Enforcer

Extended Programming Guide

Version 01

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DEFAULT CODES

Access Codes

User Code: 'Blank'

Master Manager Code: 2222.

Engineer: 1111

Clean Start Codes

Clean start with the code '2000' (UNGRADED)

Clean start with the code '2020' (Grade 2)

Other Codes

Keypad Security Code: '2000'

Delete All Wireless Data: '2000'

TECHNICAL SUPPORT

If you are still experiencing issues with the installation, please call our UK technical support team.

Please note: In order to get your issue resolved quickly, please have the software revision of the panel ready to give to one of our engineers.

Alternatively if you do not require assistance straight away, you can email the team who will reply to you as soon as possible.

Our office hours are: Monday to Friday 8:00 - 18:30.

☎ 0333 444 1280

✉ technical.support@pyronix.com

THE ENGINEER MENU

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

Please note

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

2. All personal attack and fire alarms will not cause an alarm in the Engineer Menu.

Accessing The Engineer Menu

Access to the Engineer Menu will be allowed if the Enforcer is unset. If set, the Enforcer 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. If any faults that are active, they will be displayed now on the screen. Press [NO] and enter the engineer code again.

3. 'SET DATE & TIME' is displayed.

4. Engineers Menu has been accessed.

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

Please note: It is essential that a factory default (clean start) is performed after initial power up to ensure that the correct defaults have been chosen.

Exiting The Engineer Menu

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

Useful Menu Options

Wireless device control

Learns and deletes all wireless inputs, bells and arming stations. To learn wireless keyfobs enter the Master Manager menu and scroll to CHANGE CODES. (Refer to the user manual).

Change inputs

Programs all input types, attributes, areas and names and on the Enforcer.

Assign keypads and readers

Assigns wired/wireless keypads and readers, and enables readers for entry control.

Please note: Keypads and Readers must be addressed at the device and at the keypad.

Codes and users

Changes the 'Engineer code', 'Master Manager code' and 'Duress codes'. To change user codes enter the Master Manager menu and scroll to 'EDIT USERS'.

Change outputs

Programs any outputs and assigns output modules to the Enforcer.

Diagnostics

Displays power, input status, wireless arming stations, wireless signal strength and wireless battery levels.

Communications

Enables a modem (if connected), allows signalling via communication formats or SMS, and enables the ProControl+ App and Cloud. Please refer to the 'Communications Guide'.

GENERAL INFORMATION

Default Codes

User: 'Blank'

Master Manager: 2222

Engineers: 1111

Initial Power Up

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

1. Once power has been applied to the Enforcer, 'Please Wait' will be displayed, followed by '485 Comms Lost'. After approximately one minute, the Enforcer will the time on the display, indicating the system is ready to use.
2. The Enforcer is defaulted to keypad address '0'.

Testing The Keypad

With the system unset, press the **B** key for 5 seconds at any keypad. This will cause all the LEDs on that keypad to illuminate, and the LCD screen to display each pixel. The keypad will revert to normal display after the test which will last about 10 seconds.

Wired Keypads/Readers

Keypads

Three additional wired keypads may also be connected to the Enforcer.

Key functions

[A] = Exit Engineer and 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.

Please note

1. If any additional keypads are installed on the Enforcer, 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.

2. A wireless keypad can be connected to set/unset (LEDRKP-WE)

The Internal Tag Reader (EUR-107)

The Internal tag reader can be used for setting/unsetting, entry control or access control. Refer to the installation manual for all connections.

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

Alert LED

Alarm LED

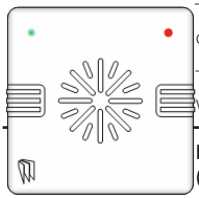
Tamper LED

Fault LED

Unset LED

The External Tag Reader (EUR-108)

The Internal Tag Reader can be used for setting/unsetting, entry control or access control. Refer to the installation manual for all connections.

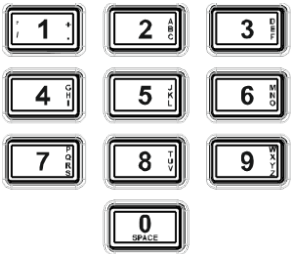


To set/unset the system using the External Tag Reader, present a pre-programmed tag to the centre of the prox.

