

Elite Version
Detention Centre Room Monitoring **8DT**

Arrowhead
Alarm Products Ltd

Installation & Programming Guide

Proudly Designed and Manufactured in New Zealand

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SYSTEM OPERATING GUIDE

PURPOSE OF THE SYSTEM

The basic function of this alarm system is to monitor people afterhours to ensure that only one person can leave their room at a time. The system is designed to allow for monitoring of up to 8 rooms per system. It is designed to be used where bedroom doors cannot be locked due to fire egress restrictions yet some form of control on egress is required.

OPERATIONAL SPECIFICATIONS

The system consists of an 8 zone alarm unit with 8 outputs plus a backlit remote keypad/annunciator.

Fitted in each room will be a pushbutton panel with an LED indicator. Also fitted to each bedroom door will be a flush mounted magnetic reed switch to monitor the door.

If the alarm is not armed at the keypad no door monitoring is provided (unless the day zone option has been assigned). Anyone tampering with the door or pushbutton wiring will create a tamper at any time.

When the alarm is armed all doors must be in the closed position. If any doors are open at that time an alarm will be generated. At any time an alarm occurs the associated LED on the keypad display (LEDs 1-8) will flash to indicate the source of the alarm.

If all doors are closed at the time of arming the alarm no alarms will be generated and the RED leds on the 8 pushbutton panels in each room will be off, as will the zone & pushbutton leds on the keypad.

If any person wishes to leave their room they must first check the RED led on the panel in their room to ensure it is OFF. If the led is off this means no other person is currently out of their room. If the led is on they cannot leave their room as someone else is already out of their room.

Provided the led in their room is off the person is free to press the pushbutton on the panel in their room. This will start the red led flashing on their panel to show the timers have been started and it will turn the red leds ON in the other 7 rooms to warn that they cannot leave their room at this time.

The instant a pushbutton is pressed in any room and the red led begins to flash, a sequence of timers is initiated. A brief description of these timers follows;

- a) The room pushbutton delay is the maximum time allowed to open the door following pressing of the button. If the door is not opened within this time the system resets and all red leds turn off. Also upon returning to the room and within the allowed time, this timer starts again following opening of the door and the pushbutton must be pressed before this timer expires. The system will also only allow the door to be opened and closed twice within one cycle e.g. one door opening to leave the room and another on re-entering again. If the door is opened a third time an alarm is generated.
- b) The room away timer starts from the time of opening the door following pressing of the pushbutton and is the maximum time allowed out of the room before pressing the button again to say you are back in the room. This resets all timers and turns all red leds off again.
- c) The door open too long timer starts from the time the door is opened (provided the pushbutton was pressed first) and is designed to set a maximum time the door can be left open. The door may be opened and closed only twice during the room away time period but cannot be left open longer than this time.
- d) The room recovery timer is a delay before the pushbutton can be re-used after having been out of the room already. e.g. following pressing the button leaving the room, returning again and then pressing the button again to reset everything the same person cannot press the button again to leave the room until the room recovery time has expired. During the room recovery time the red led will be illuminated in the room to show that the button cannot currently be used.

INTRODUCTION

This Arrowhead Elite Version 8DT alarm control panel has been designed to provide a customised solution to installations which require monitoring of people in low security detention centres.

What we have done with the Elite version 8DT is to take the basic I/O functions of an alarm panel and provided special timers to ensure that afterhours only one person may leave a room at any time.

A keypad is provided that would be fitted into the caregivers room to allow setting of the monitoring system as required. The keypad also serves as a mimic panel identifying the source of an alarm and has a built-in buzzer for local audible alarm indication. Louder internal sirens may also be connected to the system as needed.

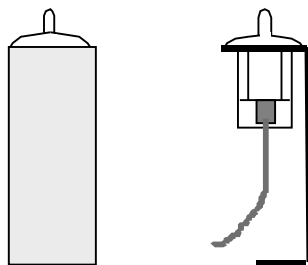
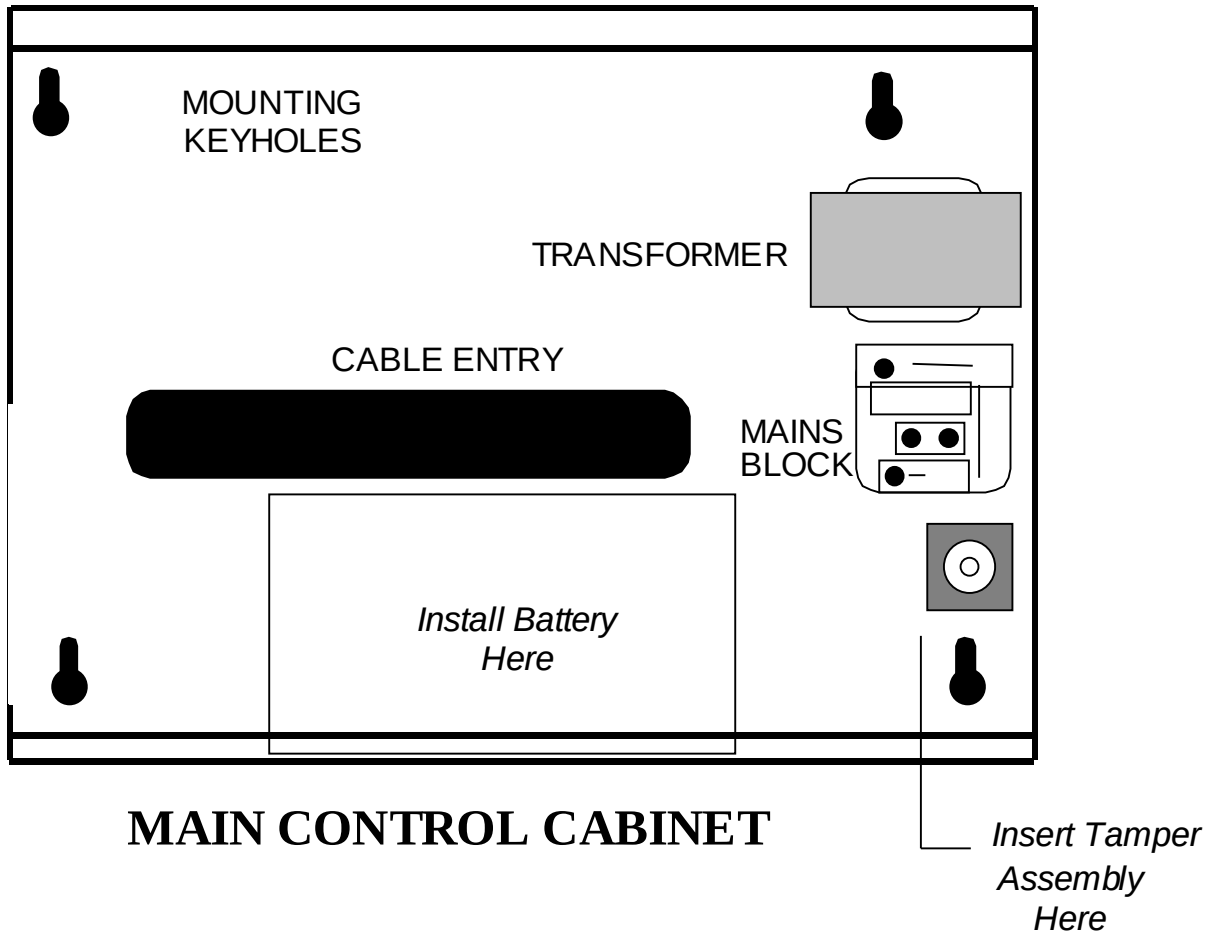
This manual will guide you through the installation and programming of your Elite 8DT alarm panel.

