

# 3M

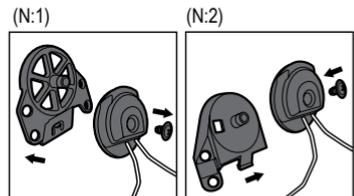
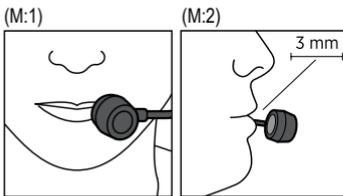
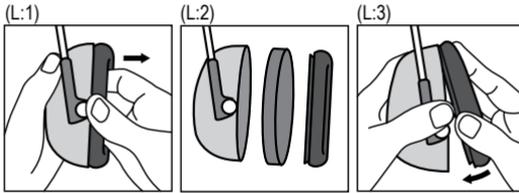
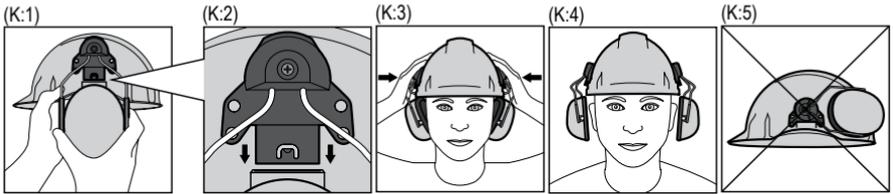
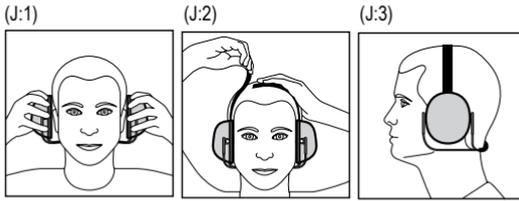
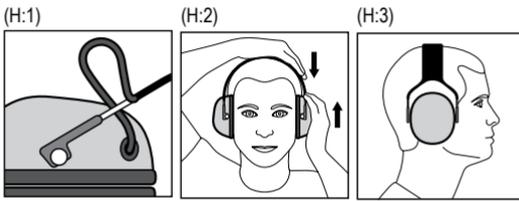
# PELTOR™

## WS™ ProTac XPI Headset



**Comhead Headset Company GmbH**  
Die Headset Spezialisten

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[www.comhead.de](http://www.comhead.de)



**(F) COMPATIBLE INDUSTRIAL SAFETY HARD HATS ACCORDING TO EUROPEAN STANDARD EN 352-3**

(F:1) Hard Hat Manufacturer	(F:2) Hard Hat Model	(F:3) Attachment	(F:4) Head size: S=small, M=medium, L=large
3M	SecureFit Safety Helmet X5000	E	S, M, L
3M	SecureFit Safety Helmet X5500	E	S, M, L
3M	G3000 Basic Set	E	L
3M	G2000	K	S, M, L
3M	G3501	E	L
3M	Versaflo M-306, M-307	AF	L

# Quick guide

fig 1

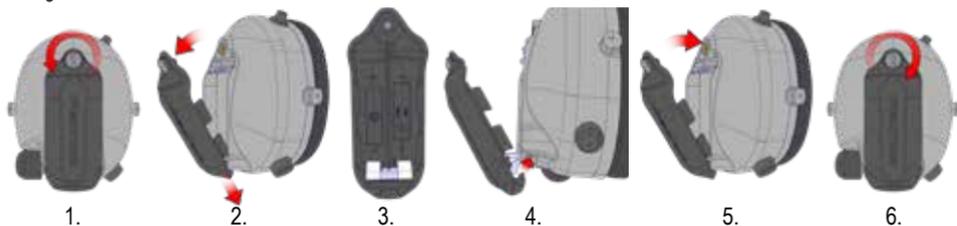


fig 2

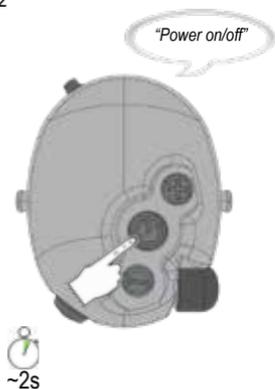


fig 3

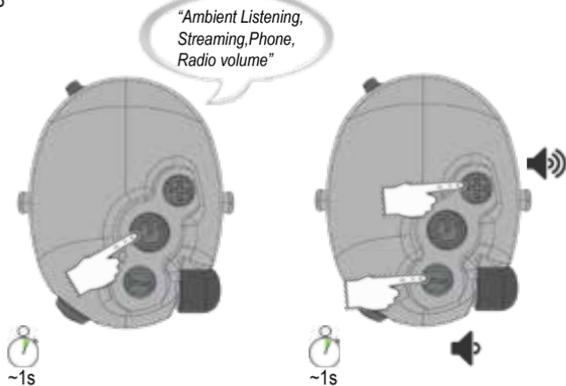
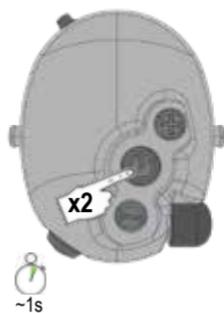


