power Consumption	15 Watts
Power Requirements	+18 to 32VDC
Max Umbilical Length	1,500m (RG108 or similar twisted pair with a DC Loop Resistance of less than 220 Ohms)
Telemetry Link	FSK/RS422
Mounting	Upright, Inverted or Profile
Scan Modes	Forward / Reverse / Auto
Built-in Timer for Indication of Hours Run	
Variable Speed Selection	
Visual Check for Seal Integrity	
Automatic Software Controlled Receiver	
Fully Field Serviceable	
Supplied with Packing Case	

The **SV4000** Transmitter and Receiver electronics are tunable via software from 150kHz to 1.5MHz (Factory only option).

Various beam angles and frequencies are available, e.g. 1MHz, 500kHz or 200kHz long range. The **SV4000** is also available as a dual frequency head in either a 200 / 500kHz and 500 / 1MHz combination.

An adaptor can be supplied which is compatible with most subsea connectors. Please contact factory for details of these options or any special designs.

## TRANSDUCER SPECIFICATIONS - 500kHz

Beamwidth: Transmit Receive	27° vert. x 2.1° horz. 27° vert. x 3.0° horz.
MDS	74dB
Source Level	210dB re 1µP at 1m
Pulse Length	100µsec
Bandwidth	10kHz

## OPTIONS AVAILABLE

Type	Frequency	Range
Single Frequency	500	100m
Single Frequency	200	300m
Dual Frequency	200 / 500	250m
Dual Frequency	250 / 1000	100m

Sonavision operate a policy of continual product development. As a result, changes to specifications can occur.