

**IMPORTANT NOTE:** These instructions are only suitable for A 4500C models or A 4500B models which have been upgraded with the A 4500C firmware. Firmware updates are available from altronics.com.au or redbackaudio.com.au.





# **Operating Manual**

# A 4500C Alert/Evacuation Controller and 50 Event Timer

**Optional Accessories** A 4498 Network Connector A 2078B Alert/Evac/Cancel Remote Wall Plate (Hard Wired) A 2081 Alert/Evac/Chime/Cancel Remote Wall Plate (Hard Wired) A 4498 Network Connection Pack A 4578 Alert/Evac/Cancel Remote Wall Plate (U/UTP Cat5) A 4579 Isolate Remote Wall Plate (U/UTP Cat5) A 4581 Alert/Evac/Chime/Cancel Remote Wall Plate (U/UTP Cat5) A 4581V Alert/Evac/Chime/Cancel Remote Wall Plate (U/UTP Cat5) A 4658 Power Injector (U/UTP Cat5) A 4660 Emergency Paging Microphone Console (U/UTP Cat5) A 4658 Power Injector A 2078B Remote Plate A 2081 Remote Plate A 4579 Isolate Plate A 4660 Paging Console A 4578 Remote Plate A 4581V Remote Plate A 4581 Remote Plate

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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.



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# **Redback® A 4500C** Evacuation Timer with Network Access **1.0 OVERVIEW**

## **1.1 INTRODUCTION**

The A 4500C is a weekly timer and Evacuation controller all housed in a convenient 1RU rack mount chassis. A total of 50 "event" switching times are available through the timing functions. Each event can be set to turn on any single day of the week or on multiple days, from 1 sec up to 24 hours. When a timing event is activated, an audio file will be played and output through the RCA line level output. There are one 99 audio playback options for the timing events, which include the Bell, Prebell, Music and outputs 5-99. A Micro SD card which is supplied, houses all the audio files to be played as well as storing all the timing events. The timing events can be programmed via the unit's front buttons which is a bit cumbersome, or they can be programmed with the supplied PC software (also available as a download from www.altronics.com.au or www.redbackaudio.com.au).

The timing events can also be programmed to activate only a relay with no audio output. This is activated by setting the output to the "relay" option in the programming setup. Once activated the common 24V Out will become active.

The Evacuation controller is designed around industry standard building emergency alert/evacuate requirements. When connected to a paging system amplifier, building occupants can be alerted and/or evacuated in the event of an emergency e.g. fire, gas leak, bomb scare, earthquake. Alert & Evac switches on the front of the unit are fitted with safety covers to prevent accidental operation.

The Alert, Evacuation and Bell tones and the cancel function are triggered by the front switches, or by the rear terminal contacts for remote activation.

The Alert, Evac, Bell and Cancel functions can also be activated via remote plates or the A 4660 Paging Console.

The Isolate function can be remotely activated via the A 4579 wall plate.

Switched 24V DC Out connections are provided for Bell, Alert, Evac or a Common out. These contacts are for connection of override relays in remote volume controls, warning strobes, bells etc.

The alert and evacuation tones are stored on the Micro SD card (Emergency Tones which conform to AS1670.4 are supplied) to allow the user to provide any tones they require.

The Evacuation mode has a voice over option for the playback of an evacuation message every third cycle of the evac tone. The voice over message is also stored on the Micro SD card and is DIP switch enabled.

(Note: The audio files must be in MP3 format and are converted by the supplied PC software to work with the timer).