fig 4

PTL



From Power off

fig 5

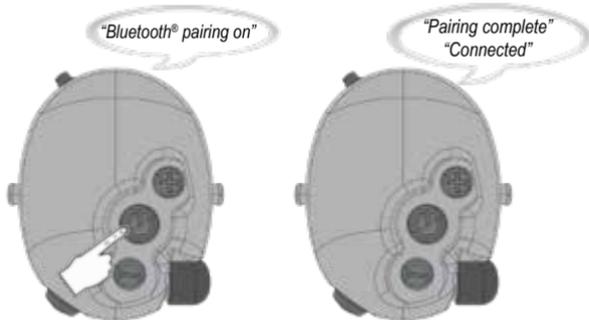


fig 6

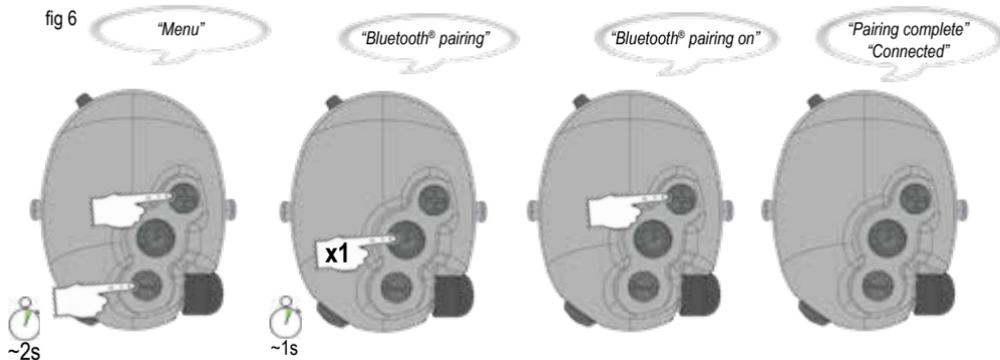


fig 7



fig 8

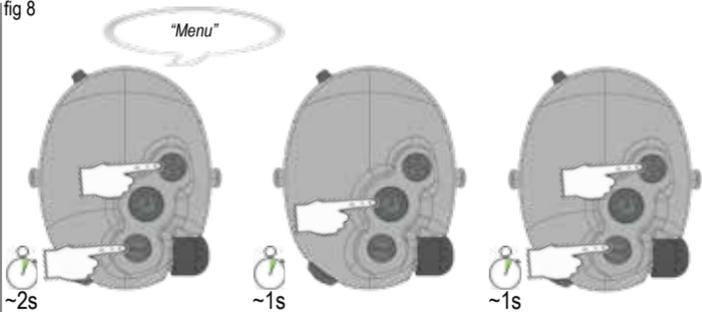


fig 9

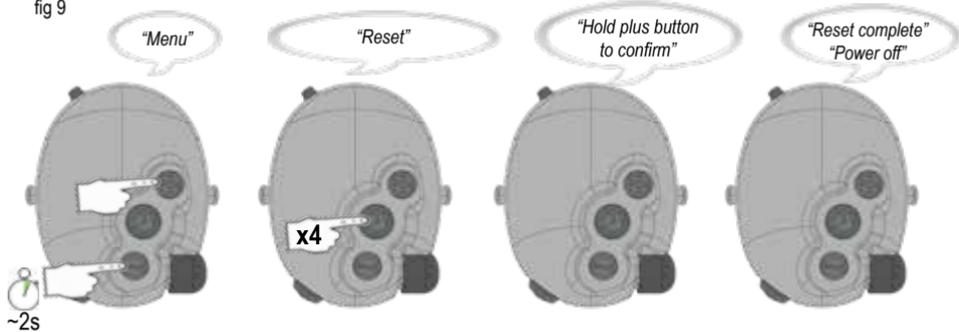
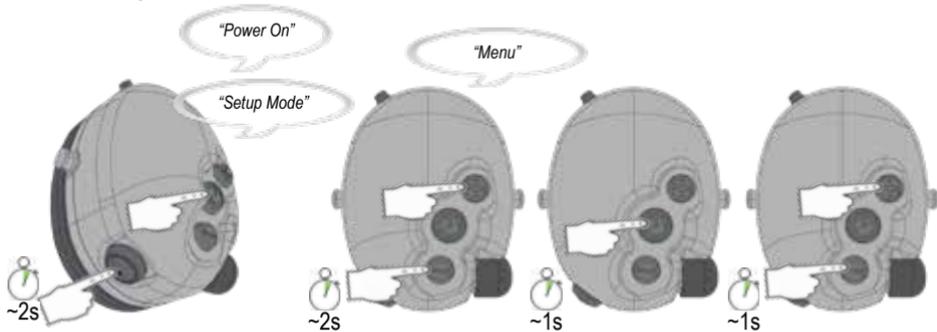


fig 10 **Setup Mode, from Power off mode**



# Laboratory Attenuation Tables

EN 352-1:2002 / EN 352-3:2002 / EN 352-4:2001+A1:2005 / EN 352-6:2002 / EN 352-8:2008

## A

Headband with foam cushion

MT15H7AWS6\*\* (A:1)

EN 352-1:2002

A:1 Frequency (Hz)	125	250	500	1000	2000	4000	8000	A:5 H	A:5 M	A:5 L	SNR	 (A6)
A:2 Mean attenuation (dB)	14.4	24.6	35.8	36.0	34.3	35.0	34.8	33	30	20	31	373 g
A:3 Standard deviation (dB)	3.1	1.8	3.2	2.7	2.3	3.0	3.4					
A:4 APV (dB)	11.3	22.8	32.6	33.3	32.0	32.0	31.4					

Helmet attachment with foam cushion

MT15H7P3EWS6\*\* (A:1)

EN 352-3:2002

A:1 Frequency (Hz)	125	250	500	1000	2000	4000	8000	A:5 H	A:5 M	A:5 L	SNR	 (A6)
A:2 Mean attenuation (dB)	18.7	25.4	33.0	38.0	34.3	34.4	34.3	31	30	23	31	395 g
A:3 Standard deviation (dB)	3.2	3.4	3.3	4.5	3.8	3.6	5.0					
A:4 APV (dB)	15.5	22.0	29.7	33.5	30.5	30.8	29.3					

Neckband with foam cushion

MT15H7BWS6\*\* (A:1)

EN 352-1:2002

A:1 Frequency (Hz)	125	250	500	1000	2000	4000	8000	A:5 H	A:5 M	A:5 L	SNR	 (A6)
A:2 Mean attenuation (dB)	14.3	24.7	34.7	35.3	36.1	37.1	37.4	35	30	21	32	365 g
A:3 Standard deviation (dB)	2.0	1.9	2.3	2.7	2.2	2.2	3.1					
A:4 APV (dB)	12.3	22.8	32.4	32.6	33.9	34.9	34.3					

Headband with gel cushion

MT15H7AWS6\*\* (A:1)

EN 352-1:2002

A:1 Frequency (Hz)	125	250	500	1000	2000	4000	8000	A:5 H	A:5 M	A:5 L	SNR	 (A6)
A:2 Mean attenuation (dB)	15.2	23.6	36.1	37.1	34.9	38.0	37.4	34	31	22	32	432 g
A:3 Standard deviation (dB)	1.9	1.7	2.7	2.2	2.5	2.7	3.3					
A:4 APV (dB)	13.3	21.9	33.4	34.9	32.4	35.3	34.1					

