

EBC | Emergency Bell Communicator System - 'Thru Water Communications'



COMMERCIAL DIVE SYSTEM PRODUCTS

Key Features:

- Unrivalled audio performance
- State of the art acoustic transducer technology
- System remote activation
- Extended operational capability of 50+ hours
- Visual diagnostics display on Bell external unit
- Stand-alone or integrated system
- Easy retrofit to all SDC's



Topside Transceiver Unit



Bell Internal Communicator

Product Overview:

The Emergency Bell Communicator System (EBC) or 'Thru Water Communications' (TWC), is designed to be installed on a Diving Support Vessel (DSV) or similar installation where one or more of the diving bells is used for manned underwater operations.

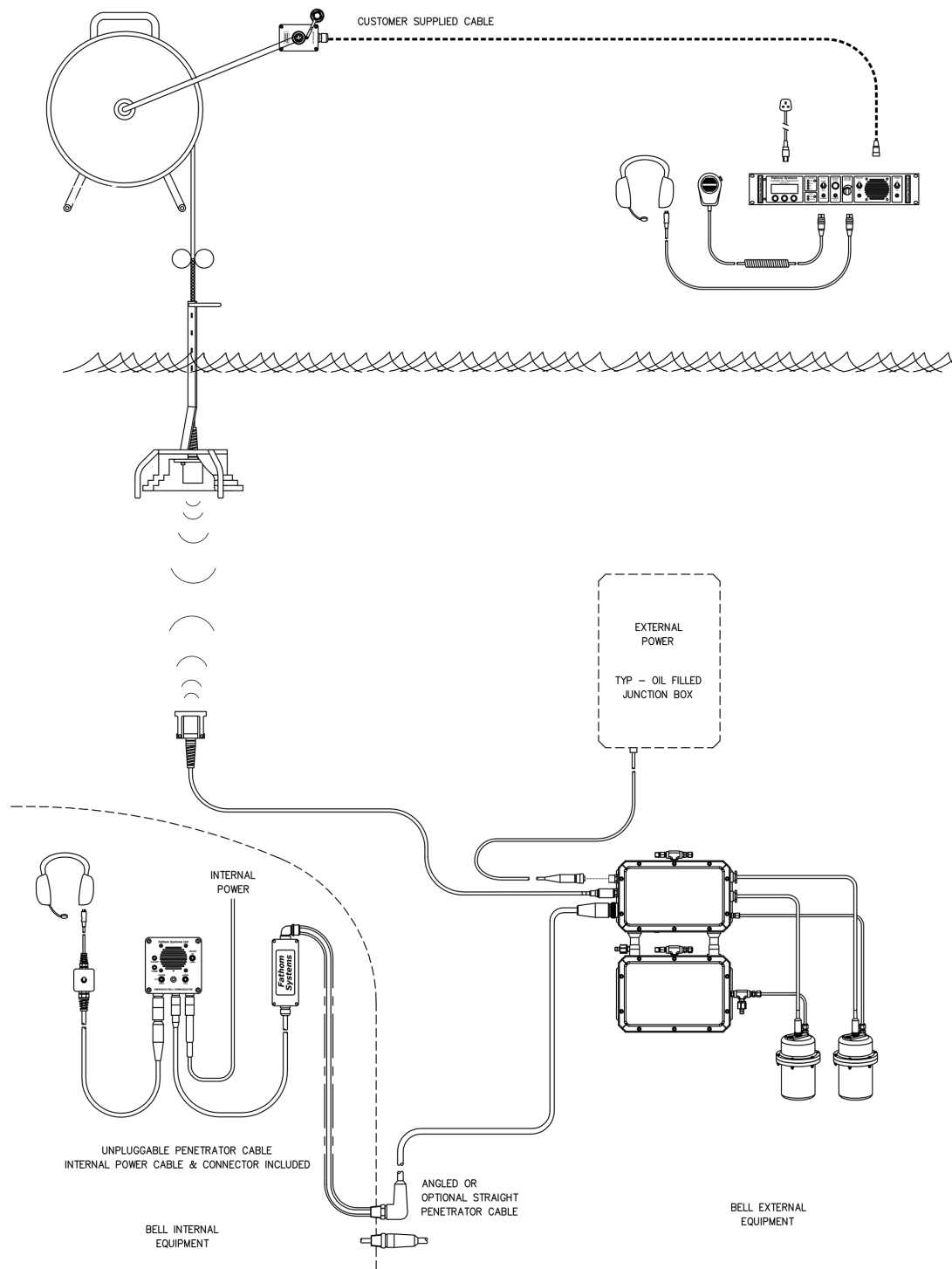
The primary function is to provide high quality, back-up voice communications to and from the divers inside the bell in an emergency situation and when no conventional wired voice communications through the umbilical is achievable.

Depending on the region of operation of the diving system, the system's certifying authority and the operator's policies, the system is likely to be a legal requirement for diving operations to proceed.

The system operates by using high frequency ultrasonic sound waves that are passed through the water between the bell and the surface vessel. Communications are 'half-duplex' which means that only one person can talk at a time.

The supervisor can use a headset with boom microphone when talking to the Divers in the bell, or alternatively an optional fist microphone with Press-To-Talk (PTT) button can be used (together with the loudspeaker on the Transceiver front panel). There is an output from the Topside Transceiver for a black-box recorder and also for a helium speech unscrambler.

A “pinger” function repeatedly sends a short Morse Code “S.O.S.” and a remote Push-To-Talk and headset allow divers to operate the system from a survival bag for a prolonged period. A remote control function allows Dive Control to remotely enable communications with the Bell and interrogate the Bell unit to check system health.



Specification

- Acoustic Transmission Power: 5 watts RMS
- Operating frequency: 27kHz (25kHz) carrier
- Audio Output: 5 watts
- Transmission Range: Up to 3km depending upon water conditions.
- Battery Duration (Bell Equipment): Over 50 hours with 10-15% talk duration @ 5°C
- Operating Temperature: -20°C to +60°C
- Operating Depth (Bell External Unit): Up to 1000 MSW
- Power Requirement (Topside Unit): 110/240 V AC 50/60 Hz @ 30W
- Power Requirement (Bell External Unit): 24V DC @ 60W (at maximum battery charging current)