





NOISE REDUCTION RATING (NRR)

The U.S. Environmental Protection Agency (EPA) has selected the Noise Reduction Rating (NRR) as the measure of a hearing protector's noise-reducing capabilities. 3M makes no warranties as to the suitability of the NRR as a measure of actual protection from any noise level since such protection depends on the sound level (loudness), how long you listen to the loud sound and how well you fit the earmuff over your ears. Although hearing protectors can be recommended for protection against harmful effects of impulse noise, the NRR is based on the attenuation of continuous noise and may not be an accurate indicator of the protection attainable against impulse noise such as gunfire.

When worn according to the User Instructions, this hearing protector helps reduce exposure to both continuous noises, such as industrial noises and noises from vehicles and aircraft, as well as very loud impulse noises, such as gunfire. It is difficult to predict the required and/or actual hearing protection obtained during exposure to impulse noises. For gunfire, the weapon type, number of rounds fired, proper selection, fit and use of hearing protection, proper care of hearing protection and other variables will impact performance. If your hearing seems dulled or you hear a ringing or buzzing during or after any noise exposure (including gunfire), or for any other reason you suspect a hearing problem, your hearing may be at risk. To learn more about hearing protection for impulse noise, visit 3M.com/hearing.

U.S. EPA specifies the NRR as the measure of hearing protector noise reduction. However, 3M makes no warranties as to the suitability of the NRR for this purpose. Research suggests that users may receive less noise reduction than indicated by the attenuation label value(s) on the packaging due to variation in fit, fitting skill, and motivation of the user. Refer to applicable regulations or guidance on how to adjust attenuation label values. It is recommended that the NRR be reduced by 50% to better estimate typical protection.

The NRR for the Tactical 500 Electronic Hearing Protector is 25 dB. Improper fit of this device will reduce its effectiveness in attenuating noise. Consult the enclosed instructions for proper fit.

Attenuation (ANSI S3.19 – 1974)

Test Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR
Mean Attenuation (dB)	21.1	23.5	29.7	33.1	35.5	40.3	41.3	43.3	41.6	25
Standard Deviation (dB)	3.5	2.9	3.4	3.5	2.4	3.8	3.9	3.2	3.8	Decibels

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

EXAMPLE

1. The environmental noise level as measured at the ear is 92 dBA.
2. The NRR is 25 decibels (dB).
3. The level of noise entering the ear is approximately 67 dBA.

CAUTION

For noise environments dominated by frequencies below 500 Hz, the C-weighted environmental noise level should be used. The NRR used in the above examples was achieved under laboratory conditions.

PRODUCT LIFETIME

It is recommended that you replace your product within 5 years from date of manufacture. The lifetime of the product will be highly dependent on the environment in which the product is stored, used, serviced, and maintained. The user must regularly inspect the product to determine when it has reached its end of life. Examples that the product may have reached its end of life are:

- Visible defects such as cracks, deformations, loose or missing parts.
- Experience of a deterioration in the hearing protector's attenuation performance, strange noise or abnormal high sound volumes from the product's electronic sound reproduction.

**NOTE:** Product lifetime does not include batteries.

WARRANTY

The Tactical 500 Electronic Hearing Protector is warranted to be free of defects in material and workmanship for a period of one (1) year from the date of original purchase. 3M will, at its option, refund or replace without charge, except for transportation costs, parts that fail under normal use and service when operated and maintained in accordance with our instructions. This warranty does not cover damage caused by misuse, abuse, unauthorized modifications, or resulting from use of third-party accessories. Proof of purchase is required to verify eligibility.

SAFETY INFORMATION

Please read, understand, and follow all safety information contained in these instructions prior to the use of this electronic hearing protection product. Retain these instructions for future reference.

INTENDED USE:

This electronic hearing protection product is intended to help protect against hazardous noise. This electronic hearing protection product is used in loud noise environments. Use in any other application has not been evaluated by 3M and may lead to an unsafe condition.

DISPOSAL

You are liable to dispose of all your electronic or electrical waste equipment by relocating over to the specified collection point for recycling of such hazardous waste. Dispose of components in accordance with all applicable local and governmental regulations.

