





Operating Manual

A 4480 8 Input / 8 Output Audio Switcher

A 4481 Paging Console A 4476 Preset Selector Wallplate A 4478/9 Local Input Wallplates A 4491/2 Music Source Selector Wallplates

Redback® Proudly Made In Australia

Distributed by Altronic Distributors Pty. Ltd. Phone: 1300 780 999 Fax: 1300 790 999 Internet: www.altronics.com.au

IMPORTANT NOTE:

Please read these instructions carefully from front to back prior to installation. They include important setup instructions.

Failure to follow these instructions may prevent the system from working as designed.

REDBACK is a registered trademark of Altronic Distributors Pty Ltd

Since 1976 Redback amplifiers have been manufactured in Perth, Western Australia by Altronics. With over 37 years experience in the commercial audio industry, we offer consultants, installers and end users reliable products of high build quality with local product support. We believe there is significant added value for customers when purchasing an Australian made Redback amplifier or PA product

Australian Made Status

All Redback house products made by Altronics will now be sporting the official Australian Made logo. Since starting manufacturing of commercial audio equipment in the mid 70's we have always taken pride in producing a quality local product.

The new adoption of the Australian Made logo will help us get the word out to local and export markets that our products carry the official compliance seal of the Australian Made campaign. We have always pushed our 'local is better' line in all of our marketing efforts, it's always an added boost when you are backed up by a widely recognised and respected icon.

Industry leading 10 year warranty.

There's a reason we have the industry leading DECADE warranty. It's because of a long tried and tested history of bulletproof reliability. We've heard PA contractors tell us they still see the original Redford amplifier still in service in schools - that's over 37 years of operation - and still going strong!

Published by Altronic Distributors © 2015 Altronic Distributors

1.0 Overview

1.1 Introduction	5
1.2 Features	6
1.3 What's in the box	6
1.4 Front panel guide	7-8
1.5 Rear panel connections	9-11

2.0 Setup Guide

2.1 Setup overview	12
2.2 Connecting audio sources	12
2.3 Connecting outputs	13
2.4 Connecting power	14
2.5 Configuring the inputs to outputs/zones	14
2.5.1 Routing audio to a zone	15
2.6 Adjusting the bass, treble and input volumes	16
2.7 Adjusting the paging console and emergency input volumes	16
2.8 Adjusting the zone volumes	16
3.0 Local Audio & Paging Console Options	
3.1 Local audio configuration	16
3.2 Paging console configuration	17
3.3 Configuring the paging console lockout on the LCD	17
3.4 Configuring the program isolate on the LCD	17
4.0 Emergency Overrides & Priorities	
5 /	
4.1 Priorities	20
4.2 Priority input	20
4.3 Labelling of input sources, zones & presets	21
4.3.1 How to label input sources & zones with USB keyboard	21
4.4 Presets	22
4.4.1 User defined presets (1 to 4)	22
4.4.2 Default preset	22
4.4.3 Last setting preset	22
4.4.4 Setting up the presets	22
4.4.5 Modifying presets	22
4.5 Button lockout feature	22
4.6 Master reset function	22

5.0 Peripheral Connections

5.1 Paging console overview (A 4481)	23
5.1.1 Features	24
5.1.2 DIP switch settings	24
5.1.3 Connecting the paging consoles	24
5.1.4 Cascading the paging consoles	25
5.1.5 Cascading the paging consoles with 8 zone wallplates and a preset plate	26
5.1.6 Multi-zone paging	26
5.1.7 Zone lockout	26
5.1.8 Store & recall	27
5.1.9 Emergency override	27
5.1.10 Paging console busy	27
5.2 Music source selection wallplate overview (A 4491/2)	28
5.2.1 Features	28
5.2.2 Menu accessed features	28
5.2.3 DIP Switch settings	29
5.2.4 Screen Layout Guide	29
5.2.5 Navigating The Menu	30
5.3 Local microphone/line input wallplate (A 4478/9)	50
5.3.1 Features	31
5.3.2 Connections	31
5.3.1 Connecting the A 4478/79 local input wall plates to the A 4491/92 Zone wall plates.	31
5.4 Preset selector wallplate (A 4476)	
5.4.1 Features	32
5.4.2 DIP switch settings	32
6.0 Troubleshooting	
6.1 Symptoms & remedies	33
6.1.1 Installation of replacement microprocessor card	33
6.1.2 RJ45 cabling configuration for system components	33
7.0 Help	
7.1 Help screens	34
7.1.1 Main screen help	34
7.1.2 Preset help	34
7.1.3 PA On/Off help	34
8.0 Specifications	
8.1 Specifications	35
9.0 Programming Sheets	
9.1 A 4480 programming sheet	36-37
9.2 A 4481 programming sheet	38

1.0 OVERVIEW

1.1 INTRODUCTION

Designed to meet the demands of todays complex installations, this unit is a very versatile cost effective public address/ background music control system.

In total there are 16 inputs:

- 1 emergency paging input
- 1 alert/evac input
- 6 auxiliary inputs and 2 auxiliary/line inputs
- 2 zone paging inputs
- 1 priority input
- 8 local inputs

Operation is as follows:

Emergency Paging mutes all other inputs, including alert/evac signals and transmits to all zones. Note: the emergency paging input will accept either a low level balanced mic signal (3mV) or a high level balanced signal (700mV). This enables sources other than a microphone to be used. For example, the output of a building occupancy warning system could feed into this input and transmit either verbal messages from the microphone or the alert & evacuation tones. All on an "all call" basis.

Alert/Evac signals mutes all other inputs, except emergency paging and transmits to all zones.

Zone Paging (via optional A 4481 paging station) mutes auxiliary signals and transmits to selected zones. Zone paging may be prohibited for each zone from the front panel on the mic console.

Priority Input mutes auxiliary signals and transmits to selected zones. This input has the same priority as the A 4481 paging stations and works on a "first in best dressed" basis. This input is enabled via a trigger input or vox enabled dual RCA input.

Local Inputs (1-8 via optional A 4478 wall plate) mutes any auxiliary source selected to that zone. Local inputs can be configured for either balanced mic or line operation.

Aux inputs (1-8) can be switched to any zone or combination of zones.

Each of the eight auxiliary inputs have tamper proof volume, treble and bass controls, plus a signal presence indicator. Volume controls are provided for each zone output.

A programmable LCD indicates which input is selected to which outputs.

Tamper proof volume controls and signal presence indicators are provided for local microphone paging and emergency microphone paging.

Remote selection wallplate (A 4490) may be connected via Cat5e cable to each zone. This wallplate enables selection of any auxiliary input source, volume adjustment of that zone plus the option to connect a local input source (mic or line) via the optional A 4478 wallplate.

Memory presets are programmable to provide easy recall of certain system configurations including a default setting, last memory setting and 4 memory presets. This is selected from the front panel, or remotely via the optional A 4476 preset selector wallplate (see 5.4, page 28).

System lockout feature to prevent unauthorised adjustment of system settings.

WARNING

System components are connected using standard "pin to pin" configuration RJ45 data cabling. When installing ensure all connections are verified before switching any system component on.

Failure to follow the correct wiring configuration may result in damage to system components.

For the correct wiring configuration, see section 6.0 "Troubleshooting".

1.2 FEATURES

- 8 Stereo RCA line inputs (internally mono mixed).
- 2 Microphone XLR inputs with phantom power option.
- Adjustable line input sensitivity 0.3/0.7V.
- Individual bass, treble and volume controls of all line inputs.
- 8 Balanced 3 pin XLR line outputs.
- Individual volume controls of all 8 outputs.
- Alert/evacuation/pre chime tone generator included (alert/evac tones comply to AS1670.4) .
- Emergency balanced input with selectable phantom power and input sensitivity.
- Programmable labelling of input sources and output zones via USB keyboard.
- Programme isolate function.
- Four programmable presets.
- Tampering lockout feature.
- 240V AC or 24V DC operation.
- 19" Rack Mount (2 unit).

Optional Features

- Zone and emergency over-ride paging via A 4481 paging console.
- Remote zone control of volume and music sources via A 4490 wall plate.
- Preset selection via A 4476 preset wall plate.
- Local microphone or music input connection via A 4478 and A 4490 wall plates.

Priority Order

Priority 1 is the highest priority and overrides all others priorities. Priority 2 is next, then priority 3 and so on.

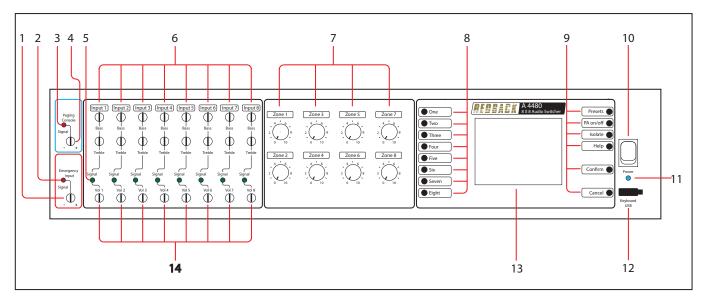
- Priority 1 Emergency microphone.
- Priority 2 A 4481 paging consoles 1 & 2 (if fitted, in emergency paging mode).
- Priority 3 Alert/evacuation tones.
- Priority 4 A 4481 paging console (in normal mode).
- Priority 5 Local zone input, if being used.
- Priority 6 Line inputs.

