

Protecting Your Most Vital Sense



Hearing

Conservation - Enhancement
and Earmold Solutions



What you should know about the noisy world

For many years we have realized the value of protecting our eyes from unwanted agents that can damage or irritate our vision, but when it comes to ear and hearing protection you may not have heard the latest.

Loud machinery and tools at home or on the job can damage your hearing – even short bursts of sound over 90 decibels can have an impact. Prolonged noise is even worse. Military and factory environments, airplanes, and subway trains are all filled with noise we can't control.

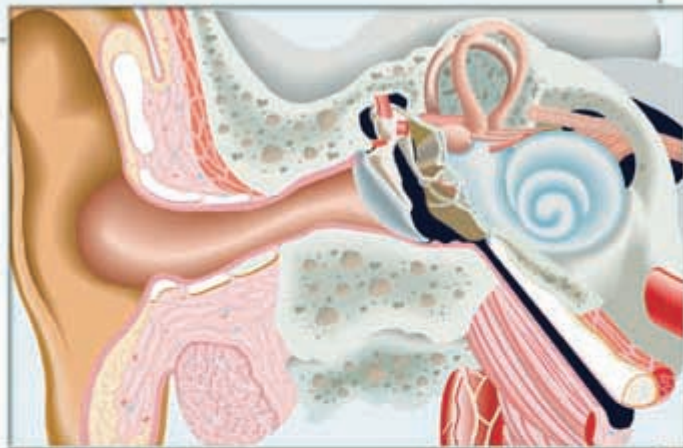
There's also plenty of noise we can control, but choose not to - such as rock concerts, sporting events, sport shooting, hunting and the operation of many common household power tools.



26 million Americans suffer from varying degrees of hearing loss

After the natural aging process, noise is the second leading cause and also the most preventable with proper protection.

Noise exposure and time limitations for the human ear



Hearing loss can be a direct effect of many occupations, recreational activities and general exposure to loud environmental sounds. The first step toward protecting your hearing is education and understanding which sounds can be detrimental to your hearing. The following information should be used as guide to determining hazardous noise exposure levels.

Noise Level

150 dB

140 dB

130 dB

120 dB

115 dB

110 dB

100 dB

90 dB

80 dB

75 dB

70 dB

65 dB

Activity

Most Firearms

Jet Engine at Takeoff

Jackhammer

Ambulance Siren, Amplified Rock Band

Sandblasting

Woodworking, Motorcycle

Pneumatic Drill, Chainsaw

Lawn mower, Shop Tools

City Traffic, Loud Music

Kitchen Appliances

Noisy and Crowded Restaurant

Conversational Speech



Permanent hearing loss can occur in as little as 15 minutes with exposure to certain sounds and almost instantly with unprotected exposure to sounds generated from firearms and certain power tools. If your hearing is susceptible to any sounds above 90 decibels, you need to take immediate action to prevent permanent hearing damage.

Noise Level

90 dB

95 dB

100 dB

105 dB

110 dB

115 dB

Exposure Limits

8 Hours

4 Hours

2 Hours

1 Hour

30 Minutes

15 Minutes

Earplugs offer the easiest and most economical means of hearing conservation

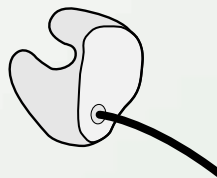
Preventative hearing maintenance is easy, economical and effective. You may remember those foamy cylindrical ear plugs that you rolled up and stuck in your ear when you were a kid. Today, modern hearing protection is specifically designed for your ears and needs.



Corded Earplugs

Custom fit earplugs provide outstanding noise protection for a variety of recreational and occupational environments. The corded option allows wearers to place the plugs over their necks when not wearing.

Shown in Orange Ultraflex



Earplugs with Removal Handle

Earplugs can be designed for a number of different needs with a variety of options. Ultraflex is recommended for noise attenuation and can be filtered to allow accurate hearing in the noisiest of environments. Shown in

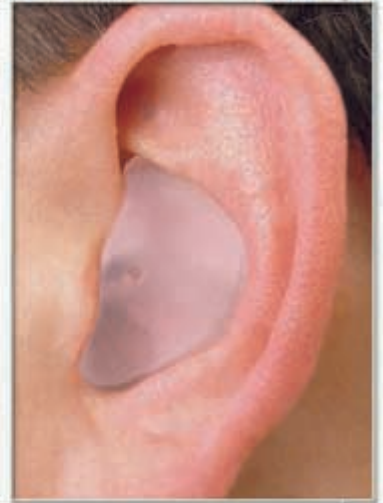
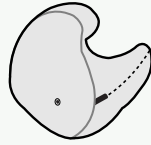
Clear Ultraflex



