



A 6500A



# **Operating Manual**

A 6500A Programmable Universal Touchscreen Wallplate
(Now with Haptic and Audible Feedback)

A 6505A 3 Relay, 2 Serial, IR Output Hub

A 6507 Serial Controlled 100V Line Attenuator

A 6510 Distribution Box - 12 Relay Output

A 6512 Single Input Serial Volume Controller

A 6514 Two Input Serial Volume Controller

A 6515 Distribution Box - 2 Relay Output (High Current)



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8.0 Warranty

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#### 1.0 OVERVIEW

#### 1.1 INTRODUCTION

Representing hundreds of hours of research and development by Redback, this universal touch-screen wallplate is the perfect control system for commercial and domestic automation. It's stylish low profile design lends itself to installation in new modern homes, classrooms, lecture theatres or corporate boardrooms. The LCD panel can be configured from 1 to 12 buttons, which can be individually labelled. Configuration is performed using the supplied software, which is then transferred to the plate via a Micro SD card. A library of button icons is included and can be customised by the user if required. Each button can be programmed for either serial (with hex code or ASCII commands), IR, or relay control, making it ideal for controlling just about any electronic device.

For IR applications the plate can learn and capture IR strings from almost any remote control.

User generated macros can be created consisting of multiple commands in a single button press. This is ideal for performing multiple tasks at once ie: turn on projector, turn on amplifier, turn off lights, drop down projector screen etc. Wall plate fits into a standard electrical wallbox for ease of installation.

#### **1.2 FEATURES**

### A 6500A Programmable Wallplate

- User programmable buttons with customisable icons
- Inbuilt icon library for commonly used buttons
- Multi-command macros
- IR learningn facility
- SD card configuration upload
- Dual cover wallplate to suit existing decor
- Single U/UTP Cat5 cable connection
- Haptic and audible feedback of button presses
- Easy to program
- 10 Year Warranty (Cracked or broken screen excluded)
- Australian Designed and Manufactured

#### A 6505A Serial Hub

- Dual RS-232 or RS-485 serial outputs
- Infra-red control output
- PIR (or closing contact) trigger
- 3 output relays (voltage free N/C & N/O contacts) 2A max (Note: Only 2 relay outputs available with the PIR option)
- U/UTP Cat5 cable connection to A 6500A wallplate
- 24V DC Input
- 10 Year Warranty
- Australian Designed and Manufactured

#### A 6510 12 Relay Distribution Box

- RS-232 or RS-485 serial inputs
- 12 output relays (voltage free N/O contacts) 1A max
- 24V DC Input
- 10 Year Warranty
- Australian Designed and Manufactured

### A 6515 2 Relay High Power Distribution Box

- RS-232 or RS-485 serial inputs
- 2 output relays (voltage free N/C & N/O contacts) 16A max
- 24V DC Input
- 10 Year Warranty
- Australian Designed and Manufactured

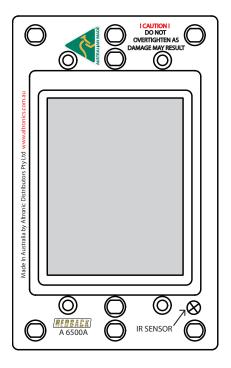
#### 1.3 WHAT'S IN THE BOX

A 6500A Controller Wall Plate
OTG Micro USB - USB socket lead
Cat6 patch lead
A 6500A Operating Manual
A 6500A Software Programming Guide

### 2.0 CONNECTION GUIDE

### 2.1 A 6500A WALL PLATE CONNECTION GUIDE

Fig 2.1a shows the front of the A 6500A wall plate with the cover removed. The IR sensor is located on the bottom right of the wall plate. When learning IR codes point the remote control at this sensor.



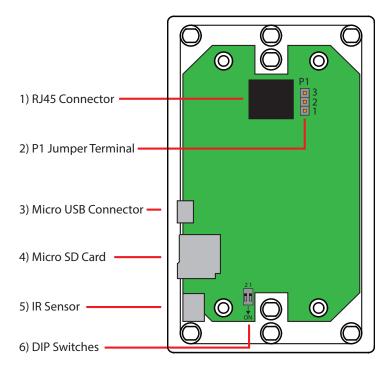


Fig 2.1a

Fig 2.1b

Fig 2.1b shows the layout of the rear of the A 6500A wall plate.

The location of the RJ45 Connector, P1 jumper terminals, Micro USB Connector, Micro SD, IR sensor and DIP switches are shown.

#### 1 RJ45 Connector

This is used for the connection between the wallplate and Serial Hub or Distribution boxes. Connection is made using Cat5/6 cable to a maximum distance of 50m.

### 2 P1 Jumper Terminal

The A 6505A Serial Hub has three relay outputs and a PIR Trigger Input. The third relay output and the PIR trigger use the same connection from the microcontroller inside the unit. This P1 jumper is used to configure the A 6505A for use with the PIR trigger or with the relay 3 output. Using the shunt header supplied, fit the shunt on pins 1 and 2 for relay 3 operation. For PIR operation fit the shunt to pins 2 and 3.

#### 3 Micro USB Connector

This connector is for the connection of a USB keyboard for inputting text when learning IR codes. An OTG (On The Go) lead may be required for connection between the USB keyboard and the micro USB socket. A lead is supplied.

#### 4 Micro SD Card

The SD card is use to store all the icon and button configuration information. (Note: The Micro SD Card is inserted with the contacts facing the front of the wall plate).

#### 4 IR Sensor

This sensor is used to learn IR codes.