## **1.2 FEATURES**

- MP3 audio format files required for Bell, Prebell and Music timing outputs
- Emergency Tones conform to AS 1670.4 (supplied)
- Random play of audio files for Prebell and Music triggers
- Easy PC based timing event setup
- Local push button operation of Alert, Evac, Bell and Isolate
- Remote triggering of Alert, Evac and Bell functions via closing contacts
- Remote triggering of Alert, Evac, Bell and Isolate functions via optional wall plates
- Emergency Paging (Optional via Redback® A 4660)
- Voice over message (In Evacuation cycle)
- Switched 24VDC output for Bell, Alert or Evac mode
- Pluggable screw terminal connections
- Auxiliary level output
- Battery backup of current time
- 24V DC operation
- Standard 1U 19" rack mount case
- Suitable for any amplifier with an auxiliary input
- 10 Year Warranty
- Australian Designed and Manufactured

## **1.3 WHAT'S IN THE BOX**

A 4500C Alert/Evacuation Controller/24 Hr 7 Day Timer 24V 2A DC Plugpack Instruction Booklet Timer programming Guide

## **1.4 FRONT PANEL GUIDE**

Figure 1.4 shows the layout of the A 4500C front panel.





## 1 Alert Tone Activation Switch

This switch is used to activate the Alert tone. It may need to be pressed for up to 2 seconds to activate.

## 2 Evac Tone Activation Switch

This switch is used to activate the Evacuation tone. It may need to be pressed for up to 2 seconds to activate.

## 3 Bell Tone Activation Switch

This switch is used to activate the Bell tone. The LED also indicates when the Bell is active.

## 4 Cancel Tone Activation Switch

This switch is used to cancel the Alert, Evac or bell tone. It may need to be pressed for up to 2 seconds to activate.

## 5 Status LEDS

Prebell LED - This LED indicates when the Prebell is active.Music LED - This LED indicates when an audio file from the Music Folder is active.Other LED - This LED indicates when an audio file from one of the Music Folders 5 - 99 is active.

## 6 Menu and Navigation Switches

These switches are used to navigate the menu functions of the unit.

## 7 Isolate Switch

This switch is used to isolate the timing functions of the unit. Note: When this is enabled the Alert, Evac and Chime buttons and remote triggers will still function.

## 8 LCD Display

This displays the current time and other timing functions.

## 9 Micro SD Card

This is used to store the audio files for playback of the timing events and the PC programming software.

## 10 Fault Indicator

This LED indicates that the unit has a fault.

#### 11 On Indicator

This LED indicates the unit is ON.

#### 12 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.

## **1.5 REAR PANEL CONNECTIONS**

Figure 1.5 shows the layout of the A 4500C rear panel.



Fig 1.5

## 1 Common 24V Out

This is a common 24V DC output which is activated when any of the Prebell, Bell, Music, Alert or Evac tones are activated. The terminals provided can be used for "Normal" or "Failsafe" modes (see section 2.12 for more details).

#### 2 Evac 24V Out

This is a 24V DC output which is activated when the Evac tone is activated. The terminals provided can be used for "Normal" or "Failsafe" modes (see section 2.12 for more details).

#### 3 Alert 24V Out

This is a 24V DC output which is activated when the Alert tone is activated. The terminals provided can be used for "Normal" or "Failsafe" modes (see section 2.12 for more details).

#### 4 Bell 24V Out

This is a 24V DC output which is activated when the Bell tone or relay only (No MP3 option) is activated. The terminals provided can be used for "Normal" or "Failsafe" modes (see section 2.12 for more details).

#### 5 Network Adapter

This RJ45 port is for connection of a Redback® proprietry adaptor board. This allows connection to an ethernet network. The Redback A 4498 Network connection pack is required (see section 3.0 for details).

#### 6 Backup Battery Switch

Use this switch to activate the backup battery. (Note: The backup battery only backs up the current time).

#### 7 Backup Battery

Replace this battery with a 3V CR2032 only. Remove by pulling the battery. Note: The positive side of the battery faces upward.

#### 8 Alert/Evac Volume

Adjust this trimpot to adjust the Alert and Evacuation tones playback volume.

#### 9 Bell Volume

Adjust this trimpot to adjust the Bell playback volume.

#### 10 Music Volume

Adjust this trimpot to adjust the Music playback volume.

#### 11 Voice-over Volume

Adjust this trimpot to adjust the message voice-over playback volume.

#### 12 PreBell Volume

Adjust this trimpot to adjust the PreBell playback volume.

