



MIXER 4 CHANNEL WITH MP3 BASED MESSAGE PLAYER



Operating Manual A 4435 4 CHANNEL MIXER WITH MESSAGE PLAYER



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 unit 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 close to 40 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 39 years of operation - and still going strong!

CONTENTS

| | Page |
|----------------------------|-------------|
| 1.0 Overview | |
| 1.1 Introduction | 4 |
| 1.2 Features | 4 |
| 1.3 What's in the box | 4 |
| 1.4 Front panel guide | 5 |
| 1.5 Rear panel connections | 6 |
| 2.0 Setup | |
| 2.1 MP3 File Setup | 7 |
| 2.2 Power Connections | 9 |
| 2.3 Audio Connections | 9 |
| 2.4 DIP Switch settings | 10 |
| 3.0 Troubleshooting | 10 |
| 4.0 Firmware Update | 11 |
| 5.0 Specifications | 11 |

1.0 OVERVIEW

1.1 INTRODUCTION

This unique Redback PA mixer features four input channels which are user selectable for either balanced mic, line or auxiliary use. In addition it incorporates a four channel SD card based message player making it an excellent choice for retail, supermarkets, hardware stores and more.

The mixer could be used for general paging and BGM applications, and the message player for customer service applications, in-store advertising or for pre-recorded commentary at galleries, display stands etc.

The message player and each input all have individual level, treble and bass controls. Vox muting is provided for channels one and two with front panel adjustable sensitivity. The message player has priority and slots in between input one and two. Custom messages, tones and music may be loaded onto the message player SD card. The messages are activated by a closing set of contacts. If input one is active when a message contact is closed, the message is queued and played once input one is no longer in use.

Messages are played on a first in, best dressed (FIBD) basis, and will also be queued if one message is playing and another is activated. Input four is also fitted with a 3.5mm jack input for connection to a smartphone/tablet as an audio source. When connected, this overrides any source connected to input 4 on the rear panel. Each input has a 3 pin XLR (2mV) and stereo RCA socket with adjustable sensitivity settings. These can be set 100mV or 1V for the stereo RCAs. Message player contacts are provided via pluggable screw terminals. 24V DC operation from the included power supply or battery backup.

1.2 FEATURES

- Four input channels
- SD card message player for audio announcements
- Individual level, bass and treble control on all inputs
- 3.5mm music input
- Adjustable input sensitivity on mic or line
- 24V DC battery back up terminals
- Four sets of closing contacts for message triggering
- 24V DC switched output
- Message active indicators
- Adjustable Vox sensitivity
- 10 Year Warranty
- Australian Designed and Manufactured

1.3 WHAT'S IN THE BOX

A 4435 Mixer 4 Channel with MP3 Message player
24V 1A DC Plugpack
Instruction Booklet

1.4 FRONT PANEL GUIDE

Fig 1.4 shows the layout of the A 4435 front panel.