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

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

Text Programming



Text may be programmed for input names, for the 'sign-on' message, and to identify the Level or Area. Each key is allocated alpha-numeric or punctuation marks characters as shown left:

The Enforcer incorporates predictive text, so the system will predict which word is being spelt. For example, if 'B' is entered, followed by 'e' then 'd', Bedroom will be displayed. To accept, press YES. If the word that is required doesn't appear on the LCD display, type in the next letter and so forth until complete.

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

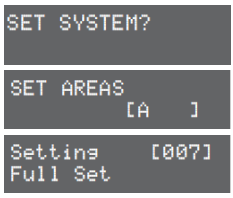
C = clears cursor / adds a space

D = moves cursor right

Engineer Function: Set System

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

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



Engineer Function: Forced Arm On Inputs

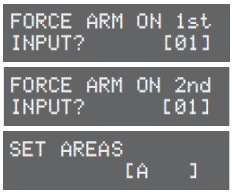
The 'Force Arm On Inputs' function enables two nominated inputs on the Enforcer to be set. Either input can be triggered to allow real life signalling or alarm testing. This function is useful when a building is full of people and these tests are needed.

Please note

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

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

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



THE ENGINEER MENU

Any programming is only saved when exiting the Engineer menu. It is essential that a 'CLEAN START' is performed after initial power up.

SET DATE & TIME

All log entries are date and time stamped. This can also programmed in the Master Manager Mode. The time is also shown on the LCD in 'Day Mode'.

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

Year, Month, Day, Hours, and Minutes

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

DST Adjust

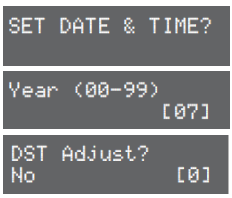
Enable or disable the 'Day Light Saver Time Adjust' as required.

Set Date and Time Programming

Press [B] or [NO] to scroll to 'SET DATE AND TIME'. Press [YES].

'Year' will be displayed. Enter the year and press [YES]. Repeat for Month, Day, Hours and Minutes and press [YES].

'DST Adjust' will be displayed. Press [◄] or [►] to enable or disable the function and press [YES].



WIRELESS DEVICE CONTROL

The Enforcer supports a maximum of 32 wireless inputs, 32 wireless keyfobs, 2 wireless Deltabell external sounders and 4 wireless arming stations.

Please note: This is without any expanders fitted to the system

Control Inputs

'Control Inputs' learns and deletes wireless inputs (detectors, contacts, sensors etc).

Control Bells

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

Programming Keyfob Buttons

'Program Keyfob Buttons' assigns actions to each buttons on the keyfob.

[0] No action: Disables the button.

[1] Show Status: GREEN = Unset. RED = Set.

[2] Set Area: Sets the chosen area.

[3] Unset Area: Unsets the chosen area.

[4] Operate Output: Triggers an output (programmable) when the nominated button is pressed.

[6] Personal attack: Activates a personal attack activation (programmed in Engineers only)

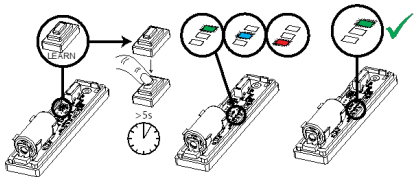
Please note: Keyfobs are learnt in the Master Manager Menu in the function 'EDIT USERS'.

Control Arming Stations

'Control Arming Stations' learns and deletes wireless arming stations. These are use to set/unset the system and trigger outputs.

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] or press [NO] to access the delete menus (you can either delete individual devices or delete all).
4. Press [◄] or [►] to select the input (1-32) to learn and press [YES].
5. Open the wireless device then press and hold the 'LEARN' button until all LEDs flash then release.



WIRELESS DEVICE CONTROL?

Control Inputs?

Learn Devices?

Input 01 Available [01]

Please note

1. The learn process is the same on all wireless peripherals. Once the green LED flashes, the learn process has been successful. If the red LED flashes, repeat the process above as the learn procedure has not been successful.

