

HeliCom™

Hyperbaric Lifeboat Helium Speech Unscrambler



The HLB HSU is designed specifically for deployment within a hyperbaric lifeboat. It allows the sat supervisor in the HLB to have clear communication with sat control, the HLB crew and the divers. It is available in a rack mount version and a portable version housed in a protective environmental case.

A front panel loudspeaker allows the divers' speech to be audible to the sat supervisor independently of his headset in all modes of operation. An on/off switch allows the loud-speaker to be switched off as required.

DSP Helium Speech Unscrambler Circuit uplink signals from the HLB rescue chamber occupants on Channel 3 are decoded to the selected gas and environmental settings by a digital signal processing (DSP) circuit. An LCD display is provided for monitoring helium speech decoding settings. Adjusting settings is easily accomplished by means of a front panel depth setting potentiometer calibrated from 0 msw to 500 msw and a user-friendly keypad for PPO₂, pitch reduction and temperature settings.

An unscrambler on/off switch allows the DSP helium speech unscrambler circuit to be bypassed when unscrambling is not required.

Operating Modes

- Helium speech communications with the pressurised occupants of the HLB rescue chamber on channel 3 using standard HLB comms boxes in the rescue chamber (equipped with loud speaker, microphone with PTT switch and headset and boom microphone).
- Normal four wire communications with the coxswain and crew of the lifeboat on channel 2 (using standard HLB comms boxes with loudspeaker, microphone with PTT switch and headset and boom microphone).
- Normal four wire communications with sat control on channel 1 for diver embarkation and launch preparation. A waterproof bulkhead connector and plug on the lifeboat hull disconnects the lifeboat for launching.



HeliCom™ Unscrambler inside hyperbaric lifeboat.



Specification

General

Power CO363AX-E)	110/230 VAC 50/60 Hz
Power (CO363AX-E24)	24VDC
Fuse Rating (both variants)	2 Amp
Power Amplifiers	1 per channel
Power Output	10 Watts per channel
Frequency Response	300 Hz to 12 kHz
DSP Unscrambler	Channel 3
Voice Correction Range	0 m to 500 m (0 ft to 1,640ft)
Audio Recording	Recording level control with VU display

HLB Helium Speech Unscrambler in Environmental Enclosure Type CO363AX-E

Connectors

4 Copex Glands on rear panel for cable installation in the field

Dimensions

Protective Case	19" 4U Enclosure
Height	500 mm
Width	515 mm
Depth	200 mm
Weight	16.5 kg

Environmental

Operating Temperatures	-10°C to +40°C
Storage Temperatures	-20°C to +60°C

Order Code: CO363AX-E (Mains Supply)

Order Code: CO363AX-E24 (24Vdc Supply)

