

OUTCOME DRIVEN INNOVATION

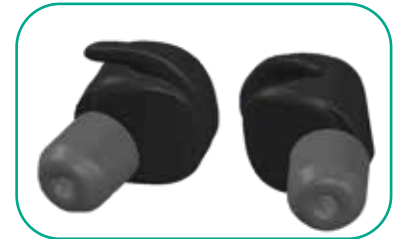
Electronic Hearing Protection and Enhancement Products for OEMs

Description

ODI has developed and deployed next generation, feature rich, hearing protection modules that can be implemented in Muff or in-ear forms for the consumer and industrial markets. The basic digital signal processing (DSP) algorithms compress any sounds in excess of 85dB in less than 1 millisecond of detection. The user hears the sounds compressed, not muted, at a reduced 85dB level, thereby protecting the user's hearing. The basic modules include 5X amplification standard. ODI can provide these products in muff or in-ear versions in NRR rating of 22dB to 28dB with customizable features based on customer requirements. Optional features include the following:

Optional Features:

- Bluetooth module for listening to music or taking phone calls. Bluetooth is a secondary operation and has separate volume controls, so ambient hearing volume remains as set by the user.
- Active Noise Cancellation (ANC) can be added. This feature isolates and eliminates systematic noise, like aircraft jet noise, chainsaw sound, lawn mower noise, etc. Typical ANC is 22-25dB depending on final design chosen.
- The newest feature adds hearing aid capability to any of our modules. ODI has two issued patents and two patents pending surrounding this technology and application to add hearing aid capability to the hearing modules. This option requires an accompanying smart phone App that is cross platform for Android and iOS. There are 8 EQ settings, all customizable by the user for each ear.



Typical Uses Include:

- Shooters – Have conversations or receive instructions while shooting 140dB shots and having full hearing protection.
- Hunters – With 5X amplification, hunters can hear a deer walking in leaves 50 yards away, while their gun shot is heard at 85dB.
- Industrial/Commercial – Noisy production facilities like machine shops, manufacturing, petrochemical plants, airports, etc.
- General Outdoor – Landscape workers, to mitigate noise from leaf blowers, lawnmowers, chainsaws, etc.
- At home or in the office, - Use the In-Ear version and you can listen to TV without turning up the TV volume, and with the hearing aid option, the sound frequencies will be adjusted to your hearing. Or, with the Bluetooth optional feature, listen to music or take phone calls while working.

Typical Customer engagement involves defining the product desired, paying a customization fee that includes tooling and certifications. ODI then sells the product to the customer at a prefixed price. Please contact us for details.

WHO WE ARE

Transforming ideas into products. Since 1993, ODI has done just that for client companies.

From initial sketch, to prototype, to final shipping product, our team is your virtual product development team.

ODI designed products have received twelve Design & Engineering Innovations Awards from International CES since 2008.

What can we make for you?