A 4580

A 4486

A 4488

A 4586

A 4587

Operating Manual

A 4580 Zone Paging System

A 4486 All Call Paging Console (Optional)
A 4488 4 Zone Paging Console (Optional)
A 4586 16 Zone Paging Console (Optional)
A 4587 Zones 17-32 Paging Console (Optional)

User manual revision number: 1.2 25/05/2020

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 unit from working as designed.

REDBACK

Since 1976 Redback amplifiers have been manufactured in Perth, Western Australia. With over 44 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 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 40 years of operation - and still going strong!

1.0 OVERVIEW

1.1 INTRODUCTION

This unit is a very versatile cost effective public address/background music control system which provides audio to up to 32 zones (*32 zones only available when two A 4580 units are daisy chained). Background music which can be selected to play through any zone is muted when general paging occurs or when an evacuation input overrides the system.

Operation is as follows:

Background music is piped to any zone which has been selected to have background music via switches on the front of the A 4580.

General Paging (via optional paging consoles) will mute the background music to the zone paged or all zones depending on the setup configuration. The paging audio will then feed to the selected zones.

Evac Input mutes background music to all zones. This is a vox enabled dual RCA input which can be adjusted via the vox sensitivity control on the front of the unit. Once the evac input is triggered, background music will be muted to all zones and the audio present at the Evac input will be piped to all zones.

1.2 FEATURES

- 16 zone paging (up to 32 zones with a second unit)
- Background music selectable to each zone
- 100V or line level switching
- 24V switched output
- Evac Input
- Evac Trigger
- Backup battery input
- Single amp or Dual amp mode
- 24V DC operation (plugpack supplied).
- 19" Rack Mount (2 unit).

Optional Features

- Zone and emergency over-ride paging via A 4486, A 4488, A 4586 and A 4587 paging consoles.

1.3 WHAT'S IN THE BOX

A 4580 Audio Switcher
24V DC 2A Plugpack
USB - PS2 compatible keyboard (D 2111)
Instruction Booklet

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 5.0 "Troubleshooting".

1.4 FRONT PANEL GUIDE

Fig 1.4A shows the layout of the A 4580 front panel.

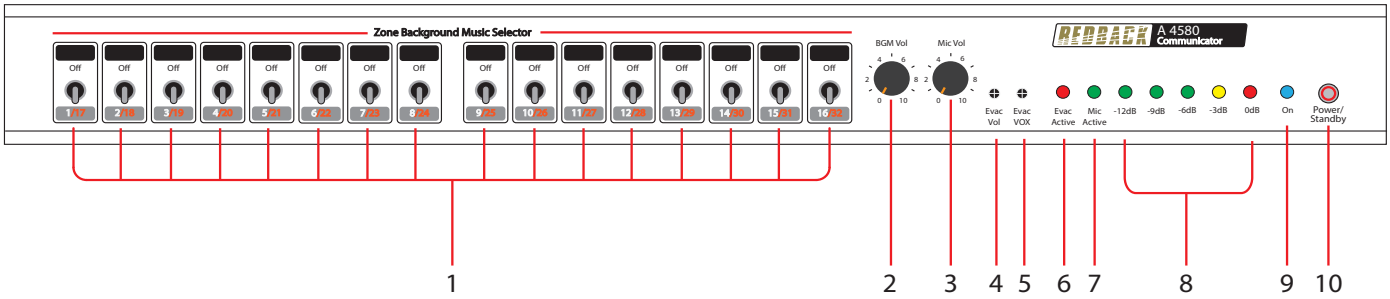


Fig 1.4A

1 **Zone Background music selector switches**
Use these switches to turn on or off the background music to a zone.

2 **Background music volume control**
Use this control to adjust the volume of the background music input.

3 **Paging microphone volume control**
Use this control to adjust the volume of the paging microphone input.

4 **Evac volume control**
Use this control to adjust the volume of the Evac Input.

5 **Evac VOX**
This trimpot is used to set the VOX sensitivity of the Evac input.

6 **Evac active indicator**
These LED illuminate to indicate when the evac input is active.

7 **Mic active indicator**
This led illuminates to indicate when the microphone is active.

8 **LED VU Meter**
This LED bargraph provides a visual indication of the output signal.

9 **On indicator**
This led indicates the unit has power.

10 **Standby Switch**
When the unit is in standby mode this switch will illuminate. Press this button to switch the unit ON. Once the unit is ON the On indicator will illuminate. Press this switch again to put the unit back in standby mode.

1.5 REAR PANEL CONNECTIONS

Fig 1.5A shows the layout of the A 4580 rear panel.

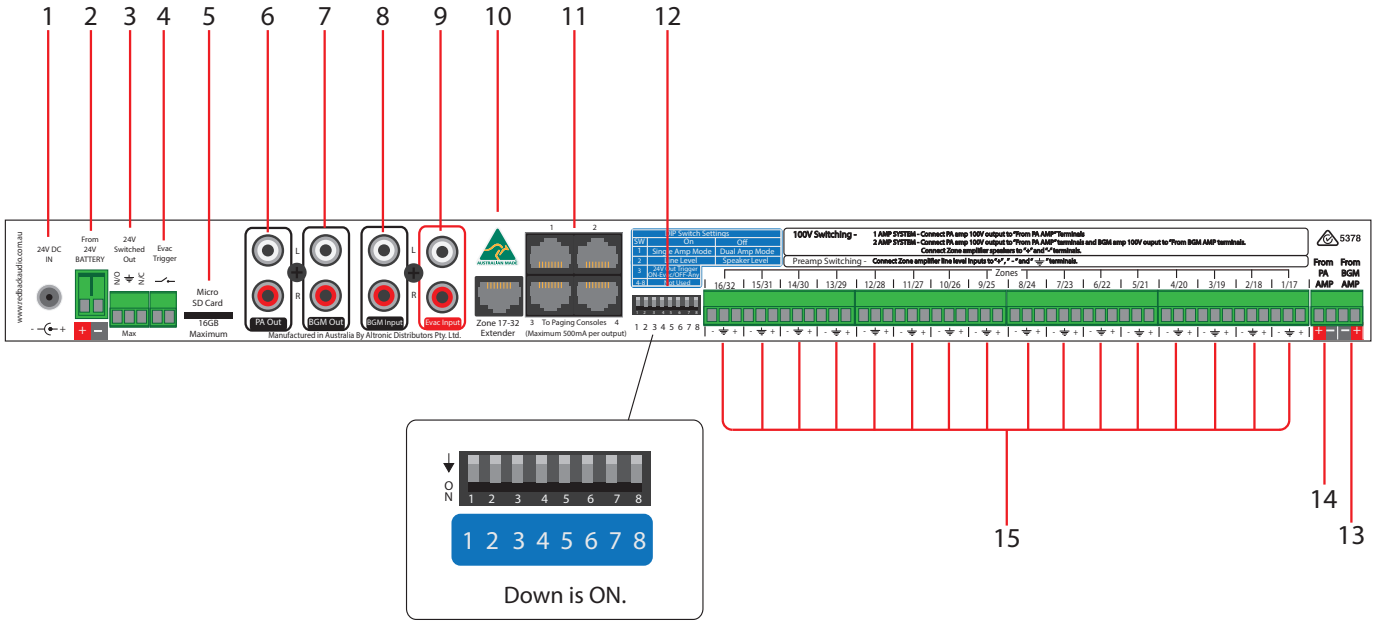


Fig 1.5A

1 **24V DC Input**
Connects to a 24V DC Plugpack with 2.1mm Jack. (Please observe the polarity)

2 **24V Battery Backup**
Connect a 24V backup supply to these terminals. (Please observe the polarity)

3 **24V DC Switched Output**
A 24V output is provided which operates in a normally closed and normally open condition.
This is activated whenever a zone is paged or when an evac input is triggered (see dip switch settings).

4 **Evac Trigger**
This is activated by a closing contact such as a switch. Once activated the audio from the Evac input will be piped to all zones.

5 **Micro SD Card Socket**
This is used for firmware updates (see Section 5.0 for more details). A Micro SD card is not supplied.

6 **PA Out RCA Connectors**
Connect these outputs to the input of the paging amplifier

7 **BGM Out RCA Connectors**
Connect these outputs to the input of the background music amplifier

8 **BGM In RCA Connectors**
Connect these inputs to the output of the background music source such as a CD player.

9 **Evac In RCA Connectors**
Connect these inputs to the output of an evacuation tone generator.

10 **Zone 17-32 Extender**
Use this port for connection of a second A 4580 for paging to zones 17-32 .

11 **RJ45 connectors for paging consoles**
These RJ45 ports connect to the A 4586 zone paging consoles.
NOTE: A maximum of two A 4586 microphone paging consoles may be connected to each port.

12 Dip Switch Settings

. *Note: The DIP switches are ON when they are down.*

DIP switch 1 sets the amplifier mode, either single amp or dual amp mode. (see section 2.2 for more details)
ON - Single Amp Mode, OFF - Dual Amp mode
DIP switch 2 sets the output level, either line level or 100V speaker level. (see section 2.2 for more details)
ON - Line Level, OFF - Speaker Level
DIP switch 3 sets the 24V DC switched output configuration. This can be set to operate when any zone is triggered or for Evac triggering (see section 2.5 for more details).
ON - Evac Triggering, OFF - Any Zone Triggering
DIP switches 4 sets the A 4580 as either a master or slave unit. When using the A 4580 with 16 zones only, it must still be set to be a master unit. When the A 4580's are being used for 32 zones of paging one unit must be the master and the second unit must be a slave.
ON - Slave, OFF - Master
DIP switches 5 sets the master A 4580 as a 16 or 32 zone switcher (This switch is not used on the slave unit).
ON - 32 zone system, OFF - 16 zone system
DIP switches 6-8 are not used.