#### 6 DIP Switches

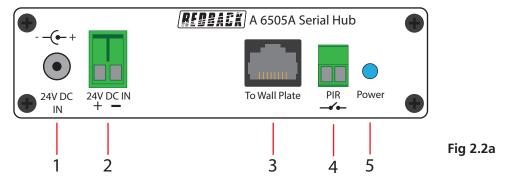
The A 6500A wall plate has optional haptic and audible feedback of button presses. These can be set by the DIP switches located on the rear of the wall plate as shown in figure 2.1b.

Switch 1: ON - Haptic Feedback active, OFF - Haptic Feedback disabled.

Switch 2: ON - Buzzer active, OFF - Buzzer disabled.

#### 2.2 A 6505A SERIAL HUB CONNECTION GUIDE

Fig 2.2a shows the layout of the front of the A 6505A Serial Hub.



#### 1 24V DC input

Connects to a 24V DC Plugpack with a 2.1mm Jack (Please observe the polarity, centre positive).

### 2 24V DC Input

Connects to a 24V DC source via a euro block (Please observe the polarity).

#### 3 RJ45 interface

This RJ45 port is for connection to the A 6500A wall plate.

### 4 PIR Trigger

This is used for connection to a PIR or other closing contact. (Note: When using the PIR trigger connection, the jumper terminal (P1) on the A 6500A has to be set to the PIR input (see section 2.1).

#### 5 Power LED

Indicates the unit has power.

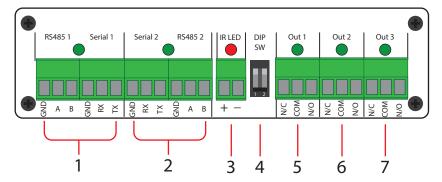


Fig 2.2b

Fig 2.2b shows the layout of the rear of the A 6505A Serial Hub.

#### 1 Serial Output 1

This output is configurable via the software as either an RS232 or RS485 output. The LED will illuminate while data is being transmitted. Follow standard RS232 or RS485 wiring when connecting these terminals.

#### 2 Serial Output 2

This output is configurable via the software as either an RS232 or RS485 output. The LED will illuminate while data is being transmitted. Follow standard RS232 or RS485 wiring when connecting these terminals.

#### 3 IR Output

These terminals are provided for connection to IR repeaters. The LED above the terminals illuminate while the output is active.

#### 4 DIP Switches

DIP 1 changes the IR LED voltage output, ON = 5V Direct, OFF = 5V @20mA to standard IR LED. DIP 2 is not used.

#### 5 Output 1

This output provides a voltage free output with a normally open and normally closed contact. This is configured via the software as the relay 1 output. (The maximum current rating of these contacts is 2A.) The LED above the terminals illuminate while the output is active.

#### 6 Output 2

This output provides a voltage free output with a normally open and normally closed contact. This is configured via the software as the relay 2 output. (The maximum current rating of these contacts is 2A.) The LED above the terminals illuminate while the output is active.

#### 7 Output 3

This output provides a voltage free output with a normally open and normally closed contact. This is configured via the software as the relay 3 output. (The maximum current rating of these contacts is 2A.) The LED above the terminals illuminate while the output is active. (Note: the jumper terminal (P1) on the A 6500A has to be set to the Relay 3 input (see section 2.1).

#### 2.3 A 6510 12 RELAY DISTRIBUTION BOX CONNECTION GUIDE

Fig 2.3a shows the layout of the front of the A 6510 12 Relay Distribution Box.

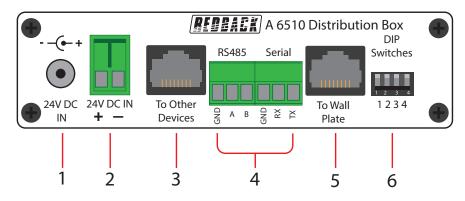


Fig 2.3a

#### 1 24V DC input

Connects to a 24V DC Plugpack with a 2.1mm Jack (Please observe the polarity, centre positive).

#### 2 24V DC Input

Connects to a 24V DC source via a euro block (Please observe the polarity).

#### **RJ45** interface 3

This RJ45 port is for connection to other Redback® compatible devices.

#### **Serial Input** 4

This input takes either an RS232 or RS485 signal. This can be connected to one of the serial outputs of the A 6505A or to a third party system. Follow standard RS232 or RS485 wiring when connecting these terminals.

#### **RJ45** interface

This RJ45 port is for connection to the A 6500A wall plate.

#### **DIP Switches** 6

1 ON: Accept serial codes through RS485 input.

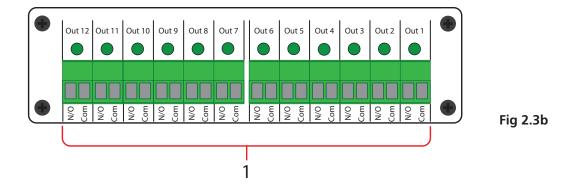
2 ON: Accept serial codes through RS232 input.

3 ON: Accept serial codes from wall plate.

4: Not Used

NOTE: Only one of the DIP switches 1-3 can be on at any time.

Fig 2.3b shows the layout of the rear of the A 6510 12 Relay Distribution Box.

