# **Technical Data Specification**

# 3M<sup>™</sup> PELTOR<sup>™</sup> WS<sup>™</sup> ALERT<sup>™</sup> X Headset (CE version)

Hearing protection with Bluetooth® technology and Mobile App interface

PELTOR

# **Product Description**

The Bluetooth® headset with noise-cancelling boom microphone connects to your mobile phone for hands free calls and streaming in noisy environments. The headset helps to protect against hazardous noise and at the same time helps promote your situational awareness via the level-dependent function for ambient listening. The headset also synchs to a mobile app so users can easily set-up and adjust the headset.

# **Key Features**

- Attenuating hearing protector comes in two models: headband or a safety helmet attachment
- Bluetooth® technology for connection to an external Bluetooth® device allows for hands-free talking and streaming
- Noise-cancelling boom microphone for clear speech transmission in noisy environments
- Level-dependent function for ambient listening to help promote auditory situational awareness
- Connection to an iOS and Android compatible mobile app, 3M™ Connected Equipment, to more easily set-up and adjust the headset. The app is available to download from App Store and Google Play.
- Mobile app allows you to receive reminders when to change replacement cushions (hygiene kit) and choose the frequency of these alerts
- Push-to-Listen feature to easily and instantaneously listen to your surroundings
- Voice guided feedback after setting adjustment. No need to remove the headset for any adjustments
- The headset will automatically turn off after four hours of non-use to save battery life
- Low-battery warning at low battery level
- To reduce the corrosion caused by sweat the electronics are located in the outer part of the cup
- Replaceable cushions (hygiene-kit)
- Replaceable covers so you can change to your own choice of colour

#### **Applications**

The 3M<sup>™</sup> PELTOR<sup>™</sup> WS<sup>™</sup> ALERT<sup>™</sup> X Headset offers Bluetooth® wireless communication in continuous or intermittent noisy environments. Essential when users need to be connected to their mobile phone throughout the day (e.g. handymen in construction industries, private contractors operating their own equipment, farmers, maintenance workers in industrial applications etc.); everywhere hands-free communication and hearing protection could be of benefit.

#### Approvals

Hereby, 3M Svenska AB declares that the product is in compliance with appropriate Directives or Regulations to fulfill the requirements for the CE and/or UKCA marking. The full text of the Declaration of Conformity is available at the following internet address:

www.3M.com/PELTOR/DOC

A copy of the Declaration of Conformity and additional information required in the Directives or Regulations can also be obtained by contacting 3M in the country of purchase.



MRX214AWS6



#### MRX21P3E4WS6



Bluetooth® technology for connection to one external device for hands free talk and streaming



Connect the headset with the "3M™ Connected Equipment" mobile app Connected Equipment" mobile app supporting both Android and iOS





Noise cancelling boom microphone for clear speech transmission in noisy environments



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

# **Headset Models and Accessories**

Article number	Description	3M ID	SAP ID
MRX21A4WS6	3M™ PELTOR™ WS™ ALERT™ X Headset, App, bright yellow, headband	UU011469580	7100257811
MRX21P3E4WS6	3M™ PELTOR™ WS™ ALERT™ X Headset, App, bright yellow, helmet attachment	UU011469598	7100256658

Article number	Description	3M ID	SAP ID
HY82	3M™ PELTOR™ HY82 Hygiene kit (cushion and foamliner)	UU008567388	7100122439
HY80	3M™ PELTOR™ HY80 Gel Sealing Ring	70071524139	7000127268
210300-664-GY/1	3M™ PELTOR™ Covers for WS™ ALERT™ Headsets, bright yellow,1 pair (left+right)	UU011614854	7100264002
210300-664-RD/1	3M™ PELTOR™ Covers for WS™ ALERT™ Headsets, red, 1 pair (left+right)	UU011321732	7100246986
210300-664-BA/1	3M™ PELTOR™ Covers for WS™ ALERT™ Headsets, blue, 1 pair (left+right)	UU011321724	7100246985
210300-664-OR/1	3M™ PELTOR™ Covers for WS™ ALERT™ Headsets, orange, 1 pair (left+right)	UU011321153	7100246983
210300-664-RE/1	3M™ PELTOR™ Covers for WS™ ALERT™ Headsets, pink, 1 pair (left+right)	UU011321138	7100247026
210300-664-SV/1	3M™ PELTOR™ Covers for WS™ ALERT™ Headsets, black, 1 pair (left+right)	UU010322590	7100253622
210300-664-GB/1	3M™ PELTOR™ Covers for WS™ ALERT™ Headsets, neon green, 1 pair (left+right)	UU011140447	7100240624
LR6NM	3M™ PELTOR™ LR6NM NiMH rechargeable AA batteries	XH001659693	7100064688
MT53N-14/1	3M™ PELTOR™ Electret boom microphone, 240mm with plug incl windshield M995/2	UU011614862	7100264326
M995/2	3M™ PELTOR™ M995 Wind shield for speech microphone	XH001679154	7010044372
HY100A	3M™ PELTOR™ HY100A Clean Hygiene Pad	XH001651351	7100064410
HYM1000	3M™ PELTOR™ HYM1000 Microphone protection (4.5 meters)	XH001651328	7100064281