Helmet attachment gel cushion

MT15H7P3\*WS6\*\* (A:1)

EN 352-2:2002

A:1 Frequency (Hz)	125	250	500	1000	2000	4000	8000	A:5 H	A:5 M	A:5 L	SNR	 (A6)
A:2 Mean attenuation (dB)	18.0	23.1	32.1	37.6	35.1	35.1	36.7	32	29	21	31	457 g
A:3 Standard deviation (dB)	2.2	4.4	3.9	2.7	3.5	2.7	5.7					
A:4 APV (dB)	15.8	18.7	28.2	34.9	31.6	32.4	31.0					

Neckband with gel cushion

MT15H7B\*WS6\*\* (A:1)

EN 352-1:2002

A:1 Frequency (Hz)	125	250	500	1000	2000	4000	8000	A:5 H	A:5 M	A:5 L	SNR	 (A6)
A:2 Mean attenuation (dB)	14.5	22.5	34.5	36.5	37.5	37.8	37.3	36	29	20	32	425 g
A:3 Standard deviation (dB)	3.4	2.0	2.6	2.3	2.7	2.5	2.9					
A:4 APV (dB)	11.1	20.5	31.9	34.2	34.8	35.3	34.4					

**B**

Headband with foam cushion  
MT15H7AWS6\*\*

**ANSI S3.19-1974**

Frequency (Hz) <sup>(B:1)</sup>	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class	
Mean attenuation (dB) <sup>(B:2)</sup>	18.6	27.4	35.9	38.9	35.8	37.7	37.0	36.4	38.0	26	A	373 g
Std deviation (dB) <sup>(B:3)</sup>	4.1	3.3	3.1	2.9	2.9	3.0	2.4	3.8	5.0			

Neckband with foam cushion  
MT15H7BWS6\*\*

**ANSI S3.19-1974**

Frequency (Hz) <sup>(B:1)</sup>	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class	
Mean attenuation (dB) <sup>(B:2)</sup>	17.3	24.3	33.4	35.9	35.0	37.8	37.0	37.7	39.8	24	A	357 g
Std deviation (dB) <sup>(B:3)</sup>	4.4	4.6	3.7	3.0	3.1	2.4	2.6	2.6	3.9			

Helmet attachment with foam cushion on 3M™ H-700 Hard Hat  
MT15H7P3EWS6\*\*

**ANSI S3.19-1974**

Frequency (Hz) <sup>(B:1)</sup>	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class	
Mean attenuation (dB) <sup>(B:2)</sup>	19.3	25.1	35.0	38.7	34.5	35.3	34.9	36.1	38.5	26	A	395 g
Std deviation (dB) <sup>(B:3)</sup>	3.6	2.9	3.1	2.1	2.5	2.1	2.4	2.8	4.1			

Headband with gel cushion  
MT15H7AWS6\*\*

**ANSI S3.19-1974**

Frequency (Hz) <sup>(B:1)</sup>	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class	
Mean attenuation (dB) <sup>(B:2)</sup>	16.9	22.5	33.4	39.9	35.2	37.6	36.1	36.7	37.5	27	A	432 g
Std deviation (dB) <sup>(B:3)</sup>	2.6	2.2	2.5	1.8	1.9	1.7	2.6	1.8	1.7			

Neckband with gel cushion  
MT15H7BWS6\*\*

**ANSI S3.19-1974**

Frequency (Hz) <sup>(B:1)</sup>	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class	
Mean attenuation (dB) <sup>(B:2)</sup>	16.6	22.6	32.3	37.7	37.6	38.7	37.8	39.5	40.3	26	A	425 g
Std deviation (dB) <sup>(B:3)</sup>	3.6	2.2	2.4	2.4	2.8	2.9	2.5	2.4	2.0			

Helmet attachment with gel cushion 3M™ H-700 Hard Hat  
MT15H7P3EWS6\*\*

**ANSI S3.19-1974**

Frequency (Hz) <sup>(B:1)</sup>	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class	
Mean attenuation (dB) <sup>(B:2)</sup>	17.5	23.3	34.6	39.2	36.1	38.2	38.5	38.7	40.0	27	A	457 g
Std deviation (dB) <sup>(B:3)</sup>	2.6	2.0	3.2	2.8	2.7	2.6	2.1	1.9	2.5			

**C)**

Headband with foam cushion

MT15H7AWS6\*\*

AS/NZS 1270:2002

Frequency (Hz) <sup>(C:1)</sup>	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamping Force
Mean attenuation (dB) <sup>(C:2)</sup>	19.6	23.2	32.9	36.8	36.6	35.0	37.5	32	5	12N
Std deviation (dB) <sup>(C:3)</sup>	2.3	2.5	3.2	3.0	3.0	4.0	2.6			Mass
Mean minus SD (dB) <sup>(C:4)</sup>	17.3	20.7	29.7	33.8	33.6	31.0	34.9			372 g

Neckband with foam cushion

MT15H7BWS6\*\*

AS/NZS 1270:2002

Frequency (Hz) <sup>(C:1)</sup>	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamping Force
Mean attenuation (dB) <sup>(C:2)</sup>	16.0	19.8	27.5	32.7	36.4	33.3	36.1	29	5	11.6N
Std deviation (dB) <sup>(C:3)</sup>	3.8	3.8	4.0	3.0	3.6	4.0	3.8			Mass
Mean minus SD (dB) <sup>(C:4)</sup>	12.2	16.0	23.5	29.7	32.8	29.3	32.3			357 g

Helmet attachment with foam cushion

MT15H7P3\*WS6\*\*

AS/NZS 1270:2002

Frequency (Hz) <sup>(C:1)</sup>	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamping Force
Mean attenuation (dB) <sup>(C:2)</sup>	16.7	18.2	26.4	32.3	35.6	32.1	34.8	27	5	9.9 N
Std deviation (dB) <sup>(C:3)</sup>	4.0	4.4	5.2	3.3	4.3	3.5	5.3			Mass
Mean minus SD (dB) <sup>(C:4)</sup>	12.7	13.8	21.2	29.0	31.3	28.6	29.5			396 g