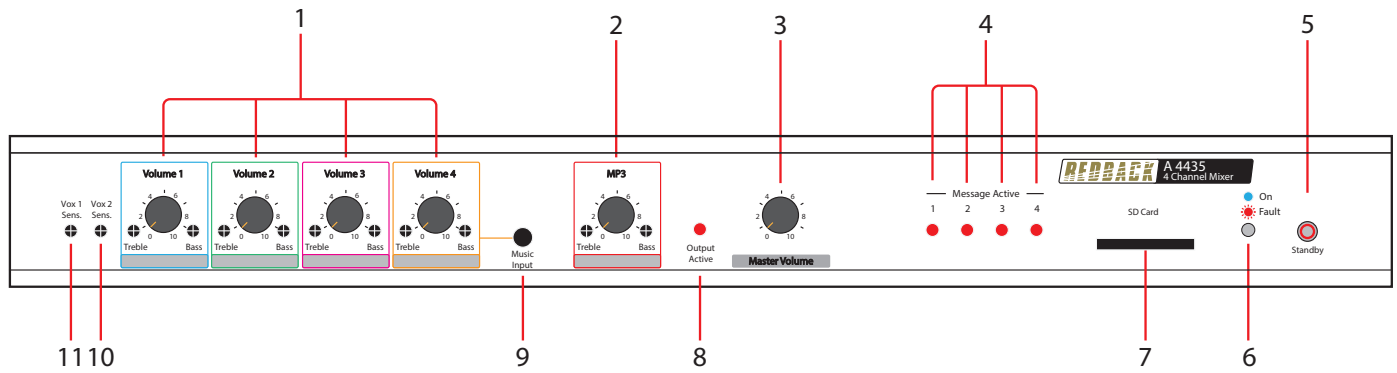


Fig 1.4

- 1 Inputs 1-4 volume controls**
Use these controls to adjust the output volume, bass and treble of inputs 1-4.
- 2 MP3 volume control**
Use these controls to adjust the output volume, bass and treble of the MP3 audio.
- 3 Master Volume**
Use these controls to adjust the output volume, bass and treble of the master volume.
- 4 Active Message Indicators**
These LED's indicate which MP3 message/audio file is active.
- 5 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.
- 6 On/Fault Indicator**
This led indicates when the unit has power if the LED is blue. If the LED is red a fault has occurred with the unit.
- 7 SD Card**
This is used to store the MP3 audio files for the message/audio playback. Note the unit is supplied with a tamper cover so that the SD card is not easily removed. The SD card may need to be pushed in with a screwdriver to insert and to remove because of the depth of the socket.
- 8 Output Active Indicator**
This led indicates when the unit has an input signal present.
- 9 Music input**
This input will override input 4 when connected. Use this for connection of portable music players. (Note: switch 1 on DIP4 must be set to ON to enable this function).
- 10 VOX 1 Sensitivity**
This sets the VOX sensitivity of input 1. When the VOX is active on input 1, inputs 2-4 are muted.
- 11 VOX 2 Sensitivity**
This sets the VOX sensitivity of input 2. When the VOX is active on input 2, inputs 3-4 are muted.

1.5 REAR PANEL CONNECTIONS

Fig 1.5 shows the layout of the A 4435 rear panel.

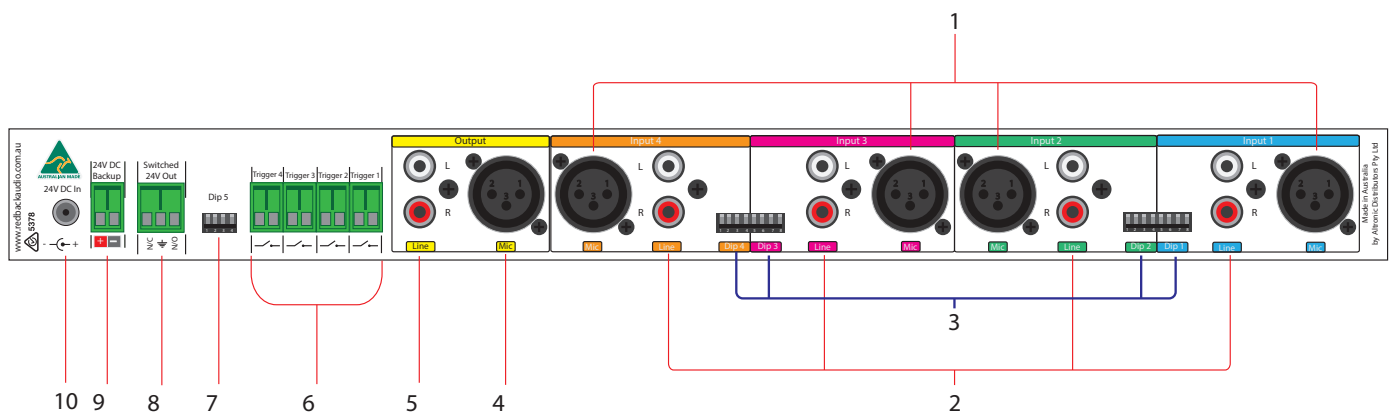


Fig 1.5

1 Microphone Inputs

There are four microphone inputs which all incorporate a 3 pin balanced XLR. Phantom power is available at each Mic input and is selected via DIP switches on DIP1 - DIP4 (For more details see DIP switch settings).

2 RCA Inputs

The line inputs are dual RCA connectors which are internally mixed to produce a mono input signal. The input sensitivity of these inputs can be adjusted to 100mV or 1V via the DIP switches.

