

Personal Safety Division

Hearing solutions catalogue

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It starts with PAR

How do you decide what hearing protection you will offer to your workers?

If you are simply using the SNR found on the hearing protection packaging as a guide you may not be providing accurate protection levels for every worker. Ears come in many shapes and sizes and to make sure all workers are getting the protection they need, you need to know their Personal Attenuation Rating (PAR).

Noise-induced hearing loss is 100% preventable.

29dB pass.

A “pass” result means the hearing protection is inserted properly and provides sufficient protection for the worker’s specific job.

10dB fail.

A “fail” result means the hearing protection is either not inserted properly or is the wrong type or size for the worker’s ear canal.



What’s your PAR?

Every employee is different. Every job is different. Every ear is different.

Finding each employee’s PAR will help you have assurance that workers’ hearing is protected and they are compliant with the law. That’s why we made the new 3M™ E-A-Rfit Dual-Ear Validation System fast, accurate and easy.

Fit testing is key.

Get results you can trust. The 3M™ E-A-Rfit Dual-Ear Validation System measure the effectiveness of the earplug or earmuff inside the employee’s ear providing accurate, quantitative results. Because you can simultaneously test both ears, you have more to focus on education including the importance of fit and protection.

Why 3M?

As the leader in hearing protection, 3M offers a complete solution, with dual-ear and earmuff testing capabilities plus a user-friendly interface. The 3M™ E-A-Rfit Dual-Ear Validation System is the fast and easy way to find your employees’ PAR, because we know how important it is to make your hearing conservation program fit seamlessly into your operation.

The challenges of hearing protection

40 million workers are exposed to loud noise and 13 million suffer from hearing disorders despite industry regulations*. You can advance your hearing conservation programme with a customised and comprehensive approach to the hearing protection challenge. Implementing a solution that really makes a difference begins with understanding the hazards, the regulation and the factors that impact protection.

The facts

The #1 Reported Occupational Health Issue: data from the European Agency for Safety and Health at Work shows that noise induced hearing loss is the most commonly reported occupational medical condition in the EU.

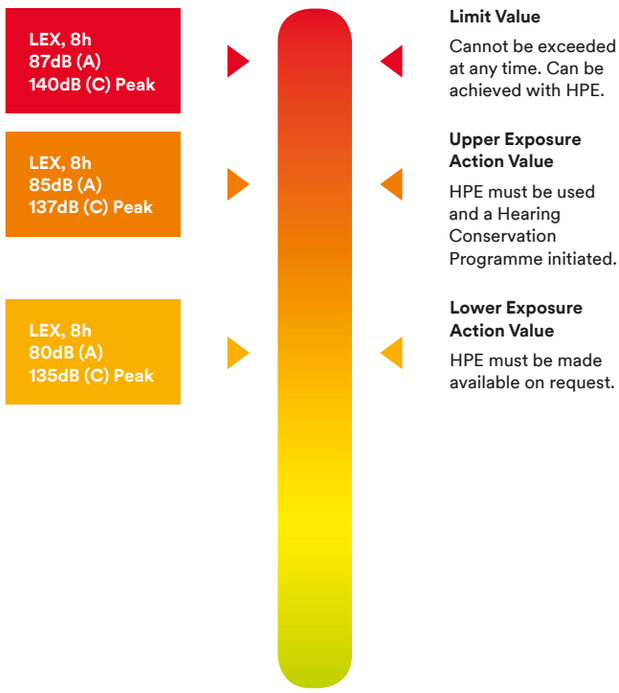
One Third of European Employees Potentially at Risk: according to the EU OSHA one third of workers in Europe are exposed to potentially dangerous levels of noise.

Repeated exposure to loud sounds, greater than 85 dB(A), can cause permanent hearing loss and tinnitus. Other health effects related to noise include stress, anxiety, hypertension, sleep disturbance and fatigue.

The regulations

The Physical Agents (Noise) Directive 2003/10/EC states that suitable hearing protection devices be made available at the Lower Exposure Action Value and information on the harmful effects of noise provided to the worker.

At Upper Exposure Action value suitable hearing protectors must be worn in areas where there is risk of noise induced hearing damage and entry to such area should be strictly controlled. In addition, hearing conservation programme be initiated which may include general health surveillance and audiometric checks. The Limit Value is the absolute ceiling limit that must not be exceed at any time and can be achieved by using appropriate hearing protectors.



* Source: European Agency for Safety and Health at Work

The real world concerns of hearing protection

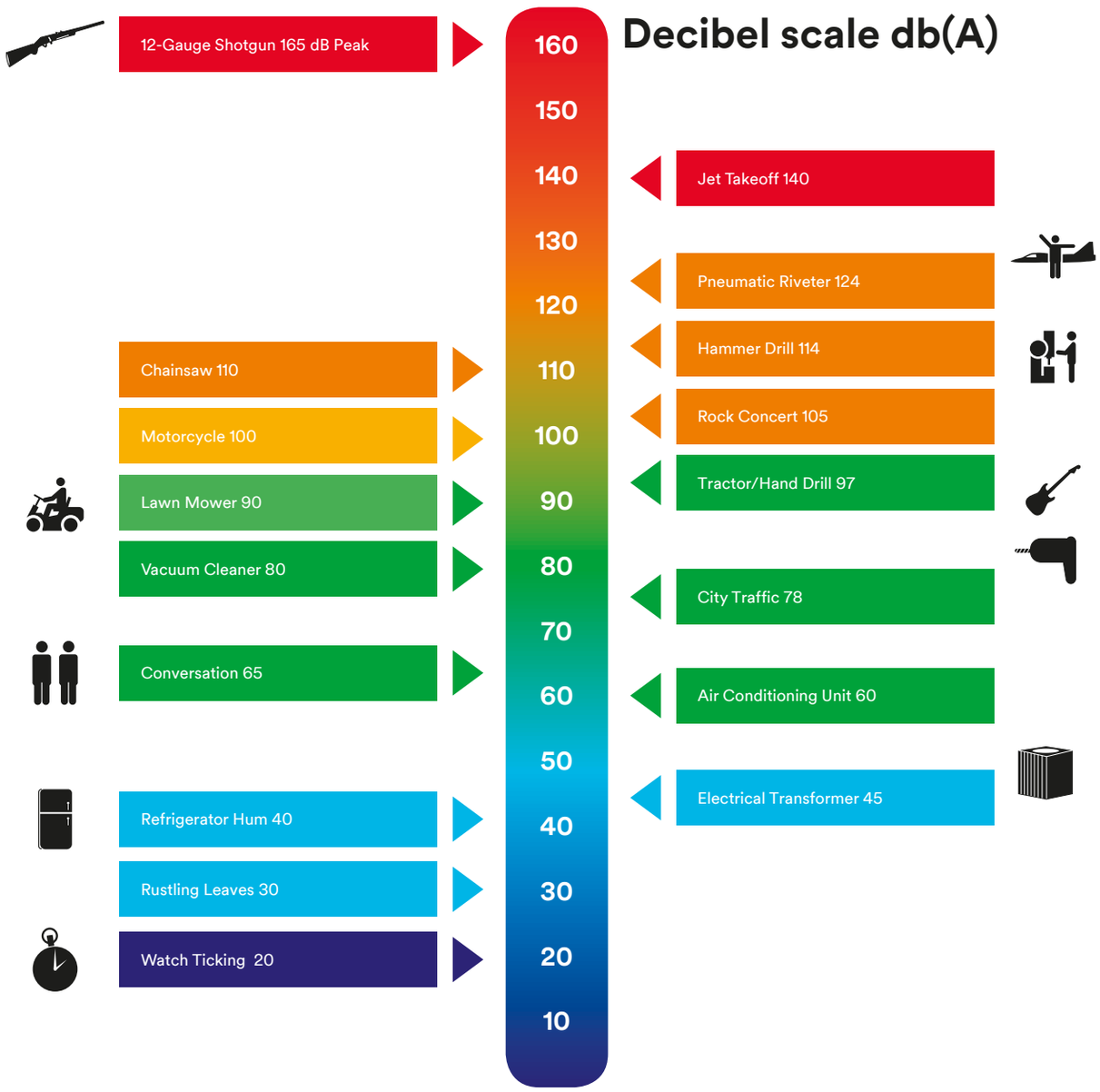
Variable Noise Levels: Every environment is different and workers can face a wide range of sound levels throughout the day and in different areas at the same facility.

The Human Factor: Each person has a different shape, size and anatomy of the ear canal, so there is no one-size fits all hearing protection solution. The key to achieving optimal protection is having the best fit possible.

Employee Communication: Where there is an essential need for workers to communicate or hear warning sounds it is vital that their hearing is protected from hazardous noise levels.

What types of sounds require hearing protection?

At home and work, it's important to understand which sounds may cause hearing loss and require hearing protection:



Is your hearing protection fit for purpose?

Harmful noise is one of the top 3 health hazards in the workplace. From 2016 harmful noise will be officially recognised as an irreversible health hazard within the new PPE Regulation. This puts hearing protection in the same level of high risk categorisation as respiratory protection and fall protection.

How will this change of categorisation affect you?

Your supplier of hearing protection products

Manufacturers of hearing protection products will be subject to more stringent on-going quality control procedures, including quality control of products or quality assurance for the entire manufacturing site. In addition, new CE marking will be applied on all packaging and products (where feasible).

Your users of hearing protection products

Protection from harmful noise needs to be taken seriously, and using the right product and wearing it correctly is vital. The new Regulation recognises this and will bring added confidence to users that the products they are wearing are able to provide reassured protection.

As Safety Officer what do you need to do?

- You will need to make sure you're buying hearing protection from a manufacturer that complies with the new Regulation when it becomes mandatory after 2019.
- Training of workers in the correct selection of personal protective equipment is already an essential requirement under the PPE User Directive 89/656/EEC.



3M has over 50 years' experience of developing innovative hearing protection products.

At 3M we recognise the importance of providing the appropriate level of support for our customers. Whether it's helping you choose the right products for particular hazards and working environments, or helping you keep up to date with changing legislation and the implications for your workplace.

3M is here to help



3M has a team of dedicated hearing technical and regulatory experts around Europe.

At 3M our manufacturing processes already operate to the more stringent quality monitoring principles required by the new Regulation, and our team of experts actively participate on many European CEN Standards Committees as well as trade associations such as the European Safety Federation.

3M can help you fulfil your essential training requirement.

As with any personal protective equipment used in high risk environments, you need to be fully confident that you select the appropriate hearing protector suitable for your workplace needs. 3M can help. We offer a range of training services including:

- Presentations
- Seminars
- Face to face demonstrations
- User training videos
- Webinars
- Fit testing

March 2016

- New Regulation published in the Official European Journal and adopted by member bodies
- Test houses, Notified Bodies and Manufacturers to start becoming familiar with the new Regulation

March 2018 (transition period)

- Both the products meeting the old PPE Directive and the new PPE Regulation can be placed on the market
- Notified Bodies can certify products against the new Regulation
- Manufacturers can apply the CE mark and place products on the market meeting the new Regulation

March 2019 (implementation period)

- The new PPE Regulation fully implemented
- New products placed on the market will be required to meet the new Regulation

The solution: detection, protection and validation

As a global leader in sound and noise detection, hearing protection and fit test validation, 3M delivers easy and comprehensive solutions to complex hearing protection challenges.

Accurate noise detection.

The first step in solving the hearing protection challenge is to measure the noise levels facing your workers. 3M Detection Solutions make it easy to measure noise hazards, so you can select the appropriate hearing protection for the application. Our detection instruments deliver accurate and reliable measurements, and 3M Detection Management Software makes it easy to report and share data.



Adaptable hearing protection.

3M delivers a wide range of innovative hearing protectors, making it easy to select the right solution for the job. A variety types and sizes of earplugs and earmuffs are available, helping your team determine the right fit for each person, and the right protection for the application. Our innovative products are designed for comfortable, extended wear, and can help your team comply with your hearing protection program.



Fit test validation.

Integrating hearing protector fit testing into your hearing conversation program benefits everyone from new hires to high-risk workers. The 3M™ E-A-Rfit™ Dual-Ear Validation System makes it easier to fit, train and motivate workers and to assess and manage the long-term performance of your hearing conservation program.



Hearing protection – where do I start?

3M | E-A-R Hearing Protection



Disposable Earplugs (Roll-down)



Push-in Earplugs



Reusable Earplugs



Banded Earplugs









3M | PELTOR™

Ear Defenders and Headsets (Headband, Helmet, Neckband)

Technology and support from the hearing protection experts

Employee education and training.

The 3M global hearing experts provide valuable on-site training and seminars throughout the world, helping employers and their workers achieve their hearing conservation goals. This training is conveniently performed on-site at no cost. Whether it's explaining attenuation ratings or regulations, or providing the motivation workers need to comply, 3M Hearing Specialists are available to help you achieve your hearing conservation program objectives. They're experts in hearing conservation training and will work with your team to help ensure your professional workers are protected with the right hearing protection equipment for their jobs.

Understanding Single Number Rating (SNR).

A single number rating is the overall level of attenuation of the hearing protector across all test frequencies performed in a laboratory under ideal conditions. However, each hearing protector's SNR is not really a good estimate for workplace noise reduction.

Many factors, such as the relationship between the size of the wearer and size of the wearer's ear canal, and how it has been inserted or fitted, can impact how effective that hearing protector will be. That's why it is so important to have the E-A-Rfit Validation System as part of your hearing conservation program and the support of a hearing protection team with over 40 years of expertise.

Innovation from the experts.

At 3M, we understand the challenges of the workplace, the complexities of fitting protection devices, and the importance of creating adaptable solutions for maximizing hearing protection. Our innovations in noise detection, protection and validation are designed to solve real-world challenges, providing our customers with the advanced and comprehensive solutions needed to help protect workers.

The 3M team of application specialists, sound engineers, and support personnel provides an unmatched level of support you can rely on to advance your hearing protection program.





Food industry worker

“In my job, I don’t want complicated hearing protection. Just keep it simple.”

Susan works indoors at a food processing plant in a damp, refrigerated area. She leaves her hearing protectors in throughout her entire shift.

She needs metal detectable earplugs or easy-to-clean earmuffs. And they have to be comfortable.



Machine operator

“My hearing protection has got to be comfortable. That’s my top priority.”

Julia works at the same station every day and wears safety glasses throughout her entire shift.

She needs small-sized earplugs or earmuffs that are comfortable for extended wear.



Production manager

“I need to be able to hear my co-workers communicate with me, and ensure they are protected.”

John works indoors, and moves in and out of noisy areas continuously throughout the day. Most of the time he is on the phone or a two-way radio.

He needs a hearing protection solution with wireless 2-way radio communications and ambient listening. And he needs detection equipment to measure the noise levels his workers are exposed to. In short, he needs to hear, communicate and measure sound levels in noisy environments.

Training and education

Training tailored to you

At 3M we believe that education is key to protection. It is essential that workers and safety managers understand the risks to their health in the workplace and know how to protect against these risks in the best way. In order for them to do this, we provide a vast array of training, suited to different businesses and individual needs.



On-site and on topic

We can provide on-site training, with a visit from our Safety Caravan, mobile across the EU or with the SafeTea Break concept recently introduced in the UK, which aims to give safety managers the chance to teach workers about health and safety issues and the importance of wearing PPE. We also provide extensive training to distributors, so that they can then advise and assist customers in selecting the correct protective equipment for their workplace. Of course our technical service teams are also on hand to present their expert knowledge of the health and safety industry.



Accessible to all

We work hard to make sure that our training and tools are accessible to all, which is why we have developed an extensive eAcademy. We currently have modules spanning how the different parts of the body work, different hazards in the workplace, and how it is possible to protect against them. We are determined to increase the safety culture and having online training means we can reach more people.
It is also flexible to the learning pace of the user, and very user friendly as well as being convenient and relevant to the needs of each individual.



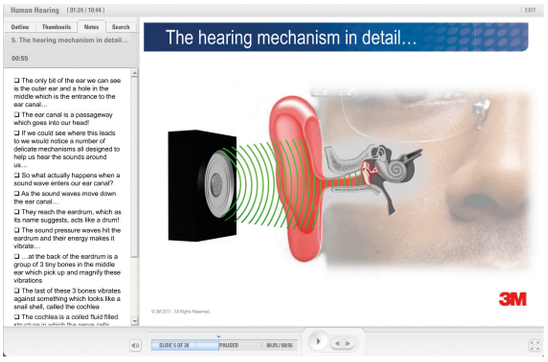
The 3M Worker Health & Safety Academy

The flexible way to discover and learn throughout your busy day

Join us online any time of the day to expand your knowledge on our current range of personal protective equipment for the workplace. Learn what you want, when you want, where you want... and at a pace that's right for you.

3M offers you engaging interactive training on topics relevant to you

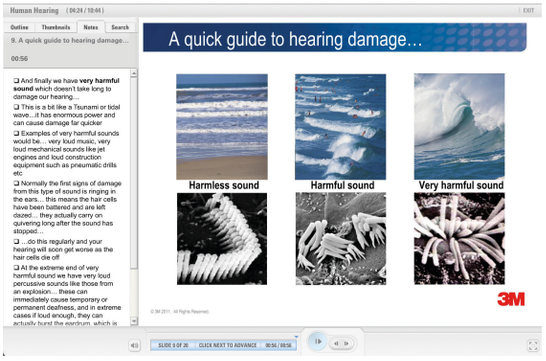
- Workplace hazards and health effects
- Industry standards and regulations
- The approach to protection
- 3M Personal Safety Solutions



Why e-learning?

