

Subphone

by *Subsea* Import Corporation

Model 2190

Long Range, Portable, Waterproof System

Subsea's Subphone Model 2190 is a waterproof, portable, wireless, through-water, long-range communication system designed specifically for communications between submarines, submersibles, surface vessels and divers under rugged conditions.

The Subphone Model 2190's proven and sophisticated technology is unequalled in the industry in terms of:

- clarity of speech
- extended long range of up to 10 km (6+ miles)
- clear communications in strong currents and around obstacles
- ease of use
- reliability in professional applications
- self contained waterproof design



Subsea's 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 Model 2190 has user selectable high and low power transmitter capability enabling the user to conserve battery life and provide a smaller acoustic footprint under conditions where only short range communications are required. The option of dual-frequency also offers the Subphone Model 2190 operator the capability of choosing the best frequency for communicating under various ocean conditions.



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subsea@telus.net

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The Subphone Model 2190 provides the most affordable, high quality, long range communications capability in a waterproof compact cabinet on the market today.

- **Waterproof, portable configuration:**
- **Portable, heavy-duty waterproof aluminum carry case with internal speaker, battery, battery charging circuitry, handheld microphone and accessory set. A separate input is provided for an optional headset c/w boom mic.**
- **Low power consumption (14 hrs. at 15% transmit).**
- **Internal pinger mode for emergency situations or as a homing signal.**
- **Tape outlet allows for recording of communications of both received and transmitted signals.**

(For a rack mount version see standard Subphone Model 580).

Specifications

Operating Frequency (Single or Double)	Two channels USB Many frequency options available, also custom frequencies
Modulation	Single-Sideband (SSB) Suppressed Carrier
Transmitter Activation	PTT (push-to-talk) Microphone 150 Ohm Dynamic
Transmitter Power	High Power:50 watts RMS Low Power:0.5 watts RMS Selectable by operator
Pinger	15 m-sec, per second pulse
Receiver Audio Output Power	2 watts RMS
Receiver Gain Control	Automatic or Manual, Selectable by operator
Nominal Range in Salt Water at Maximum Power Isothermal conditions	10 km (6.2 miles) at 10 KHz 6 km (3.7 miles) at 27 KHz
Power Source	Internal rechargeable battery, 24 V Sealed Lead Acid
Charging System	Yes
Life/Transmission Time @ 15% transmit	14 hrs
Charge condition circuitry	Yes
Operating Temperature	-20°C to 60°C -4°F to 140°F
Internal Waterproof Speaker	Yes
Tape Output	Yes
Extension Headset (optional)	Yes
Carry Case Size	55.0 cm (W) x 29.0 cm (H) x 33.0 cm (D) (21.6" x 11.3" x 13")

All specifications are subject to change without notice.