. *Note: The DIP switches are ON when they are down.*

13 From BGM AMP input
Connect this 100V line input from the 100V output of the BGM (background music) amplifier.

14 From PA AMP input
Connect this 100V line input from the 100V output of the PA (or paging) amplifier.

15 Zone 1-16 outputs.
The zone outputs can be either 100V or line level depending on configuration of the dip switches (see Fig1.6A)

2.0 SETUP

2.1 Setup Guide

The A 4580 is a 16-32 zone paging system which switches 100V speaker levels or balanced low level (line levels) signals. Background music which can be piped to any zone is muted when paging is initiated by the paging consoles or when the Evac input is triggered.

WARNING : For correct operation the dip switches 1 & 2 need to be set before using the unit.

If the A 4580 is being used in single amplifier mode (see section 2.2.1) dip switch 1 must be set to "ON"
otherwise if the unit is being used in two amplifer mode (see section 2.2.2) then dip switch 1 must be set to "OFF"

When using the unit for 100V speaker switching Dip switch 2 must be set to "OFF".
If line level switching is required then Dip Switch 2 must be set to "ON".

Failure to set the dip switches correctly might result in the unit malfunctioning.

2.2 SWITCHING 100V SPEAKER LEVELS

There are two different configurations for switching 100V speaker levels. The first uses a single amp system which is used for both Background music and PA paging. This setup mutes background music to "ALL" zones when any zone is paged. (see section 2.2.1)

The second setup involves a two amplifier system where both the background music and the PA paging has its own dedicated amplifier. This setup mutes background music to only those zones which are being paged. (See section 2.2.2)

2.2.1 SINGLE AMPLIFIER 100V LINE SWITCHING

A single amp system uses one amplifier which is used for both the background music and the PA paging. In this configuration when any zone or zones is paged the background music will be muted to all zones. (Note: If muting is desired for only those zones being paged a two amplifier setup is required (See section 2.2.2)).

NOTE : Before turning the unit on make sure the dip switches are set correctly.
For single amp switching of 100V speaker levels, Dip switch 1 should be set to "ON" and dip switch 2 should be set to "OFF" (see Dip switch settings Fig 1.6)

Each zone requiring background music must be switched "ON" from the "Zone Background Music Selector" switches on the front of the A 4580. (refer to section 1.4)

A background music source such as a CD player is connected to the BGM input (RCA connectors) on the rear of the A 4580.
The amplifier audio connection is from the "PA Out" RCA sockets on the rear of the A 4580. This is a line level signal and must be connected to a Line/Aux input on the amplifier.
The amplifier 100V output must be connected to the "From PA AMP" terminals on the rear of the A 4580.
The zone 100V speakers are wired to the "+" and "-" terminals only on the rear of the A 4580 as shown in Fig 2.1.
(Note: the earth connection is not used for 100V switching system. This terminal is used when switching line level signals.)

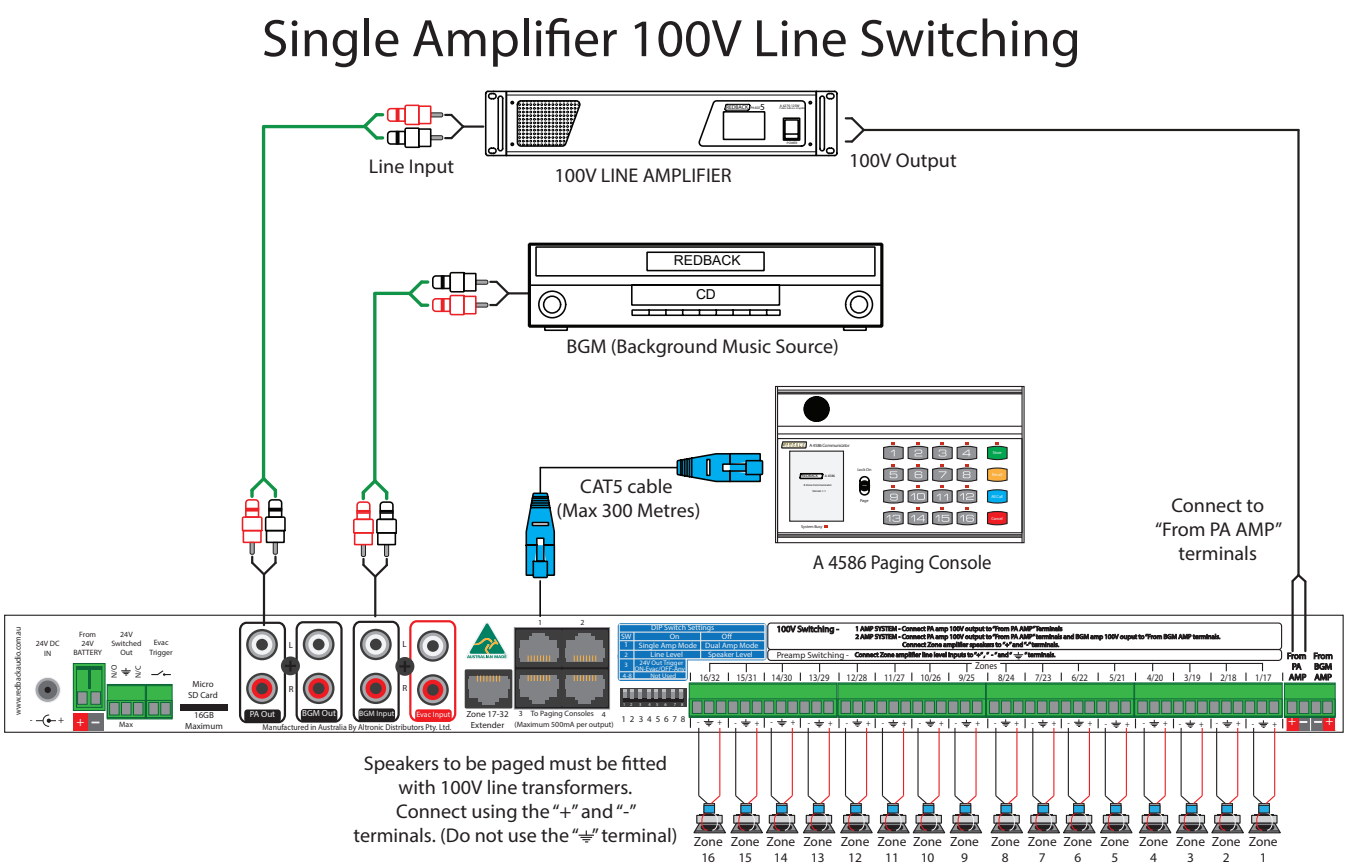


Fig 2.1

2.2.2 TWO AMPLIFIER 100V LINE SWITCHING

A two amplifier system uses dedicated amplifiers for both the background music and the PA paging. This setup mutes background music to only those zones which are being paged.

NOTE : Before turning the unit on make sure the dip switches are set correctly. For two amp switching of 100V speaker levels, Dip switch 1 should be set to "OFF" and dip switch 2 should be set to "OFF" (see Dip switch settings Fig 1.6)

Each zone requiring background music must be switched "ON" from the "Zone Background Music Selector" switches on the front of the A 4580. (refer to section 1.4)

A background music source such as a CD player is connected to the BGM input (RCA connectors) on the rear of the A 4580.

Paging Amplifier Connections
The paging amplifier audio connection is from the "PA Out" RCA sockets on the rear of the A4580. This is a line level signal and must be connected to a Line/Aux input on the amplifier.
The paging amplifier 100V output must be connected to the "From PA AMP" terminals on the rear of the A 4580.

Background Music Amplifier Connections
The background music amplifier audio connection is from the "BGM Out" RCA sockets on the rear of the A 4580. This is a line level signal and must be connected to a Line/Aux input on the amplifier.
The background music amplifier 100V output must be connected to the "From BGM AMP" terminals on the rear of the A 4580.

The zone 100V speakers are wired to the "+" and "-" terminals only on the rear of the A 4580 as shown in Fig 2.2. (Note: the earth connection is not used for 100V switching system. This terminal is used when switching line level signals.)