3 Dip Switches DIP1 - DIP4

These are used to select various options such as phantom power on mic inputs, Vox options and input sensitivities. Refer to DIP Switch Settings section.

4 Preamp Out (Balanced Line Output)

A 3 pin 600ohm 1V balanced XLR output is provided for passing the audio signal on to a slave amplifier or to record the output of the amplifier.

5 Line Out

Dual RCA's provide a line level output for recording purposes or to pass the output on to another amplifier.

6 Remote triggers

These contacts are for remote triggering of the internal MP3 player. There are four contacts which correspond to the four MP3 files stored in the trigger folders of the SD card.

7 DIP 5

These switches provide various play modes (see DIP switch settings for more details).

8 Switched Out

This is a 24V DC output which is activated when any of the remote triggers are operated. The terminals provided can be used for "Normal" or "Failsafe" modes. The output terminals have a N/O (normally open), N/C (normally closed) and a ground connection. In this configuration 24V appears between the N/O and ground terminals when this output is activated. When this output is not active 24V appears between the N/C and ground terminals.

9 24V DC Input (Backup)

Connects to a 24V DC backup supply with at least 1 amp current capacity. (Please observe the polarity)

10 24V DC input

Connects to a 24V DC Plugpack with 2.1mm Jack.

2.0 SETUP GUIDE

2.1 MP3 FILE SETUP

The MP3 audio files are stored on an SD card which is located on the front of the unit as shown in figure 1.4. These MP3 audio files are played when the triggers are activated.

These MP3 audio files can be removed and replaced with any MP3 audio file (Note: The files must be in MP3 format), whether it be music, a tone, a message etc.

The audio files are located in four folders labelled Trig1 to Trig4 on the SD card as shown in figure 2.1.

A library of MP3 tones are also supplied in the folder labelled #LIBRARY#.

In order to put MP3 files onto the SD card, the SD card will need to be connected to a PC. You will need a PC or laptop equipped with a SD card reader to do this. If a SD slot is not available then the Altronics D 0371A USB Memory Card Reader or similar would be suitable (not supplied).

You will first need to remove power from the A 4435 and then remove the SD card from the front of the unit. To access the SD card, push the SD card in so that it pops back out, and then remove the card.

Step by step guide to put an MP3 into it's associated folder with a Windows installed PC.

Step 1: Make sure the PC is on and card reader (if required) connected and correctly installed. Then insert the SD card into the PC or the reader.

Step 2: Go to "My Computer" or "This PC" and open the SD card which is usually marked "Removable disk". In this example it is named "USB Drive (M:)".

Select the removable disk and then you should get a window that looks like figure 2.1.

