# User Manual

Trade Name: 3M

## Model: Tactical 500

3M Construction & Home Improvement Markets Division
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PELTOR™ SPORT

# TACTICAL 500

## Electronic Hearing Protectors

3M

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# TACTICAL 500 ELECTRONIC HEARING PROTECTORS

Designed especially for shooters and hunters, these products go beyond protection, with excellent durability, ease-of-use and functionality. So you can stay focused and on target.

## CONTENTS


BASIC OPERATIONS 4

QUICKSTART GUIDE • TACTICAL 500 9

BLUETOOTH® OPERATION 10

NAVIGATION • TACTICAL 500 12

SAFETY INFORMATION 14

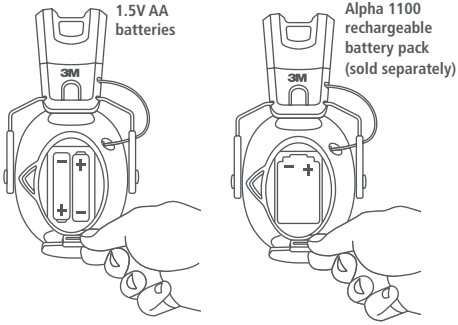
NOISE REDUCTION RATING (NRR) 17

ACCESSING THE SETUP MENU 20

# BASIC OPERATIONS

## Tactical 500 Electronic Hearing Protectors

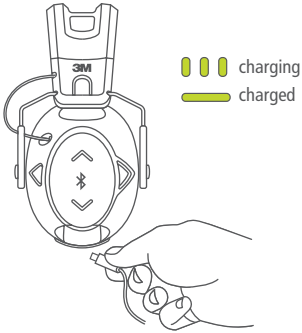
### Installing Batteries:




Install two 1.5V AA batteries or optional Alpha 1100 rechargeable battery pack as shown. Replace battery door top-end first.

Note:
- Do not mix old and new batteries
- Do not mix alkaline, standard or rechargeable batteries

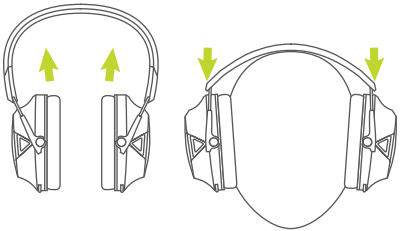
### Charging Battery Pack:
(sold separately)




Insert the micro-USB connector cable into the micro-USB jack. Connect the other end of the cable to a USB power source to begin charging.

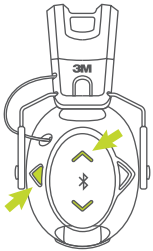
The LED will blink when the battery pack is charging and turn solid when charging is complete.

## Fitting Headset:



Fully extend sliders and place cups over ears so that microphones are facing forward. Then, tighten headband using sliders.

## Power and Volume:




Press and hold power button for 3 seconds to power ON/OFF headset. Voice Assist will announce "Power ON" or "Power OFF."

Adjust ambient volume using UP and DOWN arrows on right cup. Performance is best when volume is set to lowest level needed for conversation.

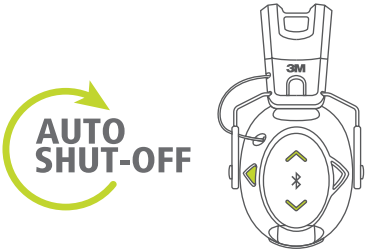
# BASIC OPERATIONS (CONT.)

## Tactical 500 Electronic Hearing Protectors

### Low Battery Warning:

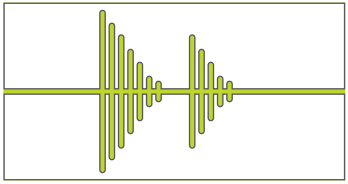
Headset will give a "Battery Low" warning every 10 minutes when battery voltage is low. Additional warnings will occur as hearing protector powers down. Replace batteries at this time.

### Auto Shut-Off:



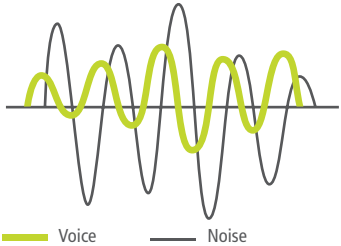

After a period of inactivity (either 2 or 4 hours according to your timer setting in the setup menu), a 10-second countdown will begin before hearing protector automatically powers down. To reset auto shut-off, simply adjust volume. After auto shut-off, press and hold the power button for 3 seconds to turn the unit on. The 2 or 4 hour auto shut-off time can be selected in the setup menu. The default setting is 2 hours.