PACKAGE CONTENTS

This Arrowhead Elite package should contain the following items;

- 1 x Elite controller PCB
- 1 x Elite new generation backlit keypad (with 16 separate zone LED's)
- 1 x Elite keypad zone list
- 1 x Elite cabinet & lid
- 1 x 17 volt 1.4a Telepermitted mains transformer
- 1 x Cabinet hardware accessory pack including,
 - 1 x Elite installation & programming guide
 - 1 x Spare 1.5a fuse
 - 1 x Cabinet tamper switch
 - 1 x Cabinet tamper bracket
 - 1 x Tamper switch wire set
 - 2 x Cabinet lid screws
 - 10 x 2k2 (red, red, red) end of line resistors
 - 10 x 4k7 (yellow, violet, red) end of line resistors
 - 10 x 8k2 (grey, red, red) end of line resistors

If any of these items are missing from this package, please contact the Arrowhead branch where you placed your order.



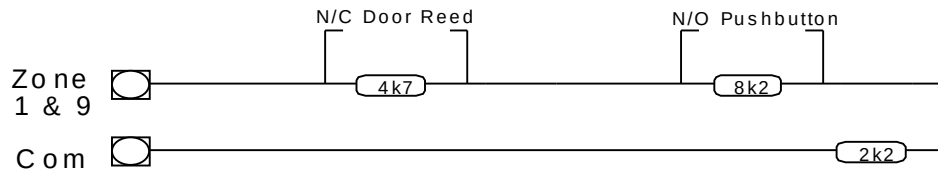
TAMPER ASSEMBLY

INPUTS & OUTPUTS

The Elite version 8DT has 8 alarm inputs, 8 pushbutton inputs and 8 preset outputs. These are;

Zones 1-8 Programmable alarm inputs with various timer functions
 Zones 9-16 Pushbutton panel inputs
 Outputs 1-8 Preset as led driver outputs for red leds on the pushbutton panels

NOTE: The alarm inputs and pushbutton panels must be wired up as per the diagram below;



The following table shows the link-up between rooms, zones, outputs and pushbuttons.

Room Number	Door Reed Switch Input	Led Driver Output No.	Pushbutton Zone Input No.
Room 1	Zone 1	Output 1	Input 9
Room 2	Zone 2	Output 2	Input 10
Room 3	Zone 3	Output 3	Input 11
Room 4	Zone 4	Output 4	Input 12
Room 5	Zone 5	Output 5	Input 13
Room 6	Zone 6	Output 6	Input 14
Room 7	Zone 7	Output 7	Input 15
Room 8	Zone 8	Output 8	Input 16

TAMPER - A 24Hr tamper circuit is available for monitoring tamper status of detectors, junction boxes, cabinets and satellite sirens etc. The tamper circuit must be terminated with an end-of-line resistor if 2k2 EOL supervision is selected. The activation events and outputs for this tamper circuit are mapped in the same manner as for detection zones.

In addition to the Analogue monitoring inputs, you will find the following system inputs on your Elite V8DT control PCB;

AC - Connect the two low voltage wires (no polarity) from the transformer to the terminals marked AC on the Elite PCB. The Elite includes a Telepermitted transformer rated at 1.4 amps at 17 volts and incorporates an inbuilt thermal protection fuse.

EARTH - Always connect the mains earth to the appropriate terminals on the mains terminal block. If required a flying lead may be connected from this earth point to the terminal marked "Frame Earth" on the Elite PCB.

**Never connect the mains earth directly to the Elite PCB
 other than at the terminal marked "Frame earth"**

BATTERY - Connect a sealed lead acid rechargeable 12V battery to these red and black battery leads. Be careful to observe correct polarity as damage may occur from incorrect connection. The minimum recommended battery capacity is 6.5 amp hours. Battery charge current at these terminals is limited to 350mA maximum.

