

### Description

The EV20 is a compact single zone occupant warning module that produces

- ✓ Alert and Evacuation signals to meet the requirements of AS1670.4
- ✓ an output that will drive up to 20-watts of speaker load is supplied with a switch control card; and
- ✓ can be installed into most fire alarm control panels or used as a stand-alone unit in its own enclosure.

### Features

- ✓ Alert and Evacuation signals to AS1670.4
- ✓ Open and short circuit speaker line monitoring and protection
- ✓ Fault indication
- ✓ Adjustable ALERT and EVAC level control
- ✓ FACP input
- ✓ "Alert" / "Evacuation" changeover time out – 0, 30, 60, 120, 180, 240 or 300 seconds
- ✓ 2.5mm terminals for field wiring
- ✓ P. A. microphone input (optional)
- ✓ Verbal messaging (optional)

### Operation

If an FACP input is received when the rotary switch is in the AUTO position the EV20 will begin to output the Evacuation signal as the factory default setting of the Alert "time out" period is 0. If the alert signal is required the "time out" duration of the "time out" is determined by the setting of the 4 way DIL switch SW1.

The set duration is termed the changeover timeout and ranges from 0 seconds to a maximum of 300 seconds. If the time out is set to 0 sec then the alert tone is bypassed and the evacuation signal commences immediately. The operator can manually stop the signal sequence by turning the rotary switch to the ISOLATE position.

SW1 TIME OUT TABLE

SW	1	2	3	4
0 (EVAC ONLY - FACTORY SETTING)	ON	OFF	OFF	OFF
30 S	OFF	ON	OFF	OFF
60 S	OFF	OFF	ON	OFF
120 S	OFF	OFF	OFF	ON
180 S	OFF	OFF	OFF	OFF
240 S	OFF	OFF	OFF	OFF
300 S	OFF	OFF	OFF	OFF
ALERT ONLY NO CHANGE OVER	OFF	OFF	OFF	ON

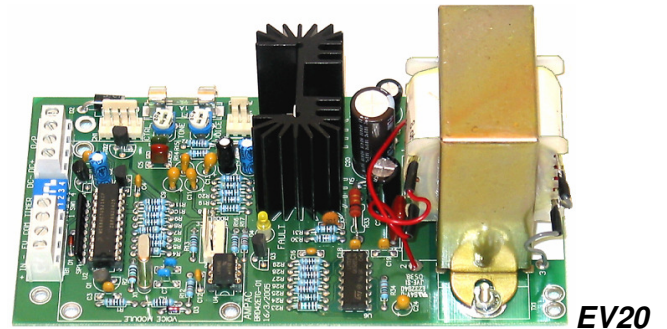
ON: 1 2 3 4

EXAMPLE OF SETTING - 30SECS

MUST ALWAYS BE SET TO OFF

#### Time Out Setting

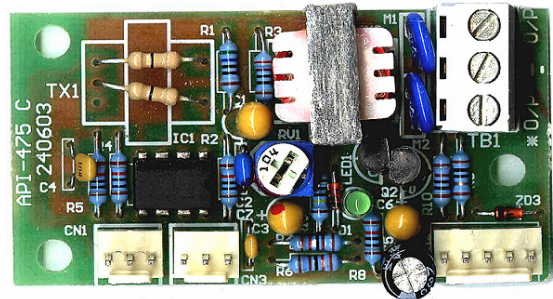
**NOTE: SW1/4 MUST ALWAYS be set to "OFF"**



### OPTIONS

#### Public Address

An optional microphone and pre-amplifier (Product code 222-0007) is used to provide the public address capabilities.



Microphone Pre-amplifier

#### Verbal Message

The optional verbal message board (Product code 222-0026) is mounted on standoffs to the main board. Audio and control interconnection to the main board is by way of a 5 way IDC cable.