## Dynamic Suppression Time:



Dynamic Suppression Time (DST) optimizes your experience by measuring the gunshot energy to adjust for the appropriate suppression time — shorter suppression time for small-caliber firearms, longer suppression time for large-caliber firearms. Dynamic Suppression Time will also adjust recovery time to reduce echoes in your environment — ideal for shooters who move between indoor and outdoor ranges. The user can select a fixed (shorter) suppression time by turning off the Adaptive Suppression Time feature in the setup menu. The default setting is Adaptive Suppression Time ON.

## Clear Voice Tracking:




Clear Voice Tracking seeks voices in background/environmental noise and reduces the noise to improve speech intelligibility. The user can select standard microphone filtering by turning off the Surround Sound Filtering in the setup menu. The default setting is Surround Sound Filtering ON.

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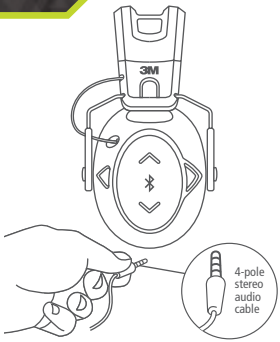
# TACTICAL 500 QUICKSTART GUIDE

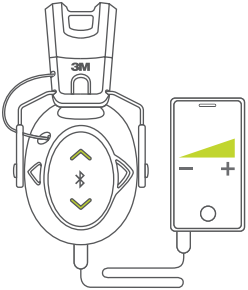
## Connect the device to automatically activate Audio Input Mode

### Audio Input Mode allows you to directly connect the hearing protector to any compatible audio device.

### Connect Device

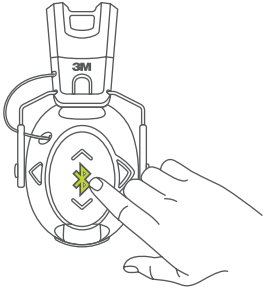
Connect device using the 4-pole 3.5 mm stereo audio cable supplied. When you connect the cable, the hearing protector will automatically switch to Audio Input Mode.




### Volume Control

Turn on the hearing protector. Use the hearing protector to control ambient volume. Use your device to control the audio input volume.




### Forward/Back or Pause/Play*

To pause or play audio on your device, press the center button once. To advance tracks, press twice. To select the previous track, press three times.

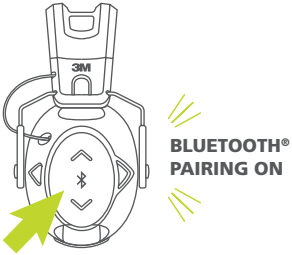
*Some devices may not be compatible with this feature and will have to be operated using their native controls.

# BLUETOOTH® OPERATION

## Tactical 500 Electronic Hearing Protector

**Use the source button to activate Bluetooth® Mode.**

Bluetooth® Mode allows you to connect hearing protector to your Bluetooth® enabled device.



### Pair Device Function

Press and hold the center Bluetooth® button for three seconds to enter pairing mode. You will hear "Bluetooth Pairing ON" and the LED will blink. Make sure your Bluetooth® enabled device is scanning/searching for devices. Check your device to make sure it has discovered "Peltor Sport Tactical 500." Select "Peltor Sport Tactical 500" to connect to the hearing protector.

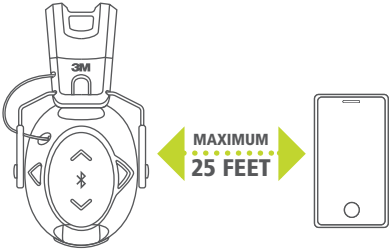
Once connected successfully, you will hear "Bluetooth Connected" and the LED on the right cup will turn off.

### Once Your Device is Paired

Once your device has been connected successfully to the Tactical 500 it will automatically link the next time you turn on the hearing protector. A "Bluetooth Connected" voice message will play once the connection is successfully established.