OUTPUTS

12 VOLT OUTPUTS - There are four 12 volt dc outputs available on the Elite PCB. These 12 volt outputs are all regulated. Three are fuse protected suitable for powering detectors, sirens and other external devices. These outputs are marked 12v and 0v, and are supplied by fuses F1 and F2. A maximum total load of 1 amp may be drawn from these terminals. The fourth set of fused (F2) 12V terminals are found adjacent to the keypad comms clock and data terminals. This 12v output is micro controlled and **MUST** only be used to power keypads, radio boards and other intelligent devices which use the keypad comms bus.

OUTPUTS 1 & 2 - These outputs are high current, open collector (high-going-low) type FET outputs capable of switching up to **1.5A @ 12V d.c.** Output 1 is preset as a status indicator associated with pushbutton 1(input 9). Output 1 is designed to drive an LED. When the alarm is armed and someone leaves their room, output 1 will turn ON to show that egress from the room is now restricted. When the egress timer for room 1 is started output 1 will flash.

Output 2 is the same as output 1 but relates to room 2.

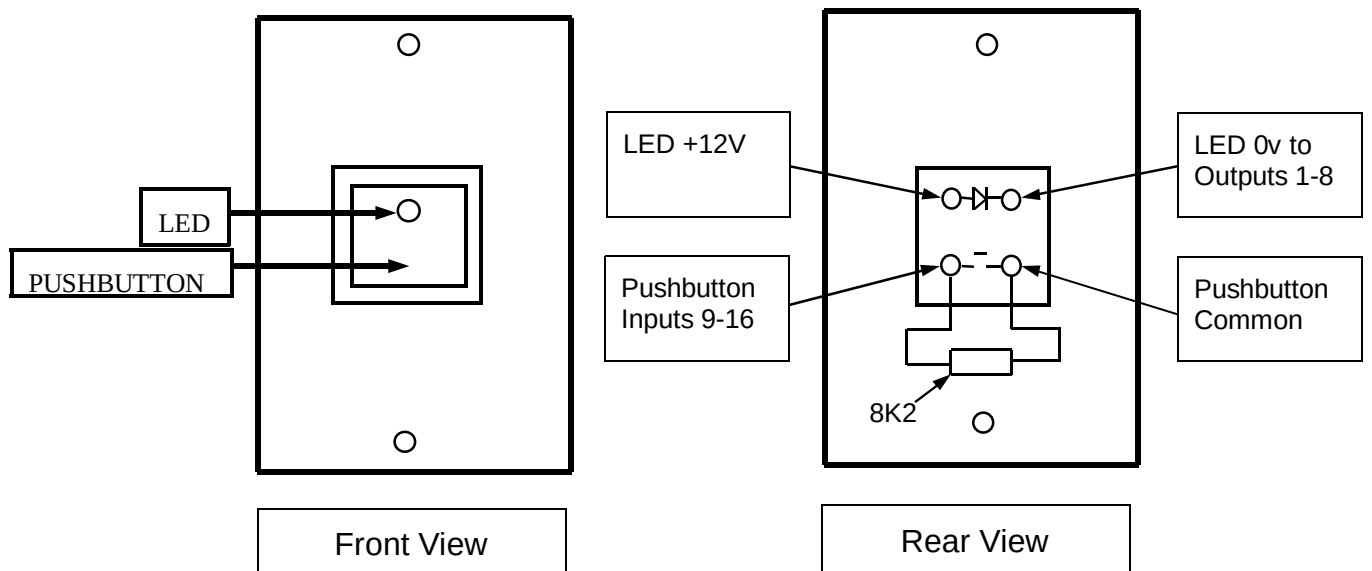
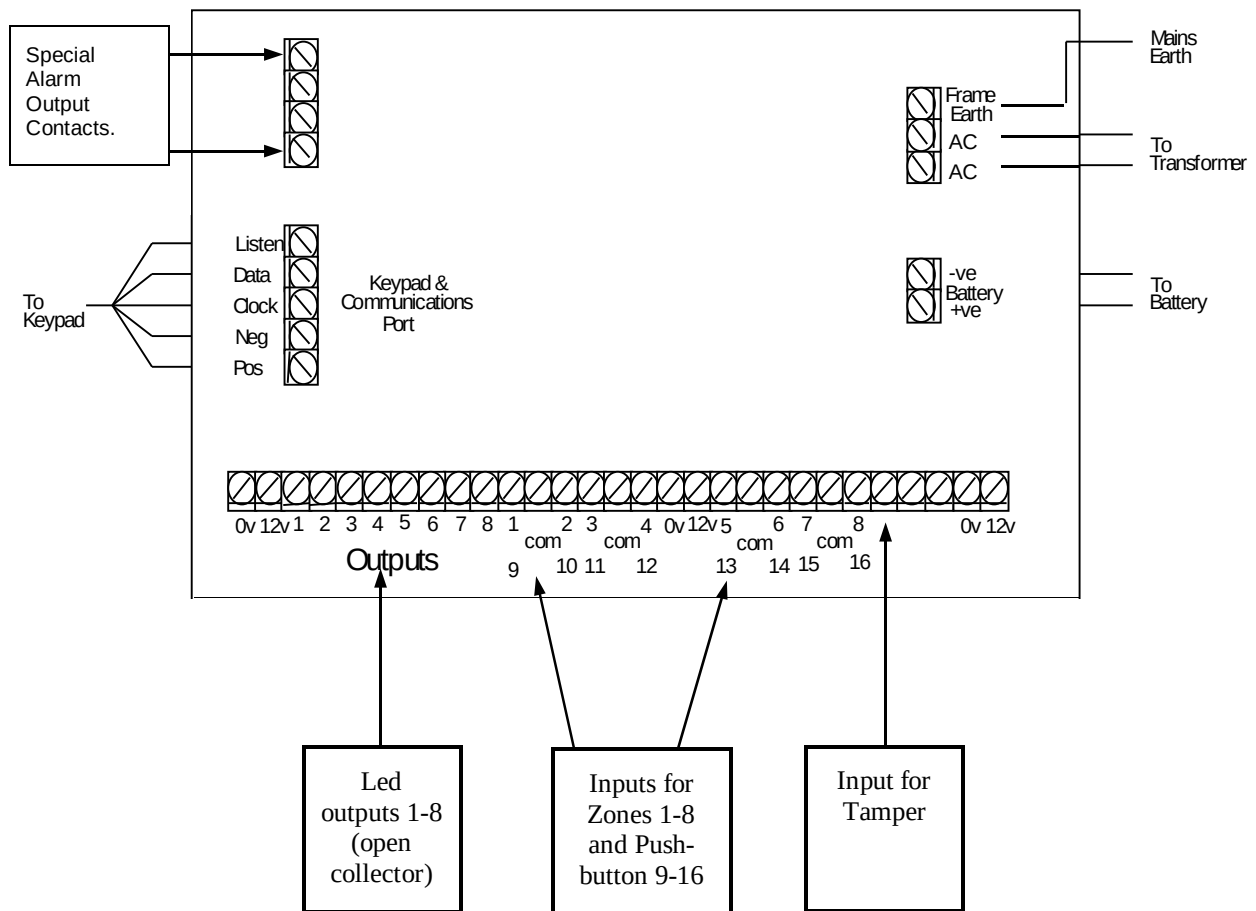
OUTPUTS 3, 4, 5, 6, 7 & 8 - These are low current, open collector (high-going-low) type outputs capable of switching no more than **100mA**. As with outputs 1 & 2 these outputs are preset as status indicators associated with pushbuttons 3-8. (e.g. pushbutton 3(input 11) is linked to output 3, etc). They are also designed to drive LED's.

