



World Class Underwater Technology

Subcom 2000 System

Emergency Through Water Communication System



Features:

- 1000m Pressure Rating
- Optional high visibility strobe light
- Up to 3km range
- Robust construction
- Simple but effective operation
- Suitable for air & helium environments
- Easily maintained owing to modular system installation
- Minimum 20 hour independent operating time when used with system Battery Pack

Applications:

- Emergency Comms in event of diving bell accident or umbilical failure
- Manned submersibles communications
- Tourist submarine communications
- Naval rescue submarine communications

Description:

The Subcom 2000 Emergency Communications System is designed primarily for back-up to the umbilical wired comms generally used in diving bells.

The Subcom 2000 would be used in the event of failure of the wired system. The system provides through-water communication which does not rely on the integrity of the bell's umbilical but operates acoustically through the water column between two transducers.

With its own battery pack, it will operate for a minimum of 20 hours under normal conditions. Subcom 2000 incorporates an extremely reliable single side-band, suppressed carrier system.

It operates at 27KHz with 4.2KHz bandwidth. All of the bell unit electronics are housed in external pressure housings to avoid helium ingress and problems with high humidity.



Physical Specifications

Surface Unit		Bell Internal Unit		Bell Battery Pack		Bell Electronics External	
Height	160mm	Height	160mm	Height	465mm	Height	465mm
Width	520mm	Width	260mm	Width	152mm	Width	152mm
Depth	310mm	Depth	95mm	Weight (in air)	11kg	Weight (in air)	8kg
Weight	16.5kg	Weight	3kg	Weight (in water)	3.5kg	Weight (in water)	1.5kg
Transducers		Transducer Cable Length		Bell Transducer Weight		Surface Transducer	
Height	115mm	Bell Transducer	4m	In Air	1.4kg	In Air	9kg
Diameter	60mm	Surface Transducer	60m	In Water	0.9kg	In Water	5kg

System Specifications

Carrier	25kHz
Transmission Frequency	25.3 - 29.5kHz
Audio frequency bandwidth	4.2kHz
Modulation	Single side band suppressed carrier
Transmit Power	10 watts
Receiver sensitivity	0.40 bar
Audio power	1 watt into 8 Ohm
Power requirement	24V DC for Bell External Unit 24V Bell Battery Pack Internal Battery Pack for Surface Unit (24v/4AH or external 24VDC) External 230V / 110VAC, 50/60Hz
Recharge voltage	
Standby current	80mA
Transmit current	500mA
Transducers	Polyurethane encapsulated pre-stressed piston
Beam pattern	Hemispherical
Depth Rating (external unit)	600m
Battery capacity (surface unit)	20 Hours (20% transmit)
Battery capacity (bell unit)	20 Hours (20% transmit)

SONAVISION

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Unit 12, Energy Development Centre, Aberdeen Science & Energy Park
Bridge Of Don, Aberdeen, AB23 8GD United Kingdom
T +44 (0) 1224 707737 F +44 (0) 1224 827290

www.sonavision.co.uk