

# 3M



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## 3M™ Peltor™ ORA Tac

The Sound Solution



CE

PELTOR™



2:A



2:B



2:C

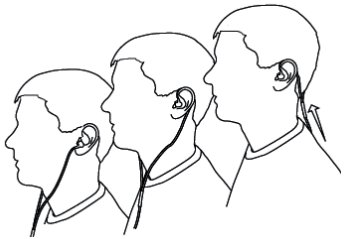


2:D





3:A



3:B

3:C

3:D

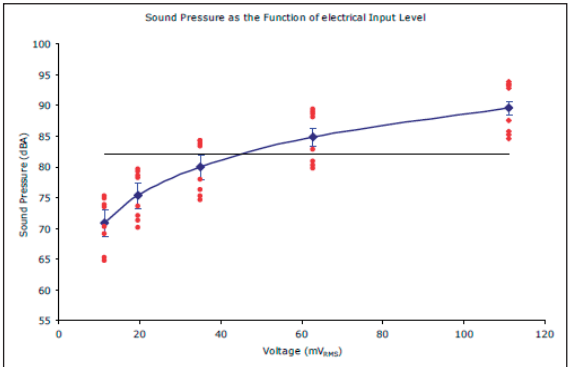
5:A

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	27,9	28,1	24,1	24,6	29,5	31,8	32,7
Std deviation (dB)	4,1	4,9	3,2	2,9	3,9	7,0	4,9
Assumed Protection Value (dB)	23,8	23,2	20,9	21,7	25,6	24,8	27,8

1) Weight 235g

SNR=25db H=25db M=23db L=22 db

5:B



5:C

Criterion Levels	
<b>MT10FL10©©©</b>	H= 109 dB(A)
	M= 108 dB(A)
	L= 108 dB(A)

## 1. What is What & Basic Operations

### 1:A ON/OFF

To turn the ORA TAC unit on or off, press and hold the "+" or "-" button for at least 3 seconds

### 1:B PTT – (Push-To-Talk)

To transmit, press either PTT switch while talking

### 1:C +/- Volume Controls

Talk -Through Volume

- To increase volume press the "+" button

- To decrease volume press the "-" button

NOTE: The radio listening level is controlled by the radio volume control.

### 1:D Battery Compartment

#### **BATTERY SAVE MODE:**

Auto Turnoff starts after 2 hours of non-active use.

A warning signal is emitted one minute prior to shut-off.

Pressing the "+" or "-" button will reset the two hour timer

### 1:E Connection plug for communication radio

### 1:F In-Ear Headset

In-Ear headset with electret microphone

An ambient microphone in each ear for listening to the external environment safely

Two internal speakers for listening to received audio

## 2. Assembly

Unpack the ORA TAC Carton, verify the following items are present:

- ORA TAC
- Two AAA batteries
- Eartips

### 2:A Attach eartips to the earbuds

2:B Attach the radio cable to the ORA TAC (To disconnect, press the small button and pull apart.)

2:C Install two AAA batteries as shown, insert positive ends first

2:D Connect completed assembly to the radio

## 3. Fitting and adjustment

### **Inserting the earplugs**

The earplugs should be inserted in the ears according to the R/L (right/left) markings on the assembly.

Earplugs should be clean before fitting.

INSERT rounded tip into ear canal WHILE PULLING ear outward & upward with opposite hand.

See illustration 3:A

ADJUST for best noise reduction.

CHECK FIT after inserting plug:

PULL plug stem gently. Plug should not come out of the ear easily. If it does, remove plug & repeat fitting.

LISTEN to steady loud noise with plugs in both ears. Cover ears with tightly cupped hands. Noise should sound about the same whether or not ears are covered.

If you cannot obtain a good fit, try a different type of hearing protector.

**CAUTION:** For greater comfort and safety, remove plug slowly with twisting motion to gradually break the seal.

### **Cable routing options**

The headset includes a cable slide to allow alternate methods of routing the cables based on user preference:

3:B Straight Down

3:C Over the ear in front

3:D Over the ear in back

## **4. Important user information**

### **WARNING!**

These hearing protectors help reduce exposure to hazardous noise and other loud sounds. Misuse or failure to wear hearing protectors at all times that you are exposed to hazardous noise may result in hearing loss or injury. If there is any drainage from your ear or you have an ear infection, consult with your physician before wearing earplugs. Failure to do so may result in hearing loss or injury.

Incorrectly inserted batteries can damage the electronics. Never replace the batteries with the unit switched on. Make sure the + and - poles are in the correct position before switching the unit on. Replace the batteries when interference increases or the volume becomes too weak.

Remove the batteries when storing the hearing protector for extended periods of time. Check the functioning of the unit after replacing the batteries.

**IMPORTANT!:** Always make sure that the volume on the com radio, intercom system or other connected equipment is set to a low level before inserting the plugs into your ears. Adjust the volume to a comfortable level afterwards.

