Operating Manual

A 4573 Alert/Evac Module with Multiple Chimes

Overview

The A 4573 module generates pre announcement chimes and alert and evacuation tones for selected Redback® products. Separate volume controls are included for adjustment of the alert/evac tone level, the chime level and the message voice-over level. The chime and alert/evac tones are triggered by closing contacts via a five way euro block. These triggers can be set to momentary or alternate action by on board DIP switches.

Chimes included on the module include pre announcement, Ding Dong, repeating Bing and repeating Bong. All of these are DIP switch selectable.

The module is also fitted with a switch over option which changes the evacuation tone from the Alert tone to the Evacuation tone after a set time. This can be adjusted from 30 seconds to 270 seconds in 30 second increments or it can be switched off altogether.

A microphone has been included which is used to record an emergency voice over message if required. This message can be turned on via DIP switches, and will play twice after the evacuation tone has repeated four times.

Important Note:
The evacuation tone for this device conforms to fire evacuation standards AS1670.4.2004
The evacuation tone (temporal pattern) conforms to international standards.

The A 4573 module is compatible with the following Redback ® products.

Compatible Amplifiers
A 4037 40 Watt Amplifier
A 4043 60 Watt Amplifier
A 4047 100 Watt Amplifier
A 4377 125 Watt Amplifier
A 4387 250Watt Amplifier
A 4275B 125 Watt Amplifier
A 4285B 250 Watt Amplifier

Compatible Mixers
A 4480A
A 4480B

Suitable Wallplates for remote triggering
A 2078B
A 2081

Installation

The A 4573 module needs to be fitted inside the Redback ® compatible product by following the following steps.

1)   Switch off and remove power from the unit the A 4573 is to be fitted to.
2)   Remove the lid from the unit.
3)   Unscrew the small protector plate on the rear panel to reveal the mounting holes for the A 4573.
4)   Line up the A 4573 with the relevant holes in the rear panel, ensure the trimpots on the board are accessible.
5)   Using the screws provided attach the A 4573 mdule to the rear panel via the green euro block.
6)   Plug the 10 way IDC cable to the 10 way header situated inside the Redback® product. (Refer to the instructions supplied with the Redback® compatible product).
7)   Plug the plastic bushes supplied into the holes on the rear panel through which the trimpots are accessed.
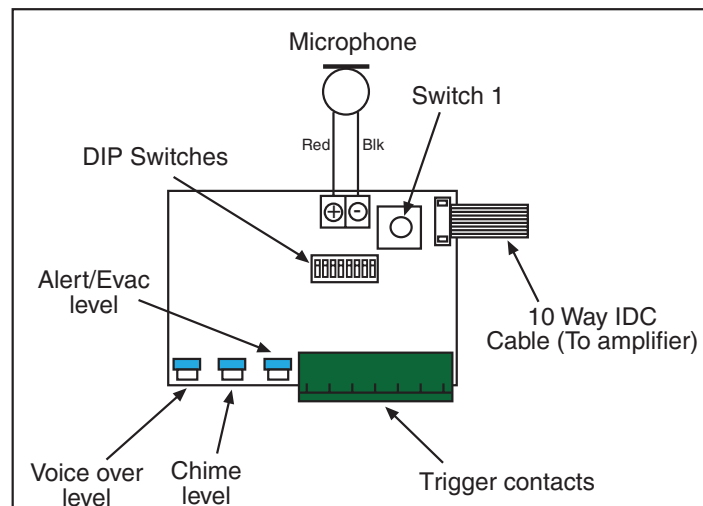8)   The unit is now ready for operation.

Fig 1

Triggering the tones

The unit is triggered by closing the contacts on the 5 way pluggable header. There are four different trigger inputs as shown in Fig 2.

Evac tone - triggered by a closed contact between EV (alert tone) and GND (ground).
Alert tone - triggered by a closed contact between AL (alert tone) and GND (ground).
Chime 2 - triggered by a closed contact between CH2 (chime 2) and GND (ground).
Chime 1/Cancel - triggered by a closed contact between CH1/CAN (chime 1/cancel) and GND (ground).

The alert and evac triggers can be set to momentary or latched action. In momentary operation the alert or evac tones will operate only while the trigger is activated. In latched operation the tones will operate continuously after they have been triggered, even with a momentary contact. This option is set by DIP switch 1 (Refer to table 2 for DIP switch settings).

