

HD•15™

**High-Definition
Electronic Earplugs**



**HD•15
Manual**

Introduction

HD-15 High-Definition Electronic Earplugs are an extension of the original Electronic BlastPLG Earplugs™ developed by Etymotic Research to improve situational awareness and to mitigate hearing loss and tinnitus in deployed Warfighters.

HD-15 earplugs are ideal for persons who operate some or most of the time around continuous loud noise such as power tools, machinery, trucks, or construction equipment, and want both maximum protection from loud impact noise, and natural hearing when no background noise is present.

On-demand hearing protection mode delivers 15-dB protection from loud, steady-state noise when sound levels exceed safe exposure limits.

Enhancement mode amplifies soft and conversational speech but loud sounds pass through without amplification.

The automatic hearing protection feature is *not* present in Enhancement mode.

ACCU•Technology

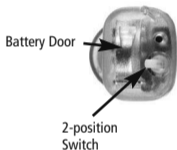
HD•15 electronic earplugs use high-definition balanced-armature receivers, high-sensitivity microphones and proprietary wide-dynamic-range compression signal processing.



Precautions

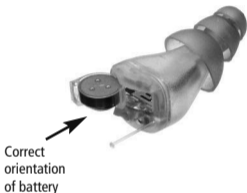
- **HD•15** electronic earplugs are made from materials and components that are standard in hearing aids and hearing protection devices.
- Allergic reactions are uncommon. If redness, soreness or other adverse reactions occur, discontinue use and contact a medical practitioner.
- Do not shower or swim while wearing the devices.
- Do not put batteries in your mouth.
- Batteries may be harmful if swallowed.
- Keep batteries out of the reach of children.

Identification



Battery Insertion

1. Remove the tab on the battery before inserting it.
2. The battery door will not close if the battery is inserted incorrectly.



Low-Battery Warning

HD•15s have an audible low-battery warning that alerts you when a battery is about to die. The signal starts as a slow ticking sound that becomes louder, faster and higher in pitch as the battery nears its end of life. **HD•15** performance and protection from loud impact noise are not altered when the warning is heard.

Eartips

Eartips



Lg. 3-flange

Sm. 3-flange

Foam

Glider

Sm. Foam

Selecting an eartip:

The eartip that is most comfortable is the likely choice, but it **MUST SEAL** well. If you can easily hear others with the device turned off (battery door open) you don't have a good seal. Twist it in deeper or choose another eartip.

When changing eartips make sure the eartip fits securely on the stem of the HD-15.



correct



incorrect

Insertion & Removal

Inserting the HD-15

- Pull the ear up and out while inserting.
- *Twist* and push gently until the eartip seals in the ear canal.
- When first using one of the 3-flange eartips, moistening slightly may ease insertion.



Removing the HD-15

- Remove the device with a slow twisting motion.

Operation

ON/OFF

The **HD-15** earplugs turn on and off by opening and closing the battery door. **Note:** It is not necessary to remove the battery as long as the door is open wide enough to disable the circuit.

Battery Door

Open = OFF
Closed = ON



2-position Switch

Toward battery door = LO position

Away from battery door = HI position

Dual-Mode Switch

On-Demand Hearing Protection Mode (LO)

- No interference with natural hearing; soft and loud sounds are heard naturally
- Automatic activation delivers 15-dB protection when steady-state noise exceeds safe exposure limits
- Maximum protection from loud impact noise

Enhancement Mode (HI)

- Soft and conversational sounds are amplified for improved communication and increased awareness of surroundings
- Automatic on-demand 15-dB hearing protection is **not** present in HI mode
- Maximum protection from loud impact noise

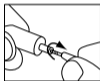
Changing Filters

HD•15 Electronic Earplugs have special filters that enhance sound quality and prevent ear wax from entering the devices. A filter should be changed if the volume decreases or sound quality declines.

ACCU•Filter™ Removal Note: Use the tool to remove the filter.



1. Remove eartip.



2. Insert tool into the filter.

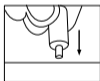


3. Remove filter.

ACCU•Filter™ Replacement Note: Do not use the tool to replace the filter.



1. Insert a new filter.



2. Press gently against a hard surface to secure the filter in place.



3. Re-attach eartip.

Trouble Shooting

Problem: No sound

What to do:

- Check to see if the battery door is closed (HD•15 turned on).
- Check battery; replace if dead.
- Clean the eartip and the end of the device.
- Check the filter
 - remove the filter
 - listen for sound to return before replacing the filter
- If sound returns replace the filter.

Note: Once filters are removed, discard. Do not reuse filters.

Care

Simple cleaning with the tool provided will keep the eartips clean and the **HD-15s** working properly.

- Use the cleaning tool to pick out or brush off debris.
- 3-flange eartips can be removed and cleaned in mild detergent. Dry eartips thoroughly before reattaching.
- Replace 3-flange eartips every 3-6 months depending on frequency of use.
- Foam and glider eartips should be replaced as needed.
- Do not use alcohol to clean the eartips or the devices.
- Remove the device before using hair products.
- Do not expose to extreme heat or moisture.
- Avoid dropping or hitting on a hard surface.



Cleaning Tool

Warranty

Etymotic will repair or replace defective product at its option if returned within one year of purchase to our designated service facility. This warranty is in lieu of all other warranties, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose.

Etymotic Research, Inc.

Etymotic invented in-ear noise-isolating earphones and developed the world's first high-fidelity earplugs for musicians. For over 25 years, Etymotic's mission has been to design innovative products that measure, enhance and protect hearing.

Audio engineers, audiologists and musicians working together have generated over 100 patents issued and pending. Etymotic Research is located in Elk Grove Village, Illinois.

Specifications

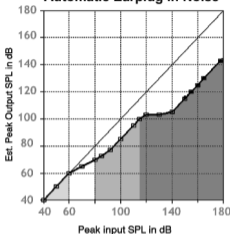
Switch: LO



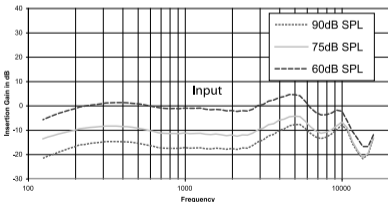
Switch in the LO position:

- Natural hearing
- Protection from continuous loud noise
- Maximum blast protection

Automatic Earplug in Noise



HD-15 Switch: LO



Specifications

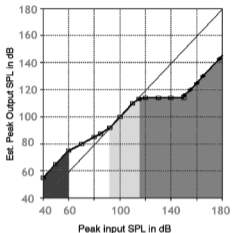
Switch: HI



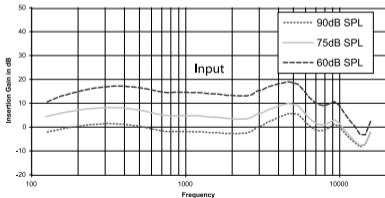
Switch in HI position:

- Boost for faint sounds
- Natural hearing
- Maximum blast protection

Boost for Faint Sounds



HD-15 Switch: HI



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