

# 3M<sup>™</sup> PELTOR<sup>™</sup> WS™ ProTac XPI Bluetooth® **Headset Range**

**Technical Data Sheet** 



## **Description**

The 3M™ PELTOR™ WS™ ProTac XPI Headset is a next generation Bluetooth® protective communication solution.

With Bluetooth® Multipoint connectivity, the headset can be simultaneously connected to two Bluetooth® enabled devices. The Push-To-Listen (PTL) feature allows users to communicate face-to-face with others in a noisy environment without the need to remove the hearing protection device (HPD) and with the noise-cancelling boom microphone that carries a water and dust-proof IP68 rating, users can have clear, hands-free communication in noisy and harsh environments. The environmental listening technology assists workers to hear environmental sounds in low noise and helps provide protection when it's loud. The bright yellow color provides enhanced visibility.

## **Applications**

The 3M™ PELTOR™ WS ProTac XPI Headset offers Bluetooth® Connectivity and Level-dependent Technology for critical communication in noisy environments. Useful when users need to be connected wirelessly to their mobile device (e.g. process operators, push-back operators at airports, maintenance etc.); everywhere critical communication and hearing protection is required.

## **Features**

- Bluetooth® 4.2 including MultiPoint.
- Bright yellow color for enhanced visibility.
- New noise-cancelling water resistant speech microphone. IP68 rated for use in noisy and demanding environments. Supports VOX.
- Support for Bluetooth® A2DP, streaming (selectable in Setup mode).
- Auto power off: The headset will turn off after 4 hrs of non-use to save battery.
- Low-battery warning at low battery level.
- FLX2 accessory jack (-111 models) for ability to add an additional external source via cable for safe and independent communication.
- Compatible with 3M™ PELTOR™ WS Ground Mec adapter.
- Compatible with 3M<sup>™</sup> E-A-Rfit validation system.





Level-dependent function for ambient listening to help improve situational awareness



Noise cancelling boom microphone for clear speech transmission in noisy environments



Bluetooth® Connectivity



### **Standards**

This 3M™ PELTOR™ Headset Range is in compliance with the essential requirements and other provisions set out in the ACMA (Australian Communications and Medial Authority) regulations. The headset versions were tested in accordance with AS/NZS 1270:2002 and met the requirements of hearing protectors.

The product has been tested by an accredited laboratory in accordance with the requirements in AS/NZS 1270 and has met the specifications of hearing protectors Class 5. When selected, used and maintained as specified in AS/NZS 1269, this hearing protector may be used in noise up to 110 dB(A) assuming an 85 dB(A) criterion. A lower criterion may require a higher protector class.

## **Quick Reference**

		3M <sup>™</sup> PEI	_TOR <sup>™</sup> WS ProTac XPI					
	Headband MT15H7AWS6	Helmet Attach MT15H7P3EWS6	Headband MT15H7AWS6-111	Neckband MT15H7BWS6-111	Helmet Attach MT15H7P3EWS6-111			
Attenuation Data SLC80	32dB	27dB	32dB	29dB	27dB			
Class	5 5	5	5	29db 5	5			
Tested to			AS/NZS1270:2002		AS/NZS1270:2002			
Physical Properties	A0/11/2012/0.2002	A0/142012/0.2002	A3/11/23/2/0.2002	A0/11/2012/0.2002	A0/11/2012/10:2002			
Clamp Force	12N	9.9N	12N	11.6N	9.9N			
Weight (Batteries Included)	372g	396g	372g	357g	396g			
Material Listing								
Cup			ABS Plastic					
Headband	PVC, PA, Stainless Steel Wire	N/A	PVC, PA, Stainless Steel Wire	N/A	N/A			
Helmet Attachment Arm / Neckband	N/A	Stainless Steel Wire	N/A	Stainless Steel Wire	Stainless Steel Wire			
Cable			PE,TPE					
Two-Point Fastener			РОМ					
Cushion			PVC foil and PUR foan	า				
Insert (Liner)			PUR foam					
Speech Microphone		ABS,PA						
Specifications								
Wired connectivity	No	No	Yes. FLX2 Connector 6-Pin, Mini XLR	Yes. FLX2 Connector 6-Pin, Mini XLR	Yes. FLX2 Connector 6-Pin, Mini XLR			
Microphone/ Type		Noise cancelling microphone, Dynamic 150 Ohm, IP 68 (6m/30min) Sensitivity71dB±3dB(0dB=1v/Pa 1KHz) @50CM Frequency response 200Hz~7KHz						
Level Dependent Microphone for Ambient Listening		Yes						
Speakers		SPL	100 Ohm +/-15%, . 15 +/- 3dB, 100-4000	) Hz				
Operating temperature		-2	0°C/-4°F to 50°C/122	2°F				
Storage temperature		-20°C (-4°F) to 40°C (104°F), <90% humidity						
Product lifetime		Up	to 5 years (excl. batter	ries)				
Other								
Colour			Bright Yellow					
Hygiene Kit  Compatible with  3M™ E-A-Rfit™  Validation System		HY83 Yes						
Compatible with 3M™ Versalfo™	N/A	Yes (MT7V/1)	N/A	N/A	Yes (MT7V/1)			
Helmet Attachment Backplate	N/A	On Product P3E (30mm)	N/A	N/A	On Product P3E (30mm)			
Haa limitatians Nass	er modify or alter this	product						

