

**MOLDEX**  
**TACTICAL** ★ **PRODUCTS**



**BATTLEPLUGS®**



**ARMED FORCES / LAW ENFORCEMENT / INDUSTRIAL / PERSONAL**

BattlePlugs are now an authorized hearing protector for use by Soldiers and Department of the Army Civilians



## MOLDEX BATTLEPLUGS IMPULSE EARPLUGS

Patented Moldex BattlePlugs earplugs use a unique filter built into the plug body to instantaneously reduce dangerous, sudden impulse noises (e.g. weapons fire) plus allow for easy communication and improved awareness in the cap open position – NRR 9dB, Medium, NRR 10dB Extra Small, and NRR 12dB, Small and Large.

- Authorized hearing protector for use by Soldiers and Department of the Army Civilians.
- Dual Mode Protection.
  - Open cap to hear commands while maintaining impulse noise protection.
  - Close cap for continuous/steady noise and impulse noise protection.
- The louder the blast, the more noise reduction (in open position).
- Cap is easy to open and close, in-ear.
- Easy to see when cap is in open or closed mode.
- Easy to clean.

*Close cap for continuous/steady noise and impulse noise protection*



*Unique patented plug design*

*Open cap to hear commands while maintaining impulse noise protection*

## AVAILABLE IN FOUR SIZES WITH POCKET-PAK AND CORD

**NRR 20dB**  
Cap Closed

**NRR 10dB**  
Cap Open



**6496**

**X-Small**  
NSN # TBD  
Replacement Tips  
NSN # TBD

**NRR 24dB**  
Cap Closed

**NRR 12dB**  
Cap Open



**6497**

**Small**  
NSN # 6515016324167  
Replacement Tips  
NSN # 6515016324230

**NRR 24dB**  
Cap Closed

**NRR 9dB**  
Cap Open



**6498**

**Medium**  
NSN # 6515016324179  
Replacement Tips  
NSN # 6515016324238

**NRR 24dB**  
Cap Closed

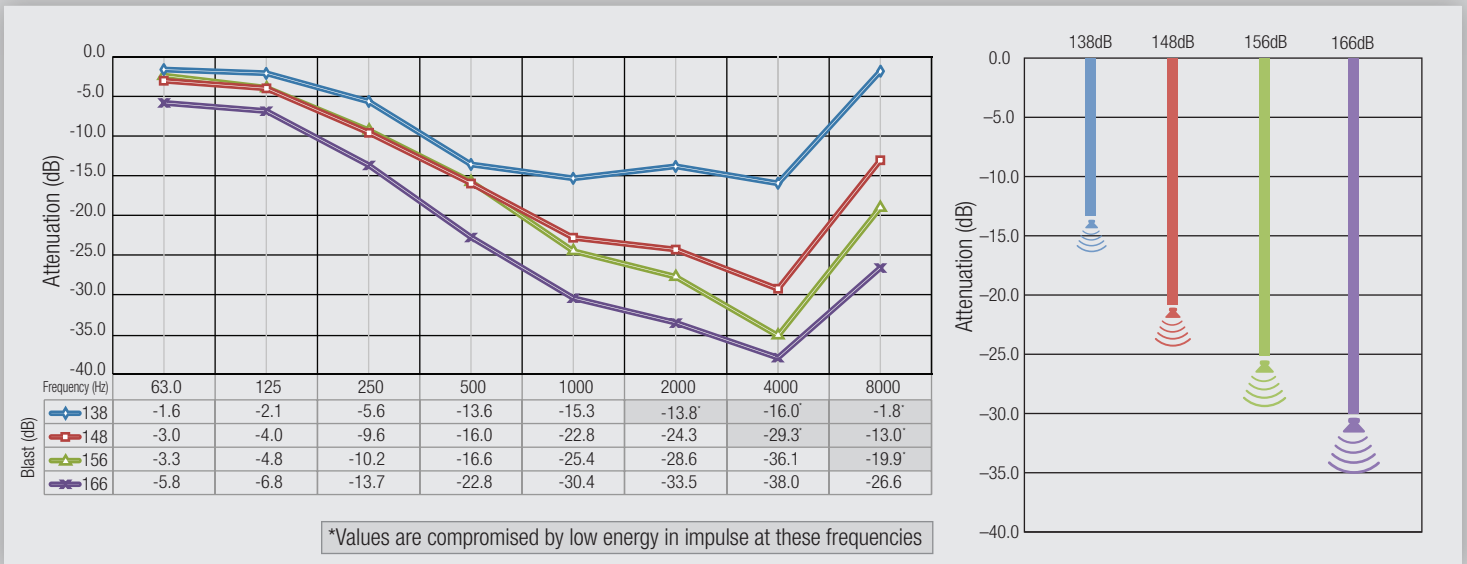
**NRR 12dB**  
Cap Open



**6499**

**Large**  
NSN # 6515016324185  
Replacement Tips  
NSN # 6515016324243

**BLAST PROTECTION DATA (CAP OPEN POSITION).  
THE LOUDER THE BLAST,  
THE MORE NOISE-REDUCTION PROTECTION PROVIDED.**



Left chart tests are performed at specific frequencies. Right chart tests are performed across entire sound spectrum.

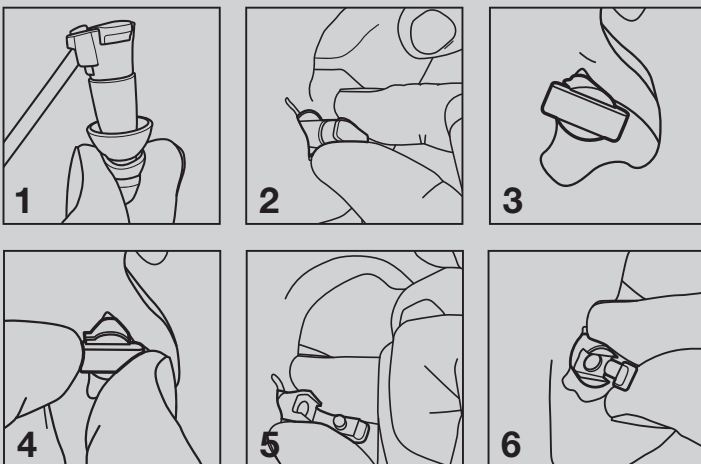