1.3 WHAT'S IN THE BOX

A 4480 Audio Switcher 240V AC power lead (suits Australian Standard) USB - PS2 compatible keyboard (Altronics D 2111) Perspex anti tamper cover Instruction Booklet

1.4 FRONT PANEL GUIDE

Fig 1.4A shows the layout of the A 4480 front panel.





- 1 **Emergency microphone volume control** Use this control to adjust the volume of the emergency microphone input.
- 2 Emergency microphone signal present indicator This LED illuminates to indicate a signal is present at the emergency microphone input.
- **3 Paging microphone signal present indicator** This LED illuminates to indicate a signal is present at the paging microphone input.
- **4 Paging microphone volume control** Use this control to adjust the volume of the paging microphone input.
- 5 Inputs 1-8 signal present indicators These LEDs illuminate to indicate a signal is present at the corresponding RCA inputs.
- 6 Inputs 1-8 bass and treble controls Use these controls to adjust the bass and treble of the 8 input sources as desired.
- Zone volume controlsUse these to adjust the volumes of the zones.

8 Zone selection buttons

These buttons select the output zone.

9 Preset selector button

This button is used to select pre-programmed preset configurations. (See section 4.4 Presets). **Public address on/off button**

This button is used to switch on or off the general paging to a particular zone. (See section 3.3 for more information). This does not block emergency paging.

Program isolate button

This button is used to isolate inputs from a particular zone. (see section 3.4 for more information) **Help button**

Pressing this button provides help on the selected option. (See section 7.0 Help).

Confirm button

This button is used to confirm your selected changes. Push "confirm" and "cancel" buttons at the same time to lock and unlock the front panel controls.

Cancel button

This button is used to exit from the current menu or cancel the selected option. Push "confirm" and "cancel" buttons at the same time to lock and unlock the front panel controls.

10 Power switch

Use this to switch to turn on mains power 220-240V AC.

11 On indicator

This led indicates the unit has power.

12 Keyboard USB input

This USB connection is for a keyboard for programming the LCD.

13 LCD

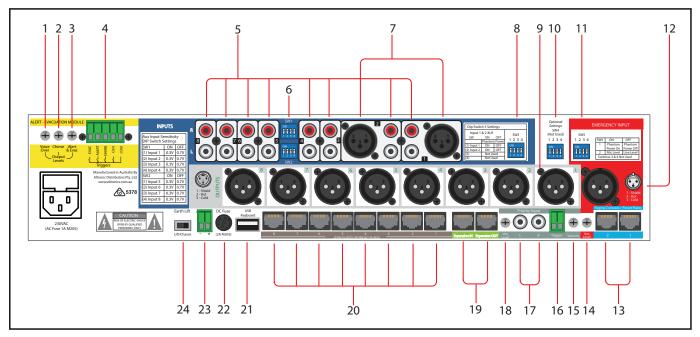
The LCD is used to indicate which inputs are selected to which outputs.

14 Inputs 1-8 volume controls

Use these to adjust the volumes of the RCA input sources.

1.5 REAR PANEL CONNECTIONS

Fig 1.5A shows the layout of the A 4480 rear panel.





1 Voice Over Volume

Use this trimpot adjustment to change the output level of the playback message.

2 Chime Volume

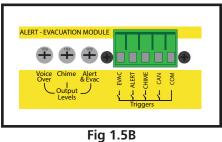
Use this trimpot adjustment to change the output level of the chime volume.

3 Alert and Evacuation Volume

Use this trimpot adjustment to change the output level of the alert and evacuation tone.

4 Alert, Evacuation, chime and cancel contacts

Use these contacts to trigger the chime tones, the alert tone, the evacuation tone and to cancel any of the tones once triggered. All tones & cancel function are operated by a closing contact to ground. This could be triggered via building fire indicator board, break glass alarm etc.



11g 1.5L

5 Stereo RCA input connectors

Connect these inputs (1-8) to the input audio sources such as a CD player etc. These inputs are converted to mono internally. Note. Inputs 1 &2 also have a line level XLR input. (Refer to section 7 over)

Overview

6 RCA input sensitivity DIP switches

These DIP switches are used to set the input sensitivity of the 8 auxiliary input sources. Each input can be configured for an input sensitivity of 0.3V or 0.7V. See fig 1.5B.

7 XLR line inputs

inputs 1 & 2 can be either RCA inputs or female XLR inputs.

8 XLR input phantom power settings

Phantom power can be applied to the XLR inputs. Refer to Fig 1.5A

Dip Switch 3 Settings			
Input 1	& 2 XLF	{	SW3
SW	ON	OFF	1234
	Phantom Power		
(1) Input 1	ON	OFF	ON
(2) Input 2	ON	OFF	
(3)	Not U	lsed	1234
(4)	Not U	sed	

Fig 1.5A

9 Male XLR balanced line output connectors

Connect these outputs (1-8) to the zone amplifiers. Use a 3 pin female XLR connector (pin 1 GND, pin 2 Cold, pin 3 Hot).

10 Optional Dip Switch Settings

Currently not used

11 Emergency input settings DIP switches

Change the sensitivity of the 3 pin emergency XLR from balanced mic level to balanced line level. Also selectes phantom power on or off. See fig 1.5C.

SW5			
1234	SW5	ON	OFF
011	1	Phantom	Phantom
ON		Power On	Power Off
	2	Mic Level	Line Level
1 2 3 4	Swite	ches 3 & 4 No	ot Used



12 Emergency microphone female 3 pin XLR socket

Use this input for emergency or "all call" paging. This has overall priority and goes to all zones. This input is suitable for connection to the output of a building EWIS system allowing remote paging and alert/evac tones to be transmitted on an "all call" basis. Sensitivity can be set to mic (0.3V) or line level (0.7V) using the DIP switch. See fig1.5C.

13 RJ45 connectors for preset plate or paging consoles

These RJ45 ports connect to the A 4481 zone paging consoles or A 4476 preset plate.

NOTE: A maximum of eight A 4481 mic consoles and a single A 4476 preset plate may be used at the same time. In this case only seven A 4475 zone wallplates can be used. The A 4476 will operate in any "Zone wall plate" or "Paging console" RJ45 port.

14 Emergency input Vox Level

Use this trimpot adjustment to change the vox level for the emergency mic input.

Aux Input S		-
DIP Switch S	Setting	S
SW1	ON	OFI
(1) Input 1	0.3V	0.7\
(2) Input 2	0.3V	0.7\
(3) Input 3	0.3V	0.7\
(4) Input 4	0.3V	0.7\
SW2	ON	OFF
(1) Input 5	0.3V	0.7\
(2) Input 6	0.3V	0.7\
(3) Input 7	0.3V	0.7\
(4) Input 8	0.3V	0.7

Fig 1.5B

15	Priority input Volume Use this trimpot adjustment to change the output level of the priority input.
16	Pririty input trigger Use this contact to trigger the priority input.
17	Priority Input RCA Connectors Connect this input to an input audio source such as telephone paging, or special event player such as the playing of the "ODE". This inputs is converted to mono internally.
18	Priority Input Vox Level Use this trimpot adjustment to change the vox level for the priority input.
19	Expansion In/Expansion Out RJ45 connectors. This is currently not used.
20	RJ45 connectors for zone wall plates These RJ45 ports connect to the A 4475 remote zone wallplates, if used.
21	USB keyboard connector Connects to a standard USB keyboard for programming the front panel LCD.
22	DC fuse (2A M205) This fuse protects the internal power supply. Replace with 2A rated fuse only.
23	Pluggable 24VDC power socket Connects to 24V DC power source via Euroblock screw terminals. Observe correct polarity when connecting.
24	Earth Lift switch

This switch is used to isolate the input earth from the chassis to help eliminate earth loops or hum.

25 240V AC power socket (Australian standard)

Connects to 240V AC mains power with the included IEC lead.

2.1 SETUP GUIDE

This is intended to be a quick setup for a minimal install. Section 3.0 will build on the initial setup and cover the installation of peripheral connections and more in depth detail on programming the unit. In this basic configuration we will use a setup in a bar as an example. The install requires 2 audio sources, a tuner and a dvd player. This audio will be fed to 4 different zones, the main bar, the beer garden, the restaurant, and the kitchen. All adjustments will be made from the front panel of the A 4480.

A programming template in PDF format is available to download from the Altronics website. This allows you to map your inputs, outputs, zone names, source names and presets before you commence programming. A printed copy is located at the end of operating manual (see section 9.0).

2.2 CONNECTING AUDIO SOURCES

Begin by connecting the audio sources. (see Fig 2.2A).

Use a dual RCA lead to connect the INPUT 1 on the A 4480 to the audio output sockets of the source eg: tuner.
 Use a dual RCA lead to connect the INPUT 2 on the A 4480 to the audio output sockets of the source eg: DVD player.

If more audio sources are required, connect them to inputs 3 -8 on the A 4480.

