EN50131-1:2006+A1:2009
EN50131-3:2009
EN50131-6:2008
EN50131-5-3:2005+A1:2008
PD6662:2010

Security Grade 2
Environmental Class II

Software Version >9.13

Programming and Installation Manual

Wireless Alarm System

RINS1549-4

PIEZO WARNING

The Enforcer system contains a 100dBA siren, please be aware of this after an activation

www.pyronix.com

CONTENTS PAGE

Default Codes:

User Code: 1234
Master Manager Code: 2222

Factory Default Codes:

Clean start with the code '2000' (UNGRADED) - See page: 33
This is the default clean start

Clean start with the code '2020' (PD6662 EN Defaults) - See page: 33

Other Codes:

Keypad Security Code: '2000'
Delete All Wireless Data: '2000'

1. Introduction

The Enforcer 32-WE is a wireless alarm system that has been designed to enable easy installation and minimal maintenance. The Enforcer 32-WE protects the property (domestic or commercial) with a multitude of unique features:

- Two Way Wireless Protection
- Signal Strength Indicator (SSI)
- Instant Two Way Device Control
- Pyronix High Security Wireless Protocol Encryption
- Programmable Wireless Supervision Time
- Intelligent Wireless Jamming Detection

1.1 System Overview

Areas:	4 (1 single partition – 4 Levels Sets)
Wireless Inputs (max):	32
Wired Inputs (max):	34 (2 x inputs on I/O board (Inputs 33-34) and 4 x ZEMs (Inputs 35-66)
Total Inputs:	66
Outputs (max):	38 (1 x output module and 3 x outputs on I/O board, 4 on each ZEM if EURO-ZEM8+ or EURO-ZEM8+PSU are used, 1 on each RKP)
User / Manager Codes:	80 (Max 32 x wireless keyfobs)
Duress / Guard Codes:	10
Communications:	PSTN (Digi-1200) or GSM (Digi-GSM) modem
Arm Devices (max):	4 (Including main keypad).
Logs:	750
Remote Arm and Soak Test:	✓
Event Signalling to UDL:	✓
Memory Type:	EEPROM
Compliant to EN Grade*:	2
Environmental Class:	II

1.2 Number of Additional Devices

Input Expanders (Wired):	4
Wireless Keyfobs:	32
Code Combinations:	4294967295 (fully encrypted rolling code)
Wireless Keyfob Variants	1
Wireless Bells:	2
Output Expanders:	1
Additional Keypads:	3
External Readers:	
Internal Readers:	

NOTE : All wireless learning is performed in the 'WIRELESS DEVICE CONTROL' menu, see page: 10 for more details.

*Compliance labelling should be removed or adjusted if non-compliant configurations are used.

*Please note that technical functions for example fire, gas and flooding are not security graded as they are outside the scope of EN50131-1 and EN50131-3.

2. The Engineer Menu

The Engineer Menu must be accessed in order to program all system configurations.

NOTE 1: All tamper alarms (including case tamper), will be disabled once in the Engineer menu.

NOTE 2: All personal attack and fire alarms will cause an alarm in the Engineer Menu.

2.1 Entering The Engineer Menu

Access to the Engineer menu will be allowed if the Enforcer 32-WE is unset. If set, the Enforcer 32-WE must be unset first via a valid user code/tag/keyfob in order to gain access. If the 'Allow Engineer Menu' function in the Master Manager Menu is set as 'No', the message 'Authorisation Required' will be shown and access will be denied until this option is set as 'Yes'.

1. Enter the Engineer code (default 1111).
2. Press [NO] if any faults appear.
3. 'SET/UNSET SYSTEM' is displayed (see page:8).
4. Press [NO].
5. 'FORCE ARM ON 1st INPUT' is displayed (see page:8).
6. Press [NO].
7. 'SOFTWARE REVISION' is displayed.
8. Engineers Menu has been accessed.

Refer to page: 9 for all functions.

When the Engineer Menu is accessed, a high pitch tone is generated intermittently.

NOTE 1: It is recommended that a factory default (Clean Start) is performed after initial power up to ensure that the correct defaults have been chosen (see page: 33).

NOTE 2: Refer to Appendix F, page: 55 for all fault code display descriptions.

2.2 Exiting The Engineer Menu

1. On a Main Menu Item (a menu that is in capital letters), press [A] or scroll to 'EXIT ENGINEERS MENU' and press [YES].

2.3 Useful Engineer Menu's

- **WIRELESS DEVICE CONTROL** (Page: 10): Learns and deletes all wireless inputs and bells. To learn keyfobs enter the Master Manager menu and scroll to CHANGE CODES. (Refer to the user manual)
- **CHANGE INPUTS** (Page: 13): Programs all input types, attributes, areas and names and on the Enforcer 32-WE.
- **ASSIGN KEYPADS/READERS** (Page: 14): Assigns keypads and readers, and enables readers for entry control. **NOTE:** Keypads and Readers must be addressed at the device and at the keypad.
- **CHANGE CODES** (Page: 18): Changes the Engineer code and Master manager code. To change user codes enter the Master Manager menu and scroll to CHANGE CODES. (Refer to the user manual).
- **CHANGE OUTPUTS** (Page: 20): Programs any outputs and assigns output modules to the Enforcer 32-WE.
- **DIAGNOSTICS** (Page: 26): Displays power, input status, wireless signal strength and wireless battery levels.
- **PROGRAM ARC/SMS** (Page: 30): Enables the modem (if connected) and allows signalling of communication formats and SMS.

3. General Information

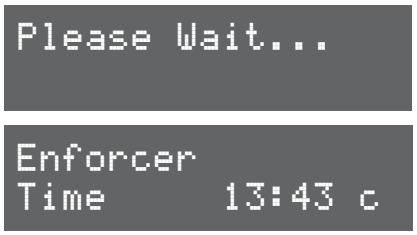
3.1 Default Codes

User: 1234.	Master Manager: 2222	Engineers: 1111

3.2 Initial Power Up

Power up the Enforcer 32-WE system, an alarm will be generated. Proceed to the nearest keypad, which will display (from power up):

1. Once power has been applied to the Enforcer 32-WE (see page: 37). 'Please Wait' and then '485 Comms Lost' will be displayed. After approximately one minute, the Enforcer 32-WE will display the name and the time on the display.
2. The Enforcer 32-WE is defaulted to keypad address '0'.



NOTE: The wording 'Enforcer 32-WE' can be changed in the function 'SYSTEM DISPLAYS' –see page:16.

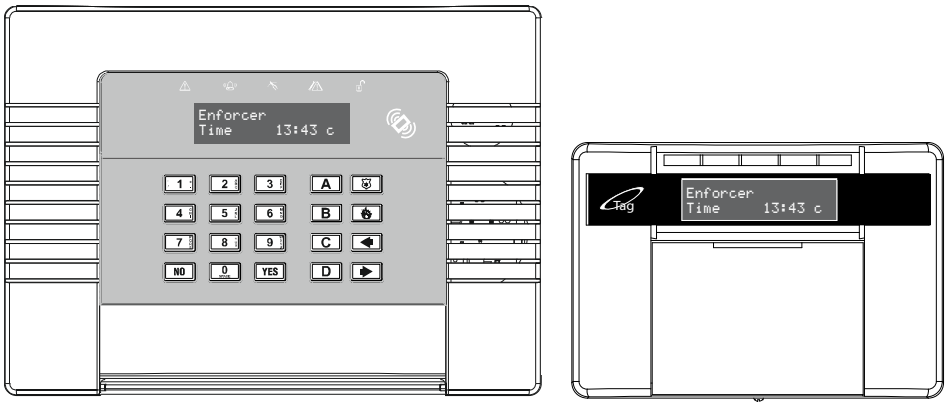
3.3 Testing The Keypad

With the system unset, press the [B] key for 10 seconds at any keypad. This will cause all the LEDs on that keypad to illuminate, and the LCD screen to scroll a display testing each pixel. The keypad will revert to normal display approximately 10 seconds after the key is released.

3.4 Keypads / Readers

3.4.1 The Enforcer Keypad and additional keypads (EUR-068)

3 additional wired keypads may also be connected to the Enforcer 32-WE. Refer to page: 39 for installation details.



KEY FUNCTIONS:

[A] = Exit manager menu / Selects Area A.

[B] = Moves backwards to the previous menu item / Selects Area B.

[C] = Enables chime and displays additional information in the log / Scrolls back 'one' in a sub menu / Selects Area C.

[D] = Moves forward in the log / scrolls between options and enters the master manager menu /Selects Area D.

[ ][ ] = Not used.

[◄][►] = Directional buttons.

[YES] = Selects items and enters menus.

[NO] = Cancels items, resets the panel and moves to next item in a menu item.

NOTE: If any additional keypads are installed on the Enforcer 32-WE, it is possible to access the Engineer Menu on any keypad. For example, if the Engineer menu is accessed on keypad address 0, the other keypads will display 'system busy', to access the Engineer menu on any other keypad, press the [B] key on the relevant keypad and the Engineer menu will be displayed.

3.4.2 The Internal Tag Reader (EUR-107)

The Internal tag reader can be used for setting/unsetting, entry control or access control. Refer to page: 40 for installation details.

Tag Area (Where a valid tag must be presented to set/unset)

Alert LED

Alarm LED

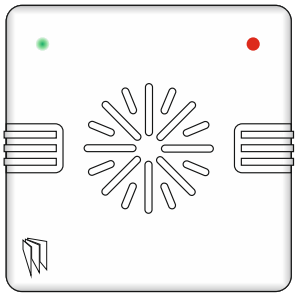
Tamper LED

Fault LED

Unset LED

3.4.3 The External Tag Reader (EUR-108)

The Internal tag reader can be used for setting/unsetting, entry control or access control. Refer to page: 40 for installation details.

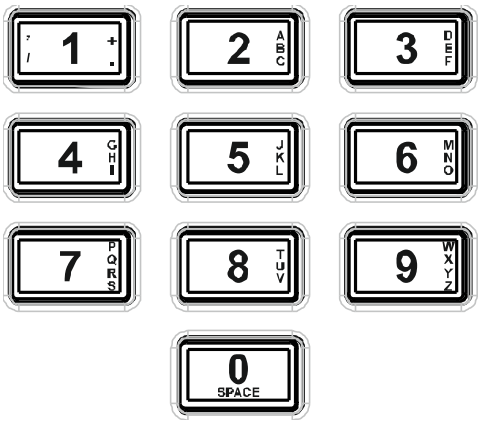


To set/unset the system using the External Tag Reader, present a pre-programmed tag to the centre of the prox.

The prox will display the system status: Green = Unset. Red = Set. Present the tag again within 10 seconds and the system will set or unset.

The system will then set depending on the type of exit mode programmed (Final door, Timed or Push to set)

3.5 Text Programming



Text may be programmed for input names, for the 'sign-on' message, and to identify the Set Level being set / unset. Each key is allocated alpha-numeric and punctuation marks characters as shown below:

The Enforcer 32-WE incorporates predictive text, so the system will predict the word that is being spelt. For example, if 'B' is pressed, and then [D] and 'e' is pressed, Bedroom will be displayed, to accept this press [YES]. If the word that is required doesn't appear on the LCD display, type the word as normal.

To type a word, press the relevant key the appropriate number of times – e.g. for the letter 'k' press [5] twice, or for the letter 's' press [7] four times.

For punctuation marks, press the [1] key.

In addition, the [A] [B] [C] [D] keys are used as follows:

[A] = make the character into a capital

[B] = move cursor left

[C] = clears cursor / adds a space

[D] = moves cursor right

3.6 Set / Unset System

Setting and unsetting the system can be done using the Engineer code.

1. Enter the Engineer code (default 1111).
2. Press [NO] if any faults appear.
3. 'SET/UNSET SYSTEM' is displayed.
4. Press [YES].
5. Select the areas to set. Press [YES].
6. The setting period will begin.
7. Once the timer expires, and a beep is heard, the Enforcer 32-WE is set.
8. To unset, enter the engineer code again.

3.7 Forced Arm On Inputs

The 'Force Arm On Inputs' function enables two nominated inputs on the Enforcer 32-WE to be set. Either input can be triggered to allow real life signalling or alarm testing. This function is useful when a building is full of people and these tests are needed.

NOTE 1: The system will give the correct signalling response to the Setting, and any resulting alarm.

NOTE 2: If the system has been set by any other code, the Engineer code will not unset it.

1. Enter the Engineer code (default 1111).
2. Press [NO] if any faults appear.
3. 'SET/UNSET SYSTEM' is displayed.
4. Press [NO].
5. 'FORCE ARM ON 1st INPUT' is displayed.
6. Enter the 1st input that is to be active. Press [YES].
7. Enter the 2nd input that is to be active. Press [YES].
8. Select the areas to set. Press [YES].
9. The setting period will begin
10. Once the timer expires, and a beep is heard, the Enforcer 32-WE is set and the 2 inputs chosen will be active.
11. To unset, enter the engineer code again.

4. The Engineer Menu

Any programming is only saved when exiting the Engineer menu. It is recommended that a Clean start is performed after initial power up. See page: 33.

4.1 Software Revision

This option identifies the software version number, software serial number and product.

Software Revision Programming

1. Press [B] or [NO] to scroll to 'SOFTWARE REVISION'. Press [YES].
2. The software revision will be displayed (e.g. V9.13) Press [YES] or [NO] to return to the Engineer menu.

NOTE: The HUB software version is labelled on the PCB.

4.2 Choose Mode

If an Enforcer 32-WE I/O board or any Zone Expander Module (Input Expanders: ZEMs) are used, the resistance, EOL mode and response time of the inputs can be programmed.

NOTE: Alarm 4K7, Tamper 2K2 must be selected if wiring double pole to an expander.

4.2.1 EOL Range (End of Line Range)

EOL Range programs the panel to operate with different resistor values

[0] Alarm: 1K, Tamper: 1K. **[1]** Alarm: 4K7, Tamper: 2K2.

[2] Alarm: 4K7, Tamper: 4K7. **[2]** Wide range.

4.2.2 EOL mode (Double End of Line (DEOL) or Single End of Line (SEOL))

EOL Mode programs all input expanders to operate as:

[0] Single End of Line (SEOL). **[1]** Double End of Line (DEOL).

4.2.3 Input Response Time

Input Response time programs the time that an input trigger must be present before the Enforcer 32-WE system generates an alarm.

[01]-[30] = 100ms to 3000ms

NOTE: Settings below (<) 400ms do not comply with PD6662/EN50131.

Choose Mode Programming

1. Press [B] or [NO] to scroll to 'CHOOSE MODE'. Press [YES].
2. Press [◄] or [►] to select the 'EOL Range' for all wired inputs*. Press [YES].
3. Press [◄] or [►] to select the 'EOL Mode' for all wired inputs*. Press [YES].

[4] Press [◄] or [►] to select the 'Input Response Mode' for all wired inputs*. Press [YES] to return to the Engineer Menu.

**On the I/O board and the expanders*

4.3 Install ZEMs

The Enforcer 32-WE supports up to 66 inputs. This is mapped by 32 wireless inputs and 34 wired inputs.

4.3.1 ZEM Address

[0] ZEM Address 0 (Inputs 35-42) **[1]** ZEM Address 1 (Inputs 43-50)
[2] ZEM Address 2 (Inputs 51-58) **[3]** ZEM Address 3 (Inputs 59-66)
NOTE: Inputs 33 and 34 are taken from the I/O board, this does not need to be addressed.

4.3.2 ZEM Installed

[0] No **[1]** ZEM8 / EURO37R (see page: 39)

4.3.3 Enter Location

The text entered here will be displayed on the LCD display if a fault occurs on the ZEM, so the ZEM can be easily located or referenced. For example, the location text maybe "ZEM Kitchen", "ZEM Loft" etc.

Install ZEMS Programming

1. Press [B] or [NO] to scroll to 'INSTALL ZEMS'. Press [YES].
2. Press [◄] or [►] to select the 'ZEM Address' . Press [YES].
3. Press [◄] or [►] to select the 'ZEM8 or EURO37R' or No' to 'ZEM Installed'. Press [YES].
4. Enter the location of the ZEM. This is so it is referenced and will appear on the display if a fault occurs. Press [YES] to return to ZEM addressing.
5. Press [NO] to return to the Engineers menu.

4.4 Wireless Device Control

The Enforcer 32-WE supports a maximum of 32 wireless inputs, 32 wireless keyfobs and 2 wireless Deltabell external sounders.

4.4.1 Control Inputs

'Control Inputs' learns and deletes wireless inputs.

4.4.2 Control Bells

'Control Bells' learns and deletes wireless Deltabell external sounders.

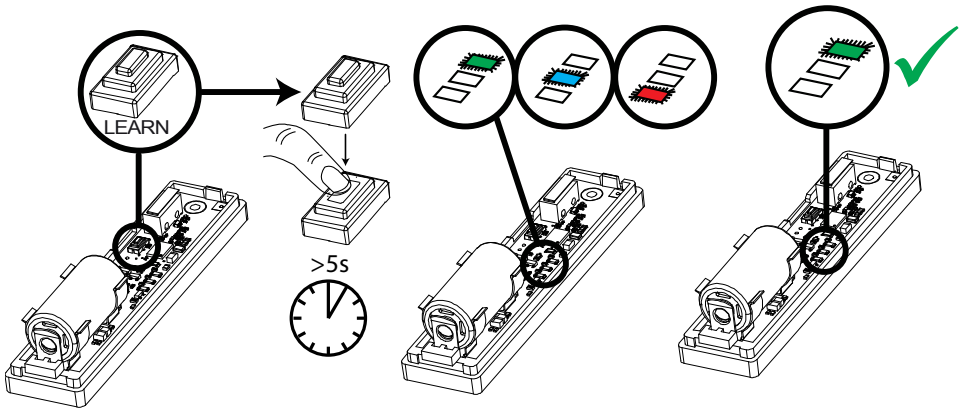
4.4.3 Programming Keyfob Buttons

'Program Keyfob Buttons' assigns actions to each buttons on the keyfob.
NOTE: Keyfobs are learnt in the Master Manager Menu in the function 'CHANGE CODES'. Refer to the user manual (RINS1548).

[0] No action: Disables the button **[1]** Show Status: GREEN = Unset. RED = Set.
[2] Set Area: Sets the chosen area **[3]** Unset Any Area: Unsets any area on the system
[4] Latch Output: Latches an output (programmable) when the nominated button is pressed.
[5] Timed Output: Activates an output for a period of time (programmable in seconds)
[6] Personal attack: Activates a personal attack activation (programmed in Engineers only)

Wireless Device Control Programming: Learning Inputs

1. Press [B] or [NO] to scroll to 'WIRELESS DEVICE CONTROL'. Press [YES].
2. 'Control Inputs' will be displayed. Press [YES].
3. 'Learn Devices' will be displayed. Press [YES].
4. Press [◄] or [►] to select the input (1-32) to learn and press [YES].
5. Open the Enforcer 32-WE wireless device and press and hold the 'LEARN' button until all LEDs flash



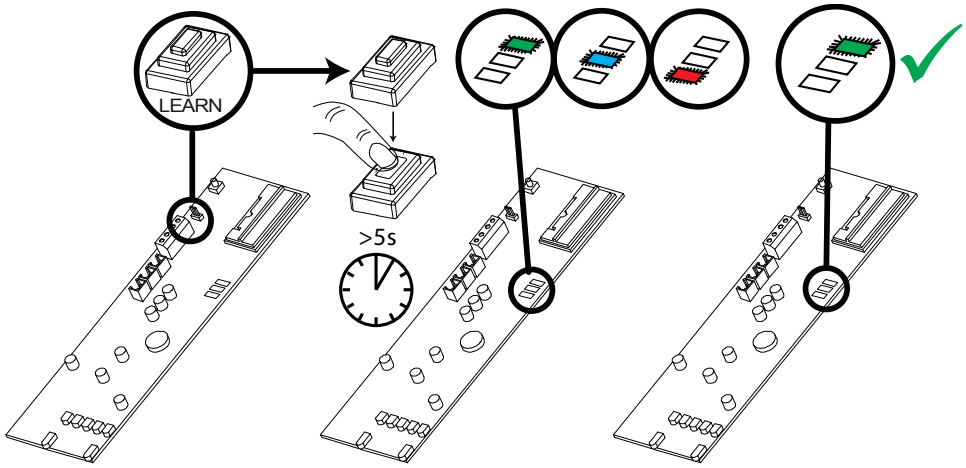
NOTE: The learn process is the same on all wireless contacts, detectors, and sensors. Once the GREEN LED is flashing, the learn process has been successful. Repeat the process above if the learn procedure has not been successful.

Wireless Device Control Programming: Deleting Inputs

1. Press [B] or [NO] to scroll to 'WIRELESS DEVICE CONTROL'. Press [YES].
2. 'Control Inputs' will be displayed. Press [YES].
3. 'Learn Devices' will be displayed. Press [NO].
4. 'Delete Devices' will be displayed. Press [YES].
5. 'Delete All' will be displayed, press [YES] and enter '2000' to delete all wireless peripherals, or press [NO] to delete individual inputs.
6. The inputs that are learnt will be displayed, press [◄] or [►] to select the inputs and press [YES] to delete it.
7. 'Input Deleted' will be displayed.
8. NOTE: Once a wireless input is deleted, the input type must be set to 'unused' in the function 'CHANGE INPUTS' (see page: 13).

