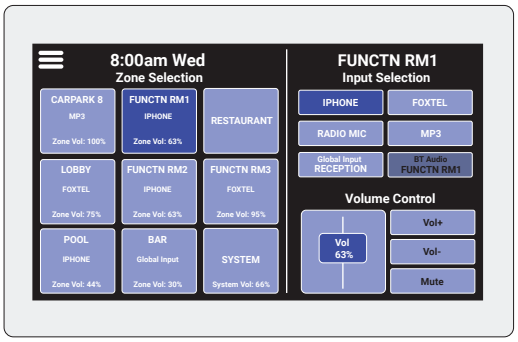
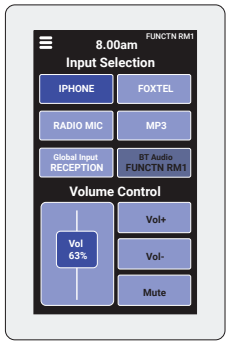


A 4463 Master Plate



A 4464 Zone Selector Plate

A 4460 Controller

Operating Manual

A 4460 4 x 8 Stereo Audio Switcher

Optional Accessories

A 4461	7" Master Wall Plate Black
A 4462	4.3" Zone Wall Plate Black
A 4463	7" Master Wall Plate White
A 4464	4.3" Zone Wall Plate White

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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.

User manual revision number: 1.1 09/08/2024

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We strive to support local suppliers wherever possible in our supply chain, helping to support Australia's manufacturing industry.

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There's a reason we have the industry leading DECADE warranty. It's because of a long tried and tested history of bullet-proof reliability. We've heard PA contractors tell us they still see the original Redford amplifier still in service in schools.

We offer this comprehensive parts & labour warranty on almost every Australian Made Redback public address product. This offers both installers and end users peace of mind that they will receive prompt local servicing in the rare event of any problems.

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1.0 INTRODUCTION

Designed to distribute 4 stereo audio input sources to 8 stereo output zones, this system is ideal for use in function centres, hotels, meeting rooms and domestic homes etc. It sends audio sources from one room to another with total ease.

Fitted with four stereo RCA connections for inputs and eight stereo RCA connections for outputs, it brings together audio sources for distributing to different zones. The signal of each output is fed into a power amplifier suitably rated for the speakers in that zone. The main unit connects to master and zone touchscreen wallplates using Cat5/6 UTP cabling, providing an easy way to select sources and adjust levels.

The master control plate offers selection of inputs to outputs, plus volume level adjustments. It's also fitted with a Bluetooth receiver which can play audio on any or all zones. Custom labelling of inputs and outputs can be performed directly on this master plate.

The local zone control plate is located within each "zone" and provides volume level adjustment and selection of inputs or Bluetooth audio programming (either from the master control plate or a device within the zone).

A total of 8 wallplates can be used on the system. Maximum of 2 plates per cable run.

The main control unit has 4 sets of closing contact triggers. When activated, via external switch or master wallplate they trigger an MP3 file stored on the inbuilt SD card. The MP3 plays to all zones. These contacts can be programmed to play different MP3s on events eg: door bell, pool gate opening, PIR sensor for customer arrival etc.

2.0 FEATURES

- 4 in, 8 out stereo
- Touchscreen & iOS/Android app control
- Four external MP3 triggers
- Six wallplate activated triggers (master only)
- Remote wallplate control
- Global function to send to all zones
- System cabling via Cat5e UTP.
- Suits all size power amps
- Local Bluetooth inputs
- Master plate can control & set up all zones
- 24V DC operation

3.0 WHAT'S IN THE BOX

A 4460 4 x 8 Stereo Audio Switcher
24V 2A DC Plugpack
Instruction Booklet

4.0 FRONT PANEL GUIDE

Fig 1 shows the layout of the A 4460 front panel.