**(D)**

MT15H7\*WS6-111

EN352-6:2002

D:1) RMS Voltage U (mV)	D:2) Mean sound pressure (dB(A))	D:3) STD sound pressure (dB)
27	66.1	0.8
47	70.9	0.8
84	75.5	0.8
149	79.1	0.8
266	81.7	0.7
472	83.7	0.8

D:4) The electrical input level for which the sound pressure level is equal to 82 dB(A):

242.3 mV
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**(E)**

EN 352-4:2001 + A1:2005

**Criterion levels**

H = 117 dB(A)

M = 111 dB(A)

L = 97 dB(A)

(G)



# 3M™ PELTOR™ WS™ ProTac XPI Headset

EN	1-8
BG	9-17
CZ	18-25
DE	26-34
DK	35-42
EE	43-50
ES	51-58
FI	59-66
FR	67-74
GR	75-83
HR	84-91
HU	92-99
IS	100-107
IT	108-115
KZ	116-123
LT	124-131
LV	132-139
NL	140-147
NO	148-155
PL	156-164
PT	165-172
RO	173-180
RS	181-188
RU	189-199
SE	200-207
SI	208-215
SK	216-223
TR	224-231
UA	232-240
ZH	241-248

### 3M™ PELTOR™ WS™ ProTac XPI Headset

MT15H7\*WS6\*

#### INTRODUCTION

Congratulations and thank you for choosing 3M™ PELTOR™ hearing protection solutions! 3M™ PELTOR™ WS™ ProTac XPI Hearing protection has built-in Bluetooth® technology and a level-dependent function for ambient listening. Welcome to the next generation of protective communication.

#### IMPORTANT

Please read, understand, and follow all safety information in these instructions prior to use. Retain these instructions for future reference. For additional information or any questions, contact 3M Technical Services (contact information listed on the last page).

#### INTENDED USE

These 3M™ PELTOR™ headsets are intended to provide workers with protection against hazardous noise levels while allowing the user to communicate via built-in Bluetooth® technology or other audio devices and hear the surroundings via the ambient microphones. It is expected that all users read and understand the provided user instructions as well as be familiar with the use of this device.

#### WARNING

This hearing protector helps reduce exposure to hazardous noise and other loud sounds. Misuse or failure to wear hearing protection at all times when exposed to hazardous noise may result in hearing loss or injury. For correct use, consult supervisor and User Instructions, or call 3M Technical Services. If your hearing seems dulled or you hear a ringing or buzzing during or after any noise exposure (including gunfire), or for any other reason you suspect a hearing problem, leave the noisy environment immediately and consult a medical professional and/or your supervisor.

#### **Failure to follow these instructions may result in serious injury or death:**

a. Listening to audio communication may reduce your situational awareness and ability to hear warning signals. Stay alert and adjust the audio volume to the lowest acceptable level. The audibility of warning signals at a specific workplace may be impaired while using the entertainment facility.

b. To reduce the risks associated with igniting an explosion, do not use this product in a potentially explosive atmosphere.

#### **Failure to follow these instructions may reduce the protection provided by the earmuff and may result in hearing loss:**

a. 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 for guidance on how to adjust attenuation label values. In the absence of applicable regulations, it is recommended that the SNR be reduced to better estimate typical protection.

b. U.S. EPA specifies the NRR as the measure of hearing protector noise reduction. However, 3M makes no warranties as to the suitability of the NRR for this purpose. 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 for guidance on how to adjust attenuation label values. It is recommended that the NRR be reduced by 50% to better estimate typical protection.

c. Ensure the hearing protector is properly selected, fit, adjusted, and maintained. Improper fit of this device will reduce its effectiveness in attenuating noise. Consult the enclosed instructions for proper fit.

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

e. 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.

f. Do not bend or reshape the headband or neckband, and ensure there is adequate force to hold the earmuffs firmly in place.

g. Earmuffs, and in particular cushions, may deteriorate with use and should be examined at frequent intervals for cracking and leakage, for example. When used regularly, replace the ear cushions and foam liners at least twice a year to maintain consistent protection, hygiene, and comfort.

h. The output of the electrical audio circuit of this hearing protector may exceed the daily limit sound level. Adjust the audio volume to the lowest acceptable level. Sound levels from any connected external device such as 2-way radios and phones may exceed safe levels and must be appropriately limited by the user. Always use external devices at the lowest sound level possible for the situation and limit the amount of time you are exposed to unsafe levels as determined by your employer and applicable regulations. If your hearing seems dulled or you hear a ringing or buzzing during or after any sound exposure or for any other reason you suspect a hearing problem, go to a quiet environment immediately and consult a medical professional and/or your supervisor.

i. If the requirements above are not adhered to, the protection afforded by the earmuffs will be severely impaired.

### EN 352 Safety Statements:

The output of the level-dependent circuit of this hearing protector may exceed the external sound level.

- The fitting of hygiene covers to the cushions may affect the acoustic performance of the earmuffs.
- Performance may deteriorate with battery usage. The typical period of continuous use that can be expected from the earmuff battery is approximately 45 hours.
- This product may be adversely affected by certain chemical substances. Further information should be sought from the manufacturer.
- These helmet mounted earmuffs are of large size range. Helmet mounted earmuffs complying with EN 352-3 are of "medium size range" or "small size range" or "large size range". "Medium size range" helmet mounted earmuffs are designed to fit the majority of wearers. "Small size range" or "large size range" helmet mounted earmuffs are designed to fit wearers for whom "medium size range" helmet mounted earmuffs are not suitable.
- The output of the audio circuit of this hearing protector may exceed the exposure limit level.
- The product shall not be used if it can't be ensured that the input voltage doesn't exceed the maximum value in Table D:1.

### CAUTION:

- Risk of explosion if battery is replaced by an incorrect type. See **"Spare parts/accessories"**.
- Do not charge batteries in temperatures above 40 °C (104 °F).
- Use only 3M™ PELTOR™ USB charger FR09 and USB wall adapter FR08 with rechargeable battery pack ACK053.
- With batteries, there is a risk of fire and burns. Do not open, crush, heat above 55 °C (131 °F), or incinerate.
- Do not mix alkaline, standard, or rechargeable batteries.
- For noise environments dominated by frequencies below 500 Hz the C-weighted environmental noise level should be used.
- Always use product-specific 3M replacement parts. Use of unauthorized replacement parts may reduce the protection you receive from this product.

