

Products

DSP Noise Cancellation Products

bhi Noise Cancellation Products greatly improve the clarity and quality of speech in radio and voice communications.

NES10-2 MKII - Noise Eliminating Extension Speaker.

Simply connects into the extension speaker socket or headphone socket of your communications equipment. Requires 12-24 VDC, and has a noise filter on/off switch, Power on/off audio bypass switch and headphone socket. Suitable for base station or mobile use.



NES5 - Basic "plug & go" Noise Eliminating Speaker.

Same as NES10-2 MKII but only has a fixed level of noise cancellation that is always on (Typ - 90% noise reduction). Simple "plug and go" operation. More suited to commercial applications where no user control is required.

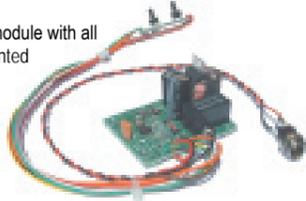
ANEM - Amplified Noise Eliminating Module.

A compact, easy to use in-line module that simply connects between the communications equipment and extension speaker. It has simple user control via two pushbuttons, and is suitable for use with all types of radio communications equipment. 12-24 VDC operation.



NEDSP1062 - Amplified DSP Noise Eliminating PCB Modules.

The NEDSP1062-KBD is a pre-wired, amplified PCB module with all the connections needed for operation. It can be easily mounted into many voice communication systems, by retrofitting into the high level audio path, in-line with the loudspeaker. The module incorporates an on board audio power amplifier and microprocessor, connected to a small, push button keyboard assembly, enabling simple control of the DSP noise filter.



The NEDSP1062-PCB module retrofits much the same as the KBD version, but comes without all the pre-wired connections and microprocessor control. It is more suited to commercial designs and applications, where user defined control might be required. Connections are on a standard 0.1" (2.54mm) pitch, enabling easy integration into almost any system. The module's functions can be preset or remotely controlled via these connections.

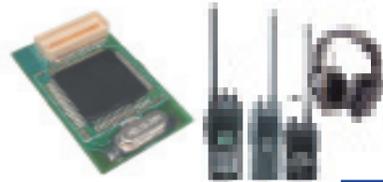
NEHM - Noise Eliminating Headphone Module.

A small compact in-line module that simply connects in between the communications equipment and headphones. It is suitable for many different types of communications and voice recording equipment, including transcription and dictation machines. It features power loop through for easy connection to existing equipment, and ease of use.



simple controls for

NNTDSP.001 - Noise eliminating plug-in pcb module for all Icom 'F' Series commercial radios and repeaters with an accessory socket. Available pre-installed in new Icom radios. Matching headsets available for a complete pmr noise cancelling solution.



NEIM1031 - Noise Eliminating In-line module.

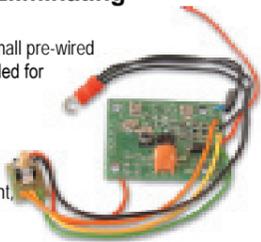
A stylish desktop unit with simple user controls. Fits in-line between the communications equipment and loudspeaker. Includes line level and audio level inputs and outputs and a headphone socket. Also suitable for processing noisy audio signals to improve voice quality. 12-24 VDC operation.



NEDSP1061 - DSP Noise Eliminating PCB modules.

The NEDSP1061-KBD module is a small pre-wired PCB module with all the connections needed for operation.

Controlled from a single pushbutton assembly, it is suitable for retrofitting into the low level audio path of most types of radio and voice communications equipment, either in the microphone or receive path.



The NEDSP1061-PCB module retrofits in the same way as the KBD version, but without the pre-wired connections and microprocessor control. It is more suited to commercial designs and applications like commercial HF radio, 'Hands free' car kits, covert surveillance equipment and CCTV, where the module can be fitted in either the microphone or receive path. Connections are on a standard 0.1" (2.54mm) pitch enabling easy integration into almost any system, where the noise filter can be preset or remotely controlled via these connections.

NEIS - Noise Eliminating Intercom System.

Easy to install modular Noise cancelling intercom system that is suited to a variety of noisy applications, but is particularly useful for improving voice quality in control room and machine plant communications, as well as: Hospital treatment rooms, Mining, Help Points, Transport, Refineries and Factories. Units are pre-configured for optimum noise cancelling and no adjustment is required. The system is connected using a single Cat5 cable. Simply plug in the power and the system is ready to use.



Accessories - A wide range of audio accessories and optional extras are available to enable connection to your equipment.

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bhi

Noise Cancellation Products



Company Profile

About Us

About us

bhi Ltd are a UK based company who design, manufacture and distribute a range of noise cancellation products that remove unwanted background noise and interference from noisy communication channels. Aimed at a number of different radio related and voice communication markets, the products all incorporate unique Digital Signal Processing (DSP) technology to enable clear communications in noisy environments.

Founded in 2002, bhi quickly came to market with their first noise cancellation product, the NES10-2 DSP noise-eliminating speaker. Other products soon followed as bhi rapidly established a worldwide distribution network for their products in 17 countries. They now have a comprehensive range of noise elimination products and accessories for a wide range of applications and markets. A design service is also available to help customers integrate bhi's DSP noise cancellation technology into their own products.

Products are manufactured in the UK under the ISO9001 quality standard. The UK facility has modern electronic assembly and test facilities along with a fully equipped machine shop, and all bhi's products are shipped worldwide from this location. By utilising all these facilities in one place, it allows bhi to bring their products to market quickly and efficiently with high quality standards.



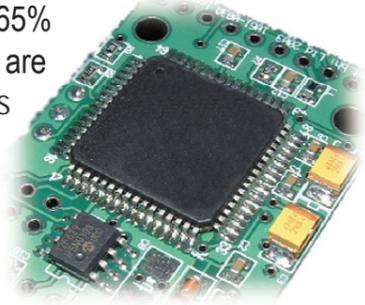
bhi have a comprehensive website and a secure on-line shop facility that services both the amateur radio and consumer markets. www.bhi-ltd.co.uk

DSP

DSP Noise Cancellation Technology

DSP Noise Cancellation Technology

The DSP noise cancellation technology incorporated in bhi's products works out the characteristics of the signal. If the signal has any noise present with the speech, the noise portion is removed - the amount of noise removed being adjustable depending on the filter level setting (65% - 98%). The resulting speech signal remains virtually unaltered even when there are high levels of noise present. If there is no noise present at all, the speech passes through unaltered. The system is fully adaptive and adjusts itself continuously to changing environmental conditions.



Applications

It can be very difficult to understand what is being said when calling or communicating from a noisy environment. bhi's noise cancellation products will integrate into most voice communication systems to greatly reduce this inherent problem. Their products will remove the unwanted background noise and interference, whether it originates from the transmission process, or is picked up from the environment by a microphone. There is a solution to suit most types of radio and voice communications equipment.

There are noise elimination speakers that fit into the base station or mobile environment, in-line modules that can be integrated into the communication system, or pcb modules that can be retrofitted internally into the equipment. The products work just as well in the microphone path on the transmit side or in the receive path, and can also be used to clean up noisy voice recordings.

Typical applications include:

- ✓ Emergency services communications
- ✓ Military and covert communications
- ✓ Audio restoration
- ✓ Transport communications
- ✓ Hands free kits
- ✓ PMR radio
- ✓ Amateur radio
- ✓ HF,VHF,UHF communications
- ✓ Marine communications
- ✓ Surveillance, CCTV and security
- ✓ Intercoms