**FITTING AND USAGE INSTRUCTIONS**

**Important Information**

When cap is open, this earplug can be used to reduce impulse noises, such as gunfire, while also allowing you to hear low level noise. In closed cap position it can be used to help protect against continuous and impulse noises. Training is required. Before first use, practice opening and closing cap while plug is NOT in the ear canal.

**Cautions**

Improper fit and failure to wear at all times during exposure to loud noise, will reduce protection and result in hearing loss. Impulse noise will be louder with cap open than closed. Do not use with cap open during continuous high hazardous noise. Remove slowly by twisting to avoid damage to eardrum.



Easy to open and close in ear. Easy to see which mode is currently used.

**For use against continuous noise always wear with cap closed (Fig. 1)**

- A. Before inserting plug check to see that cap is fully closed shut (Fig 1).
- B. Reach over the head and pull top of ear upwards (Fig 2).
- C. With other hand grasp plug handle and gently push and wiggle into ear canal until a good and comfortable seal is made.

**For use against impulse noise when hearing other sounds/communication is also needed, wear with cap open (Fig 7)**

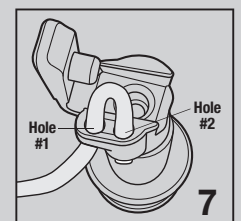
- D. If plug is already being worn with cap closed, you do not need to take plug out to open cap (Figs 3-4).
- E. To open cap, depending on the orientation of the handle, use either your thumb or index finger to gently push out on the cap latch while resting the other on the hinge, (this may take practice) (Fig 4).
- F. To insert plug with cap open, reach over the head and pull top of ear upwards (Fig 5).
- G. With other hand grasp plug handle and gently push and wiggle into the ear canal until a good and comfortable seal is made.

**Closing cap with plug in ear**

- H. To close cap you do not need to take plug out.
- I. Depending on the orientation of the handle, use either your thumb or index finger to gently push the cap into the handle until it is fully shut, (this may take practice) (Fig 6).

