Operating Manual
A 4486 Paging Console
A 4487 Line Out Box
A 4580 16 Zone Switcher

A 4487

A 4486

A 4580

1.0 Overview

The A 4486 paging microphone is a simple to use and elegant desk top design which provides paging to a single zone (when used with the A 4487). 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. Provision has also been made on the rear of the unit for a 3.5mm BGM input for background music. The paging microphone can be used in conjunction with the A 4487 Line Out Box or the A 4580 16 Zone Paging System.

The A 4487 Line out box provides a MIcrophone or Line level output which can be connected directly to the input of an amplifier. Connection between the A 4486 and A 4487 is via a Cat5e cable which carries power and the balanced audio output from the microphone. Power for the system can be connected at the microphone or the Line Out box.

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 paging consoles can be connected to the A 4580.

2.0 Features

- Single zone paging (when used with the A 4487).
- High level balanced output via Cat 5 cable
- 24V DC power supplied via Cat 5 cable
- Chime volume adjustment
- BGM volume adjustment

- All Call zone paging (when used with the A 4580).
- 3.5mm BGM input on rear
- Pre-announcement chime.
- Mic volume adjustment

3.0 A 4486 Connections

Fig 1

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**
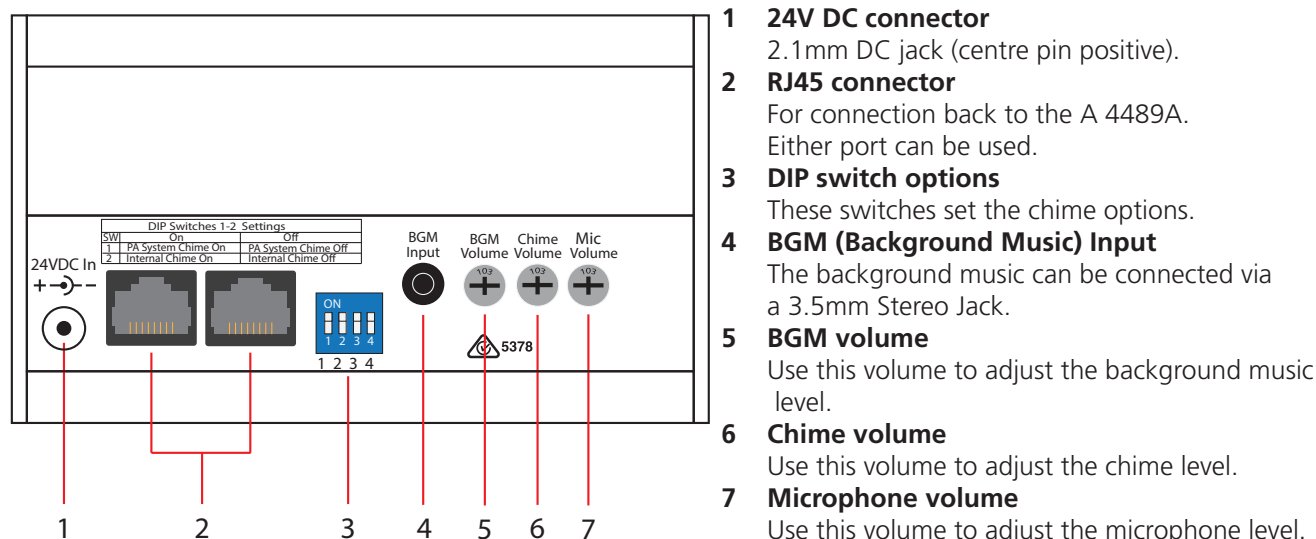   Use this volume to adjust the microphone level.

4.0 Connecting the A 4486 and A 4487

The Microphone and Line out box are connected by a CAT5e cable with a maximum run distance of 300 metres. This CAT5e cable can be connected to either of the two RJ45 ports provided on the rear of the microphone. A 24V DC power supply rated at a minimum of 500mA is required to power the system. Power connection must be made by connecting 24V DC power to the Line Out Box via the 2 way screw terminal. Power is then fed through the CAT5e cable to feed the A 4486 microphone itself. If the Cat5 cable run is long, there may be sufficient voltage drop that the A 4486 paging console doesn't power up correctly. In this instance an additional 24V DC source needs to be connected to the rear of the A 4486 via the 2.1mm DC Jack connector.

The balanced audio output from the microphone is transmitted down the CAT5e cable to the Line Out Box which splits and converts the signal to microphone and line level outputs. These are provided as screw terminal connections. Volume controls for the microphone volume and chime volume are located on the rear of the microphone.