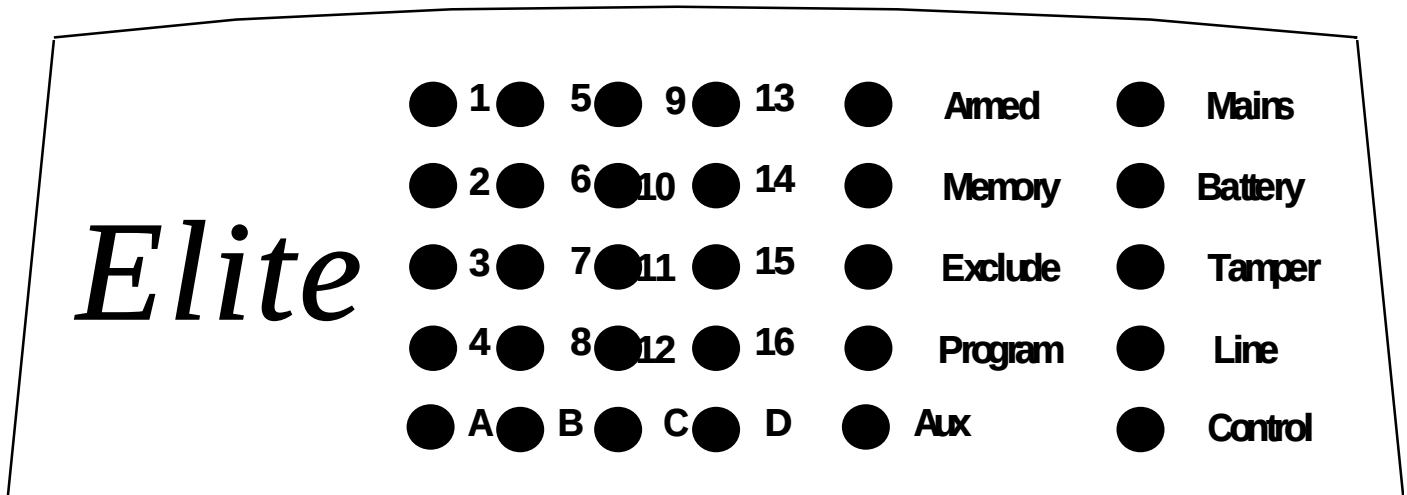
NOTE: - *Connecting devices which draw current in excess of 100mA to outputs 3,4,5,6,7 & 8 will cause permanent damage to the Elite controller.*

KEYPAD PORT - The terminals marked *POS*, *NEG*, *CLOCK*, & *DATA* make up the communications port which the keypads and other intelligent field devices use to talk to the Elite controller. The terminals are connected to corresponding terminals on the remote devices. The "listen" terminal is only used by the admin keypads and utilises a fifth wire to provide a communicator listen in facility. This feature is particularly useful when servicing monitoring faults.

This keypad 12v output is micro controlled and **MUST** only be used to power keypads, radio boards and other intelligent devices which use the keypad comms bus.

PCB WIRING DIAGRAM





Standard Elite LED Keypad Window Layout

When the Elite is displaying codes and address values in program mode it may be necessary to display the 9 and 0 digits. As there are no Zone indicators for 0 and 9 the "A" and "B" indicators are used.

ie. When displaying values in program mode
 "A" = 0 and "B" = 9

LIGHT	OFF	ON STEADY	FLASHING
BATTERY	-	Normal	Battery Low
MAINS	-	Normal	Mains Power Off
ARMED	Disarmed	Fully Armed	-
MEMORY	Normal	Memory Display	New Event to View
EXCLUDE	Normal	-	-
PROGRAM	Run Mode	Client Program Mode	Installer Program Mode
TAMPER	Normal	Tamper Violated	Tamper Alarm
LINE	Normal	-	-
AUX.	Normal	-	-
CONTROL	Normal	-	-
ZONES 1-8	Zone Secure	Zone Violated	Zone Unsealed
INPUTS 9-16	Normal	Room P/Button Locked out	Room P/Button Active

KEYPAD FUNCTIONS

The Elite LED Keypad consists of; an 18 button, backlit silicone rubber keypad, 30 LED indicators and an internal piezo buzzer housed in a modern white plastic housing. The plastic housing has a hinged front lid to cover and protect the rubber buttons when not in use. All the electronics are contained on a single circuit board inside the housing.