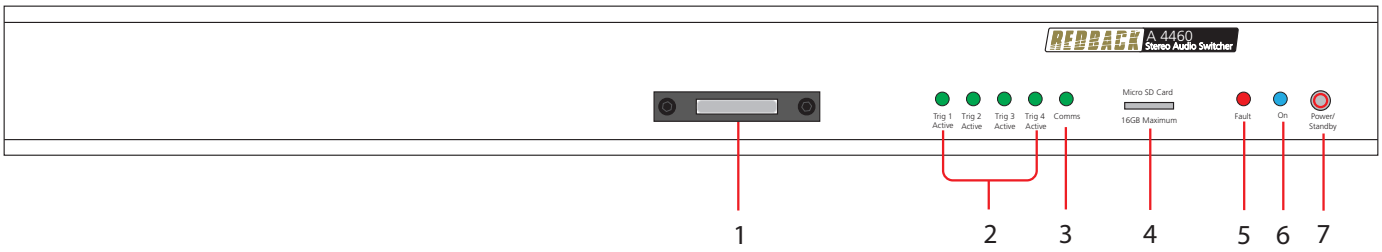


Fig 1

1 Battery Backup

Coin battery CR2032 - requires XX hex driver to remove security plate.

2 Trigger LEDs 1-4

Turn on when a trigger input MP3 has been activated from the hardware triggers on the rear of the unit.

3 Comms LED

This LED indicates when the unit is communicating with wall plates.

4 Micro SD Card Slot

16GB Maximum.

5 Fault LED

This LED indicates when the unit has a fault with MP3 playback.

6 On Indicator

This LED indicates when the unit has power.

7 Standby Switch

When the unit is in standby mode this switch will illuminate red. Press this button to switch the unit ON. Once the unit is ON the On indicator will illuminate blue. Press this switch again to put the unit back in standby mode.

5.0 REAR PANEL GUIDE

Fig 2 shows the layout of the A 4460 rear panel.

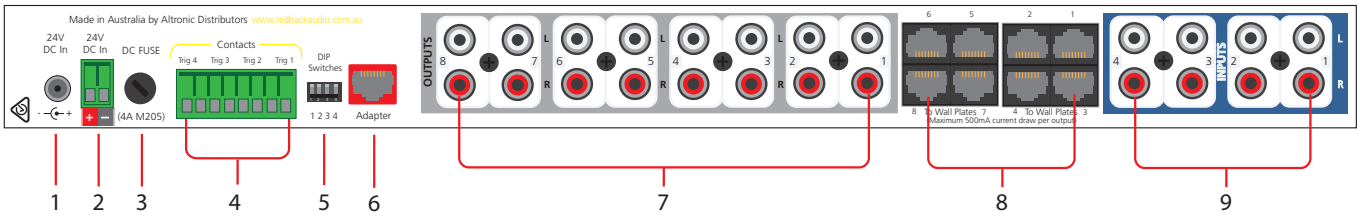


Fig 2

1 **24V DC input**
Connects to a 24V DC 2A plug pack with 2.1mm jack (centre tip positive).

2 **24V DC Input (Backup)**
Connects to a 24V DC backup supply with at least 2A current capacity (please observe the polarity).

3 **DC Protection Fuse**
4A M205 standard type fuse.

4 **Trigger Contacts**
Closing contacts for triggering MP3 playback from micro SD card files.

5 **DIP Switches**
These switches provide various options (see DIP switch settings for more details).

6 **RJ45 Interface**
Not used.

7 **RCA Outputs**
These line outputs are dual RCA connectors which are internally separated from a mono signal. The sensitivity of these outputs can be adjusted to 100mV or 1V via the switches of DIP3.

8 **Wall Plate RJ45 interface**

These RJ45 ports connect to the optional A 4461/63 Master and A 4462/64 Zone wall plates.

9 **RCA Inputs**
These 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 switches 2 & 3 of DIP1 & DIP2.

6.0 SET UP & OPERATION

The system is controlled primarily via the connected touchscreen wallplates. These allow selection of audio sources and level adjustment at each zone. A master wallplate control allows control of all zones, while the zone wallplate allows control for the zone only.

Connect all audio sources and output zones to the main controller using standard RCA cables. Connect all wallplates to the system using UTP data cable. We recommend first connecting the plates to the controller using patch cables prior to installation on the wall so that you can perform setting up of zone names, source names and adjust all settings (see section 9.0).

For Bluetooth audio streaming, each zone wallplate is fitted with a Bluetooth audio receiver. A global bluetooth input can also be set allowing a single zone to provide Bluetooth audio to all connected zones in the system. For example, a smartphone at Reception area could be streaming audio to all zones in a function venue.