Two Amplifier 100V Line Switching

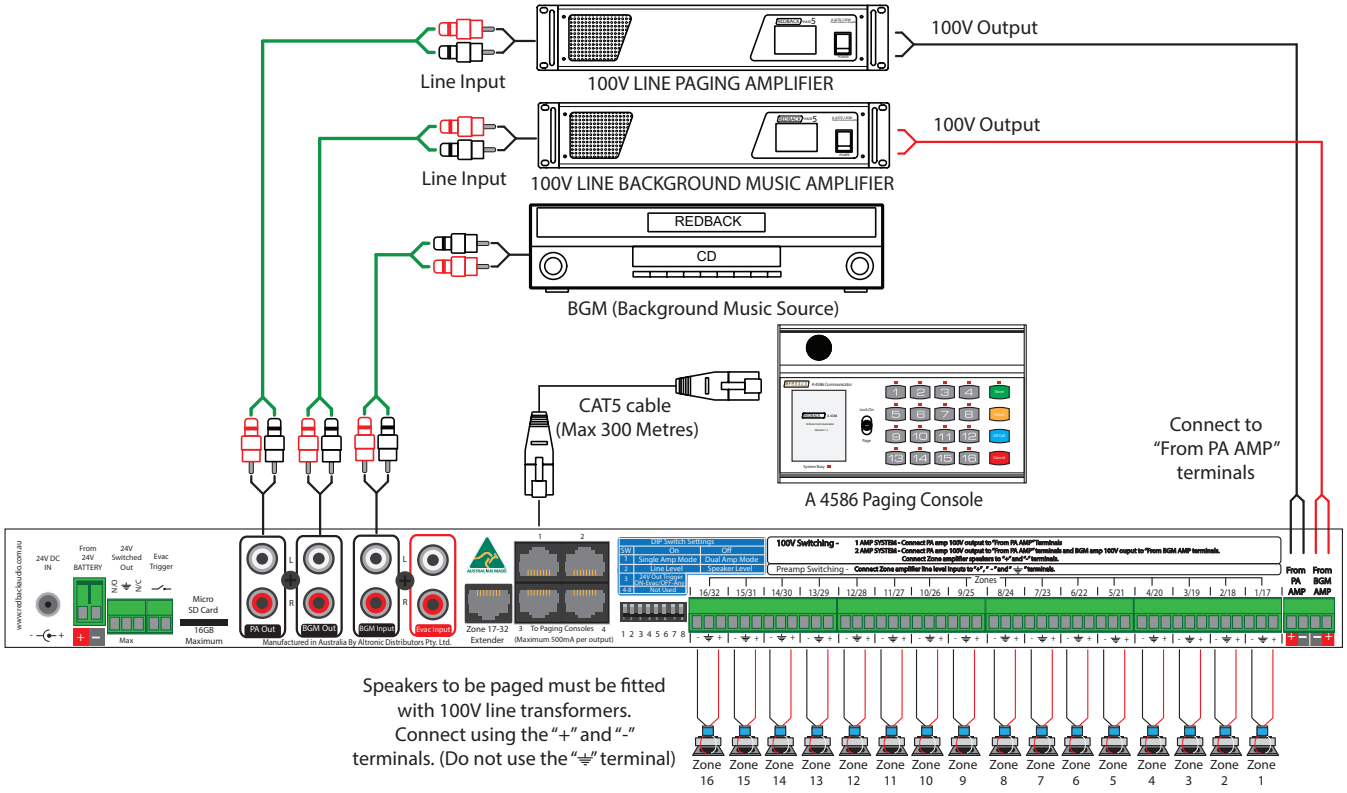


Fig 2.2

2.3 SWITCHING LINE LEVELS

The A 4580 can also be used to switch line level signals. Amplifiers are not connected to the PA OUT or BGM OUT of the A 4580. Instead each zone has its own dedicated amplifer which can then feed multiple areas. Background music and the evacuation tones are still supplied by the A 4580 and are fed into each zone amplifier. Each zone amplifier can still have its own local microphone or background music.

NOTE : Before turning the unit on make sure the dip switches are set correctly.
Dip switch 2 should be set to "ON" (see Dip switch settings Fig 1.6)
Dip switch 1 will be disabled if dip switch 2 is set to "ON"

This setup mutes the background music (supplied by the A 4580) to only those zones which are being paged.

Each zone requiring background music must be switched "ON" from the "Zone Background Music Selector" switches on the front of the A 4580. (refer to section 1.4)
A background music source such as a CD player is connected to the BGM input (RCA connectors) on the rear of the A 4580.

The zone output terminals on the rear of the A 4580 are connected to the zone amplifier inputs. The "+","-" and earth terminals are all used. Each zone output is a low impedance signal suitable for feeding directly into a power amplifier. As the signal is balanced the amplifier can be remotely located when connected using 2 core shielded cable. This enables the amplifier to be located up to 100m from the A 4580 switch box.

Individual Zone Amplifier Preamp (Low Level) Switching

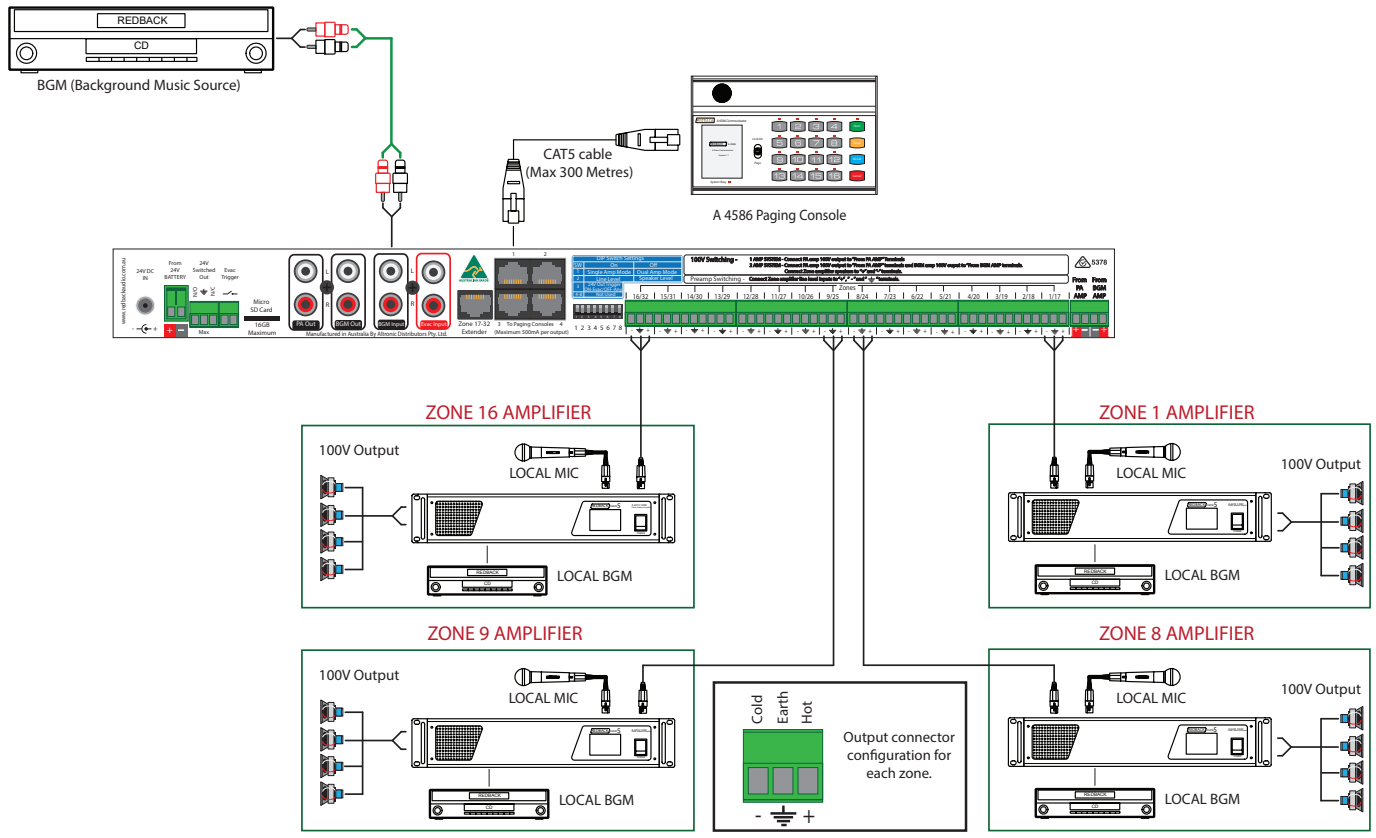


Fig 2.3

2.4 EVAC INPUT

There are two forms of evacuation triggering available on the A 4580.

The first method for triggering is a closing contact on the Evac Trigger terminals on the rear of the unit (see Fig 2.4).

The second method for triggering is a VOX controlled input in the form of a dual RCA audio input on the rear of the unit labelled Evac Input (see Fig 2.4). The trigger level is adjusted via the evac vox sensitivity control of the front of the A 4580.

Once either evac input is triggered, background music will be muted to all zones and the audio present at the Evac input will be piped to all zones.

Paging from an A 4586 paging console will over-ride the evac input.

When the evac input is active the "Evac active" led on the front of the unit will illuminate.
The volume of the Evac input is adjusted via the trimpot on the front of the unit labelled "Evac Vol".