Because the keypads communicate with the controller using data, the cable run from panel to keypads is secure against tampering. For this reason there is no tamper switch on the keypad assembly. Access to the keypad electronics will not disarm the panel.

BUTTONS

The 18 silicone rubber buttons are used for the following functions.

In normal operating mode the numeric keys are used for entering Access Codes. In Program Mode the numeric keys are used for entering options & new values.

The **PROGRAM** Key is used to prefix option selections in the program modes eg.<**PROGRAM**> 8 <**ENTER**> selects User Code 8. The **PROGRAM** key is also used prior to a Master Code to enter user program mode from normal operating mode.

The **ENTER** Key is used to enter access or program codes. It is normally used at the end of a button sequence.

LED INDICATORS

The LED indicators are used to display system conditions including Zone status, Battery state, Tamper etc. Please refer to the LED table on page 10 for a full explanation of the conditional displays.

KEYPAD TAMPER (wrong code alarm)

A wrong code or **Keypad**

Tamper alarm is generated by the Elite after 4 consecutive invalid code entries. The controller will not "Lock-Out" the keypad at this point but simply create an alarm condition as determined by the tamper alarm options. Entry of a valid user code will reset the Keypad Tamper alarm however, the alarm event will be written into memory and the keypad memory light will be flashing indicating the presence of a new memory entry.

KEYPAD INSTALLATION

INSTALLATION

Separate the two keypad halves by **carefully** inserting a small screwdriver into the release slots on the bottom edge of the keypad front half and applying a gentle pressure. This will release the bottom edge of the housing enough for you to unclip the top.

Screw the base to the wall using the mounting holes provided. These holes will match the standard single switch plate spacing. Ensure the base is mounted right side up. It is marked with the word "TOP" to aid orientation. When fixing the base to the wall make sure the top of the screw heads will not touch or short out the underside of the PCB when the top half of the keypad is reinstalled. Bring the cables through the centre of the base.

Connect the 4 wires to the 5 way terminal block on the rear of the keypad PCB making sure to match the cables up with the terminals as marked on the control panel's keypad port.

Once the cables have been terminated and the required address allocated (see section below) clip the front half of the keypad onto the base by first engaging the clips at the top edge and then close the front down and clip it in at the bottom. Now stick the zone list provided to the inside of the hinged lid.

WIRING

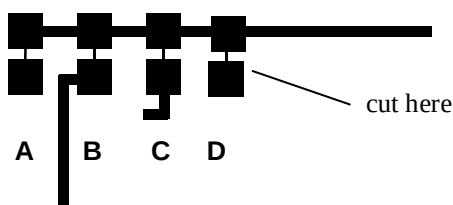
The Elite keypad connects to the Elite Controller via a 4 wire data & power connection. A maximum of 4 LED keypads can be connected, each wired in parallel.

The maximum recommended cable using standard 0.2mm security cable is 50m. Cable runs exceeding this distance may require 0.5mm cable. Always use good quality cable. Some installations may require data cable to ensure data integrity in noisy sites.

KEYPAD ADDRESS ASSIGNMENT

Keypad Address	Address Links		
	A	B	C
#			
1			
2	X		
3		X	
4	X	X	
5	N / A	N / A	N / A
6	N / A	N / A	N / A
7	N / A	N / A	N / A
8	N / A	N / A	N / A

X denotes link is cut



Each of the 4 possible LED keypads which are able to be connected to your Elite panel must be addressed individually to avoid BUS conflicts and other communication problems. As default, each keypad comes addressed as #1 with all links intact.

NOTE: DO NOT ASSIGN A KEYPAD WITH AN ADDRESS ABOVE 4 AS ADDRESSES 5-8 WILL NOT WORK ON THE SYSTEM.

Use the table to the left to determine which links to cut to assign the correct address to the keypads you are installing.

eg. To assign a keypad as address #2, you must cut link A only. To assign a keypad as address # 4, you must cut link A&B.

When cutting address links it is important to make a clean cut between the link blocks as shown below. Links can be restored by soldering across the effected pads

Link D is used to modify the function of the panic button on the keypad. With link D fitted as standard the panic button must be held for longer than 2 seconds to cause a panic. If link D is cut the panic button works instantaneously.

HOW TO PROGRAM

Panel programming can only be carried out at the keypad and always follows this pattern;

<PROGRAM> - <2 or 3 digit address> - **<ENTER>**
3 short beeps if OK - 1 long beep if error
The leds will display current value or status
Enter the new value or option
<New Value> - **<ENTER>**
3 short beeps if OK - 1 long beep if error

Throughout this manual you will see program instructions expressed as
P 23 E 5 E as an example.

In this example the <P> represents the **PROGRAM** key and <E> represents the **ENTER** key.

ACCESS TO PROGRAMMING ON POWER UP

When power is applied to the controller for the first time, with the panel tamper input open, the panel will enter Install Program Mode (Program light flashing) unless the Installer Lock-out option P30E1E has previously been enabled. From this point you can start to enter the required program information.