**Cording Instructions**

- J. Ensure that cord does not interfere with the hinged cap fully closing. Failure to close the hinged cap completely may result in reduced noise attenuation. (Fig 7).
- K. **Step 1:** Thread cord through hole #1.  
**Step 2:** Insert tip of cord into hole #2 to lock cord in place.



## CAP CLOSED – PASSIVE NOISE LEVELS - X-SMALL, SMALL, MEDIUM, LARGE

### ATTENUATION DATA

Test According to ANSI Specs S3.19-1974 Michael & Assoc., State College, PA.

		Frequency (Hz)											
		125	250	500	1000	2000	3150	4000	6300	8000			
<b>X-SMALL</b> 6496	Mean Attenuation (dB)	33.0	30.0	34.5	33.4	35.0	33.9	25.0	24.4	28.1	<b>NRR</b> <b>20</b>	<b>CSA</b> <b>BL</b>	
	Standard Deviation (dB)	3.9	4.1	3.4	5.1	3.7	4.1	3.6	4.5	4.7			
<b>SMALL</b> 6497	Mean Attenuation (dB)	34.2	30.6	36.1	34.5	35.8	36.4	30.4	26.0	30.0	<b>NRR</b> <b>24</b>	<b>CSA</b> <b>BL</b>	
	Standard Deviation (dB)	3.7	3.7	4.2	3.9	3.4	3.2	3.1	2.5	3.7			
<b>MEDIUM</b> 6498	Mean Attenuation (dB)	31.3	27.0	34.2	30.7	36.1	40.9	34.1	31.1	32.3	<b>NRR</b> <b>24</b>	<b>CSA</b> <b>BL</b>	
	Standard Deviation (dB)	4.8	4.2	4.9	3.3	3.7	4.1	3.2	2.7	3.5			
<b>LARGE</b> 6499	Mean Attenuation (dB)	35.3	29.4	33.3	31.3	34.4	39.0	33.3	31.8	32.1	<b>NRR</b> <b>24</b>	<b>CSA</b> <b>BL</b>	
	Standard Deviation (dB)	3.4	2.9	3.7	3.7	3.8	4.4	3.7	4.0	3.5			

## CAP OPEN – PASSIVE NOISE LEVELS - X-SMALL, SMALL, MEDIUM, LARGE

### ATTENUATION DATA

Test According to ANSI Specs S3.19-1974 Michael & Assoc., State College, PA.

		Frequency (Hz)											
		125	250	500	1000	2000	3150	4000	6300	8000			
<b>X-SMALL</b> 6496	Mean Attenuation (dB)	9.8	8.1	13.0	20.9	28.4	29.1	22.6	20.4	23.6	<b>NRR</b> <b>10</b>	<b>CSA</b> <b>C</b>	
	Standard Deviation (dB)	4.3	2.2	2.9	4.8	4.3	3.8	3.9	2.8	3.3			
<b>SMALL</b> 6497	Mean Attenuation (dB)	8.4	8.8	15.1	25.0	29.7	29.9	29.2	22.9	26.6	<b>NRR</b> <b>12</b>	<b>CSA</b> <b>C</b>	
	Standard Deviation (dB)	3.0	2.5	3.7	3.9	3.7	4.2	3.5	2.7	3.8			
<b>MEDIUM</b> 6498	Mean Attenuation (dB)	8.4	8.5	13.7	22.4	30.9	30.5	31.5	26.1	30.2	<b>NRR</b> <b>9</b>	<b>CSA</b> <b>C</b>	
	Standard Deviation (dB)	4.1	3.9	4.8	2.8	3.7	3.6	4.6	3.4	4.9			
<b>LARGE</b> 6499	Mean Attenuation (dB)	10.4	9.8	14.1	21.4	28.7	31.2	31.9	30.3	30.0	<b>NRR</b> <b>12</b>	<b>CSA</b> <b>C</b>	
	Standard Deviation (dB)	3.9	2.9	3.4	2.9	4.2	3.5	4.5	4.1	4.0			

### CLEANING & INSPECTION

Wash with soap and water only, and dry thoroughly before re-wearing. Keep filter hole in tip and handle free of earwax, dirt and dust. Confirm filter holes are clear by holding plug up to light source. If you cannot see light shining through filter holes rewash and check again. If unable to clear filter holes, replace earplugs. Inspect plugs for any tears or damage each time they are worn and replace immediately if necessary.

