

Subphone *by Subsea Import Corporation*

Model 580



The Subphone is a wireless, dual channel, long-range communication system designed specifically for communications between submarines, submersibles, surface vessels and divers.

The Subphone's proven and sophisticated technology is unequalled in the industry in terms of:

- clarity of speech and noise immunity
- value
- extended range of up to 10 km (6+ miles) @ 10KHz
- clear communications in strong currents and around obstacles,
- ease of use
- reliability in professional use.
- compact size (the 19" rack mount model is only 3-1/2" high =2RU)

Crystal-controlled single sideband (SSB) ultrasonic techniques provide distortion-free transmission. Sophisticated and propriety electronic circuitry and filtering enhance speech clarity and reduce extraneous noises, thereby providing optimum clarity even under adverse conditions.

The Subphone has high and low power capabilities enabling the user to conserve battery life and reduce the acoustic foot print for shorter range communications. The option of dual-frequency also offers a Subphone operator the capability of choosing the best frequency for communicating under various ocean conditions.

The Subphone provides two transducer connections per channel allowing both upper and lower transducer installations on a submarine or submersible. Inputs for both hand microphone and headset are provided as well as an output for tape recording. Options for an output to integrate the Subphone into an onboard sound system are available as well as for CW operation. A self contained portable carry case to house the unit is also available.

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Subphone Model 580 and 580TX

In addition to the standard Subphone with a range of 10 km on 10 kHz, the Subphone TX, a lower powered model with a range of 5 km / 10 kHz is also available. The Subphone TX is designed for applications such as tourist submarines, where the submarine is never at any great distance from the surface vessel.

An additional feature of either Subphone model in tourist submarine applications is that the Subphone can be connected directly to the submarines public address system. Passengers are therefore able to become more involved with a presentation by listening to communications between submarine and accompanying divers, and by being able to ask questions themselves. The Subphone and Subphone TX provide the most affordable, high quality communications capability in a compact cabinet on the market today.



Features and Specifications:

- Portable or fixed models are available:
 - a) Portable, heavy-duty aluminum carry case with internal speaker, battery, battery charging circuitry, handheld microphone and accessory set. An optional headset c/w boom mic is available. (For a waterproof portable Subphone see model 2190).
 - b) Rack mounted for permanent installation, such as on board one-atmosphere submarines.
- Internal pinger mode for emergency situations.
- Tape outlet allows for recording of all communications.

	Subphone Model 580	Subphone Model 580TX
Operating Frequency	Two operating frequencies can be selected by the user. Custom frequencies can be provided.	Two operating frequencies can be selected by the user. Custom frequencies can be provided.
Modulation	Upper Single Sideband Suppressed Carrier	Upper Single Sideband Suppressed Carrier
Transmitter Activation	PTT (push-to talk)	PTT (push-to talk)
Transmitter Power	50 Watts rms (0.5 Watts rms on Low Power)	5 Watts rms
Receiver Audio Power	2 Watts rms	2 Watts rms
Receiver Gain Control	Automatic, AGC > 90dB	Automatic or Manual > 90dB
Nominal Range open water	10 Km @ 10KHz, 6 Km @ 27KHz	3 Km
Power Supply	24VDC 5 Amp Peak	24VDC or optional 12VDC
Pinger	15msec / sec pulse	15msec / sec pulse
Speaker Output	4 ohms 2 watts	4 ohms 2 watts
Tape Output	Yes	Yes
PA Interface Output	Optional	Optional
Operating Temperature	-20°C to 60°C -4°F to 140°F	-20°C to 60°C -4°F to 140°F
Extension Headset Output / Input	Yes	Yes
Rack size	19" Rack mount x 3.5" H x 7" D + connectors	19" Rack mount x 3.5" H x 7" D + connectors
Optional Carry Case Size	19.3" W x 7.9" H x 9.5" D	19.3" W x 7.9" H x 9.5" D
Rack unit Weight	1.8Kg (4 lbs.)	1.6Kg (3.5 lbs.)

All specifications are subject to change without notice.

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