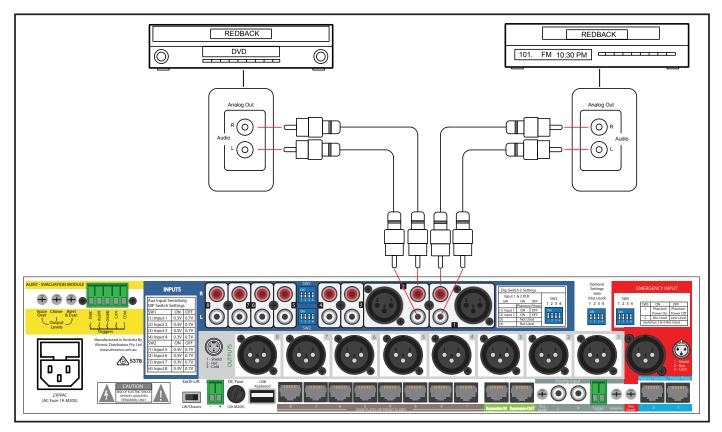


Fig 2.2A

2.3 CONNECTING OUTPUTS

The output sources are next to be connected. (see Fig 2.3A)

- 1 Use a balanced XLR lead to connect OUTPUT 1 on the A 4480 to the line input socket of the zone 1 amplifier. In this example, zone 1 is labelled as "main bar".
- 2 Use a balanced XLR lead to connect OUTPUT 2 on the A 4480 to the line input socket of the zone 2 amplifier. In this example, zone 1 is labelled as "beer garden".
- 3 Use a balanced XLR lead to connect OUTPUT 3 on the A 4480 to the line input socket of the zone 3 amplifier. In this example, zone 1 is labelled as "restaurant".
- 4 Use a balanced XLR lead to connect OUTPUT 4 on the A 4480 to the line input socket of the zone 4 amplifier. In this example, zone 1 is labelled as "kitchen".

If more output zones are required, connect them to outputs 5 to 8 on the A 4480.

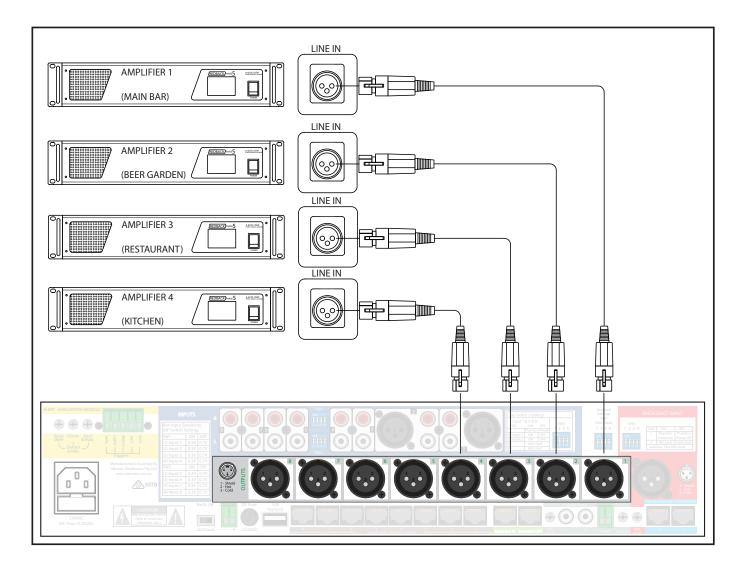


Fig 2.3A

2.4 CONNECTING POWER

Next, connect power to the unit. (see Fig 2.4A)

The A 4480 can be powered from either a 24V DC rated source or mains rated 220-240V AC @ 50Hz.

24V DC can be supplied via a 2 way pluggable terminal. The supply would need to be able to deliver a continuous 24V DC @ 2A. It is not recommended that the unit is continually powered in this manner. Rather the unit should be run of 220-240V AC via the supplied 3 pin mains lead. The 24V DC input should be connected to a backup supply which switches on in the event of mains power failure.

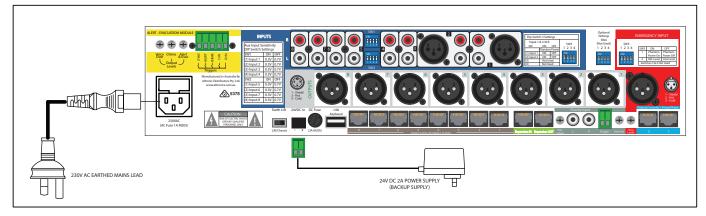


Fig 2.4A

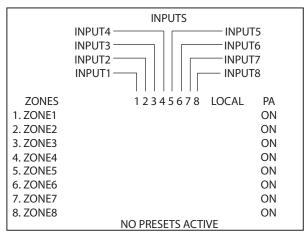
2.5 CONFIGURING THE INPUTS TO OUTPUTS/ZONES

Once the unit is switched on the title screen with the software version will momentarily appear. The unit will then go into a self check mode and search for any externally connected wall plates & paging consoles. Once the check is complete, the main screen appears. Before commencing any programming, ensure the A 4480 is unlocked. To unlock, press "confirm" and "cancel" buttons at the same time. The main screen is shown below in Fig 2.5A. The left side of the screen shows the output zones 1-8, while the input sources are displayed on the top of the screen.

There is also a local audio and paging console option shown which will not be discussed in this quick setup section. This will be covered in section 3.

Zone 1 refers to the zone 1 output which in our example was the main bar. Zone 2 refers to the beer garden and so on. To make these easier to remember the zone names can be labelled via the use of a keyboard. However this will not be covered here. Please refer to section 4.2 for more details.

The inputs work in the same manner. Input 1 in our example was the tuner and input 2 was the DVD player. Once again these can also be labelled.



2.5.1 Routing audio to a zone

In our example we have 2 input sources and 4 zones. Selecting which zone receives which audio is very simple. The buttons on the left side of the LCD are the zone selection buttons.(see Fig 2.5B)

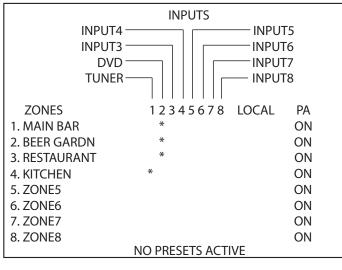
One Two Three Four Six Seven	REDBACK A 4480 8 X 8 Audio Switcher	Presets PA on/off Isolate Help Confirm Power
Eight)	Cancel Keyboard USB

Fig 2.5B

For each zone there are 8 possible inputs to select and the off position which is the default. Each time one of these zone selection buttons is pressed the next input source is routed to that particular zone. This is displayed on the screen by an "*". For instance in our example we want to route the DVD player (input 2) to the main bar (zone 1). Pressing zone selection button 1 twice will move the "*" 2 positions from the off position to input 2, thus routing the DVD player to zone 1. Continuing to press the zone 1 button will move the "*" through all the inputs and then to the off position where the "*" will no longer be visible.

By pressing the zone 2 selection button twice we can also route the DVD player to zone 2 and so on.

In the example below in Fig 2.5C (input 2) is routed to the main bar (zone 1), the beer garden (zone 2) and the restaurant (zone 3). While the tuner (input 1) is routed to the kitchen (zone 4).



2.6 ADJUSTING THE BASS, TREBLE AND INPUT VOLUMES

The system is now setup and ready to run.

The eight audio inputs all have separate bass, treble and volume controls, which are accessible on the front panel as shown in Fig 2.6A. These tamper proof controls need to be adjusted with a screwdriver and set to your desired levels. A signal present LED on each input provides instant feedback on the presence of audio from the input sources. A perspex cover is provided which can be screwed on to the front panel which covers these bass, treble and input volume pots to prevent tampering.

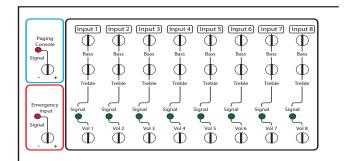


Fig 2.6A

2.7 ADJUSTING THE PAGING CONSOLE AND EMERGENCY INPUT VOLUMES

The emergency microphone and paging microphone controls are also shown in Fig 2.6a. The signal present leds indicate when a signal is present and the volume adjusts the audio level from these two microphones.

2.8 ADJUSTING THE ZONE VOLUMES

The 8 zones also each have volume controls which can be set to the desired levels on the front of the unit (see Fig 2.7A)

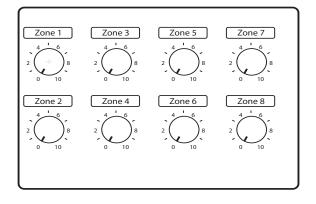


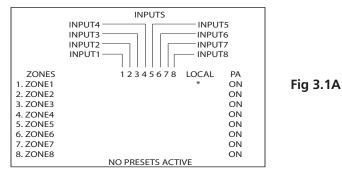
Fig 2.7A

3.0 LOCAL AUDIO & PAGING CONSOLE OPTIONS

3.1 LOCAL AUDIO CONFIGURATION

The local audio configuration on the LCD indicates zones that have a local audio source connected via the A 4478 local audio wall plate and the A 4490 zone wall plate (see section 5.2 and 5.4 for connection details).

If a local audio source is detected on a zone wall plate it is displayed on the LCD via an asterisk (*) in the local section. For example, if zone 1 had an A 4478 fitted with a live audio source connected, the system would detect the presence and display an "*" in zone 1 as shown in fig 3.1A. This automatically overrides any input source selected via the front panel.



3.2 PAGING CONSOLE CONFIGURATION

The paging console configuration on the LCD is used to display which zones are currently accessible by the paging consoles. All output zones can be programmed to be "locked out" from paging. If a zone is locked out, general paging will not be routed to that zone. However emergency paging will override locked out zones and page all output zones. An example may be an output zone such as a carpark. General paging may not be required but emergency paging would still be required.