Switch Over Option

The A 4573 is equipped with a "switch over" option which switches the unit from the Alert tone to the Evacuation tone automatically. This can be adjusted from 30 seconds to 270 seconds in 30 second increments or it can be switched off entirely. This is adjusted by switch 1 (refer to table 1 for selection details).
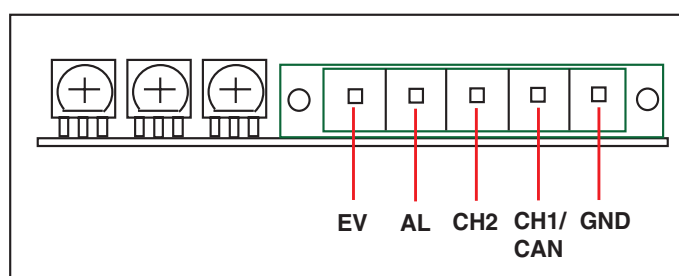

Fig 2

Voice Over message

The A 4573 has a voice over option which is used to playback a recorded messsage. This is enabled by switching DIP switch 2 to "ON" (Refer to table 2 for DIP Switch settings). Once enabled the recorded message will play twice after four cycles of the evac tone.
Note: this voice over will only operate when the A 4573 is in evac mode.
To record a message, connect the supplied microphone to the 2 way euro block as shown in figure 1. To start recording, set DIP switch 8 to "ON" and start talking into the microphone. When finished recording, set the DIP switch back to 'OFF".

Adjusting Volume Levels

The output levels for the chime, alert/evac tones and the voice over are all adjustable via trimpots as shown in Fig 1.
Note: The Alert and Evac tones are adjusted using the same trimpot. They cannot be adjusted separately.

Chime Options

There are two contacts available for activating the chime tones, and there are four different chimes available (pre announcement, Ding Dong, Repeating Bing and Repeating Bong).

It is possible to have two different chimes available to use at the same time, but if the cancel trigger is required then the module is limited to one available chime trigger (Refer to table 3 for selection details).

DIP switches and switch 1 settings

Table 1: Switch 1 Settings

SW1 Pos	Switch Over Option
0	Disabled
1	Alert swtiches to Evac after 30 seconds
2	Alert swtiches to Evac after 60 seconds
3	Alert swtiches to Evac after 90 seconds
4	Alert swtiches to Evac after 120 seconds
5	Alert swtiches to Evac after 150 seconds
6	Alert swtiches to Evac after 180 seconds
7	Alert swtiches to Evac after 210 seconds
8	Alert swtiches to Evac after 240 seconds
9	Alert swtiches to Evac after 270 seconds

Table 2: DIP Switch Settings

SW	ON	OFF
1	Momentary Alert & Evac Operation.	Latched/Continuous Alert & Evac Operation.
2	Voiceover ON.	Voiceover OFF.
3	Not Used	
8	Mic Recording ON.	Mic Recording OFF.

Table 3: DIP Switch Settings For Tones

DIP				CHIME CONTACT	
4	5	6	7	CH2	CAN/CH1
OFF	OFF	OFF	OFF	Pre Announce	Ding Dong
ON	OFF	OFF	OFF	Pre Announce	Repeating Bong
OFF	ON	OFF	OFF	Pre Announce	Repeating Bing
OFF	OFF	ON	OFF	Pre Announce	CANCEL
OFF	OFF	OFF	ON	Ding Dong	Pre Announce
ON	ON	ON	ON	Ding Dong	Repeating Bong
OFF	ON	ON	ON	Ding Dong	Repeating Bing
ON	OFF	ON	ON	Ding Dong	CANCEL
ON	ON	OFF	ON	Repeating Bong	Pre Announce
ON	ON	ON	OFF	Repeating Bong	Ding Dong
OFF	OFF	ON	ON	Repeating Bong	Repeating Bing
OFF	ON	OFF	ON	Repeating Bong	CANCEL
OFF	ON	ON	OFF	Repeating Bing	Pre Announce
ON	ON	OFF	OFF	Repeating Bing	Ding Dong
ON	OFF	ON	OFF	Repeating Bing	Repeating Bong
ON	OFF	OFF	ON	Repeating Bing	CANCEL

Remote Triggering of the tones

It is possible to remotely activate the A 4573 from the Redback® A 2078B and A 2081 wall plates. Figures 3 and 4 illustrate the wiring connections required.