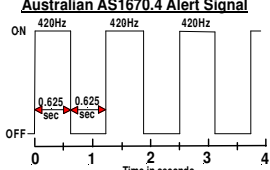
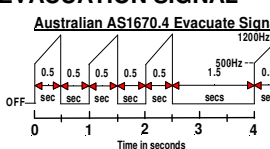
#### Message

"Emergency Evacuate Now"



Verbal Message Board

## Specifications

<b>SUPPLY VOLTAGE</b>	27VDC (nominal)
<b>QUIESCENT CURRENT</b>	41 mA
<b>MAX. CURRENT DRAW</b>	650 mA
<b>MAX. SPEAKER LOAD</b>	20 Watt RMS (100V line)
<b>ALERT SIGNAL</b>	<p><b>Australian AS1670.4 Alert Signal</b></p>  <p>AS1670.4: 420Hz pulsed on and off for 0.625 of a second at 1.25 second intervals</p>
<b>EVACUATION SIGNAL</b>	<p><b>Australian AS1670.4 Evacuate Signal</b></p>  <p>AS1670.4: 0.5 of a second sweep signal 500-1200 Hz pulsed on and off 3 times in 2.5 seconds at 4 second intervals</p>
<b>SPEAKER EOL RESISTOR</b>	47k ohms
<b>FACP INPUT</b>	Monitored

<b>DIMENSIONS (mm)</b>	
<b>Main EV20 Board</b>	180H x 82W x 55D
<b>Control Card</b>	90H x 35W x 40D
<b>P.A. Input Board (Opt.)</b>	63H x 35W x 18D

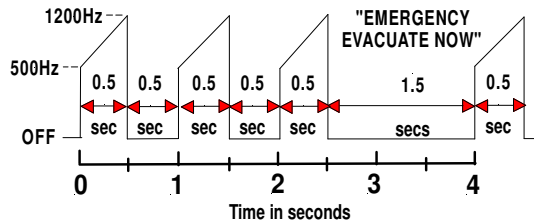
### Microphone Pre-amplifier Board

<b>SUPPLY VOLTAGE</b>	27VDC (nominal)
<b>QUIESCENT CURRENT</b>	21mA

### Voice Messaging Board

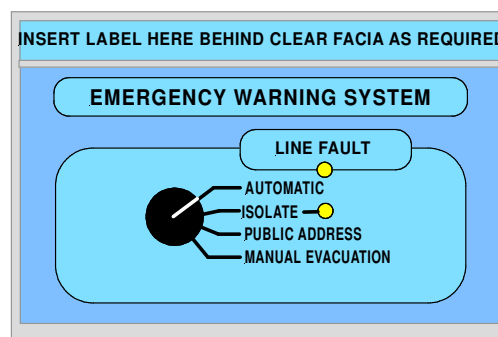
<b>SUPPLY VOLTAGE</b>	Regulated +5VDC
<b>QUIESCENT CURRENT</b>	1.4mA

Order Code	Description
222-0020	EV20 with AS1670.4 signals
222-0007	Public Address microphone and pre-amp
222-0026	Verbal Message upgrade kit



Evacuate Signal Timing

## CONTROL & INDICATOR CARD



Front Control Card

### Controls

When the control switch is in;

**AUTOMATIC** - occupant warning signals, and if applicable the verbal message, is outputted to the speaker system when it receives a "warning system" signal from the FACP.

**ISOLATE** – the occupant warning system is isolated from the FACP "warning system" signal and even if the signal is present there will be no output.