EVACUATION INPUT TRIGGERING VIA EVAC INPUT

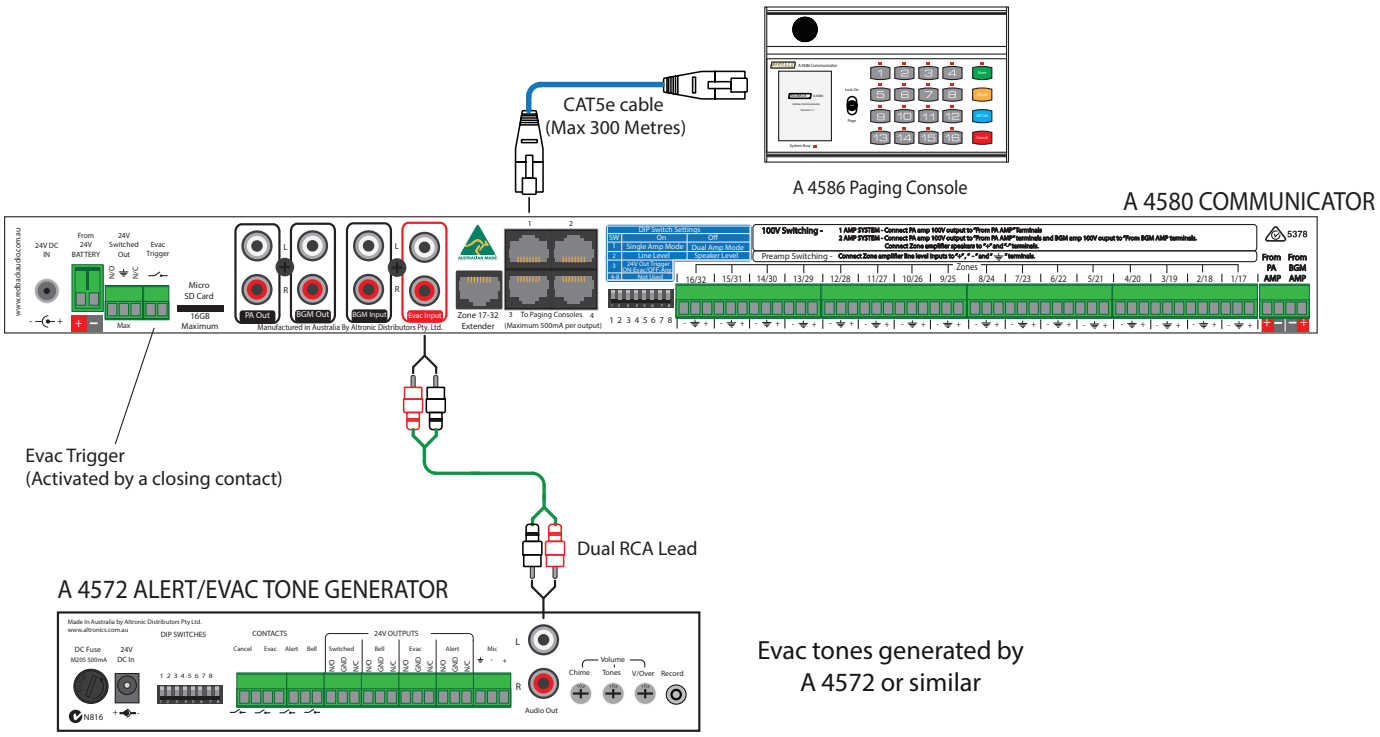


Fig 2.4

2.5 ALL CALL INPUT

The EVAC Input (discussed in section 2.4) which is primarily aimed for use as an Evac input, can also be used as an All Call Input from any line level input source.
This could be used for ALL CALL telephone paging when used with a suitable Line Isolation Unit.

NOTE: The volume of the Evac input is adjusted via the trimpot on the front of the unit labelled "Evac Vol". The trigger level is adjusted via the evac vox sensitivity control of the front of the A 4580.

2.6 24V DC SWITCHED OUTPUT

A switched output has been provided to allow for the connection of external 24V DC operated fixtures.

This is set by Dip Switch 3 (see section 1.5)

The 24V DC output can be used to operate attenuators fitted with override relays, evacuation strobes (with the addition of external relays and DC supplies), or any other fire evacuation equipment operated of 24V DC. It is important that any product connected to the 24V DC output not draw more than 100mA maximum.

This output can be set to be activated any time any zone is paged or any form of evac input is triggered (see Fig 2.5a).
"or"
only when the Evac input has been triggered (see Fig 2.5b).

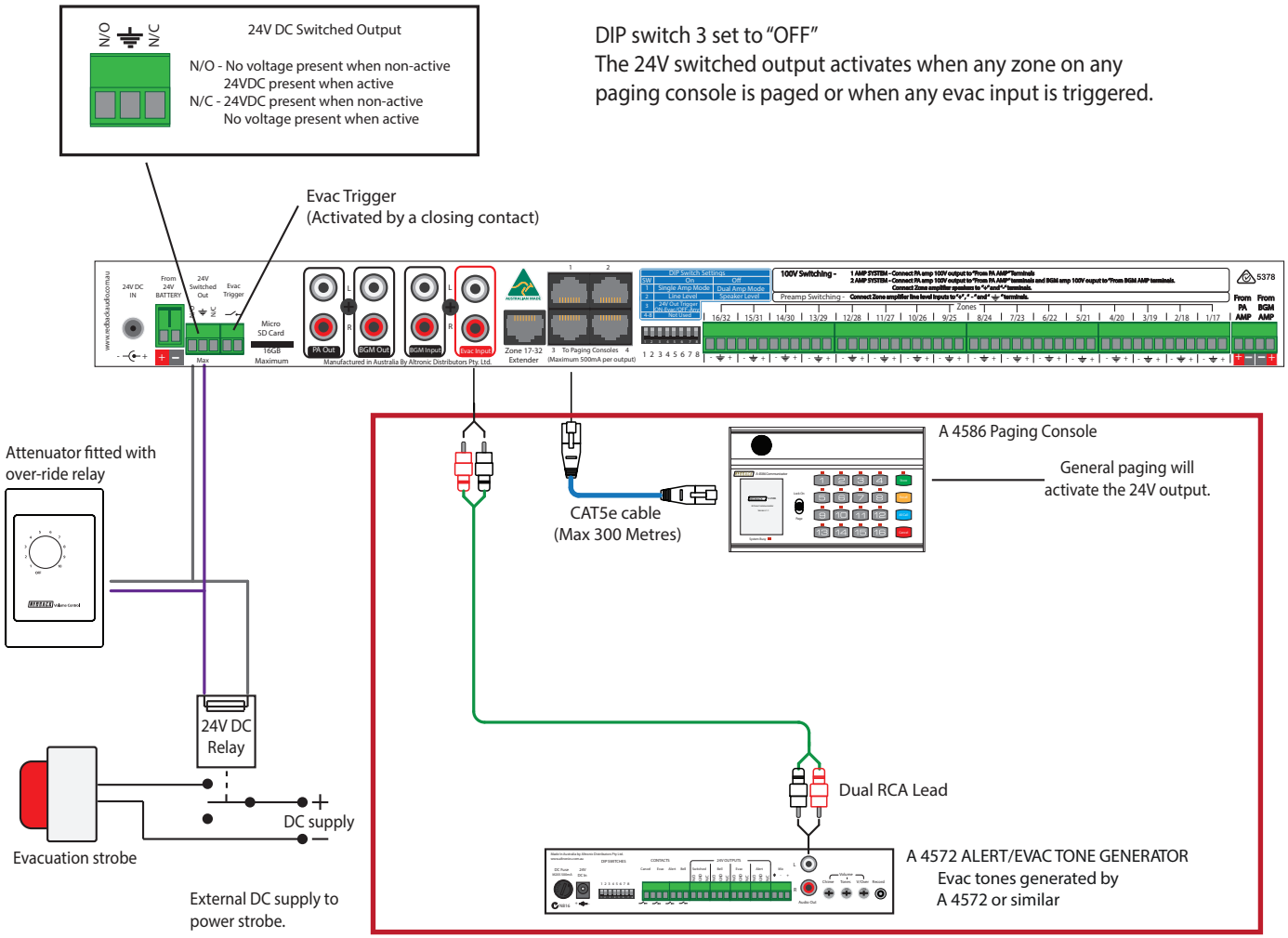


Fig 2.5a

The 24V DC Switched output terminals operate as follows.