3.3 CONFIGURING THE PAGING CONSOLE LOCKOUT ON THE LCD

To configure a zone to be locked out from general paging return to the main screen, if not already there. Press the PA on/ off button. The screen shown below in fig 3.1B should appear.

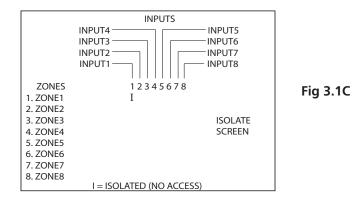
	PA MIC TO ZONE SCREEN	
ZONES		
1 ZONE1	(ON)	
1 ZONE2	(ON)	
1 ZONE3	(ON)	
1 ZONE4	(ON)	Fig 3.1B
1 ZONE5	(ON)	J S
1 ZONE6	(ON)	
1 ZONE7	(ON)	
1 ZONE8	(ON)	
Use 1 to 8 to tu	urn ZONES ON or OFF	
CONFIRM or C	ANCEL button will EXIT	

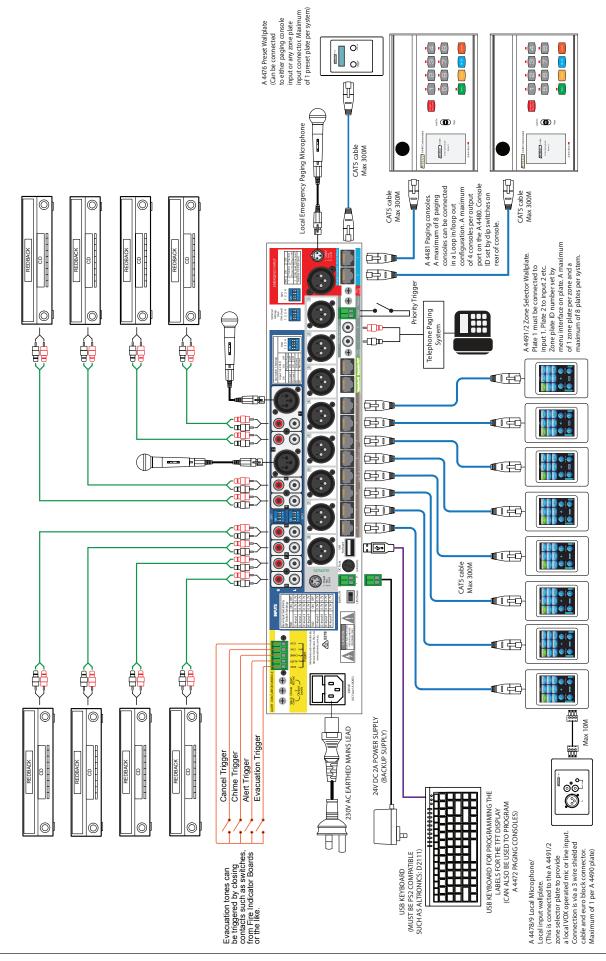
To lock a zone out from the general paging, use the buttons labelled 1-8 left of the LCD. Pressing button 1 will toggle zone 1 ON or OFF depending on its current status. Pressing button 2 will toggle zone 2 ON or OFF etc. If the zone is left in the OFF state, paging to this zone will now be locked out. Note: this lock out will be overriden by emergency paging.

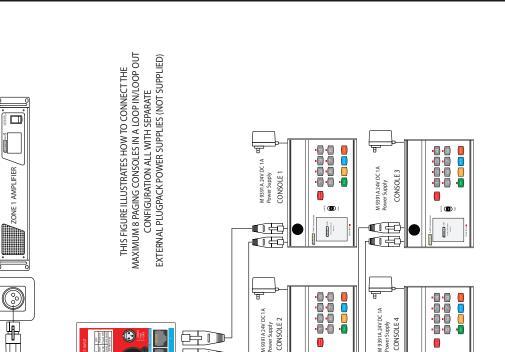
3.4 CONFIGURING THE PROGRAM ISOLATE ON THE LCD

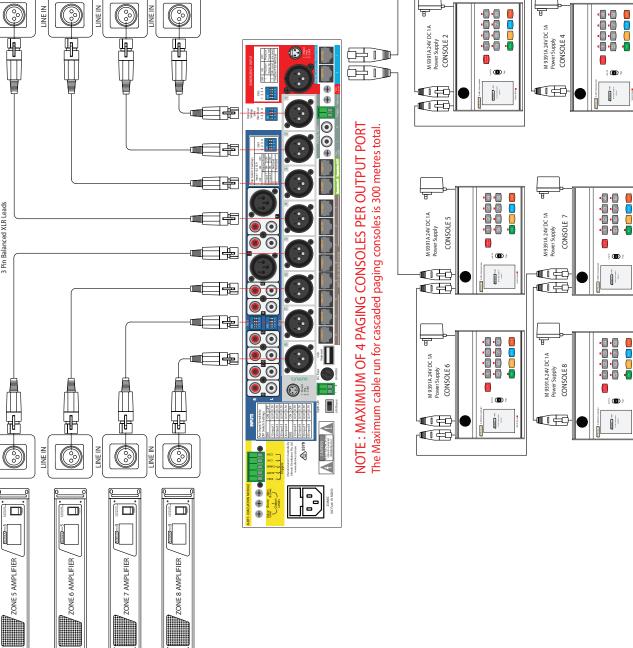
The A 4480 can be setup to isolate selected input sources from a zone, so these inputs are isolated or BLOCKED for that zone. Examples might include music being isolated or blocked to the "car park" or common areas.

To isolate an input from a zone, press the isolate button on the front of the A 4480. The screen shown in Fig3.1C will appear. In this example input 1 is isolated from zone1 as indicated by the letter "I". To isolate the inputs use the buttons 1-8 on the left of the screen to select the zone and then continue to press the selected number to scroll through the inputs. A circle on the screen indicates the cursor position. Once in position, press the isolate button and the cursor will change to an "I". The corresponding input is now isolated from that zone. Pressing the isolate button again will turn off the isolate.









ZONE 2 AMPLIFIER

Ŵ

STRAD

None of Contract o

ZONE 4 AMPLIFIER

Ì.

3 Pin Balanced XLR Leads

INF IN

ZONE 5 AMPLIFIER

LINE IN

S-MONROLE

E10020-155

ZONE 3 AMPLIFIER

4.0 EMERGENCY OVERRIDES & PRIORITIES

4.1 PRIORITIES

There are 5 levels of priority in the A 4480.

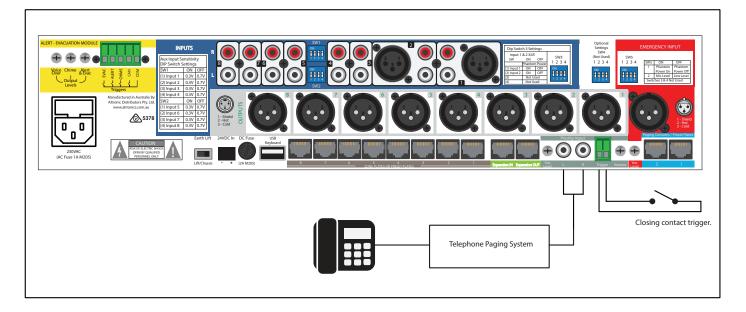
- **Level 1** The **emergency microphone** is a hard wired microphone which connects to the 3 pin XLR connection as shown in the full connection diagram. This has top priority and will override all other inputs. The gain of this microphone is set by the screwdriver adjust controls on the front of the A 4480. A signal presence LED indicates signal being received from the microphone.
- Level 2 The A 4481 paging console (optional) has an emergency paging function which will override all other inputs except the emergency microphone. See section 5.1 for details. The gain of this microphone is set by the screw driver adjust controls on the front of the A 4480. A signal presence LED indicates signal being received from the microphone.

The **priority input** operates on the same priority level as the A 4481 paging consoles. (See section 5.2 for details) The priority input and the paging consoles work on a First In Best Dressed basis.

- **Level 3** The **alert/evacuation tones** provide the next level of priority and will override all inputs except the emergency paging microphone, the paging consoles (if fitted) when used in emergency paging mode and the priority input.
- **Level 4** The A 4481 paging console when operating in standard paging mode has the next level or priority and will over ride all local zone inputs and line inputs.
- Level 5 The A 4478 local input wallplate (optional) will override audio routed to the same zone the A 4478 is connected to.
 Input audio sources 1-8 have the lowest priority and will not override anything.

4.2 PRIORITY INPUT

The priority input can be triggered via a closing contact or a vox operated audio input. This makes it useful for applications such as telephone paging or the playing of the ODE in RSL clubs when used in conjunction with a timer.





The priority or All Call input operates on the same priority level as the A 4481 paging consoles. They all work on a First In Best Dressed basis. This will over-ride all other inputs except the emergency microphone. The output level of the priority input can be adjusted vis the trimpot on the rear of the A 4480. The audio input has a trimpot adjustable vox input sensitivity.

4.3 LABELLING OF INPUT SOURCES, ZONES & PRESETS

The input audio sources and the output zones can all be labelled using a USB keyboard. Audio source examples might include CD Player, Radio, etc. Output zone examples might include Beer Garden, Foyer, Conf. Room etc. A maximum of ten characters is available for each label.

