

028-3039-02 visu'1

 **profilo**

**zero**  
interference

where ever  
**you are**

the first  
**interference free**  
covert solution

**zero**  
interference

**PHONAK**  
communication systems

For any further information, please contact:  
Phonak Communications AG | Laenggasse 17 | CH-3280 Murten  
Tel. +41 (0)26 672 96 72 | Fax +41 (0)26 672 96 77  
info@phonakcom.ch | www.phonak-communications.com

**PHONAK**  
communication systems

# the world's first transductor



## A new era in covert solution

With profilo from Phonak, your covert communication is about to change completely. profilo is the first covert communication system that is entirely immune to electromagnetic interference. Interference is caused by power lines, car ignition systems, anti-theft devices, scanners and many other electronic devices and electrical installations. Not only is interference highly annoying, it can also hinder communication and may therefore lead to dangerous or even life threatening situations. profilo is the first product of its kind containing a transductor with EMI shield. This new and exciting technology is a revolutionary Phonak invention that shows a strong commitment to serve all professionals who rely on their covert communication. profilo users

will experience nothing less than the very best in covert communication, unparalleled by any other product.

### **profilo: by the world's market leader**

Phonak has over 20 years of experience in the research, development and global distribution of covert communication. Today, 8 out of 10 customers choose Phonak covert earpieces. Professionals worldwide recognize Phonak's product quality and leading standards. With the groundbreaking profilo, Phonak is changing the covert communication landscape.