Use limitation: Never modify or alter this product.

## **Fitting Instructions**

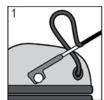
Inspect the hearing protector before each use. If damaged, select an undamaged hearing protector or avoid the noisy environment.

When additional personal protective equipment is necessary (e.g. safety glasses, respirators, etc.), select flexible, low profile temples or straps to minimize interference with the earmuff cushion. Remove all other unnecessary articles (e.g. hair, hats, jewelry, headphones, hygiene covers, etc.) that could interfere with the seal of the earmuff cushion and reduce the protection of the earmuff.

### **Headband Headset**

### To fit the hearing protector:

- 1. Slide out the cups and tilt the top of the cup out, as the cable must be on the outside of the headband (Fig 1).
- 2. Pull the cups apart and place the earmuffs over the ears so that the cushions form a snug seal around the ears.
- 3. Adjust the height of the cups by sliding them up or down while holding the headband in place (Fig 2).
- 4. The headband should be positioned across the top of your head (Fig 3).







### **Neckband Headset**

### To fit the hearing protector:

- 1. Place the cups in position over the ears (Fig 1).
- 2. Keep the cups in position, place the head strap on top of your head and lock it tight in position (Fig 2).
- 3. The head strap should be positioned across the top of your head and should support the weight of the headset (Fig 3).

Caution: The neckband earmuffs must be worn with the head strap correctly attached to keep them firmly in position to maintain an effective acoustic seal. The protection level provided by neckband earmuffs may be reduced if the head straps are not worn correctly.



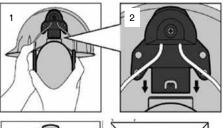




### **Helmet Attach Headset**

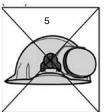
### To fit the hearing protector:

- Fit the cup: Push the attachment blade firmly into the slot on the side of the helmet until it clicks into place (Fig 1 & 2)
- Working position: With the cups over the ears press the arms inwards until you hear a click on both sides indicating a firm seal (Fig 3).
- Stand-by position: Lift the cups to the fixed stand-by position. In a noisy environment the ear muffs must be worn in the working position at all times (Fig 4).
- Parking position: First lift the cups to the stand-by position (Fig 4), then rotate them up to the next fixed position.
- Ventilation mode: Avoid placing the cups against the helmet as this prevents ventilation (Fig 5).
- Storage mode: When the helmet is not in use, lower the earmuffs and press them inward. Keep the cups clean and dry and store at normal room temperature.









### **Fit Check**

When hearing protectors are correctly worn, your voice should sound hollow and sounds around you should not sound as loud as before.

## Hearing Protector Fit Testing the 3M<sup>™</sup> E-A-Rfit<sup>™</sup> Dual-Ear Validation System

The success of your hearing conservation program requires more than offering earplugs or earmuffs. Each worker needs to wear the most effective hearing protector for the environment and the correct fit for their unique anatomy.

With 3M™ E-A-Rfit™ Dual-Ear Validation System, you can quickly identify how much protection each worker receives from their 3M hearing protectors.