### NOTE

- When worn according to these User Instructions, this hearing protector helps reduce exposure to both continuous noises, such as industrial noises and noises from vehicles and aircraft, as well as very loud impulse noises, such as gunfire. It is difficult to predict the required and/or actual hearing protection obtained during exposure to impulse noises. For gunfire, the weapon type, number of rounds fired, proper selection, fit and use of hearing protection, proper care of hearing protection, and other variables will impact performance. To learn more about hearing protection for impulse noise, visit [www.3M.com/hearing](http://www.3M.com/hearing).
- Although hearing protectors can be recommended for protection against the harmful effects of impulsive noise, the Noise Reduction Rating (NRR) is based on the attenuation of continuous noise and may not be an accurate indicator of the protection attainable against impulsive noise such as gunfire (wording required by EPA).

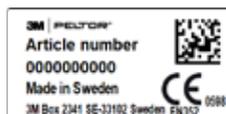
- This earmuff is provided with level-dependent attenuation. The wearer should check correct operation before use. If distortion or failure is detected, the wearer should refer to the manufacturer's advice for maintenance and replacement of the battery.
- This earmuff is provided with electrical audio input. The user should check correct operation before use. If distortion or failure is detected, the user should refer to the manufacturer's advice.
- This hearing protector limits the entertainment audio signal to 82 dBA effective to the ear.
- In Canada, users of hard hats combined with earmuffs must refer to CSA Standard Z94.1 on industrial protective headwear.
- Operating temperature range: 0 °C (32 °F) to 50 °C (122 °F)
- Storage temperature range: -20 °C (-4 °F) to 55 °C (131 °F)
- Weight of hearing protector: Refer to Laboratory Attenuation Tables A and B.

### APPROVALS

Hereby, 3M Svenska AB declares that the Bluetooth® communication is in compliance with Directive 2014/53/EU and other appropriate directives to fulfill the requirements for the CE marking. 3M Svenska AB also declares that the PPE type headset is in compliance with Regulation (EU) 2016/425 or Community Directive 89/686/EEC.

The PPE is audited annually by SGS Fimko Ltd. Takomotie 8 FI-00380 Helsinki, Finland Notified Body No. 0598 and type approved by PZT GmbH, Notified Body No. 1974, Bismarckstrasse 264 B, 26389, Wilhelmshaven, Germany. The product has been tested and approved in accordance with EN 352-1:2002 / EN 352-3:2002, EN 352-4:2001/ A1:2005, EN 352-6:2002, EN 352-8:2008 or EN 352-1:2020, EN 352-3:2020, EN 352-4:2020, EN 352-6:2020, EN 352-8:2020.

The applicable legislation can be determined by reviewing the Declaration of Conformity (DoC) at [www.3M.com/peltor/doc](http://www.3M.com/peltor/doc). The DoC will also show if some other type-approvals are also applicable. When retrieving your DoC, please locate your part number. The part number of your earmuffs can be found at the bottom of one cup. An example can be seen in the picture below.



A copy of the DoC and additional information required in the Directives can also be obtained by contacting 3M in the country of purchase. For contact information, see last pages of this user instruction.



Do NOT dispose your product as unsorted municipal waste! The crossed-out wheeled bin symbol indicates that all EEE (Electrical and Electronic Equipment), batteries, and accumulators must be disposed of according to local law by the use of available return and collection systems.

### LABORATORY ATTENUATION

The attenuation rating (SNR/NRR) was obtained with the device powered off.

#### European Standard EN 352

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 for guidance on how to adjust attenuation label values. In the absence of applicable regulations, it is recommended that the SNR be reduced to better estimate typical protection.

#### Explanation of the attenuation data (Table A)

##### European Standard EN 352

(A:1) Model designation

(A:2) Frequency (Hz)

(A:3) Mean attenuation (dB)

(A:4) Standard deviation (dB)

(A:5) Assumed protection value, APV

(A:6) Weight (g)

H = Hearing protection estimation for high frequency sounds ( $f \geq 2000$  Hz).

M = Hearing protection estimation for medium frequency sounds ( $500 \text{ Hz} < f < 2000$  Hz).

L = Hearing protection estimation for low frequency sounds ( $f \leq 500$  Hz).

(E) Criterion level

H = Criterion level for high frequency noise

M = Criterion level for medium frequency noise

L = Criterion level for low frequency noise

#### USA Standard ANSI S3.19-1974 (Table B)

U.S. EPA specifies the NRR as the measure of hearing protector noise reduction. However, 3M makes no warranties as to the suitability of the NRR for this purpose. 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 for guidance on how to adjust attenuation label values. It is recommended that the NRR be reduced by 50% to better estimate typical protection.

(B:1) Frequency (Hz)

(B:2) Mean attenuation (dB)

(B:3) Standard deviation (dB)

The level of noise entering a person's ear, when hearing protector is worn as directed, is closely approximated by the difference between the A-weighted environmental noise level and the NRR.

Example

1. The environmental noise level as measured at the ear is 92 dB(A).
2. The NRR is 32 decibels (dB).
3. The level of noise entering the ear is approximately equal to 60 dB(A).

#### Australia/New Zealand Standard AS/NZS 1270:2002 (Table C)

(C:1) Test frequency

(C:2) Mean attenuation

(C:3) Standard deviation

(C:4) Mean minus SD

#### Explanation of electrical audio input level (Table D)

##### European Standard EN 352-6

(D:1) Input signal level U (mV, RMS)

(D:2) Mean sound pressure level (dB(A))

(D:3) Sound pressure standard deviation (dB)

(D:4) Input signal level for which the mean plus one standard deviation equals 82 dB(A)

#### Explanation of criterion levels (Table E)

##### European Standard EN 352-4

Criterion level is the sound pressure level in dB(A) of the noise environment resulting in 85 dB(A) effective to the ear while wearing the hearing protectors. Three different criterion levels are defined related to the frequency content of the noise.