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## 13 Audio Out RCA Connectors

Connect these outputs to the input of the background music amplifier.

## 14 Bell Contact

These contacts are for remote triggering of the Bell tone. These could be triggered by a remote switch or other closing contact.

## 15 Alert Contact

These contacts are for remote triggering of the Alert tone. These could be triggered by a remote switch or other closing contact.

#### 16 Evac Contact

These contacts are for remote triggering of the Evacuation tone. These could be triggered by a remote switch or other closing contact.

## 17 Cancel Contact

These contacts are for remote triggering of the cancel function. These could be triggered by a remote switch or other closing contact.

## 18 Mic Volume

Adjust this trimpot to adjust the A 4660 Microphone volume.

## 19 RJ45 interface

This RJ45 port is for connection to the A 4660 microphone paging console.

## 20 RJ45 interface

This RJ45 port is for connection to the A 4578, A 4579, A 4581 and A 4581V wall plates.

## 21 Dip Switches

These are used to select various options. Refer to DIP Switch Settings section.

#### 22 24V DC Input (Backup)

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

#### 23 24V DC input

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

# **Redback® A 4500C** Evacuation Timer with Network Access **2.0 SETUP GUIDE**

## 2.1 INITIAL SETUP

Press the Power/Standby button on the front of the unit. When the unit is in standby mode this switch is illuminated Red. Once pressed the unit will power up and the Blue "On" indicator will illuminate.

Once powered up, the LCD on the front of the unit will illuminate and display the version of firmware installed on the unit. (Note: Check the redbackaudio.com.au or altronics.com.au websites for the latest Firmware updates. Refer to section 5.0 for help installing firmware updates).

A series of checks will then be carried out. These include, the confirmation of default audio files required for proper operation and the presence of a correct configuration file.

Out of the box the A 4500C comes supplied with default audio files installed for the Alert, Evac, Bell, Prebell, Music and Voice Over functions. If these files are missing or corrupt the unit will not continue. All of this information is stored on the Micro SD card.

Note: If the unit fails to start correctly the Micro SD card may not be inserted correctly or may need to be checked (refer to the Redback Programming Guide).

## 2.2 ALERT, EVAC AND BELL SWITCHES

The Alert, Evac and Bell switches on the front of the unit all work in momentary mode. ie. The alert tone will continue to sound after the alert switch is momentarily pressed and the evac tone will continue to sound after the evac switch is momentarily pressed. There is an automatic alert to evac switch-over option associated with the front panel switches (refer to section 2.8).

Note 1: The tone that is being sounded (ie alert, evac, bell) will be indicated by the illumination of the relevant front panel indicator.

Note 2: To cancel a tone either use the remote cancel contacts or the front cancel button. Note the cancel button will need to be depressed for 2 seconds. This is to prevent accidental cancelling of a tone.

Once these Alert, Evac and Bell outputs are activated, the corresponding 24V switched outputs will become active (refer to section 2.13 for more details)

## 2.3 SETTING THE CURRENT TIME

If the unit starts up correctly and no error messages are displayed, the unit will display the current time on the top line of the LCD and the next event on the bottom line as shown in figure 2.3a.





When this screen is displayed the unit is running in "AUTO MODE" and therefore all outputs will work as programmed. However if the unit is in any of the sub menu's (Menu Mode) the unit will no longer respond to any event that has been programmed to occur.

#### SPECIAL NOTE ABOUT "AUTO MODE" OPERATION

If the timer is not displaying the main clock screen, where the time is changing, the unit is not running in "Auto Mode". This means it will not be checking any of the programmed events and hence will not activate any outputs automatically.

Essentially this means that as soon as the Menu button is pressed the unit is no longer in "Auto Mode". Make sure to return to the main screen by exiting all menu's when not making changes.

Press the "Menu" button on the front of the timer. The unit is now in "Menu Mode" and the screen should display the "Clock Adjust" Screen. This is the first of seven sub menu screens which are navigated by pressing the up and down buttons as shown in Fig 2.3b. Pressing the Menu button again will exit the menu structure and return the user to the Main Screen.