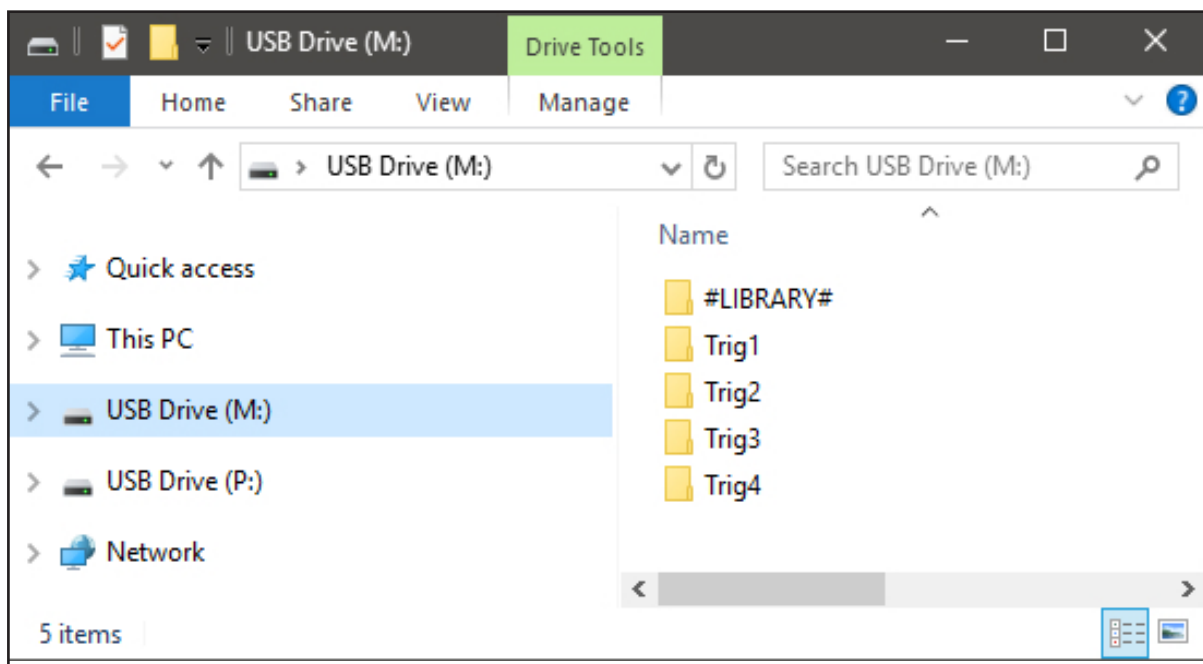


Fig 2.1

The #LIBRARY# folder and the four trigger folders are now visible.

Step 3: Open the folder to change, in our example the "Trig1" folder, and you should get a window that looks like figure 2.2

Step 4: You should see an MP3 file "1.mp3".

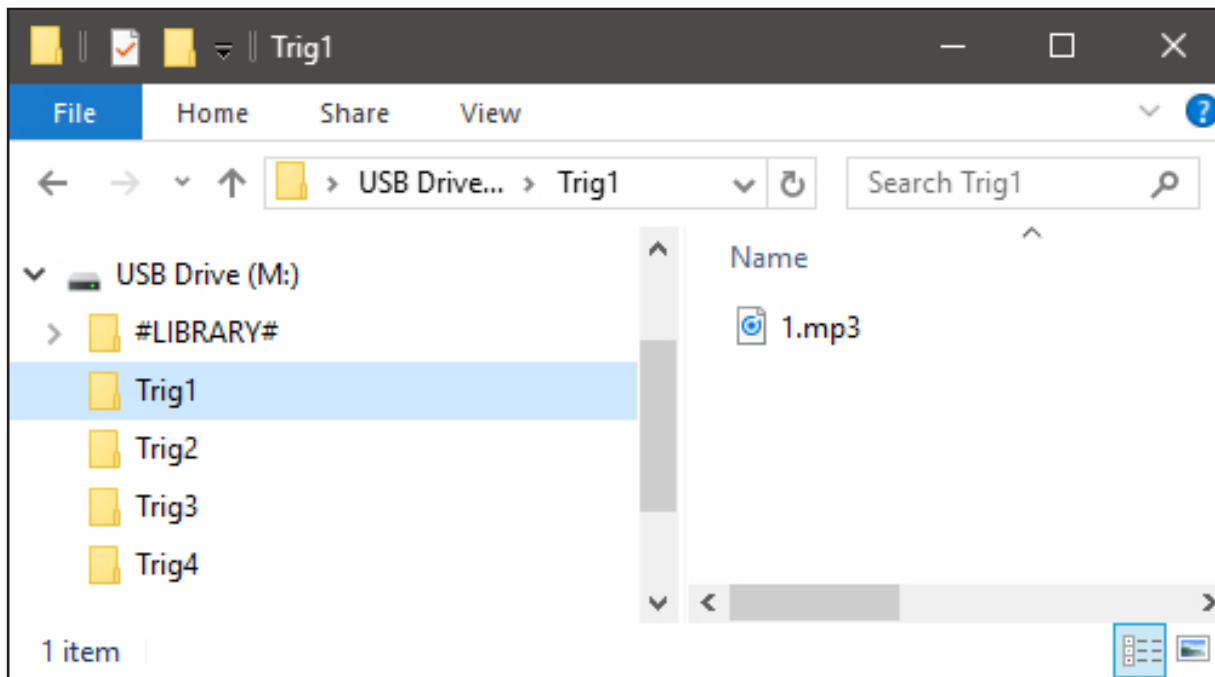


Fig 2.2

This MP3 file needs to be deleted and replaced by the MP3 file you want to play when you the rear Trigger 1 contact. The MP3 file name is not important only that there is only one MP3 file in the “Trig1” folder. Make sure you delete the old MP3!