Wireless Device Control Programming: Learning Bells

1. Press [B] or [NO] to scroll to 'WIRELESS DEVICE CONTROL'. Press [YES].
2. 'Control Inputs' will be displayed. Press [NO].
3. 'Control Bells' will be displayed. Press [YES].
4. 'Learn Devices' will be displayed. Press [YES].
5. Press [◄] or [►] to select the bell (1 or 2) to learn and press [YES].
6. Open the Enforcer 32-WE wireless Deltabell and press and hold the 'LEARN' button until all LEDs flash



NOTE: Once the GREEN LED is flashing, the learn process has been successful. Repeat the process above if the learn procedure has not been successful.

WIRELESS DEVICE CONTROL?

Control Inputs?

Control Bells?

Learn Devices?

Select Bell Available [1]

Learning...

Bell Learnt!

Wireless Device Control Programming: Deleting Bells

1. Press [B] or [NO] to scroll to 'WIRELESS DEVICE CONTROL'. Press [YES].
2. 'Control Inputs' will be displayed. Press [NO].
3. 'Control Bells' will be displayed. Press [YES].
4. 'Learn Devices' will be displayed. Press [NO].
5. 'Delete Devices' will be displayed. Press [YES].
6. 'Delete All' will be displayed, press [YES] and enter '2000' to delete both wireless Deltabell external sounders, or press [NO] to delete individual external sounders.
7. The external sounders that are learnt will be displayed, press [◄] or [►] to select the bell and press [YES] to delete it.
8. 'Bell Deleted' will be displayed.

WIRELESS DEVICE CONTROL?

Control Inputs?

Control Bells?

Learn Devices?

Delete Devices?

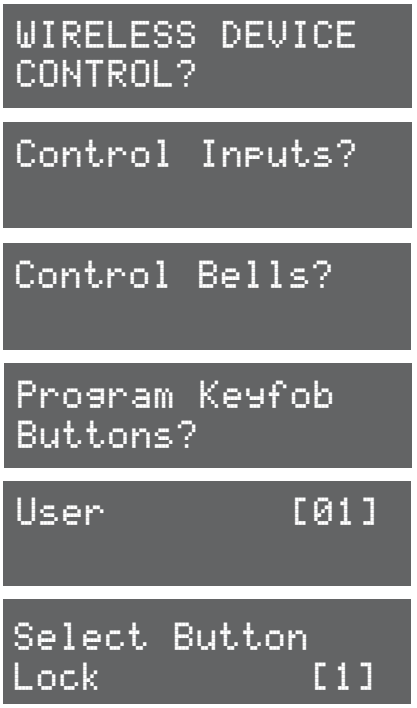
Delete All?

Select Bell Learnt [1]

Wireless Device Control Programming: Program Keyfob Buttons

1. Press [B] or [NO] to scroll to 'WIRELESS DEVICE CONTROL'. Press [YES].
2. 'Control Inputs' will be displayed. Press [NO].
3. 'Control Bells' will be displayed. Press [NO].
4. 'Program Keyfob Buttons' will be displayed. Press [YES].
5. Press [◄] or [►] to select the user (1-80) to learn and press [YES].
6. Press [◄] or [►] to select the button to be programmed and press [YES].
7. Press [◄] or [►] to select the action of the button and press [YES].
8. Select the area that the keyfob should be programmed in, press [YES].

NOTE: Keyfobs are learnt in the Master Manager Menu under 'CHANGE CODES'. Refer to the user manual.



4.5 Change Inputs

A total of 66 inputs can be programmed on the Enforcer 32-WE system. All inputs are unused by default. To save any programming the Engineer menu must be exited.

4.5.1 Input Types

See Appendix B, page 49 for all input type options.

Most commonly used input types:

[06] Intruder. **[07]** Final Exit. **[08]** Entry Route. **[13]** Day Alarm.

NOTE 1: If an alarm is triggered from an Entry Route input, it will store for 2 seconds before an alarm is activated. If a Final Exit input is triggered within this time, the system will select entry time, rather than an intruder alarm.

NOTE 2: Inputs may be automatically inhibited (omitted) at the time of reinstatement at the end of confirmation time.

4.5.2 Input Areas

The Enforcer 32-WE supports up to 4 areas. This allows 'home and away' settings. For example:

Area A: All inputs set in the house.

Area B: All inputs downstairs are active. All inputs upstairs are inactive (night time setting)

Area C: All inputs upstairs are active. All inputs downstairs are inactive

Area D: Inputs in Garage are active.

NOTE: The areas are not independent of one another, they work on the same level.

4.5.3 Input Attributes

The following attributes can be applied to any input:

Chime: The internal sounder of the Enforcer will sound a chime if enabled. Single: Chimes once when the input is triggered. Follow: Chimes when the input is triggered and only stops once the input is inactive. To enable/disable the chime in day mode press [C], when a 'c' is displayed on the keypad, the chime is enabled.

Omittable: Enables the input to be manually omitted (disabled) from the setting procedure. To omit inputs, there is a function in the Master Manager menu called 'OMIT INPUTS'.

Double Knock: The control will only generate an alarm if this input is triggered twice within a pre-set period, or if the input remains in fault condition for that period.

Normally Open: Enables the system to respond correctly when detectors of 'normally open' configuration are wired to the system. Alternatively converts input types which default to 'normally open' (e.g. Push to set) to operate with normally closed devices.

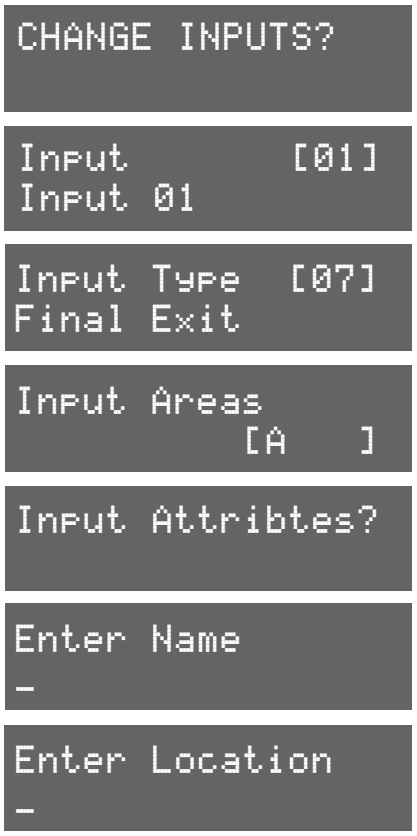
Confirm Group: If inputs are selected into the same confirm group, each input will only generate an unconfirmed alarm (and will not generate a confirmed activation). This is useful when two or more shock sensors are being activated by the same event. If a confirm group is selected as '00', the inputs are not part of any group.

4.5.4 Input Description

A name and location can be entered here. The name will appear on the display if an alarm has occurred; the location is used for a more detailed reference if required.

Change Inputs Programming

1. Press [B] or [NO] to scroll to 'CHANGE INPUTS'. Press [YES].
2. Press [◄] or [►] to select the input to program (01-66). Press [YES].
   'Input Type' will be displayed. Press [◄] or [►] to select the input type or input the shortcut number (see Appendix B, page 49 for all input type options.
3. Press [YES]
4. 'Input Area' will be displayed. Select the Area's to be assigned to the input and press [YES].
5. 'Input Attributes' will be displayed. If any attributes are needed for the input, press [YES] and press [◄] or [►] to select between the attribute enable/disable options and press [YES] to go to the next attribute.
6. 'Enter Name' will be displayed. Enter the name of the input and press [YES]. This will be displayed if it is activated or when a fault occurs.
7. 'Enter Location' will be displayed. Enter the location of the input and press [YES]. This will be displayed if it is activated or when a fault occurs after the name of the input has been shown.
8. Press [◄] or [►] to select another input to program (01-66) or press the [NO] key to return to the Engineer menu.



4.6 Assign Keypads/Readers

Any additional keypads or readers must be addressed correctly before enabling them in this function. The Enforcer 32-WE keypad is automatically addressed as 0 on initial power up. Refer to page: 39 for more information.

4.6.1 Address

Up to 3 x additional keypads or readers may be installed. Address 0 is used for the Enforcer 32-WE on-board keypad.

NOTE: Each keypad has its own individual menu that programs the key-click volume, tag volume and master volume. It will address a keypad, show the status of the keypad inputs (if programmed), force the backlight on or off and the identification number of a tag (once a tag is presented). The PA/Fire timer can be programmed. This menu also addresses the keypad.

To enter the keypad menu, press and hold the [D] key until 'SECURITY CODE' is displayed, and then enter '2000'. This function is also used to address the keypad.

4.6.2 Type

[0] Keypad. **[1]** Reader. **[2]** Not Used.

4.6.3 Reader is

If a reader is installed, the following options can be assigned to the reader:

[0] Set Point: Reader used for setting and unsetting.

[1] Not Used: Reader disabled

[2] Access Control: If an access control system is installed then the reader must be

programmed as this type. The lock open time and door open time can be programmed (in seconds).

[3] Unset Only: If the Reader is to be used as an unset device only, select this type.

[4] Entry Control: Used to lock/unlock doors. The external or internal reader can have magnetic locks connected to them. This option is used in conjunction with 'tag opens doors' in 'SITE OPTIONS' page: 21. The lock open time and door open time can be programmed (in seconds).

4.6.4 Default Level

Selects the area that the device will be defaulted to.

4.6.5 Set Point Description

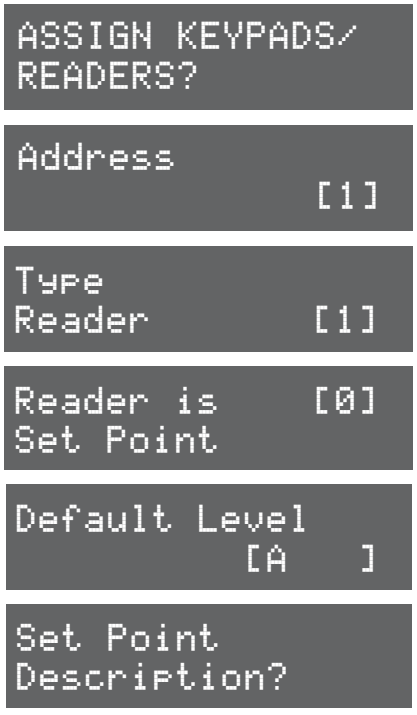
A name and location can be entered here. The name will appear on the display if an alarm has occurred, the location is used for a more detailed reference if required. E.g. Name = Entrance Keypad. Location = Hall

Programming Keypads: Assign Keypads/Readers

1. Press [B] or [NO] to scroll to 'ASSIGN KEYPADS/READERS'. Press [YES].
2. Press [◄] or [►] to select the address. Press [YES].
3. 'Type' will be displayed. Press [0] to select keypad. Press [YES]
4. 'Default Area' will be displayed. Select the default area. Press [YES].
5. 'Set Point Description' will be displayed. Press [YES] to enter the name and location if required.
6. 'Enter Name' will be displayed. Enter the name of the keypad and press [YES].
7. 'Enter Location' will be displayed. Enter the location of the keypad and press [YES].
8. Press [◄] or [►] to select another device address to program (0-3) or press the [NO] key to return to the Engineer menu

Programming Readers for Set Point or Unset Only: Assign Keypads/Readers

1. Press [B] or [NO] to scroll to 'ASSIGN KEYPADS/READERS'. Press [YES].
2. Press [◄] or [►] to select the address. Press [YES].
3. 'Type' will be displayed. Press [1] to select reader. Press [YES]
4. 'Reader is' will be displayed. Press [0] for 'Set Point' or press [1] for 'Unset Only' Press [YES].
5. 'Default Area' will be displayed. Select the default area. Press [YES]. 'Set Point Description' will be displayed. Press [YES] to enter the name and location if required.
6. 'Enter Name' will be displayed. Enter the name of the keypad and press [YES].
7. 'Enter Location' will be displayed. Enter the location of the keypad and press [YES].
8. Press [◄] or [►] to select another device address to program (0-3) or press the [NO] key to return to the Engineer menu.



Programming Readers for Entry Control or Access Control: Assign Keypads/Readers

1. Press [B] or [NO] to scroll to 'ASSIGN KEYPADS/READERS'. Press [YES].
2. Press [◄] or [►] to select the address. Press [YES].
3. 'Type' will be displayed. Press [1] to select the reader. Press [YES]
4. 'Reader is' will be displayed. Press [2] for 'Access Control' or press [4] for 'Entry Control' Press [YES].
5. 'Default Area' will be displayed if 'Entry Control' is selected. Select the default area and press [YES].
6. 'Lock Open Time' will be displayed. Enter the Lock Open Time in seconds and press [YES]. (Max 255 seconds).
7. 'Door Open Time' will be displayed. Enter the Door Open Time in seconds and press [YES]. (Max 255 seconds).
8. 'Access Control Description' will be displayed. Press [YES].
9. 'Enter Name' will be displayed. Enter the name of the keypad and press [YES].
10. 'Enter Location' will be displayed. Enter the location of the keypad and press [YES].
11. Press [◄] or [►] to select another device address to program (0-3) or press the [NO] key to return to the Engineer menu.

4.7 System Displays

This function programs the text display on the keypad for when the system is unset, or an area is set. The Site Name reference is programmed here which must match the site name programmed on the InSite software. There are options to enable or disable displaying when set, alarms, hold ups or inputs.

4.7.1 Area Texts

This programs how each Area will be displayed. For example if 'Area A' is used to set the full house this can be text as "Full House Set". There is a maximum of 16 characters on the display.

4.7.2 Sign On Message

The Sign on Message is the main display on the top line in unset mode.

4.7.3 Site Name

The Site Name is used as a reference for the InSite software if used.

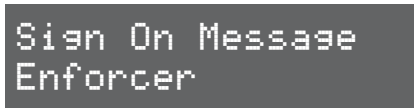
*4.7.4 Display When Set / Display Alarms / Display HU's / Display Inputs**

If 'Display when set' is enabled, then the Area Text will be displayed on the LCD keypad once the system is fully set. If Display Alarms / HU's are enabled, they will show any alarms that are activated before a valid user code/tag is entered. If Display Inputs is enabled, any inputs activated in day mode will be displayed.

NOTE: Must be set to NO to comply with EN50131-1

System Displays Programming

1. Press [B] or [NO] to scroll to 'SYSTEM DISPLAYS'. Press [YES].
2. 'Area A Text' will be displayed. Enter the text and press [YES]. Repeat for all areas.
3. 'Sign on Message' will be displayed. Enter the text and press [YES].
4. 'Site Name' will be displayed. Enter the text and press [YES].
5. 'Display When Set' will be displayed. Press [◄] or [►] to enable or disable the function. Press [YES]. Repeat for 'Display Alarms', 'Display Hus', and 'Display Inputs'. Press [YES] to return to the Engineer menu.



4.8 Change Timers

This function controls all timers of the Enforcer 32-WE.

4.8.1 Timers

For a list of all timers, refer to Appendix C, on page 50.

Most commonly used timers:

Entry Time (0-255 seconds), **Exit Time** (0-255 seconds), **Siren Time** (2-15 minutes), **Confirm Time** (1-99 minutes), **Wireless Supervision Time** (0-99 hours).

NOTE: The timer for inputs on 'Soak Control' is in the function 'ENGINEER TESTS'.

Change Timers Programming

1. Press [B] or [NO] to scroll to 'CHANGE TIMERS'. Press [YES].
2. 'A Entry Time' will be displayed. Enter the time and press [YES]. Refer to Appendix C, page 50 for all timers and enter the time on the required function and press [YES] for the next timer.
3. Press [NO] to return to the Engineer menu.

4.9 Date and Time

All log entries and the system display include the time and date. This is also programmed in the Master Manager Mode.

NOTE: Please note that powering down the system will reset the time and date information.

4.9.1 Year, Month, Day, Hours, and Minutes

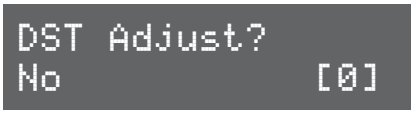
Enter the year, month, day, hours and minutes.

4.9.2 DST Adjust

Enable or disable the 'Day Saver Time Adjust' as required.

Set Date and Time Programming

1. Press [B] or [NO] to scroll to 'SET DATE AND TIME'. Press [YES].
2. 'Year' will be displayed. Enter the year and press [YES]. Repeat for Month, Day, Hours and Minutes and press [YES].
3. 'DST Adjust' will be displayed. Press [◄] or [►] to enable or disable the function and press [YES].
4. Press [NO] to return to the Engineer menu.



4.10 Exit Modes

The '**Exit Modes**' operate the Setting procedure of the Enforcer 32-WE system. The following Exit Modes are available:

4.10.1 Exit Modes

[0] Timed: The Enforcer 32-WE system will set when the programmed 'Exit Time' has expired (See 'Change Timers' on page 17).

NOTE: This is NOT suitable for systems installed to comply with BS8243.

[1] Final Door: The Enforcer 32-WE system will set when an input programmed as 'Final Exit' is either closed (if the input was opened when setting started) or it is opened and closed. 'Final door' is used for the 'lock set' operation; securing the lock completes the setting procedure and unlocking starts the entry time.

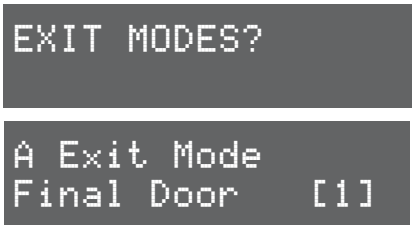
[2] Timed/Final: The Enforcer 32-WE system will set when a 'Final Exit' input has been closed, or when an 'Exit Time' has expired. The 'Final Exit' input will override any 'Exit Time' programmed if opened/closed.

NOTE: This is NOT suitable for systems installed to comply with BS8243.

[3] Push to Set (PTS): The Enforcer 32-WE system will only Set when a 'Push to Set' button has been pressed. This function will override the programmed Exit Time.

Exit Modes Programming

1. Press [B] or [NO] to scroll to 'EXIT MODES'. Press [YES].
2. 'A Exit Mode' will be displayed. Press [◄] or [►] to select the Exit Mode and press [YES]. Repeat for all areas.
3. Press [NO] to return to the Engineer menu.



4.11 Change Codes

This function changes the Engineer code, the Master Manager code and adds/changes/deletes any Duress or Guard codes.

Default Codes: **User**: 1234. **Master Manager**: 2222. **Engineer**: 1111

NOTE: User codes, fobs and keyfobs can only be changed in The Master Manager Menu. Please see the user manual for more information.

4.11.1 5 Digit Pins?

If enabled, a 5 or 6 digit code will automatically block several possible 4 digit codes that clash with it.

4.11.2 Change Duress Codes

[2] Duress Code: If the Enforcer 32-WE is unset using a 'Duress' code, a silent 'Duress' or 'Hold Up' signal is sent.

NOTE: ACPO policy prevents use of Duress codes for police call purposes.

[3] Guard Code: A 'Guard code' can be used to unset the Enforcer 32-WE only after an alarm has been activated for a minimum time (see 'Change Timer' Appendix C, page 50). The code will set a system and an output type is available to signal when this code is used (00058 Guard Code).

[4] Dial Out: If a dial out code is programmed and entered when the Enforcer 32-WE is unset, the PC number 1 that is programmed (see 'SET UP DOWNLOADING' on page: 28) will be dialled.

4.11.3 Change Master Manager Code

The Master Manager code can be 4, 5 or 6 digits long, or can be assigned to a tag. It may also have the following functions:

[0] Unset / Set. **[1]** Unset Only. **[2]** Set Only. **[3]** None (used only to access the menu).

Flexi Set: If enabled, the default area the device is assigned to, will set. If disabled, the default area will be shown on the display, and from here other areas can be selected.

Wards/Access: This will only be displayed if an Entry Control or Access Control reader is installed on the system. If the address of the Entry Control or Access Control device is entered here, then the code will be assigned to that reader only.

4.11.4 Change Engineer Code

The Engineer code can be 4, 5 or 6 digits long.

Change Codes Programming

1. Press [B] or [NO] to scroll to 'CHANGE CODES'. Press [YES].
2. '5 Digit Pins' will be displayed. Press [◄] or [►] to enable or disable and press [YES].
3. 'Change Duress Codes' will be displayed. Press [YES] to add any Duress, Guard or Dial out codes (as described previously) or press [NO].
4. 'Change Master Manager Code' will be displayed. Press [YES] to change the Master Manager code or press [NO].
5. 'Change Engineer Code' will be displayed. Press [YES] to change the Engineer code or press [NO] to return to the Engineer menu.

4.12 Volume Control

The Volume Control function applies to the loudspeaker output only. Volume levels at the keypad are programmed individually – refer to page: 14 on how to access the menu.

4.12.1 Volume Controls

The following volume on each sound can be controlled: Entry, Exit, Alarm, Fire, Tamper, Day alarm, Chime, and Intelligent Set.

Volume controls: 0 = Completely silent. 1 = Silent but sounds a beep when the system is set 2-7 volume of tones (7 = loudest).

4.12.2 Code Stops Sound

If this function is enabled, then once an alarm has been generated (even if the code is not programmed for that area) the alarm will be silenced, and a 'Misoperation (Abort) signal' will be sent. The area will remain set until a code or tag is presented that is assigned to that area.

4.12.3 Entry/Exit Keypads Only

If this function is disabled, any entry and exit tones will be heard through the main sounder. If enabled, the entry and exit tones will only be heard through the keypad speaker.

4.12.4 Alert Kps Only

If this function is enabled, any 'Alert' tones will be heard on the Keypad only and not the main sounder. If disabled, the alert tones will heard through both.

4.12.5 Silent Technical Alert

If this function is enabled then any technical alerts will be silenced, e.g line fault, ARC call fail.

4.12.6 Use Main Sounder

If enabled, all volumes that are programmed as 2-7 will activate on the main sounder. If disabled, the sounder will only activate on activations programed on volume 6-7.