Conventional training can often be difficult to manage. It can also be expensive, not simply in monetary terms, but in the time that people are kept away from their job. Time may be limited to cover content, whilst finding a convenient time for both trainer and staff may also be difficult.

- User-friendly site with online help
- Convenient – learn whenever and wherever you want
- Flexible – learn at a pace that's comfortable
- Personalised completion certificates
- Team progress tracking for managers





Meet the 3M experts



Mohammed Saleem
Senior Technical Specialist
3M EMEA

In order to ensure hearing protectors are fit for purpose and provide adequate protection for the wearer they must not only fulfil the relevant published Harmonised European standards but are carefully selected and worn at all times when exposed to the noise hazards. 3M's leadership role in the European and International Standards Committee helps ensure development of good science based standards that continuously improves wearer protection and help increase compliance.



Paweł Górski Ph.D.
Senior Application Engineer
3M Poland

Problems with a proper use of hearing protection have been known for many years. The tests carried out by Scientific Institutes demonstrated that in about 53% of cases the "real-world" attenuation provided by hearing protection devices was lower than declared assumed protection value. The researches show that trainings with fit test systems is the best way for effective education of workers and OSH officers as well. For the trainings you can use 3M™ E-A-Rfit™ Dual-Ear Validation System.



Roberto Arteconi
Advanced Application Engineer
3M Italy

Noise is an invisible risk in workplace! It's very important that you don't underestimate it! Wear always hearing protection when and where it is necessary, and wear them always following, step by step, the instruction.



Mohammed Hatooq
Senior Technology Application Engineer
3M Saudi Arabia

Trust me – no one will be affected by noise except you, hence it's important to wear your hearing protection devices properly which will help you to hear and communicate with your family easily after retirement. You have only one chance to protect your ears – take it by using hearing protection devices or leave it by ignoring them.



Juan José Caballero Lorenzi
Application Engineer
3M Spain

Noise Induced Hearing Loss (NIHL) is irreversible, but can be completely avoided! Use proper hearing protection, correctly fitted and at all times. It will protect your ears from harmful noise and will help you listen to your environment, avoiding possible accidents and enabling communication. If you do not start today, maybe tomorrow will be too late…



Joao Rosario
Application Engineer
3M Germany

He who believes he can hear as well with a hearing aid as he could with his natural hearing may also believe he can run well with crutches. Therefore, please protect your ears any time you're exposed to harmful noise. NIHL is totally preventable.



Mirey Bonfil
Advanced Application Engineer
3M Turkey

Everybody is different, and our ear canals are different too. Because of this fact, we have to choose our ear protection equipment by doing fit test in order to provide the best protection for ourselves!



Martial Bouvin
Application Engineer
3M France

On the field it is always difficult to ensure the proper use of PPE by employees. You can train, as often as possible, on the impact of a bad protection (Tinnitus, hearing loss). You can also explain what it will generate on a daily basis (not listening to your favorite music, not hearing your grandchild, not enjoying a relaxing sound). But the most powerful tool to improve the proper use of hearing protection is the training with the 3M™ E-A-Rfit™ Dual-Ear Validation System and the day by day support of the management team.



3M™ Detection Solutions

Detection is the first step in identifying where hearing protection may be needed. 3M delivers intuitive solutions for effective noise monitoring programs. Durable, accurate, and easy-to-use instrumentation makes it simple to report and share noise exposure data. 3M detection products deliver innovatively simple solutions to complex monitoring challenges.

3M™ Noise Indicator NI-100



The Noise Indicator NI-100 alerts the wearer to potentially dangerous noise levels, helping identify areas where hearing protection may be needed. Users clip the Noise Indicator to a shirt or jacket, and its LED light provides a clear indication when noise levels exceed a potentially hazardous threshold. The NI-100's small size and lightweight design make it ideal for workers in a variety of industries.

- Affordable lightweight noise monitor with a durable, easy-to-use design
- Rechargeable battery that operates for up to 200 hours between charges
- Flashing green LED indicates if noise level is below 85 dB(A)
- Flashing red LED indicates noise level is at or above 85 dB(A), indicating hearing protection may be needed

Product number	Product description	Case qty
NI-100	Noise indicator	10 EA
053-575	USB cable accessory for battery charging	10 EA

3M™ Sound Detector SD-200



The Sound Detector SD-200 is a compact, lightweight sound level meter designed to accurately measure workplace noise levels. Green, yellow and red LEDs flash the colour that corresponds to the Optime Alert System, making it easy to select the appropriate level of hearing protection. The SD-200 offers an integrating feature that computes the average sound pressure level, allowing for more accurate assessment of intermittent sound levels. The user-friendly interface makes the SD-200 easy to operate. A rechargeable lithium polymer battery helps lower the total cost of ownership compared to other sound level meters that use replaceable batteries.

- Simple, user-friendly interface; green, yellow and/or red LEDs flash when preset noise levels are reached
- A rechargeable lithium polymer battery operates up to 50 hours between charges
- Average sound pressure level delivers a steady reading where noise levels are highly variable
- Features a Class/Type 2 microphone
- Measures Sound Pressure Level (SPL), Average value (LEQ/LAVG), LED alert, Maximum value (MAX), minimum value (MIN), run-time, overload (OL) and under-range (UR)
- Display range is 40 to 130 dB (dynamic range)

Product number	Product description	Case qty
70071564713	Sound detector kit, usb cable, windscreen	1 EA
70071581758	USB cable accessory for battery charging	1 EA
70071606399	70071606399 windscreen 1 EA	1 EA

3M™ Sound Examiner SE-400 Series



The Sound Examiner SE-400 series of sound meters are engineered to accurately measure noise levels in highly variable environments. These advanced instruments compute the average sound pressure level (LEQ/LAVG) over the run time and feature user-selectable data logging intervals, helping you to more accurately assess occupational and environmental noise levels.

- Intuitive interface allows for out-of-box use with little training
- Intrinsically Safe models available
- User selectable data logging intervals for download and analysis with 3M™ Detection Management Software
- Averaging functionality allows for easy measurement in variable environments
- Printing capability with optional digital printer provides hard copy documentation in the field
- Choose from models with Class/Type 1 or Class/Type 2 microphones
- SE-401 and SE-402-R models include removable preamp for environmental noise applications
- Flashing green LED indicates if noise level is below 85 dB(A)
- Flashing red LED indicates noise level is at or above 85 dB(A), indicating hearing protection may be needed

Product number	Product description	Case qty
SE-401	SE-401 sound examiner, type 1 microphone, removable preamp	1 EA
SE-402	SE-402 sound examiner, type 2 microphone	1 EA
SE-401	SE-401 intrinsically safe sound examiner, type 1 microphone	1 EA
SE-402	SE-402 intrinsically safe sound examiner, type 2 microphone	1 EA

3M™ Edge™ Dosimeters



The Edge personal noise dosimeter series offers advanced technology packaged in an intrinsically safe, cable-free, compact frame for a lighter, more ergonomic way to monitor noise exposures.

- Comfortable, compact 3-ounce (85 grams) unit mounts easily to the shoulder
- Large display with intuitive easy-to-use interface provides crucial information at a glance
- Edge 5 model offers three independent dosimeters that can simultaneously measure against separate industry standards, all in one compact unit
- LCD display with visual warnings and option to lock out screen
- MSHA, SIRA (ATEX), CSA (U.S./Canada) and Simtars (IECEx) Intrinsic Safety Approvals

Product number	Product description	Case qty
EG5-D	Edge 5 noise dosimeter with single edge dock	1 EA
EG4-D	Edge 4 noise dosimeter with single edge dock	1 EA

3M™ AcoustiCal AC-300 Calibrator

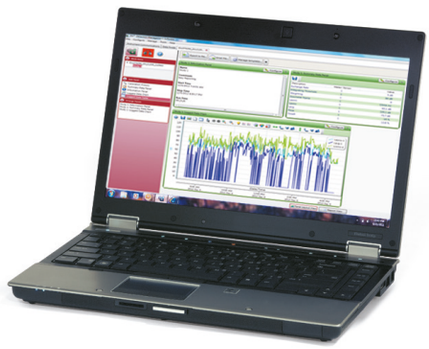


The AcoustiCal AC-300 Calibrator was specifically designed for easy field calibration of 3M sound level meters and noise dosimeters across a wide range of temperature, humidity and pressure conditions. Simply insert the microphone of your instrument into the calibrator, select the correct signal from the one-button keypad and calibrate.

- Type 1 calibrator for use with 3M™ Sound Level Meters and Noise Dosimeters
- Produces two signals: 250 Hz or 1,000 Hz at a sound pressure level of 114 dB
- Fast, simple operation for calibrating in the field
- Conforms to sound calibrator requirements of IEC 60942 (2003-01) and ANSI S1.40-2006 (R2011)

Product number	Product description	Case qty
AC-300	AcoustiCal AC-300 Calibrator	1 EA

3M™ Detection Management Software (DMS)



Once you've detected the level of noise exposure, 3M's DMS Detection Management Software allows you to centrally organise and access the information through our user-friendly software. It's data management made easy.

DMS works with 3M Detection Solutions Data Logging Instruments to allow for recording, reporting, charting and analysing exposures to a variety of occupational and environmental hazards. Easy to learn with icon-driven navigation, DMS provides a simplified user experience and a powerful, consistent software platform across multiple sites.

Product number	Product description	Case qty
DMS	Detection Management Software (DMS)	1 EA



3M™ Disposable Foam Earplugs

3M™ Disposable Earplugs, made from expandable slow-recovery foam, provide a great combination of comfort and hearing protection for users. Once in the ear, foam earplugs expand to conform to the unique shape of each ear, providing a comfortable, custom fit. 3M provides a wide range of disposable roll-down earplugs so you can choose the best solution for your individual needs.

3M™ E-A-R™ Classic™ Earplugs

Classic earplugs were the industry's first foam earplugs, virtually revolutionising hearing protection. Today, the revolution continues. It meets more wearer and environmental needs with its proprietary foams, preferred cylindrical shape and proven in-ear comfort.



Available with cord	✓
Moisture resistant	✓
Reusable	
Metal detectable	
Slow recovery foam	✓
No roll down required	

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
SP-01-002	3M E-A-R Classic Earplugs, Pack 5 Pair	28 dB	No	50 PR
CC-01-000	3M E-A-R Classic Earplugs (corded)	29 dB	Yes	200 PR
PP-01-002	3M E-A-R Classic Earplugs, Pillow Pack	28 dB	No	250 PR
PB-01-002	3M E-A-R Classic Earplugs, Polybag	28 dB	No	200 PR

3M™ E-A-R™ Classic™ Small Earplugs

The diameter of a Classic Small Earplug is 7% less than the Classic Earplug (and the same length) to help provide optimum comfort and protection in smaller ears.



Available with cord	✓
Moisture Resistant	✓
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
AM-01-000	3M E-A-R Classic Small Earplugs	28 dB	No	250 PR

3M | E-A-R Hearing Protection

3M™ E-A-R™ Classic™ Soft Earplug

Classic soft earplugs are made of proprietary thermal-reactive foam. The earplugs start out firm to allow for easy fitting then soften from body heat for a comfortable fit.



Available with cord	✓
Moisture Resistant	
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
PP-01-800	3M E-A-R Classic Soft Earplugs, Pillowpack	36 dB	No	200 PR
PR-01-004	3M E-A-R Classic Soft Earplugs	36 dB	No	200 PR
FP-01-800	3M E-A-R Classic Soft Earplugs	36 dB	No	250 PR
PR-01-005	3M E-A-R Classic Soft Earplugs	36 dB	Yes	200 PR

3M™ E-A-R™ Classic™ SuperFit™ Earplugs

SuperFit earplugs feature a unique “fitting ring” to easily see when the earplug is correctly fitted. When no orange colour is visible, the best fit is achieved. SuperFit 36 earplugs are ideal for those looking for higher attenuation. SuperFit 33 earplugs are smaller in diameter and length for a comfortable fit in smaller ear canals.



Available with cord	
Moisture Resistant	✓
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	

Dispenser available



Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
SF-01-000	3M E-A-R Classic Superfit 33 Earplugs	33 dB	No	200 PR
SF-01-003	3M E-A-R Classic Superfit 36 Earplugs	36 dB	No	200 PR

3M™ E-A-Rsoft™ Yellow Neons™ Earplugs



E-A-Rsoft Yellow Neons Earplugs have a smooth texture for in-ear comfort and are made of an advanced foam formulation for all-day wearability. Offered in one size to comfortably fit in a wide range of ears, these high attenuation earplugs are ideal for many different noisy applications. Brightly coloured for hearing protection compliance sighting, E-A-Rsoft Yellow Neons earplugs are an excellent choice for any hearing conservation program.

Available with cord	✓
Moisture Resistant	
Reusable	
Metal Detectable (ES-01-011A only)	
Slow recovery foam	✓
No roll down required	

Dispenser available 

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
ES-01-001	3M E-A-Rsoft Yellow Neons Earplugs	36 dB	No	250 PR
ES-01-005	3M E-A-Rsoft Yellow Neons Earplugs	36 dB	Yes	250 PR
ES-01-001	3M E-A-Rsoft Yellow Neons Earplugs, Pack 5 Pair	36 dB	No	50 PR

3M™ E-A-Rsoft™ Metal Detectable Earplugs



The E-A-Rsoft Metal Detectable Earplug has all the advantages of the E-A-Rsoft earplug with the added benefits of a blue metal detectable cord and an integral stainless steel ball in the non-food blue earplug. Ideal for use in the food manufacturing industries.

Available with cord	✓
Moisture Resistant	
Compatible with other PPE	✓
Reusable	
Metal Detectable	✓
Slow recovery foam	✓
No roll down required	

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
ES-01-011A	3M E-A-Rsoft Metal Detectable Earplugs	36 dB	Yes	200 PR

3M™ Foam Earplugs

Soft, hypoallergenic foam and a tapered design help provide a noise-reducing seal in the ear canal. 3M 1100 and 1110 earplugs are easy to roll down, and once fitted in the ear, soften with body temperature for comfortable extended wear.

The 1120 and 1130 Earplugs are made from a softer formulation and designed to fit smaller ear canals.



Available with cord	✓
Moisture Resistant	
Metal Detectable	
Slow recovery foam	✓
No roll down required	

Dispenser available







Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
1100	3M 1100 Earplugs	37 dB	No	200 PR
1110	3M 1110 Earplugs	37 dB	Yes	100 PR
1120	3M 1120 Earplugs	34 dB	No	200 PR
1130	3M 1130 Earplugs	34 dB	Yes	100 PR
1100	3M 1100 Earplugs Small, Pack 5 Pair	37 dB	No	50 PR

3M™ Solar™ Earplugs

Earplugs come in a choice of eye-catching colours: orange, red, pink, and purple earplugs in one convenient dispenser box. Ultra-soft foam formulation for comfortable all-day wear, plus a tapered shape for easy insertion and excellent canal-hugging seal. Available with or without ‘LiveWire’ cord.



Available with cord	✓
Moisture Resistant	
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	

Dispenser available







Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
PN-01-002	3M Solar Earplugs	36 dB	Yes	100 PR
PN-01-001	3M Solar Earplugs	36 dB	No	200 PR

3M™ E-A-Rsoft™ FX™ Earplugs



FX Earplugs feature a bell shape and super-soft, slow-recovery foam to effectively seal the ear canal and help provide reliable hearing protection. Flared end helps make fitting and removal easier.

Available with cord	✓
Moisture Resistant	
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
ES-01-020	3M E-A-Rsoft FX Earplugs	39 dB	No	200 PR
ES-01-021	3M E-A-Rsoft FX Earplugs	39 dB	Yes	200 PR

3M™ E-A-R™ E-A-Rsoft 21 Earplugs



The 3M™ E-A-R™ soft 21 Earplugs ES-01-009 is the ideal disposable hearing protector for moderate noise levels

- It provides effective protection, for low to moderate noise exposure
- It requires no roll down, simply seals the EAR canal entrance to achieve a secure fit
- Made with slow recovery foam, compatible with other 3M PPE

Available with cord	
Moisture Resistant	
Compatible with other PPE	✓
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
ES-01-009	3M E-A-R E-A-Rsoft 21 Earplugs	21 dB	No	250 PR



3M™ Dispensers

3M™ E-A-R™ One Touch™ Pro Earplug Dispenser



Conveniently provide hearing protection where employees need it. The 3M™ One Touch™ Pro Earplug Dispenser dispenses one earplug at a time with a simple twist. No more expense and waste of individually wrapped plugs. Made from ABS plastic with a powder-coated steel-back plate, it's designed for challenging environments - indoors and outdoors.