Typical connection of the A 4486 and A 4487 with a single amplifier
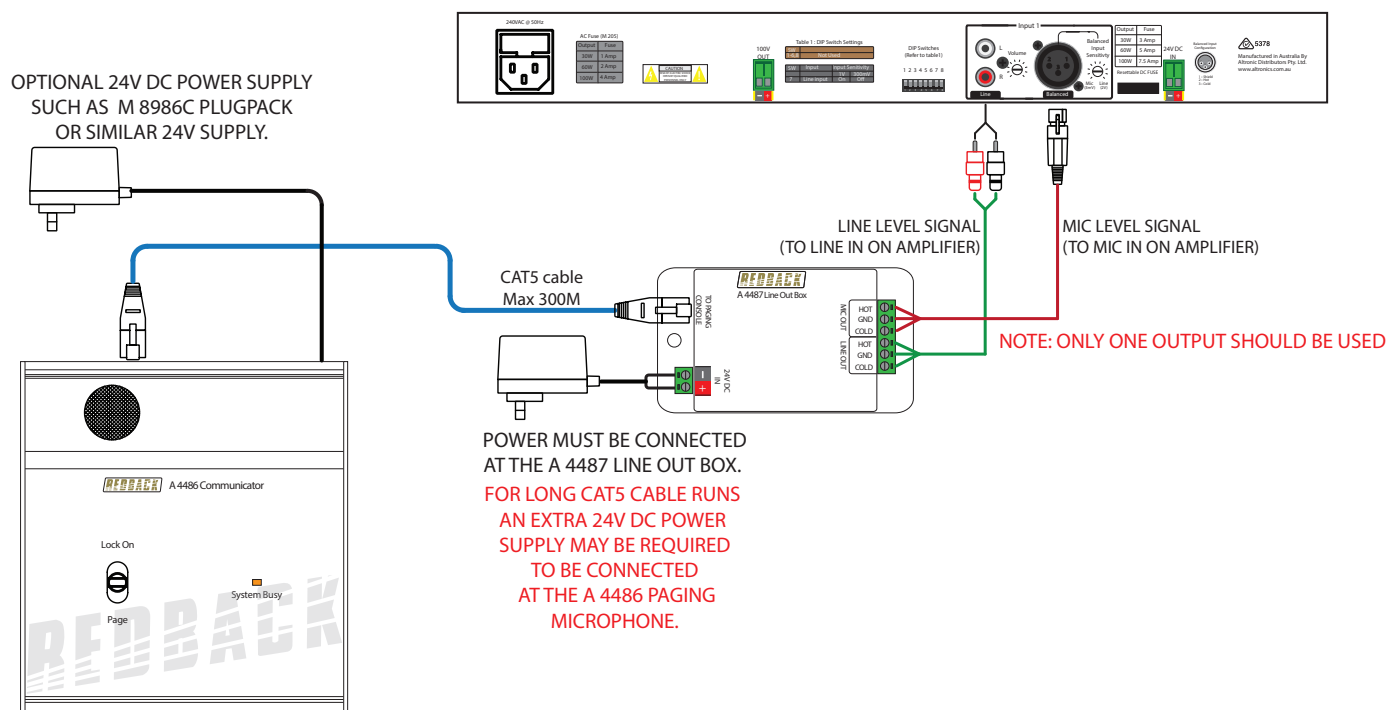

Fig 2

RJ45 cabling configuration (586A 'Straight through')

System components are connected using "pin to pin" configuration RJ45 data cabling as shown in fig 3. 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.
and will Void the warranty.

568A
Straight Through
(both ends)

Pins Face Upwards

8	
7	
6 TX-	
5	
4	
3 TX +	
2 RX-	
1 RX+	

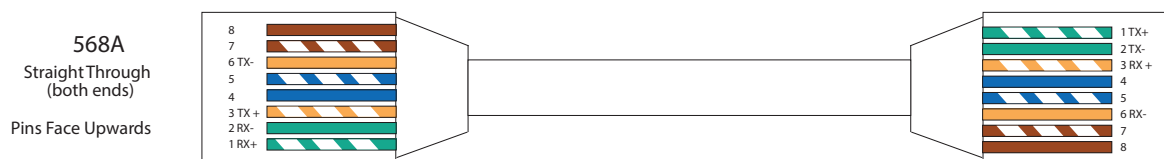|	
1 TX+	
2 TX-	
3 RX +	
4	
5	
6 RX-	
7	
8	

Fig 3

5.0 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: The ID must be set to ID1 when using the A 4486 with the A 4487.
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.