Finally, connect any closing contact triggers you wish to use (see section 8.0). These can be used to playback an MP3 file from the micro SD card when contacts are triggered from for example, a door bell, IR beam or similar. It could also be used to play timed announcements when combined with an appropriate timer fitted with closing contacts.

7.0 INPUT & OUTPUT LABELS

The inputs and outputs which are displayed on the LCD, can be easily customised by making changes to the text files on the supplied Micro SD card or alternatively use the master wallplate control. To change the labels via SD card follow the steps outlined below:

1. Disconnect power from the A 4460.
2. Remove the Micro SD card from the rear of the A 4460 by pushing it in until it clicks, and then releasing it.
3. Insert the Micro SD card into a PC or Laptop with a Micro SD slot. (If the computer doesn't have this, a compatible Micro SD card reader will be required).
4. Navigate to and select the Micro SD card.
5. Inside the card will be a folder labelled "labels". Inside this folder will be the "Input" and "Output" folders.
6. To change the Input labels, select the Input folder and open the relevant text file. I.e. The "Input2.txt" file to change the Input 2 label. Once the file is opened with a text editor, change the label to something meaningful to a maximum of 10 characters (only standard keyboard characters are accepted).
7. Repeat step 6 for the output labels.
8. Once complete, follow windows safe removal procedures for ejecting the Micro SD card.
9. With power still disconnected from the A 4460, insert the Micro SD card. Push it in until it clicks.
10. Reconnect power to the A 4460 and press the "Power/Standby" switch to turn the unit on.
11. The new labels should now be displayed on the LCD.

8.0 AUDIO TRIGGERS

On the rear panel are four hardware based triggers for connection to a closing set of contacts. When contacts close this will trigger the playback of an MP3 audio file on the micro SD card. These are stored in the TRIG1 to TRIG4 folders. A further 6 software based triggers are also available for playback from folders TRIG5 to TRIG10. These are triggered by the accessing the "Activate Triggers" button under settings. Or by selecting the "System" zone on the master wallplate and then pressing "Triggers" button. All audio triggers are a system wide playback and will override the audio sources playing in each output zone when playback is triggered. Once the MP3 has finished playback, each zone will return to previously selected audio source.

9.0 MASTER WALLPLATE OPERATION

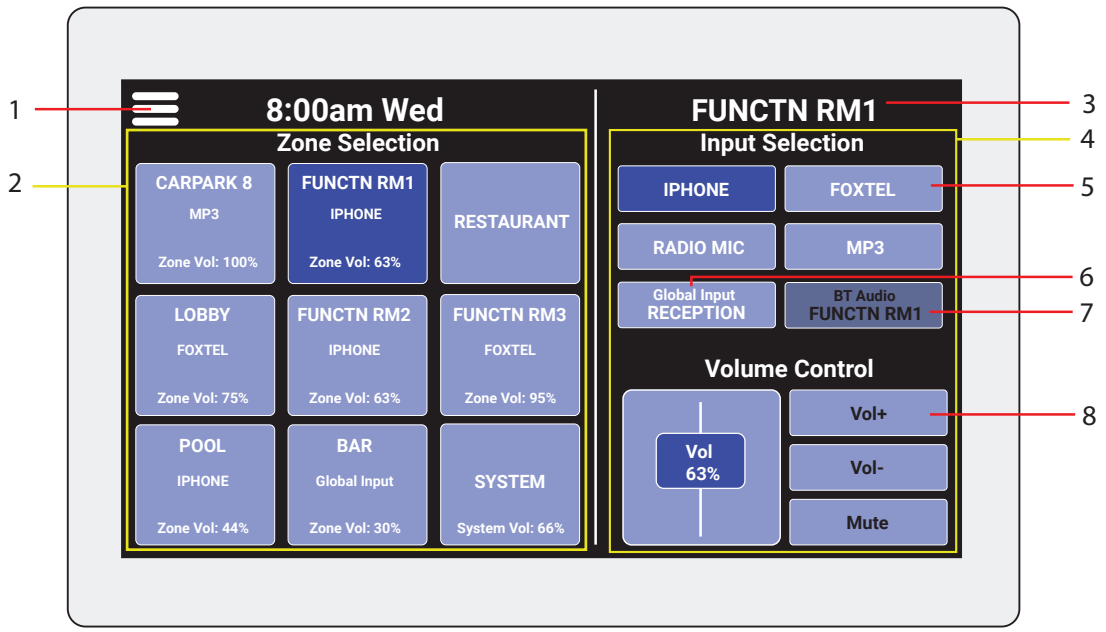


Fig 3

1 Settings Button

Tap this to access settings to adjust output zone / audio source names, colour themes and backlight settings.