NOTE the new MP3 file cannot be “Read only”. To check this right click on the MP3 file and scroll down and select Properties, you will get a window that looks like figure 2.3. Make sure the “Read Only” box has no tick in it.

Repeat these steps for the other folders as required.

The new MP3’s are now installed on the SD card, and the SD card can be removed from the PC following windows safe card removal procedures.

Make sure the A 4435 is not powered and insert the SD card into the SD card slot ; it will click when fully inserted. The A 4435 can now be powered back on.

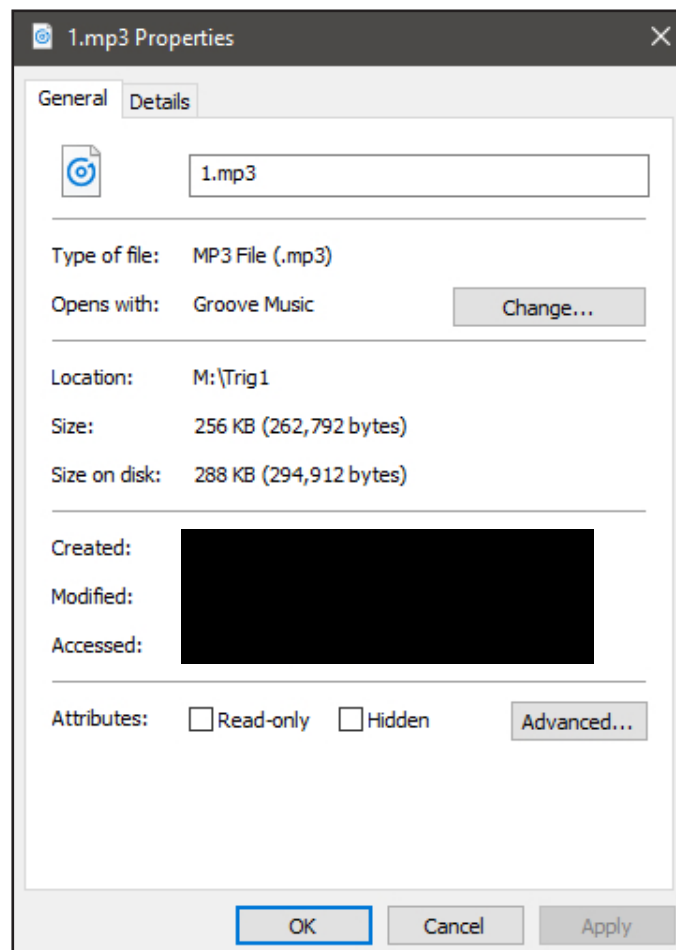


Fig 2.3

2.2 POWER CONNECTIONS

A DC socket and a 2 way terminal have been provided for 24V DC input.

The DC socket is for connection of the supplied plugpack which comes with a standard 2.1mm jack connector. The socket also has a threaded connector so that the Altronics P 0602 (shown in Fig 2.4) could be used. This connector eliminates accidental removal of the power lead.

The 2 way terminal is for connection of a backup power supply or battery.