N/O - No voltage present when non-active, 24VDC present when active

N/C - 24VDC present when non-active, No voltage present when active

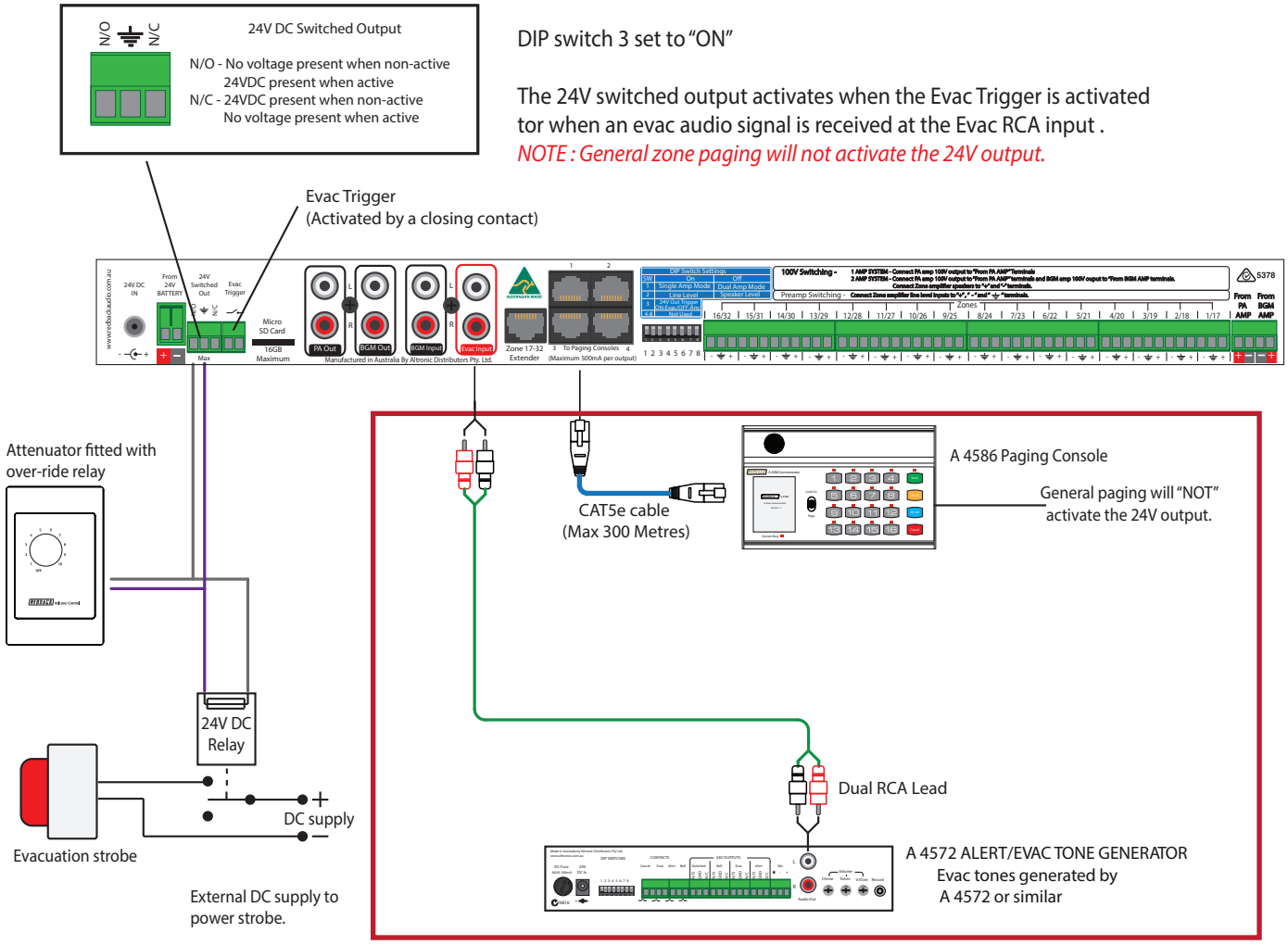


Fig 2.5b

3.0 PAGING CONSOLES

A 4486 & A 4488 OVERVIEW

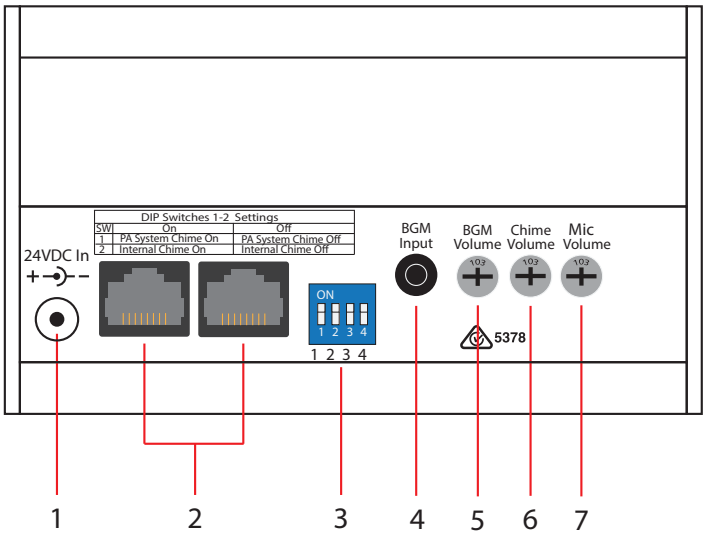
A 4486

A 4488

The A 4486 paging microphone provides All Call paging when used with the A 4580. When using the A 4486 with the A 4580 each paging microphone unit must be assigned an ID number through DIP switch settings on the rear of the A 4486. A maximum of seven A 4486 paging consoles can be connected to the A 4580.

The A 4488 paging microphone provides up to four zones of paging when used with the A 4580. When using the A 4488 with the A 4580 each paging microphone unit must be assigned an ID number through DIP switch settings on the rear of the A 4488. A maximum of six A 4488 paging consoles can be connected to the A 4580.

A 4486 and A 4488 Rear Connections



1 24V DC connector
2.1mm DC jack (centre pin positive).

2 RJ45 connector
For connection back to the A 4489A.
Either port can be used.

3 DIP switch options
These switches set the chime options.

4 BGM (Background Music) Input
The background music can be connected via a 3.5mm Stereo Jack.

5 BGM volume
Use this volume to adjust the background music level.

6 Chime volume
Use this volume to adjust the chime level.

7 Microphone volume
Use this volume to adjust the microphone level.

A 4486/88 DIP Switch Settings

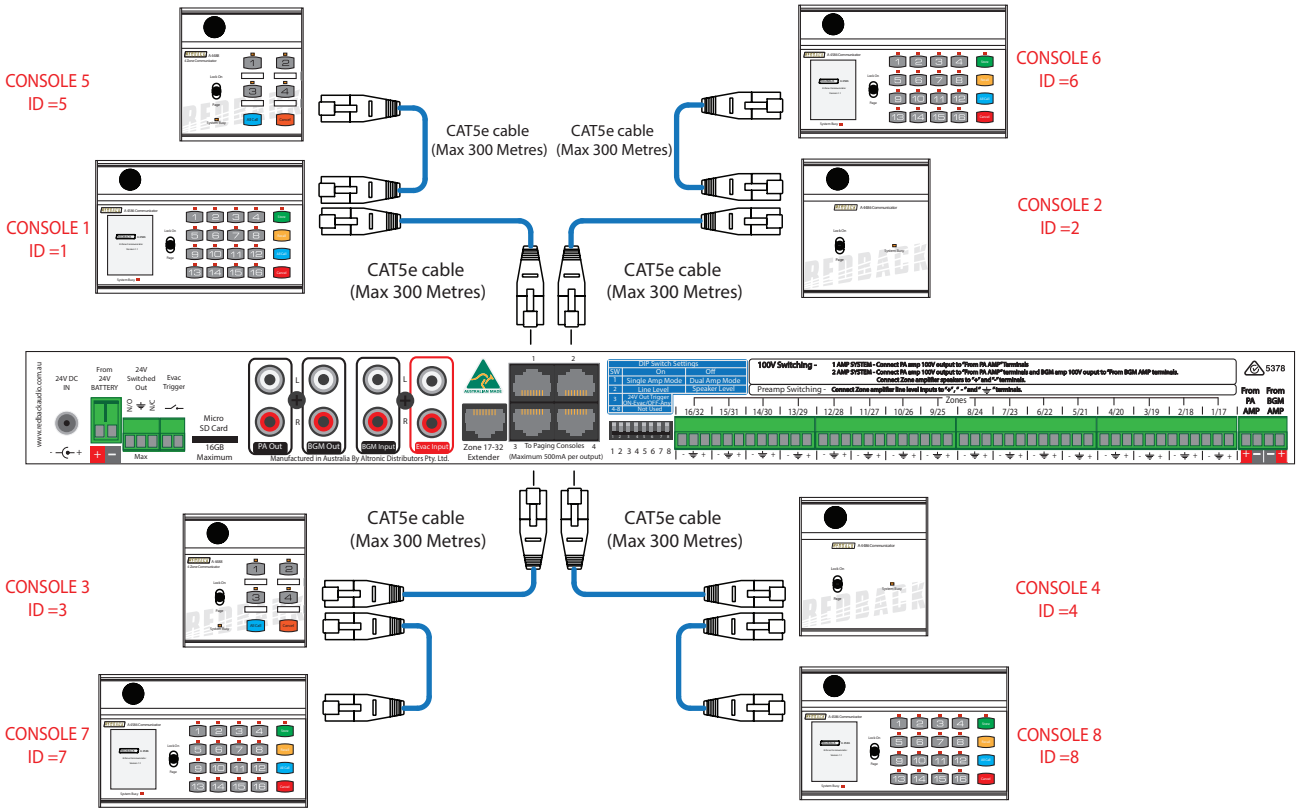
DIP switch 1 sets the pre-announcement chime on or off.
DIP switches 2-4 set the paging console ID number.

NOTE:
When using the A 4486 with the A 4580 the ID's must be set between 2-8. (Therefore a maximum of seven A 4486 paging consoles can be connected to the A 4580.

When using the A 4488 with the A 4580 the ID's must be set between 3-8. (Therefore a maximum of six A 4488 paging consoles can be connected to the A 4580.

DIP Switches 2 - 4 Set the Paging Console ID			
2	3	4	ID
Off	Off	Off	1
Off	Off	On	2
Off	On	Off	3
Off	On	On	4
On	Off	Off	5
On	Off	On	6
On	On	Off	7
On	On	On	8

A maximum of eight paging consoles can be connected to the A 4580. Any combination of A 4486, A 4488 and A 4586 is allowed up to the maximum seven A 4486 consoles or six A 4488 consoles.



PLEASE NOTE : A MAXIMUM OF 8 PAGING CONSOLES CAN BE CONNECTED TO THE A 4580
(WITH A MAXIMUM OF 2 PAGING CONSOLES PER PORT).

3.1 A 4586 OVERVIEW

The A 4586 paging console provides up to 16 zones of paging to the A 4580 audio switcher.

The consoles can be used for multi zone paging with the facility to store and recall multiple zones to a single button. The recall functions can also be labelled via a USB - PS2 compatible keyboard which can be plugged into the rear of the unit. (see section 3.1.7) 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.

A maximum of 8 paging consoles can be connected to the A 4580 at the same time. These work in a "first in, best dressed" arrangement. The consoles can be cascaded together or wired back to the A 4580 (see section 3.1.3 to 3.1.5 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.