4.3.1 How to label input sources and zones via USB keyboard

Plug a standard USB keyboard into the USB socket on either the front or rear of the A 4480. The keyboard will be automatically detected and navigate the user to the label input screen.

There are 3 options available, labelling the input sources, labelling the output zones and labelling the presets. All labels have a maximum of 10 characters consisting of the numbers 0-9 and the letters a-z. To use capital letters hold down the shift key when typing.

To label the input sources

Press the letter "i" on the keyboard. This will navigate the user to the "label inputs screen". Press the numbers 1-8 on the keyboard to select the input to label. Type in the label required and press return. Press escape to exit back to the main label input screen.

To label the output zones

Press the letter "z" on the keyboard. This will navigate the user to the "label zones screen". Press the numbers 1-8 on the keyboard to select the zone to label. Type in the label required and press return. Press escape to exit back to the main label input screen.

To label the presets

Press the letter "p" on the keyboard. This will navigate the user to the "label presets screen". Press the numbers 1-4 on the keyboard to select the preset to label. Type in the label required and press return. Press escape to exit back to the main label input screen.

Press escape on the keyboard or the confirm or cancel buttons on the front of the A 4480 to exit the labelling menu.

Once the label input screen is exited the unit will perform a system update. This will update all connected wall plates and paging consoles with the new labels. Should you make a mistake or wish to re-label a source, zone or preset, repeat the steps above. Once in the respective labelling screen, the original name may be overwritten.

4.4 PRESETS

The configurations of the input/output matrix can be saved into memory as presets which can be called up at any time. There are 4 user defined presets, a default preset and last setting preset. Before commencing preset programming, ensure the A 4480 is unlocked. To unlock, press "confirm" and "cancel" buttons at the same time.

4.4.1 User defined presets (1-4)

The A 4480 has 4 user defined presets which the user programs to save frequently used configurations. The user defined presets can be labelled via the use of a USB keyboard. This is covered in section 4.2. For instance you may set up the matrix for a wedding. Labelling a preset as "Wedding" would provide an easily recognisable label to be recalled for any wedding functions. Presets numbered 1-4 can be labelled but preset 5 which is the default preset cannot.

4.4.2 Default preset

The default preset is designed to be used as the "fall back" setting. For example, if the staff have been making changes to the unit and you need to return it to its standard setting, then the default setting could be used. This might be used as your everyday setup eg: the unit may be setup in a bar which caters to functions. The 4 presets may be all used for 1-"Tues Bingo", 2- "Sat Night", 3- "Weddings", 4- "Band night" and a preset is required for the usual everyday setting of the venue. The default setting could be set to this everyday configuration.

4.4.3 Last setting preset

The "last setting" preset or "previous" preset is an automatically saved preset which saves the current configuration before loading a preset i.e. any time a preset is loaded, the settings before it was loaded will be saved into the "last setting" preset. This is particularly useful if the user wants to return to the setup before a preset was loaded, eg: maybe Tuesday night is Bingo night and this has been saved into one of the 4 user defined presets. Before the bingo begins the venue could be setup in any sort of configuration, which is not necessarily going to be known.

Tuesday night comes around and the Bingo preset would be loaded for the bingo. Without the "last setting" preset the previous setup would be lost. The bingo night comes and goes and the previous setup can now be loaded by selecting the "previous" preset in the preset screen.

4.4.4 Setting up a user defined preset

To set up a user defined preset, configure the audio sources and output zones as per section 2.5. Once you are satisfied with your selections, press the "preset" button. The "preset save and retrieve" screen will be displayed. To save the preset, hold down one of the buttons numbered 1 to 5 for 2-3 seconds until the unit confirms your selection. Remember, presets 1-4 are user defined (these can be custom labelled), whilst preset 5 is the initial default setting.

4.4.4 Retrieving/loading a preset

To retrieve a preset from the main screen. Press the preset button and then one of the buttons numbered 1 to 6. Presets 1 to 4 being "user defined", 5 being "default" and 6 being "last setting". Once the preset is loaded the label will appear on the LCD in the lower left corner.

Presets may also be loaded remotely via the A 4476 wall plate. For more details see section 5.4.

4.4.5 Modifying a preset

If you wish to change the configuration of a preset, firstly load the preset you wish to change (as per 4.3.4). Modify any source & output zone selections you require. Once you are satisfied with your selections, press the "preset" button. The "preset save and retrieve" screen will be displayed. To save the new settings, hold down one of the preset buttons (1 to 5) for 2-3 seconds until the unit confirms your selection. Any settings previously stored in the selected preset will be overwritten with the new settings.

4.5 BUTTON LOCKOUT FEATURE

The buttons on the front of the unit can be locked out to stop tampering. To activate or de-activate this feature hold down the "confirm" and "cancel" buttons simultaneously. Please note: When a preset is selected the unit will automatically enable the button lockout feature. Preset button is not affected by the button lockout feature.

4.6 MASTER RESET FUNCTION

To reset all settings to factory default plug in a USB keyboard. Press "R" on the keyboard, this will navigate to the "reset" screen. The screen will prompt you with "Are you sure you wish to erase ALL settings?". Select "Y" for Yes, "N" for No. This will erase all settings, including input labels, zone labels, input source settings and presets.

5.0 PERIPHERAL CONNECTIONS

5.1 A 4481 PAGING CONSOLE

The A 4481 paging console is an extremely flexible addition to the A 4480 audio switcher.

The consoles can be used for multi zone paging with the facitily to store and recall multiple zones to a single button. The recall functions can also be labelled via a USB keyboard which can be plugged into the rear of the unit. (see section 5.1.4) The labels will then be displayed on the highly functional and attractive LCD. An example might be a label "sales".

An emergency paging over-ride facility is accessed by a combination of an illuminated push button switch and a PTT (push to talk) switch. This combination removes the possibliity of accidentally activating the emergency over-ride facility. When activated, emergency paging will be forced through to all zones regardless of any zones which were set to be locked out.

A maximum of 8 paging consoles can be connected to the A 4480 at the same time. These work on a "first in, best dressed" arrangement. The consoles can be cascaded together or wired back to the A 4480 (see section 5.1.3 to 5.1.5 for details).

Each unit must be assigned an ID number through DIP switch settings on the rear of the unit.

A pre-announcement chime is available at the paging console and through the PA system. Both of these are set by DIP switches on the rear of the unit.

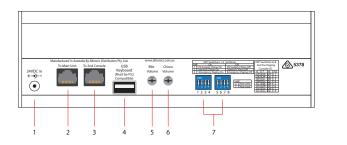


Fig 5.1A

1 24V DC connector

2.1mm DC jack (centre pin positive).

- 2 **RJ45 connector** For connection back to the A 4480.
- 3 Cascade paging connector

Secondary RJ45 socket for cascading a second console.

4 USB keyboard input.

Use the keyboard to record labels for saved store functions.

5 Microphone volume

Use this volume to adjust the microphone level.

6 Chime volume

Use this volume to adjust the chime level.

7 DIP switch options

These switches set the chime and emergency paging on or off and also assign a location number to the console.



5.1.1 Features

- Multi zone paging.
- Zone lock out facility.
- Recall multiple zones with a single button press.
- Keyboard entry labelling of recall zones.
- LCD for indicating zone selections.
- Pre-announcement chime.
- Emergency override paging to all zones.

5.1.2 DIP Switch Settings

A series of DIP switches which are accessed on the rear of the unit provide a number of

options. Table 5.1A shows the settings available.

DIP switch 1 sets the PA system chime on or off.

DIP switch 2 sets the internal chime on or off.

DIP switch 3 sets the emergency paging on or off

DIP switches 4&5 are not used.

DIP switches 6-8 select the ID number for the console.

Table 5.1a shows the ID settings.

A maximum number of 8 consoles can be connected to the A 4480 audio switcher.

Table 5.1A shows the ID settings available.

