

**Color/Size** All reduce sound 20 dB



**Packaging (2 options)**

**Package includes**

- ETY-Plugs: (1 pair clear) or
- BabyBlues: (1 pair)
- Black neck cord
- Carrying case
- Instructions

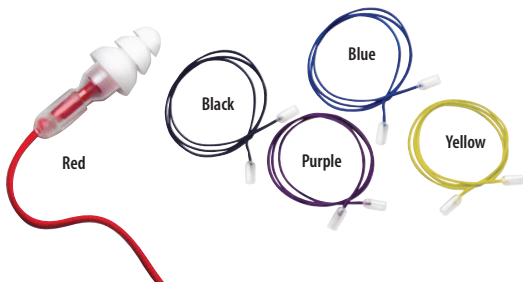


**Package includes**

- ETY-Plugs: (1 pair any color) or
- BabyBlues: (1 pair)
- Carrying case
- Instructions



**Neck Cords (optional)**



**Who Uses ETY-Plugs?**

**Aircraft**  
crew  
flight instructors  
passengers  
pilots



**Leisure**  
concerts  
night clubs  
noisy restaurants



**Athletics**  
athletes  
coaches  
sporting events



**Medical-Dental**  
dentists  
dental hygienists  
dental technicians  
surgeons



**Construction**  
carpenters  
equipment operators  
road builders  
steel workers



**Motor Sports**  
motorcyclists  
pit crews  
race car drivers  
spectators



**Emergency Vehicles**  
EMTs  
highway patrol  
firefighters



**Music**  
concerts  
marching bands  
musicians  
night clubs



**Industrial**  
factory workers  
shop teachers  
students  
supervisors



**Others**  
delivery drivers  
market traders  
night club staff  
truck drivers



**Permissible Sound Exposure with ETY-Plugs** (re: NIOSH, 1998)

Sound (dB)	Exposure type	No protection	Using ETY-Plugs
60	Conversation	SAFE	—
80-85	Noisy restaurant / Vacuum / Average factory	40 hrs	SAFE
88	Circular saw / Loud party / Motorcycle	20 hrs	SAFE
94	Subway / Riding mower	5 hrs	SAFE
97	Live band	2.5 hrs	40 HRS
100	Sporting event / Chain saw / Snowmobile	1.25 hrs	20 hrs
112	Blues bar / Rock concert	5 mins	1.25 hrs
115	Ambulance siren	2.5 mins	36 mins
140	Jet engine / Gun shot / Firecracker	INSTANT LOSS	*

\* Above 125 dB you are at risk for any period without maximum protection

NIOSH (1998). Criteria for a recommended standard: occupational noise exposure. Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institute for Occupational Safety and Health. DHHS (NIOSH) Publication No. 98-126.

ETYMOTIC RESEARCH INC.



**ETY-Plugs™**  
ER-20 High Fidelity Hearing Protection



- Music and conversation are heard clearly
- All sound is reduced evenly by 20 dB
- Available in two sizes: standard and small
- Fatigue from noise is reduced
- Patented technology
- Reusable

**ETYMOTIC RESEARCH INC.**  
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Musicians Earplugs, ETY-Plugs and BabyBlues are trademarks of Etymotic Research, Inc. The ER family of earplugs is covered by one or more of the following U.S. patents: #4,852,683, #5,113,967, #5,887,070 and other patents pending.



**FACT** More than 30 million Americans are exposed to hazardous sound levels on a regular basis. About one-third (10 million) can attribute their hearing loss, at least in part, to noise. Exposure occurs in the workplace, in recreational settings, and at home.

Source: National Institute on Deafness and Other Communication Disorders

### The Good News

## Noise-induced hearing loss can be prevented!

ETY•Plugs™ High Fidelity Earplugs lower noise evenly at all frequencies to preserve sound quality. Sound is not muffled. Music is heard clearly, but at a safe, reduced volume.