- Accurately dispenses one earplug at a time
- Dispenses earplug directly into hand
- Powder coated steel back plate and durable ABS & POM plastic for tough environments
- Free-standing or wall-mounted, could be located inside or outside
- Mounting holes designed to fit a variety of competitive dispensers
- The innovative design protects against sun, rain and wind, when dispensing earplugs outside



Refill bottles





Product number	Product description	Case qty
391-0000	3M E-A-R One-Touch Earplugs Dispenser	1 EA
PD-01-001	3M E-A-R Classic Earplugs Refill Bottle	500 PR
PD-01-002	3M E-A-Rsoft Yellow Neon Earplugs Refill Bottle	500 PR
PD-01-007	3M E-A-R Superfit 33 Earplugs Refill Bottle	500 PR
PD-01-009	3M E-A-R Classic Refill Earplugs Bag	500 PR
PD-01-010	3M E-A-R E-A-Rsoft Refill Earplugs Bag	500 PR
PD-01-800	3M E-A-R Classic Soft Earplugs Refill Bottle	500 PR
PD-01-011	Solar Refill Earplugs Refill Bottle	500 PR
1100-R	1100 Refill Bottle	500 PR
1120-R	1200 Refill Bottle	500 PR



3M™ Push-to-fit Earplugs

Simply hold 3M push-to-fit earplugs by the stem then push them into place – there is no roll-down required for a clean and comfortable fit. The soft foam tip quickly adjusts to the shape of the ear to help create a noise-reducing seal. Since you don't touch the foam tip, they are easy to fit and keep clean, even when your hands are dirty or you are wearing gloves.

3M™ E-A-R™ Express™ Earplugs™

The unique pod design of Express Earplugs allows the foam to compress easily so the earplug slides gently into the ear and expands slowly, making an effective seal for most ear canals. A flexible stem makes fitting easy.



Available with cord	✓
Moisture Resistant	
Reusable	
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
EX-01-002	3M E-A-R Express Pod Earplugs	28 dB	No	100 PR
EX-01-001	3M E-A-R Express Pod Earplugs	28 dB	Yes	100 PR

3M™ E-A-R™ Push-Ins Earplugs

No roll-down is required with these earplugs. A gentle push is all it takes for easy, consistent fitting. Blue stem makes fitting and removal easy and helps keep the tips clean when the wearer's hands are dirty. The unique, soft 3M™ E-A-Rform™ Foam Tip is shaped and sized to mould comfortably to fit most ears.

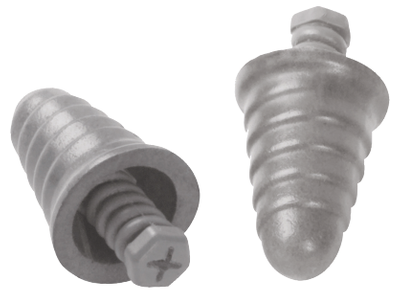


Available with cord	✓
Moisture Resistant	
Reusable	
Slow recovery foam	✓
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
EX-01-021	3M E-A-R Push-Ins Earplugs	38 dB	No	400 PR
EX-01-020	3M E-A-R Push-Ins Earplugs	38 dB	Yes	400 PR

3M™ Torque™ Earplugs

3M Torque Earplugs perform as tough as they look by providing excellent protection for noisy environments. The metallic colouring makes the earplugs look solid, but they are made from ultra-soft foam that provides day long comfort. The screw 'threads' are moulded into the foam for more than looks, twisting the plug while pushing into the ear canal can achieve an effective seal.



Compatible with other PPE	✓
Available with cord	✓
Slow recovery foam	✓
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
PN-01-009	3M Torque Earplugs	32 dB	Yes	120 PR

3M™ No-Touch™ Foam Earplugs

Soft, purple no-touch push-to-fit foam earplugs create a hygienic, noise-reducing seal in the ear with soft foam, a smooth tapered shape and paddle stems. Push-to-fit design makes fitting hearing protection easy, with no roll-down required. Available with or without cord.



Available with cord	✓
Moisture resistant	
Reusable	
Metal detectable	
Slow recovery foam	✓
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
P2001	3M No-Touch Earplugs Corded	35 dB	Yes	400 PR
P2000	3M No-Touch Earplugs Uncorded	35 dB	Yes	400 PR


3M

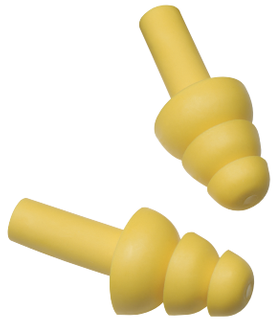


3M™ Reusable Earplugs

These durable, long-lasting earplugs are made from soft, flexible materials that are washable and reusable. The tapered tips are pre-moulded to fit a wide range of ear sizes comfortably. Available in a variety of styles and protection levels.

3M™ E-A-R™ UltraFit™ Earplugs

A proven triple-flange design and pliable, pre-moulded material make UltraFit earplugs a fit for most ear canals. These durable, reusable earplugs are easy to use again and again, reducing waste. They can be cleaned easily with soap and water. Since there is no need to roll them down before fitting, simply push them into the ears for clean and comfortable noise reduction.



Available with cord	✓
Moisture Resistant	✓
Reusable	✓
Slow recovery foam	
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
UF-01-000	3M E-A-R UltraFit Earplugs Corded, Pillowpack	32 dB	50 PR
UF-01-100	3M E-A-R UltraFit Earplugs w/ Storage Case	32 dB	50 PR
UF-01-000SP	3M E-A-R UltraFit Earplugs Small Pack	32 dB	10 PR

3M™ Earplugs 1261 / 1271

Convenient storage case with belt clip helps keep plugs convenient, clean and protected in between use. Polyester cord (1271) helps prevent loss, and ensures product is available when required thus making it more convenient for intermittent use. Finger grip design improves ease of insertion and one size fits majority wearers.



Available with cord	✓
Moisture Resistant	
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	✓

Uncorded available



Product number	Product description	Attenuation rating (SNR)	Case qty
1261	3M 1261 without Cord	25 dB	50 PR
1271	3M 1271 with Cord	25 dB	50 PR

3M | E-A-R Hearing Protection

3M™ E-A-R™ Switch Protection Earplugs



The 3M™ E-A-R Switch Protection Earplugs are designed for insertion into the ear canal to help reduce exposure to hazardous noise including steady state and peak impulse. The product features a special acoustic filter that lets lower level of sound through with little noise reduction for greater situational awareness (Awareness Mode) and at the same time offer protection against high levels of peak impulse noise.





- Specially designed soft retainer helps ensure the ear plug remains seated inside the ear canal
- Rocker assembly featuring the patented acoustic filter for protection against high levels of peak impulse noise
- Made from soft and durable material
- Supplied with three different size ear tips for best individual fit
- Can be used against peak impulse noise up to 160dB peak
- Easy to wash and clean
- Supplied in a durable storage case featuring a convenient metal chain
- Supplied with a soft polyester cord as standard

Available with cord	✓
Moisture Resistant	✓
Compatible with other PPE	✓
Reusable	✓
Metal Detectable	
Slow recovery foam	
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
370-1047	E-A-R Switch Protection Earplugs	16/28 dB	10 EA

3M™ E-A-R™ Tracers™ Earplugs

Tracers Earplugs offer the same features as E-A-R UltraFit Earplugs whilst also being metal detectable. In addition they incorporate an easy to see blue metal detectable vinyl cord, the only colour classified as non-food colour. This makes them ideal for the food manufacturing industry.





Compatible with other PPE	✓
Available with cord	✓
Moisture Resistant	✓
Reusable	✓
Metal Detectable	✓
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Case qty	Case Qty
TR-01-000	3M E-A-R Tracers s Earplugs Pillowpack	32 dB	Yes	50 PR
TR-01-100	3M E-A-R Tracers Earplugs w/ Storage Case	32 dB	Yes	50 PR

3M™ E-A-R™ Ultrafit™ X Earplugs

The E-A-R UltraFit X Earplug features the new innovative pistol grip stem, its angled shape is designed to give wearers improved fingertip control and aid ease of fit. This superb reusable earplug comes packaged in a plastic reusable container providing hygienic storage. Made from a polymer formulation, the comfortable triple flanged tip provides the excellent SNR of 35dB one of the highest offered in pre-moulded earplugs.



Available with cord	✓
Moisture Resistant	✓
Reusable	✓
Metal Detectable	
Slow recovery foam	
No roll down required	✓



Available with cord



Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
UF-01-014	3M E-A-R UltraFit X Ear Plugs	35 dB	Yes	200 PR

3M™ E-A-R™ ClearE-A-R™ 20 Earplugs

The E-A-R ClearE-A-R 20 Earplug has been developed to offer optimum attenuation in medium risk areas without adversely affecting communication with your colleagues or customer. The high precision filter controls the flow of sound to maintain a connection with the outside world. The E-A-R ClearE-A-R 20 Earplug is transparent and has a shorter stem for workers who want their hearing protection to be almost invisible.



Available with cord	
Moisture Resistant	✓
Reusable	✓
Metal Detectable	
Slow recovery foam	
No roll down required	✓



Product number	Product description	Attenuation rating (SNR)	Corded	Case qty
UF-01-021	3M E-A-R ClearE-A-R 20 Earplugs	20 dB	No	50 PR

3M | E-A-R Hearing Protection

3M™ E-A-R™ Ultrafit™ 14 Earplugs

Low attenuation reusable ear-plug made from hypoallergenic silicone rubber. The E-A-R UltraFit 14 Earplug uses unique filter technology to take the edge off low levels of harmful noise whilst allowing normal conversations or listening to broadcast music.



Available with cord	✓
Moisture Resistant	✓
Compatible with other PPE	✓
Reusable	✓
Metal Detectable	
Slow recovery foam	
No roll down required	✓



Product number	Product description	Attenuation rating (SNR)	Case qty
UF-01-015	3M E-A-R Ultrafit Low Attenuating 14 Earplugs	14 dB	50 PR

3M™ E-A-R™ Ultrafit™ 20 Earplugs

The E-A-R Ultrafit 20 Earplug is ideal in lower noise levels. Correctly matched to the noise level it allows conversation and background music to be heard whilst helping to protect the user from hearing loss.



Available with cord	✓
Moisture Resistant	✓
Reusable	✓
Metal Detectable	
Slow recovery foam	
No roll down required	✓



Product number	Product description	Attenuation rating (SNR)	Case qty
UF-01-012	3M E-A-R Ultrafit Low Attenuating 20 Earplugs	20 dB	50 PR

3M™ E-A-R™ Tracers™ 20 Earplugs

The E-A-R Tracer 20 Earplug is ideal in lower noise levels.
This low attenuating metal detectable earplug is ideal for use in the food manufacturing industry or anywhere contamination needs to be considered. The E-A-R Tracer 20 Earplug contains a non ferrous filter and has a fully metalised detectable cord in non-food colour blue.



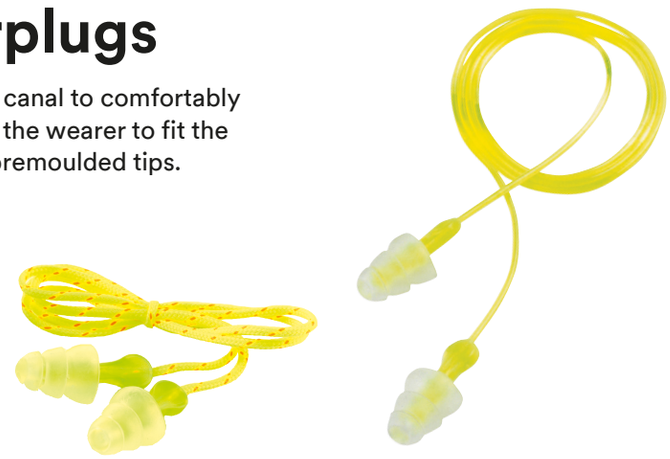
Available with cord	✓
Moisture Resistant	✓
Reusable	✓
Metal Detectable	✓
Slow recovery foam	
No roll down required	✓



Product number	Product description	Attenuation rating (SNR)	Case qty
TR-01-001	3M E-A-R Tracers 20 Earplugs, Pillowpack	20 dB	50 PR
TR-01-100	3M E-A-R Tracers 20 Earplugs w/Storage Case	20 dB	50 PR

3M™ Tri-Flange™ Earplugs

Soft, flexible flanges adapt to the shape of the ear canal to comfortably reduce exposure to noise. The plastic stem allows the wearer to fit the earplugs quickly and easily without touching the premoulded tips. Choose from a vinyl or cloth cord.



Available with cord	✓
Moisture Resistant	✓
Reusable	✓
Metal Detectable	
Slow recovery foam	
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
PN-01-006	3M E-A-R Tri-Flange Earplugs Cotton Cord with Pillowpack	29 dB	400 PR
PN-01-005	3M E-A-R Tri-Flange Earplugs Vinyl Cord with Pillowpack	29 dB	400 PR

3M™ E-A-R™ UltraTech Earplugs

UltraTech Earplug greatly improve the ability to perceive speech, warning signals and machinery noise whilst reducing harmful noise levels effectively. Ideal also for musicians as they provide flat attenuation across the hearing frequencies. The plugs are moisture resistant and reusable.



- Earplugs are ideal for musicians who require a flat attenuating protection
- Plugs are moisture resistant and reusable
- Improve wearer's ability to perceive speech, music and entertainment
- Effective protection against moderate levels of harmful noise SNR 21dB

Moisture Resistant	✓
Compatible with other PPE	✓
Reusable	✓
Metal Detectable	
Slow recovery foam	
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
UT-01-003	3M E-A-R UltraTech Earplugs	21 dB	10 PR

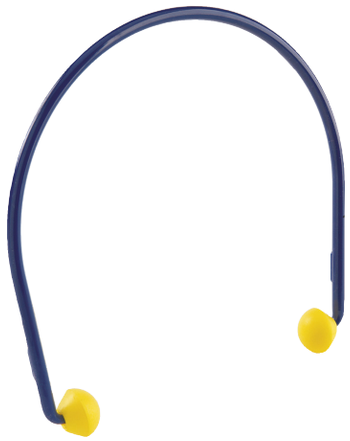


3M™ Banded Hearing Protectors

Banded hearing protectors are an easy-to-use, convenient alternative to earplugs and earmuffs. They are quick to put on and take off and may be stored around the neck in between uses, making them ideal for intermittent use. Banded hearing protectors offer simplicity to help ensure your workers are receiving the right level of protection. Most models are available with replacement tips, which make them a very cost-effective option.

3M™ E-A-Rcaps™

One of the lightest banded hearing protectors on the market, E-A-Rcaps banded hearing protectors feature comfortable foam caps on a flexible band to block the ear canal opening. Ideal for visitors to a noisy facility or people who need hearing protection for short periods of time.



Available with cord	
Moisture Resistant	
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	✓

Replacement pods available



Product number	Product description	Attenuation rating (SNR)	Case qty
EC-01-000	3M E-A-Rcaps Hearing Protector	23 dB (U-T-C)	10 EA
ES-01-300	3M E-A-Rcaps Replacement Pods	23 dB (U-T-C)	10 PR
ES-01-301	3M E-A-Rcaps Replacement Pods	23 dB (U-T-C)	50 PR

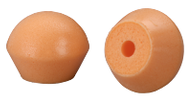
3M™ 1310

The unique flexible band allows for easy manipulation and together with the soft round shape foam ear plugs provides reduced pressure and a comfortable seal. The 1310 hearing protector is very lightweight (13g) and has easy to replace foam plug tips (1311 Replacement Pods). Designed to fit behind-the-head or under-the-chin with minimal contact with clothing.



Available with cord	
Moisture Resistant	
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	✓

Replacement pods available

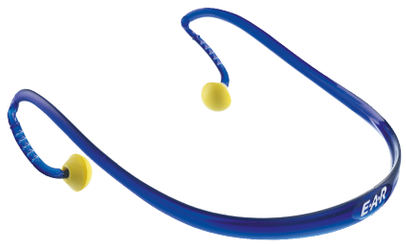


Product number	Product description	Attenuation rating (SNR)	Case qty
1310	3M 1310 Hearing Protectors, 10 Pairs/Box	26 dB (U-T-C)	50 PR
1311	3M 1310 Replacement Pods, 20 Pairs/Box	26 dB (U-T-C)	100 PR

3M | E-A-R Hearing Protection

3M™ E-A-R™ EARband

A comfortable, economic alternative to earmuffs and earplugs. This innovative new semi-aural hearing protector follows leading brand music headphone designs to provide you with a sleek, stylish, ergonomic and cool way to protect your hearing.



Available with cord	
Moisture Resistant	
Reusable	✓
Metal Detectable	
Slow recovery foam	✓
No roll down required	✓

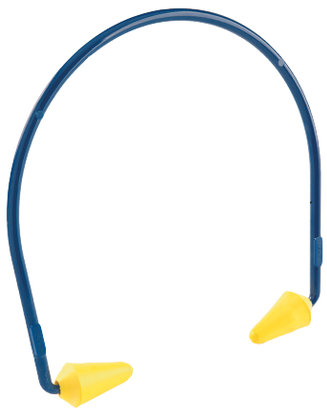
Replacement pods available



Product number	Product description	Attenuation rating (SNR)	Case qty
EB-01-000	3M E-A-R EARband Hearing Protector	21 dB (B-T-H)	10 PR
ES-01-300	3M EARCapband Replacement Pods	21 dB (B-T-H)	2000 PR
ES-01-301	3M EARCapband Replacement Pods	21 dB (B-T-H)	500 PR

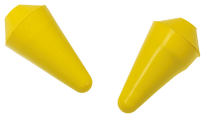
3M™ E-A-R™ Caboflex™

This lightweight, banded hearing protector is ideal when moving in and out of high noise areas, fitting comfortably around the neck when not in use. Each cone-shaped tip pivots to align with the ear, providing comfortable hearing protection against noise. Band may be worn under the chin or behind the head.



