



**KNOCK OUT NOISE. COMMUNICATE CLEARLY.**

# MOTOROLA EAR MICROPHONE SYSTEM

Talking over the roar of the crowd in a stadium or the blare of equipment on the fireground? Background noise can thwart clear and effective communication. But the Motorola Ear Microphone System delivers the audio clarity and exceptional performance you can count on.

Designed for TETRA radios, operating in analog or digital mode, our accessory uses bone conduction to pick up the user's voice from bone vibrations in the inner ear. No matter how loud the environment is, it will not transmit external noise – only the speaker's voice. When the user receives audio, the accessory acts like a normal earpiece, yet still allows you to hear the message loud and clear.

## RESPONSIVE FEATURES THAT RESPOND TO YOU

Whether you're on a utility pole or directing traffic below, the Motorola Ear Microphone is engineered for you – with a programmable button for accessing shortcut features from a radio under a coat to the large push-to-talk (PTT) button with a ring guard that is easy to use, even with gloves on. With an all-day durable design that is lightweight and comfortable to wear, you'll forget you have it on.

## FITS THE WAY YOU WORK

**Public safety** – picks up voice clearly while minimizing traffic and street noise

**Private security** – compact earpiece with no boom microphone leaves your face unobscured and hands free

**Fire service** – large PTT is easy to use, even when wearing bulky gloves

**Public works** – durable yet comfortable in-ear for long shifts

**EMS** – no boom microphone frees you to interact with others on the scene

**Haz-Mat** – fits under protective masks without affecting audio clarity



**PRODUCT SPEC SHEET**  
IMPRES EAR MICROPHONE

**MOTOROLA EAR MICROPHONES  
SPECIFICATIONS**

Part Number	PMLN5653
Description	Ear Microphone System with Bone Conduction
Radio Compatibility	MTP850 S, MTP850 Fug, MTP830 S, MTP830 Fug

**ACOUSTICS**

Microphone Type	Electret microphone
Sensitivity	-13dB ± 4.5dB at 1kHz (0dB = 1V/0.5G)
Frequency Range	200Hz – 3000Hz
Speaker Type	Electromagnetic
Output Level	104dB ± 4.5dB at 1 KHz (0dB=20uPa) Input 7.2V
Maximum Output Level	<118dB SPL at maximum radio volume
Frequency Range	100Hz – 5000Hz
Distortion (THD)	<5% (Rx) at 1 KHz at rated audio

**EARPIECE**

Dimensions	16.5mm (W) x 29mm (H) x 30mm (D)
Cable Length	525 mm ± 10mm

**CONTROLS**

Push to talk (PTT)	In-line ring-guarded PTT button with swivel clip
Programmable button	1 button in-line

**POWER**

Power Source	Radio Battery
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**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-40°C to +70°C
Storage Temperature	-57°C to +85°C
Thermal Shock	-57°C to +80°C
Humidity	90% - 95% Relative Humidity at +50°C for 8 hours
Rain	MIL810F Method 506.4 Procedure 1
Salt/Fog	MIL810F Method 509.4
Dust	MIL810F Method 510.4 Procedure 1
Vibration	MIL810F Method 514.5 Procedure 1 Category 24
Mechanical Shock	MIL810F Method 516.5 Procedure 1
ESD	IEC/EN61000-4-2
IP Rating	IP54 at used condition (Earpiece inserted into ear canal)
Regulatory	EME/EMC

**REPLACEMENT PARTS**

PMLN5510	Eartip, size medium
PMLN5511	Eartip, size small

For more information on how to be all-day secure on the go, visit [www.motorolasolutions.com](http://www.motorolasolutions.com)

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All specifications are subject to change without notice. All specifications shown are typical.