# **Technical data specifications**

Materials:	Headband MRX21A4WS6 Headband: PVC, PA Headband wire: stainless steel Two-point fastener: POM Cushion: PVC foil and PUR foam Foam liner: PUR foam Cup: ABS Level-dependent microphone for ambient listening: PUR foam Wind shield for speech microphone: ABS, PA Wind Shield: foam Helmet attachment/Hardhat MRX21P3E4WS6 Cup supporting arm: stainless steel
Battery type:	2xAA Alkaline batteries (or optional NiMH rechargeables)
Operating time:	Approximately 78 hours (Bluetooth® streaming and level-dependent)
Weight (batteries incl.):	MRX21A4WS6 (headband): 393 g MRX21P3E4WS6 (helmet attachment): 413 g
Bluetooth® technology:	Bluetooth version: 4.2
	Bluetooth headset profile (HSP): 1.2
	Bluetooth hands-free profile (HFP): 1.6
	Bluetooth Advanced Audio Distribution Profile (A2DP): 1.3
	Audio/Video Remote Control Profile (AVRCP): 1.6
	Bluetooth Range: Up to 10m (class 2)
Speakers:	27 mm diameter, 100 Ohm
Boom microphone type:	Noise-cancelling electret microphone
Operating temperature:	-20°C (-4°F) to +55°C (131°F) (battery dependent)
Storage temperature:	-20°C/-4°F to 40°C/122°F <90% humidity
Product lifetime:	Up to 5 years (excl. batteries)

Use limitation: Never modify or alter this product.

# **Attenuation Europe**

#### MRX21A4WS6

#### Headband with foam cushion

Frequency (Hz) f	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation $M_f$ (dB)	13.8	19.3	30.4	34.5	37.7	39.5	36.2	
Standard deviation $s_f$ (dB)	2.7	2.4	2.7	3.6	2.3	2.7	4.1	30
Assumed Protection Value APV <sub>f</sub> (dB)	11.1	16.9	27.7	30.9	35.4	36.8	32.1	

MRX21A4WS6: 393 q

# MRX21P3E4WS6

## Helmet Attachment with foam cushion

The met Attachment with roam cushon								
Frequency (Hz) f	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation $M_f$ (dB)	14.2	19.7	29.6	33.4	36.3	39.5	34.6	
Standard deviation s <sub>f</sub> (dB)	3.9	1.9	2.5	1.8	2.5	2.7	4.9	30
Assumed Protection Value APV <sub>f</sub> (dB)	10.3	17.8	27.1	31.6	33.8	36.8	29.7	

MRX21P3E4WS6: 413 g

L=18 dB H=34 dB M=27 dB

EN 352-1:2002

M=27 dB

EN 352-3:2002

L=18 dB

H=35 dB

EN 352-1:2002

## MRX21A4WS6

#### Headband with gel cushion

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Frequency (Hz) f	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation $M_f$ (dB)	12.6	19.6	30.4	32.4	40.1	40.5	38.0	
Standard deviation $s_f$ (dB)	2.9	2.0	3.0	2.8	3.3	3.3	2.8	30
Assumed Protection Value $APV_f$ (dB)	9.7	17.6	27.4	29.6	36.8	37.2	35.2	
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MRX21A4WS6: 454 g

## MRX21P3E4WS6

#### Helmet Attachment with gel cushion

Frequency (Hz) f	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation $M_f$ (dB)	11.8	18.6	28.4	33.2	37.9	39.1	36.9	
Standard deviation $s_f$ (dB)	2.3	2.0	2.0	2.7	2.4	3.2	4.1	29
Assumed Protection Value $APV_f$ (dB)	9.5	16.6	26.4	30.5	35.5	35.9	32.8	

MRX21P3E4WS6: 474 g

H=35 dB M=26 dB L=17dB

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

# In the box

1 x Headset 2 x AA batteries 1 x User Instruction

3M<sup>TM</sup> PELTOR<sup>TM</sup> Marketing Communication, Värnamo, Sweden

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DS17067

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Always read and follow User Instructions.

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#### Warranty

The warranty does not cover any damage caused by neglected maintenance or

For more information on maintenance, please see the User Instruction. For complete warranty condition, contact your dealer or local 3M office.

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3M<sup>™</sup> Connected Equipment





App Store (iOS)



Google Play (Android)





H=36 dB M=27 dB



L=18 dB