Available with cord	
Reusable	✓
Metal Detectable	
Slow recovery foam	✓
No roll down required	✓

Replacement tips available



Product number	Product description	Attenuation rating (SNR)	Case qty
CF-01-000	3M E-A-R Caboflex Hearing Protector	21 dB (U-T-C)	40 PR
CS-01-000	3M E-A-R Caboflex Replacement Pods	21 dB (U-T-C)	50 PR

3M™ E-A-R™ Flexicap

E-A-R FlexiCap hearing protectors feature the innovative, hinged headband allowing for a variety of wearing positions without compromising other forms of personal protective equipment. The pod features the soft, smooth polyurethane cap design of our popular semi-aural E-A-R E-A-RCaps Earplug.



Replacement pods available



Available with cord	
Moisture Resistant	
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
FX-01-000	3M E-A-R Flexicap Hearing Protectors	23 dB (U-T-C)	10 PR
ES-01-300	3M E-A-R EARband Replacement Pods	23 dB (U-T-C)	10 EA
ES-01-301	3M E-A-R EARband Replacement Pods, Bulk	23 dB (U-T-C)	50 EA

3M™ E-A-R™ Reflex™

The E-A-R Reflex multi-position banded hearing protector has an innovative hinged headband allowing for a variety of wearing positions. Featuring E-A-R™ E-A-RForm™ Foam Tip, a unique proprietary material that offers excellent attenuation. E-A-R Reflex hearing protector is quick to fit and can easily be worn with other protective equipment.



Replacement tips available



Available with cord	
Moisture Resistant	
Reusable	
Metal Detectable	
Slow recovery foam	✓
No roll down required	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
RF-01-000	3M E-A-R Reflex Hearing Protectors	26 dB (U-T-C)	10 EA
RS-01-000	3M E-A-R Reflex Replacement Pods	26 dB (U-T-C)	25 PR



3M™ Earmuffs

Earmuffs are a popular choice in hearing protection due to their ease of use and consistent fit. Available in headband, neckband, helmet attached and folding models, earmuffs help meet hearing protection needs in many common applications.

3M™ PELTOR™ Earmuffs X Series

X Series earmuffs combine 3M PELTOR's legendary hearing protection knowledge with our most advanced technologies, creating our most comfortable, durable earmuff. A broad range of protection levels make it easier to find the correct level of protection.



Comfort: Internal stainless steel wire headband designed to help maintain consistent pressure over an 8 hour period for a consistent comfortable fit

Comfort: Twin headband design helps lessen heat build up on top of head

Comfort: Carefully moulded plastic sliders help make the cup easy to adjust while the earmuff is on the head

Durability: Thermoplastic polyurethane (TPU) soft outer cup coating helps protect from abrasion and bumps

Durability: ABS plastic cups are rigid, high strength, and impact resistant

Design: Modern, sleek design helps promote users to wear them

Protection: Electrically insulated headband with no exposed wires helps protect from low voltage electrical hazards

Durability: Stainless steel wire coated with hard plastic helps make headband the most durable 3M™ has to offer

Comfort: Flat, wide headband with soft plastic coating helps provide stable pressure on top of the head for enhanced comfort

Comfort: Designed to optimise weight distribution and balance for outstanding comfort

Comfort: Wide, soft foam ear cushions designed for high comfort and an effective seal with the head

Comfort: Large space inside ear cups allows for a comfortable fit over a wide range of ear sizes

X1-X5 offers a unique colour coding system to visually identify the level of protection being worn.



X1 - Green



X2 - Yellow



X3 - Red



X4 - Bright green



X5 - Black

3M™ PELTOR™ Earmuff X1

X1 Earmuffs feature a lightweight design with very low-profile earcups. Ideal for low-to-moderate noise exposures where overprotection is a concern. Green colour coding indicates first level of noise protection in the series.

- Model X1A features an electrically insulated (dielectric) wire headband**
- Twin headband design helps reduce heat buildup with good fit and balance
- Slim-line cups for improved compatibility with other personal protective equipment (PPE)



Product number	Product description	Attenuation rating (SNR)	Case qty
X1A	3M PELTOR Earmuff X1 Headband, Black / Green	27 dB	10 EA
X1P5	3M PELTOR Earmuff X1 Helmet Mounted, Black / Green	26 dB	10 EA
HYX2	Hygiene kit	-	10 EA

3M™ PELTOR™ Earmuff X2

The X2 offers the comfort and versatility of the X1 with higher noise reduction for moderate noise exposure situations.

- Model X2A features an electrically insulated (dielectric) wire headband**
- Twin headband design helps reduce heat buildup with good fit and balance
- Yellow colour coding for easy selection



Product number	Product description	Attenuation rating (SNR)	Case qty
X2A	3M PELTOR Earmuff X2 Headband, Black / Yellow	31 dB	10 EA
X2P5	3M PELTOR Earmuff X2 Helmet Mounted, Black / Yellow	30 dB	10 EA
HYX2	Hygiene Kit	-	10 EA

3M™ PELTOR™ Earmuff X3

The X3 earmuffs take advantage of a newly-designed spacer to improve noise reduction without excess bulk or weight. Recommended for moderate to high noise situations. The red colour coding aids in easy selection for high noise environments.

- Model X3A features an electrically insulated (dielectric) wire headband**
- Twin headband design helps reduce heat buildup with good fit and balance
- New ear cushion foam technology for an effective acoustic seal and reliable protection
- Lightweight ear cups with maximum space to minimize heat and moisture buildup



Product number	Product description	Attenuation rating (SNR)	Case qty
X3A	3M PELTOR Earmuff X3 Headband, Black / Red	33 dB	10 EA
X3P5	3M PELTOR Earmuff X3 Helmet Mounted, Black / Red	32 dB	10 EA
HYX3	Hygiene Kit	-	10 EA

3M™ PELTOR™ Earmuff X4



The X4 combines high attenuation with a sleek, low-profile, aesthetically pleasing design. The fluorescent yellow-green colour provides high visibility, while the innovative foam earcup inserts and spacers help boost attenuation.

- Model X4A features an electrically insulated (dielectric) wire headband**
- Twin headband design helps reduce heat buildup with good fit and balance
- Slim and lightweight compared to other high-attenuating earmuffs
- Colour coded fluorescent yellow-green for excellent visibility
- New ear cushion foam technology for an effective acoustic seal and reliable protection

Product number	Product description	Attenuation rating (SNR)	Case qty
X4A	3M PELTOR Earmuff X4 Headband, Black / Bright Green	33 dB	10 EA
X4P5	3M PELTOR Earmuff X4 Healmet Mounted, Black / Bright Green	32 dB	10 EA
HYX4	Hygiene Kit	-	10 EA

3M™ PELTOR™ Earmuff X5



The X5 offers highest earmuff Noise Reduction Rating (SNR) in the market today for very high noise situations. The high attenuation provided by these earmuffs is a result of the optimum combination of specially-formulated foam in the earcups and cushions and the innovative spacer and cup design.

- Model X5A features an electrically insulated (dielectric) wire headband**
- Twin headband design helps reduce heat buildup with good fit and balance
- Wire headband offers comfortable pressure during prolonged usage
- Despite larger earcups, X5 is lightweight with excellent balance and comfort
- Very high noise attenuation, SNR 37 dB* in headband and 36 dB in helmet mounted version

Product number	Product description	Attenuation rating (SNR)	Case qty
X5A	3M PELTOR Earmuff X5 Headband, Black	37 dB	10 EA
X5P5	3M PELTOR Earmuff X5 Headband, Black	36 dB	10 EA
HYX5	Hygiene Kit	-	10 EA

** Electrically insulated. The bracket arms of helmet attachment earmuffs are made of non-conductive (sometimes referred to as 'dielectric') material whilst the metal components of the attachment mechanisms are covered in non-conductive material. The metal wire of the headband earmuffs are covered in a non-conductive material. These products were found to be electrically insulated, withstanding a voltage up to 1,2 kV, at an external laboratory against a modified test method based on EN 397:2012 under dry conditions. The user must determine the overall suitability of this product for the intended application taking into account any hazards other than noise for which this product is tested and approved.

3M™ PELTOR™ Earmuffs — X Series Forestry

X Series earmuffs combine 3M PELTOR's legendary hearing protection knowledge with our most advanced technologies, creating our most comfortable, durable earmuff. A broad range of protection levels make it easier to find the correct level of protection.



Compatibility with other PPE: P5 versions fit directly to many industrial safety helmets

Easy click in/click out: Cups attach and detach with less effort

Electrically insulated: Appropriate for a wide range of applications**

High-performance arms: Balance, durability and flexibility

Fit can be confirmed: Verify with 3M™ E-A-Rfit™ Dual-Ear Validation System*

Convenient storage: Store with cups clicked in or out

Series has a wide range of attenuation: Choose from 26 dB SNR to 36 dB SNR



Electrically insulated	✓
Neck band	
Folding headband	
Helmet mounted	✓
Hi-viz	
Liquid filled sealing ring	✓
Hygiene kit	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
X1P5E-OR	X1 Helmet Mounted Version Electrically Insulated (dielectric), Orange	26 dB	10 pair
X4A-OR	X4 Headband Version, Orange	33 dB	10 pair
X4P5E-OR	X4 Helmet Mounted Version Electrically Insulated (dielectric), Orange	32 dB	10 pair

*3M recommends fit testing of hearing protectors. Research suggests that many users will receive less noise reduction than indicated by the SNR due to variation in earmuff fit, earmuff fitting skill and motivation of the user.

**These earmuff cups are made of non-conductive (sometimes referred to as "dielectric") material while the metal components of the headbands and the helmet attachment mechanisms are covered in non-conductive material. This product was found to be electrically insulated, withstanding a voltage up to 1.2 kV, at an external laboratory against a modified test method based on EN 397:2012 under dry conditions. The user must determine the overall suitability of this product for the intended application taking into account any hazards other than noise for which this product is tested and approved.

3M™ PELTOR™ Optime™ I Earmuffs

Optime I Earmuffs offer versatile protection and are very lightweight providing high wearer comfort. They combine a low profile with generous inner depth which makes them easy to combine with other equipment, allowing the ear to rest comfortably. Optime I Earmuffs are your choice for both short and long duration tasks. The wide, comfortable sealing rings are filled with a unique combination of fluid and foam, which gives optimum sealing and low contact pressure at the same time. It is ideal for use in environments with moderate industrial noise, such as workshops, sheet-metal shops and printing works, but also suitable outdoors, such as lawn mowing or in connection with hobby and leisure activities.

Available in hi-viz green for workers who need hearing protection and be extra visible – on road construction sites, airports or other high-risk workplaces.



Headband

Electrically insulated	✓
Neck band	✓
Folding headband	✓
Helmet mounted	✓
Hi-viz	✓
Liquid filled sealing ring	✓
Hygiene kit	✓



Folding headband



Neckband



Hi-viz



P3* - Helmet attachment

Product number	Product description	Attenuation rating (SNR)	Case qty
H510A	3M PELTOR Optime I Earmuff Headband, Yellow	27 dB	10 EA
H510B	3M PELTOR Optime I Earmuff Neckband, Yellow	26 dB	10 EA
H510P3E	3M PELTOR Optime I Earmuff Helmet Mounted, Yellow	26 dB	10 EA
H510F	3M PELTOR Optime I Earmuff Folding Headband, Yellow	28 dB	10 EA

3M™ PELTOR™ Optime™ II Earmuff

The PELTOR Optime II Earmuff has been developed for demanding noisy environments and muffles even extremely low frequencies to a maximum degree. The sealing rings are filled with a unique combination of liquid and foam. The result is an optimum seal with low contact pressure, which provides agreeable comfort even during long-term use. The sealing rings have ventilation channels and are covered with soft, patterned, hygienic foam.

PELTOR Optime II Earmuff is a suitable choice for environments with substantial industrial noise or construction machinery, airports and agricultural work. The product is also available in a dielectric version without visible metal parts and in hi-viz green for workers who need hearing protection and to be extra visible – on road construction sites, airports or other high-risk workplaces.



Headband

Electrically insulated	✓
Neck band	✓
Folding headband	✓
Helmet mounted	✓
Hi-viz	✓
Liquid filled sealing ring	✓
Hygiene kit	✓



Folding headband



Neckband



Hi-viz



P3* - helmet attachment

Product number	Product description	Attenuation rating (SNR)	Case qty
H520A	3M PELTOR Optime II Earmuff Headband, Green	31 dB	10 EA
H520P3E*	3M PELTOR Optime II Earmuff Helmet Mounted, Green	30 dB	10 EA
H520F	3M PELTOR Optime II Earmuff Folding Headband, Green	31 dB	10 EA
H520B	3M PELTOR Optime II Earmuff Neckband, Green	31 dB	10 EA
H520A HV	3M PELTOR Optime II Earmuff Headband, Hi-viz	31 dB	10 EA

3M™ PELTOR™ Optime™ III Earmuff

Optime III Earmuff is a high performance hearing protector and has been developed for use in extremely noisy environments. The protection is based on a technology with a double casing minimising resonance in the holder casing resulting in maximum high-frequency attenuation.

The sealing rings are broad and filled with soft plastic foam for the best fit and low contact pressure. The PELTOR Optime III Earmuff stands for effective protection and highest comfort for the wearer.

The product is also available in hi-viz green for workers who need hearing protection and be extra visible – on road construction sites, airports or other high-risk workplaces.



Headband

Electrically insulated	
Neck band	✓
Folding headband	
Helmet mounted	✓
Hi-viz	✓
Liquid filled sealing ring	
Hygiene kit	✓



Neckband



Hi-viz



P3* helmet attachment

Product number	Product description	Attenuation rating (SNR)	Case qty
H540A	3M PELTOR Optime III Earmuff Headband, Black / Red	35 dB	10 EA
H540B	3M PELTOR Optime III Earmuff Neckband, Black / Red	35 dB	10 EA
H540P3*	3M PELTOR Optime III Earmuff Helmet Mounted, Black / Red	34 dB	10 EA
H540A HV	3M PELTOR Optime III Earmuff Headband, Hi-viz	35 dB	10 EA

3M™ PELTOR™ Bull's Eye™ I Earmuff

The Bulls' Eye I Earmuff is sufficient to ensure protection in most high noise situations without being too bulky. It is essential that hearing protection is comfortable to build wearer acceptance as it is critical that is is worn when exposed to noise and not be distracting whilst shooting.

The earmuff has wide comfortable sealing rings which are filled with a combination of fluid and foam, giving optimum sealing and low contact pressure. The muff also has collapsible headband for easy storage in a pocket or a bag. Also the lower part of each cup is beveled to avoid interference between the hearing protector and the rifle butt.

Electrically insulated	
Neck band	
Folding headband	✓
Helmet mounted	
Hi-viz	
Liquid filled sealing ring	✓
Hygiene kit	✓



Headband



Folding headband red



Folding headband green



Folding headband black

Product number	Product description	Attenuation rating (SNR)	Case qty
H515FB-516-RD	Bull's Eye I Headband Earmuff, Red	27 dB	20 EA
H515FB-516-GN	Bull's Eye I Headband Earmuff, Green	27 dB	20 EA
H515FB-516-SV	Bull's Eye I Headband Earmuff, Black	27 dB	20 EA
HY51	Hygiene Kit, Black	-	20 EA
HY51 GN	Hygiene Kit, Military Green	-	20 EA

3M™ PELTOR™ Bull's Eye™ II Earmuff

The Bull's Eye II Earmuff is a hearing protector for high noise environments or situations. The product is very comfortable to wear even over longer periods with a weight of 230 grams. With its thin and collapsible headband it offers great convenience. The Bull's Eye II Earmuff is available in three different colours red, green and black.



Electrically insulated	
Neck band	
Folding headband	✓
Helmet mounted	
Hi-viz	
Liquid filled sealing ring	✓
Hygiene kit	


Folding headband red


Folding headband black


Folding headband green

Product number	Product description	Attenuation rating (SNR)	Case qty
H520FB-440-RD	Bull's Eye II Headband Earmuff, Red	31 dB	10 EA
H520FB-440-GN	Bull's Eye II Headband Earmuff, Green	31 dB	10 EA
H520FB-440-SV	Bull's Eye II Headband Earmuff, Black	31 dB	10 EA
HY52	Hygiene Kit	-	20 EA
HY52 GN	Hygiene Kit (Green)	-	20 EA

3M™ PELTOR™ Bull's Eye™ III Earmuff

The PELTOR Bull's Eye III Earmuff is a hearing protector with extremely high attenuation for highly intensive noise environments or situations where your concentration needs to be protected from distracting sounds. The wide, soft, padded headband provides optimal comfort even during long hours of use with a weight of 285 grams.



Electrically insulated	
Neck band	
Folding headband	
Helmet mounted	
Hi-viz	
Liquid filled sealing ring	✓
Hygiene kit	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
H540A-441-GN	Bull's Eye III Headband Earmuff, Green	35 dB	10 EA
HY54	Hygiene Kit, Green	-	20 EA

3M™ PELTOR™ Kid Ear Muffs

The 3M PELTOR™ Kid range passive ear muffs are attractive vibrant colour hearing protectors available in headband version only. These products are specially designed for younger wearers, including children, to protect against moderate levels of noise in everyday situation such as social and leisure activities.