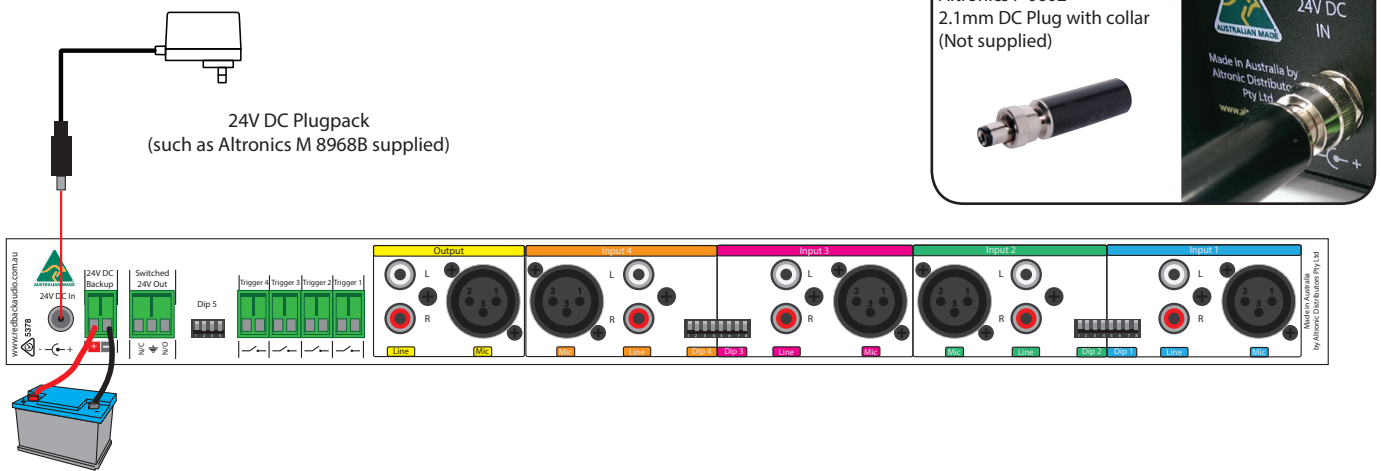


Fig 2.4

2.3 AUDIO CONNECTIONS

Fig 2.5 demonstrates a simple example of the A 4435 in use in a department store. The XLR output of the mixer is fed into an amplifier which in turn connects to speakers throughout the store. A background music (BGM) source is fed into the line level RCA's of input 2. A microphone at the front desk is connected to input 1, and has vox priority turned on via the DIP1 switches. Any time the microphone is used the BGM will be muted. A security message is played randomly, set off by a timer which is connected to trigger 1 and plays an MP3 "Security to the front of the store". The paint section in the store has a "Assistance Required" button, which when pressed activates trigger two and plays an MP3 "Assistance required in the paint section". The output of the mixer is connected to a recorder which keeps a record of everything output from the system including anything said into the microphone.