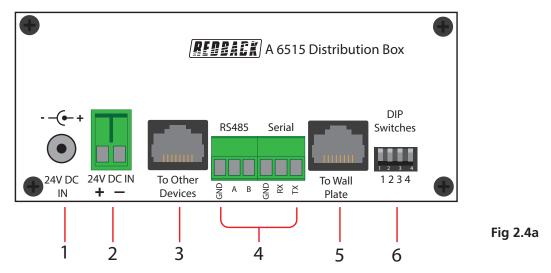


#### Outputs 1-12 1

These outputs provide a voltage free output with a set of normally open contacts. They are configured via the software as the relay 1-12 outputs (The maximum current rating of these contacts is 1A). The LED's above the terminals illuminate while the corresponding output is active.

### 2.4 A 6515 TWO RELAY DISTRIBUTION BOX (HIGH CURRENT) CONNECTION GUIDE

Fig 2.4a shows the layout of the front of the A 6515 Relay Distribution Box.



### 1 24V DC input

Connects to a 24V DC Plugpack with a 2.1mm Jack (Please observe the polarity, centre positive).

### 2 24V DC Input

Connects to a 24V DC source via a euro block (Please observe the polarity).

#### 3 RJ45 interface

This RJ45 port is for connection to other Redback® compatible devices.

#### 4 Serial Input

This input takes either an RS232 or RS485 signal. This can be connected to one of the serial outputs of the A 6505A or to a third party system. Follow standard RS232 or RS485 wiring when connecting these terminals.

#### 5 RJ45 interface

This RJ45 port is for connection to the A 6500A wall plate.

#### 6 DIP Switches

- 1 ON: Accept serial codes through RS485 input.
- 2 ON: Accept serial codes through RS232 input.
- 3 ON: Accept serial codes from wall plate.
- 4: Not Used

NOTE: Only one of the DIP switches 1-3 can be on at any time.

Fig 2.4b shows the layout of the rear of the A 6515 Relay Distribution Box.

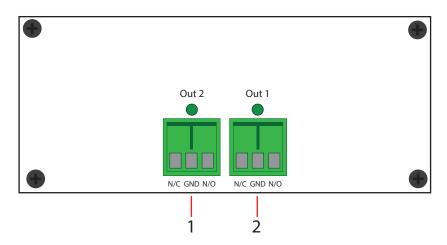


Fig 2.4b

#### 1 Output 1

This output provides a voltage free output with a normally open and normally closed contact. This is configured via the software as the relay 13 output. (The maximum current rating of these contacts is 16A.) The LED above the terminals illuminate while the output is active.

### 2 Output 2

This output provides a voltage free output with a normally open and normally closed contact. This is configured via the software as the relay 14 output. (The maximum current rating of these contacts is 16A.) The LED above the terminals illuminate while the output is active.

### 3.0 SYSTEM WIRING CONFIGURATIONS

The A 6500A Wall Plate can be configured to operate with either the A 6505A, A 6510 or A 6515 or a combination of these.

### 3.1 STANDARD SERIAL, IR and RELAY SETUP

Shown below is the standard setup with the A 6500A Wall Plate connected to the A 6505A Serial Hub via a CAT5e/6 cable. 24V DC power is connected to the A 6505A by a plugpack with a 2.1mm jack or through the euro block terminals. The A 6505A in turn powers the A 6500A Wall Plate through the Cat5e/6 cable.

The A 6505A Serial Hub can then be connected to up to two RS232 or RS485 controlled devices. IR control of multiple devices is available through the IR repeater output and a total of three relay outputs enable control of devices with a closing contact. The relay contacts are rated at 2A maximum and a set of normally open and normally closed contacts are available for each relay.

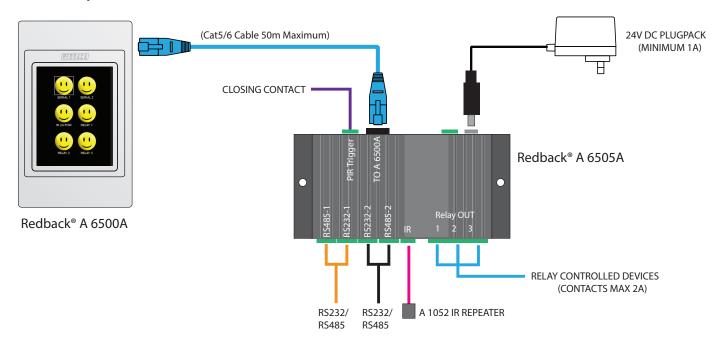


Fig 3.1

## 3.2 TWELVE RELAY SETUP (NO SERIAL or IR)

The simple setup provides up to twelve output relays for switching, with no serial or IR outputs. The A 6500A Wall Plate is connected to the A 6510 via a CAT5e/6 cable. 24V DC power is connected to the A 6505A by a plugpack with a 2.1mm jack or through the euro block terminals. The A 6510 in turn powers the A 6500A Wall Plate through the Cat5e/6 cable. The relay contacts are rated at a maximum of 1A with a set of normally open contacts only.

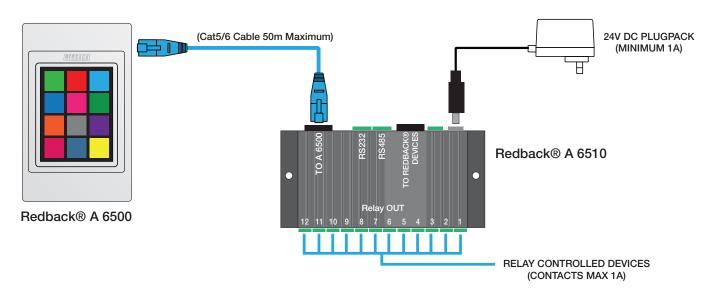


Fig 3.2

### 3.3 TWO RELAY SETUP (HIGH CURRENT, NO SERIAL or IR)

The high power setup provides up to two output relays for switching, with no serial or IR outputs. The relays are high current outputs rated at 16A maximum and a set of normally open and normally closed contacts are available for each relay. The A 6500A Wall Plate is connected to the A 6515 via a CAT5e/6 cable. 24V DC power is connected to the A 6505A by a plugpack with a 2.1mm jack or through the euro block terminals. The A 6515 in turn powers the A 6500A Wall Plate through the Cat5e/6 cable.