Volume Control Programming

1. Press [B] or [NO] to scroll to 'VOLUME CONTROL'. Press [YES].
2. 'A Entry' will be displayed. Enter the volume and press [YES]. Repeat for all areas.
3. 'Code Stops Sound' will be displayed. Press [◄] or [►] to enable or disable and press [YES].
4. 'E/E Keypads Only' will be displayed. Press [◄] or [►] to enable or disable and press [YES].
5. 'Alert Kps Only' will be displayed. Press [◄] or [►] to enable or disable and press [YES].
6. 'Silent Tech Alert' will be displayed. Press [◄] or [►] to enable or disable and press [YES].
7. 'Use Main Sounder' will be displayed. Press [◄] or [►] to enable or disable and press [YES]. The Engineer menu will be displayed.

4.13 Alarm Response

The Alarm Response function controls how certain activations are to perform.

4.13.1 Silent 1st Alarm

If this function is selected as 'confirmed', then the first alarm to activate on the system will be silent, but only if another input activates (i.e. a confirmed alarm) then the alarm will activate and the alarm tones will be heard. This option is only valid once the system has been set for 3 minutes and not if the entry time has started.

4.13.2 Disable Confirm On Entry

To comply with BS8243 clauses 6.4.3 and 6.4.4, this option should be set to YES to disable confirmation once the entry procedure has started. **For use with BS8243 option 6.4.5, this option should be 'No'.** If 'Disable Confirm On Entry' is set to YES this option will disable **ALL** confirmation signals on entry. If NO the confirmation signals are enabled on expiry of entry time.

4.13.3 Alarm Starts / Stops (Alarm Responses)

There are 4 different 'Alarm Responses' that can be programmed:

[0] Keypads: If an alarm occurs, the keypad sounder will activate.

[1] Internal Sounders: If an alarm occurs, the internal sounder will activate.

[2] Bells Only: If an alarm occurs, the external sounders will activate.

[3] Signal Digi: If an alarm occurs, the digi will communicate.

[4] Confirm: If an confirmed alarm occurs.

If the Alarm Response for Area A is programmed as 'Start At' "Keypads" and 'Stop at' "Bells Only" then it will take 15 seconds to go through each alarm responses before stopping at "Bells Only".

If the Alarm Response is programmed as 'Start At' "Signal Digi" and 'Stop At' "Confirm", all keypads, internal sounders and bells only will activate the same time as 'Signal Digi' and all will stop when there is a 'Confirmed Alarm'.

The Enforcer 32-WE can operate on a combined Area basis, for example if both Areas 'A' and 'B' are set; you may want the process of the alarm responses to change. Therefore The 'If Areas set' section of this function should be used and select the desired Areas and the Alarm Responses.

Alarm Responses Programming

1. Press [B] or [NO] to scroll to 'ALARM RESPONSES'. Press [YES].
2. 'Silent 1st Alarm' will be displayed. Press [◄] or [►] to enable or disable and press [YES].
3. 'Disable Confirm on Entry' will be displayed. Press [◄] or [►] to enable or disable and press [YES].
4. 'Area A start at' will be displayed. Press [◄] or [►] to select the alarm responses and press [YES]. Repeat for all alarm notifications.
5. The Engineer menu will be displayed.

4.14 Change Outputs

This function programs all output types, Any output type may be programmed to any of the systems outputs, including any outputs for wireless bells. Outputs must be used within their rated capacity. Please see the installation manual.

4.14.1 Output Types

Refer to Appendix D, page 51 for all output type options. Most commonly used input types:

[0003] Intruder Any. **[0006]** Confirmed Any. **[0014]** Siren Any. **[0016]** Strobe Any.

[0018] Unconfirmed Any. **[0051]** Line Fault. **[0052]** Mains Fail. **[1###]** Follow Input.

4.14.2 Endstation Outputs

This function programs the Bell, Strobe and PGM output on the I/O board if connected (see page: 39 for connections).

4.14.3 ZEM Outputs

If a EURO-ZEM8+ or EURO-ZEM8+PSU has been connected to the Enforcer 32-WE (Zone Expander Modules), this function programs the 4 outputs on each expander. The address of the expander is required before the output programming. Refer to page: 42 for connections.

4.14.4 Wireless Bells

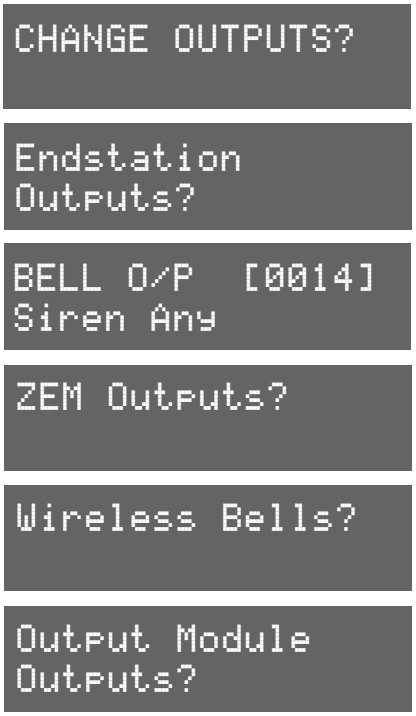
At default, any wireless bells learnt to the Enforcer 32-WE have the two outputs programmed as 'Siren Any' and 'Strobe Any'. These outputs can be programmed differently if required.

4.14.5 Output Module Outputs

If a EURO-OEM8R8T, or EURO-OEM16R+PSU is connected to the Enforcer 32-WE, they must be addressed in this function. All output programming is done also here. A maximum of 1 output expander can be connected to the Enforcer 32-WE. Refer to page: 42 for connections

Change Output Programming

1. Press [B] or [NO] to scroll to 'CHANGE OUTPUTS'. Press [YES].
2. 'Endstation Outputs' will be displayed. Press [YES] to program any endstation outputs (on the I/O module if connected), or press [NO] for the next function. Use [◄] or [►] to scroll through the outputs or the select the shortcut number.
3. 'ZEM Outputs' will be displayed. Press [YES] to program any ZEM outputs (on the EURO-ZEM8+ or EURO-ZEM8+PSU if connected), or press [NO] for the next function.
4. 'Wireless Bells'' will be displayed. Press [YES] to program any wireless output types or press [NO] for the next function.
5. 'Output Module Outputs'' will be displayed. Press [YES] to address an output module (EURO-OEM8R8T or EURO-OEM16R+PSU if connected) or press [NO] for the next function.
6. 'Keypad Outputs' will be displayed. Press [YES] to program any outputs on any additional keypads connected or press [NO] for the next function.
7. 'Reader Outputs' will be displayed. Press [YES] to program any outputs on any readers connected or press [NO] to return to the Engineer menu for the next function.

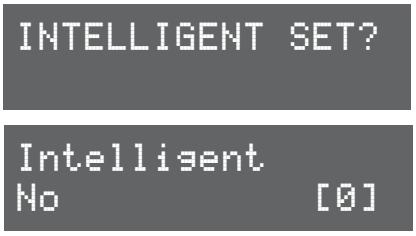


4.15 Intelligent Set

When the Intelligent set function is enabled, the Enforcer 32-WE will set in level set B (the user code used must have level sets A and B assigned), but if a final exit input is activated (such as a front door) on level set A, the Enforcer 32-WE will automatically switch to setting level set A, If no input is activated, the Enforcer 32-WE will just set level set B.

Intelligent Set Programming

1. Press [B] or [NO] to scroll to 'INTELLIGENT SET'. Press [YES].
2. 'Intelligent' will be displayed. Use [◄] or [►] to enable / disable intelligent setting.
3. Press [YES] to return to the Engineer menu.



4.16 Site Options

A full range of site options is available to tailor the operation of the system.

4.16.1 Set with Fault:

If 'YES', the Enforcer 32-WE will set regardless of the following faults being present: device fail, mains fail, battery fault, fuse fault, SMS failure, relay sirens 1&2 or relay strobe faults.

4.16.2 Set with Tamper+:

If 'YES', the Enforcer 32-WE will set regardless of the following tamper faults being present: Case tamper and any system tampers.

4.16.3 Set with ATS Fault:

If 'YES', the Enforcer 32-WE will set regardless of the following ATS faults being present: telecom line fail, modem fail, STU/ATE line fault, STU/ATE one path fail, Digi dial fail, or STU/ATE comms fail.

4.16.4 Set Fail = Alarm:

If 'YES', the Enforcer 32-WE will generate a graduated alarm when the 'Set Fail' timer has expired (See 'CHANGE TIMERS', page: 17), and will trigger any output programmed as '0011 Set Fail' if the setting procedure is still incomplete. If 'NO' the exit timer will continue until the exit route is clear.

4.16.5 Do Battery Load Test:

If 'YES', the Enforcer 32-WE will perform a full load battery test at 7:00am each day.

4.16.6 Strobe/Squawk at Set:

If 'STROBE', any output programmed as 'STROBE ANY' will activate for 5 seconds after the Enforcer 32-WE has set. If 'SQUAWK' any output programmed as 'SIREN ANY' will activate for 5 seconds after the Enforcer 32-WE has set, and if 'BOTH' then any outputs programmed as STROBE ANY or SIREN ANY will activate for 5 seconds after the Enforcer 32-WE has set.

NOTE: If this function is enabled, a potential security risk could be in view for intruders to see.

4.16.7 Autoset Force:

If 'YES', and an auto set timer is programmed on the InSite upload/download software, then the Enforcer 32-WE will set on an auto set regardless of any inputs being open during the setting period.

4.16.8 Restrict PIN use:

If 'YES', the Enforcer 32-WE prevents a PIN code being entered on the Entry time, but allows a PIN code to silence any alarm that may occur.

NOTE: Enable when BS8243 option 6.4.5 is in use

4.16.9 Simple Set

If 'YES', the Enforcer 32-WE allows a user to set the system 'quickly' by pressing [YES] and then the Area (A, B, C or D).

NOTE: This must not be enabled when BS8243 option 6.4.5 is in use.

4.16.10 2 Key HU:

If the [1] and [7] keys are pressed and held together for a period of time (programmed in the keypad menu, see page: 14), a 'Hold Up' will occur.

If 'NONE', the keys are disabled. If 'SILENT', a 'Silent Hold Up' will be signaled. If 'Bells Only', any external sounder will activate but NO signals will be sent. If 'BOTH', any external sounder will activate and a signal will be sent using a Digi 1200 (PSTN) or Digi GSM.

4.16.11 Tag Opens Doors

This function is only be used in conjunction with a reader being programmed as 'Entry Control' is in 'ASSIGN KEYPADS/READERS' (see page: 14).

If 'YES' the 'Entry Control' readers will control the setting/unsetting and the doors. If 'NO' the Entry Control readers will control the setting/unsetting only.

4.16.12 Fire Key Enable

If 'YES' the fire key will be enabled on the Enforcer 32-WE keypad.

4.16.13 Set With Polling Fault

If 'YES' the Enforcer 32-WE will set the system if there is a wireless polling fault. The Enforcer 32-WE will display a wireless polling fault but will allow the user to set the system.

If 'NO' the user will not be able to set the Enforcer 32-WE with a polling fault. The Enforcer 32-WE will display a fault and the arming procedure will be stopped.

4.16.14 Fob Unset Entry

If 'YES' any wireless keyfobs learnt will only be able to unset the Enforcer 32-WE once the entry time time has been activated. If 'NO' any wireless keyfobs learnt will always be able to set and unset the Enforcer 32-WE.

4.16.15 Wireless Bell Supervision

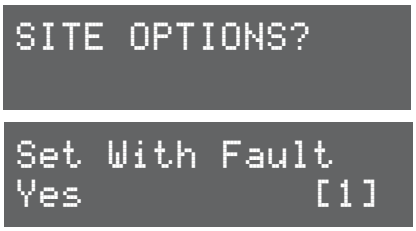
If 'YES' then the wireless external sounder (DELTABELL-WE) will go into alarm if it can no longer communicate with the Enforcer 32-WE.

4.16.16 Download if Set

If 'YES' any upload/download procedures will be possible on the InSite software regardless of the set/unset status of the Enforcer 32-WE.

Site Options Programming

1. Press [B] or [NO] to scroll to 'SITE OPTIONS'. Press [YES].
2. 'Set With Fault' will be displayed. Use [◄] or [►] to enable/disable each option and press [YES]. Repeat for all functions. The engineer menu will be displayed once all functions have finished.



4.17 Engineer Reset Options

The Engineer Reset Options are used so that once an alarm has occurred; the Enforcer 32-WE system can only be reset by an engineer code, anti-code or red care reset from an Alarm Receiving Center (ARC).

4.17.1 Engineer Restore of Intruder

If 'UK Intruder', an Engineer code must be used to reset the Enforcer 32-WE after an alarm. 'Secure Intruder' should not be used.

4.17.2 Engineer Restore of Hold Up

If 'YES', an Engineer code must be used to reset the Enforcer 32-WE after an Hold Up, Input Hold Up, or Duress activation.

4.17.3 Engineer Restore of Tamper

If 'YES', an Engineer code must be used to reset the Enforcer 32-WE after a tamper activation.

4.17.4 Engineer Restore of Soak

If 'YES', an Engineer code must be used to reset the Enforcer 32-WE after an input that is on 'soak' has triggered when the Enforcer 32-WE is set.

4.17.5 Engineer Restore of Confirmed

If 'YES', an Engineer code must be used to reset the Enforcer 32-WE after a confirmed alarm has occurred.

4.17.6 Engineer Restore of Faults

If 'YES', an Engineer code must be used to reset the Enforcer 32-WE after the following faults: ATE telecom fail, Modem fail, ATE single path fail, Telecom line fail, Battery disconnect, Batt charge, Battery load, Excessive charge, Battery critical and Device fail.

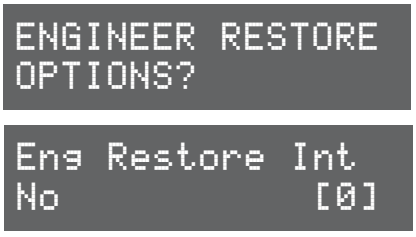
4.17.7 Anti-Code Restore

If 'YES', the Enforcer 32-WE will display an Anti-Code, to which can be used to generate a special reset code (usually from the ARC) to reset the Enforcer 32-WE.

NOTE: that if Anti-Code is selected, this will coincide with the options that have been selected previously. For example, if 'Engineer Restore Intruder' is selected, and Anti-Code is selected, then an anti-code will be produced on intruder activation.

Engineer Reset Options Programming

1. Press [B] or [NO] to scroll to 'SITE OPTIONS'. Press [YES].
2. 'Engineer Restore Intruder' will be displayed. Use [◄] or [►] to enable/disable each option and press [YES]. Repeat for all functions. The engineer menu will be displayed once all functions have finished.



4.18 Review Logs

The control panel has two Event Logs, which are time and date stamped. The first log which is a panel log, records all events that occur on the Enforcer 32-WE, i.e. Users entering their codes to arm or disarm areas, alarm events, failures to arm etc.

The second log which is an access log, only records access control events.

4.18.1 Panel Log

The Panel log records all events that occur on the Enforcer 32-WE, i.e. Users entering their codes to set or unset areas, alarm events, failures to set etc. Pressing [C] will give more information of the display (for example, shows which user unset the Enforcer 32-WE).

4.18.2 Access Log

The Access log records all events for Access Control events.

With each log, use the [D] key to move from one event to the previous event. The [B] key will move from one event to the next event that occurred.

To view additional details, press the [C] key. If no other information is available, the display will move to the next log entry. Pressing the [A] key will return to the main screen for that entry.

NOTE: For all Fault Codes please refer to Appendix F, on page 55.

Review Logs Programming

1. Press [B] or [NO] to scroll to 'REVIEW LOGS'. Press [YES].
2. 'Panel log' will be displayed. Press [YES] to display the panel log.
3. The time, date and event will be displayed. Use [◄] or [►] to scroll through the event log. If more information is required, for example, if 'Alarm on Input' is displayed, press [C] to show more information (e.g. the input that activated). Press [NO] to exit the Panel log.
4. 'Access log' will be displayed. Press [YES] to display the access log and repeat the operations mentioned above. Press [NO] to exit to the Engineer menu.

4.19 Engineer Tests

The Test function allows the engineer to test inputs, outputs, batteries and the siren.

4.19.1 Sounds To Play

This function previews all of the different tones the Enforcer 32-WE system makes. They have a choice of: Chime, Chime Follow, Exit, Exit Fault, Entry, Tech Fault, Tamper, Alarm, PA, and Fire.

4.19.2 Walk Test

The walk test feature is used to test all the inputs programmed on the Enforcer 32-WE. It is recommended that after programming any inputs, the Engineer menu is exited to save all data, after this point a walk test should be performed. The inputs that haven't been activated will be shown on the display. Once all the inputs have been walk tested, 'Walk Test Completed' will be displayed. When walk-testing a double-knock detector, it must be triggered twice within the preset period. When testing dual-trip detectors, the first detector must be triggered and then the second detector; next, open the second detector and trigger the first detector.

4.19.3 Soak Control

Any input may be placed on 'soak test' which monitors the detector without giving an alarm activation. If the chosen input triggers whilst the system is set, it will indicate the activation and enter the details in the event log. The number of days the input is in soak control before the input becomes active can be programmed.

4.19.4 Test Siren

Any outputs programmed as '0014 Siren Any' and '0016 Strobe Any' will be tested.

4.19.5 Do Battery Load Test

The Enforcer 32-WE performs a check of the battery operation every 10 seconds, by dipping the power supply voltage momentarily, and measuring the system voltage. If the battery voltage measured is below 8.9V, or the battery fuse has failed, a 'BATTERY FAULT' warning will be generated. The Enforcer 32-WE is programmed to perform an automatic battery load test at every power supply at 7.00am each day. This will drop the power supply voltage below the battery voltage, whilst monitoring the system diagnostics. The test will NOT take place if:

- The siren and strobe Output are live
- The Enforcer 32-WE is in Engineer Mode
- Any battery faults exists
- Any mains fault exists
- The site option 'Do Battery Load Test' is not selected (see 'Site Options', page: 21).

If the test has already started, it will be aborted if any of these conditions apply, other than entry

into Engineer Mode. If the test is aborted, it will NOT be performed until the next day. This is selected in SITE OPTIONS under "Do Battery Load Test". The test may also be performed as required, under engineer control.

4.19.6 Test Outputs

The engineer can test all the Programmable Outputs on the Input/Outboard board and the output module.

4.19.7 Test Communications

If the engineer is using SIA or Contact ID to signal events, this function can be used to send a test signal to the Alarm Receiving Centre. It can also be used to test SMS signaling.

4.19.8 Start CHC SMS Update

If the engineer has set up SMS text messaging then this function needs to be used (after enabling SMS calls in 'Set up Digi/SMS', the engineer mode must be exited to save all the data, and then this function must be entered (this function is also in the master manager menu)).

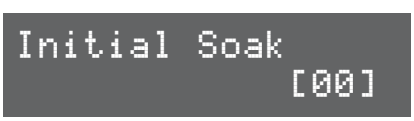
The system will automatically carry out a test call to our Host Computer every **two weeks.** The call is made via a premium rate number and the bill payer should be informed of the charge **(50p per call).** Customers who have "BT Answer 1571" enabled may have difficulty in connecting to the CHC.

Engineer Tests Programming: Walk Test

1. Press [B] or [NO] to scroll to 'ENGINEER TESTS'. Press [YES].
2. 'Sound to play' will be displayed. Use [◄] or [►] to select the different sounds. Press [NO] to exit.
3. 'Walk Test' will be displayed. Press [YES].
4. Select the areas that are required to be walk tested and press [YES].
5. A list of all inputs programmed for that area will be displayed on the keypad. Once an input has been walk tested (i.e. the detector has activated and deactivated) then the input will be taken off the list.
6. Once all inputs have been tested, 'Walk Test Completed' will be displayed. To exit the walk test function at any time press [NO].
7. Press [NO] again to go back to the Engineer menu.

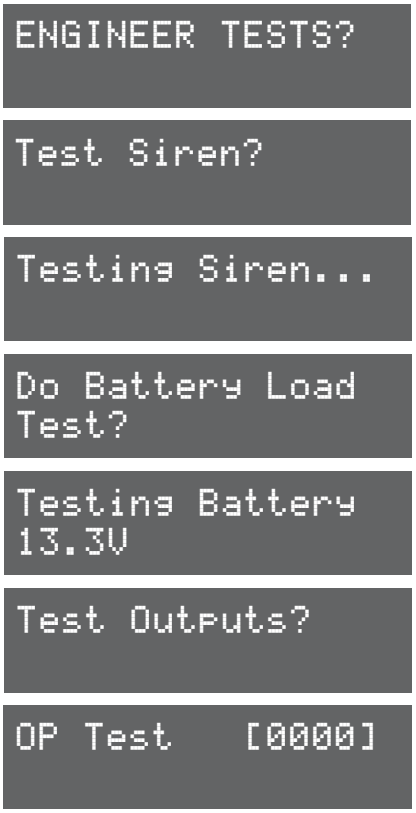
Engineer Tests Programming: Soak Control

1. Press [B] or [NO] to scroll to 'ENGINEER TESTS'. Press [YES].
2. 'Sound to play' will be displayed. Press [NO].
3. 'Walk Test' will be displayed. Press [NO].
4. 'Soak Control' will be displayed. Press [YES].
5. Select the inputs that are required to be soak tested. Each input should be entered, following by [YES]. Press [NO] once finished.
6. 'Soak Days Left' will be displayed. Select the number of days that the inputs will be left on soak test and press [YES].
7. 'Initial Soak' will be displayed. Enter the number of days the soak test will revert to in the event a soak input is triggered during testing. Press [YES].
8. Press [NO] to go back to the Engineer menu.