- Comfortable and fun children's ear defenders suitable for smaller head sizes.
- Consistent level of comfort when worn for long periods.
- Comfortable to wear due to wide sealing rings which are filled with unique combination of fluid and foam.
- Smooth with no protruding parts to catch on things.
- The average noise reduction you receive by wearing this product is 27dB SNR.





Electrically insulated	
Neck band	
Folding headband	
Helmet mounted	
Hi-viz	✓
Liquid filled sealing ring	✓
Hygiene kit	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
H510AK-442-RE	3M PELTOR™ Kid Ear Muffs, Pink,	27 dB	10
H510AK-442-GB	3M PELTOR™ Kid Ear Muffs, Neon Green	27 dB	10

3M™ PELTOR™ H31 Earmuffs

The earmuff is ultra light and features orange, hi-viz cups for added visibility. This versatile, over-the-head earmuff has a stainless steel headband that resists bending and warping. The earcups provide optimum comfort with pivot points that tilt and liquid/foam-filled earmuff cushions. The design of the cup shape also has a recess in the upper part allowing improved fit with safety helmets.





Electrically insulated	
Neck band	
Folding headband	
Helmet mounted	✓
Hi-viz	✓
Liquid filled sealing ring	✓
Hygiene kit	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
H31A 300	3M PELTOR H31 Earmuff Headband, Orange	27 dB	10 EA
H31P3* 300	3M PELTOR H31 Earmuff Neckband, Orange	28 dB	10 EA
HY52	Hygiene Kit	-	10 EA

3M™ PELTOR™ H505B Welding Earmuff

The Welding Earmuff features a low-profile design that fits comfortably under most welding helmets, as well as a semi-soft cup surface that minimises scratch sound transmission. With a two-point suspension for balanced pressure distribution, this advanced earmuff delivers the comfortable protection that professionals need in a wide range of welding environments.



Electrically insulated	
Neck band	✓
Folding headband	
Helmet mounted	
Hi-viz	
Liquid filled sealing ring	✓
Hygiene kit	✓

Product number	Product description	Attenuation rating (SNR)	Case qty
H505B	Welding Neckband Earmuff, Black	24 dB	10 EA
HY505	HY51 Welding Earmuffs (replacement cushions and inserts) Hygiene kit	-	10 EA



3M™ E-A-Rfit™ Dual-Ear Validation System

Fit testing made easy. To make sure they are getting the protection they need, you need to know the Personal Attenuation Rating (PAR) of every employee.

The highest-SNR earplug or earmuff won't provide the expected protection if it doesn't fit right or isn't used right. Once you know each employee's number, you'll be on the way to yours: 100% confidence in your hearing conservation program.

Validation

1 Fit

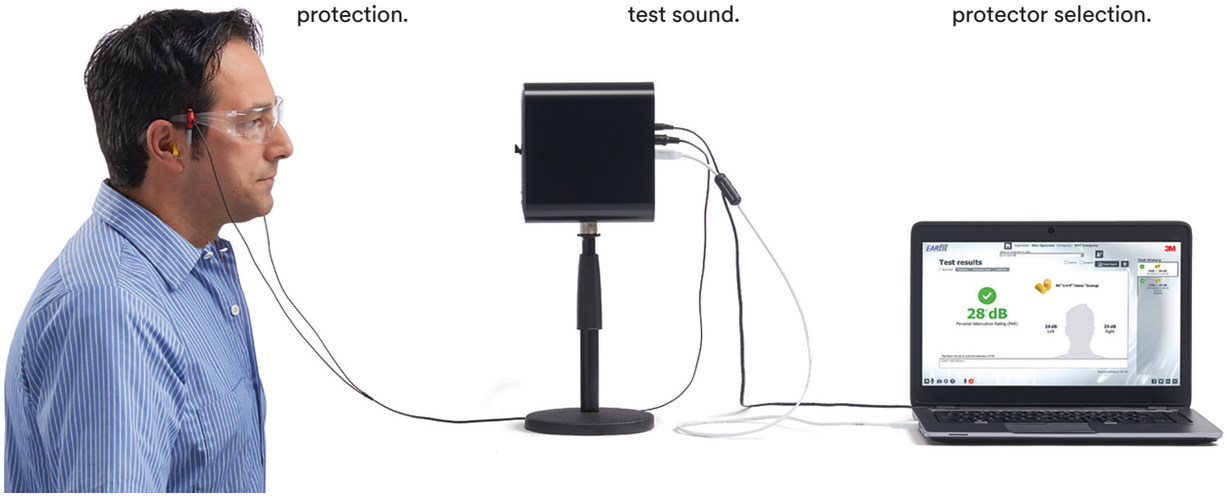
Have the employee insert their hearing protection.

2 Test

Connect to microphones and begin speaker test sound.

3 Assess

Use PAR to customise hearing protector selection.



✗ **10 dB**
Right

✓ **29 dB**
Left



Fail

A 'fail' result means the hearing protection is either not inserted properly or is the wrong type or size for the worker's ear canal.

NOTE:

Finding out each employee's PAR is the first step to a successful conservation program. Once a worker's PAR is measured, you can determine if they're using the right hearing protection and ensure they're trained on using it properly.

Pass

A 'pass' result means the hearing protection is inserted properly and provides sufficient protection for the worker's specific job.

3M™ E-A-Rfit™ Dual-Ear Validation System

Fit testing is key, so make sure you get results you can trust. The 3M™ E-A-Rfit™ Dual-Ear Validation System measures the effectiveness of the earplug from inside the ear, providing accurate quantitative results. And because you can simultaneously test both ears, you'll have more time to educate employees on the importance of fit and compliance.

Features:

- Dual-ear testing
- Fast, clear accurate results
- Earmuff testing capability
- Tests all 7 frequencies
- Seamless software integtration
- Science-based, quantitative testing
- Compact design

E-A-Rfit™



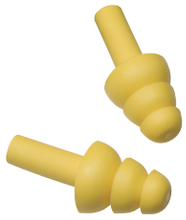
3M™ E-A-Rfit™ Dual-Ear Validation System

Get results you can trust. The E-A-Rfit Dual-Ear Validation System measures the effectiveness of the hearing protection from inside the employee's ear, providing accurate, quantitative results. And because you can simultaneously test both ears, you'll have more time to educate employees on the importance of fit and compliance.

These earplug styles cover fit validation testing for more than 80 different 3M earplug products.



E-A-Rsoft™ Yellow Neons™



UltraFit™



Push-Ins™



Classic™



E-A-Rsoft™ FX™



Classic™ Small



Express™



Classic™ Plus



1100



Tri-Flange™

Product #	Abbreviated description	Case qty
393-1000	E-A-Rfit Kit – Validation System includes the Software, Speaker and Impact-Resistant Carrying Case	1 KIT
393-2000-50	E-A-Rsoft Yellow Neons Probed Test Plugs	50 PR
393-2001-50	UltraFit Probed Test Plugs	50 PR
393-2002-50	Push-Ins Probed Test Plugs	50 PR
393-2003-50	Classic Probed Test Plugs	50 PR
393-2004-50	E-A-Rsoft FX Probed Test Plugs	50 PR
393-2007-50	Classic Small Probed Test Plugs	50 PR
393-2008-50	Express Probed Test Plugs	50 PR
393-2009-50	Classic Plus Probed Test Plugs	50 PR
393-2010-50	Model 1100 Probed Test Plugs	50 PR
393-2011-50	Tri-Flange Probed Test Plugs	50 PR
393-2020-50	E-A-R Caps Probed Test Plugs	50 PR



3M™ Communication Headsets

Close up or far away the 3M™ PELTOR™ communication solutions for noisy environments make it possible for users of hearing protectors to communicate very effectively – with their immediate environment and with people further away.

The sound solution

First-class communication and hearing protection! There was a time when wearing hearing protectors meant being isolated and out of contact. Those days are over. Today, 3M™ PELTOR™ offers first-class communication solutions that not only make your working day safer and more efficient, but also much nicer!

3M™ PELTOR™ products are developed for all environments where high safety must be combined with communication. Shop and industrial environments, construction sites, agriculture and forestry are a few examples.

We have developed several models to ensure there's a PELTOR headset for every situation. Headband models for all-round use, and models with helmet attachments for people who wear safety helmets at work.

To ensure easy use of our products and good functions for all environments we use advance technology such as DECT and Bluetooth®.



Oil & gas



Mining



Hunting & sport shooting



Airport ground handling



Military & law enforcement



Aviation



Transportation



Industry

The importance of wearing hearing protection 100% of time exposed



100% usage

Gives the expected protection.



99% usage

Just five minutes of carelessness per day significantly reduces the effect of the hearing protector.



90% usage

Virtually no protection.

Safety

To be effective, a hearing protector should be used 100% of the time in noisy environments. Even taking it off for a short time dramatically reduces its effectiveness and greatly increases the risk of hearing damage. The 3M™ PELTOR™ Communication Solutions encourage longer use because the wearer feels less isolated and can communicate with others more easily.

Function symbols

To help you to understand the functionality of the products you will find below symbols on each product page.



Hearing protection with level-dependent function for ambient listening



Hearing protection that features Bluetooth® technology, for wireless connection to mobile phone, or communication radio



Hearing protection with built in two-way radio



Hearing protection with built-in FM radio receiver



Hearing protection with external audio input



Hearing protection for communication with external two-way radio



3M™ Versaflo™ Helmets M-300 Series with 3M™ PELTOR™ LiteCom solutions

M-300 Series Helmets meet the highest powered respirator performance requirements (TH3) for this type of product when used with specific 3M™ Air Delivery Units. Now approved to be used with 3M™ PELTOR™ LiteCom headsets, M-300 Helmets off er you the possibility to communicate eff ectively whilst protecting your hearing in noisy environments.

Highly versatile rigid headtops

Head protection approved according to EN397

Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards)

Modern, well balanced design

Lightweight with excellent balance

Fully-adjustable head suspension

A deflector allows users to direct the airflow inside the headtop for increased control and comfort

Visor design

Visor design combines excellent peripheral and downward vision with good optical clarity

Lenses provide chemical and scratch resistance

Typical applications:

Smelting & foundry applications

Grinding

Chemical processing & plant maintenance

Agricultural applications

Construction & renovation

Demolition

Note: 3M does not accept responsibility or liability, direct or consequential, arising from reliance upon any information provided and the user should determine the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence or fraudulent misrepresentation.

Electronic Protectors

Size Ranges: S = Small, M = Medium, L = Large

Helmet Model	Wedge	Product Number	Description	Size
Versaflo™ M-306 or M-307 Helmet	Z3AF	MT**H79P3*	3M™ PELTOR™ Helmet Att. Headsets, Product numbers beginning with MT7H or MT53H except model number ending -77	M/L
		MT7H540P3*	3M™ PELTOR™ Twin Cup Headsets, Helmet attached, except model number ending -77	M/L
		MT*H7P3*	Helmet Attached WS™ ProTac XP, WS™ Headset XP, Tactical XP, LiteCom, WS™ LiteCom, LiteCom PRO II, LiteCom Plus product numbers beginning with MT7H or MT53H.	M/L



3M™ Versaflo™ Helmets M-300 Series

with 3M™ PELTOR™ Communication solutions





3M™ PELTOR™ MT53V/1



3M™ PELTOR™ MT7V/1

2 options of built-in microphones:

- Dynamic
- Electret

reddot design award
honourable mention 2011

INTERNATIONAL DESIGN EXCELLENCE AWARDS '11
BRONZE

3M™ PELTOR™ ProTac™ III Headset



The 3M PELTOR ProTac III hearing protector helps protect against harmful noise, whilst allowing ambient sounds to be heard at a level below 82dB. It increases your ability to communicate with nearby colleagues, as well as hearing warning signals, approaching vehicles, or sounds in machines and processes.

- Attenuating hearing protector
- Level-dependent function for ambient listening
- 3.5 mm listen only stereo input (limited to 82 dB) for connection to external devices (e.g. cell phone, two-way radio, iPod)
- Voice guided menu system
- Auto power off: The headset will turn off after 4 hrs of non-use to save battery
- 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
- Available in both in headband and helmet attached versions (black)
- Available in two different cup sizes: one with higher attenuation and one slim version with lower attenuation



Battery type: 2x AA (Alkaline)
Operating time: Approximately 100 hours of battery lifetime
Net weight (batteries incl.):
ProTac™ III Slim MT13H220A (headband) = 303g
ProTac™ III MT13H221A (headband) = 355g
ProTac™ III Slim MT13H220P3E (helmet attachment) = 322g
ProTac™ III MT13H221P3E (helmet attachment) = 374g
Operating temperature: -20°C to +55°C (battery dependent)
Wired connectivity: 3.5mm listen-only stereo input jack (limited to 82 dB)
3M™ PELTOR™ accessories:
HY220 Hygiene kit
FL6CE/1 3M™ PELTOR™ FL6CE/1 3.5 mm Cable
HY100A 3M™ PELTOR™ HY100A CLEAN HYGIENE PAD





Attenuation*
MT13H221A 3M™ PELTOR™ ProTac™ III Headset

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	17.0	24.0	28.0	36.9	37.3	39.3	35.4
Standard deviation (dB)	3.2	2.0	29.5	3.3	4.9	3.2	3.9
Assumed protection (dB)	13.8	22.0	2.6	33.6	32.4	36.1	31.5

EN 352-1:2002 SNR=32 dB H=34 dB M=29 dB L=22 dB

Attenuation*
MT13H220A 3M™ PELTOR™ ProTac™ III Slim Headset

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	13.3	17.4	22.3	28.0	30.8	37.6	37
Standard deviation (dB)	3.2	1.8	2.3	3.2	3.4	2.8	4.8
Assumed protection (dB)	10.1	15.6	20.0	24.8	27.4	34.8	32.2

EN 352-1:2002 SNR=26 dB H=29 dB M=23 dB L=17 dB

3M™ PELTOR™ ProTac III
MT13H221A Headband
Available in: Black
SNR: 32dB

3M™ PELTOR™ ProTac III Slim Headset
MT13H220A Headband
Available in: Black
SNR: 26dB

3M™ PELTOR™ ProTac™ III Headset, black, helmet attachment
MT13H221P3E Helmet attachment
Available in: Black
SNR: 31dB

3M™ PELTOR™ ProTac™ III Slim Headset, black, helmet attachment
MT13H220P3E Helmet attachment
Available in: Black
SNR: 25dB

3M™ PELTOR™ WS™ Headset XP



In environments with potentially hazardous levels of noise, protecting your hearing is essential. But so is communicating with your team.

With built in Bluetooth® wireless technology the 3M™ WS™ Headset XP enables communication and the streaming of high quality stereo sound. So you can safely hear and communicate even in loud environments.

- CE-marked hearing protection
- Noise cancelling speech microphone
- Bluetooth® wireless technology HS/HF and A2DP profile for communication and streaming high quality stereo sound
- Advanced Voice Operated Transmission (VOX) technology for hands-free communication in high noise environments
- Stainless steel wire headband
- Wire headband offers comfortable pressure during prolonged usage
- Push-to-talk (PTT)
- Ergonomically placed PTT-button on cup for easy operation
- Hearing protection
- Noise attenuating headset help provide hearing protection in environments with potentially hazardous noise

Bluetooth

3M™ PELTOR™ WS™ Headset XP

MT53H7AWS5

Technical data specifications Bluetooth® Wireless Technology Version: 2.1+EDR

Frequency: 2400-2483.5 MHz

Supported profiles: HF/HS version 1.5, A2DP version 1.2

Output power: 2.5 mW

Power: 2xAA NiMH or alkaline batteries, 1,2-1,5 V –

Battery life time: Operating time: 24 h, standby time: 150 h Low battery level is indicated by a voice message: “low battery”,

Settings: The last settings are stored when the headset is switched off

Microphone: Noise cancelling boom microphone

Mode: Stereo

Auto power off: 2 hours from last activation

Menu voice guide language: English

Storage: Recommended storage conditions: -20° C - +55° C, <90% humidity Recommended max. shelf life: 5 years except the batteries, <1 year Use limitation: Never modify or alter this product

3M™ PELTOR™ accessories:

ACK053 Rechargeable battery
FR08 Power supply
FR09 Battery charger
HY793 Hygiene kit
M995 Microphone Wind Protector
HYM1000 Microphone Protector

Attenuation*

MT15H7AWS5 Headband

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	17.4	24.0	31.9	34.4	35.1	37.0	35.1
Standard deviation (dB)	2.0	2.6	3.0	2.6	4.3	4.0	3.2
Assumed protection (dB)	14.5	21.1	28.9	31.9	30.9	33.1	32.0

SNR=31dB H=32dB. M=29dB. L=22dB

3M™ PELTOR™ WS™ ProTac XP



The 3M™ PELTOR™ WS™ ProTac XP Headset is equipped with a level-dependent function for situational awareness and communication. The headset features Bluetooth® wireless technology and can also be connected via a jack to provide high quality communication and streaming.

The level-dependent function helps you hear ambient sounds such as external alarm signals or approaching vehicles. It also allows face to face communication in quiet environments. Robust design, clear controls and an intuitive menu system. This is a headset you will never want to take off.