IMPORTANT NOTE:
Ensure power is switched off when adjusting DIP switches.
New settings will be effective when power is switched back on. **Fig 4**

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

6.0 Activating the BGM (Background Music)

Backgound music can be supplied to the paging system by connecting an audio source such as a mobile phone, tablet etc. to the 3.5mm input jack on the rear of the paging microphone. Figure 5 shows the position of this connector.
To activate the background music, move the push to talk switch to the up position which is lablelled "Lock On". While the switch is in this position and only this position will the background music will be piped out. The volume is adjusted by the BGM volume trimpot on the rear of the microphone.
If the switch is moved to the "Page" position the background music will stop and paging will be active.
If the switch is in the centre position the BGM and paging are not active.
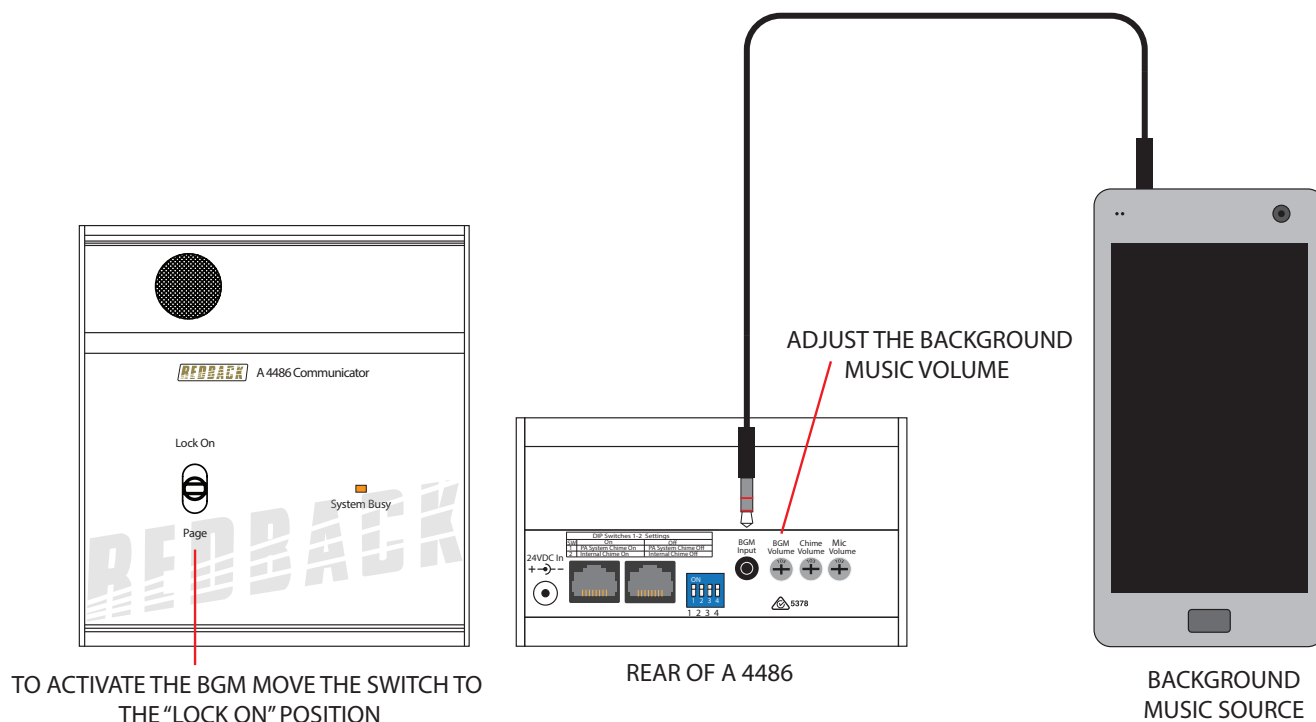
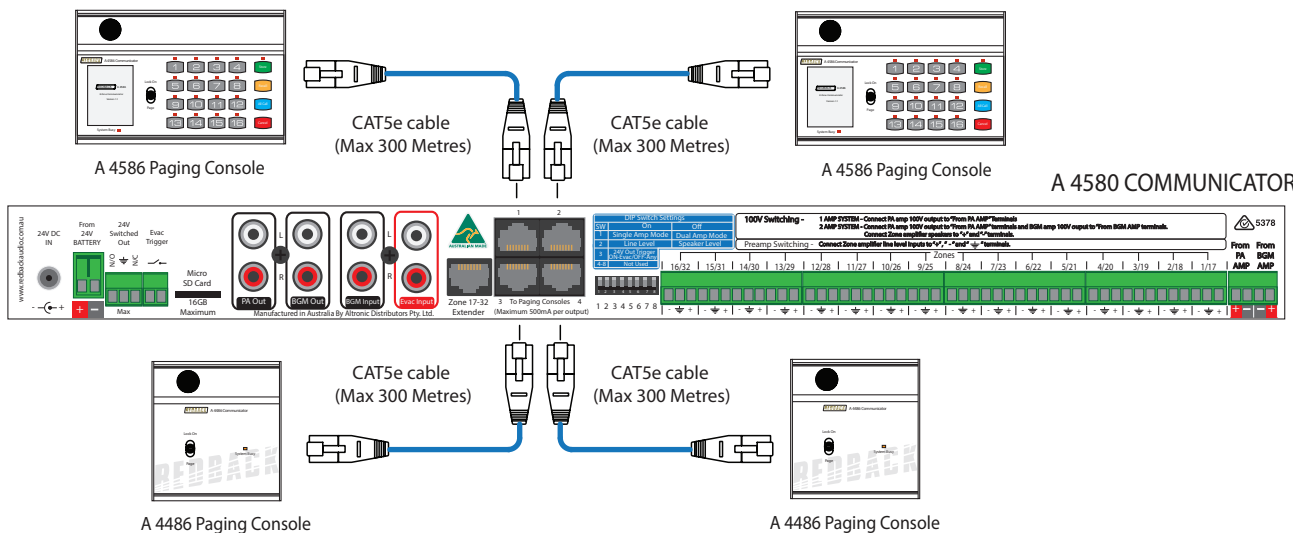## Connecting an audio source to the BGM input