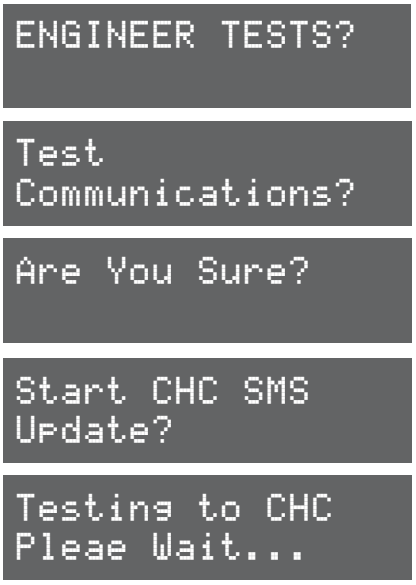
Engineer Tests Programming: Test Siren, Battery Load Test and Test Outputs

1. Press [B] or [NO] to scroll to 'ENGINEER TESTS'. Press [YES].
2. 'Sound to play' will be displayed. Press [NO].
3. 'Walk Test' will be displayed. Press [NO].
4. 'Soak Test' will be displayed. Press [NO].
5. 'Test Siren' will be displayed. Press [YES]. Any outputs programmed as 'Siren Any' and 'Strobe Any' will trigger. Press [NO] to exit.
6. 'Do Battery Load Test' will be displayed. Press [YES] to perform a battery load test, the voltage will be displayed, followed by 'Battery Passed' if the test has been successful. Press [NO].
7. 'Test Outputs' will be displayed. Press [YES] to perform a test on any output type. For example if '0006' is entered, and the [YES] key is pressed, a 'Confirmed Any' test will be activated. Press [NO] to cancel the test.
8. Press [NO] to go back to the Engineer menu.



Engineer Tests Programming: Test Communications and Start CHC SMS update.

1. Press [B] or [NO] to scroll to 'ENGINEER TESTS'. Press [YES].
2. 'Sound to play' will be displayed. Press [NO].
3. 'Walk Test' will be displayed. Press [NO].
4. 'Soak Test' will be displayed. Press [NO].
5. 'Test Siren' will be displayed. Press [NO].
6. 'Do Battery Load Test' will be displayed. Press [NO].
7. 'Test Outputs' will be displayed. Press [NO].
8. 'Test Communications' will be displayed. Press [YES] to send a test signal to the ARC.
9. 'Testing to CHC' will be displayed. Press [YES] to send a test signal to the Castle Host Computer.
10. Press [NO] to go back to the Engineer menu.



4.20 Diagnostics

The Enforcer 32-WE diagnostic function shows all system readings, including power supplies, input status, wireless signal and wireless battery status.

The diagnostic resolution is: Voltage: 0.1V, Current: 0.01A.

4.20.1 View PSUs

This function shows all power readings for; the endstation, any ZEMs, any output expanders, any keypads and readers.

4.20.2 View Inputs

This function shows all the input statuses on the Enforcer 32-WE (including Wireless and any expanders connected). The resistances can be shown, or just the status; **C** = Closed, **O** = Open, **T** = Tamper, **-** = Not learnt and **F** = Resistance fault. For wireless inputs; **S** = Supervision fault. **B** = Battery fault.

NOTE: The endstation inputs are those of the I/O board if connected.

4.20.3 View Wireless Device Status

Signal Strength

One of the most important factors for a reliable wireless installation is the signal strength between a wireless device and the Enforcer 32-WE. If a device is out of range it will not be able to send events.

The Enforcer 32-WE has an advanced signal strength technology that operates by monitoring all inputs/bells after 5 minutes from the initial test, it will then perform test this every 16 seconds.

The signal strength results are displayed on the keypad and the device, making this test very simple and accessible.

For a reliable installation check that a "good" or "excellent" install result is received from each test.

NOTE: When monitoring signal strength for a device, it is recommended that the device is in the final installation position, and also in the 'worst case scenario' for example with all doors and roller shutters closed etc. The following will be displayed:

'?' = Waiting for device signal strength information (please note this may take up to 5 minutes during its initial test)

3 = Excellent signal

2 = Good install position.

1 = Weak install position (reposition and retest)

0 = Missing (reposition and retest)

IMPORTANT! DO NOT INSTALL DEVICES WHEN 1 (Weak) or 0 (Missing) IS SHOWN

Each input/siren device is tested every 15 seconds, and activating an input will do an immediate test. Each device also has status LEDs. Device Status GREEN is equivalent to 3 & 2 above. Device Status RED is equivalent to 1 above.

GREEN = GOOD, **RED** = BAD. **All LEDS** = Starting test

To get a more descriptive reading, press [YES] again when the status is shown. The following will be displayed:

Excellent [50 to 100] = OK to install

Good [30 to 49]= OK to install

Weak [0 to 29] = Not OK to install

Missing (no number is displayed) = Not OK to install

Wireless Battery Strength

The diagnostics function also monitors the battery of each input and bell so that any low/bad batteries can be recognised and replaced. The following will be displayed:

Testing = Waiting for a Battery result

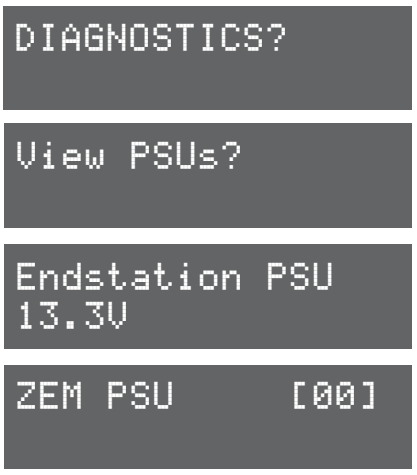
Good = At least 1 month of battery life remaining

Replace = Battery Needs To Be Replaced Immediately

Each input / bell device is tested every 15 seconds.

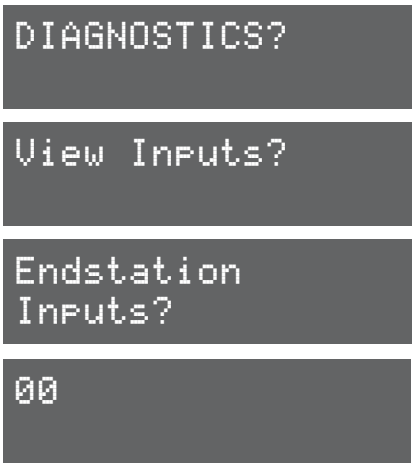
Diagnostics Programming: View PSUs.

1. Press [B] or [NO] to scroll to 'DIAGNOSTICS'. Press [YES].
2. 'View PSUs' will be displayed. Press [YES].
3. 'Endstation PSU' will be displayed and the power supply reading of the Enforcer 32-WE will be shown. Press [YES].
4. 'ZEM PSU' will be displayed. Enter the address of the ZEM installed. The power supply reading will be displayed and press [YES].
5. Repeat the above for any Output expanders, keypads and readers installed. Press [NO] to return to the sub-menu.



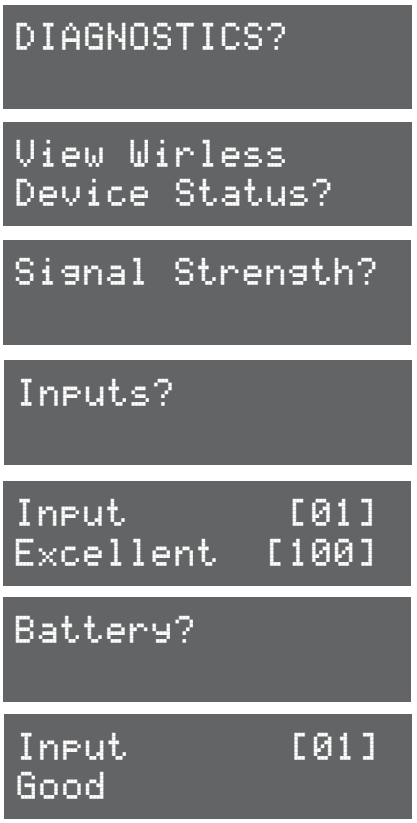
Diagnostics Programming: View Inputs.

1. Press [B] or [NO] to scroll to 'DIAGNOSTICS'. Press [YES].
2. 'View PSUs' will be displayed. Press [NO].
3. 'View Inputs' will be displayed. Press [YES].
4. 'Endstation Inputs' will be displayed. To view the Endstation Inputs (the two inputs on the I/O board) press [YES]. The status will be displayed. Press [YES] again to view the resistance values. Press [NO] to return to the sub-menu.
5. Repeat the above for the sub-menu's 'Wireless Inputs', and 'ZEM Inputs' (selecting the address first). Press [NO] to return to the sub-menu.



Diagnostics Programming: View Wireless Device Status.

1. Press [B] or [NO] to scroll to 'DIAGNOSTICS'. Press [YES].
2. 'View PSUs' will be displayed. Press [NO].
3. 'View Inputs' will be displayed. Press [NO].
4. 'View Wireless Device Status' will be displayed. Press [YES].
5. 'Signal Strength' will be displayed, press [YES], or [NO] to jump to 'Battery'.
6. 'Inputs' will be displayed in the Signal Strength Menu, press [YES].
7. 'Please Wait' will be displayed and a countdown of 300 will start. This process will take a few minutes. The display will then show the signal strength, to show a detailed signal strength view press [YES] on this screen. Use [◄] or [►] to scroll through each input (or alternatively enter the input number). Press [NO] to exit.
8. 'Bells' will be displayed. Repeat the above for the Bell signal strength. Press [NO] to return to the sub-menu.
9. 'Battery' will be displayed. press [YES] to view the battery status of all wireless inputs and bells. Repeat as mentioned above. Press [NO] to return to the Engineer menu.



4.21 Set Up Downloading

The Enforcer 32-WE system has uploading and downloading capability. The Enforcer 32-WE 'InSite' upload/ download software allows the monitoring of the status of each input, alter programming, and review the logs. This software is available to download from www.pyronix.com under 'downloads'. When this section refers to 'dials the software', this means the PC that the software is installed.

4.21.1 Download By

A download from the Enforcer 32-WE to the PC can be done either by RS232 (direct connection - see page: 38) or Modem (remote dial in connection - see page 38).

4.21.2 Security Mode

When creating a customer in the 'InSite' software, it is important that the Enforcer 32-WE telephone number is programmed both in the software and the Enforcer 32-WE (in this menu).

[0] Auto Answer: Allows the software to dial into the Enforcer 32-WE at any time.

[1] Panel Dials: This does not allow the software to dial into the Enforcer 32-WE at all. All modes allow the Enforcer 32-WE to dial the software without restriction. At any time, the Enforcer 32-WE can be forced to dial the software by entering the Master Manager menu and selecting 'DIAL OUT MENU'.

[2] Dial Back: When dialing the Enforcer 32-WE, click the 'Dial Customer' option in the software

and the PC be called. Once answered, both the Enforcer 32-WE and the software will hang up. After a few seconds the Enforcer 32-WE will call the software and connect.

4.21.3 Telecom Line

[0] Dedicated Line: When the software dials the Enforcer 32-WE, it will answer immediately.

[1] Shared Line: When the software dials the Enforcer 32-WE, it will hang up after the primed number of rings. The software will then redial the Enforcer for it to answer in its primed state.

4.21.4 Number of Rings to Prime

[01]-[15] = This is the number of rings (audibile 'rings' in the phone call) to prime the Enforcer 32-WE when the Enforcer is installed on a shared telephone line (see 'Shared Line' above).

4.21.5 Roving Dial

This option (when set to 'No') prevents anyone dialling into the panel using roving dial from the software. To comply with DD263:2010 this option must be defaulted to 'No'.

4.21.6 Modem Speed

For future use. Make sure this is set to **[1] HIGH.**

4.21.7 Prefix Tel No

If, for example a '9' is required to dial an 'outside' line, this must be entered here.

4.21.8 ARM PC Telephone Number

This is the phone number of the PC modem where the software is installed for performing the 'Automatic Remote Maintenance' (ARM) service. Press [A] button to add any symbols: ',' = 2 second pause, '+' for roaming calls. This is used in conjunction with the **'DIAL OUT MENU'** function (see page: 32).

4.21.9 Program PCs

Up to 4 x PC modem numbers may be programmed, i.e. the software maybe installed on four different PCs (office PC, home PC, etc). These are selected in the 'Dial Out Menu' in the Master Manager menu (refer the Enforcer 32-WE User manual).

The signalling events are unique to each PC modem number.

Send Alarms: If enabled, the panel will report 'alarm' events to the PC running UDL software.

Send Faults: If enabled, the panel will report any 'fault' events to the PC running UDL software.

Send Set / Unset: If enabled, the panel will report 'open/close' (arm/disarm) events to the PC running UDL software.

Send Access Control: If enabled, the Enforcer 32-WE will report any 'access control' events to the PC running UDL software.

4.21.10 UDL Password

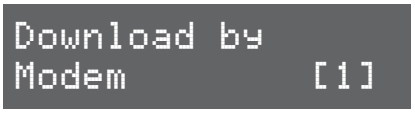
This password is used to identify the UDL connection. Make sure the password here and on the software are the same.

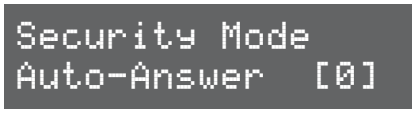
4.21.11 Redials

The number of redials that it will call to the software before it fails.

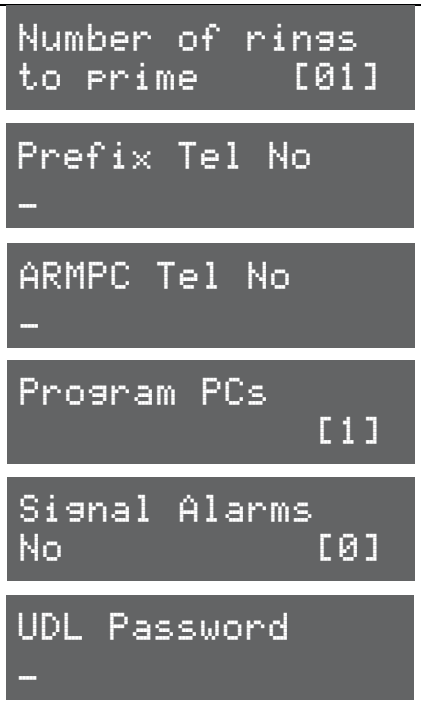
Set Up Downloading Programming

1. Press [B] or [NO] to scroll to 'SET UP DOWNLOADING'. Press [YES].
2. 'Download by' will be displayed. Use [◄] or [►] to scroll through the different options and press [YES] to select.
3. 'Security Mode' will be displayed. Use [◄] or [►] to scroll through the different options and press [YES] to select.
4. 'Telecom Line' will be displayed. Use [◄] or [►] to scroll through the different options and press [YES] to select.
5. 'Number of Rings to Prime' will be displayed. Enter the number of rings and press [YES].
6. 'Roving Dial' will be displayed. Use [◄] or [►] to enable or disable the roving dial. Press [YES].
7. 'Modem Speed' will be displayed. DO NOT ALTER. Press [YES].





8. 'Prefix Tel No' will be displayed. Enter any prefix number if required and press [YES].
9. 'ARMPC Tel No' will be displayed. If 'Automatic Remote Maintenance' is being used, enter the PC modem number here and press [YES].
10. 'Program PCs' will be displayed. Select the PC number and press [YES]. Enter the modem number and press [YES].
11. 'Signal Alarms' will be displayed. Use [◄] or [►] to enable or disable the signalling events. Repeat for 'Signal Faults', 'Signal Set/Unset' and 'Signal Access Control'. Press [NO] to exit the 'Program PCs' sub-menu.
12. 'UDL Password' will be displayed. Enter the software password if required. press [YES].
13. 'Redials' will be displayed. Enter the number of redials and press [YES], the Engineer menu will be displayed.



4.22 Program ARC / SMS?

A PSTN modem (Digi 1200) or GSM modem (Digi-GSM) can be connected to the Enforcer 32-WE. The PSTN will signal Fast Format or SMS, and the GSM will signal SMS only.

4.22.1 Program ARC/SMS Calls

Enabling the ARC/SMS will trigger the Enforcer 32-WE to look for a modem. Up to 4 Alarm Receiving Centre (ARC) Numbers can be programmed and each number may be active or inactive.

Formats:

[000] Fast Format 4.8.1. **[001]** Fast Format 6.8.1. **[002]** Fast Format 4.16.1.

[003] Fast Format 6.16.1. **[004]** RS232 Tx. **[128]** SIA Level 1. **[129]** SIA 3.

[130] Contact ID. **[133]** SMS Message. **[134]** SMS-UBS.

A maximum of 4 ARCs may be programmed to signal Fast Format. 2 telephone numbers can be programmed for each of the ARCs.

1 mobile number can be programmed for SMS.

NOTE: There is a "ARC/SMS" number that is defaulted to the Vodafone Bureau number and must not be deleted.

If signalling to an ARC, an account code will need to be entered.

Channels:

If signalling to an ARC, the Digi Channels will need to be selected (1-8). These can be programmed in the 'Programming Digi Channels' function.

If signalling using SMS, the event types must be programmed. Refer to Appendix E, page 54 for a full list of the event types. Most common event type scenarios are as follows:

Basic SMS: Content types: 6 and 28 for Area A only.

Basic SMS with special unsets: Content types: 3, 6 and 28 for Area A only.

Full SMS: Content types: 1,6,12,27, and 28 for Area A only.

Basic CID or SIA: Content types: 6,7,8,13,28 and 30 for all used areas.

Full CID or SIA: Content types: 1,12,6,7,8,13,28 and 30 for all used areas.

Extended CID or SIA: Content types: 1,12,5,7,8,13,,25, 28 and 30 for all used areas.

NOTE: Do not use content type 10 when using SMS.

Redials: Select the number of redials that are required [0]-[15].

Time Out: Select the time that the Enforcer 32-WE will wait for a reply.

Low Battery Report: Enables or disables low battery reporting.

Test Calls: If 'Time of Day' is selected, then the time will need to be entered when a test call is required.

NOTE 1: Inform the user that Signalling and SMS costs will incur and they should contact their network provider if they have any questions.

NOTE 2: The more content types enabled, and the more areas enabled, the more costs will incur.

NOTE 3: If a Digi-GSM is installed (opposed to a Digi-1200), then the communication formats that can only be used are: Fast Format, SMS message and Contact ID. The string "1st ARC/SMSCI 07785499993" will not be displayed either. If this is displayed, the Digi GSM is not connected to the Enforcer 32-WE.

NOTE 4: To add a pause when programming a telephone number, press [A] until a comma is displayed.

4.22.2 Programming Digi Channels

The communication protocol 'Fast Format type 4.8.1' is commonly used for BSIA Fast Format signalling. The channels for Fast Format can be individually programmed in this function. Each channel uses a programmable output number (see Appendix D, page: 51)

NOTE: The communicator "status channel" (channel 0) is used for low voltage and test calls.

4.22.3 Advanced SMS Details

This function is used to enter an 'Account Reference' if required when using SMS messaging.

There is a 'Manufacturer's Access' area that can be used to change the 'Castle Host Computer' (CHC) number. To have this access please contact customer support.

4.22.4 Prefix Number

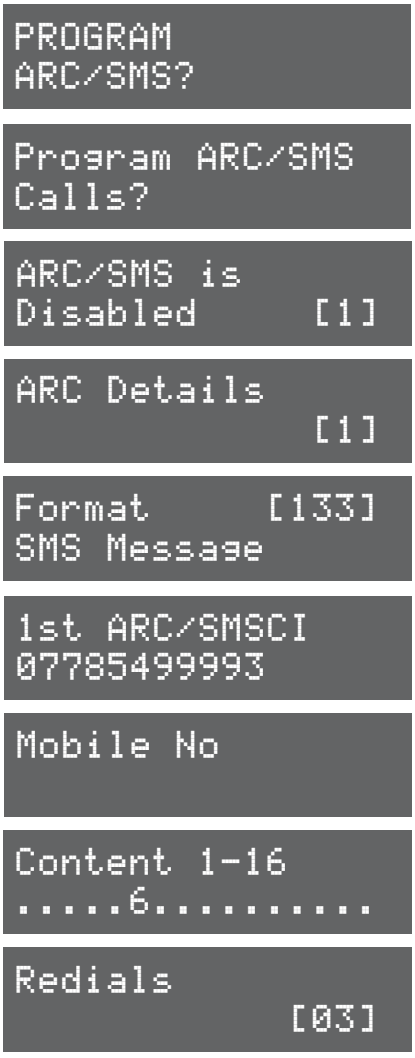
The prefix telephone number is an extra digit required to reach the Enforcer 32-WE if needed, For example, dial 9 to get an 'outside' line.

4.22.5 3 Way Calling

For future use.