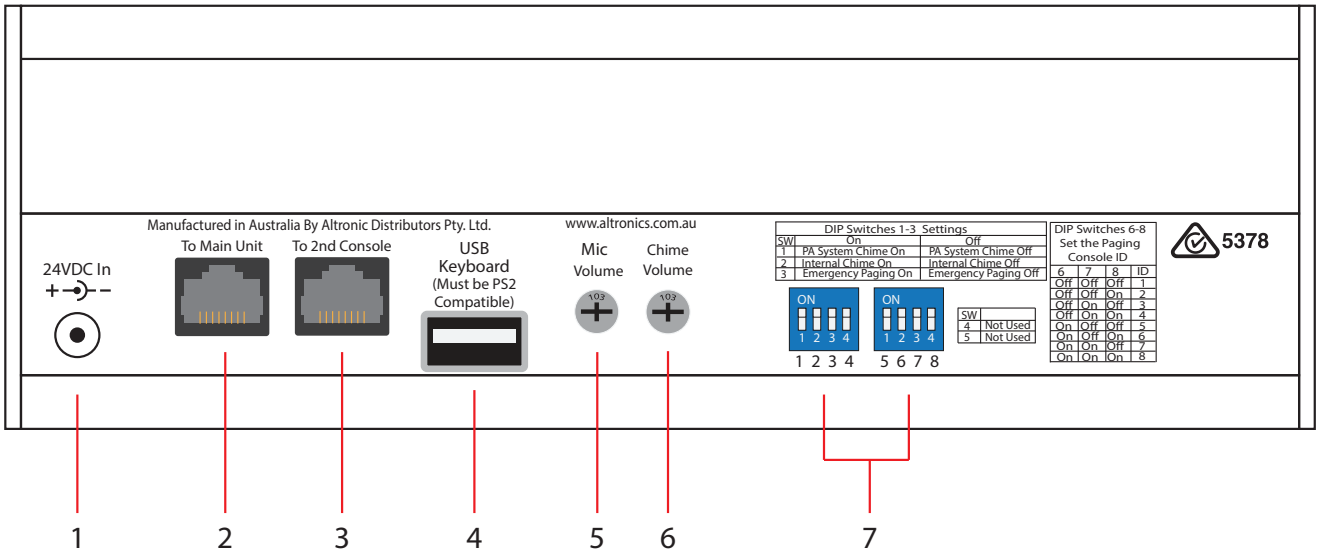


Fig 3.1

1 **24V DC connector**
2.1mm DC jack (centre pin positive).

2 **RJ45 connector**
For connection back to the A 4580.

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 or ID to the console.

3.1.1 Features

- Multi zone paging.
- 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.

3.1.2 DIP Switch Settings

A series of DIP switches which are accessed on the rear of the unit provide a number of options.
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. (Note: The emergency paging is only active when the A 4580 receives external emergency tones).
DIP switches 4&5 are not used.
DIP switches 6-8 select the ID number for the console.
Table 3.1A shows the ID settings.

A maximum number of 8 consoles can be connected to the A 4580.

Table 3.1A

DIP Switches 6-8 Set the Paging Console ID			
6	7	8	ID
Off	Off	Off	1
Off	Off	On	2
Off	On	Off	3
Off	On	On	4
On	Off	Off	5
On	Off	On	6
On	On	Off	7
On	On	On	8

3.1.3 Connecting the paging consoles

The consoles are connected to the A 4580 via standard Cat5e cabling as shown in Fig 3.1b. The maximum distance between the A 4580 and a paging console is 300m. Note that each paging console must be assigned an ID number via the DIP switches on the rear of the unit before operation (see 3.1.2 DIP switch settings). Eg Console 1 is set to ID1, console 2 is set to ID2 etc
A maximum of eight consoles can be connected at one time but only used in certain configurations. There are four RJ45 ports on the back of the A 4580 which can be used to connect the A 4586 paging consoles. Each port can accomodate a maximum of 2 paging consoles without the aid of external power supplies.
(External plugpacks are not required unless power problems are encountered from long cable runs).
Fig 3.1B shows how to connect one paging console per RJ45 port.

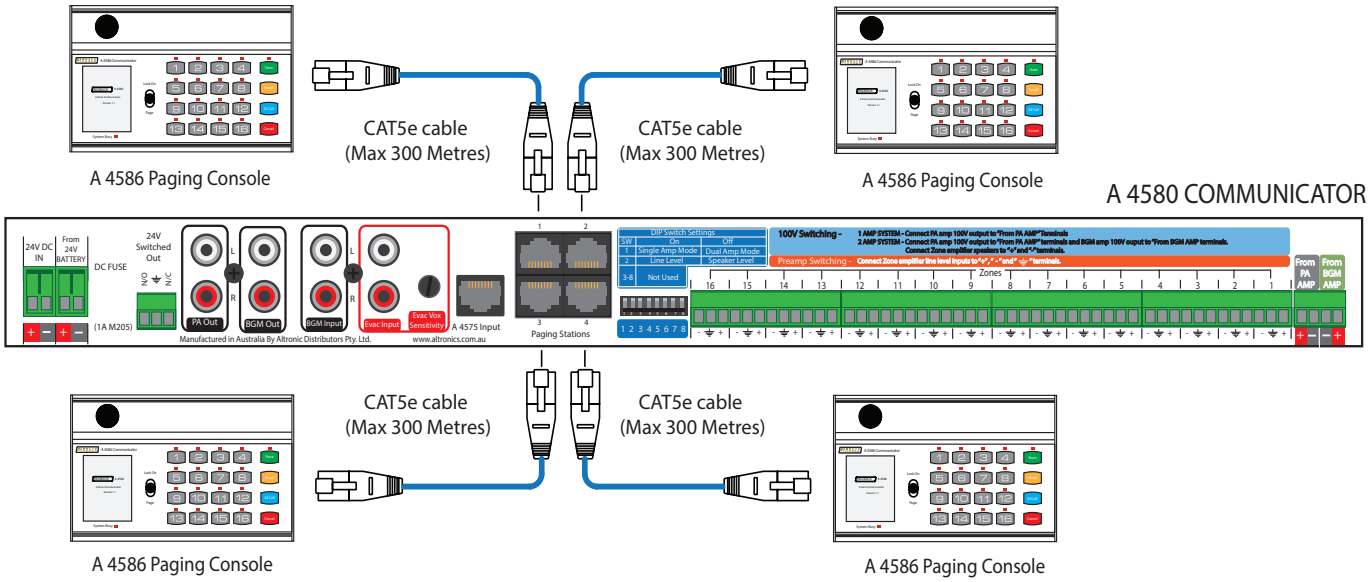
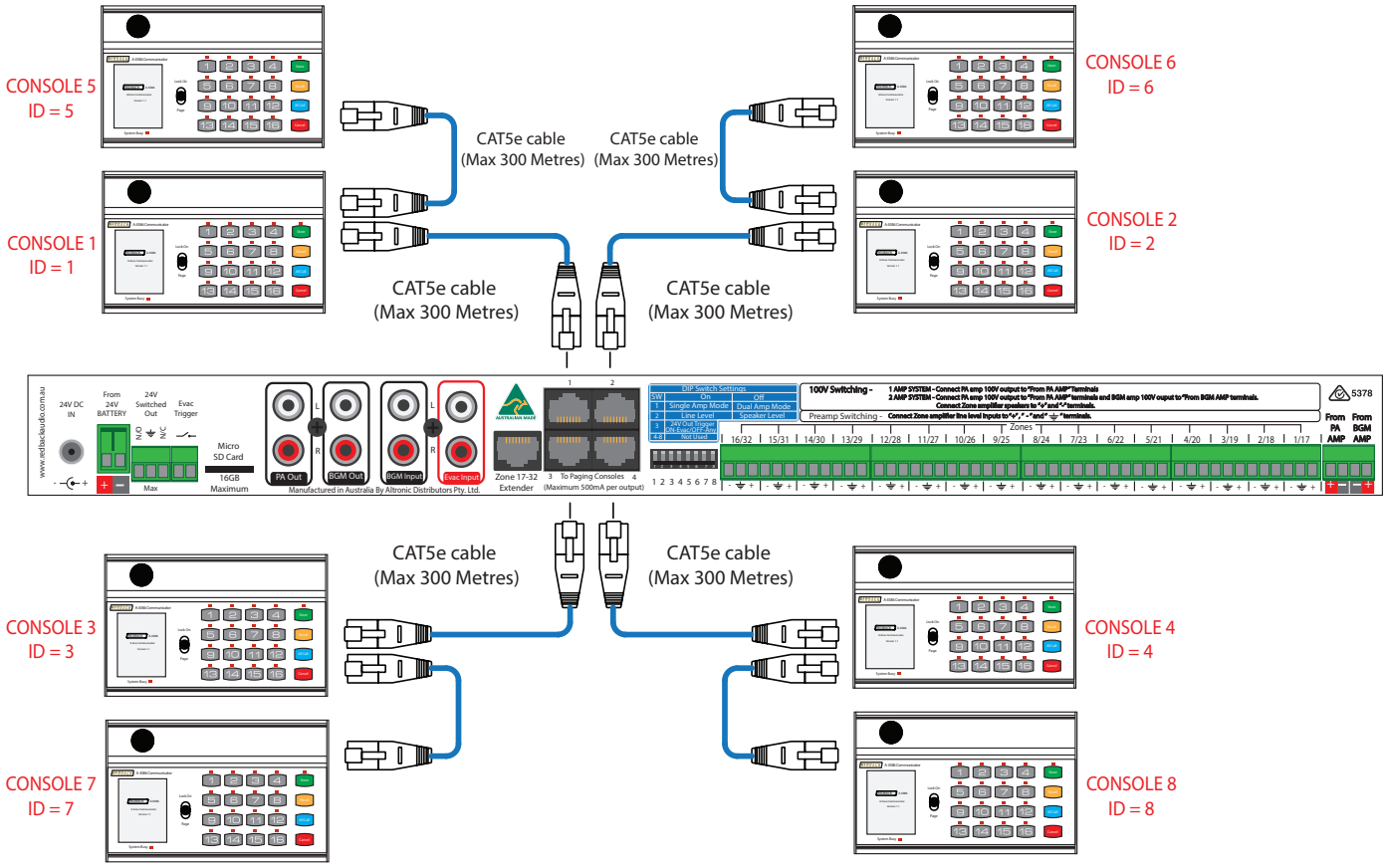


Fig 3.1B

3.1.4 Cascading the paging consoles

If more than 4 paging consoles are required the consoles can be cascaded together. Fig 3.1C shows how to connect eight paging consoles at once. Consoles 1-4 are connected to their respective number ports. Ie console 1 to port 1, console 2 to port 2 etc. Any extra consoles are connected as shown in Fig 3.1C, so console 5 to port 1, console 6 to port 2 and so on. Note that each paging console must be assigned an ID number via the DIP switches on the rear of the unit before operation (see 3.1.2 DIP switch settings). Eg Console 1 is set to ID1, console 2 is set to ID2 etc
In Fig 3.1C a maximum of eight consoles are connected. Consoles 1 & 5 are connected to Port 1, consoles 2 & 6 to port 2, consoles 3 & 7 to port 3 and consoles 4 & 8 are connected to Port 4. Please note: A maximum of 2 paging consoles can be connected per RJ45 port on the A 4580. (External plugpacks are not required unless power problems are encountered from long cable runs).