ADJUST THE BACKGROUND MUSIC VOLUME

A 4486 Communicator

Lock On

System Busy

Page

TO ACTIVATE THE BGM MOVE THE SWITCH TO THE "LOCK ON" POSITION

REAR OF A 4486

BACKGROUND MUSIC SOURCE

Fig 5

7.0 Connecting the Paging Console/s and the A 4580 Communicator

The Paging console/s and A 4580 Communicator are connected by CAT5e cables with a maximum run distance of 300 metres. This CAT5e cable can be connected to either of the two RJ45 ports provided on the rear of the microphone. A 24V DC power supply rated at a minimum of 1A is required to power the system. Power connection must be made by connecting power to the A 4580 communicator via the euro block or DC power socket. Power is then fed through the CAT5e cables to supply power to the paging consoles.

A maximum of seven 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 4486 paging consoles. Each port can accomodate a maximum of 1 paging console without the aid of external power supplies.

Fig 5 shows how to connect one paging console per RJ45 port. When connecting the A 4486 paging consoles to the A 4580 they must be set to ID2 - ID8. They cannot be set to ID1.

PLEASE NOTE : A MAXIMUM OF 4 PAGING CONSOLES CAN BE CONNECTED TO THE A 4580
WITHOUT THE USE OF EXTERNAL POWER SUPPLIES. (AND A MAXIMUM OF 1 PAGING CONSOLE PER PORT)

Fig 5

11.0 Trouble shooting

SYMPTOMS	REMEDIES
Paging consoles not responding	Make sure the ID's are set correctly
No audio out of A 4486	Check Cat5e lead wired correctly
No audio from zone terminals on rear of A 4486	Check wiring to "Audio In" terminals
No Background music	Check lead on BGM input of paging console Check BGM volume
No Pre-announcement chime	Check DIP switch settings Check chime volume
No sound from Microphone	Check Mic Volume

SPECIFICATIONS

OUTPUT MIC LEVEL:...3mV
OUTPUT LINE LEVEL:...1V
BGM INPUT SENSITIVITY:...500mV
OUTPUT CONNECTORS:
    Audio Outputs: (A 4487)............Euroblock terminal
    Paging Console (A 4486):...................... RJ45 8P8C
INPUT CONNECTORS:
    Line Out Box Input:............................... RJ45 8P8C
    24V DC Power (A 4487):............Euroblock terminal

24V DC Power (A 4486):..2.1mm JACK(centre +ve)
CONTROLS:
    Mic Volume:.......................................Rear Volume
    Chime Volume:..................................Rear Volume
    BGM Volume:.....................................Rear Volume
POWER SUPPLY:....................................24V DC @ 0.5 Amp
DIMENSIONS:≈.................... A 4486 - 117W x 135D x 350H
DIMENSIONS:≈...........................A 4487 - 90W x 52D x 30H
WEIGHT: ≈...A 4486 - 0.7 kg