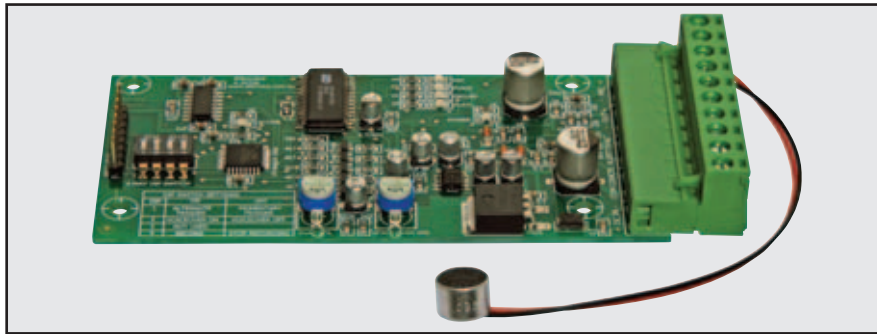




## Alert / Evac Tone Generator Module

# OPERATING INSTRUCTIONS



The A 2070B Evac/Alert module was designed as an add-on for existing amplifiers / P.A. installations. The module is very easy to install, and can run from any DC voltage from 8-35V. The size has been made very compact, by virtue of the latest in low power micro-processor design. It will generate standard alert and evacuation tones which conform to AS1670.4. The module can be configured to be latched on (in the case of alert and evac tones) and comes with a voice over facility to record messages.

### ALERT TONE

The alert tone is a warning tone that starts at -50dB below maximum level and increases in 10dB steps to the maximum. The frequency of the tone is 420Hz. Each tone burst lasts for 0.625 secs, with 0.625 secs in between. So total cycle from start to maximum takes 6.25 secs. Once the maximum level is reached, this continues until either the input is removed, the power is removed or the cancel trigger is used, depending on the DIP switch setting (see Dip Switch settings for more information).

### EVACUATION TONE

The Evac tone is used to initiate an evacuation of a building. This is a constant frequency tone at 480Hz at a constant output level. The tone burst lasts for 0.5 seconds with a 0.5 second gap between bursts and is repeated 3 times. There is a 1 second gap between cycles. This will continue until power is removed, the Cancel contact is triggered or the Evac trigger is removed while the unit is in Momentary Trigger Mode (see Dip Switch Settings). If the "Voiceover Message" dip switch is in the "ON" position the unit will play the recorded message between each 3 burst cycle (see Dip Switch Settings).

### DIP SWITCH SETTINGS

The A 2070B is fitted with a 4 way dip switch.

#### **Dip SW 1**

ON – Enables Latched Triggering of Alert and Evac tones  
OFF – Enables Momentary Triggering of Alert and Evac tones

The Alert and Evac inputs are triggered by a "short to ground" connection (See Fig 1).

When the Dip Switch is set to the latched position a short pulsed connection is all that is required to trigger the corresponding tone.

Once the Alert input is triggered the "Alert" tone will continue to sound until either power is removed, the "Evac" trigger is pulsed or the "Cancel" trigger is pulsed. Once the Evac input is triggered the "Evac" tone will continue to sound until either the power is removed or the "Cancel" trigger is pulsed. (Pulsing the "Alert" trigger will not stop the "Evac" tone.

#### **Dip SW 2**

ON – Voiceover ON  
OFF – Voiceover OFF

When Dip Switch 2 is set to the "ON" position and the Evac input has been triggered the unit will perform 3 cycles in the Evacuation mode and then play the pre-recorded message.

When the Dip Switch is set "OFF" the unit will perform a 1 second gap instead of playing the message.