zero  
interference

technical  
description



the best in  
**covert**  
communication

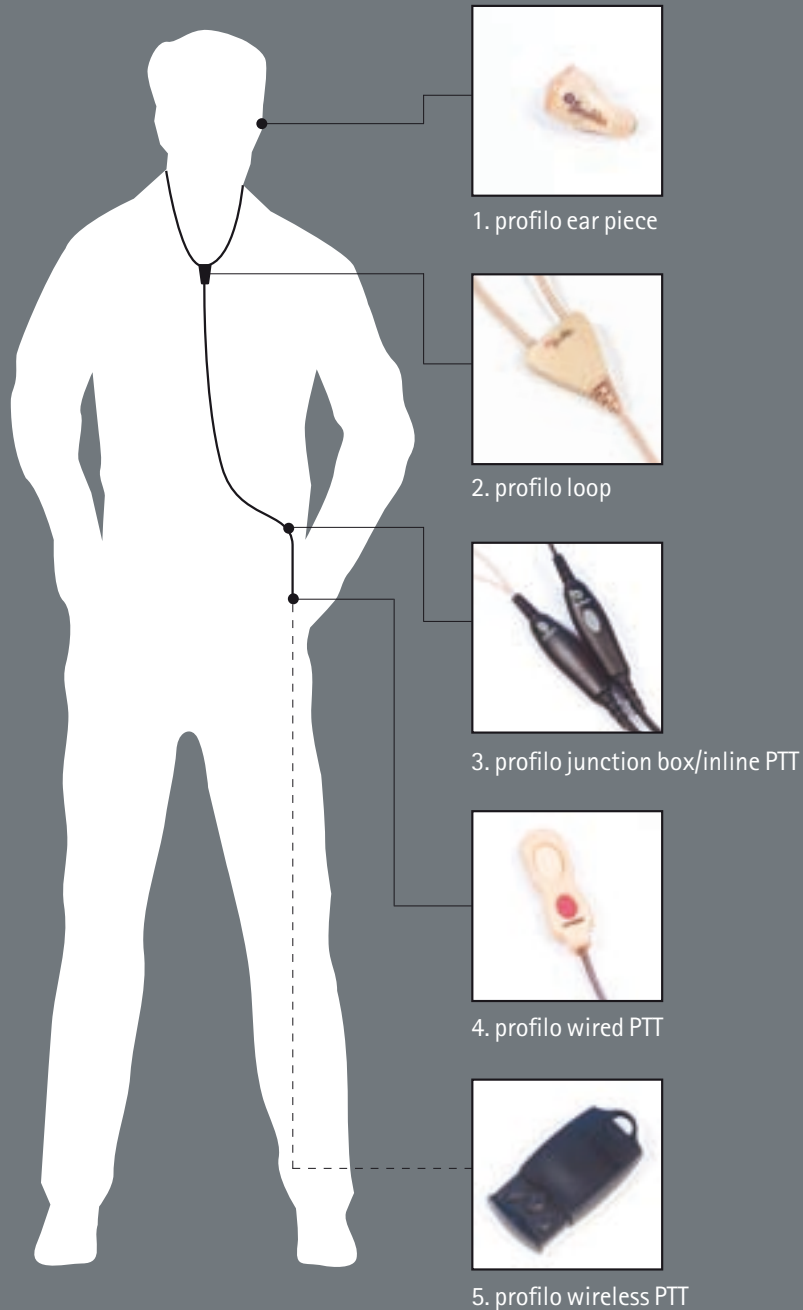


## **Transductor: a new revolutionary technology**

The profilo system consists of a special profilo loop and a profilo earpiece that are both based on the new transductor technology. Unlike conventional covert systems, the profilo loop transmits the speech signal coming from the professional radio on a much higher frequency than the usual plain base-band audio frequencies.

The profilo earpiece picks up the frequencies emitted by the loop and transposes them down to the audible domain again. The earpiece contains a very powerful Digital Signal Processing chip that carries out complex tasks such as automatic gain control, loudness limiting and soft squelch rapidly and efficiently.

By transmitting on much higher frequencies, the covert communication system is immune to electromagnetic interferences. In other words: profilo is the only covert solution with EMI shield.



## profilo system is available in 2 different configurations

### profilo WL (wireless)

- profilo earpiece
- wireless PTT + in-line PTT on junction box
- neckloop with integrated microphone
- suitable radio connector

### profilo LM (loopMic)

- profilo earpiece
- wired PTT
- neckloop with integrated microphone
- suitable radio connector

### profilo earpiece

The small covert profilo earpiece combines the new transducer technology with the comfort and the reliability of the well-known Phonak earpieces : the housing is based on the popular and proven phonito Intra and phonito Digital housings.

### profilo loop

Discreet, detachable with integrated microphone as an integral part of the transducer technology.

### profilo wired PTT

2 key push to talk button.

Large button : normal PTT

Red button : emergency button or accept and disconnect GSM/mobile phone on Tetra radios.

### wireless PTT

Fully discreet and waterproof with mute function, volume control and battery check.



zero  
interference



## Technical specifications

### profilo earpiece

Max volume @ 1kHz, automatically limited	103dB SPL (*) / profilo HV: 113dB SPL
Frequency response	300Hz...3600Hz
Type of receiver	modulated and processed by DSP
Background noise filter (when no audio signal)	Soft squelch
Battery typ / average life span	O <sub>2</sub> Zn, A10 / 80h
Battery end of life warning	Beep
SNR (signal to noise ratio)	> 45dB
Storage temp	-10° C to + 65° C
Operating temp	0° C to + 40° C

### singleLoop

Length	65 cm incl. safety connector
Power Supply	external power requested (3.3V...10V)
Input Signal	max 3.5 Vrms
Length (Loop to Junction box)	60 cm
Color	beige

### microphone integrated in singleLoop

Type	Omni directional electret
Output impedance @ 1 kHz	4,4 kΩ
Requence response	100 Hz...10kHz
Amplifier current drain	Max 50μA
Sensitivity @ 1 kHz (dB re 1V/1PA)	-34.0 +/-3 dB
Supply Voltage	1.5 - 10.0 V DC
Temperature range (operating)	-10° C To +60° C

### 2-key PTT

Switching cycles	> 100'000
------------------	-----------

### wireless PTT

Battery autonomy	Min 1 year with 100 PTT / day
Operating distance	45 - 90 cm (operating beep)
Switching cycles	> 100'000

(\*) fulfill the new EU directive and regulation regarding noise at work regulations (regulated by AGC)



anytime  
anyplace



## Zero interference

With the advent of ever more electronic systems, electromagnetic interference is increasing dramatically. All current covert systems are susceptible to these unwanted signals and earpieces oftentimes pick up an annoying humming which may render the relayed voice message inaudible. Contrary to conventional inductor covert systems, profilo features an integrated EMI shield. The transducer takes the voice signal to a completely different frequency band, where electronic systems do not emit interference. Therefore, even in the presence of strong interferers, there is no humming or masking of important messages. The result is

crystal clear and extremely discreet communication, even in electromagnetically polluted environments and for the very complex Tetra and Tetrapol professional radios.