H = criterion level for high frequency noise.

M = criterion level for medium frequency noise.

L = criterion level for low frequency noise.

#### Explanation of the industrial safety hard hat attachment (Table F)

##### European Standard EN 352-3

(F:1) Helmet manufacturer

(F:2) Helmet model

(F:3) Helmet attachment

(F:4) Head size: S = Small, M = Medium, L = Large

**NOTE:** These earmuffs should be fitted to, and used only with the industrial safety helmets listed in Table F. These earmuffs were tested in combination with the following industrial safety hard hats, and may give different levels of protection if fitted to different hard hats.

**NOTE:** When selecting accessories, such as headgear-mounted hearing protection, please consult the NIOSH approval label or consult 3M Technical Service for approved configurations.

## COMPONENTS

- (G:1) Headband (PVC, stainless steel)
- (G:2) Two-point fasteners (POM)
- (G:3) Ear cushion (PVC foil, PUR foam)
- (G:4) Speech microphone
- (G:5) On/Off/Mode button
- (G:6) [+] button
- (G:7) [-] button
- (G:8) Bluetooth® button
- (G:9) External input PTT (\*-111 models)
- (G:10) External input jack, FLX 2

## 1. FITTING INSTRUCTIONS

### 1:1 Headband

- (H:1) Slide out the cups and tilt the top of the cup out, as the cable must be on the outside of the headband.
- (H:2) Adjust the height of the cups by sliding them up or down while holding the headband in place.
- (H:3) The headband should be positioned across the top of the head as shown and should support the weight of the headset.

### 1:2 Neckband

- (J:1) Position the earcups over your ears so that the cushions fully enclose the ears and seal tightly against the head.
- (J:2) Keep the cups in position, place the head strap on top of your head and lock it tight in position.
- (J:3) The head strap should be positioned across the top of your head and should support the weight of the headset.

NOTE: The retention system of some helmets can interfere with correct positioning of the earcups over the ears if the neckband headset is donned before the helmet. If this occurs with your helmet, you should don the helmet first and the headset after securing the helmet onto your head.

### 1:3 Helmet attachment

- (K:1) Insert the helmet attachment in the slot on the helmet and snap it into place.
- (K:2) Make sure that the cable is on the outside of the headband.
- (K:3) Work mode: Press the headband wires inwards until you hear a click on both sides.  
Make sure that the cups and the headband wires do not press on the edge of the hard hat when in work mode as this could reduce the noise attenuation of the earmuff.
- (K:4) Ventilation mode: To switch the unit from work mode to ventilation mode, pull outward on the ear cups until you hear a click.  
Avoid placing the cups against the helmet as this prevents ventilation (K:5).

NOTE: Do not store the helmet with the helmet attachment in ventilation mode. This causes stress on the helmet attachment.

NOTE: When the helmet is not in use, make sure that the cups are left in work mode. This will decrease the stress on the helmet attachment.

### 1:4 Microphone

- (M:1) (M:2) To maximize the performance of the speech microphone in noisy areas, position the microphone very close to your mouth (less than 3 mm or 1/8 inch).

### 1:5 Replacing the helmet attachment plate

- For proper fitting on different industrial safety helmets, the helmet attachment plate may need to be replaced. Find the recommended attachment in Table F. Other plates can be obtained from your dealer. A screwdriver is needed to replace the helmet attachment plate.
- (N:1) Loosen the screw holding the plate and remove the plate.
- (N:2) Attach the appropriate plate while ensuring the left (L) and right (R) designated plates are on the appropriate earmuff, if applicable, and then tighten the screw.

## 2. OPERATING INSTRUCTIONS

### 2:1 Replacing the batteries (fig. 1)

- 1-2: Remove the battery compartment lid and insert the alkaline batteries or ACK053.
- 3: The battery polarity must correspond to the marking in the battery compartment. Low battery level is indicated by the recurring voice message "low battery".
- 4-6: Hook the lid and close the compartment lid.

NOTE: Use only 3M™ PELTOR™ USB charger FR09 and 3M™ PELTOR™ USB wall adapter FR08 with 3M™ PELTOR™ ACK053.

### 2:2 Operation time

- Approximate operation time with new AA alkaline batteries and fully charged ACK053 battery (1900 mAh):
  - Level-dependent: approx. 150 hours
  - Bluetooth® and level-dependent: approx. 45 hours

#### NOTE:

Depending on the environment, temperature, and battery, the operation time may vary.

### 2:3 Power on/power off (fig. 2)

- Press and hold the On/Off/Mode button for approximately 2 seconds to switch the headset on or off. A voice message will confirm that the unit has been switched on or off with the voice message "power on" or "power off".

NOTE: The headset is automatically powered off after four hours of inactivity. This is indicated by the voice message "automatic power off".

### 2:4 Adjusting the sound source volume level (fig. 3)

- To adjust the sound source volume level, short press (1 s) the [+] or [-] button. Change the active sound source by short pressing (1 s) the On/Off/Mode button.

The sound source can be:

- Ambient listening
- Streaming
- Phone
- Radio

## 2:5 Ambient listening (level-dependent microphones)

Helping protect your hearing from potentially harmful noise levels. Constant rumbling and other potentially harmful noises are reduced, but you can still speak normally and make yourself heard.

The ambient listening volume adjusts the level-dependent function for ambient sound. It is adjustable in 4 levels and an off mode. Adjust the volume by pressing the [+] or [-] buttons.

## 2:6 Communication face to face (Push-To-Listen, PTL)

(fig. 4)

The Push-To-Listen feature enables you to instantly listen to your environment by muting the Bluetooth® audio volume and activating the level-dependent microphones. Short press (1 s) the On/Off/Mode button two times to activate Push-To-Listen. Short press any button to deactivate Push-To-Listen.

## 2:7 External input (\*FLX2 models)

External equipment can be connected via FLX2 cables with a standard connector. For information on wiring for your specific headset, please refer to product data sheet or consult your dealer.

## 2:8 External input PTT (\*FLX2 models)

The PTT (Push-To-Talk) button (fig. 7) is used to manually control radio transmission for radios connected to the external input jack.