- Protects your hearing (SNR: 31dB)
- Noise cancelling speech microphone for clear communication in noisy environments using digital noise reduction
- Stainless steel wire headband for comfortable and consistent pressure
- Bluetooth® wireless technology for communication and streaming high quality stereo sound
- Advanced voice operated transmission (VOX) technology for hands-free communication in high noise environments
- Level-dependent function for situational awareness and communication
- External radio connection jack (only available in FLEX connector version)
- Easy to use with four button operation
- Ghost voice guided menu system
- Auto power off in 2 hours from last activation
- Also available as neckband or helmet attachment



Frequency range: 2400-2483.5 MHz

Bluetooth® version: 2.1+EDR

Battery type: Surround + Bluetooth (active): 24h, Surround only + Bluetooth off: 150h

Operating time: level dependent + Bluetooth active: app 24h

Net weight, (incl. batteries):
Headband: 396g
Helmet attachment: 421g
Neckband: 386g

Operating temperature: -20°C to +55°C (battery dependent)

Wired connectivity: available with flex input jack

Storage: recommended storage conditions: -20° C - +55° C, <90% humidity recommended max. shelf life: 5 years except the batteries, <1 year use limitation: never modify or alter this product

3M™ PELTOR™ accessories:

ACK053 Rechargeable battery
FR08 Power supply with USB connector
FR09 Battery charger with USB connector
M60/2 Wind shield for attenuation mic
HYM1000 Hygiene tape for boom mic
HY79 Hygiene kit

Attenuation*

MT15H7AWS5 Headband

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	17.4	24.0	31.9	34.4	35.1	37.0	35.1
Standard deviation (dB)	2.8	2.9	3.0	2.6	4.3	4.0	3.2
Assumed protection (dB)	14.5	21.1	28.9	31.9	30.8	33.1	32.0

SNR=31dB H=32dB. M=29dB. L=22dB

3M™ PELTOR™ WS™ ProTac XP

MT15H7AWS5 Headband

SNR: 31dB



3M™ PELTOR™ WS™ ProTac XP

MT15H7P3EWS5 Helmet attachment

SNR: 31dB

3M™ PELTOR™ WS™ ProTac XP

MT15H7BWS5 Neckband

SNR: 30dB

3M™ PELTOR™ WorkTunes™ Pro Headset

The 3M™ PELTOR™ WorkTunes™ Pro Headset helps protect you from potentially harmful workplace noise while at the same time enjoy listening to the built in FM or AM/FM radio. The built-in antenna, fast digital tuning and ability to store stations makes the hearing protector flexible and easy to work with.

- High attenuating hearing protector
- FM or AM/FM radio headset with built-in antenna
- Digital station search
- Voice guided menu system with announced frequencies
- Store up to 5 stations
- 3.5mm listen only stereo input (limited to 82dB) for connection to external devices (e.g. cell phone, two-way radio, iPod)
- Auto power off, the headset will turn off after 4hrs of non-use to save battery
- 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
- Available in both in headband and helmet attached versions (black)









Battery type: 2x AA (Alkaline)
Operating time: Approximately 40 hours of battery lifetime
Net weight (batteries incl.):
WorkTunes Pro FM HRXS220A (headband) = 351g
WorkTunes Pro FM HRXS220P3E (helmet attachment) = 369g
WorkTunes Pro AM/FM HRXS221A (headband) = 353g
WorkTunes Pro AM/FM HRXS221P3E (helmet attachment) = 371g
Operating temperature: -20°C to +55°C (battery dependent)
Wired connectivity: 3.5mm listen-only stereo input jack (limited to 82 dB)
3M™ PELTOR™ accessories:

HY220 Hygiene kit
FL6CE/1 3M™ PELTOR™ FL6CE/1 3.5 mm Cable
HY100A 3M™ PELTOR™ HY100A CLEAN HYGIENE PAD

Attenuation*

HRXS221A and HRXS220A EN 352-1:2002

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	17.0	24.0	29.5	36.9	37.3	39.3	35.4
Standard deviation (dB)	3.2	2.0	2.6	3.3	4.9	3.2	3.9
Assumed protection (dB)	13.8	22.0	26.9	33.6	32.4	36.1	31.5

SNR=32 dB H=34 dB M=29 dB L=22 dB

Attenuation*

HRXS221P3E and HRXS220P3E EN 352-3:2002

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	16.6	22.0	29.1	36.3	36.4	38.7	34.2
Standard deviation (dB)	2.7	2.2	2.9	3.4	3.9	4.2	4.0
Assumed protection (dB)	2.7	2.2	2.9	3.4	3.9	4.2	4.0

SNR=31 dB H=33 dB M=28 dB L=21 dB

3M™ PELTOR™ WorkTunes™ Pro FM Radio Headset

HRXS220A Headband
Available in: Black
SNR: 32dB

3M™ PELTOR™ WorkTunes™ Pro FM Radio Headset

HRXS220P3E Helmet attachment
Available in: Black
SNR: 31dB

3M™ PELTOR™ WorkTunes™ Pro AM/FM Radio Headset

HRXS221A Headband
Available in: Black
SNR: 32dB

3M™ PELTOR™ WorkTunes™ Pro AM/FM Radio Headset

HRXS221P3E Helmet attachment
Available in: Black
SNR: 31dB

3M™ PELTOR™ WS™ ALERT™ XP

With the 3M™ PELTOR™ WS™ ALERT™ XP level dependent FM-radio Bluetooth® headset, we introduce a new era in the world of hearing protection. With a built-in FM-radio receiver, Bluetooth® and a level dependent technology for situational awareness, 3M PELTOR WS ALERT XP enables users to have wireless telephone conversations or listen to their favorite music even in noisy environments.

- Protects your hearing (SNR: 29dB)
- Built in FM-radio receiver
- Wireless calls and music via Bluetooth®
- Patented speaker system for full-bodied dynamic sound
- Level dependent technology for situational awareness enables you to communicate with you colleagues while maintaining your ability to hear and react on e.g. warnings signals
- External jack (3.5mm) enable you to connect to external devices via cable
- Fast tuning
- Memory/preset function
- Voice guided menu system
- Also available as helmet attachment
- Possibility to use rechargeable batteries and charge them direct in the headset







3M™ PELTOR™ WS™ ALERT™ XP

MRX21AWS5 Headband

SNR: 29dB

3M™ PELTOR™ WS™ ALERT™ XP

MRX21P3EWS5 Helmet attachment

Available in: Black

SNR: 31dB

Battery type: 2X AA 1.2–1.5 V

Operating time: Approximately 23 hours of battery lifetime with included alkaline batteries (all functions active)

Net weight (incl. batteries):

430 g (headband)

455 g (helmet att.)

Operating temperature: -20°C to +55°C (battery dependent)

Wired connectivity: 3,5 mm AUX input jack (limited to 82dB(A))

3M™ PELTOR™ accessories

HY81 Hygiene kit
FL6CE/1 Connection cables for external audio input
LR6NM Rechargeable AA batteries
FR08 Power supply
FR09 Battery charger

Attenuation*

MRX21AWS5 Headband

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	15.5	19.2	28.0	29.6	35.1	34.4	37.1
Standard deviation (dB)	2.3	1.5	2.1	2.4	2.4	4.0	3.0
Assumed protection (dB)	13.2	17.7	25.9	27.2	32.7	34.4	34.1

SNR=29dB H=33dB. M=26dB. L=20dB

3M™ PELTOR™ WS™ ALERT™ XPI Headset

The 3M™ PELTOR™ WS™ ALERT™ XPI Headset is the next generation protective communication solution. With Bluetooth® wireless communication, noise-cancelling boom microphone, integrated FM-Radio and level-dependent function for ambient listening, the WS™ ALERT™ XPI Headset not only helps protect you against hazardous noise, but also makes it easy to make phone calls with both hands free in noisy environments.

- High attenuating hearing protector in two models: stand-alone headband or safety helmet attachment (SNR 30 dB)
- Bluetooth® MultiPoint Technology for connection to one or two external devices for hands-free talk and streaming
- Noise cancelling boom microphone for clear speech transmission in noisy environments
- Level-dependent function for ambient listening to help improve your situational awareness (limited to 82 dB)
- Push-to-Listen feature to easily and instantaneously listen to your surroundings
- Built-in FM-Radio with radio volume limited to 82dB
- Voice guided menu system with announced FM-Radio frequencies
- Digital station search
- Ability to store up to 4 favourite stations
- Auto power off: The headset will turn off after 4 hrs of non-use to save battery



MRX21AWS6



MRX21P3EWS6



Battery type: 2xAA batteries (Alkaline)

Operating time: Approximately 58 hours (FM radio and level-dependent)
Approximately 78 hours (Bluetooth® streaming and level-dependent)

Weight (batteries incl.): MRX21AWS6 (headband): 411 g
MRX21P3EWS6 (helmet attachment): 431 g

Bluetooth® Technology: Bluetooth version: 4.2
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 +55°C (131°F)

Shelf life: 5 years excl. batteries

3M™ PELTOR™ accessories:

HY82 3M™ PELTOR™ HY82 Hygiene kit

FR08 3M™ PELTOR™ FR08 Power supply with USB connector

FR09 3M™ PELTOR™ FR09 Battery charger with USB connector

LR6NM 3M™ PELTOR™ LR6NM Rechargeable AA batteries

M995/2 3M™ PELTOR™ M995 Wind shield for speech microphone

HY100A 3M™ PELTOR™ HY100A Clean hygiene pad

HYM1000 3M™ PELTOR™ HYM1000 Microphone protection

Attenuation*

MRX21AWS6*

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	13.8	19.3	30.4	34.5	37.7	39.5	36.2
Standard deviation (dB)	2.7	2.4	2.7	3.6	2.3	2.7	4.1
Assumed protection (dB)	11.1	16.9	27.7	30.9	35.4	36.8	32.1

SNR=30dB. H=35dB. M=27dB. L=18dB

3M™ PELTOR™ WS™ ALERT™ XPI

MRX21AWS6 headband

SNR: 30dB

SNR: 29dB

3M™ PELTOR™ WS™ ALERT™ XPI

MRX21P3EWS6 helmet attachment

SNR: 30dB

3M™ PELTOR™ WS™ ALERT™ XPI

MRX21AWS6-ACK, incl. ACK (FR09, FR08, LR6NM), headband

SNR: 30dB

3M™ PELTOR™ WS™ ALERT™ XPI

MRX21P3EWS6-ACK, incl. ACK (FR09, FR08, LR6NM), helmet attachment

SNR: 30dB

3M™ PELTOR™ LiteCom

With 3M™ PELTOR™ LiteCom communicating in noisy environments has been made easy – and safe. LiteCom is a tough and rugged headset designed to cope with demanding use in many different working environments. The built-in two-way radio has got 8 channels with 38 subchannels, and has a range of up to 3km. It lets you talk hands-free and work safely regardless of harmful noise levels.

- Protects your hearing (SNR: 32dB)
- Built in two-way radio
- 8 channels in the PMR 446MHz band
- 38 subchannels
- Range of up to 3km depending on conditions
- Voice operated transmission (VOX)
- Auto power off function
- Battery status indication
- Voice guided menu system
- Also available as neckband or helmet attachment



3M™ PELTOR™ LiteCom

MT53H7A4400-EU Headband

SNR: 32dB

Built in Two-way radio



3M™ PELTOR™ LiteCom

MT53H7B4400-EU Neckband

SNR: 32dB



3M™ PELTOR™ LiteCom

MT53H7P3E4400-EU Helmet attachment

SNR: 33dB

Frequency range: 446 MHz (PMR)

Battery type: 2X AA 1.2–1.5 V batteries or NiMH (2,4 V)

Operating time: approximately 20 hours of battery lifetime with included alkaline batteries

Net weight (incl. batteries):

394g (headband)

418g (helmet att.)

384g (neckband)

Operating temperature: -20°C to +55°C (battery dependent)

3M™ PELTOR™ accessories

HY79 Hygiene kit
ACK053 Rechargeable battery
FR08 Power supply
FR09 Battery charger
MT53N-12 Electret microphone

Attenuation*

MT53H7A4400-EU Headband

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	18.1	24.3	32.1	36.2	34.7	39.2	36.0
Standard deviation (dB)	2.4	1.7	2.2	2.6	3.6	3.3	2.4
Assumed protection (dB)	15.6	22.6	29.9	33.6	31.1	35.9	33.6

SNR=32dB H=33dB. M=30dB. L=23dB

3M™ PELTOR™ LiteCom Plus

3M™ PELTOR™ LiteCom Plus electronic level dependent headset with built-in two-way communication radio and external audio input is based on a robust basic design with a number of added features. This is a headset that is designed for demanding use on a daily basis. The built-in two-way radio has 8 or 69 channels with 121 subchannels, and has a range of up to 3km. It lets you talk hands-free and work safely regardless of harmful noise levels. The level dependent function for ambient listening ensures you are not isolated from your immediate surroundings, but can still hear alarms, unexpected sounds and calls for help.

- Protects your hearing (SNR: 34dB)
- Built in two-way radio communication
- 8 channels in the PMR 446 MHz bandor 69 channels in the LPD 433 MHz band
- 121 subchannels
- Range of up to 3km depending onconditions
- Level dependent function for ambient listening
- Rechargeable lithium-ion battery with 20 hours operating time
- A separate audio input enables connection to external equipment such as mobile phone, two-way radio
- Voice operated transmission (VOX)
- Auto power off function
- Battery status indication
- Voice guided menu system
- Also available as neckband or helmet attachment

Frequency range: 446 MHz (PMR), 433 MHz (LPD)
Battery type: 3,7 V Lithium ACK081
Operating time: Approximately 20 hours
Net weight (incl. batteries):
464g (headband)
491g (helmet att.)
453g (neckband)
Operating temperature: -20°C to +55°C (battery dependent)

3M™ PELTOR™ Accessories

HY79	Hygiene kit
MT7N-02	Dynamic microphone (standard)
ACK081	Battery
AL2AI	Charging cable
FR08	Power supply
FL5602	External PTT

Attenuation*
MT7H7A4410-EU Headband

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	20.2	26.7	35.0	37.4	35.7	40.4	38.9
Standard deviation (dB)	3.1	3.1	2.6	2.1	3.0	2.9	2.1
Assumed protection (dB)	17.1	23.6	32.4	35.3	32.7	37.5	36.8

SNR=34dB H=35dB. M=32dB. L=25dB



3M™ PELTOR™ LiteCom Plus

MT7H7A4410-EU Headband
SNR: 34dB





3M™ PELTOR™ LiteCom

Plus MT7H7B4410-EU Neckband
SNR: 33dB



3M™ PELTOR™ LiteCom

Plus MT7H7P3E4410-EU Helmet attachment
SNR: 33dB

3M™ PELTOR™ WS™ LiteCom

3M™ PELTOR™ WS™ LiteCom with Bluetooth® opens up a world of communication with your built-in two-way radio headset at the hub. You become a mobile, hands-free communication center, the built-in two-way radio and wireless connections to your computer and cell phone. You can take your calls, or stream music thanks to electronics that let you switch easily between functions. The level-dependent technology lets you hear ambient sounds such as external alarm signals or approaching vehicles. It also allows face to face communication at close distance. Robust design, clear controls and an intuitive menu system. This is a headset you will never want to take off.

- Protects your hearing (SNR: 30dB)
- Built in two-way radio communication
- Bluetooth® communication link enables talking wireless in the mobile phone or streaming music
- 8 channels in the PMR 446 MHz band
- 38 subchannels
- Range of up to 3km depending on conditions
- Level dependent technology for situational awareness
- A separate audio input enables connecting equipment such as mobile phones or external two-way radios
- Works with rechargeable batterypack or 2x standard AA batteries
- Voice operated transmission (VOX)
- Auto power off function
- Voice guided menu system
- Also available as neckband or helmet attachment



3M™ PELTOR™ WS™ LiteCom

MT53H7A4410WS5 Headband

SNR: 30dB



Frequency range: 446 MHz (PMR)

Bluetooth® Version: 2.1+EDR

Battery type: Rechargeable batterypack or 2x standard AA batteries

Operating time: Approximately 13 hours

Net weight (incl. batteries):

462g (headband)

448g (helmet att.)

490g (Neckband)

Operating temperature: -20°C to +55°C (battery dependent)

3M™ PELTOR™ Accessories

HY79 Hygiene kit
ACK053 Rechargeable battery
FR08 Power supply
FR09 Battery charger
MT53N-12 Electret microphone



3M™ PELTOR™ WS™ LiteCom

MT53H7B4410WS5 Neckband

SNR: 31dB



3M™ PELTOR™ WS™ LiteCom

MT53H7P3E4410WS5 Helmet attachment

SNR: 31dB

Attenuation*

MT53H7A4410WS5 Headband

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	14.7	23.4	30.7	34.6	34.5	36.9	37.3
Standard deviation (dB)	3.9	4.6	3.2	3.4	3.1	2.7	4.2
Assumed protection (dB)	10.8	18.8	27.4	31.2	31.4	34.2	33.1

SNR=30dB H=33dB. M=27dB. L=19dB

3M™ PELTOR™ Level Dependent Ear Plug LEP-100 EU

The 3M™ PELTOR™ Level Dependent Earplug helps protect your hearing, and can help improve situational awareness and communications in challenging environments. Integrated with state-of-the-art level-dependent technology, the LEP-100 helps provide hearing protection in noise and situational awareness in quiet environments.