5.1.3 Connecting the paging consoles

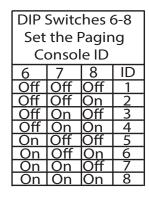
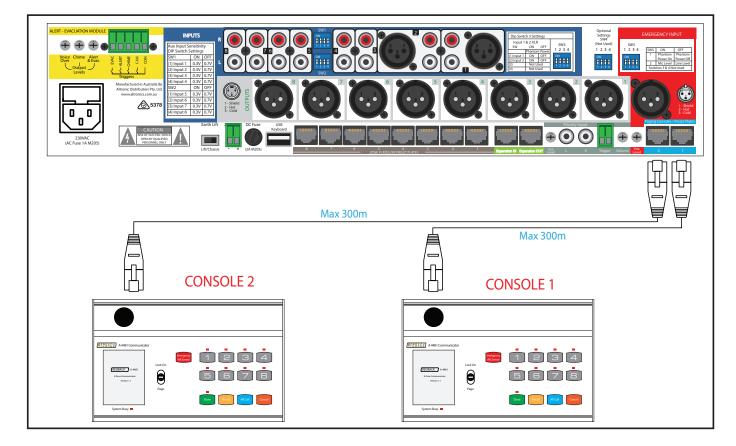


Table 5.1A

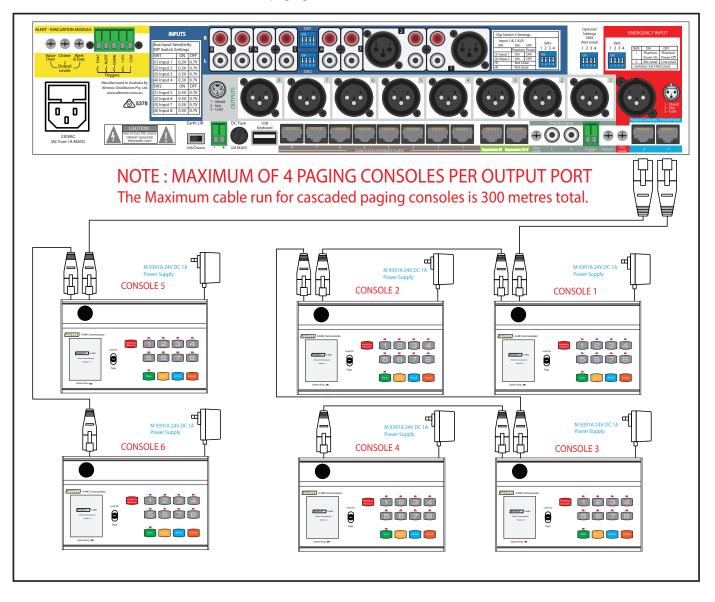


The consoles are connected to the A 4480 via standard Cat5e cabling as shown in Fig 5.1B. The maximum distance between the A 4480 and a paging console is 300m. Note that each paging console must be assigned an ID number before operation (see section 5.1.2 DIP switch settings).

A maximum of eight consoles can be connected at one time but only used in certain configurations. There are two RJ45 ports on the back of the A 4480 which can be used to connect the A 4481 paging consoles. Each port can accomodate a maximum of 4 paging consoles. Fig 5.1B shows how to connect one paging console per RJ45 port.

5.1.4 Cascading the paging consoles

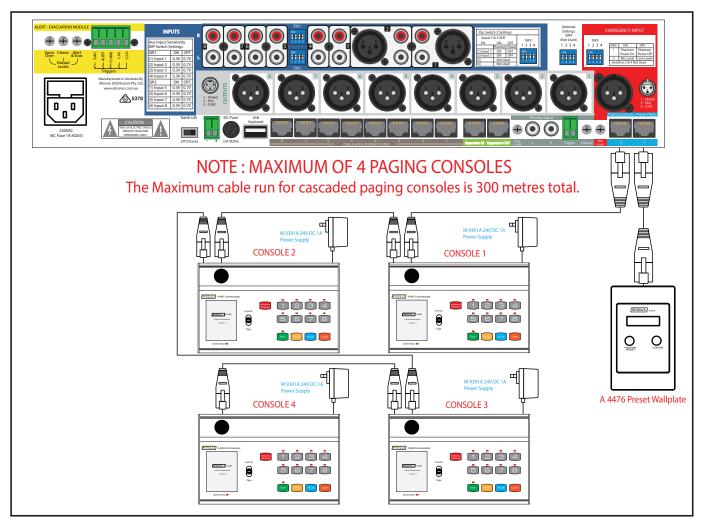
If more than 2 paging consoles are required the consoles can be cascaded together with the addition of external power supplies. Fig 5.1C shows how to connect six paging consoles at once. In this fig consoles 1-4 are connected to Port 1 and consoles 5-6 are connected to Port 2. This could also be configured for 3 consoles per port. Please note: A maximum of 4 paging consoles can be connected per RJ45 port on the A 4480. Each additional paging console has a dedicated power supply and the total cat5 cable run can be no longer than 300m. I.e the maximum length of cable (after all paging consoles have been cascaded) to the furthest paging console is 300 metres.



Peripheral Connections

5.1.5 Cascading the paging consoles with 8 zone wallplates and a preset plate.

The situation may arise where all 8 zone wall plates, a preset wallplate and two or more paging consoles are required. In this case the configuration shown in Fig 5.1D may be used. In this figure four paging consoles have been connected in cascade to RJ45 port 2. This is the maximum number of paging consoles allowed in this configuration. The A 4476 preset wallplate may be connected to either paging console input or any zone wallplate input. Note that each paging console must be assigned an ID number before operation (see 5.1.2 DIP switch 4). In cascade operation, each A 4481 paging console must be powered by individual 24V DC power supplies (Altronics part: M 9391A).





5.1.6 Multi-zone paging

Paging is achieved by pressing the numbered button of the zone required. The button will illuminate. Hold down the page switch and speak into the microphone. Note: a zone with a fast flashing LED has general paging blocked. To page to multiple zones, press the buttons for the desired zones. Multiple buttons will illuminate. Hold down the page switch and speak into the microphone.

5.1.7 Zone lock out

General paging can be blocked to any zones either at the A 4480 main unit or via the paging consoles. To block paging to a zone from the A 4481, hold down the desired zone button until a message on the LCD indicates the zone is blocked out. Release the button to resume. To unlock the zone, repeat the procedure.

5.1.8 Store & recall groups of zones

Two function keys labelled store and recall may be used to program groups of zones into a single number recall, just as your telephone might have a "quick dial" memory function.

To store a group of zones

First press the store button on the paging console. Then select the zones you wish to group together. Once the desired zones are selected, press store again. You can now assign a group number using the numbered buttons (1 to 8). If you have previously stored a group of zones in the memory, these buttons will illuminate. Press store to complete the process.

Note that you may select one of the previously stored group numbers, however this will overwrite the existing stored zone selections.

The screen will now prompt you to label your stored group of zones. This allows quick visual feedback to the user when selecting groups of zones, examples of labels might include: All W/house, Bar&Lobby, Sales&Yard etc. Plug in a standard USB PS2 compatible keyboard (Altronics D 2111) into the rear of the A 4481 paging console and type in your desired label. The maximum label length is 10 characters. Press backspace to delete letters. Hold down the shift key for capital letters. Press return (enter) when finished.

If a zone label is not required, press cancel to complete the process of storing a group of zones. Note: if the keyboard is not operational, it may need to be unplugged and connected again.

To recall zones

Press the recall button. Any buttons which are programmed with groups of zones will illuminate. If any of these groups were given a label then these will show on the LCD.

Select one of the illuminated buttons to recall. The zones stored in this group will then illuminate automatically. Hold down the page (PTT) switch and speak into the microphone. Press cancel when finished or the unit will time out automatically after ~15 seconds.

5.1.9 Emergency Override

The A 4481 is fitted with an emergency paging override which routes paging to all zones even those which are blocked. To initiate the emergency paging press the red emergency paging button. The LCD will display the image shown below and all the zone buttons will illuminate to show that all zones will be paged.



Fig 5.1E

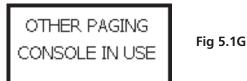
At this stage paging override hasn't been activated. To activate emergency paging hold down the page (PTT) switch and speak into the microphone. If the pre-annoucement chime DIP switch is set on the chime will sound. The LCD will display the image shown below.



Fig 5.1F

5.1.10 Paging Console Busy

If the system has two A 4481 paging consoles connected there will be times when both units may be needed at the same time. If one of the paging consoles is in use the second console will be notified and the busy LED will illuminate and the LCD will display the image shown below.



5.2 A 4491/2 MUSIC SOURCE SELECTOR WALL PLATES

The A 4491and A 4492 wall plates allow remote selection of the zone's input audio source and volume level. In addition, when connected to the A 4478 or A 4479 local zone input wallplate, it allows the use of a local signal source, such as a wired mic, radio mic or aux source, which VOX mutes the selected input from the A 4480. The LCD displays the zone name, the input sources and zone and local input volume levels.

Note: The volume controls only adjust the volume of the 8 aux input sources, plus the local input (when used). General and emergency paging from the A 4480 Audio Switcher will override these volume settings.





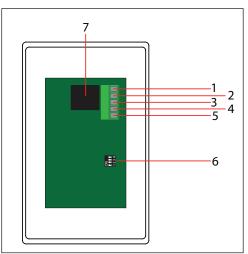


Fig 5.2 Rear of plate

A 4491

A 4492

A 4491/2 Wiring Connections

- **1** Positive audio connection from A 4478/79 wall plate.
- 2 Negative audio connection from A 4478/79 wall plate.
- **3** Ground audio connection from A 4478/79 wall plate.
- 4 Not Used
- 5 Not USed
- **6** DIP Switch (see DIP switch settings for more details).
- **7** RJ45 connection. (Cat5e provides power to the wallplate and routes local audio (fed from A 4478/79) back to the A 4480.)

A five way euro block connector is provided for connection to the A 4478 wall plate. But only three of the connections are required as listed above. It is advisable to use shielded cable for this connection.