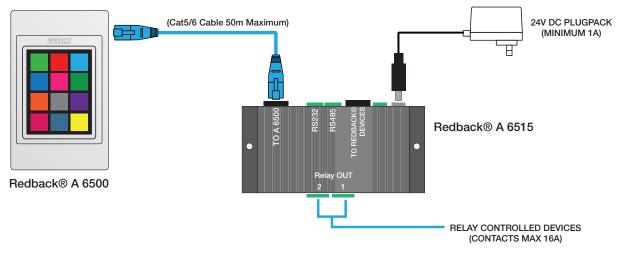


Fig 3.3

#### 3.4 THIRD PARTY RELAY CONTROL

The A 6510 and A 6515 relay distribution boxes can both be controlled by a third party device with either an RS232 or RS485 output, via serial commands which are described in the supplied programming manual. NOTE: The A 6510 and A 6515 will receive serial only. They do not transmit any serial data. See section 4.0 for serial wiring details.

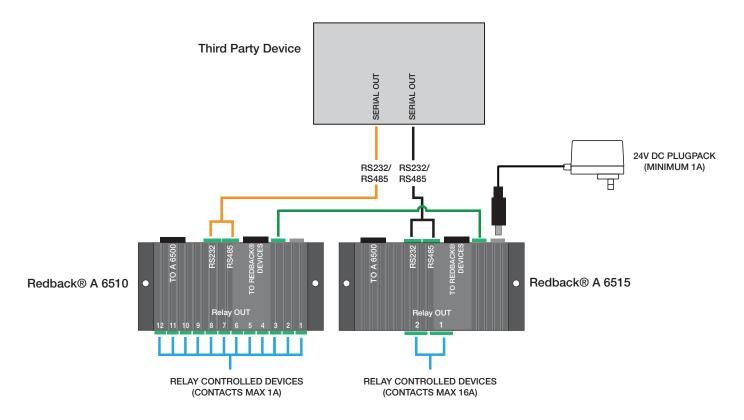


Fig 3.4

#### 3.5 SERIAL and IR CONTROL with FIFTEEN OUTPUT RELAYS

This configuration expands the standard setup to provide serial and IR control with up to 15 output relays. The A 6500A Wall Plate is connected to the A 6505A Serial Hub via a CAT5e/6 cable. 24V DC power is connected to the A 6505A by a plugpack with a 2.1mm jack or through the euro block terminals. The A 6505A in turn powers the A 6500A Wall Plate through the Cat5e/6 cable and powers the A 6510 by running a cable from the 24DC In terminals of the A 6505A to the A 6510 24V In terminals.

The A 6505A Serial Hub can then be connected to up to two RS232 or RS485 controlled devices. IR control of multiple devices is available through the IR repeater output and a total of fifteen relay outputs enable control of devices with a closing contact. The relay contacts on the A 6505A are rated at 2A maximum and a set of normally open and normally closed contacts are available for each relay. The relay contacts on the A 6510 are rated at 1A maximum with normally open contacts only.

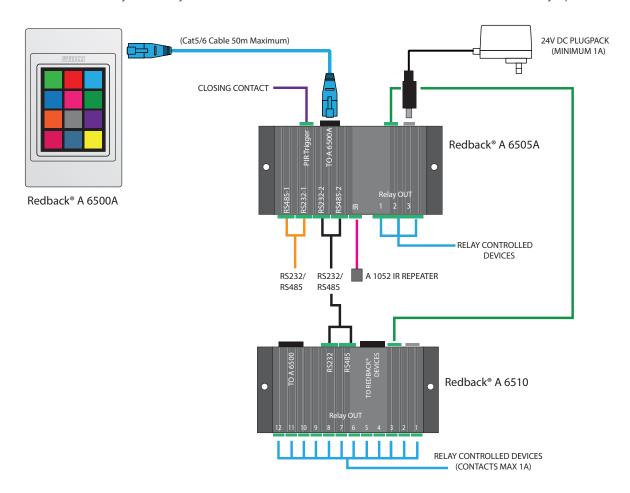


Fig 3.5

### 3.6 SERIAL and IR CONTROL with THREE LOW POWER and TWO HIGH CURRENT RELAYS

This configuration expands the standard setup to provide serial and IR control with 3 low power output relays and two high current output relays.

The A 6500A Wall Plate is connected to the A 6505A Serial Hub via a CAT5e/6 cable. 24V DC power is connected to the A6505 by a plugpack with a 2.1mm jack or through the euro block terminals. The A 6505A in turn powers the A 6500A Wall Plate through the Cat5e/6 cable and powers the A 6515 by running a cable from the 24DC In terminals of the A 6505A to the A 6515 24V In terminals.

The A 6505A Serial Hub can then be connected to up to two RS232 or RS485 controlled devices. IR control of multiple devices is available through the IR repeater output and a total of five relay outputs enable control of devices with a closing contact. The relay contacts on the A 6505A are rated at 2A maximum and a set of normally open and normally closed contacts are available for each relay. The relay contacts on the A 6515 are rated at 16A maximum with a set of normally open and normally closed contacts for each relay.