Hocks Noise Braker™

Hocks Noise Brakers are recognized as superior aural protection devices for a variety of activities. Hocks devices contain a patented acoustical chamber to attenuate sound to appropriate speech levels. **Shown in**

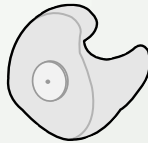
Clear Ultraflex



Sonic Valve Earplug

The Sonic Valve earplug provides protection for noisy factory environments and other extremely loud sounds. The Sonic Valve can be worn continuously without any discomfort.

Shown in Clear Ultraflex



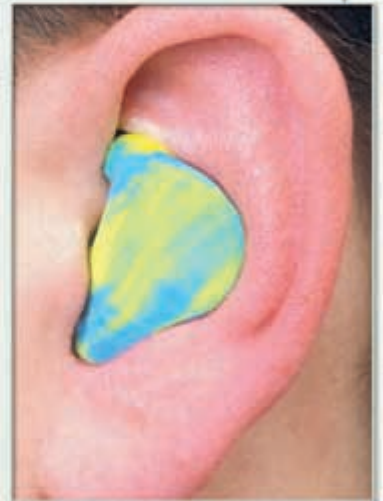
Floatable Swimmer Earplug

Floatable Swimmer's plugs are made of a super soft hydrophobic silicone material that can be made

to change color or glow in the dark. Swim plugs are available in a variety of solid, swirled and neon colors.

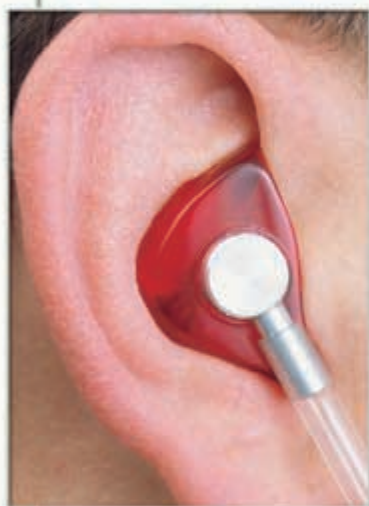
Shown in Blue/Yellow

Floatable Swirl



Speciality hearing enhancement earmolds are available for almost any communication need

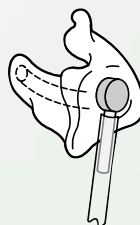
Today's custom earmolds come in all shapes and sizes for nearly every application where sound levels need to be enhanced and reduced. Doctors, newscasters, race car drivers and anyone with a mobile telephone or a Walkman™ radio can benefit from the many styles available.



Receiver Mold with Stethoscope Adaptor

Customized Receiver molds can be fit to nearly any stethoscope and add comfort and enhance hearing abilities in noisy medical environments. Primary applications include, doctors, anesthesiologists, paramedics, and EMTs.

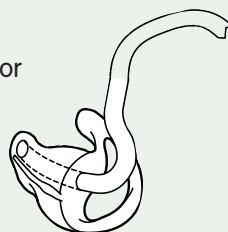
Shown in Red Lucite



Newscaster/Teleprompter Mold

The skeleton style earmold is used extensively by broadcast professionals, reporters and numerous law enforcement agencies. The custom design allows for discreet and clear two-way communication.

Shown in Green Lucite

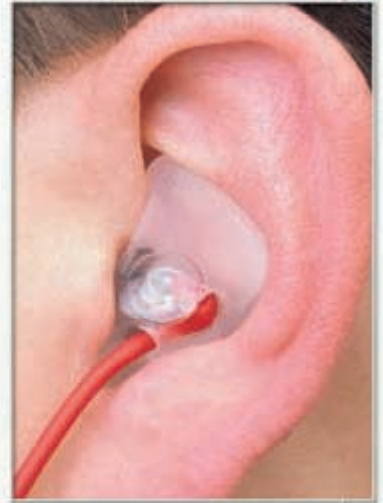
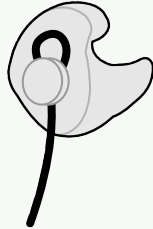


Racing Receiver Mold

Racing molds are used by amateur and professional drivers who demand quality communication. The custom design allows maximum comfort and

durability and provides excellent sound suppression underneath any racing helmet.