5.2.1 Features

- Remote selection of input audio source
- Volume control of local input
- Personal Identification Number 2 stage Lockout Function
- DIP switch selectable Menu Lockout Function
- Provision for input of local microphone or
- line level audio via A 4478 or A 4479 wall plate

5.2.2 Menu Accessed Features

- Enable/Disable Local Input
- Vox Delay Adjustment
- Backlight Timeout Adjustment
- Change Zone (Wall plate ID)
- Vox Sensitivity Level Adjustment
- Disable Input Sources
- Change Pin Number
- Lock/Unlock Screen

- Volume control of zone input
- Mute function
- Zone Lockout
- Cat5e connection to A 4480
- Powered from the A 4480

5.2.3 DIP Switch Settings

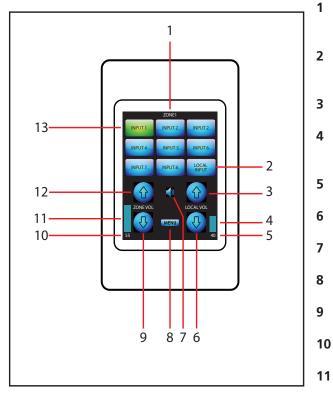
On the rear of the wall plate as shown in Fig 5.2 there are four DIP switches which setup some of the plates options.

12

ON - PIN is required for access to the menu function.
OFF - PIN not required
ON - Backlight toggles on and off when buttons on screen pressed.
OFF- Backlight doesn't change when buttons pressed.
Not Used
Not Used

5.2.4 Screen Layout Guide

Fig 5.3 shows the layout of the A 4491/92 LCD.





Zone Label

This is the label set by the A 4480 used to identify the zone (e.g. Office).

Local Input Button Press this button to activate the local input. The button will change to red when active. Local input volume up button Press this button to increase the local input volume. Local input volume bar graph indicator This bar provides a quick visual indicator of the local input volume. Local input volume indicator The number signifies the actual local input volume level. Local input volume down button Press this button to decrease the local input volume. Sound indicator button Press this button to mute/enable the sound. Menu button Use this button to enter the Menu functions. Zone volume down button Press this button to decrease the zone volume. Zone volume indicator The number signifies the actual zone volume level. Zone volume bar graph indicator

This bar provides a quick visual indicator of the zone volume.

Zone volume up button Press this button to increase the zone volume.

13 Input selection buttons 1-8 Use these buttons to select the desired input source.

5.2.5 Navigating The Menu

The menu button provides access to a host of options which are listed below.

Note : Access to the Menu can be restricted to only be available with a Personal Identification Number (PIN). This can be activated by setting DIP Switch 1 to "ON" (See DIP settings).

1) Local Mic On/Off

The local input from the optional A 4478/79 wall plate can be enabled/disabled. Press the button and follow the prompts to disable/hide the local input button and volume controls. Once hidden the local input icons will be greyed out. They are no longer accessible from the main screen. To enable/show the local input press the button and follow the prompts.

2) Change Pin Number

When DIP switch 1 is set to "ON" or if the plate is locked, a Personal Identification Number (PIN) is required to access the Menu function. The pin number can be changed by pressing this button and following the prompts.

3) Change Zone (Wall plate ID)

Use this option to set the wall plate ID. This must be set to match the RJ45 port connection on the rear of the A 4480.

4) Backlight Timeout

The time the backlight remains on after the screen has been touched can be adjusted. The time can be adjusted between 0 and 600 seconds. Setting the time to zero keeps the backlight on continually. Set the time to 1 sec and the backlight will turn off after 1 sec etc.

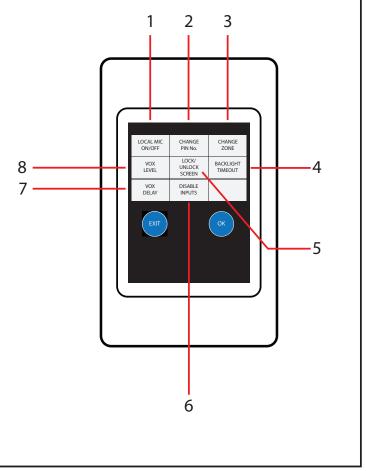


Fig 5. A 4491/92 Menu Screen

5) Lock/Unlock Screen

There are two levels of user lockout available.

The first level locks the inputs so that the input source cannot be changed by pressing the input buttons on the LCD. Note : The volume and mute buttons are still accessible at this lockout level.

The second level locks out the entire wall plate so that none of the buttons function.

Press the Lock/Unlock Screen button and follow the prompts. Note: To unlock the plate after locking the first level, the user will have to proceed to the Lock Entire plate function and then have access to the Unlock function.

6) Disable Inputs

By using this function any of the eight input sources can be disbaled, so that they are not available to the zone. Press the Disable Inputs button and then highlight the zones to be disabled. Once the inputs are disabled the buttons will be greyed out on the LCD.

7) Vox Delay

The amount of time the VOX delay is active can be adjusted from 0 to 30 seconds in 1 sec increments. Press the VOX Delay button and follow the prompts.

8) Vox Sensitivity Level

The vox sensitivity of the local input can be set here. The VOX sensitivity can be set between 1 and 99 with 99 being the most sensitive. Press the VOX Sensitivity Level button and follow the prompts.

5.3 A 4478/9 LOCAL MICROPHONE/LINE INPUT WALL PLATES

The A 4478/9 connects to the A 4491/2 audio source selector plates to provide the facility to access a local microphone or audio source in the same zone. Examples might include a handheld microphone, laptop or MP3 player. This audio signal is fed into the A 4490 wallplate where it overrides the wallplates current audio source selection from the A 4480 via a VOX circuit.

This new status is displayed on the main screen of the A 4480 by an "*" in the local input brackets.









A 4478/9 Connections

- **1** Microphone ground connection.
- 2 Microphpone negative connection.
- **3** Microphone positive connection.

5.3.1 Features

- Microphone XLR input
- Dual RCA input
- 3.5mm jack input. Note: The RCA and 3.5mm jack input are mixed together internally.

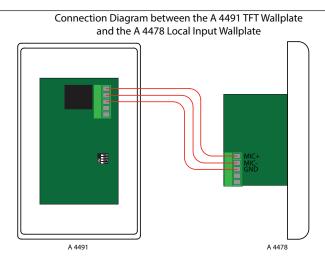
5.3.2 Connections

Audio is routed back to the A 4491/2 zone wallplates by connection of twin shielded audio cable (such as Altronics W 3028) to the euroblocks on the rear of both wall plates.

Fig 5.3

5.3.3 Connecting the A 4478/79 local input wall plates to the A 4491/92 Zone wall plates.

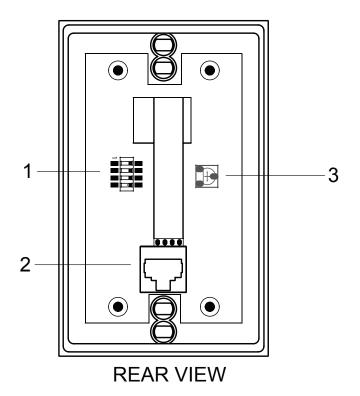
Each A 4491/92 remote zone plate can have a maximum of one A 4478 or A 4479 local input plate connected, to provide a local audio override of the zone. Both plates have a five way euro block connector used for this purpose. It is advisable to use shielded cable for this connection. NOTE : Only three of the connections are required as shown in Fig5.3.



5.4 A 4476 PRESET SELECTOR WALL PLATE

The A 4476 wallplate is used to provide local access to presets programmed into the A 4480. The presets are displayed on the LCD and can be cycled through by pressing the program preset button. The A 4476 may be connected to either paging console input or any zone wallplate input on the A 4480.





A 4476 Connections

- 1 Dip Switch Settings
 - Do not adjust. leave in default setting.
- 2 RJ45 Connection
- Cat5e provides power to the wallplate and routes preset information to the A 4480
- 3 Do not adjust.

5.4.1 Features

- Remote preset selection
- Cat5e connection
- LCD indicates presets available

5.4.2 DIP Switch Settings

In the current version of the A 4476, the DIP settings are not required for setup. Leave in default setting.

6.0 TROUBLE SHOOTING

6.1 SYMPTOMS AND REMEDIES

SYMPTOMS	REMEDIES
Signal presence leds all come on	Check internal fuses
Keyboard not detected	Remove & reinsert keyboard, try another keyboard Turn A 4480 off and repeat setup
None of the buttons work	The unit may be locked. Hold down confirm & cancel buttons to unlock (and lock) the unit. See section 4.4.
Emergency Mic keeps triggering	Make sure the emergency mic is turned off when not in use.

6.1.1 Installation of replacement microprocessor card

There may come a time when software updates are required and this will require the replacement of the microprocessor card which is located inside the unit. The card can be replaced by observing the following procedure.

- 1. Remove power from the unit.
- 2. Remove the lid.
- 3. The microprocessor card is located on the main board as shown in fig 6.1A. Remove the board, taking care not to touch the microprocessor itself. Note: the board may be difficult to pull out.
- 4. Insert the new microprocessor card taking note of the orientation.
- 5. Send the replaced card back to your nearest Altronics branch.

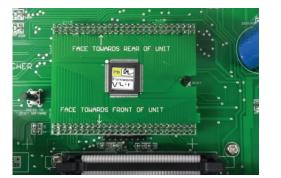


Fig 6.1A

6.1.2 RJ45 cabling configuration for system components (586A 'Straight through')

System components are connected using "pin to pin" configuration RJ45 data cabling as shown in fig 6.1B. When installing ensure all connections are verified

with a LAN cable tester before switching any system component on.

Failure to follow the correct wiring configuration may result in damage to system components.

586A Straight Through	1 TX+		1 TX+ 2 TX- 3 RX +
Straight Through (both ends)	4 5		4
Pins Face Upwards	6 RX-		6 RX-
l	8	Fig 6.1B	δ

7.0 HELP

7.1 HELP SCREENS

Pressing the help button on any screen will provide a quick guide to the selected option/screen. The following is a transcript of each help option available on the A 4480.