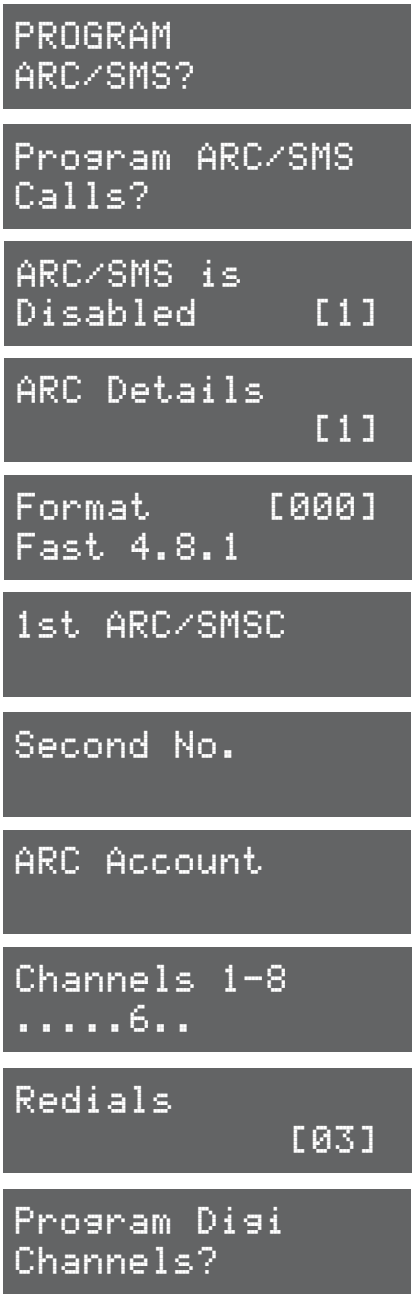
Program ARC/SMS: SMS Programming

1. Press [B] or [NO] to scroll to 'PROGRAM ARC/SMS'. Press [YES].
2. 'Program ARC/SMS Calls will be displayed. Press [YES] to program the SMS numbers and event types.
3. 'ARC/SMS is' will be displayed. Use [◄] or [►] to enable or disable signalling and press [YES].
4. 'ARC Details' will be displayed. Select the ARC account to be programmed (1-4) and press [YES].
5. 'Active' will be displayed. Use [◄] or [►] to enable or disable the ARC number and press [YES].
6. 'Format' will be displayed. Enter [133] for SMS messaging and press [YES].
7. '1st ARC/SMS' will be displayed (only if using a Digi-1200 PSTN modem). DO NOT DELETE. Press [YES].
8. 'Mobile Number' will be displayed. Enter the mobile number that receive all signalling events and press [YES].
9. 'Valid Area's' will be displayed. Select the areas that the mobile number will be applicable to and press [YES].
10. 'Content' will be displayed. Select the content types that will be signaled and press [YES]. Repeat for content types 17-32 and press [YES].
11. 'Redials' will be displayed. Enter the number of redials required if the number programmed is not answered and press [YES].
12. 'Time Out' will be displayed. Enter the time and press [YES].
13. 'ARC Details' will be displayed and another number can be programmed if required. Press [NO] to return to the sub-menu. If a pre fix number is required, keep pressing [NO] until 'Prefix Tel No.' is displayed and enter the number and press [YES].



Program ARC/SMS: Fast Format Programming

1. Press [B] or [NO] to scroll to 'PROGRAM ARC/SMS'. Press [YES].
2. 'Program ARC/SMS Calls will be displayed. Press [YES] to program the SMS numbers and event types.
3. 'ARC/SMS is' will be displayed. Use [◄] or [►] to enable or disable signalling and press [YES].
4. 'ARC Details' will be displayed. Select the ARC account to be programmed (1-4) and press [YES].
5. 'Active' will be displayed. Use [◄] or [►] to enable or disable the ARC number and press [YES].
6. 'Format' will be displayed. Enter [000] for FAST FORMAT and press [YES].
7. '1st ARC/SMS' will be displayed. Enter the primary ARC number and press [YES].
8. Second Number' will be displayed. Enter the backup number if required and press [YES].
9. 'ARC Account' will be displayed. Enter the account code that the ARC has given and press [YES].
10. 'Channels 1-8' will be displayed. Select the channels that will be required to be signaled and press [YES]. Repeat for restores and press [YES].
11. 'Redials' will be displayed. Enter the number of redials required if the number programmed is not answered and press [YES].
12. 'Time Out' will be displayed. Enter the time and press [YES].
13. 'Low Battery Report' will be displayed. Use [◄] or [►] to enable or disable the ARC number and press [YES].
14. 'Test Calls' will be displayed. Use [◄] or [►] to enable or disable and press [YES].
15. 'ARC Details' will be displayed and another number can be programmed if required. Press [NO] to return to the sub-menu.
16. Press [NO] again and 'Program Digi Channels' will be displayed. Press [YES] to program the digi channels for signaling Fast Format. Refer to Appendix D, page 51 for the output types. Press [NO] to return to the sub-menu.



4.23 Dial Out Menu

The Dial Out Menu can be used to dial to a remote PC (rather than the PC dialling the control panel). The modem telephone numbers can be programmed in 'SET UP DOWNLOADING' – see page: 28. The following actions can be performed: Connect to PC, Test Dial, Arm Service (The ARM software must be used for this), Data from PC, Data to PC, Diagnostics and Commissions.

4.23.1 Select PC to dial

In the Enforcer 32-WE function 'Set Up Downloading', the PC number of where the UDL software is installed is programmed. To dial this number, so the Enforcer 32-WE connects to the software, use this function.

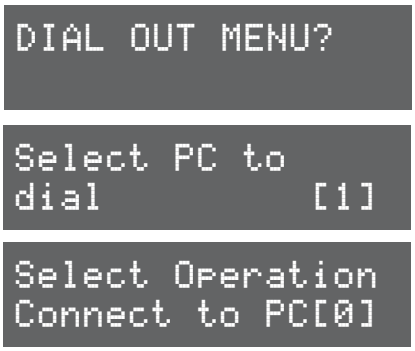
4.23.2 Select Operation

The following operations are available when dialing to the software:

[0] Connect to PC. **[1]** Test Dial. **[2]** ARM Service**. [3]** Data from PC**. [4]** Data to PC.
[5] Diagnostics **[6]** Commissioning.

Dial Out Menu Programming:

1. Press [B] or [NO] to scroll to 'DIAL OUT MENU'. Press [YES].
2. 'Select PC to dial' will be displayed. Enter the PC number to dial out to and press [YES].
3. 'Select Operation' will be displayed. Use [◄] or [►] to select the operation and press [YES] the PC will be dialed.
4. Press [NO] to return to the Engineer menu.



4.24 Clean Start

It is recommended that a factory default (Clean Start) is performed after initial power up to ensure that the correct defaults are applied. Please see page: 44 for a list of all defaults for each code.

4.24.1 Clear Wireless Data

If this function is not accepted, then all wireless inputs, wireless external sounders will be still present on the Enforcer 32-WE.

4.24.2 Clear Codes

If this function is not accepted, then all codes, tags and keyfobs will be still present on the Enforcer 32-WE.

4.24.3 Clear Logs

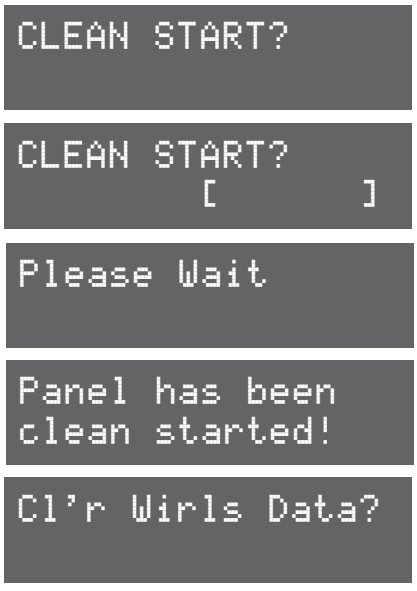
If this function is not accepted, then all event logs will be still present on the Enforcer 32-WE.

NOTE: If everything is defaulted, the system memory will also be restored to factory defaults except the following:

- Keypad address '0' remains enabled at all times & the keypad in use remains enabled
- Additional keypads connected will keep the area information

Clean Start Programming

1. Press [B] or [NO] keys to scroll to 'CLEAN START'. Press [YES].
2. a) Enter the default code **2000** for Ungraded defaults
   3. b) Enter the default code **2020** for PD6662 EN Grade 2 defaults.
4. 'CLEAR WIRELESS DATA' will be displayed. To delete all wireless data (any inputs and bells that are learned) press [YES], or press [NO] to keep the wireless data.
5. 'CLEAR CODES' will be displayed. To delete/default all user code, tag and keyfob data, press [YES], or press [NO] to keep the codes that are programmed.
6. 'CLEAR LOGS' will be displayed. To delete all event log data press [YES], or press [NO] to keep the event log data.



5. Specification and Warranty

5.1 Technical Specification

Enforcer 32-WE Mains Inputs	
European rated voltage	230V AC -15/+10%
European rated current	83mA
Capable operating voltage	90 - 264V AC
Current	22 - 75 mA
Rated Frequency	50 / 60Hz
Input Fuse Rating	T 2A (cannot replace)
PSU	Type A
Radio Frequency	868MHz, FM Transceiver Narrow Band
Enforcer 32-WE Battery	
Output instant voltage	12.71V (with no mains and battery fully charged)
Peak to peak ripple voltage	10mVpk
Battery low voltage cut off value	8.5V
Type	NiMH 8 cell 2200mAh rechargeable battery
CIE current when operating on battery backup	90mA
Environment	
Physical Dims	220 x 160 x 50mm
Weight	1025g
Operating Temp	-10°C to +40°C
Nominal Temp	-10°C to +50°C
Storage Temp	-20°C to +60°C
I/O Board (If Connected)	
Inputs	2 Wired (DEOL, SEOL)
Output Voltage	13.2 VDC (nominal)
Max Current for PGM Output	70mA
SAB Outputs	250mA Continuous Load
Bus Fuse	F500mA 250V Bus Fuse
Aux Fuse	F500mA 250V Aux Fuse
Systems Analysis: Inputs (Max 66)	
On Board	32 Wireless
I/O Board	2 Wired
Input Modules	4 Wired: EURO-ZEM8, EURO-ZEM8+ or EURO-ZEM8+PSU
Systems Analysis: Outputs (Max 38)	
I/O Board	3 Wired
Keypads/Readers	3 Wired: EUR-064, EUR-107
Input Module	16 Wired: EURO-ZEM8+
Output Module	1 Wired: EURO-OEM8R8T or EURO-OEM16R+PSU
2 x Fuses	F500mA 250V
System Analysis: Additional Devices	
Keypads	Up to 3
Readers	Up to 3
Bell Boxes	2

5.2 Product Information

For electrical products sold within the European Community. At the end of the electrical products useful life, it should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice in your country. When disposing of the product the batteries must be removed and disposed of separately in accordance with the local regulations

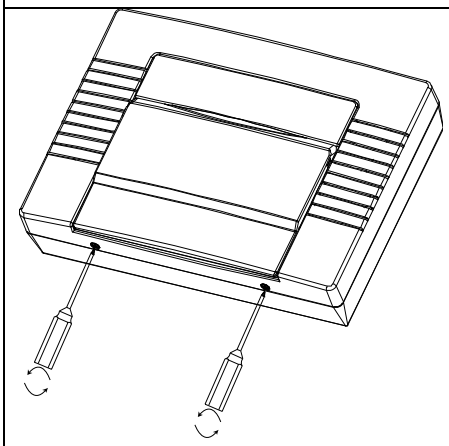
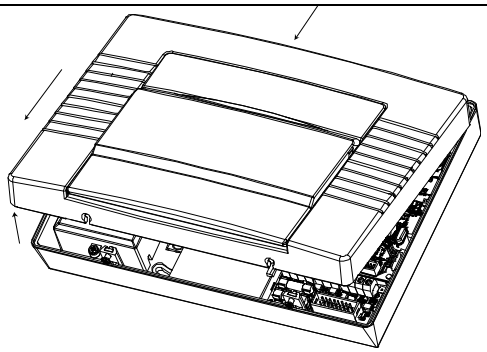
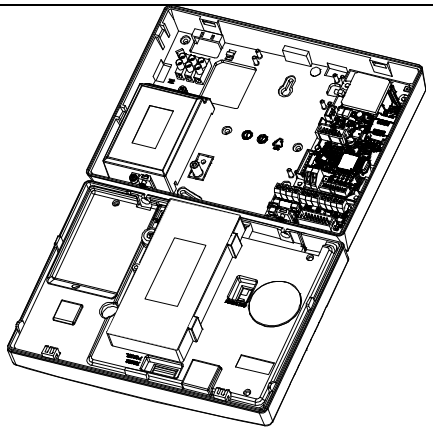
5.3 Warranty

This product is sold subject to our standard warranty against defects in workmanship for a period of two years. In the interest of continuing improvement of quality, customer care and design, Pyronix Ltd reserve the right to amend specifications without giving prior notice.

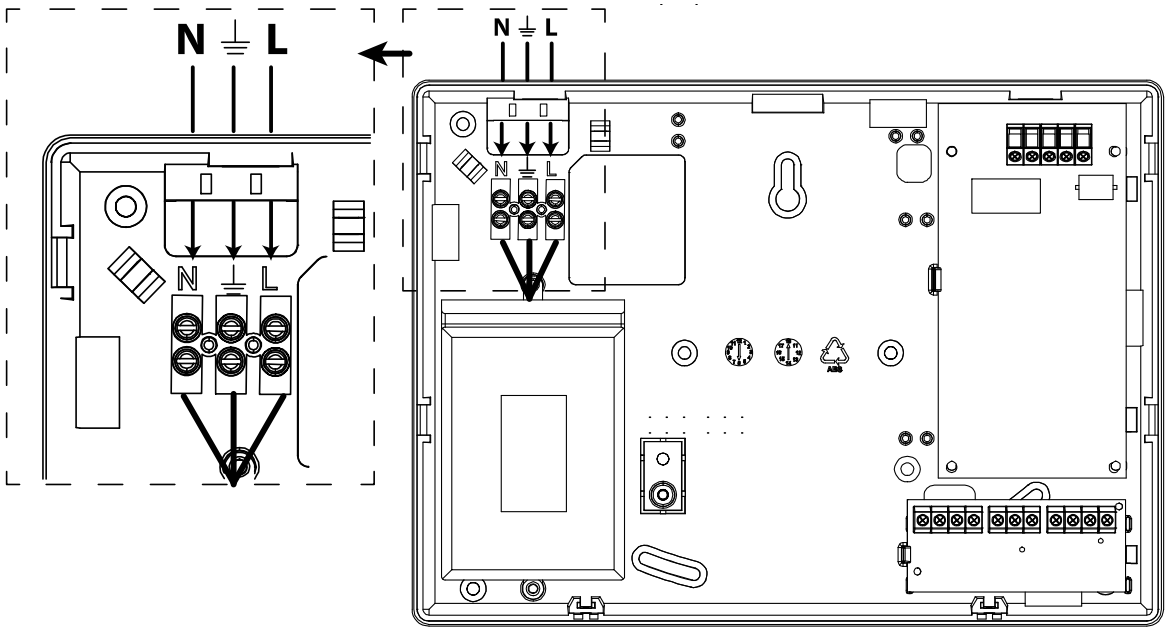
6. Installation Guide

NOTE 1: It is recommended that the Engineer menu is accessed prior to opening a powered Enforcer 32-WE.

NOTE 2: If any new peripheral is installed (i.e. Modem, I/O board, Expander) it is recommended that the Enforcer 32-WE is powered down (mains and battery).

1. Slightly unscrew the two screws located at the bottom. **NOTE:** Do not fully unscrew at these can be used as a 'hanger' to the rear casing as shown in Step 3.	**2.** Unhinge the Enforcer 32-WE from the top and pull down to disconnect. **NOTE:** Take extra care when removing the front of the Enforcer 32-WE as modems, I/O boards etc may be connected to the front.	**3.** Hang the front of the Enforcer 32-WE on the opening screws at the bottom if required. Shown below.
		

6.1 Mains and Earth Wiring



It is important that the electrical earth connection is connected when connecting the 240V mains supply to the Enforcer.

NOTE 1: Do not locate the mains cables next to internal cabling.

NOTE 2: Ensure that the Enforcer 32-WE is not mounted on any metal surfaces.

NOTE 3: That the mains cables should not be internally 'looped' as shown. This may interfere with the wireless antenna's. Where possible it is recommended that all mains cables should be installed through the area nearest the mains terminals as shown above.

NOTE 4: If cable management is an issue, a spacer is available: ENF/SPACER-WE

6.2 Inside of the Enforcer 32-WE: Rear

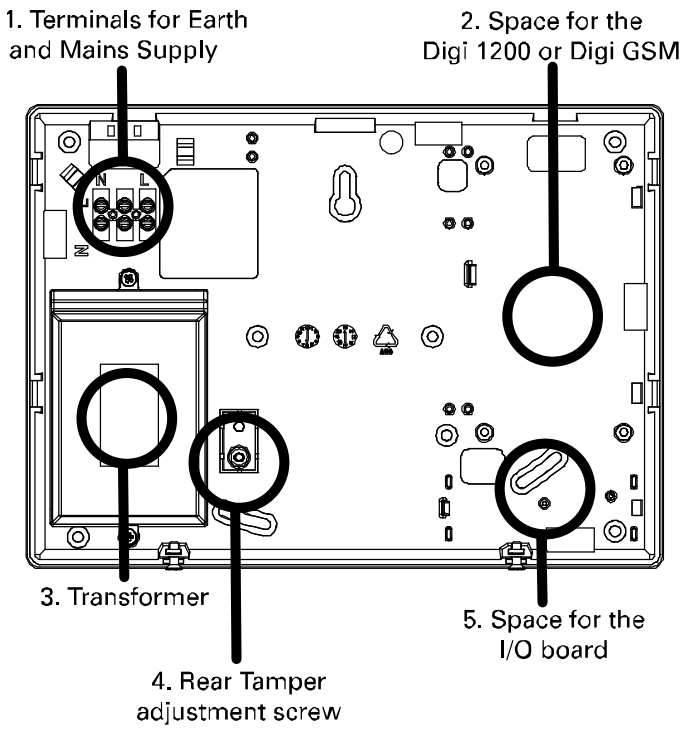
1. Terminals for Earth and Mains Supply. See page: 35.

2. If a modem is required (The DIGI-1200 or DIGI-GSM) then this space is used to install them. See page: 43.

3. The transformer is situated in a housing, this shouldn't need to be removed.

4. The rear tamper adjustment screw is used if the tamper from the front of the Enforcer 32-WE isn't sitting flush to the back plate - this may happen if the Enforcer 32-WE is installed on an uneven surface.

5. If an I/O board is installed, then this space is used to install it. See page: 39.



6.3 Inside of the Enforcer 32-WE: Front

1. RS232 connection for Up/downloading to the InSite software. See page: 38.

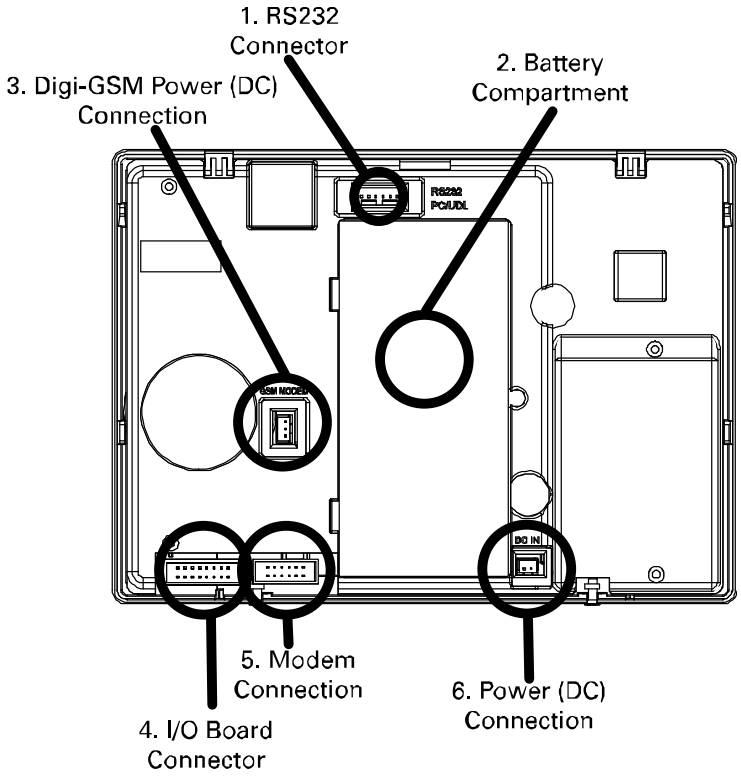
2. Where the control panel battery is located. See page: 37.

3. The power connection for a Digi-GSM if connected. See page: 43.

4. The connection for an I/O board if connected. See page: 39.

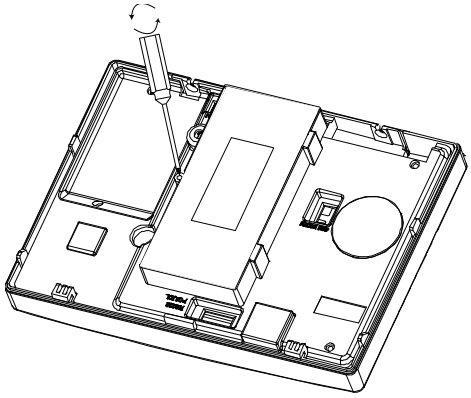
5: The connection for the modem installed (Digi-GSM or Digi-1200). See page: 43.

6: The power connection (+12V DC) for the Enforcer 32-WE.