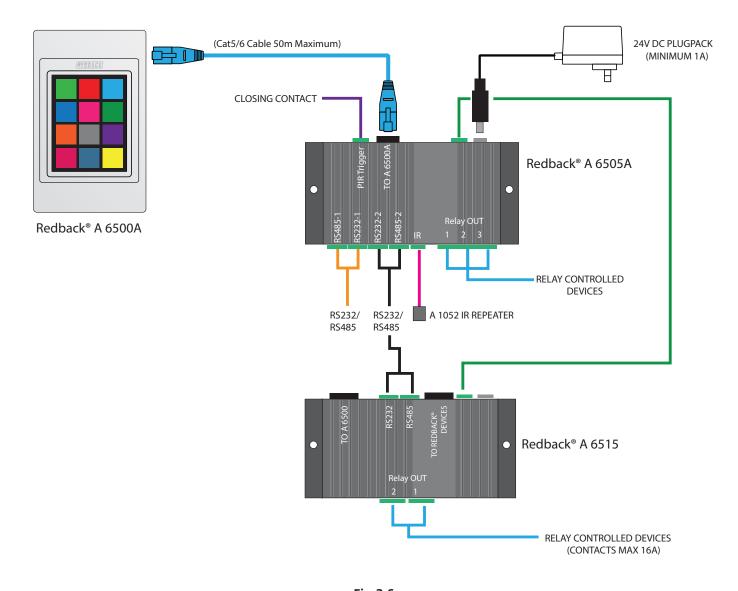


Fig 3.6

#### 3.7 SERIAL and IR CONTROL with FIFTEEN LOW POWER and TWO HIGH CURRENT RELAYS

This configuration expands the standard setup to provide serial and IR control with 15 low power output relays and two high current output relays.

The A 6500A Wall Plate is connected to the A 6505A Serial Hub via a CAT5e/6 cable. 24V DC power is connected to the A 6505A by a plugpack with a 2.1mm jack or through the euro block terminals. The A 6505A in turn powers the A 6500A Wall Plate through the Cat5e/6 cable and powers the A 6510 and A 6515 by running a cable from the 24DC In terminals of the A 6505A to the 24V In terminals of the A 6510 and A 6515.

The A 6505A Serial Hub can then be connected to up to two RS232 or RS485 controlled devices. IR control of multiple devices is available through the IR repeater output and a total of seventeen relay outputs enable control of devices with a closing contact. The relay contacts on the A 6505A are rated at 2A maximum and a set of normally open and normally closed contacts are available for each relay. The relay contacts on the A 6510 are rated at 1A maximum with normally open contacts only. The relay contacts on the A 6515 are rated at 16A maximum with a set of normally open and normally closed contacts for each relay.

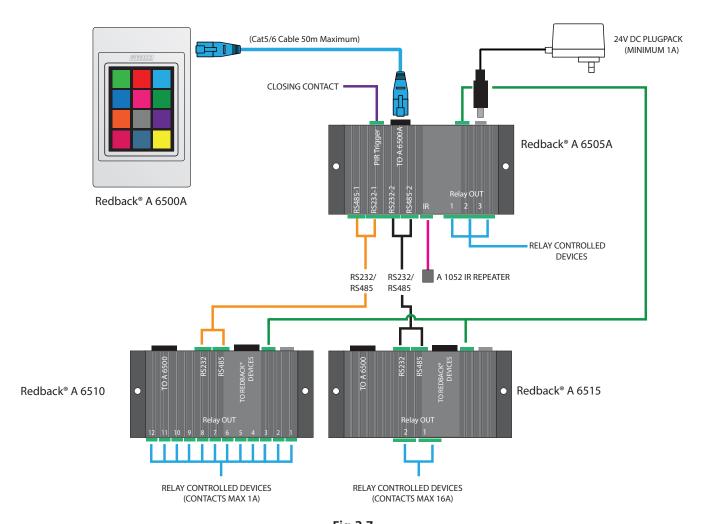
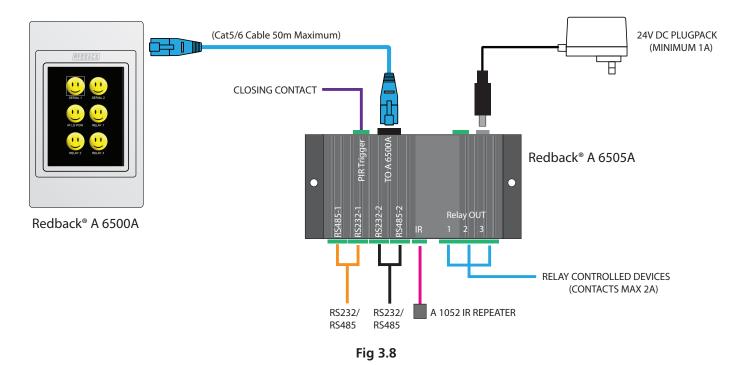


Fig 3.7

#### 3.8 A 6500A FIRST POWER UP

THe A 6500A Wall Plate is connected to the A 6505A as shown in figure 3.8. Once power is applied to the A 6505A Serial Hub, the A 6500A Wall Plate will power up a couple of seconds later. The screen will briefly display the software revision and some dignostic information, before displaying the default testing screen which displays six smiley face icons. These icons represent buttons and are labelled "SERIAL 1", "SERIAL 2", "IR LG POW", "RELAY 1", "RELAY 2" and "RELAY 3".