## 2:9 Bluetooth® Multipoint technology

This headset supports Bluetooth® Multipoint technology. Use Bluetooth® Multipoint technology to connect your headset to two Bluetooth® devices at the same time. Depending on the type of Bluetooth® devices connected and their current activities, the headset controls the Bluetooth® devices in different ways. The headset prioritizes and coordinates activities from the connected Bluetooth® devices.

**NOTE:** The default setting is Bluetooth® Single point, so you have to activate Bluetooth® Multipoint in the setup mode of the headset.

## 2:10 Pairing a Bluetooth® device (fig. 2, fig. 5)

The first time the headset is powered on, it automatically enters pairing mode. A voice message confirms, "Bluetooth® pairing on". Pairing mode can also be entered from the menu (fig. 6). This can be used for pairing a second device. If another device has been paired, you can also pair a second device by long pressing the Bluetooth® button when starting the headset. See "**Configuring your headset**".

Make sure that Bluetooth® communication is activated on your Bluetooth® device. Search and select "WS ProTac XPI" on your Bluetooth® device. A voice message confirms when the pairing is complete, "pairing complete" and "connected".

**NOTE:** You can always stop the pairing process by a long press (2 s) on the Bluetooth® button (fig. 7).

**NOTE:** Only one of the two paired devices can be a two-way radio. The headset only supports PTT over Bluetooth® if the two-way radio supports 3M™ PELTOR™ Push-To-Talk protocol. If you have any questions, please contact your local distributor.

**NOTE:** When a third Bluetooth® device is successfully paired, one of the previously paired devices is removed from the headset. If one of the devices is connected, the unconnected device is removed. Otherwise, the first paired device is removed.

## 2:11 Reconnecting Bluetooth® devices

When the headset is powered on, it tries to reconnect to all paired devices during 5 minutes. A voice message will confirm the connection, "connected".

**NOTE:** If the link is lost, a voice message will confirm with "disconnected".

## 2:12 Bluetooth® function

Bluetooth® is the name of a technical standard for short-range wireless transmission, with a working range of approximately 10 metres. This headset can be used with other Bluetooth®-enabled units that support any of the profiles: headset (HSP), hands-free (HFP), or streaming audio (A2DP).

- If the message "no paired devices" is heard, no Bluetooth® device is linked to the headset.
- If the message "connecting Bluetooth®, connected" is heard, a Bluetooth® enabled device is linked to the headset and connected.
- If the message "connecting Bluetooth®, connection failed" is heard, a Bluetooth® device is linked to the headset, but not connected.

## 2:13 Answer a phone call (fig. 7)

When the headset is connected to a phone via Bluetooth® wireless technology and there is an incoming call, answer by pressing briefly on the Bluetooth® button on the right cup.

## 2:14 Reject a call (fig. 7)

Press and hold the Bluetooth® button for 2 seconds to reject a phone call.

## 2:15 Adjust Bluetooth® volume (fig. 3)

Press the [+] or [-] buttons to adjust the volume on an active paired Bluetooth® device.

## 2:16 Toggle between phone and headset (fig. 7)

When a call is active, it is possible to transfer the audio to the phone instead of the headset, by pressing the Bluetooth® button for 2 seconds. To return the call to the headset, press the Bluetooth® button for 2 seconds once more.

## 2:17 Finish a phone call (fig. 7)

To finish an ongoing phone call, press the Bluetooth® button briefly.

**2:18 Redial** (fig. 7)

The last dialed number on a phone connected via Bluetooth® can be redialed. Press and hold the Bluetooth® button for 2 seconds.

**2:19 Voice dial** (fig. 7)

To activate voice control of the last paired device, short press the Bluetooth® button.

**3. CONFIGURING YOUR HEADSET** (fig. 8)

Settings are changed in the menu. Press and hold the [+] and [-] buttons for approximately 2 seconds to access the menu. To step through the menu, press the On/Off/Mode button briefly. The menu steps are listed below. At each menu step the [+] and [-] buttons are used to change the setting and step through the available settings. A voice message confirms each menu step. After ten seconds of inactivity, the menu returns to volume mode.

**3:1 Bluetooth® pairing** (fig. 6)

When the voice message says "Bluetooth® pairing", short press (1 s) the [+] button to start pairing. Short press (1 s) the Bluetooth® button to stop pairing. A voice message will confirm, "Bluetooth® pairing on". Search and select "WS ProTac XPI" on your Bluetooth® device. A voice message will confirm when pairing is complete, "pairing complete" and "connected". Short press (1 s) the [-] button to stop the pairing. A voice message will confirm, "pairing failed".

**3:2 VOX (voice operated transmission)**

VOX enables automatic transmission when the sound level at the microphone is above the VOX level. This allows radio transmission without pressing the Bluetooth® button. There are two settings: off mode (default) and on mode for activating voice operated transmission.

**3:3 Battery type**

Battery type adjusts the indication of low battery warning for different types of battery. It is adjustable for two types of batteries: rechargeable and alkaline.

**3:4 Reset (reset to factory default)** (fig. 9)

To confirm a reset to factory default, hold the [+] button for two seconds.

**4. SETUP MODE** (fig. 10)

To access the setup mode, the headset must be turned off. Then press and hold the On/Off/Mode button and Bluetooth® button for approximately 2 seconds to start the headset in setup mode. Press and hold the [+] and [-] buttons for approximately 2 seconds to access the extended menu. To step through the menu, press the On/Off/Mode button briefly. The menu steps are listed below. At each menu step, the [+] and [-] buttons are used to change the setting and step through the available settings. A voice message confirms each menu step. After ten seconds of inactivity, the menu returns to volume mode.

**4:1 Bluetooth® pairing**

When the voice message says "Bluetooth® pairing", short press (1 s) the [+] button to start pairing. Short press (1 s) the Bluetooth® button to stop pairing. A voice message will confirm, "Bluetooth® pairing on". Search and select "WS ProTac XPI" on your Bluetooth® device. A voice message will confirm when pairing is complete, "pairing complete" and "connected". Short press (1 s) the [-] button to stop the pairing. A voice message will confirm, "pairing failed".