FCC INFORMATION

Modifications to this device shall not be made without the written consent of 3M Company. Unauthorized modifications may void the authority granted under Federal Communication Rules permitting the operation of this device.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

ISED INFORMATION

This device complies with Industry Canada's license-exempt RSS's. Operation is subject to the following two conditions:

1. This device may not cause interference; and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This Class B digital apparatus complies with CAN ICES-003(B)/NMB-003(B)

RENSEIGNEMENTS SUR ISDE

Cet appareil est conforme aux spécifications des normes applicables au matériel radio exempt de licence d'Innovation, Sciences et Développement économique Canada (ISDE). L'utilisation de l'appareil est assujettie aux deux conditions suivantes:

1. Cet appareil ne doit pas provoquer de brouillages; et
2. Cet appareil doit accepter tout brouillage, y compris les brouillages qui peuvent en compromettre le fonctionnement. CAN ICES-003(B)/NMB-003(B)

Noise  
Reduction  
Rating

25

DECIBELS  
(When used as directed)

THE RANGE OF NOISE REDUCTION RATINGS  
FOR EARPLUG HEARING PROTECTORS  
IS APPROXIMATELY 15 TO 30  
DB. THIS RANGE DOES NOT INDICATE GREATER EFFECTIVENESS  
FOR ANY PARTICULAR NOISE SOURCE.  
3M COMPANY ST. PAUL, MN

NOISE RATING  
3M COMPANY ST. PAUL, MN

U.S. EPA  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

Explanation of Signal Word Consequences	
<b>WARNING:</b>	Indicates a hazardous situation which, if not avoided, could result in serious injury or death.
<b>CAUTION:</b>	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury and/or property damage.

WARNING

This hearing protector helps reduce exposure to hazardous noise and other loud sounds. **Misuse or failure to wear hearing protectors at all times that you are exposed to noise may result in hearing loss or injury.** If there is any drainage from your ear or if you have an ear infection, consult with your physician before wearing hearing protection. Failure to do so may result in hearing loss or injury. For proper use, see *user instructions* or call 3M Technical Service toll free at 1-800-494-3552.

**To reduce the risks associated with hazardous voltage and fire which, if not avoided, could result in serious injury or death:**

- Never use this product, or charge/replace batteries, in an explosive environment.
- Do not mix old and new batteries.
- Do not mix alkaline, standard or rechargeable batteries.
- Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the local requirements.
- When using a 3M Alpha 1100 Li-Ion Battery Pack, see instructions provided with the Battery Pack for additional safety information.
- Only charge using 3rd party certified (such as UL, Intertek, etc.) equipment.

**To reduce the risks associated with hazardous noise which, if not avoided, could result in serious injury or death:**

- U.S. EPA specifies the NRR as the measure of hearing protector noise reduction. However, 3M makes no warranties as to the suitability of the NRR for this purpose. Research suggests that users may receive less noise reduction than indicated by the attenuation label value(s) on the packaging due to variation in fit, fitting skill, and motivation of the user. Refer to the applicable regulations, including for guidance on how to adjust attenuation label values. It is recommended that the NRR be reduced by 50% to better estimate typical protection.
- Always wear hearing protectors when you are exposed to noise.
- Ensure hearing protection is properly fitted. Follow any fitting instructions included with this product.
- Do not bend or reshape the headband as this will cause a loose fit and sound leakage.
- For best protection, the ear cushions should seal firmly against your head. Anything that interferes with the seal, such as long hair (pull back to the extent possible), thick or poorly fitting eyeglass temples, pencils or caps, may lessen the protection.
- If you suspect that the noise reduction is inadequate, remove yourself from the noisy environment and then check fit, inspect the hearing protector, or consider another type of hearing protector.
- Do not immerse in water. Clean with a damp cloth and mild soap. Do not use harsh or abrasive chemicals.
- Earmuffs must be regularly inspected for cracks or worn parts and for proper fitting. Replace as needed.
- Do not change between "Safe Volume Control ON" and "Limiter ON" settings during a single workday.
- Do not store the hearing protector in direct sunlight or at temperature above 131°F (55°C). For example, behind a windshield or in a window.
- When not in use, always store product in a clean and dry area in the original packaging and away from sources of direct heat or sunlight (for example on a dashboard or windowsill).
- Do not store product in temperatures above 131°F (55°C) and below -4°F (-20°C).
- Do not operate product above 131°F (55°C) or below 5°F (-15°C).
- Do not charge product above 113°F (45°C) or below 32°F (0°C).
- This product will experience qualitative changes under excessively high temperatures in transportation or storage over time.
- Using the entertainment or communication features of this device may reduce your situational awareness and ability to hear workplace warning signals. Stay alert and adjust the audio volume to the lowest acceptable level.

CAUTION

**To reduce the risks associated with chemical exposure and fire which, if not avoided, could result in minor or moderate injury:**

- Do not store with the batteries installed. A leaking battery may cause bodily injury or damage to the hearing protector.

ACCESSING THE SETUP MENU

To enter the setup menu, press and hold the center key on the right cup along with the power button for three seconds. The hearing protector will announce "Setup Mode."