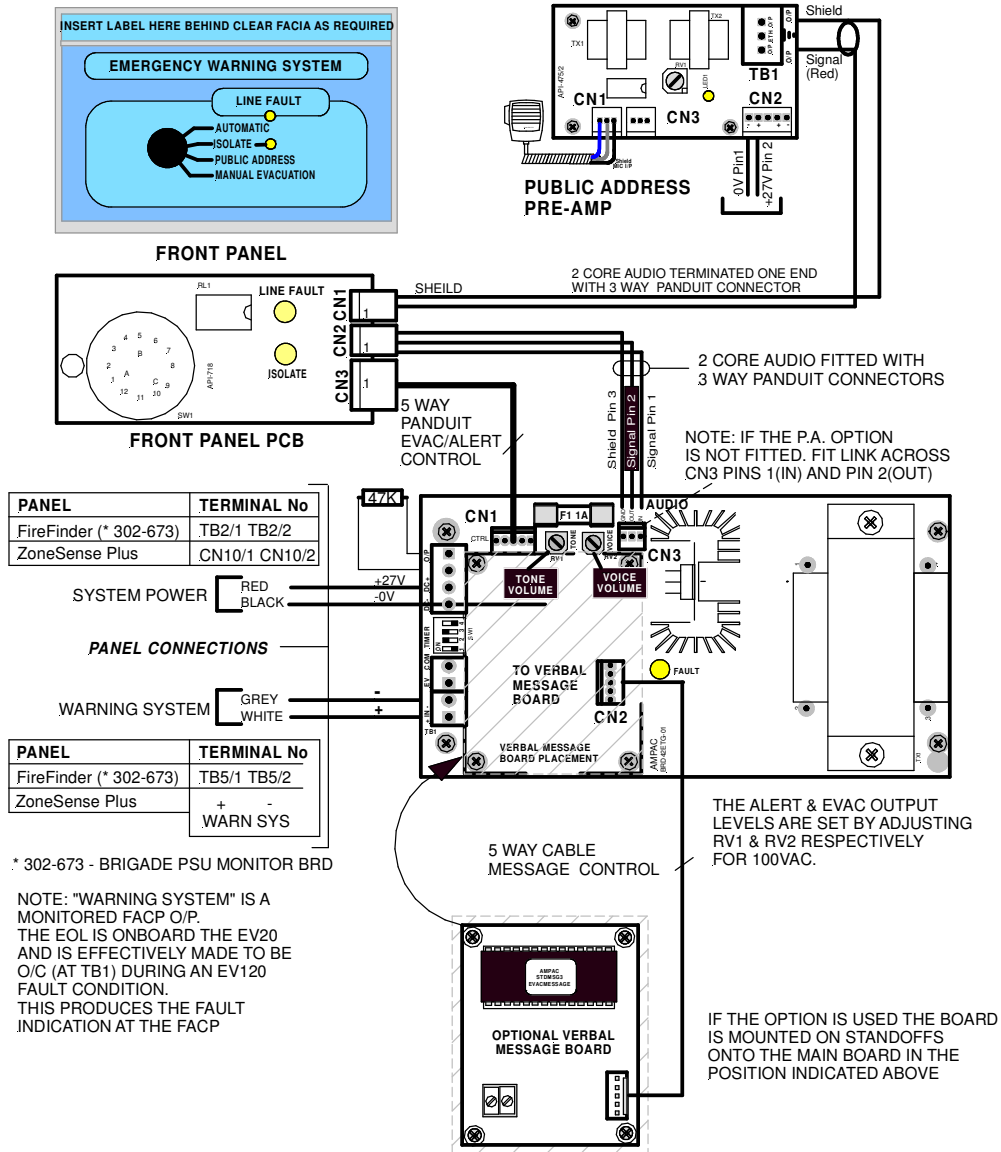
**PUBLIC ADDRESS** – the occupant warning system can be used locally as a PA system.

**MANUAL EVACUATION** – the occupant warning signal/s will be transmitted over the system.

### Indicators

**LINE FAULT** (Yellow LED) - In the event of an open or short circuit speaker line the LINE FAULT indicator (yellow) will be illuminated

**ISOLATE** (Yellow LED) - the LED will be illuminated (yellow) when the occupant warning system is isolated



**Wiring Diagram of an EV20 single zone OWS with Both P.A. and Verbal Message Boards Fitted**