### TIP REPLACEMENT

Pull off old plug tip. Perform CLEANING & INSPECTION as described above. Slide on new plug tip and make sure that the bottom of plug tip makes contact with the base of the plug insert.

### MOLDEX TECHNICAL ASSISTANCE

Moldex provides all of the technical assistance required to set up a hearing protection program. For more information call +1 (800) 421-0668 or +1 (310) 837-6500 ext. 512/550 or E-mail: tech@moldex.com or visit www.moldex.com.

Keep earplugs away from infants and small children as they may get caught in the windpipe and create a choking hazard.



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## ORDERING INFORMATION

SKU#	Plug Size	Qty./Case	Contents/Bag
6496 NSN #	X-Small TBD	50 Bags	Pair of BattlePlugs, cord, Pocket-Pak,® Chain, and Instructions
6497 NSN #	Small 6515016324167	50 Bags	Pair of BattlePlugs, cord, Pocket-Pak,® Chain, and Instructions
6498 NSN #	Medium 6515016324179	50 Bags	Pair of BattlePlugs, cord, Pocket-Pak,® Chain, and Instructions
6499 NSN #	Large 6515016324185	50 Bags	Pair of BattlePlugs, cord, Pocket-Pak,® Chain, and Instructions

## REPLACEMENT TIPS

6496T NSN #	50 Pairs of X-Small Replacement Tips in Zip-Top Bag TBD
6487T NSN #	50 Pairs of Small Replacement Tips in Zip-Top Bag 6515016324230
6488T NSN #	50 Pairs of Medium Replacement Tips in Zip-Top Bag 6515016324238
6489T NSN #	50 Pairs of Large Replacement Tips in Zip-Top Bag 6515016324243

### WARNING TO USER

- BattlePlugs reusable earplugs must be fitted and worn correctly to provide effective protection. Wash or clean hands before use. Plugs should be routinely washed with mild soap and warm water. CAUTION: Remove with a slow twisting motion to break the seal. Due to the tight seal, rapid removal may damage eardrum.
- Use this laboratory-derived attenuation data for comparison purposes only. The amount of protection afforded in field use often is significantly lower depending on how the protectors are fitted and worn.
- Failure to follow all instructions could result in hearing loss or injury. Failure to obtain a proper fit will reduce effectiveness of hearing protectors and could result in hearing loss or injury.
- BattlePlugs must only be used as part of a hearing conservation program that complies with applicable local safety and health regulations.
- Overprotection can be dangerous. The wearer must be able to hear warning signals.
- Wearers with hearing loss should exercise extreme caution.
- It is the employer's responsibility to ensure that the type of hearing protector and its NRR is appropriate for the user in their particular workplace.
- To select proper size tip choose the largest size that allows all flanges to fit comfortably inside the ear canal for a good seal.
- Use caution when working around machinery or other equipment to ensure neck cord does not become caught or entangled.
- Failure to follow these warnings could result in serious injury or death.
- Although hearing protectors can be recommended for protection against the harmful effects of impulse noise, the Noise Reduction Rating (NRR) is based on the attenuation of continuous noise and may not be an accurate indicator of the protection attainable against impulse noise such as gunfire. (Wording required by EPA)
- No earplug can completely protect the user from sustained or repeated exposure to impulse sound and in particular to gunfire or weapons fire. BattlePlugs when properly fitted and worn will reduce exposure to harmful levels of impulse sound but cannot completely eliminate such exposure either through the ear canal or through bone conduction. Hearing loss may still occur even with proper fitting and use of any impulse noise earplug.
- Properly fitted passive slow recovery NRR 33 foam earplugs either alone or combined with high NRR earmuffs will provide greater protection from impulse sound to the user than any reusable impulse earplug but also cannot eliminate such exposure either through the ear canal or through bone conduction. Accordingly, hearing loss may still occur as a result of sustained or repeated exposure to impulse sound. However, slow recovery foam earplugs, either alone or with earmuffs, will not allow the user to hear commands, approaching vehicles or other sounds the user may need to hear.



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