7.1.1 Main Screen Help Page

This screen sets the input/output matrix. Labels on the left are the output zones. Labels on the top are the input sources. Pressing the zone buttons will change the input to that zone eg: pressing button 1 will change the input to zone 1. Continuing to press button 1 will cycle through all the inputs to the OFF position, then back to input 1 and so on.

The paging console settings shown on the right of the LCD are covered in the PA ON/OFF help page.

7.1.2 Preset Help Page

CREATE A PRESET

To create a preset, set your input to output configuration on the main screen. Press preset button to enter preset page. To save your settings into preset 1 hold button 1 on the left until told to let go. To save preset 2, repeat with button 2 etc. **LOAD A PRESET**

To load a preset, press button 1 to load preset 1. Press button 2 to load preset 2.

LABEL A PRESET

To label a preset, exit this screen and plug in keyboard. Follow the prompts.

7.1.3 PA ON/OFF Help Page

The PA microphone can be disabled from a zone ie: paging will be blocked to that zone if it is set to OFF. To toggle the PA ON or OFF to a zone, press the button number for the zone eg: if you want to toggle zone 1 ON or OFF, press button 1.

8.0 SPECIFICATIONS

A 4480 Control Unit

Wallplate / paging cor Data transmission: Front panel controls:	Cat5e cabling max 300m Individual output level
	controls, input bass, treble & level controls, paging mic level control emergency mic level control, zone selection buttons
Rear panel controls:	Voiceover output level, chime output level, alert & evac output level, earth lift switch, emergency mic level, emergency mic vox level, priority output level, priority vox level
	Dual stereo RCA's 0.3/0.7V
	2): 3 pin XLR with phantom power
Outputs (1-8):	3 pin XLR balanced line
Emergency mic input:	3 pin XLR balanced line
Priority input:	Dual steroe RCA's
Other inputs: USB key Power:	/board (type A socket front & rear)
	240V AC / 24V DC
Power connection (24)	-
Power connection (24)	/ DC): 2.1mm DC socket / Euroblock terminal
Protection (AC): Protection (DC): Dimensions: Weight:	500mA M205 2A M205 482W x 152D x 88H mm 4kg

A 4481 Paging Console

Output connection: Data transmission: Front panel controls:		2 x RJ45 8P8C Cat5e cabling max 300m election (1-8), store, recall, cancel, emergency paging, tch
Rear panel controls: C	hime out	tput level, mic output level
Other inputs:		USB keyboard (type A)
Mic frequency response	ie:	100Hz - 10kHz
Mic Sensitivity:		-76dB ±3dB
Mic Polar pattern:		Cardioid (unidirectional)
Power connection (24)	/ DC):	Euroblock terminal
Mic gooseneck:		325mm
Dimensions:		210W x 110D x 55H mm
		(excluding gooseneck)
Weight:		1.3kg

A 4491/2 Music Source Selector Wallplate

Output connec	tion:	RJ45 8P8C
Data transmiss	ion:	Cat5e cabling max 300m
Front panel co	ntrols:	Local input level control, zone
		source level control, source
		selector, confirm button
Wallplate:		Altronics Dual Cover
Power:	Powere	d by A 4480 over Cat5e cable.

A 4476 Preset Selector Wallplate

Output connection	RJ45 8P8C
Data transmission:	Cat5e cabling max 300m
Front panel contro	ls: Program preset, confirm button
Power:	Powered by A 4480 over Cat5e cable.

A 4478/9 Local Mic/Line Input Wallplate

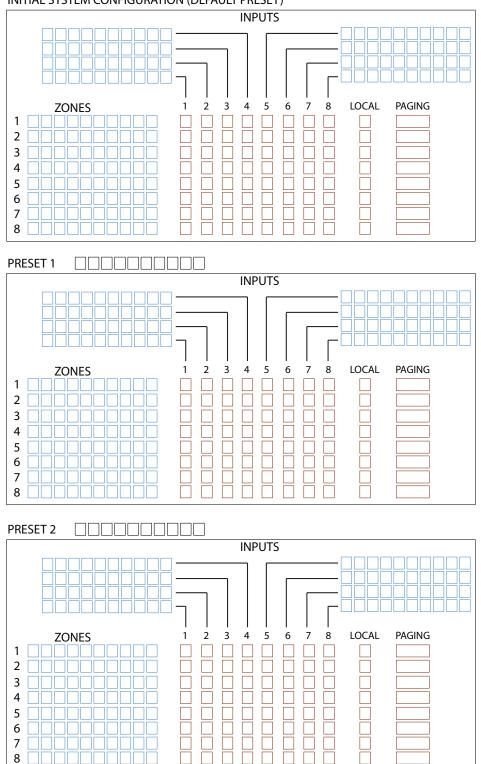
Inputs:	3 pin XL	R balanced line, Dual stereo
		RCA's,3.5mm stereo jack
Output connect	ion:	Screw terminal connection
Signal transmiss	sion:	twin shielded audio cable
		(connects to A 4491/2)
Power:	Powe	ered by A 4480 over Cat5e cable.

9.0 PROGRAMMING SHEETS

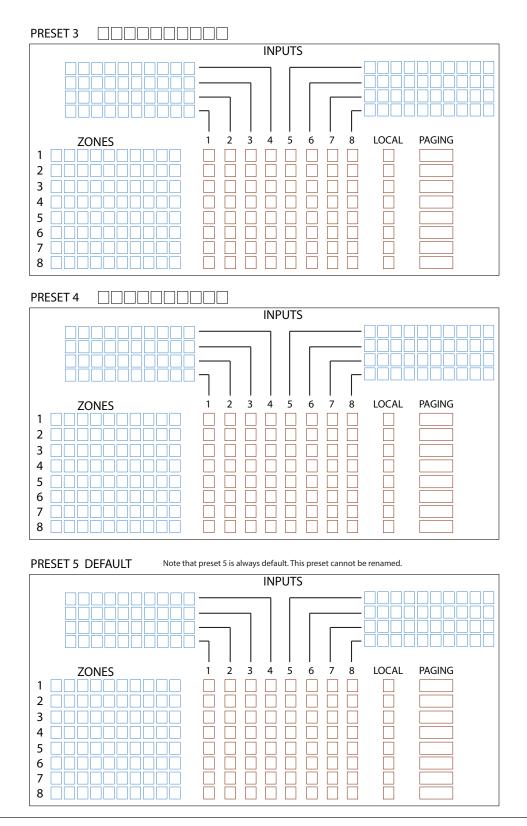
9.1 A 4480 Programming Sheet

Enter your preset configurations, zone names and source names. Note that zone and audio source names must be the same on all presets.

Max 10 characters per zone/source name. Retain for your records. A PDF form version of this is available for download on the A 4480 product page at www.altronics.com.au.



INITIAL SYSTEM CONFIGURATION (DEFAULT PRESET)

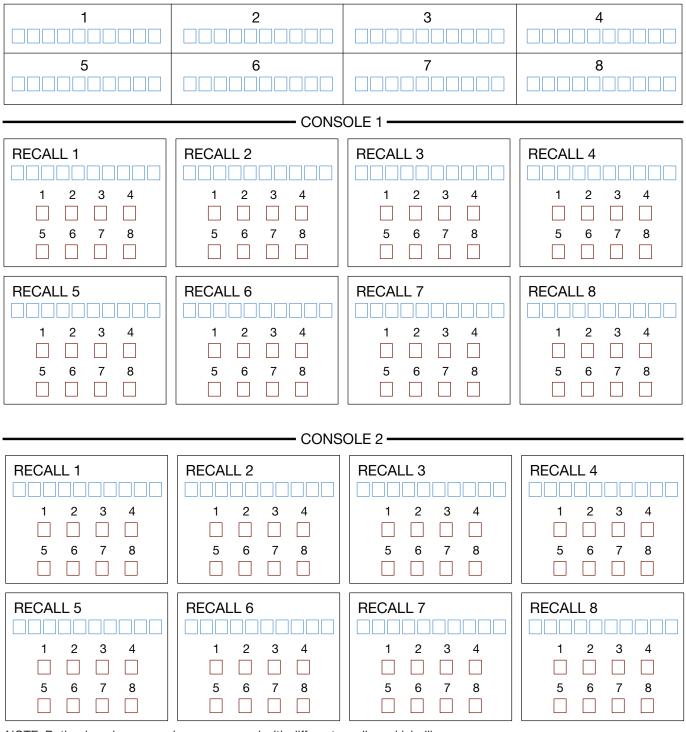


9.2 A 4481 Programming Sheet

Each A 4481 can store 8 groups of zones using the store & recall function. This permits quick selection of multiple paging zones.

Use the set up sheet below to select the groups of zones. Group names have a maximum of 10 characters. A PDF form version of this is available for download on the A 4481 product page at www.altronics.com.au.

ZONE NAMES



NOTE: Both microphones can be programmed with different recalls and labelling.

NOTES

All Australian made Redback products are covered by a 10 year warranty.

Should a product become faulty please contact us to obtain a return authorisation number. Please ensure you have all the relevant documentation on hand. We do not accept unauthorised returns. Proof of purchase is required so please retain your invoice.