## The Technology Behind 3M™ E-A-Rfit™

The 3M™ E-A-Rfit™ Dual-Ear Validation System is based on Field Microphone-In-Real Ear (F-MIRE) technology that measures the effectiveness of hearing protectors from inside a worker's ears, providing accurate, quantitative results.

The tester wears a pair of modified 3M™ probed hearing protectors connected to a dual-element microphone. A loudspeaker is placed in front of the tester. When it emits a broadband noise, the dual-element microphone measures the signal in the ear canal and outside the ear plug. In less than five seconds, the difference between the two measurements is calculated and a Personal Attenuation Rating (PAR) is displayed.

### It Starts with PAR

The 3M<sup>™</sup> E-A-Rfit<sup>™</sup> Validation System puts the worker in the context of their noise environment and helps you understand their level of attenuation.

The results you get from the 3M™ E-A-Rfit™ is displayed as a PAR. The PAR is a numerical value that shows the reduction in sound level within the ear when a hearing protector is worn. The resulting PAR, combined with the worker's exposure to noise, is used to determine if a worker is receiving appropriate protection from the noise hazard.

Knowing the PAR lets you identify workers who are inadequately protected, so you can provide real-time intervention and training.

## Key Benefits of the 3M<sup>™</sup> E-A-Rfit<sup>™</sup> Dual-Ear Validation System include:

- · Tests both ears simultaneously in less than 5 seconds
- Science-based, quantitative testing
- Fast, clear, and accurate results
- Tests 7 frequencies 125Hz to 8000Hz
- 3M<sup>™</sup> Earplug, earmuff and headset (comms) testing capability

Contact your 3M Personal Safety Specialist to find out more about our 3M™ E-A-Rfit™ Dual-Ear Validation System or for assistance in solving your complex or day-to-day hearing conservation challenges

### **Attenuation Data**

### 3M™ PELTOR™ WS™ ProTac XPI Headset, Headband MT15H7AWS6, MT15H7AWS6-111

AS/NZS 1270:2002

Test Frequency (HZ)	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamp Force
Mean Attenuation (dB)	19.6	23.2	32.9	36.8	36.6	35.0	37.5			
Standard Deviation (SD) (dB)	2.3	2.5	3.2	3.0	3.0	4.0	2.6	32dB	5	12 N
Means minus SD (dB)	17.3	20.7	29.7	33.8	33.6	31.0	34.9			

Hearing protector Class 5 tested to AS/NZS1270. When selected, used and maintained as specified in AS/NZS1269, this protector may be used in noise up to 110dB(A) assuming an 85dB(A) criterion. A lower criterion may require a higher protection class.

### 3M™ PELTOR™ WS™ ProTac XPI Headset, Neckband MT15H7BWS6-111

AS/NZS 1270:2002

Test Frequency (HZ)	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamp Force
Mean Attenuation (dB)	16.0	19.8	27.5	32.7	36.4	33.3	36.1			
Standard Deviation (SD) (dB)	3.8	3.8	4.0	3.0	3.6	4.0	3.8	29dB	5	11.6 N
Means minus SD (dB)	12.2	16.0	23.5	29.7	32.8	29.3	32.3			

Hearing protector Class 5 tested to AS/NZS1270. When selected, used and maintained as specified in AS/NZS1269, this protector may be used in noise up to 110dB(A) assuming an 85dB(A) criterion. A lower criterion may require a higher protection class.

### 3M™ PELTOR™ WS™ ProTac XPI Headset, Helmet Attach MT15H7P3EWS6, MT15H7P3EWS6-111\*

AS/NZS 1270:2002

Test Frequency (HZ)	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamp Force
Mean Attenuation (dB)	16.7	18.2	26.4	32.3	35.6	32.1	34.8			
Standard Deviation (SD) (dB)	4.0	4.4	5.2	3.3	4.3	3.5	5.3	27dB	5	9.9 N
Means minus SD (dB)	12.7	13.8	21.2	29.0	31.3	28.6	29.5			

Hearing protector Class 5 tested to AS/NZS1270. When selected, used and maintained as specified in AS/NZS1269, this protector may be used in noise up to 110dB(A) assuming an 85dB(A) criterion. A lower criterion may require a higher protection class.

Mean = Mean attenuation value derived from testing in accordance with AS/NZS 1270:2002.