### How much noise is too much?

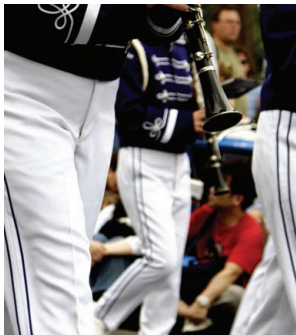
Hearing loss is a function of exposure time, the average sound level, and the peak level of very loud sounds. Exposure to excessive noise can cause permanent hearing loss depending on the intensity and duration of the sound. Some persons are more susceptible to hearing loss from high-level sound than others.

### Preserve sound quality

The human ear overloads at high sound levels, making it difficult or impossible to distinguish speech or the musical blend.

### Prevent ringing in the ears

Ringing in the ears (tinnitus) and temporary hearing loss can occur from a single concert, sporting event or sudden loud noise like a firecracker. Even if a temporary hearing loss recovers over a period of hours to days, there is a risk that repeated exposure to loud noise could result in permanent hearing loss.



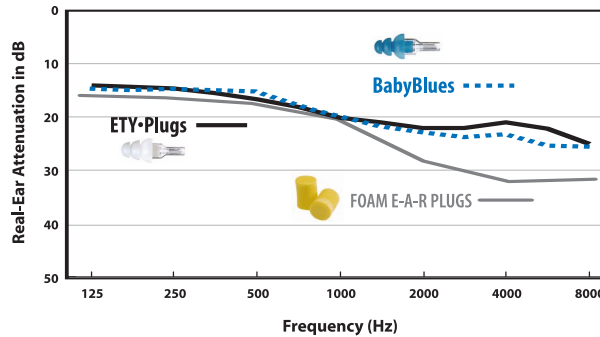
### About ETY•Plugs (2 Sizes)

ETY•Plugs earplugs use patented technology that replicates the natural response of the ear canal so that sound heard with these earplugs is as clear as the original, just quieter. The BabyBlues™ earplugs were created to fit smaller ear canals. ETY•Plugs earplugs have nearly the same fidelity as Etymotic's Musicians Earplugs™ (custom earplugs worn by professional musicians) and are a low-cost alternative.



Musicians Earplugs™

### ETY•Plugs Noise Reduction



ETY•Plugs provide almost equal sound reduction (20 dB) across the range of hearing. Foam earplugs reduce the high frequencies, resulting in muffled speech and music.

### About Noise Reduction Rating (NRR)

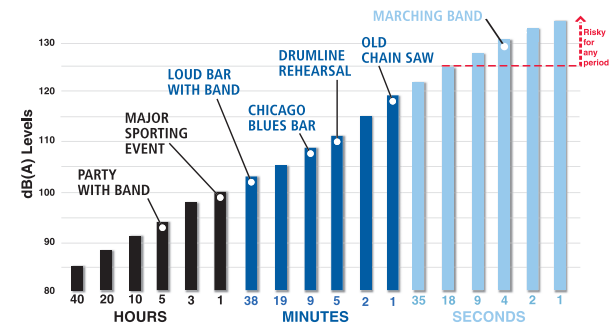
The U.S. Environmental Protection Agency requires manufacturers to print a noise reduction rating (NRR) on all non-custom earplugs. The formula used to determine NRR includes an adjustment for test variability, individual variability, and for those persons who do not wear ear protection as instructed. When worn properly, Etymotic earplugs provide more sound reduction than the assigned NRR value. Laboratory data on subjects wearing properly sealed ETY•Plugs™ shows between 18-22 dB average sound reduction over the 250-8000 Hz frequency range, but the NRR calculated from the same data is 12 dB.



### Permissible Sound Exposure Guidelines

Continuous Sound dB(A)	Unprotected Permissible Exposure Time
85	8 hours
88	4 hours
91	2 hours
94	1 hour
97	30 minutes
100	15 minutes
103	7.5 minutes
106	< 4 minutes
109	< 2 minutes
112	~1 minutes
115	~30 seconds

NIOSH (1998)



Hearing loss is a function of exposure time, the average noise level and the peak level of very loud sounds.