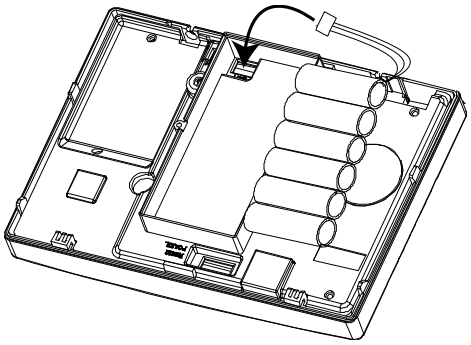


6.4 Connecting / Replacing the Control Panel Battery

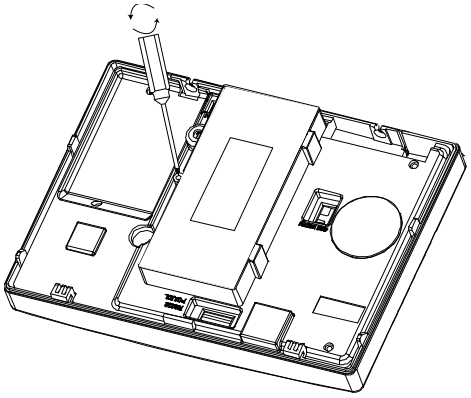
1. Unscrew the battery compartment



2. Connect the battery pack

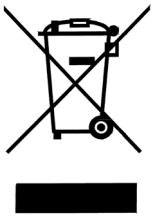


3. Close the battery compartment masking sure no battery cable is trapped underneath.



NOTE: The Enforcer 32-WE back up battery must be replaced by the manufacturer's recommendation. The part code for this battery is BATT9V6/2Ah1-WE.

The battery is NiMH 8 cell 2200mAh rechargeable.



Install the batteries in the space provided and connect the battery connector to the two pins as shown above. Reinstall the battery holder cover

Dispose of the batteries in accordance with the local regulations.

6.5 Important Installation Notes

- Ensure wiring is done to the national wiring regulations in the country where the installation is taking place. In the UK, this is BS 7671 Requirements for electrical installations; IET Wiring Regulations (17th edition). If in doubt, consult a local qualified electrician.
- Ensure that a readily accessible disconnect device incorporated in the premises installation wiring shall be provided external to the equipment with a contact separation of at least 3,0mm and connected as closely as possible to the supply.
- Ensure that the Input and Output Board (I/O Board) used to connect wired keypads, readers, inputs and outputs to the Enforcer 32-WE, and is only connected to circuits operating at SELV voltage.
- When securing external wires, ensure that means are provided in the installation to prevent the SELV or signal circuits from coming into contact with live parts of the power supply circuit. Wires should be fixed near their terminal blocks.
- The end of stranded conductor shall not be consolidated by soft soldering at places where the conductor is subjected to contact pressure.
- On completion of wiring use tie-wraps to prevent any loose wires causing a safety hazard (material of cables tie shall be rated at least HB or better).
- Cables ties and hoses shall be separate for power supply cable and SELV wirings.
- Size of protective bonding conductors: minimum section 1.5mm².

6.6 RS232 Connection / Uploading and Downloading Software

The Enforcer PC software (InSite) can be downloaded from http://www.pyronix.com/pyronix-downloads.php. To enable the Enforcer to receive upload/download commands, refer to page: 28.

6.6.1 Serial Connection (RS232)

1. Open up InSite.
2. Click on Roving Dial Customer.
3. Enter the panels' engineer code.
4. Enter the site name.
5. (This can be found in SYSTEM DISPLAYS in the panel on site).
6. Enter the Name.
7. The little green box which displays RS232 in the bottom left of the Insite screen should turn yellow when connecting and when connected switch to blue.

6.6.2 PSTN / GSM Connection

1. Open up InSite.
2. Click on Roving Dial Customer.
3. Set Dial Out Mode to MODEM.
4. Enter the site telephone number the panel is connected to.
5. Enter the panels' engineer code.
6. Enter the site name.
7. (This can be found in SYSTEM DISPLAYS in the panel on site).
8. Select whether the panel was set up for a Shared Line.
9. Enter the amount of rings the panel was set up for priming.
10. Enter the name.
11. Click dial.
12. The little green box which displays MODEM in the bottom left of the Insite screen should turn yellow when dialling and when connected switch to blue.

6.6.3 Connecting From Site to InSite

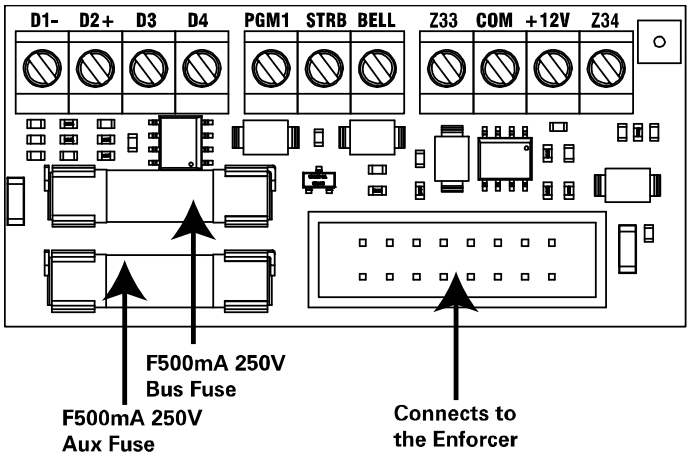
1. Open InSite on the PC.
2. Enter Engineers Menu (Default code 1111).
3. Scroll to 'DIAL OUT MENU' and press YES.
4. "Select PC to Dial" will be displayed. Select which PC (1-4) to dial and press YES.
5. "Select Operation" will be displayed. Use ◄ and ► to scroll to 'Commissioning [6]" and press YES.
6. "Calling Remote PC" will be displayed.
7. As the Enforcer sends data the display will change through "ID Check passed" and finish on "PC call ended press the YES key".
8. Press YES to complete. The screen will go back to 'DIAL OUT MENU'.

6.7 Input / Output Board

The Input/output (I/O) board contains the RS485 terminals that are used to connect additional wired keypads, readers, input expanders and output expanders .

Terminals:

D1-: RS485 0V
D2+: RS485 +12V
D3: RS485 'A' Bus
D4: RS485 'B' Bus
PGM1: Programmable Output
BELL: Bell output for a wired external sounder
STRB: Strobe output for a wired external sounder
Z33: Wired Input 33
COM: Common terminal for Z33 and Z34
+12V: +12V auxiliary supply
Z34: Wired Input 34

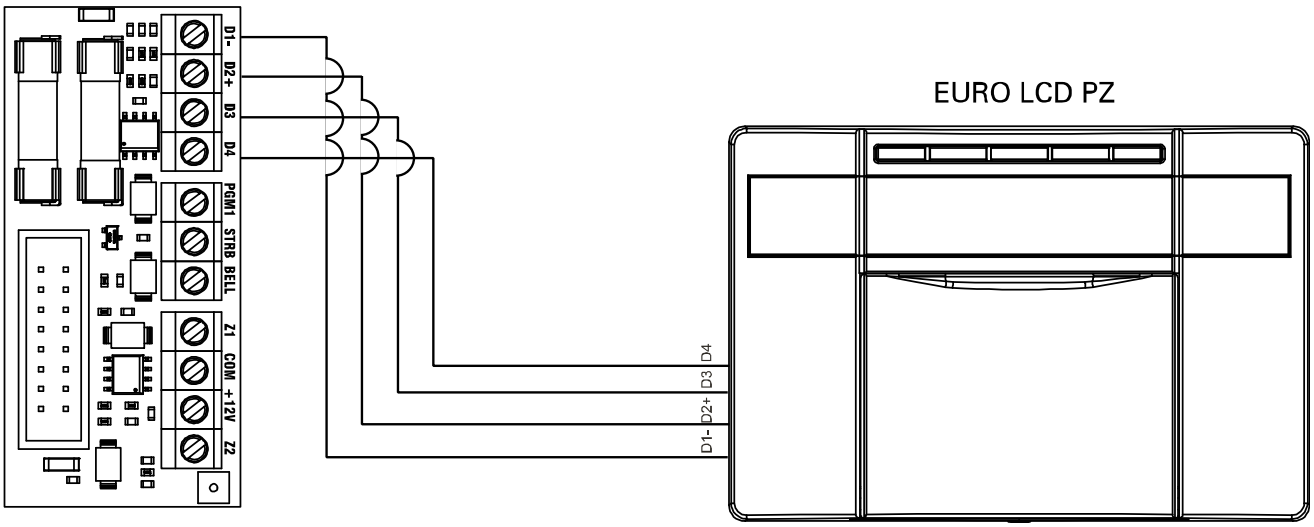


The maximum devices the I/O board can have on the RS485 bus are as follows:
4 x Input Expanders: EURO-ZEM8, EURO-ZEM8+ or EURO-ZEM8+PSU
1 x Output Expander: EURO-OEM8R8T or EURO-OEM16R+PSU
3 x Keypads/Readers (same bus): EUR-068, EUR-107 or EUR-108

6.8 Connecting Peripherals to the I/O Board

6.8.1 Connecting Keypads (EUR-064)

I/O Board

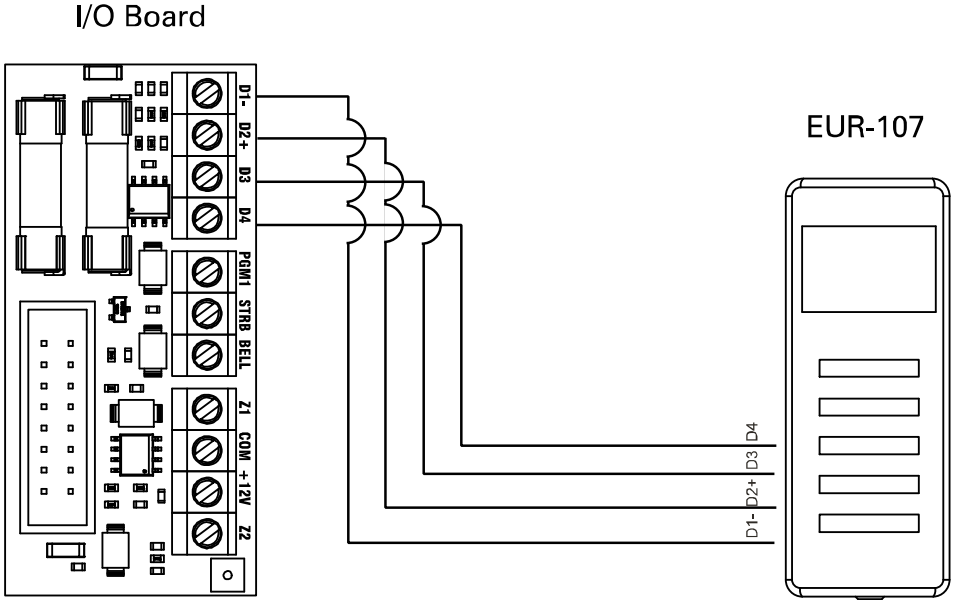


Up to 3 additional keypads can be connected to the Enforcer 32-WE. These will be addressed individually and also addressed in the Engineer function "Assign Keypads / Readers'.

Addressing at the keypad

Each keypad will also need to be addressed individually, press and hold the [D] key until 'SECURITY CODE' is displayed. Enter '2000' and select the desired address (the first keypad that is connected should be addressed as '1'. Press the [A] key to save the data and exit.

6.8.2 Connecting Internal Tag Readers (EUR-107)



Up to 3 readers can be connected to the Enforcer 32-WE. Each keypad are reader needs to be addressed as described below. These will also need assigning in the Engineer function ''Assign Keypads / Readers'.

Addressing at the Reader

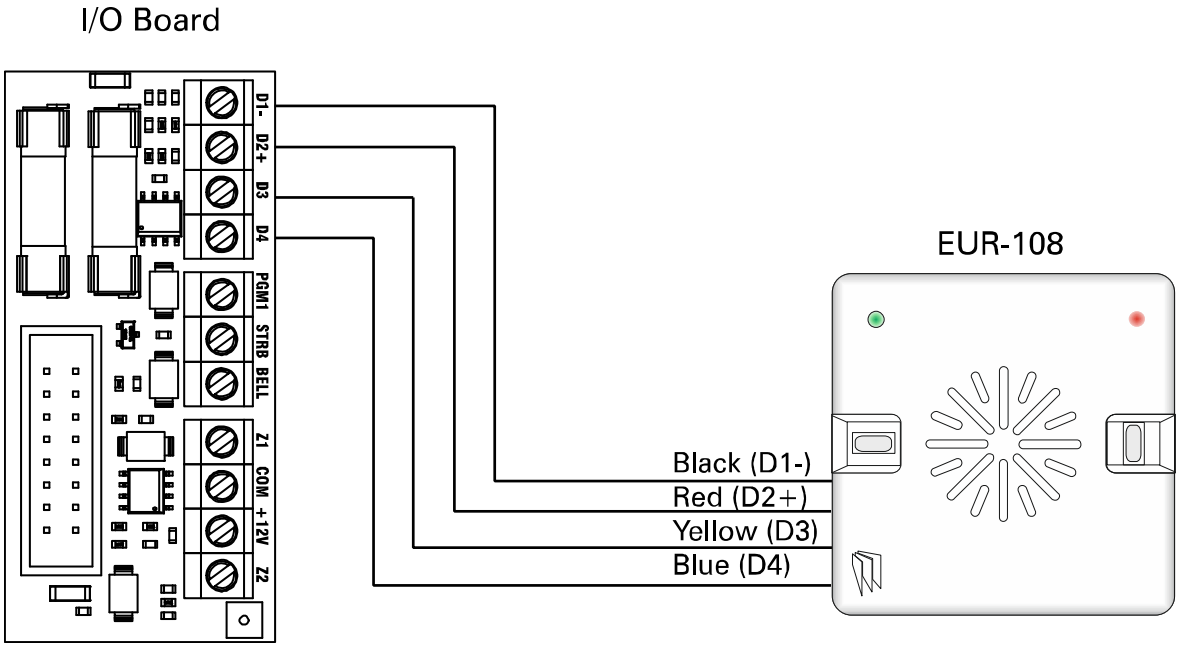
Address 1 = SWITCH 1 ON.

Address 2 = SWITCH 2 ON.

Address 3 = SWITCH 1: ON, SWITCH 2: ON.

NOTE: If using the EUR-107 as access control/entry control please refer to the peripheral instructions for connection details

6.8.3 Connecting External Tag Readers (EUR-108)



If an additional external reader is connected, this will need to be assigned in the programming, 'Assign Keypads/ Readers'. Each reader will also need to be addressed individually via connecting certain wires to ground.

Addressing at the Reader

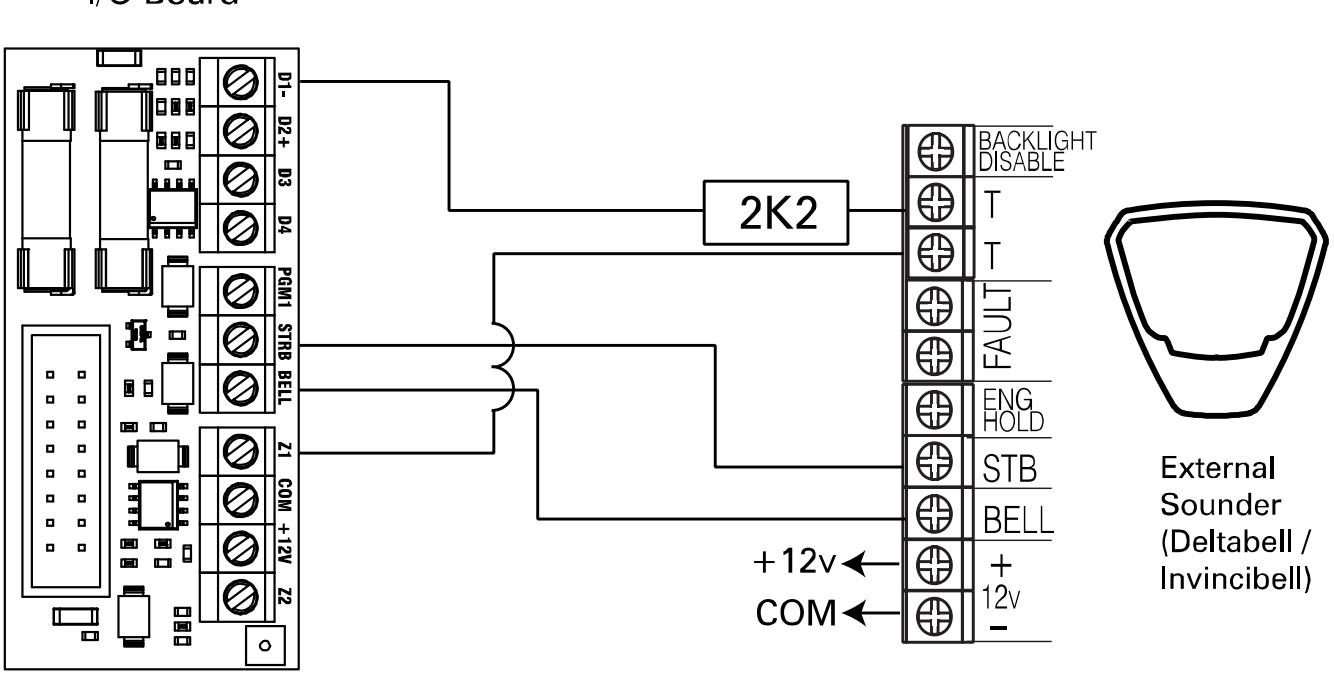
Address 1: Brown, Orange to GND

Address 2: Brown, Green to GND

Address 3: Brown to GND

NOTE: If using the EUR-108 as access control/entry control please refer to the peripheral instructions for connection details

6.8.4 Wiring a Wired External Sounder

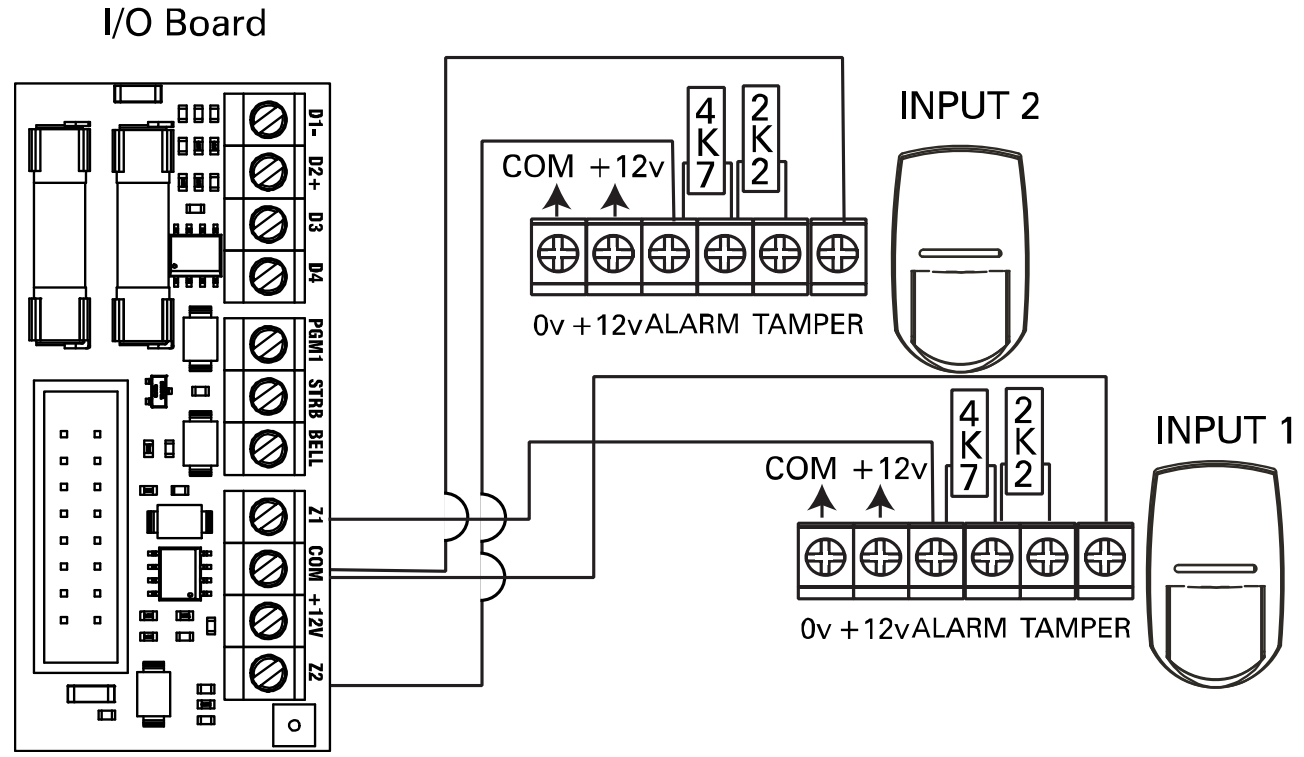


To create the bell tamper circuit, a resistor is required across 0V supply and tamper circuit of the bell box. Note that the input must be programmed as 'tamper'.

The resistor value will correspond to the value selected in 'WIRING CHOICE'.

IMPORTANT: THE BELL BOX CONNECTED WILL NEED TO BE IN SCB MODE. Unless the bell box is a Pyronix Deltabell.