**SD** = Standard Deviation derived from testing in accordance with AS/NZS 1270:2002.

**Mean-SD** = Mean attenuation value minus Standard Deviation

SLC<sub>80</sub> = Single number rating commonly used in Australia and New Zealand to compare acoustic performance of hearing protectors. The subscript '80' indicates that in well managed hearing protector programs, the protection provided is expected to equal or exceed the SLC80 in 80% of protector-wearer noise spectrum combinations.

**Class** = A simplified process for selecting hearing protectors based on the wearers 8-hour equivalent continuous A-weighted sound pressure level.

3M strongly recommends personal fit testing of hearing protectors. Research suggests that users may receive less noise reduction than indicated by the attenuation label value(s) on the packaging due to variation in fit, fitting skill, and motivation of the user. Refer to applicable regulations and guidance on how to adjust attenuation label value(s). In the absence of applicable regulations, it is recommended that the attenuation label value(s) be reduced to better estimate typical protection.

The effectiveness of a hearing protector reduces dramatically when the hearing protector does not fit properly, is incorrectly inserted or is not worn 100% of the time during ALL hazardous noise events. Removal of the hearing protector, even for brief moments, substantially reduces protection and greatly increases the risk of hearing damage.

<sup>\*</sup> These earmuffs were tested in combination with the HC600 industrial safety helmet using the P3G adapter and may give different levels of protection if fitted to different helmets.

## **Cleaning and Maintenance**

Follow recommended care and cleaning instructions in order to maintain best noise reduction and function.

#### Cleaning

- Carry out a visual battery condition check. Replace if battery leakage or defects are detected.
- Use a cloth wetted with soap and warm water to clean the outer shells, headband and ear cushions.

NOTE: Do NOT immerse the hearing protector in water.

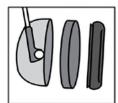
If the hearing protector gets wet from rain or sweat, turn the earmuffs outwards, remove the ear cushions and foam liners, and allow to dry before reassembly. The ear cushions and foam liners may deteriorate with use and should be examined at regular intervals for cracking or other damage. When used regularly, 3M recommends replacing the foam liners and ear cushions at least twice a year to maintain consistent attenuation, hygiene, and comfort. In hot and humid environments more frequent changes may be required to maintain acceptable hygiene. If an ear cushion is damaged, it should be replaced.

### Maintenance - Changing the Hygiene Kit

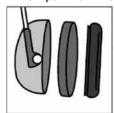
Cushions and inserts can be replaced by using the approved Hygiene Kits for your 3M™ PELTOR™ Product. See 'Ordering Information' section.

1. Remove the cushions and inserts as shown.





2. Replace the worn or damaged cushions and insert with the new pair from the appropriate hygiene kit.





 3M<sup>™</sup> PELTOR<sup>™</sup> HY100A Clean Hygiene Pads can be applied onto the earmuff cushions to help absorb sweat and moisture for improved comfort and hygiene.

### **Storage**

- Store the product in a clean and dry area before and after use.
- Remove batteries before storing the product for extended periods
- Always store the product in the original packaging and away from any sources of direct heat or sunlight, dust and damaging chemicals.
- Storage temperature range: -20°C (-4°F) to 40°C (104°F)
- Relative humidity: <90%.
- For headband versions: make sure that no force is applied to the headband and that the cushions are not compressed.
- Helmet attachment version: ensure the earmuffs are in the storage position and that the cushions are not compressed.

## **Disposal**

If the product is to be disposed\*, it should be disassembled and disposed of as solid waste. Please see local authority regulations for disposal advice and locations

\*Discard the product within 5 years from date of manufacture or immediately if damaged or cannot be cleaned.

**Australia:** Customers must refer to their Local Council Municipal area for disposal of electronics at their end of life.