- Protects your hearing (SNR 32dB/38dB)
- Level dependent technology for situational awareness
- Intuitive one-button operation
- Recharge on the go
- LED charging status





Level Dependent (surround)

Earpiece power

Earpiece power battery type: Lithium Ion

Battery Life: up to 16 hours

Battery Charge Time: approximately 90 minutes

Volume steps: 3 steps, Low, Medium, High

Case battery type: 3 AA Alkaline Batteries

Case battery life: up to 16 recharging cycles

Case USB type: Micro B

Standards

Waterproof rating: Complies with IP54 with cover and USB ports closed.

SNR: PPE directive 89/686/EEC

Physical characteristics

Weight: box containing charger, 2 earpieces, 4 pair communications eartips, cord, 3 AA batteries – 272g

Weight: 1 earpiece - 4g

3M™ PELTOR™ accessories

370-TEPL-25 Communication Tips Replacement, Large
370-TEPM-25 Communication Tips Replacement, Medium
370-TEPS-25 Communication Tips Replacement, Small
PELTIP5-01 Torque™ Ear Tips, 50pr

Ultrafit [G1]

Frequency (Hz) [G2]	125	250	500	1000	2000	4000	8000
Mean attenuation (dB) [G3]	34.5	31.5	36.2	33.4	34.8	34.9	38.8
Standard deviation (dB) [G4]	6.0	5.4	5.6	4.3	3.8	5.0	4.0
Assumed protection (dB) [G5]	28.5	26.1	30.6	29.1	31.0	29.9	34.8

[G6] 9g SNR=32dB H=31dB. M=30dB. L=29dB

Torque [G1]

Frequency (Hz) [G2]	125	250	500	1000	2000	4000	8000
Mean attenuation (dB) [G3]	37.8	36.0	40.5	41.2	41.3	39.6	46.1
Standard deviation (dB) [G4]	4.3	5.5	4.2	4.7	3.2	4.3	3.6
Assumed protection (dB) [G5]	33.5	30.5	36.3	36.5	38.0	35.3	42.5

[G6] 9g SNR=38dB H=37dB. M=36dB. L=34dB

3M™ PELTOR™ Level Dependent Ear Plug

LEP-100 EU

SNR: 32dB / 38 dB



Technical Information

Technical information

Noise regulations

The European Physical Agent (Noise) Directive 2003/10/EC is designed to ensure that employees are protected from physical as opposed to chemical hazards. Hearing loss is one of the most common industrial injuries, and, despite some success in reducing it due to earlier legislation, continues to cost industry dearly whilst making retirement a misery for many. Noise induced hearing loss is totally preventable using a variety of techniques including process evaluation, engineering control, hearing protectors etc.

Action and limit values

All values for noise exposure are averaged over an 8 hour working day except for peak values (impact or impulse noise) which refer to a single event. There is an option to average the noise level over a 40 hour week. An action value is a point at which certain defined actions must take place.

The limit value is the noise level at the ear which must not be exceeded.

Lower Exposure Action Value 80 dB(A) continuous or 112 pa (135 dB(C)) peak level

- Assess the level of the risk
- Take reasonable steps to reduce exposure
- Advise employees of the risk
- Provide appropriate hearing protection
- Provide training and information about the risk and control measures
- Provide audiometry when risk assessment suggests a risk to health

Upper exposure action value 85 dB(A) continuous or 140 pa (137 dB(C)) peak level

- All the above
- Wearing of hearing protection is compulsory
- Audiometry is a requirement

Exposure limit value 87 dB(A) continuous or 200 pa (140 dB(C)) peak level

- This limit must never be exceeded
- The level is at the ear, i.e. takes into account any hearing protection used

Hearing protection standards

EN 352-1	General requirements - earmuffs
EN 352-2	General requirements - earplugs
EN 352-3	General requirements - helmet mounted earmuffs
EN 352-4	Safety requirements and testing - level dependent earmuffs
EN 352-5	Safety requirements and testing - active noise reduction earmuffs
EN 352-6	Safety requirements and testing - earmuffs with electrical audio input
EN 352-7	Safety requirements and testing - level dependent earplugs
EN 352-8	Safety requirements and testing - entertainment audio earmuff
EN 458	Guidance document - selection, care, use, maintenance of hearing protectors

Educational aids

Providing your workers with hearing protection is not enough to ensure you comply with health & safety regulations. Involving workers in the choice of hearing protection and providing them with a good quality training program plays a vital part.

3M has a wide variety of educational material to help you achieve an effective training scheme: from posters, leaflets, videos and presentations through to model ears to demonstrate how to fit an earplug. Our sales expertise can provide you with the tools you need to construct and provide an effective training programme.

Hearing protection use and care

Roll down earplugs



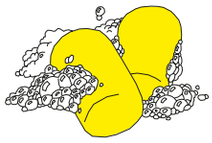


How to use

Slowly roll and compress foam earplugs into a very thin cylinder. While compressed, insert the earplug well into the ear canal. Fitting is easier if you reach around the head to pull the ear outward and upward during insertion.

Care and cleaning

Keep the earplugs clean and free from material that can irritate the ear canal. They may be washed in mild liquid detergent and warm water. Squeeze excess water from the plugs and air dry. Washing may be repeated several times. Discard the earplugs if they noticeably change their firmness or do not re-expand to their original size and shape.



Reusable pre moulded earplugs





How to use

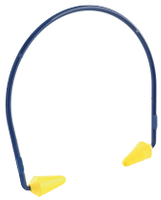
Reach around the back of your head and pull outward on the ear while inserting the plug until you feel it sealing. This may seem tight at first, especially if you have never worn earplugs.

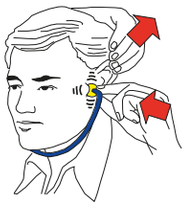
Care and cleaning

Pre-moulded earplugs could last several months depending on the type and on your work environment, hygiene and body chemistry. They should be replaced if they shrink, harden, tear, crack or become permanently deformed. Wash them in warm soapy water and rinse well. When dry, store them in a carrying case.



Banded earplugs



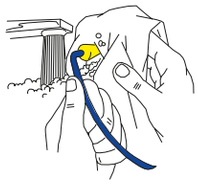


How to use

Hold the large ends of the pods and swivel them to direct the tips into the ear canal openings. Firmly push and wiggle the pods into the ear canal until a snug seal is obtained. Pulling on the outer ear while pushing the pods will be helpful to most wearers.

Care and cleaning

Most semi-aural hearing protectors can be cleaned in the same way as pre-moulded earplugs. Since the band holds the tips in place to provide an acoustic seal, do not tamper with it otherwise the protection afforded by the device may be reduced.



Earmuffs



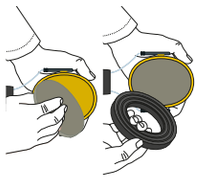


How to use

Earmuffs must fully enclose the ears to seal against the head. Adjust the headband so cushions exert even pressure around the ears to get the best noise reduction. Pull hair back and out from beneath the cushions. Do not wear caps, store pencils behind the ear or anything that may break the seal.

Care and cleaning

Cushions can be cleaned with warm soapy water and rinsed thoroughly. Do not use alcohol or solvents. Cushions normally need replacing at least twice a year or more – whenever they become stiff, cracked, or do not seal. Do not modify earmuffs in any way, and especially do not stretch or abuse the headband as this will reduce protection.



PELTOR™ clean

Disposable hygiene protection for hearing protectors, headsets etc.

The disposable hygiene protection PELTOR™ Clean is an easy way to improve hygiene and comfort. They are easy to fix to the sealing rings and lead to insignificant loss of attenuation. Effective and practical for use in dirty or hot environments to keep cushions hygienically clean. Also useful when several persons are using the same item, for example visitors hearing protectors.



Product number	Product description	Case qty
HY100A	100 pairs on a roll in a dispenser	
HY100A-01	20 envelopes x 5 pairs in a dispenser	



Choosing the right product

	 E-A-R Soft Yellow Neons	E-A-R Soft Metal Detectable	 E-A-R Soft F X	 Classic	 Classic Soft	 Superfit 33	 Superfit 36	 One Touch Pro Dispenser	 1120	 Solar	 1100	 Express	 Push-Ins	 Torque	 No-Touch	 Ultrafit	 Ultrafit 14	 Ultrafit 20
Hearing protection types:																		
Disposable earplugs	•	•	•	•	•	•	•	•	•	•	•							
Push-to-fit earplugs												•	•	•	•			
Re-usable earplugs																•	•	•
Banded earplugs																		
Ear muffs																		
SNR v dB 28dB SNR	36	36	39	28	36	33	36		34	36	37	28	38	32	35	32	14	20
Noise level:																		
< 85 dB																	•	
83–93 dB																		•
87–98 dB				•								•						
94–105 dB														•		•		
95–110 dB	•	•	•		•	•	•		•	•	•		•		•			
Customer need:																		
Corded	•		•	•					•	•		•	•	•	•	•	•	•
Un-corded	•			•	•	•	•	•	•	•								
Application/environment:																		
Temperature (•cold/hot•)	••	••	••	••	••	••	••		••	••	••	••	••	••	••	••	••	••
Humidity				•	•	•											•	•
Metal detection		•																
Lack of hygiene facility												•	•	•	•	•	•	•

	 Clear E-A-R 20	 Tracers	 Tracers 20 Metal Detectable	 Un-corded: 1261 Corded: 1271	 Tri-Flange Corded	 E-A-R Flex 14	 E-A-R Band	 Caboflex	 E-A-R Caps	 1310	 X1	 X2	 X3	 X4	 X5	 Optime I	 Optime II	 Optime III	 Bull's Eye I	 Bull's Eye II	 Bull's Eye III
	•	•	•	•	•															
						•	•	•	•	•										
											•	•	•	•	•	•	•	•	•	•
	20	32	20	25	29	14	21	21	23	26	27	31	33	33	37	27	31	35	27	31	35
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3M™ PELTOR™ Optime™ certified helmet attachment options

Helmet brand	Model number	P3 adapter	H31	H510	H520	H540
3M	Airstream AH1, AH4, AH7, HT-701, HT-702, HT-705, HT-707	AE	ML	ML	ML	L
3M	G500 Headgear	E	SML	SML	SML	SML
3M	Versaflo™ M-106, M-107, M-306, M-307	AF	ML	ML	ML	ML
3M	3M™ Speedglas™ Welding Helmet 9100 MP	AF	ML	ML	ML	ML
3M	G2000	K	SML	SML	SML	SML
3M	G22	E	SML	SML	SML	SML
3M	G3000	E	SML	SML	SML	SML
3M	G3501	E	SML	SML	SML	SML
3M	H-700	E	SML	ML	SML	L
Auboueix	Brennus	F	SML	SML	SML	SML
Auboueix	Fondelec	F	SML	SML	SML	SML
Auboueix	Iris	E	ML	ML	ML	ML
Auboueix	Iris 2	E	ML	ML	ML	ML
Auboueix	KARA	E	SML	SML	SML	ML
Grolls	Balance	E	ML	ML	ML	ML
Grolls	Balance AC	E	ML	ML	ML	ML
Grolls	Balance HD	N	SML	SML	SML	SML
Grolls	Robust	E	SML	SML	SML	SML
Centurion	1100/ARCO type 2	H	SML	SML	SML	ML
Centurion	1125/ARCO plus	H	SML	SML	SML	SML
Centurion	1540/ARCO	A	ML	ML	ML	ML
Centurion	Concept	E	SML	SML	SML	SML
JSP	EVOLITE	E	L	ML	ML	L
JSP	MK6R/MK7R	E	L	SML	SML	L
JSP	MK8	E	L	L	ML	L
Kemira	Top Cap	A	SML	SML	SML	SML
LAS	LP2002	E	SML	SML	SML	SML
LAS	LP2006	E	SML	SML	SML	SML
MSA	Super V-Gard II	E	SML	SML	SML	SML
MSA	V-Gard	E	SML	SML	SML	SML
Petzl	Vertex	E	SML	SML	SML	SML
Protector / Scott	Style 300	E	SML	SML	SML	SML
Protector / Scott	Style 600	E	SML	SML	SML	SML
Protector / Scott	Tuffmaster II	E, G	ML	ML	ML	ML
Römer	Bravo 2 Nomaz	B	SML	SML	SML	SML
Römer	Marcus Top Atlas Nomaz	B	SML	SML	SML	SML
Römer	N2 Atlas Nomaz	BB	SML	SML	SML	SML
Römer	Profi Expo	E	SML	SML	SML	SML
Römer	Profia Nomaz	E	SML	SML	SML	SML
Römer	Top Expo Atlas	B	SML	SML	SML	SML
Schubert	BEN	BB	SML	SML	SML	SML
Schubert	BER S	E	SML	SML	SML	SML
Schubert	BER80/WPC80	EA	SML	SML	SML	SML
Schubert	BOP R	B	SML	SML	SML	SML
Schubert	PIONIER	B	SML	SML	SML	SML
Schubert	SH 91/WPL 91	EB	SML	SML	SML	SML
Schubert	SW1	EB	ML	ML	ML	ML
Sofop Taliaplast	Oceanic	E	ML	ML	ML	ML
Sofop Taliaplast	Opus	E	ML	ML	ML	ML
UVEX	Airwing	E	SML	SML	SML	SML
Voss	Inap 88	E	SML	SML	SML	SML
Voss	Inap Master	E	ML	ML	ML	ML
Voss	Inap PCG	G	ML	ML	ML	ML
Voss	Inap Star	E	ML	ML	ML	ML

i.e. for what head size the combination of helmet and hearing protector is approved

3M™ PELTOR™ X series certified helmet attachment options

Helmet brand	Model number	P5 adapter	X1P5, X1P5-OR	X2P5	X3P5	X4P5, X4P5-OR	X5P5
3M	G500 Headgear	E	SML	SML	SML	SML	SML
3M	G22	E	SML	SML	ML	SML	L
3M	G2000	K	SML	SML	SML	SML	ML
3M	G3000 (Basic Set)	E	SML	SML	SML	SML	ML
3M	G3501	E	SML	SML	ML	SML	L
3M	H700	E	SML	L	L	SML	L
3M	Speedglas Welding Helmet 9100 MP	AF*	SML	ML	ML	SML	L
3M	Versaflo M-106 and M-107	AF*	ML	ML	ML	ML	ML
3M	Versaflo M-306 and M-307	AF*	SML	ML	ML	SML	L
Arco	Arco Champion	H*	L	L	L	L	L
Arco	Arco Champion Plus	H*	L	L	L	L	L
Aubouiex	Iris 2	E	L	L	L	L	L
Aubouiex/Seybol	Kara	E	SML	SML	SML	SML	ML
Centurion	1100 (H fitting)	H*	L	L	L	L	L
Centurion	1125 (H fitting)	H*	L	L	L	L	L
Centurion	Concept (E fitting)	E	L	L	L	L	L
Centurion	Concept (H fitting)	H*	L	L	L	L	L
Centurion	Vulcan	H*	L	L	L	L	L
Delta Plus	Zircon	E	SML	L	L	SML	L
Grolls	Balance AC	E	L	L	L	L	L
MSA	V-Gard 500	E	SML	SML	SML	SML	SML
PETZL	Vertex Best, Vent and ST	E	ML	ML	ML	ML	L
Protector/Scott	Style 300	E	ML	ML	ML	ML	ML
Protector/Scott	Style 600	E	SML	SML	SML	SML	ML
Shuberth	EuroGuard	E	SML	L	L	SML	L

S = small size, M = medium, L = large size*
* i.e. for what head size the combination of helmet and hearing protector is approved





Attenuation data

E-A-R™ ULTRAFIT™ 14 EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	4.2	4.5	5.9	9.0	15.4	23.4	30	29.9
Standard deviation (dB)	2.4	2.6	2.0	2.7	3.0	3.0	3.6	2.7
Assumed protection (dB)	1.8	1.9	3.9	6.3	12.4	20.4	26.4	27.2

SNR=14dB H=19dB, M=11dB, L=6dB

E-A-R™ ULTRATECH™ EARPLUGS

Mean attenuation (dB)	14.3	15.3	18.1	20.8	21.8	26.3	21.5	27
Standard deviation (dB)	3.3	2.9	3.6	4.3	3.5	3.0	3.2	4.7
Assumed protection (dB)	11.0	12.3	14.5	16.4	18.3	23.3	18.3	22.3

SNR=21dB H=21dB, M=18dB, L=16dB

E-A-R™ E-A-RSOFT™ 21 EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	19.1	18.1	16.1	17.1	19.8	31.9	34.9	31
Standard deviation (dB)	5.9	5.4	4.9	4.0	2.8	4.7	4.3	5.2
Assumed protection (dB)	13.2	12.7	11.2	13.1	17.0	27.2	30.6	25.8

SNR=21dB H=24dB, M=17dB, L=14dB

E-A-R™ E-A-RBAND™ EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	20.5	19.4	16	16.5	20.9	31.4	35.3	36
Standard deviation (dB)	4.2	5.4	4.1	4.2	2.5	4.3	3.6	4.0
Assumed protection (dB)	16.3	14.0	11.9	12.3	18.4	27.1	31.7	32.0

SNR=21dB H=25dB, M=17dB, L=14dB

E-A-R™ ULTRAFIT™ 20 EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	7.4	9.1	12.9	19.4	22.8	27.6	32.6	36.8
Standard deviation (dB)	4.0	6.0	4.5	5.0	3.7	2.9	3.6	3.9
Assumed protection (dB)	3.4	3.1	8.4	14.4	19.1	24.7	29.0	32.9