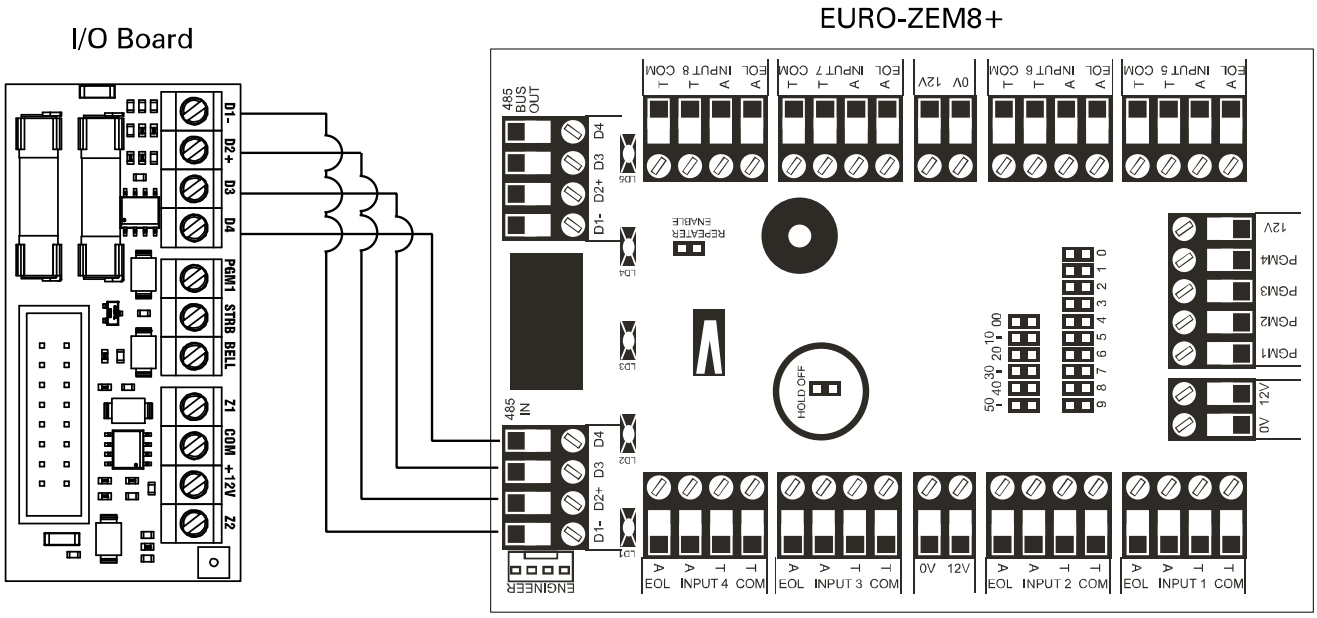
6.8.5 Wiring Wired Inputs



The End of Line value for all wired inputs is programmed in 'PROGRAM EOL. At default they are set to DEOL and the resistor values are 4K7 for Alarm and 2k2 for tamper.

6.9 Connecting an Input Expander

Up to 4 x Remote Input Expanders can be connected to the Enforcer 32-WE.



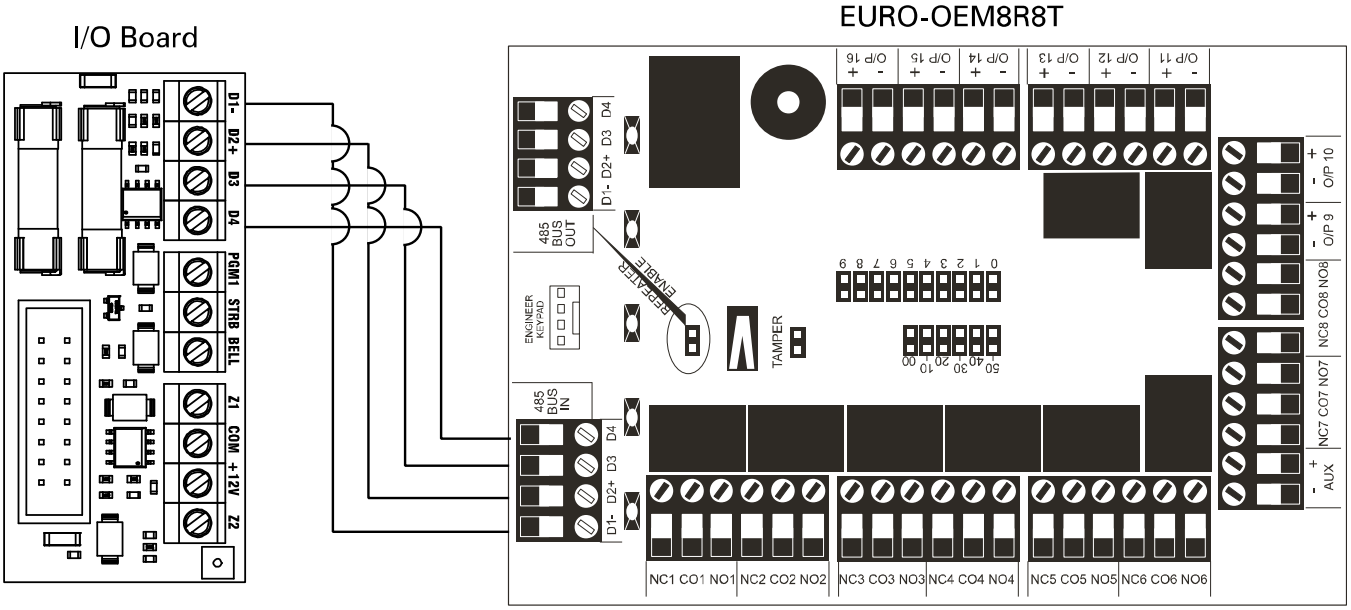
NOTE: The above shows the I/O board connected to a EURO-ZEM8+, the connections for a EURO-ZEM8 are done in the same way. NOTE: If using a EURO-ZEM8+PSU, the D2+ MUST NOT be connected.

ZEM Address 0 (Inputs 35-42), ZEM Address 1 (Inputs 43-50),

ZEM Address 2 (Inputs 51-58), ZEM Address 3 (Inputs 59-66).

6.10 Connecting an Output Expander

1 x Remote Output Expander can be connected to the Enforcer 32-WE. Each output expander allows 16 additional outputs.



NOTE: The above shows the I/O board connected to a EURO-OEM8R8T. If using a EURO-OEM16R+PSU, the D2+ MUST NOT be connected.

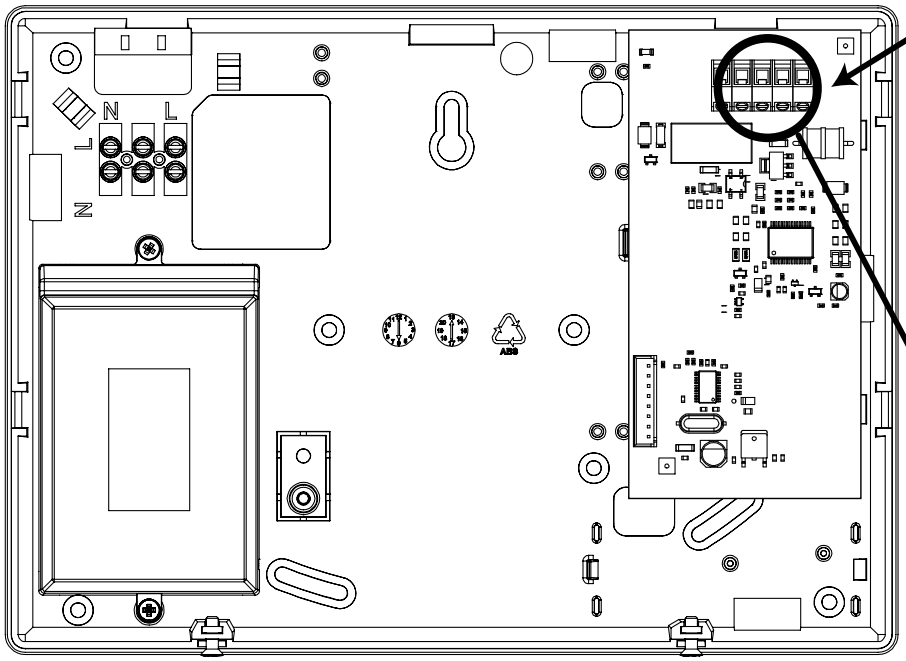
6.11 PSTN Modem

IMPORTANT NOTE: TURN OFF THE MAINS BEFORE DISCONNECTING THE PSTN MODEM

The PSTN modem card is used to enable the Enforcer 32-WE to communicate either via contact ID, Fast Format, SIA or SMS texts via a telephone line. It will also enable remote uploading/downloading.

Before making these connections, all power must be disconnected from the system.

NOTE 1: The telecom ground terminal (TE) should ALWAYS be connected to earth in order to maximise the effectiveness of the transient voltage protection on the unit.

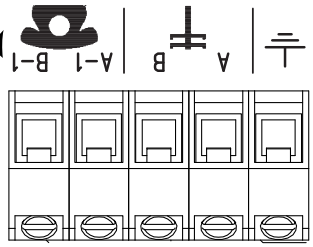


DIGI 1200 (PSTN) Location

A & B Terminals: Telephone line input for connection to analogue PSTN telephone line

A-1 & B-1 = Telephone line output for connection to other telecom equipment

⏚ = Earth connection



6.12 GSM Modem

IMPORTANT NOTE: TURN OFF THE MAINS BEFORE DISCONNECTING THE GSM MODEM

The GSM modem card is used to enable the Enforcer 32-WE to communicate either via Contact ID, Fast Format, or SMS texts via a SIM card. It will also enable remote uploading/downloading.

6.12.1 Antenna

The supplied antenna will need to be connected to the Enforcer 32-WE GSM and placed in a suitable area where the signal strength at it's maximum.

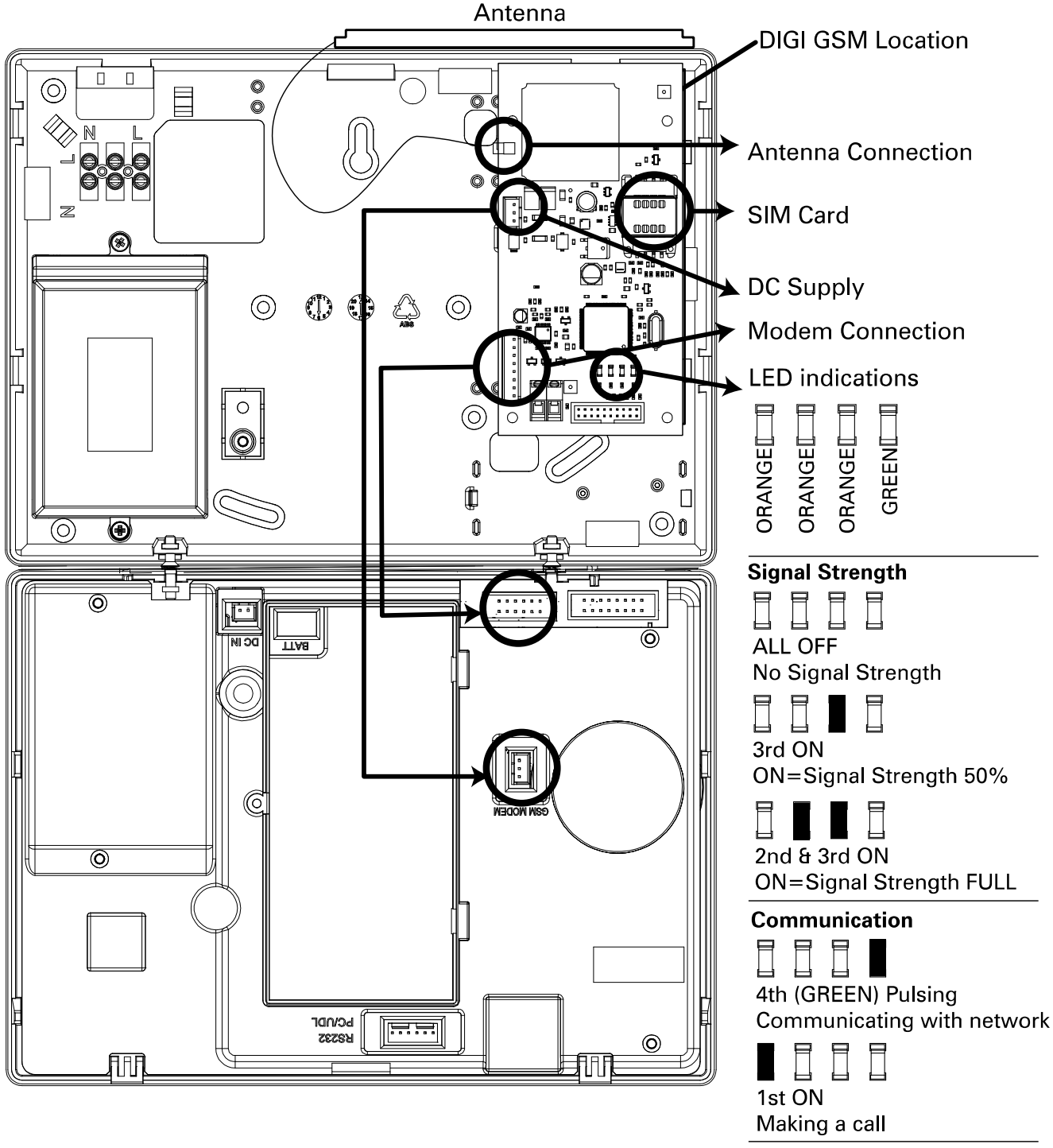
6.12.2 Digi GSM Information

NOTE: When SMS messages are sent, the GSM module uses the 'voice channel'. However, when the panel needs to be programmed remotely using the UDL software and modem, a data channel must be used. It is advisable to find out from the network provider whether or not they offer data service, as listed below:

- Some networks provide the data channel as a standard service with pay as you go and contract SIM cards.
- Some networks have to enable the data channel separately.
- Some networks use a different phone number for the data channel from the GSM number of the SIM card.
- Some networks automatically recognise the data call from the voice call.

Example: At the time of writing, "O2" uses a separate data number from the GSM number. While "T-Mobile" automatically recognises data call from voice call. "Vodafone" and "Orange" do not offer any data number or channel and therefore cannot currently be used for remote upload/downloading.

6.12.3 Digi GSM connection



NOTE: The product has been approved as supplied. If the communications module is replaced with a different model, then the certification will be void.

Appendix A. Defaults

Engineer Menu's	Clean Start 2000 (Ungraded)	Clean Start 2020 (PD6662 EN Grade 2)
SOFTWARE REVISION		
CHOOSE MODE		
EOL Range	4k7/2k2 [1]	
EOL Mode	DR [1]	
Input Response	300ms	
INSTALL ZEMs		
ZEM Address	No [0] (for all ZEM addresses)	
WIRELESS DEVICE CONTROL		
Control Inputs		
Control Bells		
Program Keyfob Buttons		
Lock [1]	Set Area [2]: Area A	
Unlock [2]	Unset Area [3]	
I [3]	Set Area [2]: Area B	
II [4]	Show Status [1]	
Lock + Unlock [5]	No Action [0]	
I + II [6]	Hold up [6]	
Lock + I [7]	No Action [0]	
Unlock + II [8]	No Action [0]	
CHANGE INPUTS		
Inputs	All inputs unused	
Input Area	A (if input programmed)	
Input Attributes		
Chime	No [0]	
Omittable	No [0]	
Double Knock	No [0]	
Normally Open	No [0]	
Confirm Group	[00]	
Input Description		
Enter Name	Input 01	
Enter Location	_	
ASSIGN KEYPADS/READERS		
Address	Address [0]: Keypad [1] Addresses [1]-[3]: Unused [0]	
Default Level	Default Level [A]	
Set Point Description		
Enter Name	Device 0	
Enter Location		
If programmed as Reader:		
Reader Is:	Set Point [0]	
If programmed as Reader, Entry Control or Access Control	Lock Open Time [005] Door Open Time [010]	
SYSTEM DISPLAYS		
Area A Text	Full Set	
Area B Text	Night Set	
Area C Text	Area C	
Area D Text	Area D	
Sign on Message	Enforcer 32-WE	
Site Name	_	
Display When Set	No [0]	
Display Alarms	No [0]	
Display Hus	No [0]	
Display Inputs	No [0]	
CHANGE TIMERS		
A, B, C, D: Entry Time	[030]	
A, B, C, D: Exit Time	[020]	

Engineer Menu's	Clean Start 2000 (Ungraded)	Clean Start 2020 (PD6662 EN Grade 2)
A, B, C, D: Siren Time	[04]	
Confirm Time	[30]	
HU Confirm Time	[08]	
Strobe Time	[00]	
Re-Arm No	[3]	
AC Signal Delay	[040]	
Settle	[005]	
Double Knock	[10]	
Pre-Alarm	[000]	[030]
Line Fault	[180]	[020]
Set Fail	[120]	[040]
Fire Siren Time	[04]	
Set Fail Warning	[00]	
Wireless Supervision Time	[24]	[2]
Wireless Jamming Time	[100]	
Service Time	[000]	
SET DATE & TIME		
Year (00-99)	[07]	
Month (1-12)	[01]	
Day (1-31)	[01]	
Hours (0-23)	[02]	
Minutes (0-59)	[52]	
DST Adjust?	No [0]	
EXIT MODES		
A Exit Mode	Timed/Final [2]	Final Door [1]
B Exit Mode	Timed [0]	
C Exit Mode	Timed [0]	
D Exit Mode	Timed [0]	
CHANGE CODES		
5 Digit PINs	No [0]	
Change Duress Codes	All codes empty	
Change Master Manager Code		
Master Manager Code	2222	
User Areas	ABCD	
User Set Options	Unset/Set [0]	
Flexi Set	Yes [1]	
User Name	_	
Change Engineer Code	1111	
VOLUME CONTROL		
A, B, C, D Entry	4	
A,C, D Exit	4	
B Exit	1	
Alarm	7	
Fire	7	
Tamper	6	
Day Alarm	6	
Chime	3	
Intelligent Set	3	
Code Stops Sound	Yes [1]	
E/E Keypads Only	No [0]	
Alert Kps Only	Yes [1]	
Silent Tech Alert	No [0]	
Use Main Sounder	Yes [1]	
ALARM RESPONSE		
Silent 1st Alarm	Never [0]	
Disable Confirm On Entry	No [0]	
Area A, B, C, D Starts At	Digi [3]	
Area A ,B, C, D Stops At	Confirm [4]	

Engineer Menu's	Clean Start 2000 (Ungraded)	Clean Start 2020 (PD6662 EN Grade 2)
Fire, Gas, HU Start At	Digi [3]	
Fire Stops At	Digi [3]	
HU Stops at	Confirm [4]	
Day Alarm Starts	Sirens Only [2]	
Day Alarm Stops	Sirens Only [2]	
CHANGE OUTPUTS		
Endstation Outputs		
BELL O/P	Siren Any [0014]	
STB O/P	Strobe Any [0016]	
PGM O/P	Not Used [0000]	
ZEM Outputs		
ZEM Address		
Output 1-4	Unused [00]	
Wireless Bells		
BELL O/P	Siren Any [0014]	
STB O/P	Strobe Any [0016]	
Output Module Outputs		
OP Mod Address		
OP Mod Installed	No [0]	
Keypad Outputs		
Address [0]-[3]		
Output 1	Unused [0000]	
Reader Outputs		
Address [1]-[3]		
Output 1	Unused [0000]	
INTELLIGENT SET		
Intelligent	No [0]	
SITE OPTIONS		
Set With Fault	Yes [1]	
Set With Tamper+	Yes [1]	No [0]
Set with ATS Fault	Yes [1]	No [0]
Set Fail = Alarm	Yes [1]	
Do Bat Load Test	No [0]	
Strb/Sqwk At Set	None [0]	
Autoset Force	No [0]	
Restrict PIN Use	No [1]	Yes [1]
Simple Set	No [0]	
2 Key HU	Both [2]	None [3]
Tag Opens Doors	No [0]	
Fire Key Enable	No [0]	
Set with Poll Fault	Yes [0]	No [0]
Fob Unset Entry	No [0]	
Wireless Bell Supervision	No [0]	Yes [1]
Download if Set	No [0]	
ENGINEER RESTORE OPTIONS		
Engineer Restore Intruder	No [0]	
Engineer Restore Hold Up	No [0]	
Engineer Restore Tamper	No [0]	Yes [1]
Engineer Restore Soak	No [0]	
Engineer Restore Confirmed	No [0]	Yes [1]
Engineer Restore Faults	No [0]	
Anti-Code Restore	No [0]	
REVIEW LOGS		
ENGINEER TESTS		
DIAGNOSTICS		
SET UP DOWNLOADING		
Download By	None [0]	
PROGRAM ARC/SMS		

Engineer Menu's	Clean Start 2000 (Ungraded)	Clean Start 2020 (PD6662 EN Grade 2)
Program ARC/SMS Calls		
ARC/SMS is	Disabled [1]	
Active	No [0]	
Format	SMS Message [133] *(PSTN ONLY)*	
1st ARC/SMSC	07785499993	
Mobile Number		
Valid Areas	ABCD	
Content 1-16	6	
Content 17-32	.	
Redials	[03]	
Time Out	[45]	
Program Digi Channels		
Digi Channel 1	Fire [0001]	
Digi Channel 2	HU Device Any [0009]	
Digi Channel 3	Unconfirmed Any [0018]	
Digi Channel 4	Final Set Any [0022]	
Digi Channel 5	Tamper Any [0007]	
Digi Channel 6	Omit Rearm Any [0017]	
Digi Channel 7	Confirmed Any [0006]	
Digi Channel 8	Mains Fail [0052]	
Digi Channel 9	Global Fault 2 [0056]	Global Fault 1 [0055]
Digi Channel 10	Test ATS [0064]	
Digi Channel 11-16	Not Used [0000]	
Advanced SMS Details		
Account Ref	_	
3 Way Calling	No [0]	
DIAL OUT MENU		
Select PC to dial	[1]	
Select Operation	Connect to PC [0]	
CLEAN START		
EXIT ENGINEER MENU		

Appendix B. Input Types

Number & Type		Operation
00	**Unused**	*Factory default.* Input is programmed out of operation.
01	**Fire**	Active at all times. Audible response: Full (differentiated). Communicator: 'Fire' signal.
02	**Gas**	Active at all times. Audible Response: Full (differentiated) Communicator: 'Gas' signal.
03	**HU#**	Active at all times. Audible Response: Full (differentiated) Communicator: 'Hold Up' and 'Input HU' signals.
04	**Silent HU#**	Active at all times. Audible Response: None Communicator: 'Hold Up' and 'Input HU' signals.
05	**Tamper**	When unset: Audible Response: Internal only Communicator: 'Tamper' signal. When set: Audible Response: Full (differentiated) Communicator: 'Tamper' and 'Unconfirmed' signals.
06	**Intruder**	Active when set. Audible Response: Full Communicator: 'Intruder' and 'Unconfirmed' signals.
07	**Final Exit (FX)#**	Active when set – initiates entry timer if system not unset before entry time expires: Audible Response: Full. Communicator: 'Intruder' and 'Unconfirmed' signals.
08	**Entry Route (ER)**	Active when set, except during entry time. Audible Response: Full. Communicator: 'Intruder' and 'Unconfirmed' signals.
09	**ER (Part FX)**	When fully set (A), acts as Entry route input, as above. When part set (B,C,D), acts as Final Exit input, as above.
10	**FX (Part ER)**	When fully set (A), acts as Final Exit input, as above. When part set (B,C,D), acts as Entry route input, as above.
11	**PTS**	Active during exit time to complete Setting procedure No audible or communicator response. *Note: May be used to act as 'doorbell' by use of 'chime' attribute.*
13	**Day Alarm**	When armed: Audible Response: Full; Communicator: 'Instant' signals. When disarmed: Audible Response: Programmable; Communicator: '24hr Alarm' signal (if programmed in Alarm Responses menu).
16	**Fault**	When armed: Audible Response: Full; Communicator: 'Instant' signals. When disarmed: Audible Response: Programmable; Communicator: '24hr Alarm' signal (if programmed in Alarm Responses menu).
20	**Keyswitch Latched***	Accepts input from keyswitch (or equivalent) to Set/Unset the Set modes assigned to it. Setting includes normal exit time, etc. Requires latching action switch.
21	**Entry Shock Input**	Active when system set. Works in conjunction with EE input type for detection of forced entry. See page 49 for details.
23	**Keyswitch Pulsed***	Accepts input from keyswitch (or equivalent) to Set/Unset the Set modes assigned to it. Requires momentary action switch to toggle set/unset state.
32	**Flood**	This input type will work as a 24hr input, any inputs that are programmed for Flood will activate the external siren.
44	**ATE Line Fail**	Once a ATE line fail has been recognised the input will open.