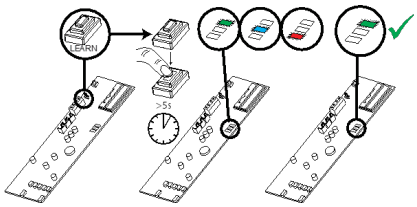
2. For full installation instructions please refer to the installation guide provided with each device.

```
Learning...
```

```
Input Learnt!
```

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] or press [NO] to access the delete menus (you can either delete individual devices or delete all).
5. Press [◄] or [►] to select the bell (1 or 2) to learn and press [YES].
6. Open the wireless external siren then press and hold the 'LEARN' button until all LEDs flash then release.




```
WIRELESS DEVICE
CONTROL?
```

```
Control Inputs?
```

```
Control Bells?
```

```
Learn Devices?
```

```
Select Bell
Available    [1]
```

```
Learning...
```

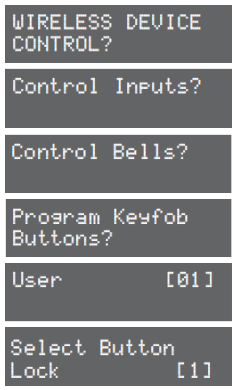
```
Bell Learnt!
```

Please note: Once the green LED flashes, the learn process has been successful. If the red LED flashes, repeat the process above as the learn procedure has not been successful.

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. 'Control Arming Stations' will be displayed, press [NO].
5. 'Program Keyfob Buttons' will be displayed. Press [YES].
6. Press [◄] or [►] to select the user (1-80) and press [YES].
7. Press [◄] or [►] to select the button to be programmed and press [YES].
8. Press [◄] or [►] to select the action of the button and press [YES].
9. Select the area that the keyfob should be programmed in, press [YES].

Panic alarm (function option 6) must be allocated to two buttons pressed together (I + II recommended, button option 6) and can only be programmed in the Engineer Menu.



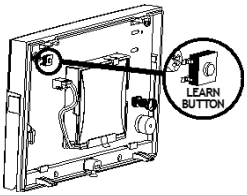
Please note

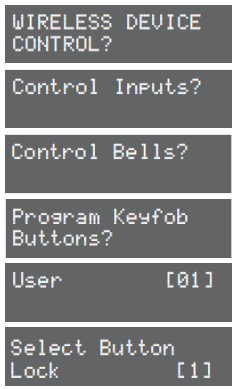
1. Keyfobs are learnt in the Master Manager Menu under 'EDIT USERS'.

2. Using the output types 170-199 (User Defined), outputs can be activated by the keyfob buttons. Refer to 'User Outputs' function in the 'CHANGE OUTPUTS' menu.

Control Arming Stations

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. 'Control Arming Stations' will be displayed. Press [YES].
5. 'Learn Devices' will be displayed. Press [YES] to learn an arming station or press [NO] to access the delete menus (you can either delete individual devices or delete all).
6. Press [◄] or [►] to select which keypad (1-4) to learn and press [YES].
7. Open the Arming Station and press and hold the 'LEARN' button until all LEDs flash and then release.





Please note

1. Once the green LED flashes, the learn process has been successful. If the red LED flashes, repeat the process above as the learn procedure has not been successful.

2. Tags to control setting/unsetting are learnt in the Master Manager Menu under 'EDIT USERS'.

Wireless Arming Station functions are programmed in the 'ASSIGN KEYPADS/READERS menu and are mapped as:

Arming Station #1 : Address [4] Arming Station #2 : Address [5]

Arming Station #3 : Address [6] Arming Station #4 : Address [7]

CHANGE INPUTS

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

Input Types

See Appendix B for all input type options.

Most commonly used input types:

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

Please 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.

2. Inputs may be automatically omitted at the time of reinstatement, which is at the end of confirmation time. This is irrelevant of whether the input has the attribute 'Ommitable' set to 'Yes' or 'No'

Input Areas

The Enforcer supports up to four areas and can be used as follows:

Area A: All Factory

Area B: Reception Only

Area C: Offices Only

Area D: Factory Floor Only

Input Area (Any/All)

In some installations a 'common' area may be required. A common area is an area that only sets when other specific areas become set. Example: An entry and exit reception area in a building may only need to be set if both the offices and warehouse are set. If the office in Area A is set, but the warehouse in Area B is still occupied, then the reception would still need to be inactive so people would be able to leave the premises via the entry / exit reception route. One input can be allocated to one or more areas. In this example the inputs located in the reception area will be programmed so that the reception inputs will be in Area A and Area B, so these inputs must have the Input Areas set as 'ALL' programmed.

Area A: Office - Inputs = 3, 4, 5 Area B: Warehouse - Inputs = 6, 7, 8

Reception inputs – 1 and 2 are programmed into both Areas A and B, with both inputs configured as 'ALL' The Reception Area inputs will now only become active if both Area A and Area B are both set.