Fig 2.3b

## SPECIAL NOTE ABOUT "AUTO MODE" OPERATION

If the timer is not displaying the main clock screen, where the time is changing, the unit is not running in "Auto Mode". This means it will not be checking any of the programmed events and hence will not activate any outputs automatically.

Essentially this means that as soon as the Menu button is pressed the unit is no longer in "Auto Mode". Make sure to return to the main screen by exiting all menu's when not making changes.

Select the CLOCK ADJUST sub menu by presing the "Enter" button. After selecting this option, the screen as shown in Fig 2.3c should appear.



## Fig 2.3c

The cursor will be positioned over the hour section of the time. Use the up and down buttons to change the hour and then press the "Enter Button" to confirm the hour. The cursor will move to the minutes section of the time. Use the up and down buttons to change the minutes and then repeat the process again for the seconds. Once the seconds have been updated the cursor will move to the day of the week. Use the up and down buttons again to change the day and then press enter to confirm. The time is now set.

## 2.4 PROGRAMMING THE TIMING EVENTS USING THE SUPPLIED PC SOFTWARE

Refer to the Redback Timer Programming Guide.

## 2.5 PROGRAMMING THE TIMING EVENTS USING THE FRONT BUTTONS

In order to set up the timing events, the station (or event) times will need to be programmed. This can be achevied by using the buttons on the front of the unit.

Select the "TIMES ADJUST" option from the menu (refer to figure 2.3b). This option allows the user to enter the Station (Event) information which includes the event "Turn on time", "Period" and "Output". After selecting this option, the screen as shown in Fig 2.5a should appear.



## Fig 2.5a

The top left text is the time event number. Up to 50 events can be programmed into the A 4500C. Pressing the "up" and "down" buttons at this stage will move up and down through the events 1- 50. The top right text indicates that TIME1 (Event1) is currently disabled. The bottom left text refers to the time this event will happen (i.e. the "Start" Time). Press the "Enter" button to edit this event, or press the "Menu" button to exit.

Pressing the Enter button will take you to the "Editing Time" screen (Refer to fig 2.5b). This is where the event "Start" time is entered.



#### Fig 2.5b

The cursor will be positioned over the hour section of the time. Use the up and down buttons to change the hour and then press the "Enter Button" to confirm the hour. The cursor will move to the minutes section of the time. Use the up and down buttons to change the minutes and then repeat the process again for the seconds. Once the seconds have been updated the screen will change to the "Period" set screen (Refer to fig 2.5c). This is where the duration of the event is recorded.



Once again, use the up and down buttons to set the hour, minutes and seconds and press enter when finished. Once the period has been set, the desired output for this event is to be set using the "Output" screen (See fig 2.5d).



## Fig 2.5d

The output defaults to Disabled. Scroll through the other options by using the up and down buttons. The Output can be set to Prebell, Bell, Music, No MP3/Relay Only or outputs 5-99. These outputs correspond to the audio files located on the Micro SD card which are configured by the Timer Programming Software. (Note: Direct MP3 file manipulation on the Micro SD card is no longer available).

(Note. Direct wird mie manipulation on the wilclo 3D card is no longer available).

Once the desired output for the event has been set, press the enter button to move to the next screen (See fig 2.5e).



#### Fig 2.5e

This is where the days of the week this event will occur are entered. The top right line of text refers to the days of the week, Monday through to Sunday. The line of text below this sets each day "ON" or "OFF". Use the up and down buttons to set the day to Y for "ON" and N for "OFF".

Once the days of the week are set, press the enter button to confirm and be returned to the main menu. Repeat this process for any other events to be programmed.

This process of entering the events can be quite time consuming so it is recommended using the PC software (Redback Weekly Timer Programmer.exe).

## 2.6 DELETING A PROGRAMMED TIME

Select the "DELETE TIMES" option from the menu (refer to figure 2.3b).

After selecting this option, the screen as shown in Fig 2.6 should appear.