These buttons relate to the outputs of the A 6505A Serial Hub. When these buttons are pressed the corresponding output's LED will illuminate as shown in the A 6505A rear panel diagram of figure 3.9.

NOTE: The Serial 1, Serial 2 and IR LED's will flash sparodically.

This Default configuration is useful for testing purposes.

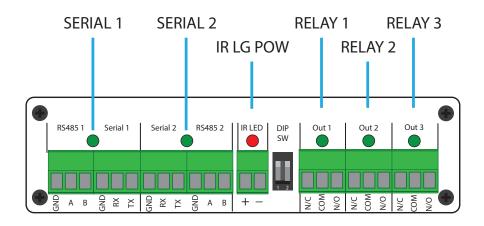


Fig 3.9

This screen setup is not going to be applicable to any real world application. In the following section a Lecture Theatre Setup is outlined.

#### 3.9 LECTURE THEATRE SETUP

Fig 3.10 Illustrates a simple configuration which may be used in a Lecture Theatre using a projector, powered projector screen, DVD player, laptop computer and the A 6500A wall plate and A 6505A relay hub.

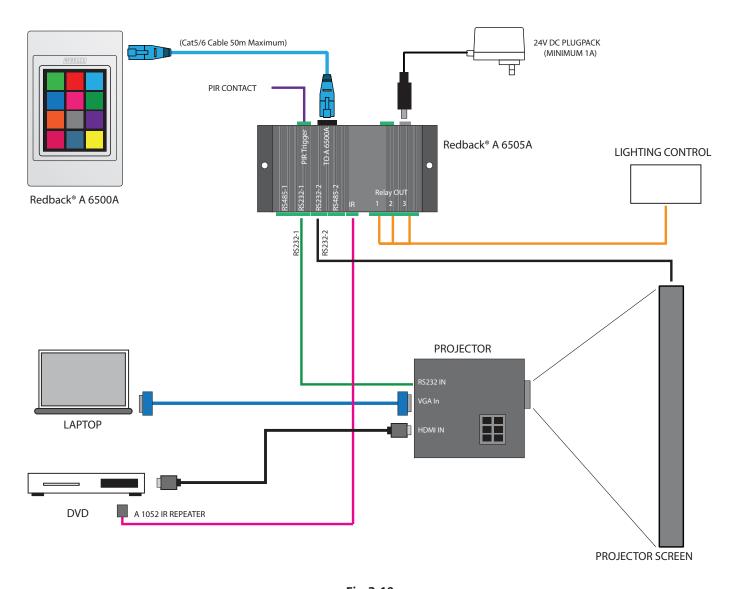


Fig 3.10

**Power and A/V Wiring:** In this example the A 6500A wall plate is located at the lecturn and the A 6505A Relay Hub is situated in the ceiling space where power for the realy hub, projector and projector screen are located. The A 6500A Wall Plate is powered through the single Cat5/6 cable connected back to the A 6505A. The laptop and DVD player are situated and powered at the lecturn and their corresponding VGA and HDMI output cabling is connected back to the projector.

**Control Wiring:** The projector is controlled by RS232 commands from the A 6505A serial output 1, the projector screen is controlled by RS232 commands from the A 6505A serial output 2. The RS232 control cabling requires only the TX and GND connection from the A 6505A and the RX and GND connection at the projector and projector screen. The DVD player is controlled by IR codes sent from the A 6505A to an IR repeater (such as Altronics A 1052). The lighting is controlled by the relay outputs of the A 6505A which are voltage free closing contacts. Figure 8 cable would be sufficient for all of these connections.

**PIR Trigger:** This input can be triggered by either a PIR (passive infrared sensor), door beam trigger, floor sensor or a simple reed switch on a door. Any form of closing contact can be used to trigger this input. The A 6500A can be programmed to perform commands which are activated once this contact is triggered. This makes it ideal for any number of applications, including in the case of the Lecture Theatre example being used to configure the theatre when someone enters the room.

#### 4.0 SYSTEM WIRING

## 4.1 RJ45 cabling configuration for connection between the A 6500A Wall Plate and the A 6505A Serial Hub (586A 'Straight through')

Components are connected using "pin to pin" configuration RJ45 data cabling as shown in fig 4.1. 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 4.1

### 4.2 Serial wiring

RS232 Serial wiring from the Redback® A 6505A Serial Hub to the Redback® A 6510 or the Redback® A 6515 The RS232 control cabling requires only two connections from the output of the A 6505A Serial Hub to the input connector of the A 6510 or A 6515. The TX pin of the A 6505A is connected to the RX connection of the A 6510 or A 6515, and the GND terminals are connected together.

#### RS232 Serial wiring from Third Party Device to Redback® A 6510 or the Redback® A 6515

The RS232 control cabling requires only two connections from the output of the third party device to the input connector of the A 6510 or A 6515. The TX pin of the output device is connected to the RX connection of the A 6510 or A 6515, and the GND terminals are connected together.

RS485 Serial wiring from the Redback® A 6505A Serial Hub to the Redback® A 6510 or the Redback® A 6515 The RS485 control cabling requires three connections from the output of the A 6505A Serial Hub to the input connector of the A 6510 or A 6515. The "A" connection of the A 6505A is connected to the "A" connection of the A 6510 or A 6515, the "B" connection of the A 6505A is connected to the "B" connection of the A 6510 or A 6515 and the GND terminals are connected together.