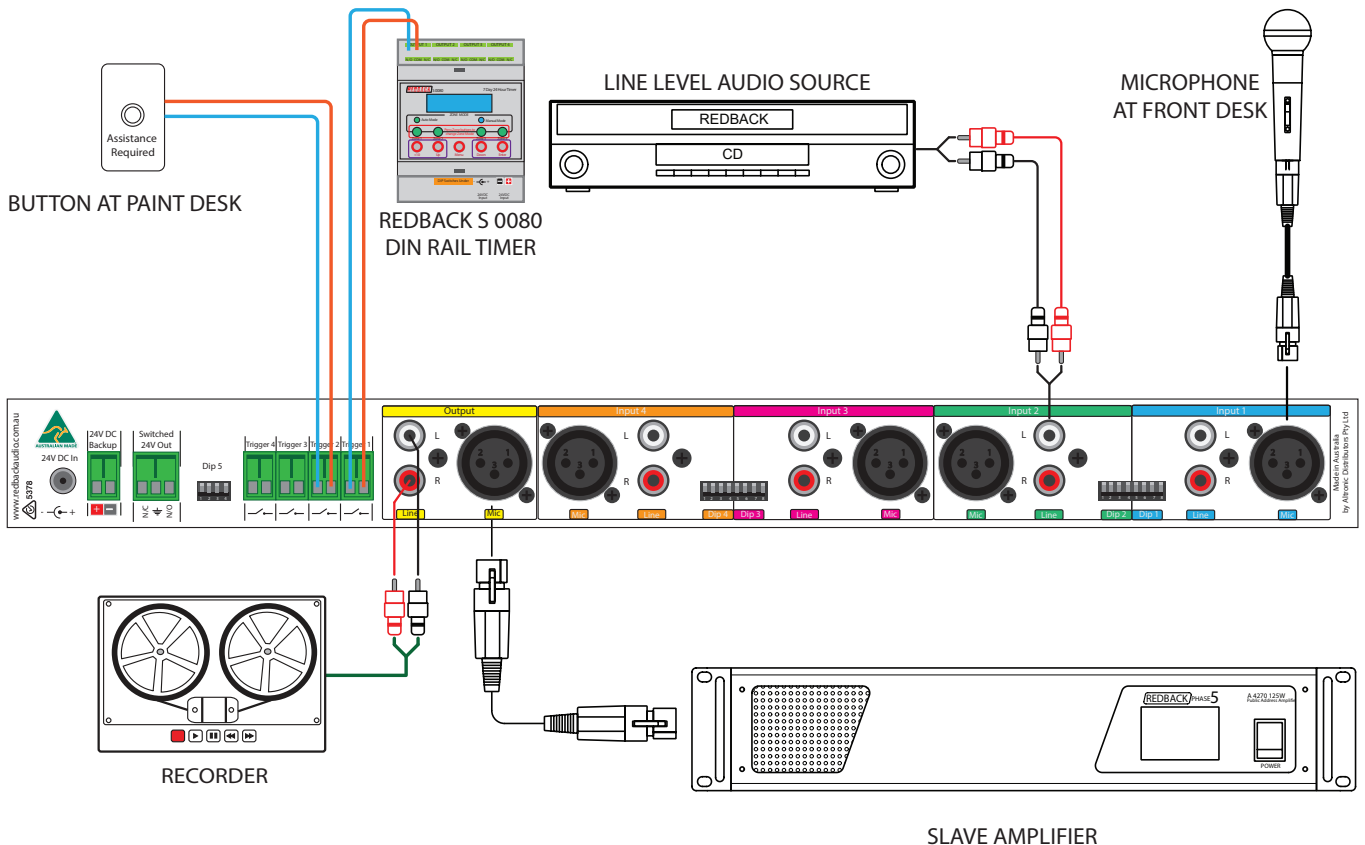


Fig 2.5

Redback® A 4435 Mixer 4 Input & Message Player

2.4 DIP Switch settings

The A 4435 have a set of options which are enabled via the DIP switches 1-5.

DIP 1-4 set the input level sensitivity, phantom power and priorities for inputs 1-4 as outlined below.

(* Priority/VOX muting is only available for inputs 1-2. Inputs 3-4 have no priority levels.)

DIP 1

Switch 5 - Input 1 Select - OFF - Mic, ON - Line

Switch 6 - Sets Input 1 sensitivity to either ON - 1V or OFF - 100mV. (This affects both the Balanced Mic and Line inputs)

Switch 7 - Sets Input 1 priority or VOX to ON or OFF.

Switch 8 - Enables Phantom power to the Mic on input 1.

DIP 2

Switch 1 - Input 2 Select - OFF - Mic, ON - Line

Switch 2 - Sets Input 2 sensitivity to either ON -1V or OFF -100mV. (This affects both the Balanced Mic and Line inputs)

Switch 3 - Sets Input 2 priority or VOX to ON or OFF.

Switch 4 - Enables Phantom power to the Mic on input 2.

DIP 3

Switch 5 - Input 3 Select - OFF - Mic, ON - Line

Switch 6 - Sets Input 3 sensitivity to either ON - 1V or OFF - 100mV. (This affects both the Balanced Mic and Line inputs)

Switch 7 - Not used

Switch 8 - Enables Phantom power to the Mic on input 3.

DIP 4

Switch 1 - Input 4 Select - OFF - Mic, ON - Line/Music input (*Must be set to ON for Music Input to operate*)

Switch 2 - Sets Input 4 sensitivity to either ON - 1V or OFF - 100mV. (This affects both the Balanced Mic and Line inputs)

Switch 3 - Not used

Switch 4 - Enables Phantom power to the Mic on input 4.

Input 1: When VOX is enabled on input 1 it will override inputs 2 - 4.

Input 2: When VOX is enabled on input 2 it will override inputs 3 - 4.

DIP 5

Switch 1 - ON - Hold trigger contact closed to play, OFF - Hold trigger contact closed momentarily to play.

Switch 2 - ON - Trigger 4 acts as a remote cancel, OFF - trigger 4 acts as normal trigger.

Switch 3 - Not used

Switch 4 - Not used

IMPORTANT NOTE:

**Ensure power is switched off when adjusting DIP switches.
New settings will be effective when power is switched back on.**

3.0 TROUBLE SHOOTING

If the REDBACK Phase 4 amplifier fails to deliver the rated performance, check the following:

No Power, No Lights

The standby switch is used to turn the unit on. Make sure this switch has been pressed.

Make sure mains power switch is on at the wall.

Check the supplied plugpack is connected correctly.

MP3 files not playing

The files must be MP3 format. Not wav, AAC or other.

Check SD card is inserted correctly.

DIP switch changes not effective

Turn the unit OFF before changing DIP switch settings. Settings become effective after power is returned.