#### **Dip SW 3**

Not Used

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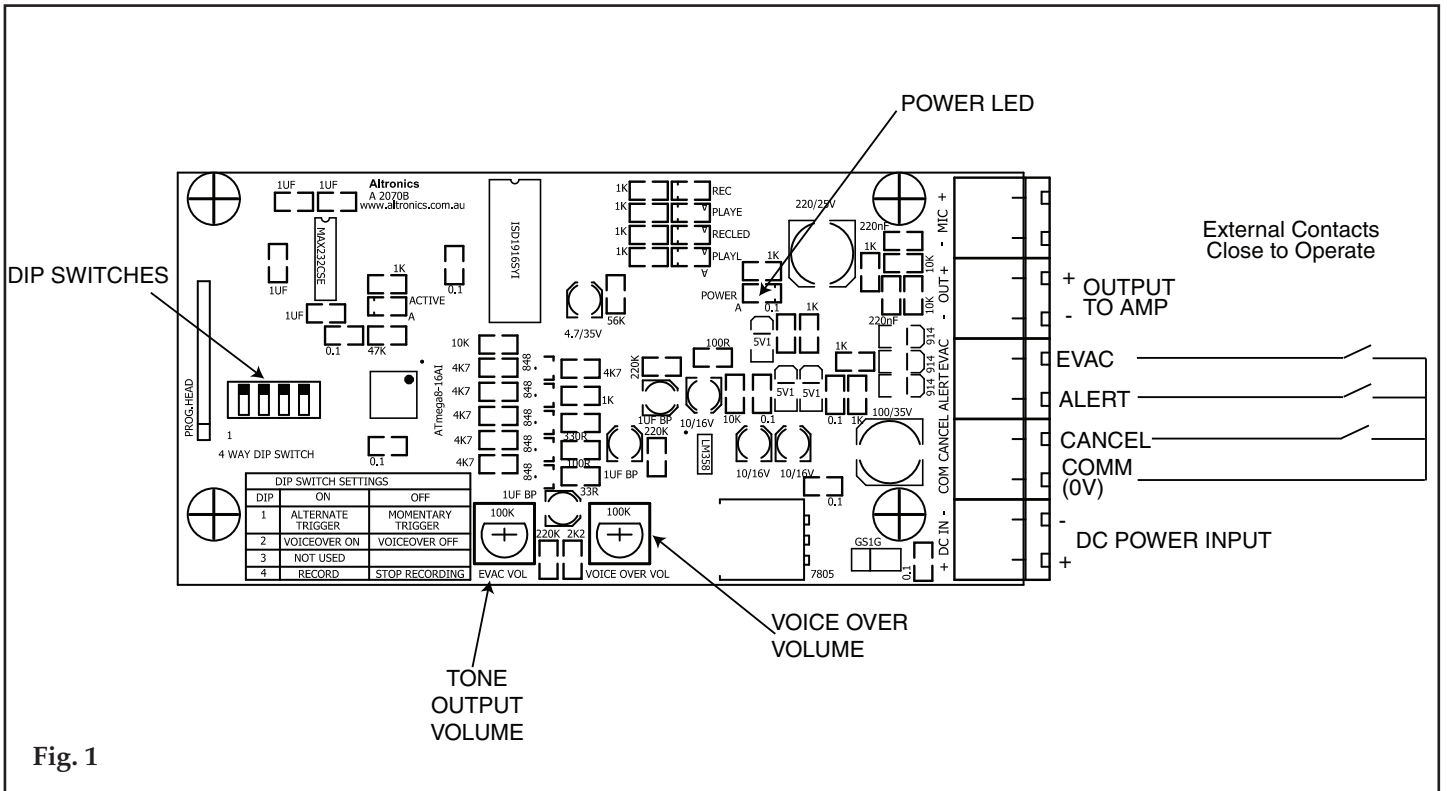


Fig. 1

## Dip SW 4

ON – Message Recording ON  
 OFF – Message Recording OFF

When Dip Switch 4 is set “ON” the unit is in record mode and will record through the microphone input. To record a message follow the steps below.

## RECORDING OF THE VOICE OVER MESSAGE

1. Disconnect the unit from power.
2. Re-connect power to the unit.
3. Set dip switch 4 to the “ON” position.
4. Use the microphone to record your message. (Please note the recording will begin as soon as dip switch 4 is turned on. The maximum message length is 16 seconds.)
5. Set dip switch 4 to the “OFF” position.
6. To re-record the message follow steps 3-5.

## Alert Tone

Output Frequency.....400Hz  
 Waveform.....Square wave  
 Output level.....-50dB to 0dB in 10dB steps  
 Output ON duration.....0.625 secs  
 Output off duration.....0.625 secs  
 Cycle Duration.....1.25 secs

## EVAC Tone

Output frequency.....450Hz  
 Waveform.....Square  
 Output level.....0dB  
 Cycle Time.....3.5 secs (incl. 1sec gap)

## VOLUME CONTROLS

There are 2 adjustable trimpots on the unit. These are for setting the output level of the unit (labelled EVAC VOL) and for adjusting the volume of the message playback (labelled VOICE OVER VOL).

## WIRING CONNECTIONS

It is intended that the module be installed and connected internally to an amplifier, although a stand-alone version can be made with a separate power supply.

Firstly determine if the module will fit into your amplifier. Power can then be taken from almost any point in the amplifier, with a voltage of 8 to 35V dc. It is best to measure the available supply first.

## SPECIFICATIONS

### General

Minimum trigger time.....1mS  
 Maximum output level.....1.25V RMS  
 Power supply voltage.....8-35V DC  
 Power supply current.....15mA  
 Size.....52(w) x 120(l) x 20mm(h)

### Voice Over

Maximum record/play time.....16secs  
 Sample rate.....12kHz

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