#### Fig 2.6

From this point the "Up" and "Down" buttons can be used to scroll through the different times, or press the "Enter" button to delete this time. After deleting the time, a message will indicate that the time has been cleared and the next time will then be displayed on the screen. Press "Enter" to delete, "Menu" to exit or the "Up" and "Down" buttons to scroll to another time.

## 2.7 RESET ALL PROGRAMMED TIMES

Select the "RESET ALL TIMES" option from the menu (refer to figure 2.3b).

After selecting this option, the screen as shown in Fig 2.7 should appear.

RESET ALI	_ TIMES
UP=YES /	DN = NO

Press the "UP" button to reset all the times programmed and stored on the Micro SD card. Press the "No" button to exit without resetting the times.

## 2.8 EV CHANGEOVER

Select the "EV CHANGEOVER" option from the menu (refer to figure 2.3b).

After selecting this option, the screen as shown in Fig 2.8 should appear.



## Fig 2.8

This option allows the user to enter the automatic switch over time between the Alert and Evac cycles.

NOTE: This affects the front panel Alert and Evac buttons and the rear Alert and Evac contacts.

Press the "UP" and "DOWN" buttons to scroll through the various times available and press enter when the desired switchover time is highlighted. The changeover times go up in 10 second intervals up to 600 seconds.

NOTE: If the changeover time is set to "0" the changeover will be de-activated and therefore the unit will not switch over from the Alert cycle to the Evac cycle automatically.

## 2.9 PLAY PREBELL

Select the "PLAY PREBELL" option from the menu (refer to figure 2.3b).

After selecting this option, the screen as shown in Fig 2.9 should appear.

00:00:00	
PLAYING MP3	

Fig 2.9

The Audio File associated with the "Pre bell" output will sound. Press the cancel button on the front of the unit to cancel.

## 2.10 PLAY MUSIC

Select the "PLAY MUSIC" option from the menu (refer to figure 2.3b).

After selecting this option, the screen as shown in Fig 2.10 should appear.

00:00:00 PLAYING MP3

Fig 2.10

The Audio File associated with the "Music" output will sound. Press the cancel button on the front of the unit to cancel.

## 2.11 AUDIO CONNECTIONS

## Audio Output:

This output consists of stereo RCA sockets with an output of 0dBm into a  $600\Omega$  input. This is suitable for most PA amplifier auxiliary inputs.

#### Rear Panel Volume Controls:

The output levels of the Alert/Evac, Prebell, Bell, Music and Voice Over tones can all be adjusted via trimpots located on the rear of the unit.

## 2.12 DIP SWITCH SETTINGS

The A 4500C has various options which are set by the DIP switches on the rear of the unit. These are outlined below in figure 2.11.

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

## Switch 1

This switch is used to either loop the Bell/Prebell, or play the Bell/Prebell only once after it has been triggered.

ON = Loop, OFF = Play Once

#### Switch 2

DIP switch 2 enables or disables the voice over message. The voice-over message is played in between every three cycles of the evac tone.

ON = Enabled, OFF = Disabled

#### Switch 3

This switch can be used to lockout the menu button, to deter tampering with the programmed times.

ON = Menu button disabled, OFF = Menu button enabled

#### Switch 4

This switch can be used to lockout the front isolate button. ON = Isolate button disabled, OFF = Isolate button enabled **Switch 5-8** Not Used

DIP SWITCH SETTINGS					
SW	ON	OFF	SW	ON	OFF
1	Loop PreBell/Bell Until Cancelled	Play Prebell/Bell Once	2	Voice Over Enabled	Voice Over Disabled
3	Disable Menu Options	Enable Menu Options	4	Disable Isolate Switch	Enable Isolate Switch
5-8	NOT USED				



## 2.13 24V OUTPUT CONNECTIONS

These contacts can be used for connection of override relays in remote volume controls, or strobes for unusually noisy environments. An override relay is necessary where attenuators are used so that the alert tone, evac tone or message is broadcast at full volume regardless of the volume setting on the individual volume control (attenuator).