SNR=20dB H=25dB, M=17dB, L=10dB

E-A-R™ CABOFLEX™ EARPLUGS (Under-The-Chin Mode)

Mean attenuation (dB)	22.7	20.7	22.4	22.7	23.8	32.3	42.2	36.2
Standard deviation (dB)	8.7	7.8	8.7	9.2	7.0	5.7	4.6	8.2
Assumed protection (dB)	13.9	12.9	13.7	13.5	16.8	26.6	37.6	28.0

SNR=21dB H=25dB, M=17dB, L=15dB

E-A-R™ CLEARE-A-R™ 20 EARPLUGS

Mean attenuation (dB)	8.8	11.7	14.4	18	20.9	26.4	31.3	36.4
Standard deviation (dB)	3.9	3.9	2.9	4.2	3.4	3.9	5.8	5.0
Assumed protection (dB)	4.9	7.8	11.5	13.8	17.5	22.5	25.5	31.4

SNR=20dB H=23dB, M=17dB, L=13dB

E-A-R™ CLASSIC™ EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	22.3	23.3	24.6	26.9	27.4	34.1	41.6	40.4
Standard deviation (dB)	5.4	5.3	3.6	5.4	4.8	3.1	3.5	6.4
Assumed protection (dB)	16.9	18.1	20.9	21.5	22.6	30.9	38.1	34.0

SNR=28dB H=30dB, M=24dB, L=22dB

E-A-R™ TRACER™ 20

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	7.4	9.1	12.9	19.4	22.8	27.6	32.6	36.8
Standard deviation (dB)	4.0	6.0	4.5	5.0	3.7	2.9	3.6	3.9
Assumed protection (dB)	3.4	3.1	8.4	14.4	19.1	24.7	29.0	32.9

SNR=20dB H=25dB, M=17dB, L=10dB

E-A-R™ EXPRESS™ EARPLUGS

Mean attenuation (dB)	27.8	26	24.9	25.2	29.4	34.9	37	35.9
Standard deviation (dB)	5.4	4.5	3.3	5.0	4.2	4.1	5.2	3.7
Assumed protection (dB)	22.4	21.5	21.5	20.2	25.2	30.8	31.8	32.2

SNR=28dB H=30dB, M=24dB, L=22dB

E-A-R™ E-A-R CAPS™ EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	21.0	20.2	19.8	19.1	23.2	33.4	41.0	40.7
Standard deviation (dB)	4.1	4.4	4.2	4.3	3.7	4.5	2.9	5.4
Assumed protection (dB)	16.9	15.8	15.5	14.8	19.5	29.0	38.1	35.2

SNR=23dB H=27dB, M=19dB, L=17dB

E-A-R™ REFLEX™ EARPLUGS (over-the-head)

Mean attenuation (dB)	23.3	24.4	22.7	24.1	27.7	35.3	39.8	37.9
Standard deviation (dB)	8.7	8.1	7.0	5.6	4.8	5.1	4.8	7.3
Assumed protection (dB)	14.6	16.3	15.7	18.5	22.9	30.2	35.0	30.6

SNR=26dB H=29dB, M=22dB, L=18dB

E-A-R™ FLEXICAP™ EARPLUGS (under-the-chin)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	26.1	22.8	20.1	18.6	22	32.7	36.5	37
Standard deviation (dB)	5.2	6.0	5.0	3.3	3.4	4.1	4.3	8.3
Assumed protection (dB)	20.8	16.8	15.1	15.3	18.6	28.6	32.2	28.7

SNR=23dB H=26dB, M=19dB, L=17dB

PELTOR™ Optime™ I - H510A EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	11.4	18.7	27.5	32.9	33.6	36.6	35.9
Standard deviation (dB)	4.1	3.6	2.5	2.7	3.4	2.7	3.7
Assumed protection (dB)	7.3	15.1	25	30.1	30.2	33.9	32.2

SNR=27dB H=32dB, M=25dB, L=15dB

PELTOR™ Optime™ I - H510B EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	10.9	17.1	25.4	31.5	32.6	36.1	34.8
Standard deviation (dB)	3.5	2.8	1.8	2.6	4.3	3.2	3.6
Assumed protection (dB)	7.3	14.3	23.6	28.9	28.3	32.9	31.1

SNR=26dB H=30dB, M=24dB, L=15dB

PELTOR™ OPTIME™ I - H510F EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	12.2	18.7	27.0	32.9	35.0	36.5	34.4
Standard deviation (dB)	3.4	3.2	2.9	2.1	4.0	2.9	3.9
Assumed protection (dB)	8.7	15.5	24.1	30.8	31.0	33.6	30.6

SNR=28dB H=32dB, M=25dB, L=16dB

PELTOR™ Optime™ I - H510P3

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	11.2	13.4	26.9	33.9	32	33.5	36.9
Standard deviation (dB)	2.0	1.9	1.8	1.9	2.4	1.8	1.8
Assumed protection (dB)	9.2	11.5	25.1	31.9	29.6	31.7	35.1

SNR=26dB H=32dB, M=23dB, L=15dB

PELTOR™ BULLS EYE™ I EARMUFFS

Mean attenuation (dB)	13.2	10.9	17.3	26.6	28.3	33.5	37.8	37.9
Standard deviation (dB)	3.2	3.2	2.5	2.2	2.7	2.6	2.0	2.6
Assumed protection (dB)	10.0	7.7	14.8	24.4	25.6	30.9	35.7	35.3

SNR=27dB H=32dB, M=24dB, L=15dB

PELTOR™ H31A 300 EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	11.2	17.4	29.7	36.2	37.3	34.7	35.7
Standard deviation (dB)	3.7	3.8	2.5	3.1	3.6	3.2	3.7
Assumed protection (dB)	7.5	13.6	27.2	33.1	33.7	31.5	32

SNR=27dB H=33dB, M=25dB, L=15dB

PELTOR™ H31B 300 EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	10.2	17.1	29.0	34.3	37.2	36.6	35.8
Standard deviation (dB)	2.9	2.9	1.8	2.2	3.7	2.3	4.0
Assumed protection (dB)	7.3	14.2	27.2	32.1	33.5	34.3	31.8

SNR=27dB H=34dB, M=25dB, L=15dB

PELTOR™ H31P3* 300 EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	11.8	19.2	28.6	34.3	37.7	37.8	38.0
Standard deviation (dB)	3.2	3.8	2.7	1.8	3.8	2.9	1.9
Assumed protection (dB)	8.6	15.4	25.9	32.5	33.9	34.9	36.1

SNR=28dB H=35dB, M=26dB, L=16dB

3M™ 1261/1271 EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	26.6	27.7	28.4	29.5	29.6	35.6	35.6	38.9
Standard deviation (dB)	9.4	9.9	10.9	9.6	8.2	6.8	9.8	6.7
Assumed protection (dB)	17.2	17.8	17.5	19.9	21.4	28.8	25.8	32.2

SNR=25dB H=27dB, M=22dB, L=20dB

3M™ 1310 EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	22.6	21.7	21.8	23.6	25.1	34.8	40.5	42.7
Standard deviation (dB)	5.0	4.6	4.5	4.3	3.0	3.2	4.3	3.6
Assumed protection (dB)	17.6	17.0	17.3	19.3	22.1	31.6	36.2	39.1

SNR=26dB H=30dB, M=22dB, L=19dB

E-A-R™ CLASSIC™ CORDED EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	21.7	23.7	26.1	30.4	30.1	33.8	42.6	42.1
Standard deviation (dB)	6.3	5.6	5.2	5.7	5.3	4.6	4.0	5.7
Assumed protection (dB)	15.4	18.0	20.9	24.6	24.9	29.2	38.6	36.4

SNR=29dB H=30dB, M=26dB, L=23dB

E-A-R™ ULTRAFIT EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	29.2	29.4	29.4	32.2	32.3	36.1	44.3	44.8
Standard deviation (dB)	6.0	7.4	6.6	5.3	5.0	3.2	6.0	6.4
Assumed protection (dB)	23.2	22.0	22.7	26.9	27.3	32.8	38.3	38.4

SNR=32dB H=33dB, M=28dB, L=25dB

E-A-R™ TRACERS EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	29.2	29.4	29.4	32.2	32.3	36.1	44.3	44.8
Standard deviation (dB)	6.0	7.4	6.6	5.3	5.0	3.2	6.0	6.4
Assumed protection (dB)	23.2	22.0	22.7	26.9	27.3	32.8	38.3	38.4

SNR=32dB H=33dB, M=28dB, L=25dB

PELTOR™ Optime™ II - H520A EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	14.6	20.2	32.5	39.3	36.4	34.4	40.2
Standard deviation (dB)	1.6	2.5	2.3	2.1	2.4	4.0	2.3
Assumed protection (dB)	13.0	17.7	30.2	37.2	34.0	30.4	37.9

SNR=31dB H=34dB, M=29dB, L=20dB

PELTOR™ Optime™ II - H520B EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	14.7	20.4	32.3	39.6	36.2	35.4	40.2
Standard deviation (dB)	1.8	2.6	2.5	2.2	2.4	4.2	2.4
Assumed protection (dB)	12.9	17.8	29.8	37.4	33.8	31.2	37.8

SNR=31dB H=34dB, M=29dB, L=20dB

PELTOR™ Optime™ II - H520F EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	14.5	20.3	32.6	39.1	35.1	34.7	39.8
Standard deviation (dB)	1.8	2.6	2.4	2.5	2.3	2.7	2.5
Assumed protection (dB)	12.7	17.7	30.2	36.6	32.8	32.0	37.3

SNR=31dB H=34dB, M=28dB, L=20dB

PELTOR™ Optime™ II - H520P3* EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	14.1	19.4	32.0	39.9	36.2	35.4	39.2
Standard deviation (dB)	2.3	2.7	2.7	2.4	2.6	4.4	2.6
Assumed protection (dB)	11.8	16.7	29.3	37.5	33.6	31.0	36.6

SNR=30dB H=34dB, M=28dB, L=19dB

PELTOR™ BULLS'EYE II EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	14.5	20.3	32.6	39.1	35.1	34.7	39.8
Standard deviation (dB)	1.8	2.6	2.4	2.5	2.3	2.7	2.5
Assumed protection (dB)	12.7	17.7	30.2	36.6	32.8	32.0	37.3

SNR=31dB H=34dB, M=26dB, L=20dB

3M™ TRI-FLANGE™ EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	27.8	29.9	29.6	30.8	35.3	34.6	38.7	43.0
Standard deviation (dB)	6.8	8.2	7.7	6.8	6.7	7.1	8.8	5.9
Assumed protection (dB)	21.0	21.7	22.0	24.0	28.5	27.5	29.9	37.1

SNR=29dB H=29dB, M=27dB, L=24dB

3M™ TORQUE™ EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	30.9	31.9	30.2	30.7	34.1	37.1	44.4	43.7
Standard deviation (dB)	3.0	5.2	6.5	5.5	7.0	4.1	5.1	5.6
Assumed protection (dB)	27.9	26.7	23.7	25.2	27.1	33.0	39.3	38.1

SNR=32dB H=33dB, M=28dB, L=26dB

E-A-R™ E-A-RSOFT™ YELLOW NEONS EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	23.7	30.8	36.1	39.2	39.5	35.8	42.1	46.1
Standard deviation (dB)	6.7	6.5	6.7	4.7	3.9	4.9	3.1	3.3
Assumed protection (dB)	17.0	24.3	29.4	34.5	35.6	30.9	39.0	42.8

SNR=36dB H=34dB, M=34dB, L=31dB

E-A-R™ E-A-RSOFT™ METAL DETECTABLE EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	23.7	30.8	36.1	39.2	39.5	35.8	42.1	46.1
Standard deviation (dB)	6.7	6.5	6.7	4.7	3.9	4.9	3.1	3.3
Assumed protection (dB)	17.0	24.3	29.4	34.5	35.6	30.9	39	42.8

SNR=36dB H=34dB, M=34dB, L=31dB

E-A-R™ CLASSIC™ SOFT EARPLUGS (Uncorded)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	28.2	30.6	32.8	35.9	36	38.5	43.8	43.1
Standard deviation (dB)	6.7	6.4	5.4	4.2	3.7	3.2	3.8	3.8
Assumed protection (dB)	21.5	24.2	27.4	31.7	32.3	35.3	40.0	39.3

SNR=36dB H=36dB, M=33dB, L=29dB

E-A-R™ SUPERFIT™ 33 EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	24.9	27.5	31.2	33.9	34.5	37.5	43.3	45.0
Standard deviation (dB)	7.2	6.9	6.9	7.0	6.0	3.3	3.3	4.8
Assumed protection (dB)	17.7	20.6	24.3	27	28.5	34.2	40.1	40.2

SNR=33dB H=35dB, M=29dB, L=26dB

E-A-R™ SUPERFIT™ 36 EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	29.1	32.4	36.0	38.0	38.9	39.1	43.1	44.6
Standard deviation (dB)	6.2	7.3	7.3	6.8	6.7	3.1	6.1	6.3
Assumed protection (dB)	22.8	25.0	28.7	31.2	32.2	35.9	37.0	38.4

SNR=36dB H=36dB, M=33dB, L=30dB

E-A-R™ E-A-RSOFT™ FX EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	34.6	37.5	38.5	40.4	38.6	39.6	48.9	47.8
Standard deviation (dB)	5.7	6.0	5.4	5.0	4.2	2.5	3.8	3.9
Assumed protection (dB)	28.9	31.5	33.1	35.4	34.4	37.1	45.1	43.9

SNR=39dB H=39dB, M=36dB, L=34dB

E-A-R™ PUSH-INS™ EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	34.8	37.0	38.2	40.2	39.9	40.1	41.9	41.1
Standard deviation (dB)	5.0	5.7	6.0	4.5	5.0	3.3	3.8	3.7
Assumed protection (dB)	29.8	31.3	32.2	35.7	34.9	36.8	38.1	37.4

SNR=38dB H=37dB, M=36dB, L=34dB

E-A-R™ ULTRAFIT™ X EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	33.1	34.6	34.2	35.8	38.2	38.0	42.9	45.2
Standard deviation (dB)	4.7	5.6	6.7	5.7	5.7	5.3	4.5	6.0
Assumed protection (dB)	28.4	29.0	27.5	30.1	32.5	32.7	38.4	39.2

SNR=35dB H=35dB, M=32dB, L=30dB

PELTOR™ Optime™ III H540A EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	17.4	24.7	34.7	41.4	39.3	47.5	42.6
Standard deviation (dB)	2.1	2.6	2.0	2.1	1.5	4.5	2.6
Assumed protection (dB)	15.3	22.1	32.7	39.3	37.8	43.0	40.0

SNR=35dB H=40dB, M=32dB, L=23dB

PELTOR™ Optime™ III H540B EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	17.5	24.5	34.5	41.4	39.5	47.3	42.0
Standard deviation (dB)	2.3	2.7	2.0	2.2	2.0	4.4	2.8
Assumed protection (dB)	15.2	21.8	32.5	39.2	37.5	42.9	39.2

SNR=35dB H=40dB, M=32dB, L=23dB

PELTOR™ Optime™ III H540P3* EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	17.1	24.5	34.8	40.2	39.6	46.7	43.1
Standard deviation (dB)	2.3	2.8	2.2	2.0	1.8	4.2	2.5
Assumed protection (dB)	14.8	21.7	32.6	38.2	37.8	42.5	40.6

SNR=34dB H=40dB, M=32dB, L=22dB

PELTOR™ BULLS EYE™ III EARMUFFS

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	17.4	24.7	34.7	41.4	39.3	47.5	42.6
Standard deviation (dB)	2.1	2.6	2.0	2.1	1.5	4.5	2.5
Assumed protection (dB)	15.3	22.1	32.7	39.3	37.8	43.0	40.0

SNR=35dB H=40dB, M=32dB, L=23dB

3M™ SOLAR™ EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	23.7	30.8	36.1	39.2	39.5	35.8	42.1	46.1
Standard deviation (dB)	6.7	6.5	6.7	4.7	3.9	4.9	3.1	3.3
Assumed protection (dB)	17.0	24.3	29.4	34.5	35.6	30.9	39.0	42.8

SNR=36dB H=34dB, M=34dB, L=31dB

3M™ NO-TOUCH™ EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	30.4	32.3	31.3	33.5	36.1	37.4	47.8	46.5
Standard deviation (dB)	4.1	4.9	4.1	3.8	3.5	4.3	4.3	5.5
Assumed protection (dB)	26.3	27.4	27.2	29.7	32.6	33.1	43.5	41.0

SNR=35dB H=35dB, M=32dB, L=30dB

3M™ 1120/1130 EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	23.9	25.4	30.1	34.2	34.9	39.0	48.2	45.5
Standard deviation (dB)	4.7	4.5	5.0	4.6	5.5	3.5	5.0	5.4
Assumed protection (dB)	19.2	20.8	25.1	29.6	29.4	35.5	43.2	40.1

SNR=34dB H=36dB, M=30dB, L=27dB

3M™ 1100/1110 EARPLUGS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	30.0	33.1	36.3	38.4	38.7	39.7	48.3	44.4
Standard deviation (dB)	3.9	5.0	7.4	6.2	5.6	4.3	4.5	4.4
Assumed protection (dB)	26.1	28.1	28.9	32.2	33.1	35.4	43.8	40.0

SNR=37dB H=37dB, M=34dB, L=31dB



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