**ANSWER A CALL**
Press once

**REJECT OR DISCONNECT FROM A CALL**
Press and hold




## Incoming Calls, Messages & Alerts

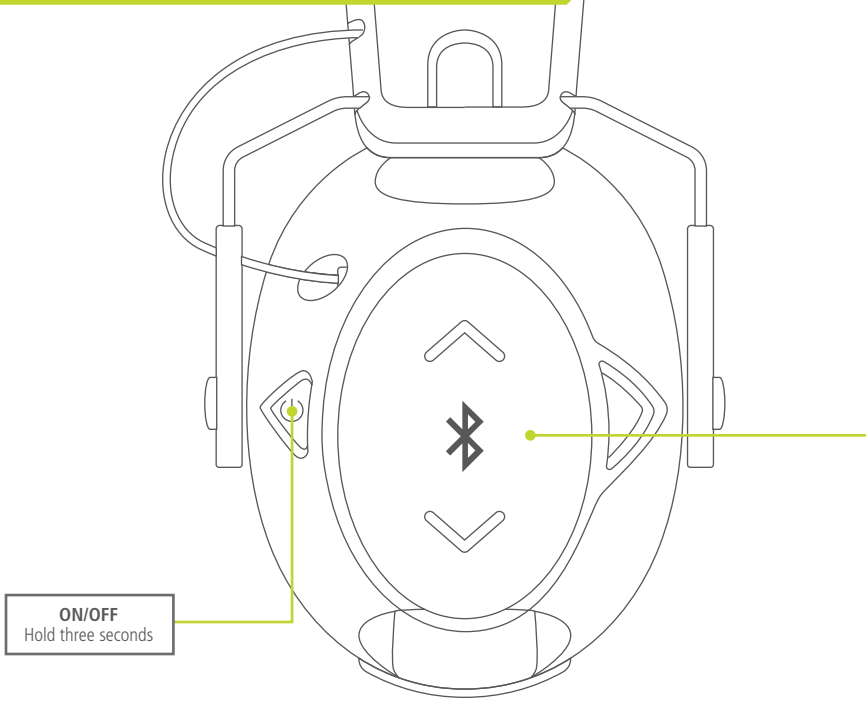
In Bluetooth® Mode, incoming phone calls, messages and alerts will cause the music to be muted, and your phone's ringtone to sound until the call, message or alert has ended. To answer an incoming call, press the center Bluetooth® button once. To reject or disconnect from a call and return to Bluetooth® audio, press and hold the Bluetooth® button.

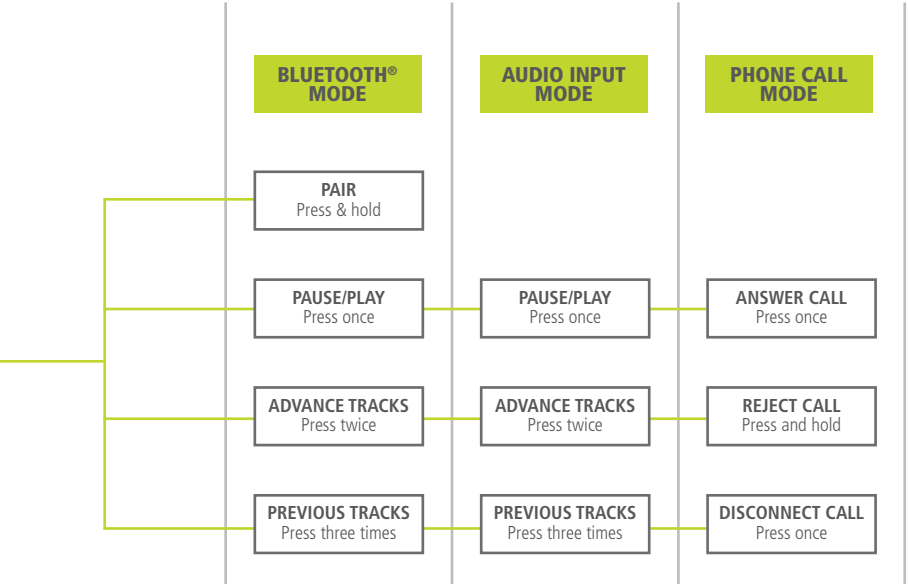
## Tactical 500 Wireless Bluetooth® Range

The typical range between a Bluetooth® enabled device and the Tactical 500 is approximately 25 feet. This distance may vary depending on the device. As the distance between the Bluetooth® enabled device and the hearing protector increases, the risk of signal drops also increases.

For best results, keep your Bluetooth® enabled device on your body or within an arm's length of the Tactical 500 Electronic Hearing Protector while using Bluetooth® Mode.

# TACTICAL 500 NAVIGATION






Some devices may not be compatible with this feature and will have to be operated using their native controls.

# 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 harmful 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.

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

## ⚠ WARNING

These hearing protectors help reduce exposure to hazardous noise and other loud sounds.
**Misuse or failure to wear hearing protectors at all times that you are exposed to noise may result in hearing loss or injury.** For proper use, see user instructions call or 3M Technical Service toll free at 1-800-494-3552.