ACCESS TO PROGRAM MODES FROM RUN MODE

Press **<PROGRAM>** - <Master Code> - **<ENTER>**
Program light on solid
Note: Default Master Code (P1) is 123

Then Press **<PROGRAM>** - <Installer Code> - **<ENTER>**
Program light flashing
Note: Default Installer Code (P19) is 000000

TO CLEAR PROGRAM INFORMATION (From Install Mode Only)

There are three options available for clearing program information (Reset to defaults). These are detailed on page 17.

eg. To reset User Codes 1-8 (P 92 E)

Press **<PROGRAM>** - 92 - **<ENTER>**
3 beeps - Program light flashing

eg. To reset All other panel parameters (P 93 E)

Press **<PROGRAM>** - 93 - **<ENTER>**
3 beeps - Program light flashing

After the system configuration or User Codes have been reset, all values, options & Codes will be set to the values shown in the Program Option Summary as defaults. These value & option selections have been chosen as the most common set-up for the majority of systems.

TO EXIT PROGRAM MODE

To exit program mode when you have finished programming:

Press <**PROGRAM**> - <**ENTER**>
Program light goes out

The panel is now back in Run Mode, any program changes you have made will have replaced previous values and be in effect.

Note: During programming Tamper and 24 hour alarms are disabled which allows quiet access to the panel, detectors and satellite siren units etc. On exiting program mode, all inputs are scanned.

Note: Where there are multiple options at one address, options 0 & 9 have been reserved. Entering a 0 at the address will turn all options off whereas entering a 9 will turn all options on.

PROGRAMMING USER CODES

USER CODES - (P1E to P8E) & (P19E)

There are 9 codes available in the Elite, 8 user codes and 1 installer code. The user codes are located in addresses 1-8. As default, Codes 1 to 8 are pre-defined as ARM/DISARM codes with code 1 being a Master Code.

The user code stored at address **P19E is the installers code** which has been assigned permissions to access full program mode. Codes may be varied in length from 1 to 6 digits.

To program a User Code you must first be in program mode, then select the address from 1-8. (If there is already a code programmed at this address, it will be flashed back to you) Now enter the code then press the **ENTER** key.

eg. P 1 E 1234 E
3 beeps - program light flashing

In this example we have set Code 1 (Master Code) to be 1234.

eg. P 5 E 5678 E
3 beeps - program light flashing

In this example we have set code 5 to be 5678

To replace a code simply enter the new code in the same address as the old code. This will overwrite the previous code but maintain the user permissions as mapped to that user number.

To clear or delete a code simply enter the **EXCLUDE** button at the address where the old code is stored.

eg. P 3 E <**EXCLUDE**> E
3 beeps - Program light flashing

When flashing back codes and values Zone indicators 1-8 are used to indicate digits 1-8. The digit 0 is indicated by the "A" light and 9 is indicated by the "B" light.

USER CODE PERMISSIONS-(P11E-P18E)	1E	User can set alarm
	2E	User can unset alarm
	3E	User can access installer program mode(Master code)

These options allow each user code to have restricted permissions if required.

PROGRAMMING OUTPUT OPTIONS

INVERT OUTPUTS P20E

P20E 1-8E

This address allows the normal state of outputs 1-8 to be inverted.

OPTIONAL SPECIAL FUNCTION ALARM OUTPUT OPTIONS- P21E

This address(P21E) is used to map various alarm conditions to a special alarm output relay using the dialler relay on board(This relay is spare as the dialler is not used on this panel).The output can be used to provide an internal alarm working in conjunction with the buzzer on the keypad.Note:the relay provides N/C contacts as standard. Please refer to the drawing on Page 9 for the connection details.For N/O contacts invert output P30E Opt 5.

P21E	1E	Door alarm at output#1	(Default=1)
	2E	Door tamper at output#1	
	3E	Keypad tamper at output#1	
	4E	Panel tamper at output#1	
	5E	Day zone to output#1	
	6E	Keypad panic to output#1	
	7E	Mains fail to output#1	
	8E	Battery low to output#1	

- Option 1 **Door Alarm**-When the system is armed and an alarm occurs at a door input (inputs 1-8)this output will turn on until reset by code or the output reset timer expires.
- Option 2 **Door Tamper**-The door inputs 1-8 must have a 2K2 resistor in series with a flush mounted reed switch.A short circuit on the zone input will cause a door tamper alarm.
- Option 3 **Keypad Tamper** - If more than 4 incorrect codes are entered at the keypad sequentially then a keypad tamper alarm will be generated.
- Option 4 **Panel Tamper** - An alarm on the panel tamper will cause an alarm at output 1.
- Option 5 **Day Zone** - If an input(1-8) is set as a day zone it will cause this output to operate for a 2 second period when the input unseals.
- Option 6 **Panic** - If a keypad panic alarm is generated then output 1 will turn on.
- Option 7 **Mains** - A mains power failure can be mapped to output 1
- Option 8 **Battery** - A battery low signal can be mapped to output 1

INPUT RESPONSE TIME P29E Value 1-31(Default=6)

This option allows the zone response time to be set.Values are in approx.80ms increments.This option can be used to increase the zone response time to prevent secondary tripping of inputs following door closure.

BASIC PANEL OPTIONS P30E (Default=all off)

- | | | |
|-------------|-----------|---|
| P30E | 1E | Installer Lockout |
| | 2E | Panel Tamper is 2K2 EOL or short circuit |
| | 3E | Arm button before code |
| | 4E | Code Required to arm |
| | 5E | Invert Special alarm output on expansion socket |
- Option 1 If this option is set(led ON) access to program can only be achieved by knowing the Master & installer codes
 - Option 2 Normally the panel tamper needs a 2K2 resistor to be sealed but if this option is off the panel needs only a short circuit across the tamper terminals.
 - Option 3 If this option is on then the single button ARM function is disabled and the alarm must be Armed by entering <ARM><USER CODE><ENTER>.
 - Option 4 If this option is on then the single button ARM function is disabled and the alarm must be Armed by entering <USER CODE><ENTER>.

KEYPAD OPTIONS P31E-P34E(Default=2)

P31E **1E** Leds off when armed at keypad 1
 2E Panic button enabled at keypad 1

Option 1 This option allows the leds on the keypad to be turned off when armed. The first button pressed or an alarm condition will automatically turn the leds on again.