#### Alert/Evac 24V Out:

These contacts are for switched 24V outputs whenever the alert or evac tones are activated. These may be used to run external systems such as strobes in unusually noisy environments, or override relays in remote volume controls. When this output becomes active, 24V will appear between the N/O contact and the GND contact. When this output is not active 24V will appear between the N/C contact and the GND.

#### Bell 24V Out:

These contacts are for switched 24V outputs whenever the Bell or Relay Only (No MP3 option) are activated These contacts are for operating an external relay used to operate something like a lunch bell etc.

When this output becomes active, 24V will appear between the N/O contact and the GND contact. When this output is not active 24V will appear between the N/C contact and the GND.

#### Common 24V Out:

These contacts are for switched 24V outputs whenever the Alert, Evac, Bell, Prebell or Relay Only (No MP3 option) tones are activated. When this output becomes active, 24V will appear between the N/O contact and the GND contact. When this output is not active 24V will appear between the N/C contact and the GND.

# **Redback® A 4500C** Evacuation Timer with Network Access 3.0 NETWORK ACCESS

The Redback® A 4500C has been upgraded from previous versions to now include access via a network connection. The unit is connected with the addition of the Redback® A 4498 Network Connection Pack. With the upgraded PC software all the event timing and audio file selection can be adjusted remotely.

Note: Audio files cannot be transferred via this connection. All audio files must be loaded onto the supplied Micro SD card via the PC software. These files are stored in a Library on the SD card and can then be selected remotely.

Figure 3.1 below demonstrates how to connect the timer to a network via the Redback® A 4498 Connection Pack. The pack includes a serial to ethernet converter, a proprietry adaptor board, a DC power lead and a short CAT6 lead for connection between the A 4500C and the Adaptor board. The Serial to Ethernet Converter requires some configuration which is outlined in the A 4498 instruction manual.

Once the Serial To Ethernet Converter setup is complete and all required connections made, the unit should now be accessible via the PC software. Refer to the supplied Software Programming Guide for more information.

Note: An IT administrator or someone experienced with network protocols will be required to setup the network access.



Fig 3.1 Connecting the timer to a network via the Redback® A 4498 Connection Pack

# **Redback® A 4500C** Evacuation Timer with Network Access 4.0 REMOTE WALL PLATES

There are a number of remote wall plates which can be connected to the A 4500C for remote triggering of the Alert, Evacuation and Bell tones and for remotely cancelling any tones which may be active.

## 4.1 A 2078B and A 2081 Remote Plates (Hard Wired)



## A 2078B



The A 2078B wall plate provides a remote means of triggering the Alert and Evacuation tones and the cancel function. While the A 2081 wall plate provides a remote means of triggering the Alert, Evacuation and Bell tones and the cancel function. Connection from the A 2078B is made to the A 4500C via a minimum of 6 wires as shown in Fig 4.1A. Connection is made from the A 2081 to the A 4500C via a minimum of 8 wires as shown in Fig 4.1B. If standard Cat5 cable is used for the wiring, the plate can be located up to 30m away from the main unit. This can be

increased to 100m away using heavier guage cable, which reduces the voltage drop across this distance and ensures the switch leds illuminate.

The Alert/Evac/Chime/Cancel switches on the wall plate are connected to the corresponding contacts on the rear of the A 4500C. While the Alert, Evac and Bell LEDs on the wall plate are connected to the Alert, Evac and Bell 24V outputs of the A 4500C. The cancel LED is not connected. A mimimum of six wires can be used on the A 2078B if the ground connections of the Alert and Evac 24V outputs and the Alert/Evac and cancel switch grounds are linked together (see Fig 4.1B). A mimimum of eight wires can be used on the A 2081 if the ground connections of the Alert, Evac and Bell 24V outputs and the Alert/Evac and cancel switch grounds are linked together (see Fig 4.1B).



Fig 4.1A Connecting the A 2078 Wall Plate to the A 4500C



Fig 4.1B Connecting the A 2081 Wall Plate to the A 4500C

## 4.2 A 4578, A 4579, A 4581 and A 4581V Remote Plates (U/UTP Cat5/6 cabling)

The A 4578, A 4581 and A 4581V wall plates provide a remote means of triggering the Alert, Evacuation and Bell (A 4581 and A 4581V only) tones and the cancel function.