#### RS485 Serial wiring from Third Party Device to Redback® A 6510 or the Redback® A 6515

The RS485 control cabling requires three connections from the output of the third party device to the input connector of the A 6510 or A 6515. The "A" pin of the output device is connected to the "A" connection of the A 6510 or A 6515, the "B" pin of the output device is connected to the "B" connection of the A 6510 or A 6515, and the GND terminals are connected together.

### 5.0 TROUBLE SHOOTING

SYMPTOMS	REMEDIES
A 6500A wall plate not powering up	Check Cat5e connection to A 6505A/07/10/12/14/15
A 6507/6510/A 6512/A 6514 or A 6515 not accepting serial codes	Check DIP switches 1-3 on these units are set correctly and/or check wiring
IR transmission not working	Check IR led wiring/check DIP switch 1 on A 6505A

# New Additions to the Redback® Range

### 6.0 NEW ADDITIONS TO THE RANGE

#### 6.1 Redback® A 6507 Serial Controlled 100V Line Attenuator





This compact module includes a seven step 100V 50 Watt line speaker attenuator/volume control which can be remotely adjusted via RS485 serial control. A 24V DC override relay is included for emergency paging applications, ensuring the volume is switched to maximum regardless of the volume setting.

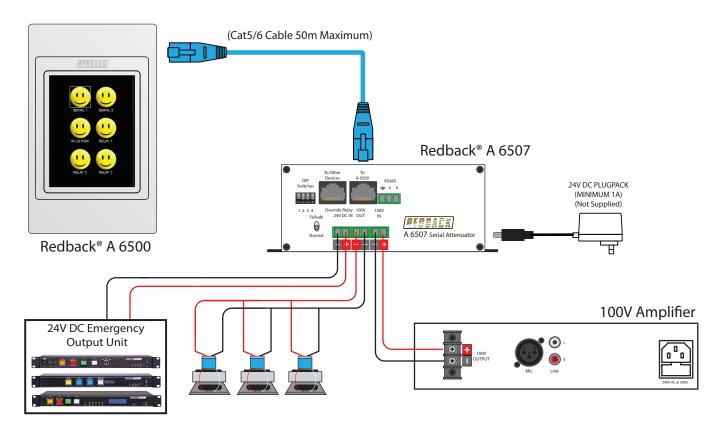
The unit is suitable for all 100V line amplifiers and connects between the amplifier output and the speakers to be controlled. The Redback® A 6507 will interface directly to the Redback® A 6500A wallplate or any other third party control system which utlises RS485 serial codes. The attenuator circuit includes a 22uF BP capacitor for line monitoring applications.

The figure below illustrates a typical connection diagram when using the Redback® A 6500A wallplate to control the Redback® A 6507 Attenuator. The Redback® A 6500A connects via a Cat5e/6 lead into the "To A 6500" RJ45 connection port. 24V DC power is supplied to the Redback® A 6507 via a 24V DC plugpack or other 24V DC source (minimum24V DC 1A).

Serial control of the attenuator circuit is provided by the A 6500A wallplate which is programmed with the serial codes using the PC software supplied with the Redback® A 6500A.

The audio into the attenuator is provided by an amplifer with a 100V line output. The attenuated signal is then output out of the attenuator into the speaker load up to a maximum of 50 watts of load.

Emergency or paging override of the audio can be achieved by applying 24V DC to the Override Relay terminals. Once activated the output volume will switch to maximum regardless of the volume setting.



For more information refer to the Redback® A 6507 Instructions or the Redback website - www.redbackaudio.com.au

# New Additions to the Redback® Range

### 6.2 Redback® A 6512 Single Input Serial Volume Controller





This compact module has been designed to alter the volume of any low level signal source feeding any amplifier or mixer remotely, via RS 232 or RS 485, or via the Redback® A 2280B remote volume wallplate.

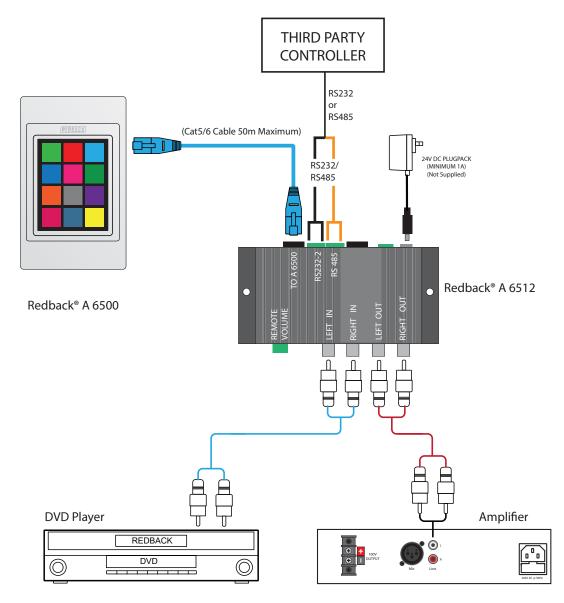
The Redback® A 6512 will interface directly to the Redback® A 6500 wallplate or any other third party control system which utilises RS232 or RS485 serial codes.

The figure below illustrates a typical connection diagram when using the Redback® A 6500A wallplate or a third party controller to control the Redback® A 6512 Serial Volume Controller.

The Redback® A 6500A connects via a Cat5e/6 lead into the "To A 6500" RJ45 connection port of the Redback® A 6512. 24V DC power is supplied to the Redback® A 6512 via a 24V DC plugpack or other 24V DC source (minimum24V DC 1A). Serial control of the volume circuit is provided by the A 6500A wallplate which is programmed with the serial codes using the PC software supplied with the Redback® A 6500A.

