# 2-way communication + hearing protection

Activities done in noisy environments generally face a lot of problems with speech communication. Normal hearing protection can block out speech recognition and when the communication must be done over a wide range, it can be impractical. The use of 2-way radios can be useful but is often insufficient. The Varicom<sup>®</sup> can provide a solution.

The Varicom<sup>®</sup> consists of a custom made earpiece with a built-in high profile miniature microphone and speaker. All the electronic parts are imbedded in the earpiece and thereby insulated against the environmental noise. This leads in an exceptional speech intelligibility. The Varicom<sup>®</sup> proves to be not only a good communication system but also an excellent hearing protector.



VARIPHONE

### How does it work?

The Varicom<sup>©</sup> will be connected via a PTT (push to talk) interface to the most common 2-way radios. This PTT interface contains all the electronics for signal conditioning and gives the command for transmit and receive mode. When a call comes in the user will hear the message directly in the ear. When a talk back is required a push on the PTT switch will activate the microphone inside the earpiece, which takes up the vibrations from the voice in the ear canal, and sends it via the radio to the receiving destination. This way of communicating is called 'earspeech'.





### **Production procedure**

The Varicom<sup>®</sup> can be made based on an ear impression made by our technicians. These ear impressions are used in our laboratories for the manufacturing of an individual (left or right at your choice) communication earpiece with built-in electronics and a cable supplied with a durable Lemo connector for connection to the PTT interface. A second visit by our technicians will take place for the fitting and the necessary checks on comfort and leaktightness.

**Budget solution** 

Ear-O-Tec Tel: 08 9278 2498 Internet: www.earotec.com.au E-mail: info@earotec.com.au



## Advantages

- Wearer comfort
- User friendly
- Optimal speech intelligibility
- Easy to use
- Easy to combine with protective clothes and/or gas suites with breathing apparatus
- Compatible with a large range of 2-way radios
- Hands free use

#### **Specifications**

Classification: Half duplex communication system based on ear speech principle Design: Standard full concha Material: Hypoallergenic acrylic Weight: ± 15gr Identification: unique numbering Special parts:

– Leaktest canal

- Red and blue caps (L-R coding) - Miniature microphone and speaker
- Kevlar reinforced cable
- Durable Lemo connector for
- connection to PTT interface - Ear gear (ear holder and strain relief)

## Attenuation:

- Average amount of attenuation: 27 dB (1 Khz)
- Adjustable attenuation optional
- Electronic specifications:
- DC-resistance: 1490 Ohm Impedance: 6300 Ohm (at 1 Khz)
- Total Harmonic distortion: 1,4 % (at 800 Hz)

#### Options

- Various colours
- Soft canal tip

#### **Approvals**

- Intrinsically safe:
- EEx ia II C T6
- EEX ib IIB/IIC T4 (Tüv 01 Atex 1680)