**4:2 VOX (voice operated transmission)**

VOX enables automatic transmission when the sound level at the microphone is above the VOX level. This allows radio transmission without pressing the Bluetooth® button. There are two settings: off mode (default) and on mode for activating voice operated transmission.

**4:3 Battery type**

Battery type adjusts the indication of low battery warning for different types of battery. It is adjustable for two types of batteries: rechargeable and alkaline.

**4:4 Reset (reset to factory default)** (fig. 9)

To confirm a reset to factory default, hold the [+] button for 2 seconds.

**4:5 VOX mode**

Enable or disable the VOX function.

**NOTE:** When disabled, this will not be available in the menu.

**4:6 Automatic power off**

The automatic power off is the time that elapses before the headset is automatically powered off if no buttons are pressed or if there is no transmission made. There are two settings: off and 4 hours (default).

**4:7 Bluetooth® streaming**

Enable or disable the streaming function. Disable is default.

**4:8 Bluetooth® Multipoint**

Enable or disable the Multipoint function. Disable is default.

**4:9 Microphone volume**

Increase or decrease the microphone gain.

**4:10 LED On/Off/Mode button**

The On/Off/Mode button is illuminated by a Light Emitting Diode (LED) which indicates that the headset is powered on.

## 5. CLEANING AND MAINTENANCE

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. If an ear cushion is damaged, it should be replaced. See "**Spare parts/accessories**" below.

### REMOVING AND REPLACING THE EAR CUSHIONS

L:1 To remove the ear cushion, slide your fingers under the inside edge of the ear cushion and firmly pull straight out.  
L:2 Remove existing liner(s) and insert new foam liner(s).  
L:3 Fit one side of the ear cushion into the groove of the earcup and then press on the opposite side until the ear cushion snaps in place.

### USE AND STORAGE CONDITIONS

Remove the batteries before storing the product. Do not store the hearing protector at temperatures above 55 °C (131 °F), for example on a dashboard, parcel shelf or window sill, or at temperatures below -20 °C (-4 °F). Do not use the hearing protector at temperatures above 50 °C (122 °F), or below 0 °C (32 °F).

## 6. SPARE PARTS/ACCESSORIES

### 3M™ PELTOR™ HY83 Hygiene kit

Replaceable hygiene kit. Replace at least twice a year to ensure constant attenuation, hygiene, and comfort.

### 3M™ PELTOR™ HY80 Gel ring for industrial headset

Gel sealing rings featuring a super-thin polyurethane skin with a double-hump top face design and a silicone gel-filled bladder with a foam backing.

### 3M™ PELTOR™ HY100A Single-use protectors

Single-use protector that is easy to fit to the ear cushions.

### 3M™ PELTOR™ HYM1000 Microphone protector

Moisture- and wind-resistant tape that protects the speech microphone.

### 3M™ PELTOR™ ACK053 Rechargeable battery pack

Rechargeable NiMH battery pack, 1900 mAh 2.4 V  
Operating temperature range: 0 °C (32 °F) to 50 °C (122 °F)

### 3M™ PELTOR™ FR09 Battery charger

Charger for the PELTOR ACK053.

### 3M™ PELTOR™ FR08 Power supply

Power supply for the PELTOR FR09.

### 3M™ PELTOR™ M171/2 Wind shield for MT73 speech microphone

Effective protection from wind noise. Enhances the life span and protects the speech microphone. One per package.

### 3M™ PELTOR™ 1180 SV Battery lid

Battery lid for use with 1.5 V batteries of type LR6 (AA).

### 3M™ PELTOR™ M60/2 Wind shield for ambient microphones

Wind protection for the microphones.

### 3M™ PELTOR™ FLX2 Accessory cables

Please contact your 3M PELTOR dealer.

## FCC AND IC INFORMATION

This device complies with Part 15 of the FCC rules and Industry Canada's license-exempt Radio Standards Specifications. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesirable operation.

This portable device with its antenna complies with FCC/IC RF Exposure limits for general population / uncontrolled exposure. The antenna used for this device must not be co-located or operating in conjunction with any other antenna or transmitter. Changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation distance between the two interfering devices.
- Consult 3M Technical Service.

**NOTE:** Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

CAN ICES-3 (B)/NMB-3(B)

#### **WARRANTY AND LIMITATION OF LIABILITY**

**NOTE:** The following statements do not apply in Australia and New Zealand. Consumers should rely on their statutory rights.

**WARRANTY:** In the event any 3M Personal Safety Division product is found to be defective in material, workmanship, or not in conformity with any express warranty for a specific purpose, 3M's only obligation and your exclusive remedy shall be at 3M's option, to repair, replace, or refund the purchase price of such parts or products upon timely notification of the issue by you and substantiation that the product has been stored, maintained, and used in accordance with 3M's written instructions. EXCEPT WHERE PROHIBITED BY LAW, THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY, OR THOSE ARISING FROM A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE, EXCEPT OF TITLE AND AGAINST PATENT INFRINGEMENT. 3M has no obligation under this warranty with respect to any product that has failed due to inadequate or improper storage, handling, or maintenance; failure to follow product instructions; or alteration or damage to the product caused by accident, neglect, or misuse.

**LIMITATION OF LIABILITY:** EXCEPT WHERE PROHIBITED BY LAW, IN NO EVENT SHALL 3M BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL LOSS OR DAMAGES (INCLUDING LOST PROFITS) ARISING FROM THIS PRODUCT, REGARDLESS OF THE LEGAL THEORY ASSERTED. THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE.

**NO MODIFICATION:** Modifications to this device shall not be made without the written consent of 3M Company. Unauthorized modifications may void the warranty and the user's authority to operate the device.

To properly dispose of the battery, follow local solid waste disposal regulations. Many rechargeable batteries are required to be recycled by local, state/province, and national laws. To properly recycle/dispose of the battery or battery pack, always follow local solid waste disposal regulations. Additionally, in the United States and Canada, 3M Company is partnering with Call2Recycle (RBRC) to provide recycling service to you to help ensure that the rechargeable batteries within our products are recycled properly. To assist you in using this service, call the Call2Recycle battery recycling information help line at 1-800-8-BATTERY (1-800-822-8837) or consult Call2Recycle's battery recycling guidance online at [www.call2recycle.org](http://www.call2recycle.org).