PLEASE NOTE : A MAXIMUM OF 8 PAGING CONSOLES CAN BE CONNECTED TO THE A 4580
(WITH A MAXIMUM OF 2 PAGING CONSOLES PER PORT).
(External plugpacks are not required unless power problems are encountered from long cable runs).

Fig 3.1C

3.1.5 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.

3.1.6 Zone Lockout

General paging can be blocked to any zones via the paging console. To block paging to a zone from the A 4586, 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. NOTE: This will only lock out zones for use from the console that the zones were locked out from. It will not lock out the same zones from other paging consoles.

3.1.7 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 (D 2111) into the rear of the A 4586 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 fin ished.

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.

3.1.8 Paging Console Busy

If the system has more than two A 4586 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.

Fig 3.1D

4.0 32 ZONE PAGING

It is possible to page up to a maximum of 32 zones when the A 4586 paging console is combined with the A 4587 paging console. The A 4587 simply plugs into the rear of the A 4586 via a Cat5e/6 lead (supplied). All communication and power are supplied through the A 4586 paging console.

Note: In order to be able to switch 32 zones of audio a second A 4580 unit is required.

Figure 4.2 illustrates a typical connection diagram with multiple paging consoles some of which are 32 zones.
Note: All paging consoles must be connected to the A 4580 master unit. Do not fit any consoles to the slave unit.

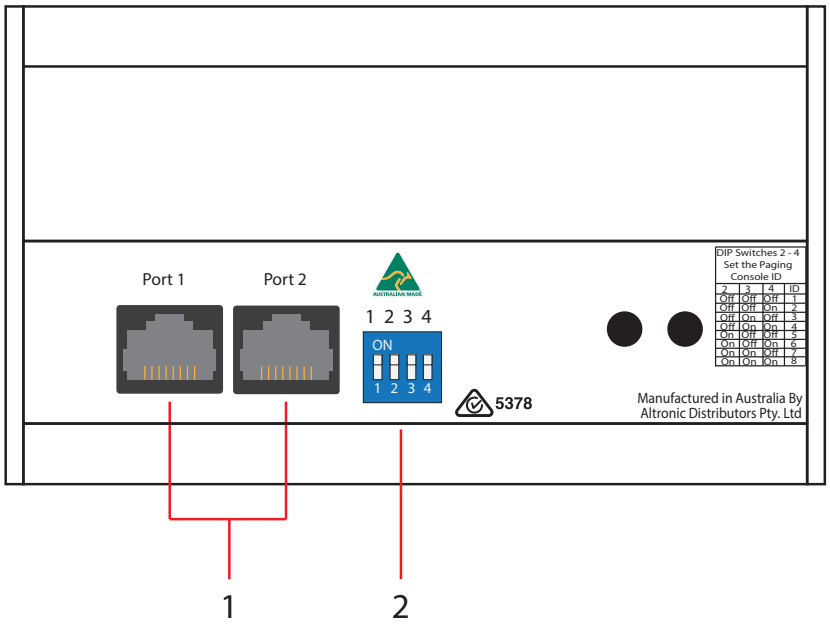
4.1 A 4587 OVERVIEW

The A 4587 paging console provides paging to zones 17-32 with the addition of a second A 4580 audio switcher.
The A 4587 is connected to the rear of an A 4586 16 zone paging console via standard Cat5e cabling as shown in figure 4.1.

Each unit must be assigned an ID number through DIP switch settings on the rear of the unit.
Note: When connecting an A 4587 to an A 4586 paging console both units must be set to the same ID.

4.1.1 A 4587 DIP Switches

Switch 1: Not Used
Switch 2: Sets the unit ID



DIP Switches 2 - 4 Set the Paging Console ID			
2	3	4	ID
Off	Off	Off	1
Off	Off	On	2
Off	On	Off	3
Off	On	On	4
On	Off	Off	5
On	Off	On	6
On	On	Off	7
On	On	On	8