To navigate the features in the setup menu, use the up and down arrows on the cup. To toggle between the settings, press the center key. The setup menu options are as follows:

**Adaptive Suppression Time** – while on, this feature measures the energy in the gunshot and sets the suppression time accordingly. It can be turned on or off from the setup menu. When turned off, the user will experience the shortest suppression time, regardless of the firearm used or the environment they are shooting in. This feature is also referred to as Dynamic Suppression Time.

**Surround Sound Filtering** – while on, this feature tracks voices in background noise to improve speech intelligibility. It can be turned on or off from the setup menu. When turned off, it uses a fixed filter to eliminate some environmental noise. This feature is also referred to as Clear Voice Tracking.

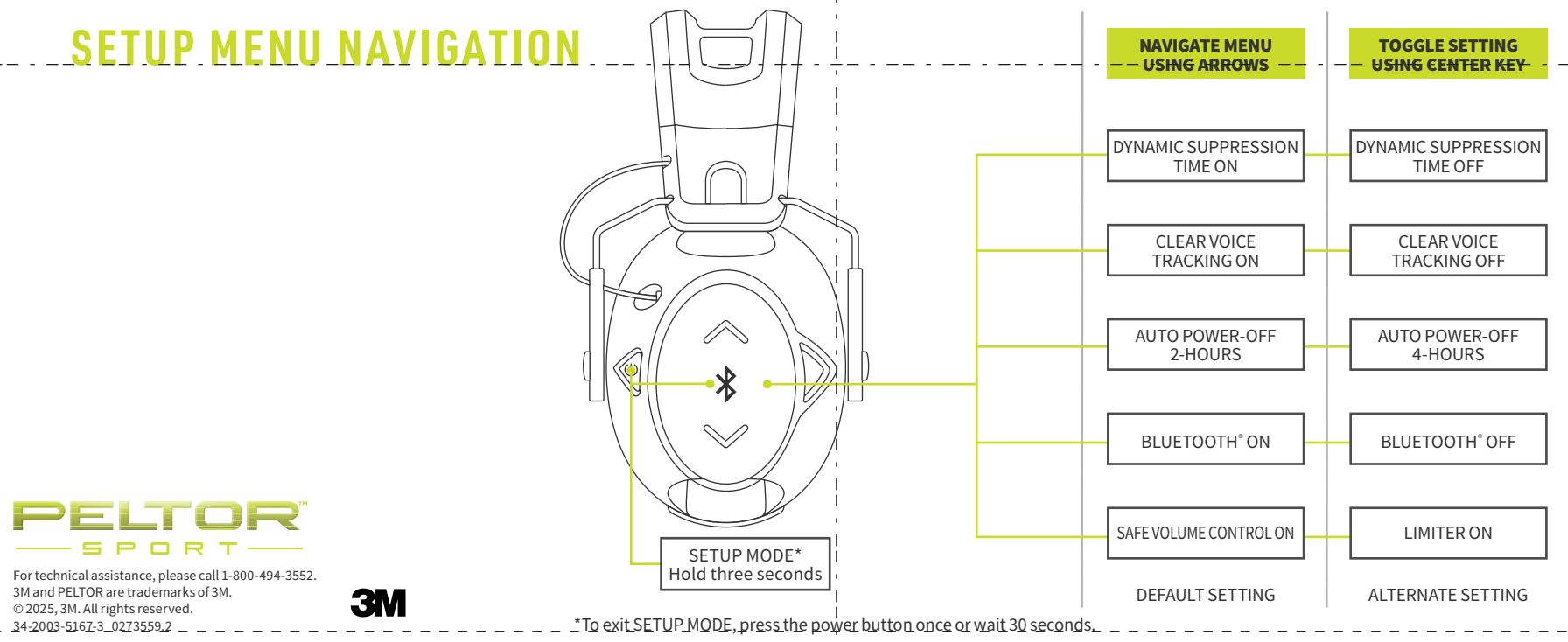
**Auto Power-Off** – this feature preserves battery life by powering off the unit after a fixed period of inactivity. It can be set to 2 or 4-hour periods. The default setting is 2-hours. This feature is also referred to as Auto Shut-Off.

**Bluetooth** – while on, the Bluetooth® feature will be active allowing for connection to compatible devices. Turning off the Bluetooth® feature will disable all functionality.

**Safe Volume Control ON / Limiter ON** – the Safe Volume Control ON feature allows for increased volume while using audio inputs, yet corrects to maintain safe levels over a 24-hour period. The Limiter ON functions sets an audio input maximum sound pressure level of 82 dB(A).

**To exit the setup menu, press the power button once or wait 30 seconds. You will hear successive tones increasing in pitch before entering normal operation.**

SETUP MENU NAVIGATION



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