Note: The A 2078B and A 2081 were never designed to be connected to the A 4573 module. Hence there is no way to illuminate the switch lamps which require 24V DC to operate. So no visual indication of the switches being activated is possible.
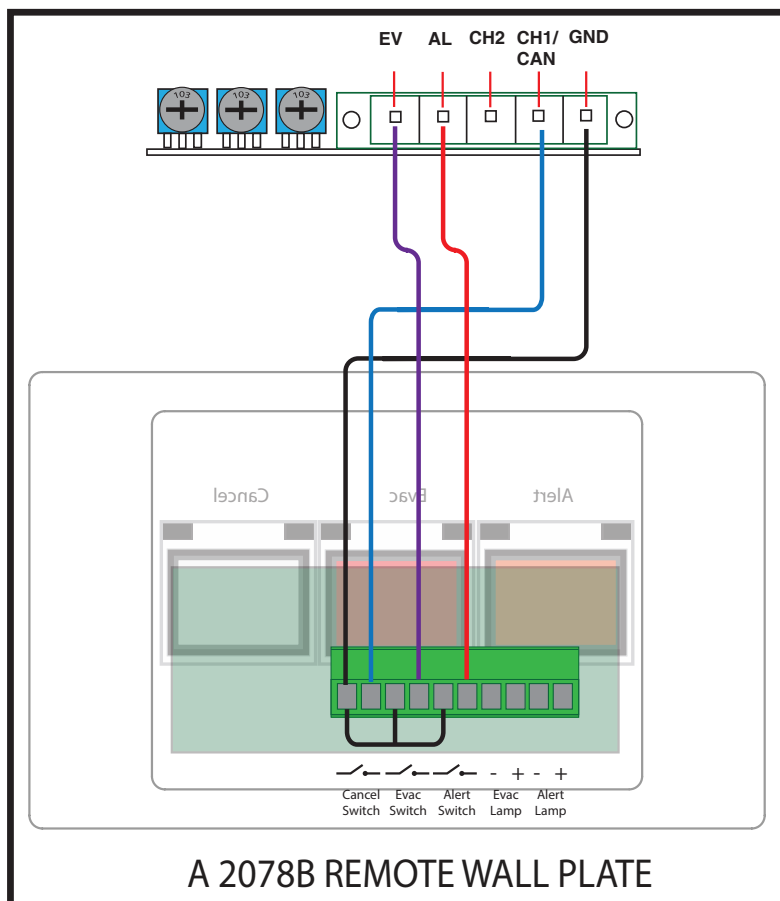
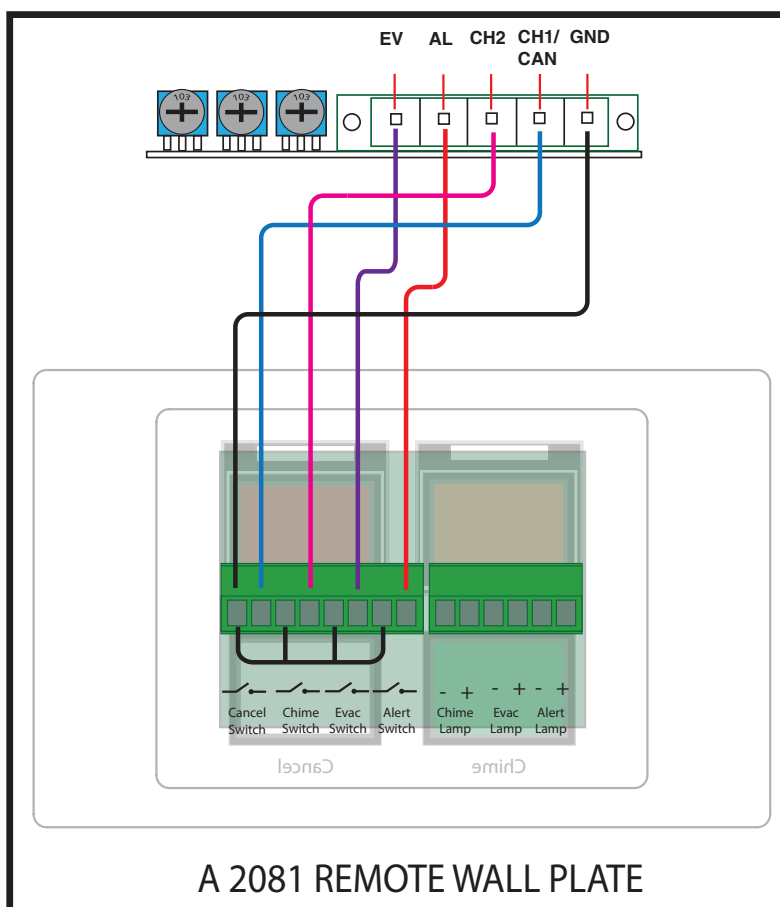**A 2078B** Remote Plate

A 2081 Remote Plate

A 2078B REMOTE WALL PLATE

Fig 3

A 2081 REMOTE WALL PLATE

Fig 4