



*No Compromise Communications*

# ADSP2 Speaker Manual

## 1 ADSP2 Speaker

Congratulations on your purchase of the most sophisticated noise reduction technology available. The ADSP<sup>2</sup> Speaker incorporates SGC’s proprietary digital noise reduction technology in a small speaker package. You can get the benefits of ADSP<sup>2</sup> noise reduction on any transceiver or receiver you own.



The ADSP<sup>2</sup> Speaker was designed for one purpose only, to provide “One Touch” noise reduction. All adjustments in the ADSP<sup>2</sup> algorithms are made internally. Operation is “One Touch” simple!

When using ADSP<sup>2</sup>, your focus is on operation. If you need noise reduction, pressing the button on top of the cabinet once provides 13 dB of noise reduction and pressing it a second time provides 26 dB. A third press of the button returns to bypass mode where the audio is fed directly to the speaker. Nothing could be simpler.

## 2 Specifications

### General

Size 3” X 5” X 2-1/2”  
Weight 11 oz

### Audio Limits

Min Input 100 mV RMS  
Max Input 5 volt RMS  
Power Output 5 Watts RMS  
Current Consumption  
idle 110 mA  
full out 500 mA

### Functions

	Single Touch	Double Touch
Noise Reduction	13 dB	26 dB
Time Delay	6.5 ms	13 ms
Tone Rejection	-50 dB	-65 dB

Out of Band Rejection -45 dB  
Noise Floor -60 dB



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### **3 ADSP<sup>2</sup> Speaker Connections**

There are only two connections to make with your ADSP<sup>2</sup> Speaker: 12VDC Power and Audio In.

#### **3.1 12 VDC Power**



A black wire and a red wire are provided without connectors for 12 VDC power. The red wire should be connected to 12 VDC and the black wire to ground. The speaker unit should operate well with voltages from 10-15 volts. The unit itself is protected against power reversal, so there will be no harm if it is connected backwards inadvertently.

#### **3.2 Connecting to your Speaker Output**



ADSP<sup>2</sup> Speaker connects directly to your Speaker or Headphones jack on your transceiver. The audio connection is provided with a monaural mini-plug connector. If your receiver uses another connection, you may either replace the existing connector or use an adapter selected to fit your needs.

### **4 Speaker Operation**

The ADSP<sup>2</sup> Speaker operation is easy with a “One Touch” control for noise reduction and tone interference rejection. When power is applied to the ADSP<sup>2</sup> Speaker, a small red LED will light behind the front grill to let you know power is on. On initial power up, the speaker is in bypass mode and the audio signal is connected directly to the speaker.



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The push button on top of the speaker is used to activate ADSP<sup>2</sup>. The “One Touch” button operates in three steps:

- When the speaker is powered on, a red LED on the left side behind the speaker grill will light.



- Press & Release the Pushbutton for One-Touch Noise Reduction  
When the first level of noise reduction is engaged, a single green LED will be lit behind the front grill in the lower right corner.
- Press & Release the Pushbutton for Double-Touch Noise Reduction  
When the second level of noise reduction is engaged, two green LEDs

will be lit behind the front grill

- Press & Release the Pushbutton for No Reduction  
The green LEDs will go out and the audio signal will be fed directly to the speaker again.

In some situations, additional noise reduction is not necessarily better and it pays to be flexible in the use of noise reduction when trying to copy signals. If any additional information is needed, do not hesitate to contact us at [sgc@sgcworld.com](mailto:sgc@sgcworld.com).



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## **5 Standard Warranty**

### **SGC LIMITED PRODUCT WARRANTY (1 Year Parts and Labor) And SOFTWARE LICENSE**

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