Shown in Clear Ultraflex



Earborne™ Headset Mold

The Earborne Headset mold is part of the Earborne line of telecommunication products. The lightweight headset mold provides a secure and

comfortable fit while dissipating body heat away from the ear.

Shown in Purple Lucite, also available in Ultraflex.

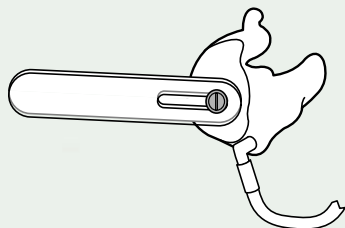


Pilot Headset Mold

Professional pilots have several choices in headset communications. Two of the most popular are the Telex5x5 Pro III and Plantronics' MS-50-T30-2. Both are compatible with the Pilot mold, which

features an adjustable boom microphone for positioning.

Shown in Blue Lucite





Custom Radio Mold

With today's advancements in mobile phone technology, the importance of "hands-free" communication is emphasized more than ever. Custom radio molds are a perfect fit for most mobile phone and radio headsets.

Shown in Clear Ultraflex



Custom SoundScopes™
are designed for all types
of shooting - firearm and bow



Custom SoundScopes

Whether it's game movement, trap release or range commands, hearing is an important advantage in your shooting accuracy and enjoyment - not to mention your safety. And because gun use can damage hearing permanently, firearm users' ability to acquire and locate sounds is often diminished even further. SoundScopes fully customized in-the-ear models provide the ultimate in comfort and convenience. Discover a new world of enhanced shooting proficiency without inhibiting your firing position or range of movement.

Shown in Camouflage Green Plastic

Sound attenuators preserve hearing by reducing volume without distorting the ears' natural response



Hearing is perhaps the most vital sense, especially for the musician, it's their livelihood and helps verify the tonal quality of their work. Musicians practice and perform in a variety of settings and are exposed to high levels of sound for varying periods of time that can eventually have a detrimental effect on hearing.

Musician's Earplugs

Unlike earplugs, Musician's Earplugs attenuate across all frequencies rather just than low and mid range frequencies, which makes music more clear and natural sounding. Musician's Plugs are available with three filters: ER-9 (9 dB cut), ER-15 (15 dB cut) and ER-25 (25 dB cut). **Shown in Green Ultraflex**



Instrument

Small Strings

Large Strings

Woodwinds

Brass

Flutes

Percussion

Vocalists

Acoustic Guitar

Amplified Instruments

Marching Band

Recording Engineers

Sound Crews

Recommended Filter

ER-9 and ER-15

ER-9 and ER-15

ER-9 and ER-15

ER-15 and ER-25

ER-15

ER-15 and ER-25

ER-9 and ER-15

ER-9 and ER-15

ER-15 and ER-25

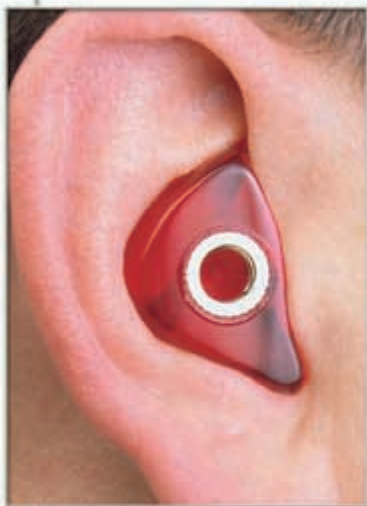
ER-15

ER-15

ER-15

Custom earmold solutions for all your hearing and lifestyle needs

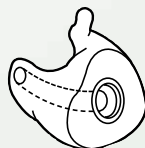
There are several styles of earmolds available. There are a number of important factors to consider when making the right selection. Styles of molds will differ in terms of occlusion, retention, cosmetics and ease of modification. Please consult your hearing professional for more information about the right earmold for your hearing loss.



Receiver Mold

The Receiver mold is used with an external receiver that is snapped into the mold. Appropriate applications include: body aids, stethoscopes, anesthesiologists, and other listening molds.

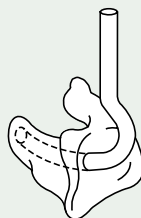
Shown in Red Lucite



Shell Mold

The Shell mold is exceptionally sturdy and lightweight and is recommended for fitting moderate and severe hearing losses. It provides an effective seal to reduce the likelihood of feedback and occlusion. Shown in

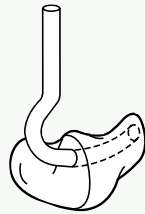
Blue Ultraflex with helix





Half Shell Mold

The Half Shell mold offers a comfortable and lightweight fit. Its size provides easy insertion and removal. Because of its



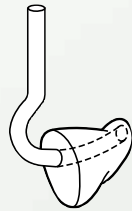
smaller size and lack of a helix area, the half shell is not recommended for fitting severe hearing losses.