Option 2 This option turns the panic button at the keypad on if required.

P32E-P34E Same as P31 but for keypads 2,3 & 4

BEEPS TO KEYPAD P36E-P39E(Default=1,2,3,4)

P36E **1E** Door alarms beep keypad buzzer
 2E Door tamper alarms beep keypad buzzer
 3E Keypad tamper alarms beep keypad buzzer
 4E Panel tamper alarms beep keypad buzzer
 5E Day zone alarms beep keypad buzzer
 6E Keypad panic alarms beep keypad buzzer
 7E Mains failure beeps keypad buzzer
 8E Battery low beeps keypad buzzer

P37E-39E Same as P36 but for keypads 2,3 & 4

ZONE INPUT MODE FOR ZONES 1-8. P40E(Default=LEDS 1-8 ALL OFF,I/P's 1-8 are N/C)

ZONE INPUT MODE FOR ZONES 9-16. P41E(Default=LEDS 1-8 ALL ON,I/P's 9-16 are N/O)

DAY ZONES P42E(Default-none) Value 1-8

This option allows zones 1-8 to operate as day zones. If the LED is on the input is a day zone and will beep the keypad buzzer for 2 seconds every time a day zone is unsealed during the unset state. It will also operate output 1 for 2 seconds if the day zone option is selected(P21E).

ROOM PUSHBUTTON DELAY P51E-P58E Value 0-9999 Seconds(Default=10Sec)

P51E INPUT1-(0-9999Sec). When the alarm is Armed all rooms are then monitored via their respective input(1-8). If an occupant of any room wishes to leave for any reason they may do so but first must press the pushbutton on the wall panel in their room. The timer at this address sets the time following pressing of the pushbutton that the door must be opened. If the door has not been opened before this timer expires then the door cannot be opened without causing an alarm. Equally, when returning to the room and the door is opened then closed again upon entering the room this time starts again forcing the pushbutton to be pressed within the time period to prevent an alarm. NOTE: The door cannot be opened a 3rd time without causing an alarm.

P52E-P58E Same as P51E but these timers relate to inputs 2,3,4,5,6,7 & 8

ROOM AWAY TIME P61E-P68E Value 0-9999 Seconds(Default 300Sec)

P61E INPUT1-(0-9999Sec) When the alarm is Armed and the pushbutton is pressed in Room 1 this is the maximum time the person can be absent from the room before resetting at the pushbutton. If not reset before this time expires then an alarm will be generated.

P62-68E Same as P61E but these timers relate to inputs 2,3,4,5,6,7 & 8

DOOR OPEN TOO LONG P71E-P78E Value 0-9999 Seconds(Default 10Sec)

P71E INPUT1-(0-9999Sec) When the alarm is Armed this timer can restrict the maximum time that the door in Room 1 may be left open before an alarm is generated. The door open too long timer can override the Room Away Timer. Provided the door has an automatic closer fitted this timer should be left as short as possible.

P72E-P78E Same as P71E but these timers relate to Inputs 2,3,4,5,6,7 & 8

ROOM RECOVERY TIME P81E-P88E Value 0-9999 Seconds (Default=60Sec)

P81E INPUT1-(0-9999Sec) Following someone leaving room 1 and returning within the allowed time then pressing the pushbutton to reset all alarm timers, the room recovery timer then starts to prevent pressing of the same room button again. The default time is 1 minute but this can be adjusted as required.

P82E-P88E Same as P81E but these timers relate to inputs 2,3,4,5,6,7 & 8

SPECIAL ALARM RESET TIME P89E Value 0-9999 Seconds(Default=600Sec)

P89E SPECIAL ALARM RESET TIME This timer sets the duration of the alarm reset time on output 1 following any door or tamper alarm. If a value of 0 is programmed then the output will latch on until reset by a valid user code at the keypad. (Default=0)

DISPLAY SOFTWARE VERSION P90E

P90E This address will flash out the current panel version number at the keypad

DISPLAY KEYPAD NUMBER P91E

P91E This address will flash out the keypad number(1-4) which is in program mode to verify all links on the back of the keypad have been cut successfully. Only required if more than 1 keypad is used.

RESTORE CODES TO DEFAULT P92E

P92E This address will erase all programmed user codes (1-8) and return code 1 to the default 987.

RESTORE ALL OTHER DEFAULTS P93E

P93E This address will return all other panel defaults.

CLEAR EVENT BUFFER P94E

P94E This address clears all events in the memory buffer. The buffer can store the last 40 events in memory.