4.1.2 A 4587 Rear Connections

1 RJ45 connector
For connection back to the A 4586 paging console. Either port can be used.

2 DIP switch options
These switches set the ID number for the console.

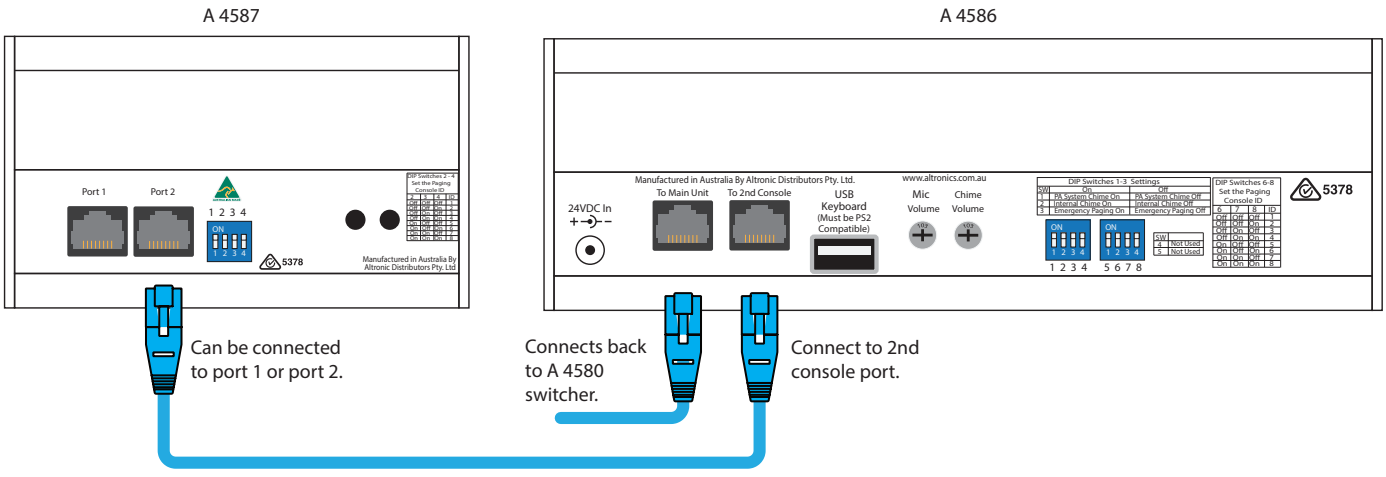
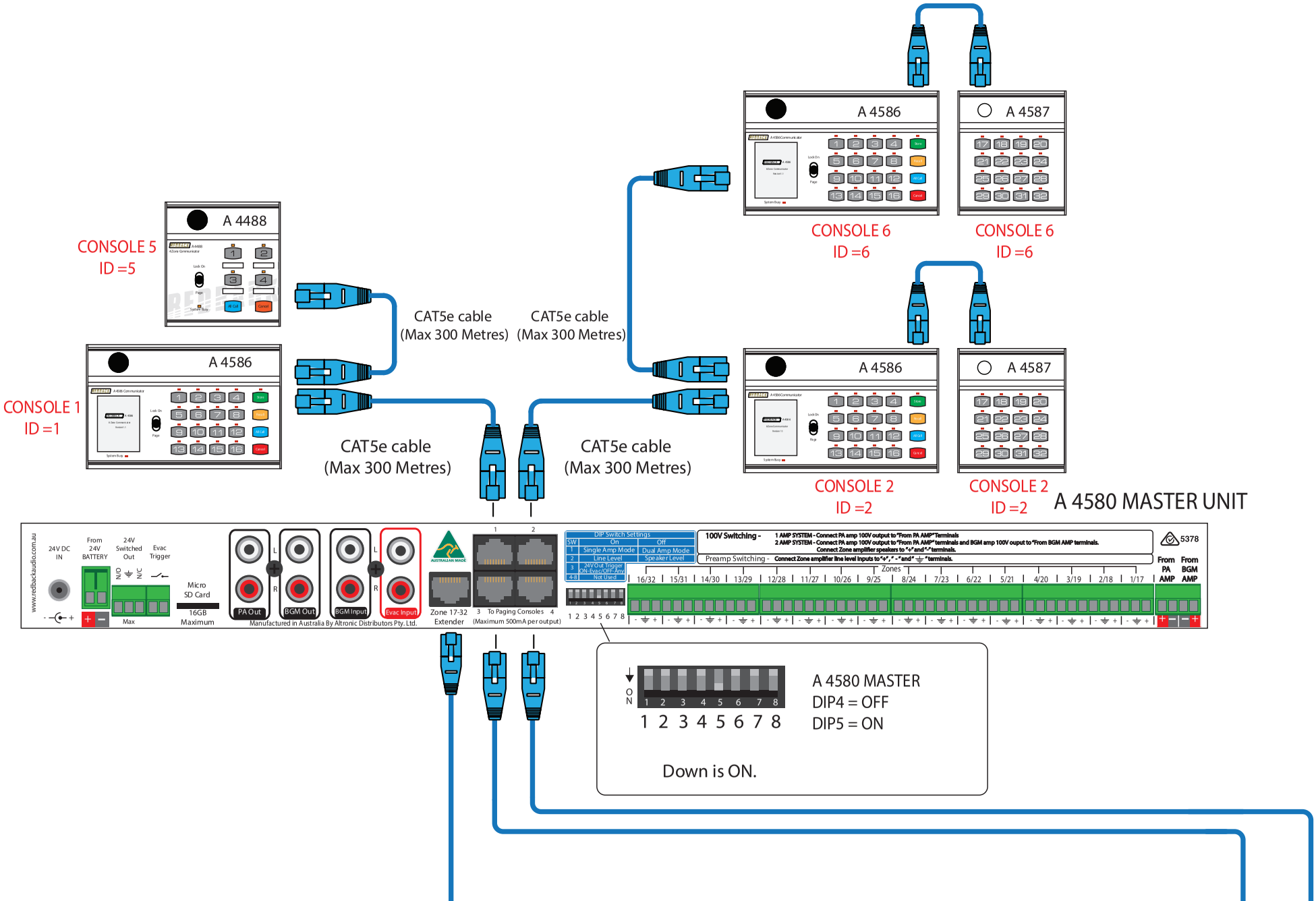
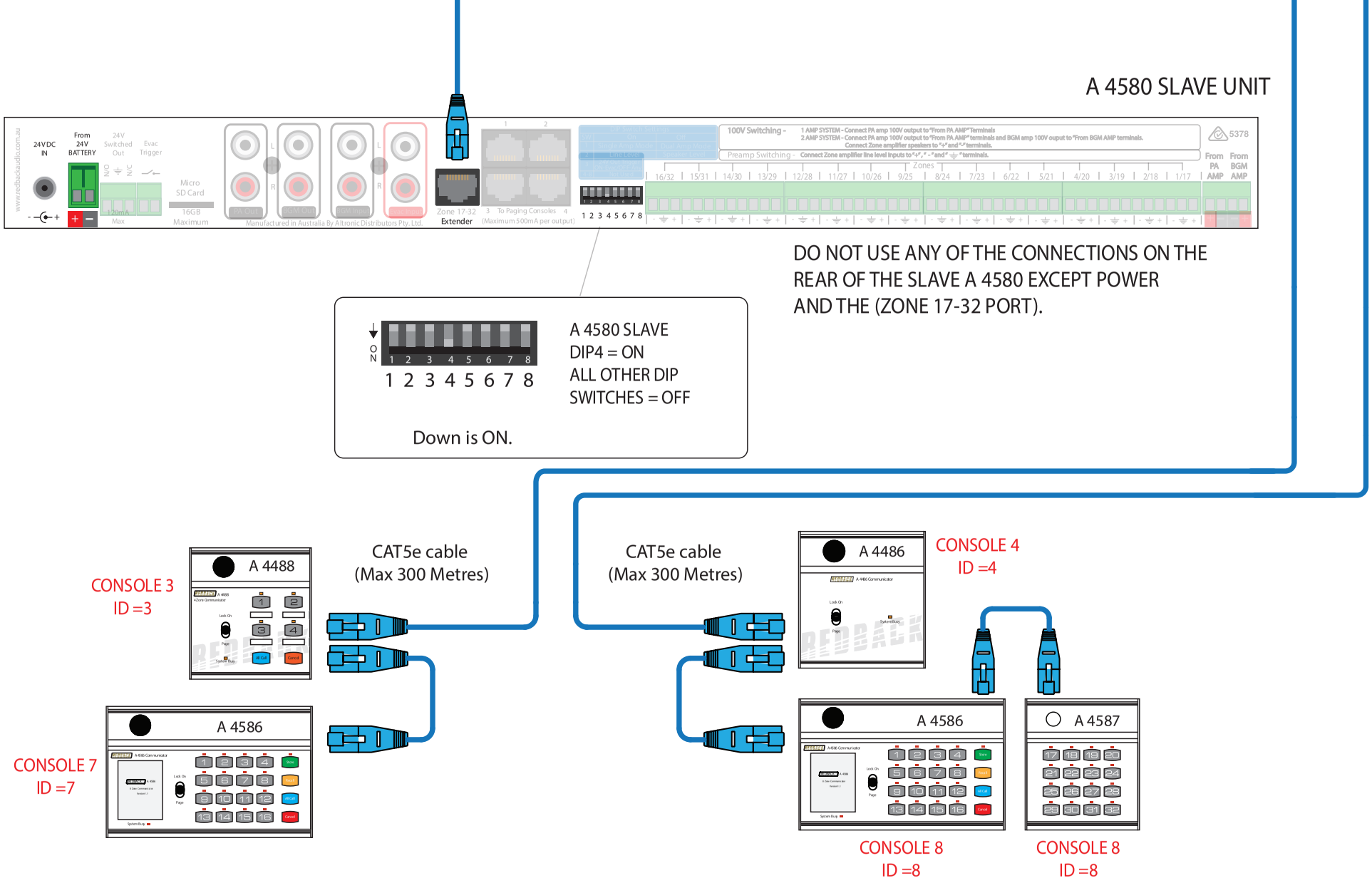


Fig 4.1

Figure 4.2 Multiple paging console configuration with a mixture or single, four, 16 and 32 zone paging consoles.
In this configuration there are three sets of 32 zone paging consoles, two sixteen zone paging consoles, two four zone paging consoles and one single All Call paging console. In order to be able to page to 32 zones , two A 4580 switching units are required, one of which is the master unit and the other is the slave.





The master and slave options are set by the DIP switches on the rear of the A 4580 units (refer to the DIP Switch 4-5 settings on pg 7). The master A 4580 has DIP switch 4 set to OFF and DIP switch 5 set to ON. The Slave A 4580 has DIP switch 4 set to ON.
All paging consoles must be connected back to the master A 4580 unit. Connection is made between the Master A 4580 and the Slave A 4580 via a Cat5e/6 lead which connects between the (Zone 17-32 Extender) ports on both units. Please note : a maximum of 8 paging consoles can be connected to the a 4580 (with a maximum of 2 paging consoles per port) the combination of an a 4586 and a 4587 is counted as one paging console. (External plugpacks are not required unless power problems are encountered from long cat5 runs).

5.0 TROUBLE SHOOTING

5.1 SYMPTOMS AND REMEDIES

SYMPTOMS	REMEDIES
Keyboard not detected on A 4586	Remove & reinsert keyboard Try another keyboard Turn A 4580 off and repeat setup Make sure the keyboard is a USB/PS2 keyboard (D 2111)

5.2 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 5.2. 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.

Fig 5.2

6.0 FIRMWARE UPDATES

It is possible to update the firmware for the A 4580 by downloading the relative update version from redbackaudio.com.au if available.
To perform an update, follow these steps.

1) Download the Zip file from the website.
2) Remove the Micro SD card from the rear of the A 4580 and insert it into your PC.
3) Extract the contents of the Zip file to the root folder of the Micro SD Card.
4) Rename the extracted .BIN file to update.BIN.
5) Remove the Micro SD card from the PC following windows safe card removal procedures.
6) With the power turned OFF, insert the Micro SD card back into the A 4580.
7) Turn the A 4580 ON. The unit will check the Micro SD card and if an update is required the A 4580 will perform the update automatically.

7.0 SPECIFICATIONS

A 4580 Control Unit

Paging console inputs:	4 x RJ45 8P8C
Data transmission:	Cat5e cabling max 300m
Front panel controls:	Mic level control, BGM (background music) level control, zone BGM selection switches, Evac vox level ,Evac volume
Front panel indicators:	Mic active,Evac active
Rear panel controls:	
BGM (background music) input:	Dual stereo RCA's
Evac input:	Dual stereo RCA's
BGM (background music) output:	Dual stereo RCA's
PA (public address) output:	Dual stereo RCA's
24V DC Switched output:	Euroblock terminal
Zone output connectors:	Euroblock terminal
Power connection (24V DC):	Euroblock terminal
Protection (DC):	Internal 2A polyswitch
Dimensions:	482W x 175D x 44H mm
Weight:	2.5kg

A 4586 Paging Console

Output connection:	2 x RJ45 8P8C
Data transmission:	Cat5e cabling max 300m
Front panel controls:	Zone selection (1-8), store, recall, all call, cancel, PTT switch
Rear panel controls:	Chime output level, mic output level
Other inputs:	USB PS2 compatible keyboard (type A)
Mic frequency response:	100Hz - 10kHz
Mic Sensitivity:	-76dB ±3dB
Mic Polar pattern:	Cardioid (unidirectional)
Power connection (24VDC):	2.1mm JACK (centre +ve)
Mic gooseneck:	325mm
Dimensions:	235W x 110D x 55H mm (excluding gooseneck)
Weight:	0.6kg

6.0 A 4586 Programming Sheet

Each A 4586 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 4586 product page.

ZONE NAMES

1	2	3	4
5	6	7	8

CONSOLE 1

RECALL 1	RECALL 2	RECALL 3	RECALL 4
RECALL 5	RECALL 6	RECALL 7	RECALL 8

CONSOLE 2

RECALL 1	RECALL 2	RECALL 3	RECALL 4
RECALL 5	RECALL 6	RECALL 7	RECALL 8

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