





# **Operating Manual**

## A 4487 Line Out Box

Optional Accessories **A 4658** Power Injector (U/UTP Cat5) **A 4660** Emergency Paging Microphone Console (U/UTP Cat5)



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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 unit from working as designed.

### 1.0 OVERVIEW

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 4660 and A 4487 is via a Cat5e/6 cable which carries power and the balanced audio output from the microphone.

The A 4660 paging microphone provides paging to a single zone. A pre-announcement and post-announcement chime is available at the paging console and through the PA system. Both of these are activated via the paging console menu. Provision has also been made on the A 4660 paging console for background music.

### 2.0 FEATURES

#### A 4487

- Mic and Line level balanced outputs
- 24V DC power supplied via optional plugpack

#### A 4660

- Single zone paging (when used with the A 4487).
- Pre-announcement chime (optional A 4660).
- Post-announcement chime (optional A 4660).
- Chime volume adjustment
- Mic volume adjustment
- BGM volume adjustment
- Additional BGM Input (paging microphone)
- High level balanced output via Cat 5 cable
- 24V DC power supplied via Cat 5 cable

### 3.0 CONNECTING THE A 4660 AND A 4487

The A 4660 Paging console and Line out box are connected by a Cat5e/6 cable with a maximum run distance of 200 metres. This Cat5e/6 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/6 cable to feed the A 4660 microphone itself.

The balanced audio output from the microphone is transmitted down the Cat5e/6 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 paging console.





### 4.0 A 4660 PAGING CONSOLE OVERVIEW

The A 4660 paging consoles allows for paging to a single output zone. This is achieved by simply pressing the page button. General paging will override the background music.

At the completion of the announcement, background audio will be restored.

A maximum of one paging console can be connected back to the A 4487. Each unit must be assigned an address which is set when the A 4660 is first initialised, or it can be re-assigned by accessing the Factory Reset option (see page 5).

The paging console can also be used as a secondary local source of background music (BGM).

## 5.0 A 4660 HOME SCREEN

Figure 2 below outlines the main functions of the A 4660.

**1 Menu Button** - Press this to access the system settings (see section 6.0)

**2 Installer label** - Displays the installer label if required (see section 6.3)

**3 BGM (Background music) source** - Describes the background music condition and/or source..

**4 Page Button** - Press this button to page. Press again to cancel paging. Note: If the Chime In or Chime Out are enabled (see section 6.6) these will activate before and/or after paging is available.

5 BGM Disabled/Enabled - Press this button to enable or disable the background music option (see section 7.0).







## 6.0 A 4660 SETTINGS

The settings menu can be accessed using the icon on the top left of the screen. Once in this menu the following screen will be displayed, which shows the various settings available.



Fig 3 - Console Settings Screen.

#### 6.1 A 4660 System Settings

The System settngs screen is shown in figure 4.



Fig 4 - System Settings Screen.

- **Audible Feedback** Allows you to enable/disable the audible feedback (in built speaker) on button presses and set the volume. Press the button to enable/disable and use the slider below to adjust the feedback volume.
- **2 Restart unit** This will restart the A 4660.
- **3 Factory reset** This will reset the unit back to it's default settings. This option is also required to re-assign the paging console address (Press the factory reset button, tap confirm and a prompt will appear for the units address. Select the required address (which can be any number from 1-2). If any settings need saving before the factory reset, use the Export Settings option below.
- **Export Settings** This feature allows the settings of the unit to be transferred to another unit or kept as a back up. Simply insert a Micro Sd card into the unit and follow the prompts.
- 5 **Import Settings** This feature allows the settings of the unit to be imported from another unit. Insert a Micro SD card and follow the prompts.

#### 6.2 A 4660 Backlight Settings

Press the "backlight" button to display the screen shown in figure 5.

There are two levels of screen brightness which come into effect, when the screen hasn't been touched for a period of time set by the user.

This menu screen allows the user to select the active screen brightness level, the dimmed brightness level and timeout periods for the transition from active screen mode to dimmed mode, and the transition period from dimmed mode to screen off mode.

- **1 Active Screen Brightness Level** Use this slider to adjust the brightness level of the active screen.
- 2 Dimmed Screen Brightness Level Use this slider to adjust the brightness level of the dimmed screen
- **3** Active Screen to Dimmed Mode transition time Use these buttons to adjust the timeout period to enter dimming mode (set to 0 for the screen to be remain always on).
- **4 Dimmed Mode to screen Off transition time** Use these buttons to adjust the timeout period from dimmed screen mode to the screen turning off completely (This is unavailable if the dimming mode is set to zero).