The third party controller sends RS232 or RS485 codes directly to the corresponding RS232 or RS485 input connector of the Redback® A 6512.

The output volume of the Redback® A 6512 is set by the serial codes sent to the unit.



For more information refer to the Redback® A 6512 Instructions or the Redback website - www.redbackaudio.com.au

# New Additions to the Redback® Range

### 6.3 Redback® A 6514 Two Input Serial Volume Controller





This compact module has been designed to alter the volume of any low level signal source feeding any amplifier or mixer remotely, via RS 232 or RS 485. The unit includes two RCA inputs which are selectable by serial control and remote volume which is also serial controlled.

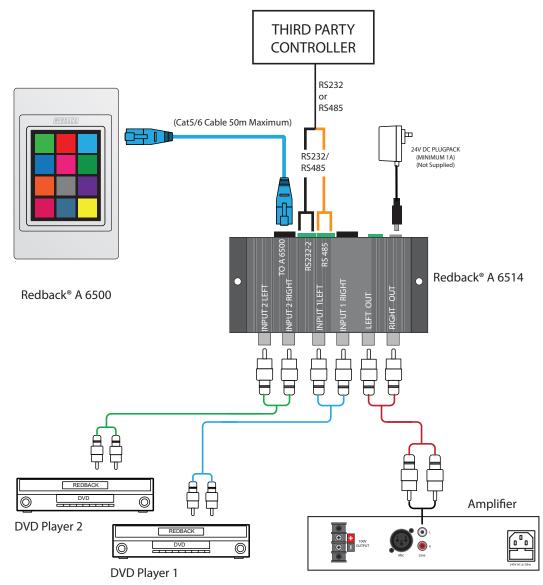
The Redback® A 6514 will interface directly to the Redback® A 6500 wallplate or any other third party control system which utilises RS232 or RS485 serial codes.

The figure below illustrates a typical connection diagram when using the Redback® A 6500A wallplate or a third party controller to control the Redback® A 6514 Serial Volume Controller.

The Redback® A 6500A connects via a Cat5e/6 lead into the "To A 6500" RJ45 connection port of the Redback® A 6514. 24V DC power is supplied to the Redback® A 6514 via a 24V DC plugpack or other 24V DC source (minimum24V DC 1A). Serial control of the volume circuit is provided by the A 6500A wallplate which is programmed with the serial codes using the PC software supplied with the Redback® A 6500A.

The third party controller sends RS232 or RS485 codes directly to the corresponding RS232 or RS485 input connector of the Redback® A 6514.

Either Input 1 or Input 2 can be selected by serial control and the output volume of the Redback® A 6514 can also be set by the serial codes.



For more information refer to the Redback® A 6514 Instructions or the Redback website - www.redbackaudio.com.au

## 7.0 SPECIFICATIONS

A 6500A Wall Plate	A 6510 Distribution Box (12 Relay)
Input connection: Micro USB (USB Keyboard)	INPUT CONNECTORS:
Output connection:RJ45 8P8C	Power connection (24V DC): 2.1mm DC socket
Data transmission: cat5e cabling max 50m	Euroblock terminal
Wallplate: Altronics Dual Cover	<b>Data:</b> RJ45 8P8C
<b>Dimensions</b> :	Serial In (RS232 & RS485):Screw Terminals
Power: Powered by A 6505A/10/15 over Cat5e	OUTPUT CONNECTORS:
cable	Relay (1-12) Switched Out: Screw Terminals
Current Draw: 50mA	NOTE: Relays rated for low power, typical 24V DC switching
<b>Weight</b> : 0.075kg	<b>Dimensions</b> : 90W x 131D x 30H
	Current Draw: 30mA (idle)
A 6505A Serial Hub	250mA (Max)
INPUT CONNECTORS:	<b>Weight</b> : 0.18kg
Power connection (24V DC): 2.1mm DC socket	
Francisco I	A CE4E D' ( ' D
Euroblock terminal	A 6515 Distribution Box (2 Relay)
Data:RJ45 8P8C	A 6515 Distribution Box (2 Relay) INPUT CONNECTORS:
<b>Data:</b> RJ45 8P8C	INPUT CONNECTORS:
Data:RJ45 8P8C OUTPUT CONNECTORS:	INPUT CONNECTORS: Power connection (24V DC): 2.1mm DC socket
Data:	INPUT CONNECTORS:  Power connection (24V DC):
Data:	INPUT CONNECTORS: Power connection (24V DC):
Data:	INPUT CONNECTORS:  Power connection (24V DC): 2.1mm DC socket  Euroblock terminal  Data: RJ45 8P8C  Serial In (RS232 & RS485): Screw Terminals
Data:	INPUT CONNECTORS:  Power connection (24V DC): 2.1mm DC socket  Euroblock terminal  Data: RJ45 8P8C  Serial In (RS232 & RS485): Screw Terminals  OUTPUT CONNECTORS:
Data:	INPUT CONNECTORS:  Power connection (24V DC): 2.1mm DC socket Euroblock terminal  Data: RJ45 8P8C  Serial In (RS232 & RS485): Screw Terminals  OUTPUT CONNECTORS:  Relay (1-2) Switched Out: Screw Terminals
Data:	INPUT CONNECTORS:  Power connection (24V DC):
Data:	INPUT CONNECTORS: Power connection (24V DC):

<sup>\*</sup> Specifications subject to change without notice



#### **8.0 WARRANTY**

**REDBACK®** is a registered trademark of Altronic Distributors Pty Ltd

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

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.