2 Zone Selection Area

This area is used to toggle between the eight output zones for when adjustments to input selection or volume level are required. For system wide changes, the system button can be pressed, when a source is chosen, that source will be selected in all zones and the volume setting chosen will also apply to all zones.

3 Output Zone Name

The name of the output zone that sources are displayed for.

4 Input & Volume Selection Area

This area is used to adjust the four audio sources in the chosen output zone. It also displays the status of Bluetooth audio connectivity and the global input selection.

5 Input Selection Button

Tap these buttons to switch between audio sources.

6 Global Input

Allows the user to select a bluetooth audio streaming device playing on a zone, which is then made available to all zones in the system. This can be accessed in the settings menu of the master wallplate by pressing the "Select Global Input" button or alternately, press and hold the Global Input button from the main screen.

7 Bluetooth Audio Status

When selected the BT function will enable allowing you to connect audio streaming from your chosen device. This button changes colour to display as the active source when connected.

8 Volume Selection Area

Use these buttons to make adjustments to level control. For fine adjustment use the +/- buttons. The slider also moves up and down to choose a desired volume level. The mute button turns the selected audio source off and on as desired. When turning back on, audio will return to previously selected level.

MASTER WALLPLATE OPERATION

The master wallplate or paging console connects to the controller via Cat5e UTP or similar cabling and can be located up to 300m away. Up to two plates (master or zone) can be connected on a single cable run, with a maximum of 8 wallplates per system.

The master wallplate allows for audio source selection and level control for every output zone. The left side of the screen displays the output zones with the custom zone labels you have selected in section 7.0. Below the name, the chosen audio source and volume level is displayed.

To make changes, tap the output zone you desire on the left and use the volume slider, volume +/- buttons or on/off selector to make adjustments to the mixed audio output in that zone.

For example, if you wanted to turn the "MP3" on in "Function RM1", you would tap the "Function RM1" output zone on the left, then press "MP3" button to select that source. The source will change colour indicating it is switched on, and the volume will be set to the last used setting.

To adjust the colour theme, tap the three lines icon on the top left of the screen. See section 11.0 for information on wallplate settings.

To make system wide changes to audio sources, select "SYSTEM" on the left hand side of the screen and then select the audio source and volume level you wish to play in all zones connected to the system.

10.0 ZONE WALLPLATE OPERATION

1 Settings Button

Tap this to access zone wallplate settings ie: to adjust wall plate colour theme and backlight settings.

2 Audio Source Selection Buttons

Use these buttons to select the audio source required for the zone you are located in.

3 Global Input Source Selection

Allows the user to select the global input which is a bluetooth audio streaming device which is made available to all zones in the system.

4 Volume Control Area

Use these buttons to make adjustments to level control and mute audio. When muting is turned off, volume level returns to last chosen setting.

5 Output Zone Name

The name of the output zone.

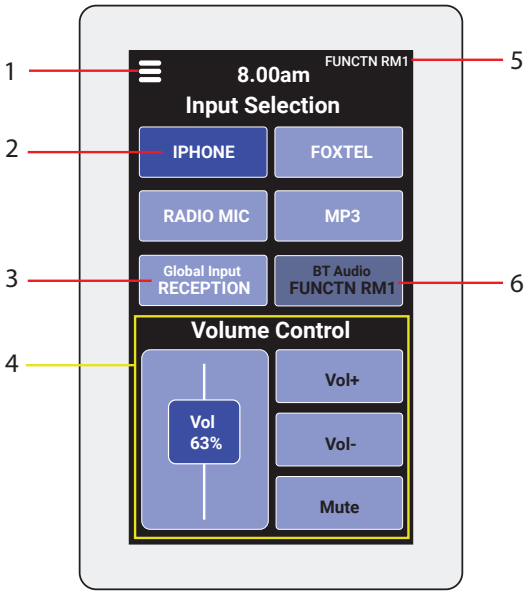


Fig 4

6 Bluetooth Audio Status

When selected the BT function will enable allowing you to connect audio streaming from your chosen device. This button changes colour to display as the active source when connected.

The zone wallplate connects to the controller via Cat5e UTP or similar cabling and can be located up to 300m away. Up to two plates (master or zone) can be connected on a single cable run, with a maximum of 8 wallplates per system.

The zone wallplate allows for audio source selection and level control for the zone in which its located. To make changes, simply tap the volume +/- buttons or switch an audio source on or off using the on/off selector. When an audio source is switched off, the controls will display in a darker colour.

To adjust the colour theme, tap the three lines icon on the top left of the screen. See section 11.0 for information on wallplate settings.

11.0 WALLPLATE SETTINGS MENU

Each wallplate has a settings menu which can be accessed using the icon on the top left of the screen (marked 1 in figure 3 & 4). Once in this menu the following screen will be displayed.

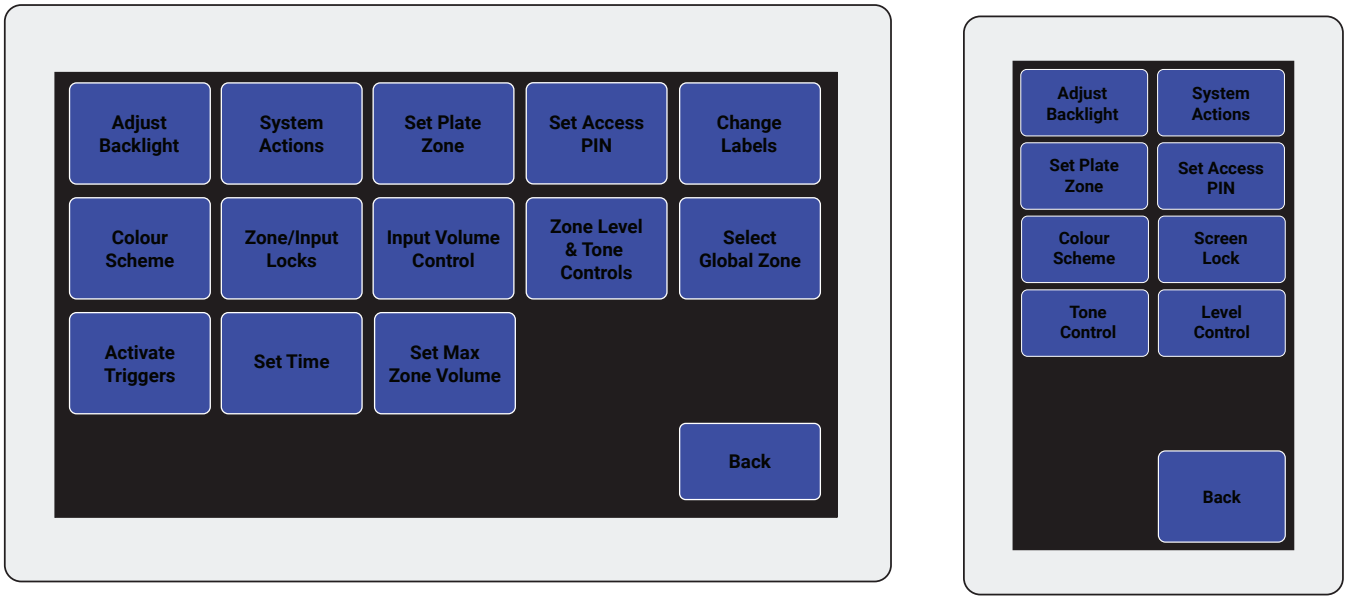


Fig 5 - Wallplate Settings. Master (left), Zone (right).

Adjust backlight - Allows you to select active brightness and dimmed brightness levels of the wallplate with the time out period selectable for each level before the wallplate switches the screen off.

System actions - Allows you to choose settings for audible feedback on touch (on/off), screen rotation and wallplate/factory reset functions.

Set plate zone - Each wallplate in the system must have a unique zone. This setting allows you to enter the zone for the plate you are using. On the master plate when set the words "Local Zone" will appear under the chosen zone name for that wallplate.

Set access PIN - 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 reset PIN.