The A 4579 wall plate provides a way of remotely isolate the timing functions of the A 4500C. This has the same functionality as the Isolate switch on the front of the timer.

The wall plate switches are momentary operation and must be pressed for up to 3 seconds to activate, and have protective "flip up" covers to prevent accidental operation.

Connection is made to the A 4500C via standard Cat5e cabling as shown in Fig 3.2 There are two RJ45 ports on the rear of the wall plates, either of which can be used. Only one A 4578, A 4579, A 4581 or A 4581V wall plate is allowed to be connected to the A 4500C via the "To Wall Plate" RJ45 port.

If the wall plates have a connection problem with the A 4500C main unit, the LED on the wall plate will flash.











Fig 4.2 Connection of (One only) wall plate via CAT5/6 cabling.

# Redback® A 4500C Evacuation Timer with Network Access 5.0 A 4660 PAGING CONSOLE

## 5.1 A 4660 OVERVIEW

The A 4660 paging console provides general paging, emergency paging and remote selection of "Alert", "Evac", "Bell" and "Cancel" modes.

**General paging** is achieved by simply pressing the PTT (push to talk) switch and then speaking. General paging will override the Bell function.

**Emergency paging** is available when the unit is in an emergency mode i.e In Alert or Evac Mode.

If one of these modes is active, emergency paging is achieved by pressing the paging button.

When activated, emergency paging overrides all functions of the A 4500C.

A maximum of 1 paging console can be connected to the A 4500C. The console is wired back to the A 4500C via Cat5e/6 cabling to the RJ45 port on the rear of the unit (see section 5.3 for details).

Note: For long cable runs Redback® A 4658 power injectors may be required.

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 19). The address when connecting to the A 4500C can be any number from 1-8.

The Alert, Evac and Bell modes can be activated from the A 4660 paging console. Simply Press the button for the desired mode and hold for 2-3 seconds to activate.

Note: These modes are inactive when the A 4500C is in manual or isolate mode.



## 5.2 A 4660 SETTINGS MENU

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.





## 5.2.1 System Settings

The System settngs screen is shown in figure 5.2.





- **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 cycle power to the A 4500C and re-start the unit. Handy if the unit is locked away.
- **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 1-8). 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

## 5.2.2 Backlight Settings

Press the "backlight" button to display the screen shown in figure 5.3.



Fig 5.3 - Backlight Settings Screen.

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).

**5.2.3 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.

**5.2.4 Installer label** - Allows you to customise an installer label which is displayed on the top of the main screen. Use the displayed keyboard to enter the label and press enter.

## 5.2.5 Microphone settings

Press the "microphone" button to display the screen shown in figure 5.4. From this menu the chime options and action of the paging button are set.



## Fig 5.4 - Microphone Settings Screen.

- **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.
- **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.
- **3 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.

## 5.3 Connecting the paging console

The console is connected to the A 4500C via standard Cat5e/6 cabling as shown in figure 5.5.





There is one RJ45 port on the back of the A 4500C which can be used to connect a single A 4660 paging console. The maximum distance between the A 4500C and a paging console is 200m.

Note: External power injectors (Redback ® A 4658) may be required if power problems are encountered from long cable runs. This is shown connected to the console in the example of figure 5.6.



Fig 5.6

Note: Power Over Ethernet or POE's cannot be used as the power injectors as they run on 48V. The A 4500C and A 4660 systems are powered by 24V DC. Use of POE's will void the warranty.

# **Redback® A 4500C** Evacuation Timer with Network Access 6.0 TROUBLE SHOOTING

## **6.1 SYMPTOMS AND REMEDIES**

## SYMPTOMS

PC SOFTWARE WILL NOT RUN

#### REMEDIES

The PC software for this product may not run on all PC's. The .NET framework on the PC has to be updated to .NET Framework 4. Available for download on the microsoft website.