*The use of these inputs will make the system unable to comply with EN50131-1 Grade 2

#These input types cannot be bypassed.

Entry Shock Input Type (21)

This input type is designed specifically for use with systems installed using BS8243 option 6.4.5.

This input type is always used in conjunction with an Entry/Exit input. The Entry/Exit input is a door contact on the initial entry door, and the Entry Shock input is a **non-latching** shock sensor fitted to the door frame in the vicinity of the lock. If the initial entry door is subjected to gross attack and forced open, then at the expiry of entry time only one further intruder input need to be activated to signal a sequentially confirmed alarm – the Entry Shock input counts as the first to alarm. The Entry/Exit door contact must be opened with 10 seconds of the shock detector triggering for the Entry Shock response to apply. Triggering the Entry Shock input in isolation will NOT generate an alarm of any kind.

Appendix C. Timers

Timer	Function	Range
Entry Time	Entry time for each area. (if programmed as the input type 'Final Exit')	0 – 255 seconds
Exit Time	Exit time for each area.	0 – 255 seconds
Siren Time	Cut off time for external sounder. Separate for each area.	2 – 15 minutes
Confirm Time	Time period during which a second activation must occur to qualify as 'sequentially confirmed' alarm. ***NOTE: BS8243 specifies a confirm time between 30 and 60 minutes.*** *This also can be used in conjunction with testing an omit signal.*	1 – 99 minutes
HU Confirm Time	Time period during which a second activation on a hold alarm must occur to qualify as 'sequentially confirmed' alarm. ***NOTE: BS8243 specifies a confirm time between 8 and 20 hours.*** *This also can be used in conjunction with testing an omit signal.*	8 – 20 hours
Strobe Time	Time strobe output remains live after siren time ends. ***'99' means endless.***	0 – 99 minutes
Re-Arm No.	Number of times system re-arms after bell time ends. ***NOTE: Re-arm number applies to each area, and does not affect emergency alarms. '9' means always re-arm.***	0 – 9
AC Signal Delay	Time delay before mains failure or technical alarm notified. ***NOTE: Setting '250' = never alarms. System change-over to battery supply and associated visual alert indication is always immediate.*** *Some ATE imposes a randomised delay in notifying a mains fail. This should be taken into account when setting this timer.*	0 – 250 minutes
Settle	Time between final exit input closing, and system setting.	0 - 255 seconds
Double Knock	Length of filter period applied to inputs with 'Double Knock' attribute.	0 – 75 seconds
Pre-Alarm	Delays 'Intruder' output signals if entry time has started. ***Pre-alarm time must be set for at least 30 seconds to comply with PD6662***	0 – 255 seconds
Line Fault	Duration of Telecom Line Fault before 'Line Fault' alarm triggered. *NOTE: In the case of devices connected via the ATE pins, this time is additional to that already applied by the ATE.*	0 – 250 seconds
Set Fail	Time after which 'Set Fail' operation will be invoked if exit procedure not completed.	0 – 255 seconds
Fire Siren Time	Cut off time for fire alarm. '99' means endless.	1 – 99 minutes
Set Fail Warning	Time for which a set fail warning will be present.	0 – 99 seconds
Wireless Supervision Time	This option is only applicable if wireless devices are installed. It is the time window before a wireless supervision fault will be signalled. For example: if the time is set for 2 hours, then any device that doesn't communicate with the wireless expander within that period will cause a supervision fault. This must be programmed to 2 hours or less for compliance to EN50131.	0-99 hours
Wireless Jamming Time	This option is only applicable if wireless devices are installed. It is the time window that if a wireless device had its signal 'blocked' a fault would display. For example, if the time is set to 30 seconds, then if a wireless device is 'jammed' longer than 30 seconds a fault will be displayed. This must be programmed to 30 seconds or less (but not zero) for compliance to EN50131.	0-100 seconds
Service Time	This is a timer that can be set in days, and will display a message to the user warning that a service is due. An engineer code will clear the message.	367 days

Appendix D. Output Types

Type		Active	Restore
0000	**Not Used**	(permanently off)	
0001	**Fire**	At alarm	When a valid code is entered
0002	**Hold Up Any**	At a HU or Duress alarm *(This includes keypad HU)*	When a valid code is entered
0003	**Intruder Any**	At alarm, while system is disarmed	At first valid code entry and at end of confirm time.
0005	**Misoperation Any (Abort)**	When system is silenced after any 'intruder' output is triggered	After 2 minutes
0006	**Confirmed Any**	After two 'intruder' alarm activations	At next code entry
0007	**Tamper Any**	Any tamper alarm	At code entry to silence And at end of confirm time.
0008	**Duress**	At a Duress alarm (i.e. from a keypad)	When a valid code is entered
0009	**HU Device Any**	At alarm on a HU input only	When a valid code is entered
0010	**Gas**	At alarm	When a valid code is entered
0011	**Set Fail**	Pre-set time after start of exit time, if exit procedure is not complete	At code entry to rearm
0012	**Entry Deviation**	When deviation from entry route occurs, during entry time	At code entry to unset
0013	**Secure Intruder Any**	At alarm, after exit time started, until unset	At first valid code entry and at end of confirm time.
0014	**Siren Any**	When alarm live	When alarm silenced or when siren timer expires
0016	**Strobe Any**	When alarm live	When alarm silenced or when strobe timer expires
0017	**Omit Rearm Any**	Input omitted if active (or in alarm condition) at the end of confirmation time.	When system disarmed
0018	**Unconfirmed Any**	Any intruder or Tamper alarm	At code entry to silence
0021	**Exit Starts Any**	When exit time starts to set FIRST area	At code entry to unset LAST area
0022	**Final Set Any**	When FIRST area is set	At code entry to unset LAST area
0023	**Strobe Set Fail**	Works similar to output 016, but also fires if the set fail timer expires.	
0025	**Keyswitch unset**	This output turns on for 5 seconds when the system is disarmed via a keyswitch input (pulsed or latched)	
0026	**Set with Omit**	Activates when inputs are omitted on setting	
0028	**Power Fault**	Active during low volts and battery faults*. Restores at code entry after fault cleared.	
0029	**Confirmed Intruder Any**	When more than one intruder alarm activates	At next code entry
0030	**Confirmed Hold Up Any**	When more than one confirmed hold up activates	At next code entry
0033	**Entry/Exit**	Live during any entry or exit time	

Type		Active	Restore
0034	**Lights**	When exit or entry timer starts	20 seconds after set/unset procedure completed
0035	**Follow Input**	When input triggers	Dependent upon programming
0037	**Restore 1**	At code entry to set	After 3 seconds
0038	**Restore 2**	At code entry to set	When unset
		Re-triggers whenever an additional area is set	
0039	**PIR Latch 1**	When set (and in Walk Test)	At alarm, or when unset
0040	**PIR Latch 2**	This is the inverse polarity to PIR Latch 1	
0041	**Mains Good**	Output showing the mains is healthy	
0042	**Detr Indn Enable**	This output activates during walk test and also when a code is entered to view indications – staying activated for the time for which the indications are viewed.	
0043	**Follow Test**	New output for alternative bell test by activating SAB	
0044	**Off During Test**	New output for alternative bell test by activating SAB	
0048	**Detr Walk Test**	This output is active during walk test, and will only deactivate when all detectors have been tested.	
0049	**Detector Masked** (Not applicable on grade 2 systems)	If any detector goes into 'mask' condition the output will trigger	When masking fault clears.
0050	**Follow 24 Hour**	If any input programmed as "Day alarm" activates	When input restored
0051	**Line Fault**	When Line Fault signalled by communicator	When fault clears
0052	**Mains Fail**	After pre-set time without mains power	On restoration of mains
0053	**Battery Faults**	When battery disconnected or load fail detected	At next valid code entry
0054	**Low Volts**	At fault	When fault clears
0055	**Global Fault 1** (Faults: Modem, Battery, Fuse, Line, Mains)	Activates if fault occurs only when system is armed	When all faults cleared
0056	**Global Fault 2** (Faults: as above)	Activates if fault occurs at any time	When all faults cleared
0058	**Guard Code Used**	When 'guard' code accepted	After 60 seconds
0059	**Engineer Access**	When entering Engineer Mode	Leaving Engineer Mode
0060	**Initialise Digi**	At power up	Live for 45 seconds only
0063	**Test ATE/GSM**	Test signalling through PSTN and GSM. Activates when a test call is sent.(only used for specific GSMs)	When test completed
0064	**Test ATS** *For use with ATE complying with BSIA Form 175 to initiate test call to ARC by each available path.*	Test signalling through PSTN and GSM. Activates when a test call is sent.	When test completed
0066	**ATE not used**	Makes the ATE pin 5V or 0V depending if ATE outputs are inverted	
0070-0079	**Fob Output 01-10**	Can be used to triggers outputs via the keyfob. For example if an output is programmed as type 0071 (Fob Output 02) and is wired	

Type		Active	Restore
		to a garage door. And if a user has a keyfob programmed with button 2 as Latched or Keyswitch Output (with Output 2 selected), then when the button is pressed the garage door will open.	
0600-0609 Timers 01-10: For future development			
0610-0619 Calendar 01-20: For future development			
0620-0639 Logic Gate 01-20: For future development			
0640-0649 Delay 01-10: For future development			
1xxx	**Follow input xxx**	When input is activated	When input clears

Default Digi Channels

Digi Channel	Enforcer 32-WE
1	Fire (0001)
2	HU Device Any (0009)
3	Unconfirmed Any (0018)
4	Final Set Any (0022)
5	Tamper Any (0007)
6	Omit Rearm Any (0017)
7	Confirmed Any (0006)
8	Mains Fail (0052)
9	Global Fault 2 (0056)
10	Test ATS (0064)

Appendix E. Content Types

No.	Description
1	Final Set, System Rearm, ATM set, Secure set system
2	System set by auto set, Auto set cancelled by user, Forced Set, System unset by auto unset ATM disarmed
3	Access Exit Request, Special Unset
4	Set Fail, Set Fail (with zone)
5	Burglary Alarm, Entry/Exit alarm, Day alarm, Perimeter, Perimeter Alarm, Gas Alarm, No Zone Activity - sent, Tamper Alarm, Tamper On Zone, Flood Alarm, Keybox Alarm
6	Burglary Alarm Once, Entry/Exit alarm once, Day alarm once, Interior Alarm Once, Perimeter Alarm Once, Fire Alarm Once, Gas Alarm Once, Holdup Alarm Once, Medical Alarm Once, PA Alarm Once, Tamper Alarm Once, Flood Alarm Once, Keybox Alarm Once
7	Alarm Silenced
8	Confirmed Output, Confirmed Intruder, Confirmed Hold Up
9	Input Line OK, Telecom line OK, Input Line fail, STU Telecom Line OK
10	Low Volts, Detector fault, Detector Fault, Detector Masked, Device Restored, Device Fail, Fuse 1, Fuse 2, Fuse 3, Fuse 4, Fuse 5, RS485 fault (not used), Telecom line fault, ID Line Short Fault on a device at rearm, Radio supervision failure, Radio hub jamming, Radio low battery, Battery Connect, Battery Disconnect, Battery Load Fail, Battery Critical, DIGI Fail Comms, STU comms failure on STU input indication, Network Fault (IP panels), Excess Charge Modem Failed, Warning Device Fault, Warning Device Fault Restore
11	Clock Set To, PC - Clock set to, Changed Code, Code Added, Deleted Code, Engineer Reset Site Changed, Clock Set From, System Restart, Logs Cleared, Clean Started, CHC Call Failed Logs nearly full, Engineer reset needed, Twin Device, Excess Current
12	Unset System
13	Engineer Access, Engineer Exit
14	Door Forced, Door Left Open
15	Tag at Reader
16	Invalid Tag
17	Zone Special Log Switcher Opened
18	Zone Special Log Switcher Closed
19	Zone Special Log Opened
20	Zone Special Log Closed
21	Ward Unset, Ward Silenced, Ward Zone Unset, Ward Zone Silenced, Shunt Closed
22	Ward Set, Ward Zone Set, Shunt Opened
23	Ward Alarm
24	Zone Walk Tested
25	Burglary Restore, Entry/Exit Restore, Day alarm restore, Interior Alarm Restore, Perimeter Restore, Detector Masked Restore, Detector Fault Restore, Fire key Restore, Gas Restore Fuse fail restore, 2 key PA restore, Tamper Restore, Tamper On Zone Restore, iD line short restore, Case tamper restore, Radio Supervision restore, Flood Alarm Restore, Radio Jamming restore, Radio hub jam restore, Radio low battery restore, System (SAB) tamper restore Keybox Restore
26	Test Call
27	Restore of mains fail alarm, Mains Fail Alarm
28	Fire Alarm, Fire key pressed, Fire Restore, Duress Code, Holdup Alarm, Hold Up Restore Code Guessing, Radio fob PA, PA Alarm, Two key PA, Radio Fob PA restore, PA Restore
29	Medical Alarm, Medical Alarm Restore
30	Zone Omitted at Rearm, Day Alarm Zone Omitted, Zone Omitted, Day Alarm Zone Omitted Restore, Zone Omitted Restore, Fire Zone Omitted, Fire Zone Omitted Restore, Zone Force Armed
31	Stopped Set, Abort

Appendix F. Fault Codes

If a device on the Enforcer 32-WE is not installed correctly or has lost its communication with the panel, "DEVICE FAIL" will be shown on the keypad as shown:

Control Panel = Main panel fault (e.g. battery)
485 Fail Kpd = Keypad
485 Fail Trd = Tag Reader / Door Station / TMZ
485 Fail Zem = Zone Expander Module (ZEM)
485 Fail Opm = Output Module

For the keypad and tag readers, the top line will show the set point name, for the ZEMs and output modules a 'Location' description (if inputted) will be shown on the top line of the display instead of the address number. (Address number will be displayed in 2 digits, e.g.: 00,01,02 etc).

Wireless Fault Displays

Fault	Description	Solution
Wireless mismatch	There is an input learnt without having a type assigned to it	Assign an input type in 'Change Inputs'.
User name Wireless Low Bat	Low battery on radio keyfob for the user with the name shown on the top line.	Replace the battery on the mentioned keyfob.
Input name Wireless Low Bat	Low battery on radio input, entered name of input shown on top line.	Replace the battery on the mentioned input device.
Siren n Wireless Low Bat	Low battery on radio bell number 'n'	Replace the battery on the mentioned radio bell.
Input name Wireless Supervision fault	Radio input whose name is shown on the top line hasn't 'checked in'	Walk test the detector, perform a diagnostic – signal strength test and try replacing the battery.
Siren n Wireless Supervision fault	Radio bell number 'n' hasn't 'checked in'	Test the siren, perform a diagnostic – signal strength test and try replacing the battery.
Input name Tamper Alarm	Tamper fault on radio input whose name is shown on the top line	Check the tamper switch on mentioned radio input; check that the case is closed properly.
Siren n Tamper Alarm	Tamper fault on radio bell number 'n'	Check the tamper switch on the mentioned radio bell.
Location Wireless Jam WZm	Jamming fault on the wireless ZEM whose location is shown on the top line	Check no radio interference is in close proximity to the radio devices/panel.
"Input name" Or "Siren n" Wirless Poll Fail	No 'polls' are received for 20 minutes before the set operation	Test the signal strength / battery on the device shown.

Fault Indications

RS-485 BUS PROBLEMS		
Fault	**Description**	**Solution**
485 Fail xxx	Device on RS-485 communications bus is failing to communicate correctly with the control panel.	Identify device from the location/name and the device type. Check device addressed correctly to match programming. Ensure that 2 devices of the same type do not share the same address. Check connections at device, and cabling to it. If above correct, re-boot device, followed by re-boot of End Station.
485/Comms Lost	Displayed on keypad that has not yet established communications with End Station	Part of routine initialisation procedure. If persists, check display at other keypad(s) to confirm if device failure at that keypad or complete system RS-485 failure (temporarily attach additional keypad direct to End Station if necessary).
Keypad display is BLANK	Keypad address does not match any keypad enabled	Check keypad address, noting that a keypad at address 00 must be present to program system. Also check "Assigning Keypads" menu in Engineer mode set up correctly.
Keypad display normal, but KEYS LOCKED OUT	More than one device connected at the same address	Correct addressing so that no overlaps. Then power system down and up again to correctly reinitialise.
Authorisation Required	The master manager will need to give the Engineer access	The option 'Allow Engineer Menu' will need to be enabled by the master manager
POWER SUPPLY PROBLEMS		
Fault	**Description**	**Solution**
Battery Fault xxx	Battery Fuse failed, OR Battery not present, OR Battery volts low	***Note:* This indication should be expected during recharge after a mains failure.** The top line displays 'Control Panel' if it is a fault on the endstation, if the Battery fault is on a ZEM/OPM 'xxx' will show the device type and the top line the location text if entered, if not it shows xxx-nn where nn is the address of the ZEM/OPM.
Bat Test Fail XXX	Battery Load Test has failed	Only displays if option selected. Battery uncharged or capacity below specification may need replacing. Same method as showing the device as battery fault.
Bat Critical XXX	Battery being powered down	Protects battery from deep discharge damage during extended mains failure. Same method as showing the device as battery fault. ***Note:* System is now powered down**
Mains Fail xxx	Mains supply failed	System detects mains frequency out of specification, as well as voltage. Same method as showing the device as battery fault. **Note: 'AC FAIL' timer operative**
Low Volts xxx	Power supply volts low	Battery volts below normal 'battery fault' level during mains failure. Same method as showing the device as battery fault

DETECTION FAULTS		
Fault	**Description**	**Solution**
Case Tamper XXX	Case tamper switch open	Secure switch closed. Same method of showing the device as battery fault.
COMMUNICATION FAULTS		
Fault	**Description**	**Solution**
Control Panel Modem Fault	End Station unable to communicate with Digi Modem	If modem not present, ensure that "Disable Digi" option is set to 'YES' and "DOWNLOAD MODE" is set to 'NONE' or 'RS232'. If present, but not detected, check the modem is inserted correctly.
Control Panel ARC Call Fail	***Call to ARC from Digi Modem Digi Modem has failed. <u>Note:</u>*** *This is a communication problem, which is rarely caused by an equipment fault.*	Check ALL call details are programmed correctly. Ensure signalling format is correctly set for ARC receiver. Ensure that calls to the ARC or SMS bureaux numbers are allowed on the PSTN line, eg 0800, 0845 etc.
CHC TEST FAIL	Unable to communicate with Castle Host Computer. ***<u>Note:</u>*** This would also result if the telephone line had premium rate calls blocked.	Ensure the Digi is enabled, and at least one SMS call is correctly programmed. Check that ordinary phone on same line connects to CHC, and modem tones heard – if not, problem is PSTN – NOT equipment.
Control Panel Line Fault 100	PSTN Line Fault signalled by Digi Modem.	Only operative if "DOWNLOAD BY MODEM" selected OR "DISABLE DIGI/SMS" is set to 'NO' ***<u>Note:</u> 'Line Fault' timer operative.***

Secure Holdings
Pyronix House
Braithwell Way
Hellaby
Rotherham
S66 8QY

Customer Support line (UK Only):
+44(0)845 6434 999 (local rate) or
+44(0)1709 535225

Hours: 8:00am - 6:30pm, Monday to Friday
Email: customer.support@pyronix.com
Website: www.pyronix.com