**6.3 A 4660 Labels** - Allows you to customise an installer label which is displayed on the top of the main screen, and name the Bluetooth module.

Select the desired button and then use the displayed keyboard to enter the labels.

**6.4 A 4660 PIN Access** - Set an optional access PIN preventing unauthorised access to the wallplates settings. Type in a preferred PIN and press "E" to accept. Press "C" to delete PIN digits or to reset the PIN (For access without a PIN, delete all PIN digits). Once complete press the BACK button and the change will take effect.

### 6.6 A 4660 Microphone settings

Press the "microphone" button to display the screen shown in figure 6. From this menu the chime options and action of the paging button are set.





- **1 Console Speaker** This button enables the speaker built into the A 4660. If enabled the chime will be audible from the console as well as through the paging system.
- 2 Chime In This button allows you to enable or disable the pre-annoucement chime on the paging audio. The level can also be adjusted to suit the installation. For instance a user may require the pre-annoucement chime be louder than the normal programming. The standard pre-announcement chime can be replaced by an MP3 file installed on a MIcro SD card by the user. A folder called "chime\_in" needs to be created and the required MP3 file inserted into this folder. The micro SD card needs to be inserted into the A 4660 and kept there.
- **3 Chime Out** This button allows you to enable or disable the post-annoucement chime on the paging audio. The level can also be adjusted to suit the installation. For instance a user may require the post-annoucement chime be louder than the normal programming. The standard post-announcement chime can be replaced by an MP3 file installed on a MIcro SD card by the user. A folder called "chime\_out" needs to be created and the required MP3 file inserted into this folder. The micro SD card needs to be inserted into the A 4660 and kept there.
- **9 PTT Action** This button determines the action of the paging button. If momentary action is selected the paging button will need to be held to page. If alternate action is selected the paging button needs to be pressed and released to start paging. The paging mode will stay active for the period set by the timeout, or until the paging is cancelled by the user.
- **5 Mic AGC** Allows for the microphones automatic gain control (AGC) effect to be adjusted up or down according to installation requirements. AGC allows the signal to automatically adjust to compensate for variations in level of peoples voices when making paging annoucements. Please note high levels of AGC will increase audible noise in the system while paging.
- **6 Paging Level** Adjust the paging level to suit the installation. This allows for paging to be adjusted to suit the level of programming from other sources connected to the system.

### 7.0 UNDERSTANDING THE BGM (BACKGROUND MUSIC)

Background music can be supplied to the paging system via the A 4660 paging console.

Press the "BGM Select" button accessed by the Menu button (refer to figure 3) to display the screen shown in figure 7. From this menu the BGM options and volume are set.



Fig 7

- **BGM Level** Adjust the BGM level to suit the installation.
- 2 Select BGM Source Use these buttons to select the A 4660 BGM input source (See section 7.1).

#### 7.1 A 4660 Background Music Sources

There are three options available as background music sources.

#### MP3 via Internal SD card

Background music can be played from a Micro SD card inserted into the unit. A folder called "BGM" needs to be created and the required MP3 files inserted into this folder. MP3 files stored in the "BGM" folder will be played randomly.

Please note: Every time paging occurs the background music will return to a new MP3 file. It will not resume from the previously playing file.

#### **Bluetooth Connection**

A bluetooth device such as a mobile phone, can be paired to the A 4660 for BGM playback. Simply search for the bluetooth device and pair. Previously paired devices can be cleared using the "Clear Paired" button. The Bluetooth module can be labelled using the procedure set out in section 6.3.

#### Line In

A local BGM source such as a mobile phone or tablet, is connected to the A 4660 through a compatible Redback UTP solutions transmitter. Figure 8 illustrates the use of a mobile phone as the local BGM source. This is connected to the 3.5mm audio input of the Redback A 4944 and then fed through a Cat5e/6/6 cable to the A 4660 paging console.



#### Fig 8 - Local BGM input via Redback A 4944 solutions transmitter

#### RJ45 cabling configuration (586A 'Straight through')

System components are connected using "pin to pin" configuration RJ45 data cabling as shown in fig 9. 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.



Fig 9

### 8.0 Specifications

OUTPUT MIC LEVEL:	3mV
OUTPUT LINE LEVEL:	1V
BGM INPUT SENSITIVITY:	500mV
OUTPUT CONNECTORS:	
Audio Outputs: (A 4487)Euroblo	ck terminal

CONTROLS:	
Mic Volume:	Rear Volume
Chime Volume:	Rear Volume
BGM Volume:	Rear Volume
POWER SUPPLY:	

INPUT CONNECTORS: