

# Hearing protection for track officials

ATOM Clinic 2025

There are three types of hearing protection that could be used by track officials. In two of the cases, they provide reduction of noise, in the other they both reduce noise but allow conversation. We will discuss all three and the pros and cons of each.

Noises like verbal communication average around 60 decibels, a food processor averages around 95 decibels, or a jet plane at take-off, 120 decibels. Where a .22, .209 or .32 caliber blank can be anywhere between 140 and 155 decibels. Noises over 140 decibels can be painful to the ear. Continuous noises over 120 decibels will be injurious to your hearing. Being outside is helpful, but the close proximity of the noise to both ears is our concern.

Noise Reduction Rating (NRR) is a unit of measurement that determines the effectiveness of hearing protection. When looking for noise reduction you want a **NRR rating of at least 22. An NRR rating of 30 or better is ideal.**

The three types of noise reduction device available to officials are, ear plugs, ear muffs and electronic muffs:

**Ear plugs:** fit into your ear and muffle all sounds. They may be made of disposable foam, heavy duty polymer, or moldable material. Can be worn under a muff for greater protection.

**Disposable** – made of foam. You squish the foam into your ear and let it expand.

PRO's	CON's
Muffles all sounds	Muffles all sounds; reduces communication
Great NRR	Not fitting properly reduces effectiveness
Light weight and portable	Can be uncomfortable
Inexpensive and shareable	

**Tri-phalanges:** Polymer – Usually three polymer phalanges that fill the ear canal and muffle all sounds. Attached by a string that hangs around neck.

PRO's	CON's
Muffles all sounds	Muffles all sounds; reduces communication
Great NRR	Not fitting properly reduces effectiveness
Light weight and portable	Can be uncomfortable
Reuseable and shareable	Size of plug cannot be changed

**Moldable** - molded into your ear to muffle sounds; easy to mold and re-moldable; no extraneous noise; can have a cord that hangs around neck

PRO'S	CON'S
Blocks most sounds	Muffles all sounds; reduces communication
Fitted to your ear	Not shareable
Exceptional NRR of 31	May take a few attempts to get them molded correctly
Light weight and portable -	
Comfortable due to custom fit	

**MUFFS:** sit over ears on head with padded ear covers which can be made of gel for a better fit

PRO'S

Muffles all sounds, but not like plugs

Easy to use, plugs can go under

Affordable

Durable

Shareable

CON'S

Muffles all sounds; greater ambient sound infiltration

Sweaty and sticky

Lesser NRR as plugs due to fit/gaps; may need extra gel pad

Can be uncomfortable with headwear

Wear to store when not needed

**ELECTRONICS:** sit over ears on head with electronic assistance to offer both hearing protection and amplify ambient sounds. Utilize microphones and speakers to allow wearers to hear conversation while safeguarding the ears.

PRO'S

Can hear communication around you

Comfortable

Bluetooth and cellphone adapted

Check on mic direction and speakers

CON'S

Usually more expensive

Not waterproof

Batteries needed

Heavy and hard to store when not in use

Possible delay from the sound to device activation (attack time)

The consensus is:

Your first requirement is to get the best NRR available. Should be labeled on the protection.

Pick the type of protection that is most comfortable for you and fits your situation.

Go to a gun shop or sporting goods store and try them on. **Always look for the NRR rating!**

Do you need to wear a communication headset while starting? Most communication headsets do not provide appropriate ear protection. Would usually require a plug for added protection.

If you have to use a head set with a single or double muff to communicate with timer, clerk and press box, or meet personnel, get a plug to protect both ears. You can wear them individually.

The expense can be a factor, but hearing loss is also expensive to correct.

**Never be without some type of ear protection!**

Decibullz – [www.decibullz.com](http://www.decibullz.com)

Surefire – [www.surefire.com/earpro](http://www.surefire.com/earpro)

Howard Leight – [www.howardleightshootingsports.com](http://www.howardleightshootingsports.com)

Walker's = [www.walkersgameear.com](http://www.walkersgameear.com)

Mack's – [www.makcearplugs.com](http://www.makcearplugs.com)

Axil – [www.goaxil.com](http://www.goaxil.com)

Gloryfire – [www.gloryfire.com](http://www.gloryfire.com)