PROGRAM SUMMARY

CLIENT PROGRAMMING

PROGRAM USERS CODES

P1E	CODE 1	DEFAULT=123
P2E	CODE 2	
P3E	CODE 3	
P4E	CODE 4	
P5E	CODE 5	
P6E	CODE 6	
P7E	CODE 7	
P8E	CODE 8	

INSTALLER PROGRAMMING

USER CODE PERMISSIONS

P11E	CODE 1 PERMISSIONS	1E	CODE CAN SET ALARM	DEFAULT=1,2,3
P12E	CODE 2 PERMISSIONS	2E	CODE CAN UNSET ALARM	DEFAULT=1,2
P13E	CODE 3 PERMISSIONS	3E	CAN ENTER FULL PROGAM MODE	DEFAULT=1,2
P14E	CODE 4 PERMISSIONS			DEFAULT=1,2
P15E	CODE 5 PERMISSIONS			DEFAULT=1,2
P16E	CODE 6 PERMISSIONS			DEFAULT=1,2
P17E	CODE 7 PERMISSIONS			DEFAULT=1,2
P18E	CODE 8 PERMISSIONS			DEFAULT=1,2
P19E	INSTALLER CODE			DEFAULT=000000
P20E	INVERT OUTPUTS 1-8			DEFAULT=NONE
P21E	SPECIAL ALARM OUTPUT OPT.	1E	DOOR ALARM	DEFAULT=1
		2E	DOOR TAMPERS	
		3E	KEYPAD TAMPERS	
		4E	PANEL TAMPERS	
		5E	DAY ZONE	
		6E	KEYPAD PANIC	
		7E	MAINS FAILURE	
		8E	BATTERY LOW	
P29E	INPUT RESPONSE TIME(VALUE 1-31)			DEFAULT=6
P30E	PANEL OPTIONS	1E	INSTALLER LOCKOUT	DEFAULT=2
		2E	PANEL TAMPERS EOL OR SHORT	
		3E	ARM BUTTON BEFORE CODE	
		4E	CODE REQUIRED TO ARM	
		5E	INVERT SPECIAL ALARM OUTPUT	
P31E	KEYPAD 1 OPTIONS	1E	LEDS TURN OFF WHEN ARMED	DEFAULT=2
		2E	PANIC BUTTON ENABLED	
P32E	KEYPAD 2 OPTIONS			DEFAULT=2
P33E	KEYPAD 3 OPTIONS			DEFAULT=2
P34E	KEYPAD 4 OPTIONS			DEFAULT=2
P36E	BEEPS TO KEYPAD 1	1E	DOOR ALARMS BEEP KP	DEFAULT=1,2,3,4
		2E	DOOR TAMPERS BEEP KP	
		3E	KEYPAD TAMPERS BEEP KP	
		4E	PANEL TAMPERS BEEP KP	
		5E	DAY ZONES BEEP KP	
		6E	KEYPAD PANIC BEEP KP	
		7E	MAINS FAILURE BEEP KP	
		8E	BATTERY LOW BEEP KP	
P37E	BEEPS TO KEYPAD 2			DEFAULT=1,2,3,4
P38E	BEEPS TO KEYPAD 3			DEFAULT=1,2,3,4
P39E	BEEPS TO KEYPAD 4			DEFAULT=1,2,3,4

PROGRAMMING DELAYS & TIMERS

P40E	INPUT CONFIG.N/C OR N/O FOR ZONES 1-8	DEFAULT=1-8 N/C(LEDs 1-8 OFF)
P41E	INPUT CONFIG.N/C OR N/O FOR ZONES 9-16	DEFAULT=9-16 N/O(LEDs 1-8 ON)
P42E	INPUTS 1-8 ARE ALSO DAY ZONES	DEFAULT=NONE
P51E	ROOM 1 PUSHBUTTON DELAY	DEFAULT=10Sec
P52E	ROOM 2 PUSHBUTTON DELAY	DEFAULT=10Sec
P53E	ROOM 3 PUSHBUTTON DELAY	DEFAULT=10Sec
P54E	ROOM 4 PUSHBUTTON DELAY	DEFAULT=10Sec
P55E	ROOM 5 PUSHBUTTON DELAY	DEFAULT=10Sec
P56E	ROOM 6 PUSHBUTTON DELAY	DEFAULT=10Sec
P57E	ROOM 7 PUSHBUTTON DELAY	DEFAULT=10Sec
P58E	ROOM 8 PUSHBUTTON DELAY	DEFAULT=10Sec
P61E	ROOM 1 AWAY TIME	DEFAULT=300Sec
P62E	ROOM 2 AWAY TIME	DEFAULT=300Sec
P63E	ROOM 3 AWAY TIME	DEFAULT=300Sec
P64E	ROOM 4 AWAY TIME	DEFAULT=300Sec
P65E	ROOM 5 AWAY TIME	DEFAULT=300Sec
P66E	ROOM 6 AWAY TIME	DEFAULT=300Sec
P67E	ROOM 7 AWAY TIME	DEFAULT=300Sec
P68E	ROOM 8 AWAY TIME	DEFAULT=300Sec
P71E	DOOR 1 OPEN TOO LONG TIME	DEFAULT=10Sec
P72E	DOOR 2 OPEN TOO LONG TIME	DEFAULT=10Sec
P73E	DOOR 3 OPEN TOO LONG TIME	DEFAULT=10Sec
P74E	DOOR 4 OPEN TOO LONG TIME	DEFAULT=10Sec
P75E	DOOR 5 OPEN TOO LONG TIME	DEFAULT=10Sec
P76E	DOOR 6 OPEN TOO LONG TIME	DEFAULT=10Sec
P77E	DOOR 7 OPEN TOO LONG TIME	DEFAULT=10Sec
P78E	DOOR 8 OPEN TOO LONG TIME	DEFAULT=10Sec
P81E	ROOM 1 RECOVERY TIME	DEFAULT=60Sec
P82E	ROOM 2 RECOVERY TIME	DEFAULT=60Sec
P83E	ROOM 3 RECOVERY TIME	DEFAULT=60Sec
P84E	ROOM 4 RECOVERY TIME	DEFAULT=60Sec
P85E	ROOM 5 RECOVERY TIME	DEFAULT=60Sec
P86E	ROOM 6 RECOVERY TIME	DEFAULT=60Sec
P87E	ROOM 7 RECOVERY TIME	DEFAULT=60Sec
P88E	ROOM 8 RECOVERY TIME	DEFAULT=60Sec
P89E	SPECIAL ALARM OUTPUT RESET TIME	DEFAULT=600Sec
P90E	PANEL SOFTWARE VERSION	
P91E	DISPLAY KEYPAD NUMBER	
P92E	RESTORE USER CODE DEFAULTS	
P93E	RESTORE ALL OTHER SYSTEM DEFAULTS	
P94E	CLEAR MEMORY EVENTS	

120 sec	2 min
180 sec	3 min
240 sec	4 min
300 sec	5 min
360 sec	6 min
420 sec	7 min
480 sec	8min
540 sec	9 min
600 sec	10