**New Zealand:** Customers must dispose of electronics at their end of life in their local e-waste disposal bins.

## **Ordering Information**

3M Code	Model #	Description
Headsets	N4745117ANA/00	
UU010123527	MT15H7AWS6	3M™ PELTOR™ WS™ ProTac XPI Headset, Headband, NOT FLX2 Compatible
UU010123535	MT15H7P3EWS6	3M™ PELTOR™ WS™ ProTac XPI Headset, Helmet Attach, NOT FLX2 Compatible
UU010123543	MT15H7AWS6-111	3M™ PELTOR™ WS™ ProTac XPI Headset, Headband, FLX2 Compatible
UU010123568	MT15H7BWS6-111	3M™ PELTOR™ WS™ ProTac XPI Headset, Neckband, FLX2 Compatible
UU010123550	MT15H7P3EWS6-111	3M™ PELTOR™ WS™ ProTac XPI Headset, Helmet Attach , FLX2 Compatible
Accessories - FLX		
UU010126348	FLX2-111	3M™ PELTOR™ FLX2 Cable for Hytera DP7*
UU010124293	FLX2-35	3M™ PELTOR™ FLX2 Cable for Icom angled 2-pin
UU010124301	FLX2-44	3M™ PELTOR™ FLX2 Cable for Icom F31/F41
UU010126330	FLX2-64	3M™ PELTOR™ FLX2 Cable for Icom F34/F44
UU010054110	FLX2-36	3M™ PELTOR™ FLX2 Cable for Kenwood 2-pin
UU009731132	FLX2-107	3M™ PELTOR™ FLX2 Cable for Kenwood Multipin
UU010126314	FLX2-18	3M™ PELTOR™ FLX2 Cable for Motorola GP900
UU009898113	FLX2-21	3M™ PELTOR™ FLX2 Cable for Motorola GP300/DP1400
UU009879477	FLX2-32	3M™ PELTOR™ FLX2 Cable for Motorola GP340
UU009731124	FLX2-63	3M™ PELTOR™ FLX2 Cable for Motorola Mototrbo
UU010126322	FLX2-65	3M™ PELTOR™ FLX2 Cable for Motorola GP344
UU010902672	FLX2-69	3M™ PELTOR™ FLX2 Cable for Motorola DP2400/3441
UU010123584	FLX2-101	3M™ PELTOR™ FLX2 Cable for Sepura STP
UU009898071	FLX2-28	3M™ PELTOR™ FLX2 Cable for Mobile/Dect Phones
Accessories - Mic	crophone	
UU008163634	MT73/1	3M™ PELTOR™ Water Resistant Boom Microphone (IP 68)
UU008014308	MT7V/1	3M™ PELTOR™ Boom Microphone for 3M™ Versalfo™ M-300 Head Top * Z3AF/2 Backplates Included
UU008159483	M171/2	3M™ PELTOR™ M171/2 Wind shield/Wind protector, 2 pcs for speech microphone
XH001652532	M60/2	3M™ PELTOR™ Wind Shield for Surround/Environmental Mics
AT010580697	HYM1000	3M™ PELTOR™ HYM1000 Microphone protection
Accessories - Hel	lmet Adaptors/Backplat	tes
UU010853503	Z3GS/2 (25mm)	Helmet Adapter for 3M <sup>™</sup> Scott Safety Helmets and 3M <sup>™</sup> Scott Safety Visor Range
XL001642468	Z3E/2 (30mm)	Helmet Adapter for Common Helmets
XL001642484	Z3G/2 (25mm)	Helmet Adapter for 3M <sup>™</sup> Visor Range
XA007702625	Z3AF/2	Helmet Adapter for 3M™ Versaflo M-Series Head Top
Accessories - Hyg	giene	
UU008197921	HY83	3M™ PELTOR™ HY83 Hygiene Kit (cushion and foam liner)
XH001651351	HY100A	3M™ PELTOR™ HY100A Clean Hygiene Pad
3M™ E-A-Rfit™ Du	al-Ear Validation Syster	
70071691110	393-3001-2	3M™ PELTOR™ Earmuff Probed Test Cushion B

### In the box

- 1x Hearing Protector
- 2 x AA batteries (non re-chargeable)
- 1x User instruction

## **Important Notice**

To the extent permitted by law, 3M shall not be liable for any loss or damage including any loss of business, loss of profits, or for any indirect, special, incidental or consequential loss or damage arising from reliance upon any information herein provided by 3M. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

## 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 noise may result in hearing loss or injury. For proper use, see supervisor, User Instructions, or call 3M TechAssist Helpline 1800 024 464.

Always ensure the hearing protection device (HPD) is:

- Suitable for the application;
- Fitted correctly;
- Worn during all periods of exposure;
- Replaced when necessary.





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