Shown in Blue Ultraflex



Canal Mold

The Canal mold is the smallest mold available and offers superior comfort and cosmetic appeal. Canal earmolds



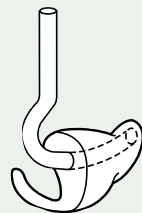
require a long ear canal for good retention. Because of its size, the canal mold is not recommended for fitting severe hearing losses.

Shown in Blue Ultraflex



Canal Lock Mold

The Canal Lock mold is similar to the canal mold with an added protrusion in the concha. It is designed to be small



and inconspicuous like a canal mold, but with better retention. The canal lock is also not recommended for fitting severe hearing losses.

Shown in Clear Lucite

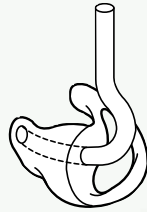




Skeleton Mold

The Skeleton mold is the most popular earmold available because it provides maximum comfort and retention. It is appropriate for fitting mild to severe hearing losses and can be easily modified to other styles.

Shown in Orange Lucite

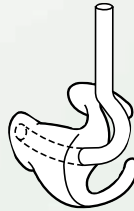


Semi-Skeleton Mold

The Semi-skeleton mold is inconspicuous and lightweight and provides good retention for most ears.

It is recommended for ears with distorted or flat concha areas or for those with limited dexterity who require easier insertion.

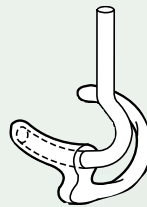
Shown in Orange Lucite



Non-Occluding A Mold

Non-occluding molds provide a retention ring for the tube without occluding the ear. Style A differs from B in that the canal portion is finished with material the length of the tube.

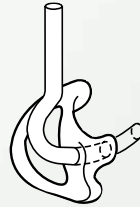
Non-Occluding molds are recommended for patients with normal hearing to 1500 Hz, or use tinnitus maskers or cross instruments. Shown in Red Lucite





Non-Occluding B Mold

Non-occluding molds provide a retention ring for the tube without occluding the ear. Non-Occluding molds are recommended for patients with normal hearing to 1500 Hz, or use tinnitus maskers or cross instruments.



Shown in Blue Lucite



Earmold Style versus Hearing Loss

When selecting the style of earmold consider the type of hearing instrument prescribed. Please note that high gain instruments require a tighter seal than mild gain instruments. Shell and Skeleton molds generally provide the best acoustic seal.



Earmold Style	Severity of Hearing Loss		
	Mild	Moderate	Severe-Profound
Receiver		•	•
Shell	•	•	•
Half Shell	•	•	
Canal	•	•	
Canal Lock	•	•	
Skeleton	•	•	•
Semi-Skeleton	•	•	
Non-Occluding	•	•	

Ultraflex

Ultraflex is a very soft, yet durable vinyl material. It gives a good acoustic seal for high gain hearing instruments. It is recommended for fitting severe losses, children's molds, or for patients who cannot tolerate hard materials. Modification is not recommended.

Silicone

Silicone shares the softness and durability qualities of Ultraflex, but is non-allergenic. It is recommended when a soft material is needed and an allergy problem has been determined. As with Ultraflex, modification is not recommended. A Vinyl Anchor is also

a suggested option. Silicone molds are available in flesh pink, tan and brown.

ProSeal

ProSeal is the softest earmold material available, but because of its extreme softness, ProSeal molds can be difficult to insert. The durable material provides an excellent seal and is recommended for fitting severe hearing losses. As with other soft materials, modifications are not recommended. A Vinyl Anchor is recommended to help retain the tubing. ProSeal molds are available in translucent flesh, clear and brown colors.

Custom earmold color swatch



Please note that color availability and appearance will vary according to material and specific style. Camouflage and glitter based colors are also available, please consult the order form or your sales rep for specific ordering instructions. Custom colors can also be created using a mixing process, contact your sales rep for additional information.



Starkey Laboratories

Long recognized as a leading innovator, Starkey continues to provide professionals and their patients with the finest, technologically advanced products and services. This on-going commitment to quality and innovation has earned Starkey the distinction of being the world's largest manufacturer of custom hearing products.

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6700 Washington Avenue South • Eden Prairie • Minnesota • 55344 • 800.328.8602

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