- The hearing protector must be worn, adjusted, cleaned and maintained in accordance with this manual.
- The hearing protector features level dependent. Check that this feature works before using the unit. If distortion or flaws are discovered, consult the instructions for maintenance and battery replacement.
- Always wear the hearing protector at all times during exposure to hazardous noise
- Certain chemical substances may damage this product. Contact the manufacturer for more information.
- The hearing protector is fitted with an electric audio input. Check correct operation before using the unit. If distortion or failure are discovered, consult the manufacturer's instructions.
- If sound distortion increases or the volume becomes too weak, it is time to charge or replace the batteries. Never replace or insert batteries with the unit switched on. Ensure that the batteries are correctly aligned before using the product.
- Store product without the batteries.
- Under extremely cold conditions, warm the hearing protector before using.
- The wearer should ensure that the ear plugs are regularly inspected for serviceability.
- The audibility of warning signals at a specific workplace may be impaired while using the entertainment facility.
- The performance may deteriorate with battery usage.

**Note:** If these recommendations are not followed, attenuation may be adversely affected leading to hearing impairment.

### **WARNING!**

The output from the level dependent circuit of the hearing protector may exceed the daily limit sound level

### **WARNING!**

Performance may deteriorate with battery usage. The typical period of continuous use that can be expected from the product is 400 hours

## **WARNING!**

These ear plugs should not be used where there is a risk that the connecting cord could be caught up during use.

## **WARNING!**

If these recommendations of use, storage and maintenance described in this user instruction are not adhered, the protection afforded by the ear plugs will be severely impaired.

## **5. Technical Data**

### **5:A Attenuation values, SNR**

The nominal range of diameters of the ear plugs are 8-12 mm

The attenuation values are tested and approved according to PPE directive 89/686/EEC and applicable sections of standard EN 352-2:2002 and EN 352-7:2002  
Certificate issued by FIOH, Topeliuksenkatu 41, FI-00250 Helsinki, Finland, ID#0403.

### **Explanation of the attenuation data tables:**

1. Weight
2. Frequency (Hz)
3. Average attenuation (dB)
4. Standard deviation (dB)
5. Expected attenuation (dB)

### **5:B Input signal level/usage time for audio input**

Electrical audio input of the earplugs was measured in accordance with in-house-method derived from those described in standard EN 352-6:2002

Maximum permitted audio signal in relation to usage time.

To prevent harmful effects on hearing, the input signal should not exceed the specified values (average speech sound level). The long-term average value of the earphone volume is measured at a level corresponding to no more than 82 dB(A) sound level. Electrical input level for which the mean plus one standard deviation A-weighted diffuse-field related sound pressure level is equal to 82 dB is at RMS-voltage  $U = 29$  mV.

### **5:C Criterion levels (G)**

A criterion level is the amount of noise (measured as A-weighted sound pressure) outside the hearing protector that gives 85 dB(A) inside. The noise level depends on the type of noise. H is high-frequency dominated noise, M is noise that is not dominated by any given frequency, and L is low-frequency dominated noise.

### **5:D Battery type**

2 X AAA 1.2–1.5V

### **5:E Battery life : ~ 400h (5% talk, 5% listen, 90% On time)**

The expected battery life may vary depending on the brand of batteries and the temperature in which the product is used. A Low-Battery condition will generate 3 beeps that repeats every 10 seconds until the batteries are replaced.

### **5:F Storage & Operating Temperature**

Operating Temp:	-32°C to +55°C
Storage Temp:	-32°C to +63°C
Storage humidity:	< 85%
Shelf life	< 5 years

### **5:G**

The Peltor Ora Tac meets the requirements of the EMC directive 2004/108/EC and has been tested in accordance with applicable parts of standards: EN 61000-4-2, EN 61000-4-3, EN 61000-4-8, EN 61000-6-4

## 6. Maintenance, Cleaning and disposal

This product is covered by the WEEE directive 2002/96/EC and is recyclable.

Dispose the product in accordance with national regulation.

Use local recycling system for electronic products.

### EARPLUG TIPS:

- Keep the earplug openings free of earwax and debris
- Wash plugs with mild soap and warm water as needed
- Look for tears or cracks under any of the three flanges
- Replace if necessary

## 7. Spare Parts and Accessories

### Connection Cables

#### Product code    Communication radio

TAA13-T0299	ICOM F31/F41
FL6U-35	ICOM IC-F3GS, GT51/61 F4GS, GT etc with angled connector
FL6U-31	ICOM IC-F3S, F4S, IC-E90, LPD06,PMR06 (with straight connector)
TAA19-T0299	ICOM F34/F44
FL6U-36	Kenwood 260/270, 360/370 LPD, TH22E PMR etc
FL6U-21	Motorola GP300, CPO40
FL6U-32	Motorola GP640, 680,1280, 320, 340, 360, 380
FL6U-61	Motorola Visar 3,5 mm, GP344/388 via Motorola adapter plug
AL3CB-T0299	Motorola GP900
TAA20-T0299	Motorola GP344/GP388, GP328+ /GP338 +
FL6U-32	Motorola TETRA MTH800/MTP850
TAA22-T0299	Vertex VX160/400
FL6U-31	Zodiac PA2099/PA1599/PA5499/ PA5500/P2400 + various LPD/PMR
FL6U-58	Sepura SRP 2000 / SPM 3*000
FL6U-63	Motorola Mototrbo

### Eartips

<b>Art no</b>	<b>Eartip</b>
XXXXXX	Ultrafit Eartip

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