Colour scheme - Set button colour scheme to preset red, blue or black/white. Note that other colour schemes may be provided via future firmware updates.

MASTER WALLPLATE ONLY SETTINGS

Change labels - Allows you to set and change the custom labels for the output zones and audio sources.

Zone/input locks - Locks out selected zone wallplates or input audio sources from being used.

Input volume control - Sets system wide input sensitivity to cater for differing levels between audio sources.

Zone level & tone control - Allows you to set and change the bass and treble levels, triggers MP3 playback level and BT output level.

Select global zone - Choose a zone from which the Bluetooth connection will be available to all zones ie: smartphone streaming wireless audio at reception is available to all zones in the system.

Activate triggers - Allows manual playback of audio triggers including the connected hardware contacts on the rear panel, plus software based triggers for MP3 audio playback.

Set time - Sets system wide time and date.

Set max volume - Allows you to set and change the maximum output levels for all zones.

12.0 APP OPERATION

iOS/Android app under development. The app will connect to the local zone wallplate via Bluetooth and allow adjustments of source and level control in that zone.

13.0 DIP SWITCH SETTINGS

The A 4460 has 1 set of DIP switches with the following settings.

DIP 1

Switch 1	OFF: MP3 play trigger momentary to play MP3 until end. ON: MP3 play trigger hold to play MP3. Release to stop.
Switch 2	Not Used.
Switch 3	Not Used.
Switch 4	OFF: Battery back up for clock off. ON: Battery back up for clock on.

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

14.0 FIRMWARE UPDATE

It is possible to update the A 4460 firmware by downloading updated versions from www.altronics.com.au or redbackaudio.com.au. To perform an update, follow these steps.

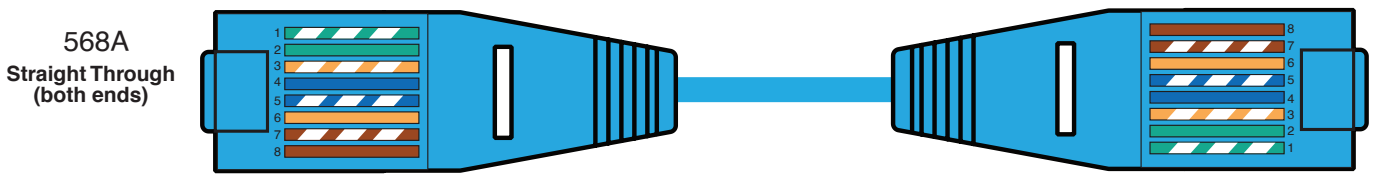
1. Download the Zip file from the website.
2. Remove the Micro SD card from the A 4460 and insert it into your PC.
3. Extract the contents of the Zip file to the root folder of the SD Card.
4. Rename the extracted .BIN file to update.BIN.
5. Remove the SD card from the PC following windows safe card removal procedures.
6. With the power turned off, insert the SD card back into the A 4460.
7. Turn power on to the A 4460. The unit will check the SD card and if an update is required the A 4460 will perform the update automatically.

For updating firmware on wallplates (A 4461, A 4462, A 4463, A 4464), each plate needs to be individually updated.

RJ45 cabling configuration for system components (568A 'Straight through')

System components are connected using "pin to pin" configuration RJ45 data cabling as shown below. 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.



15.0 WALLPLATE CONNECTION DETAILS

A maximum of 8 wall plates can be connected to the A 4460 controller as shown in the example of figure 6. These can be either Master or Zone wall plates and are connected to the output ports labelled "Wall Plates" via Cat5e UTP or similar cabling.
Only one wall plate per output port is allowed and each plate can be located up to 200m away. No cascade connections or Tee Off's allowed.