- **To reduce the risks associated with hazardous voltage and fire:**
  - 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 instructions.
  - When using a 3M™ Alpha 1100 Li-Ion Battery Pack, see instructions provided with the Battery Pack for additional safety information.

- **To reduce the risks associated with harmful noise:**
  - 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, will lessen the protection.
  - 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.
  - Tactical 500 only: Do not change between "Dosimeter 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).

**⚠ CAUTION**

- **To reduce the risks associated with chemical exposure and fire:**
  - Do not store with the batteries installed. A leaking battery may cause bodily injury or damage to the hearing protector.

The WEEE logo (shown at the left) appears on the product to indicate that this product must not be disposed of or dumped with your other household wastes. 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.

# SAFETY INFORMATION

**FCC Caution:**

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

**ISEDC Warning**

This device complies with Innovation, Science, and Economic Development Canada licence-exempt RSS standard(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.

Le présent appareil est conforme aux CNR d Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. Lexploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radio apparatus containing digital circuitry which can function separately from the operation of a transmitter or an associated transmitter, shall comply with ICES-003. In such cases, the labelling requirements of the applicable RSS apply, rather than the labelling requirements in ICES-003.

This Class B digital apparatus complies with ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003.

This equipment complies with ISED 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.

Cet équipement est conforme aux ISED RF limites dexposition aux radiations dans un environnement non controlé.

Cet émetteur ne doit pas être situé ou opérant en conjonction avecune autre antenne ou émetteur.

# NOISE REDUCTION RATING (NRR)

The 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.

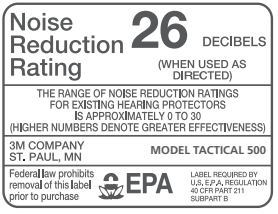
When worn according to the User Instructions, this hearing protector helps reduce exposure to both continuous noises, such as industrial noises and noises from vehicles and aircraft, as well as very loud impulse noises, such as gunfire. It is difficult to predict the required and/or actual hearing protection 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.

The NRR may overestimate the hearing protection provided during typical use due to variation in fit, fitting skill and motivation of the user. 3M recommends the NRR be reduced by 50% or in accordance with applicable regulations, for estimating the amount of noise reduction provided. Improper fit or inconsistent use of this device will reduce its effectiveness in attenuating noise.

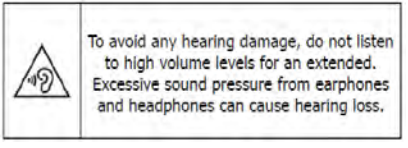
# NOISE REDUCTION RATING (NRR)

## EXAMPLE

1. The environmental noise level as measured at the ear is 92 decibels dB(A).
2. The NRR is 24 dB(A).
3. The level of noise entering the ear is approximately 68 dB(A).




The NRR for the Tactical 500 Electronic Hearing Protector is 26 dB(A). Improper fit of this device will reduce its effectiveness in attenuating noise. Consult the enclosed instructions for proper fit.



ATTENUATION DATA ANSI S3.19-1974

| TEST FREQUENCIES (HZ) | 125 | 250 | 500 | 1000 | 2000 | 3150 | 4000 | 6300 | 8000 | NRR | CSA Class |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean Attenuation (dB) | 19.2 | 22.2 | 30.0 | 36.5 | 36.8 | 38.5 | 42.6 | 42.8 | 42.8 | 26 | A |
| Standard Deviation | 3.4 | 2.4 | 2.6 | 2.9 | 2.9 | 3.3 | 3.2 | 3.4 | 3.1 | | |

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 decibels dB(A).
2. The NRR is 26 dB(A).
3. The level of noise entering the ear is approximately 66 dB(A).

## 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 example was achieved under laboratory conditions.

## AUDIO INPUT LEVEL

The audio level in the hearing protector is dependent on the audio input level.

To prevent harmful noise levels, the hearing protector audio level is limited to 82 dB(A) when connected to a Personal Music Player (PMP). If the hearing protector is connected to a PMP or other device with a very high output level, it is the user's responsibility to set the audio input level to a safe level. The maximum permitted audio input level for 8 hours of usage time, compressed speech and music is 51.8 mV for the Tactical 500 Electronic Hearing Protectors.

## 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, repair 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 or unauthorized modifications. Proof of purchase is required to verify eligibility.

# 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. This is a Tactical 500 feature only.

**Dosimeter ON / Limiter ON** – the Dosimeter 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.***

PELTOR™ SPORT

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