4.0 FIRMWARE UPDATE

It is possible to update the firmware for this unit by downloading updated versions from www.altronics.com.au or redbackaudio.com.au.

To perform an update, follow these steps.

- 1) Download the Zip file from the website.
- 2) Remove the SD card from the A 4435 and insert it into your PC. (Follow the steps on page 8 to open the SD card).
- 3) Extract the contents of the Zip file to the root folder of the SD Card.
- 4) Rename the extracted .BIN file to update.BIN.
- 5) Remove the SD card from the PC following windows safe card removal procedures.
- 6) With the power turned OFF, insert the SD card back into the A 4435.
- 7) Turn the A 4435 ON. The unit will check the SD card and if an update is required the A 4435 will perform the update automatically.

5.0 SPECIFICATIONS

OUTPUT LEVEL:.....0dBm

DISTORTION:.....0.01%

FREQ. RESPONSE:.....140Hz - 20kHz

SENSITIVITY

Mic inputs:3mV balanced

Line inputs:.....100mV-1V

OUTPUT CONNECTORS

Line out:3 pin XLR balanced or 2 x RCA

Switched out:Screw terminals

INPUT CONNECTORS

Inputs:3 pin XLR balanced or 2 x RCA

..... 3.5mm stereo jack front panel

24V DC power:Screw terminals

24V DC Power:2.1mm DC Jack

Remote triggers:Screw Terminals

CONTROLS:

Power:.....Standby Switch

Bass:.....±10dB @ 100Hz

Treble:.....±10dB @ 10kHz

Master:Volume

Inputs 1-4:Volume

MP3:Volume

INDICATORS:.....Power on, MP3 error,
.....Message active

POWER SUPPLY:..... 24V DC

DIMENSIONS:≈..... 482W x 175D x 44H

WEIGHT: ≈..... 2.1 kg

COLOUR:Black

* Specifications subject to change without notice

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.

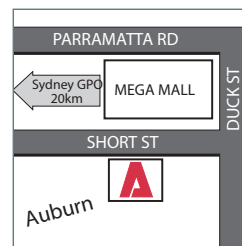
Ph: 1300 797 007 Fax: 1300 789 777

www.altronics.com.au

Sydney, NSW.

15 Short St, AUBURN,
NSW 2144

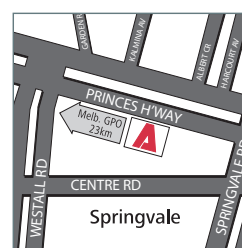
Open:
Mon-Fri 8.30am - 5.30pm
Sat 9.00am - 4.00pm



Melbourne, Vic.

891 Princes Hwy, SPRINGVALE
VIC 3171

Open:
Mon-Fri 8.30am - 5.30pm
Sat 9.00am - 5.00pm
Sun 10.00am - 4.00pm



Brisbane, Qld.

Unit 2, 1870 Sandgate Rd,
VIRGINIA, QLD 4014

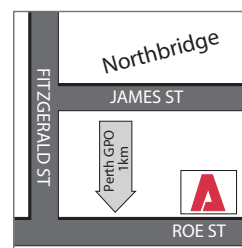
Open:
Mon-Wed, Fri 8.00am - 5.30pm
Thur 8.00am - 8.00pm
Sat 8.30am - 5.00pm
Sun 10.00am - 4.00pm



Perth, WA.

174 Roe St, PERTH, WA 6000

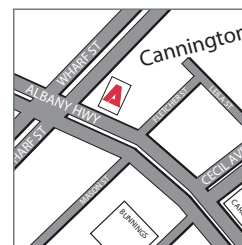
Open:
Mon-Wed, Fri 8.00am - 5.30pm
Thur 8.00am - 8.00pm
Sat 8.30am - 5.00pm
Sun 12.00pm - 5.00pm



Cannington, WA.

Unit 6, 1326 Albany Highway,
CANNINGTON, WA 6107

Open:
Mon-Wed, Fri 8.00am - 5.30pm
Thur 8.00am - 8.00pm
Sat 8.30am - 5.00pm



Balcatta, WA.

Unit 7, 58 Erindale Rd,
BALCATT, WA 6021

Open:
Mon-Fri 8.00am - 5.30pm
Sat 8.30am - 5.00pm
Sun 10.00am - 4.00pm

