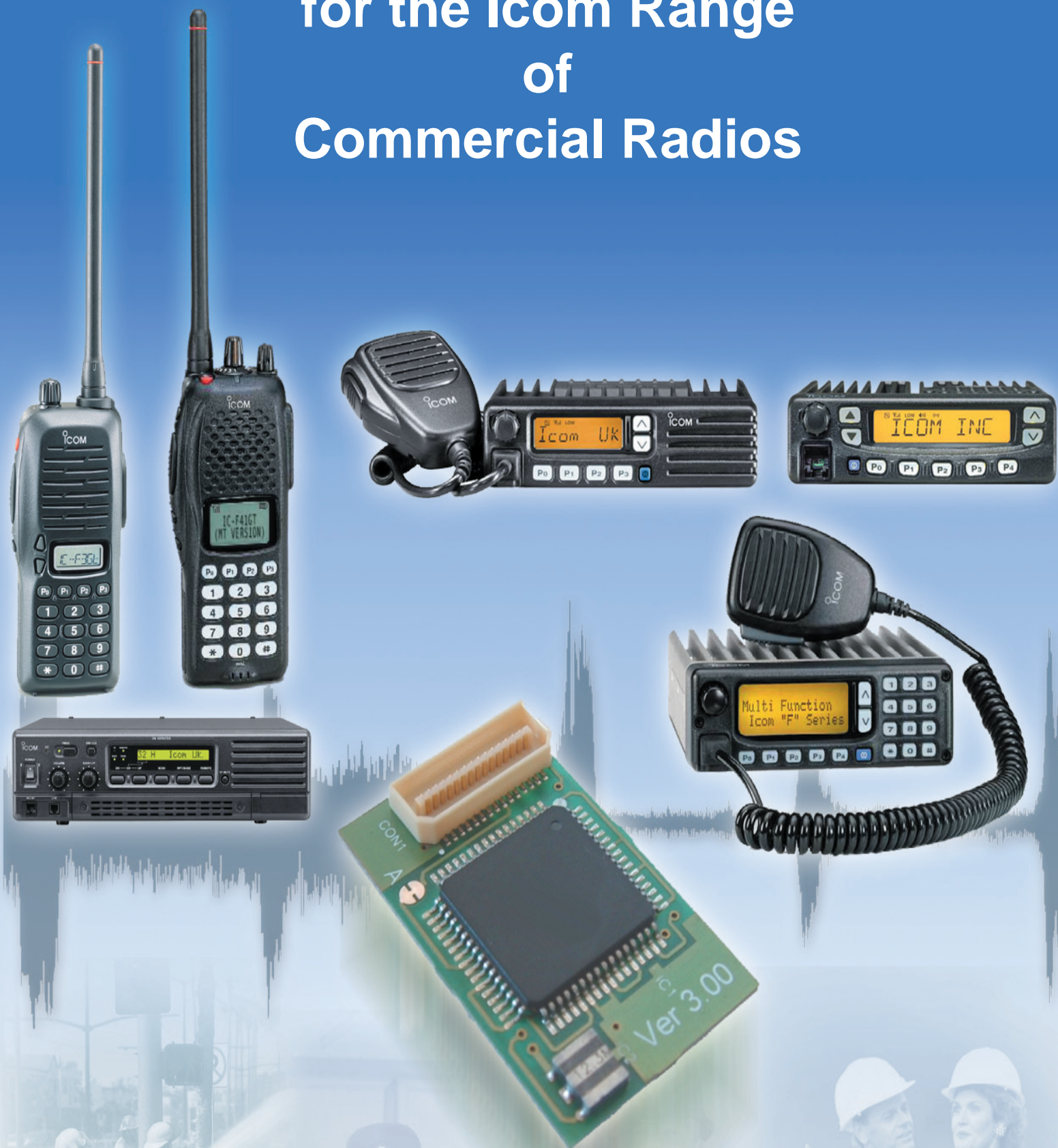


DSP Noise Cancellation for the Icom Range of Commercial Radios



Description:

The unique **NNTDSP.001** noise eliminating DSP board enables clear verbal radio communication from a user where there is high ambient noise, without the use of complicated programming or soldering.

The **NNTDSP.001** DSP board is ideal for a variety of environments including construction sites, motorsport, airports, noisy factories and dockyards, in fact anywhere there is high background noise. For example, on construction sites, loud noises are generated from various pieces of machinery such as site generators and pneumatic drills. The worker in this environment, using an Icom radio, transmits audio which has all the construction noises superimposed on it. On each of the receiving radios that have the DSP module fitted, the unwanted noise is removed and the user can hear clearly what is being said. Used in conjunction with noise cancelling headsets, the NNTDSP.001 DSP noise cancelling module allows the user to enjoy superb voice communications within high noise environments.

The **NNTDSP.001** DSP board operates on most Icom commercial radios that have an accessory socket (except IC-F12/22 Series, IC-F51/61series and IC-F22SR).

This NNTDSP.001 DSP noise cancelling "plug-in" module uses an innovative process of noise reduction that enables clear voice communications without degrading the speech quality. The audio pass-band of the digital signal processing (DSP) technology is divided into sub-bands. The system works out whether the signal has speech or noise characteristics in the sub-band. If the signal has noise characteristics, the noise portion is removed. If no noise is present the speech remains unchanged. The system is fully adaptive and adjusts itself continuously to changing environmental conditions. When the signal is first received the DSP automatically adjusts to the characteristics of the voice signal and noise within 1 second and then continuously removes the unwanted noise for the rest of the transmission. The module is installed in the "Option" socket and a small modification is required in the radio to enable the module to work. Details of this small modification can be found in the user manual, which can be viewed on our website www.bhi-ltd.co.uk.



This modification cuts the audio path of the loudspeaker and allows the insertion of the DSP board. The programming software is set up to "enable OPT 1" on one of the assignable buttons such as P0 to P3 on the mobiles or if used with a handportable there are also the buttons above and below the PTT. Noise level is set at 6; this is adjustable by links on the module.

Features:

- 8 preselectable noise cancellation levels
- Fully adaptive noise cancellation 9–35dB
- low current consumption
- Easy to install
- Competitively priced

Order code: **NNTDSP.001**

Compatible Models:

- IC-F3 & IC-F3S Handheld Series (2nd series)
- IC-F3/F4GS/GT Handheld Series
- IC-F31/41GS/GT Handheld Series
- IC-F110/S Mobile Series
- IC-F310/S Mobile Series
- IC-F510 Mobile Series
- IC-F1610 Mobile Series
- IC-FR3100 Repeater Series
- IC-F14/S IC-F24/S
- IC-F15/S IC-F25/S

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