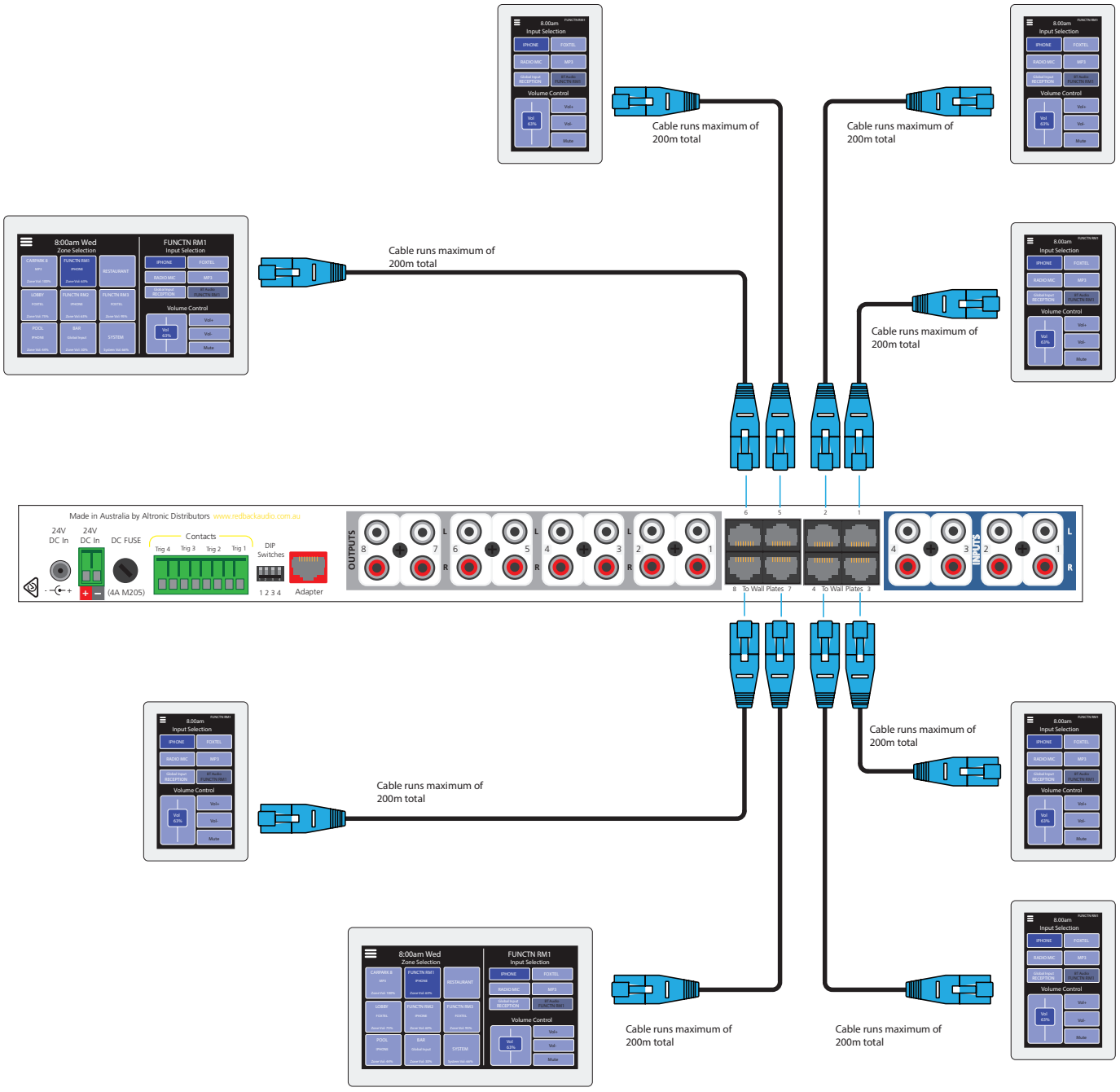


Fig 6. Wallplate connection example

16.0 SPECIFICATIONS

AUDIO:	
Distortion:	0.01%
Frequency response:	140Hz - 20kHz
Line input sensitivity:	100mV-1V
Output sensitivity:	3mV-1V

CONNECTION:	
Output connections:	2 x RCA
Input connections:	2 x RCA
Power connectons:	Screw terminals, 2.1mm DC jack
Wallplates:	RJ45 8P8C
Data transmission:	Cat5e cabling max 300m

CONTROLS & INDICATORS:	
Controls:	Power/Standby Switch
Indicators:	Power on, Fault, Comms, Trig 1, Trig 2, Trig 3, Trig 4 Active

GENERAL:	
Power Supply:	24V DC 2A
Dimensions:	≈482W x 125D x 44H
Weight:	≈2.1 kg

* Specifications subject to change without notice