

intelligence underwater

fathomsystems.co.uk

Diver's Microphone - 'Hot Mic'



COMMERCIAL DIVE SYSTEM PRODUCTS

Key Features:

- Long lasting performance
- Unrivalled audio quality
- Rugged construction
- Noise cancelling ability
- Pre-terminated gold pins
- Fits industry standard oral-nasal masks
- LED power indicator
- Encapsulated electronic interface circuitry



The Fathom Systems current loop microphone, or diver's hot mic, has been developed to provide reliable and high quality operation in the harsh environment present inside the diver's helmet. The microphone uses a high quality moisture resistant noisecancelling element which is covered with a GoreTex waterproof membrane which permits pressurisation and de-pressurisation associated with diving applications.

An integral circuit board in the microphone housing provides the electrical interface to the DDCS, and when the microphone



is connected correctly and powered up, a small red LED on the circuit board is illuminated. This can be clearly seen through the clear encapsulation around the PCB.

This microphone is installed in the port in the Oral-nasal inside the diver's helmet and uses a DC current to provide power to the microphone. This current is 'modulated' by the diver's speech and this becomes the voice signal transmitted from the microphone to the surface.





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There are only two wires needed to connect the microphone to the umbilical, and these wires are polarity insensitive (i.e. the microphone will work correctly when connected either way).

It is recommended that the microphones be connected to the internal wiring inside the diving helmet or band-mask with single-pin sealed gold-pin connectors.

These connectors ensure that water is kept away from the electrical connections and therefore provide the best performance and reliability. For this reason, we recommend that 'bullet crimps' or similar connection methods are not used.



- Durable Polyethylene construction (PET)
- 12V DC, 25-35mA
- 42mm Diameter x 16.5mm housing (machined to suit retrofit to KM Hat)
- 200mm standard 26AWG flying leads (100mm optional or unterminated)
- Industry standard male sealed gold plated pins (1.57mm OD, +/- 0.2mm)
- Audio level 1mV 10mV (AC output at 50mm)

Ordering information:

Order Code 000-001-710	Diver's Microphone c/w 200mm Flying Leads & Gold Pins
Order Code 000-010-578	Diver's Microphone c/w 100mm Flying Leads & Gold Pins
Order Code 000-005-017	Diver's Microphone c/w TBCmm Flying Leads (unterminated)

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