CHECK Micro SD CARD HAS BEEN INSERTED CORRECTLY CHECK Micro SD FORMATTED CORRECTLY CHECK MP3 FILES INSTALLED CHECK FORMAT OF MP3 (It cannot be WAV or AAC) MP3 files cannot be "Read Only" See page 9.

*ERROR1* (Micro SD card not found) *ERROR2* (Micro SD card not formatted properly) *ERROR4* (Cannot find an MP3 to play) *ERROR7* (Cannot Play MP3)

ERROR8 (Fault with Configuration File)

Power switch is illuminated Red but unit doesn't work

Unit will not play MP3 files.

Unit doesn't play an MP3 at the appointed time.

Alarm times have been updated by user but the times don't change.

CHECK CONFIGURATION FILE (Incorrect time??)

The unit is in standby mode. Press the Power/Standby switch. The unit is ON when the Blue ON LED is illuminated.

Make sure all MP3 files are not "Read Only". See page 9.

This could be caused by MP3 files which are Read Only. The unit will attempt to play the file but not be able to play it, hence the MP3 will not be played at the appointed time.

The times are saved to a file named "config.cnf". This file cannot be named anything else. It must also be saved to the root folder of the Micro SD card.

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

System components are connected using "pin to pin" configuration RJ45 data cabling as shown in fig 6.1. 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.

568A Straight Through (both ends) Pins Face Upwards







WARNING System components are connected using standard "pin to pin" configuration RJ45 data cabling. When installing ensure all connections are verified before switching any system component on.

Failure to follow the correct wiring configuration may result in damage to system components.

# Redback® A 4500C Evacuation Timer with Network Access **7.0 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 Micro SD card from the A 4500C and insert it into your PC.

3) Extract the contents of the Zip file to the root folder of the Micro SD Card.

4) Rename the extracted .BIN file to update.BIN.

5) Remove the Micro SD card from the PC following windows safe card removal procedures.

6) With the power lead removed from the rear of the unit, insert the Micro SD card back into the A 4500C.

7) Reconnect power to the A 4500C and turn ON. The unit will check the Micro SD card and if an update is required the A 4500C will perform the update automatically.

## **8.0 SPECIFICATIONS**

OUTPUT LEVEL:OdBm	CONTROLS:
DISTORTION:0.01%	Alert
FREQ. RESPONSE:140Hz - 20kHz	Voice
SIGNAL TO NOISE RATIO:	Bell:
Alert/Evac/Chime:70dB typically	Prebe
	Musi
OUTPUT CONNECTORS:	Powe
Audio Output:RCA Stereo Socket	Alert
Common 24V DC Out:Screw Terminals	Evac
Alert 24V DC Out : Screw Terminals	Bell S
Evac 24V DC Out:Screw Terminals	Canc
Bell 24V DC Out:Screw Terminals	
	INDICATORS
PLEASE NOTE:	Music, Othe
Output loads limited to 0 12Amp each	
	MP3 FILE FO
INPLIT CONNECTORS.	
24V DC Power: Screw Terminals	
2/1/DC Power: 2 1mm DC lack	BACKUP BA
Remote Alert Evac Bell Cancel:	POW/FR SUP
Kemole Alert, Evac, Dell, Cancel.	
VVALLELATE/FAGING CONSULE INPUTS RJ45 8P8C	COLOON

DATA TRANSMISSION:.....Cat5e cabling max 300m

Alert/Evac:	Rear Volume
Voice over:	Rear Volume
Bell:	Rear Volume
Prebell:	Rear Volume
Music:	Rear Volume
Power:	On/Off Switch
Alert Switch:	Illuminated Push Switch
Evac Switch:	Illuminated Push Switch
Bell Switch:	Illuminated Push Switch
Cancel Switch:	Push Switch

......Power on, MP3 error, Prebell, r MP3 folders

RMAT: .....Minimum 128kbps, 44.1kHz, 32bit, VBR or CBR, Stereo

BACKUP BATTERY :	
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.