Please note: All inputs in a common area must be programmed as 'Entry Route' or 'Final Exit'.

Input Attributes

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.

Monitor Activity

Enables the input to generate an alarm if the input does not detect any activity for a period specified by the NAT (Non Activity Time.) See 'Change Timers'.

Confirm Group

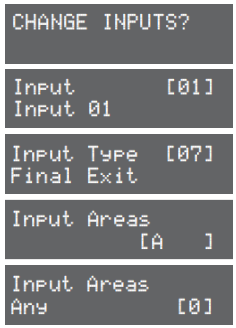
If inputs are selected into the same confirm group, each input will only generate an unconfirmed alarm (and will not generate a confirmed activation). This is useful when two or more shock sensors are being activated by the same event. If a confirm group is selected as '00', the inputs are not part of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

Input Description and Location

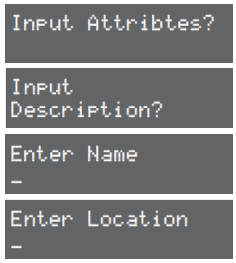
A name and location can be entered here. The name will appear on the display if an alarm has occurred; the location is used for a more detailed reference if required.

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].
3. 'Input Type' will be displayed. Press [◄] or [►] to select the input type or input the shortcut number (see Appendix B, for all input type options.)
4. Press [YES], 'Input Areas' will be displayed. Select the areas to be assigned to the input and press [YES].
5. Input Areas' will be still be displayed, but this time the options are 'Any' or 'All'. Make a selection using then [◄] or [►] then press [YES].
6. Input Attributes' will be displayed. If any attributes are needed for the input, press [YES] then press [◄] or [►] to select between the attribute enable/disable options. Finally press [YES] to go to the next attribute.



7. Input Description' will be displayed. Press [YES] to enter a name and location for this device or press [NO] to return to input selection.
8. 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.
9. '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.
10. Press [◄] or [►] to select another input to program (01-66) or press the [NO] key to return to the Engineer menu.



CHOOSE MODE

If a Enforcer I/O board or any Zone Expander Module (Input Expander or ZEM) are used, the resistance, EOL mode and response time of the inputs can be programmed.

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

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.

EOL Mode

EOL Mode programs all input expanders to operate as:

[0] Single End of Line (SEOL).

[1] Double End of Line (DEOL).

Input Response Time

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

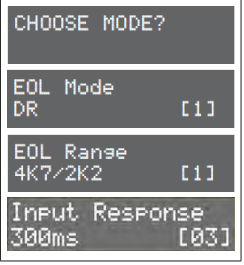
[01] - [30] = 100ms to 3000ms

Please note: Settings above (>) 400ms do not comply with PD 6662 / EN 50131.

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 Time' for all wired inputs*. Press [YES] to return to the Engineer Menu.

*On the I/O board and the expanders



INSTALL ZEMS

The Enforcer supports up to 66 inputs. Zone Expander Modules (ZEMS) can be used to expand the Enforcer to have a further 32 wireless inputs, 32 wired inputs or a combination of both. There are also 2 inputs that can be used on an I/O Board if connected (refer to installation manual).

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)

Please note: Inputs 33 and 34 are taken from the I/O board, these do not need to be addressed.

ZEM Installed

[0] No

[1] ZEM8/EURO37R

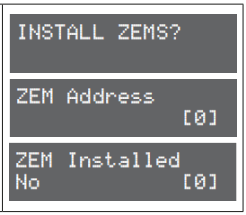
[2] EURO-ZEM32-WE

Enter Location

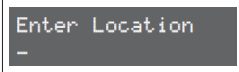
The text entered here will be displayed on the LCD display if a fault occurs on the ZEM, so the ZEM can be easily located or referenced. For example, the location text maybe "ZEM Kitchen", "ZEM Loft" etc.

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 ZEM32-WE' 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.



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.

Common output types

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

[0003] Intruder Any

[0006] Confirmed Any

[0014] Siren Any

[0016] Strobe Any

[0018] Unconfirmed Any

[0051] Line Fault

[0052] Mains Fail

[1###] Follow Input

Endstation Outputs

This function programs the Bell, Strobe and PGM output on the I/O board if connected.

ZEM Outputs

If a zone expander with additional outputs has been connected to the Enforcer, this function programs the outputs on each expander. The address of the expander is required before the output programming.

Wireless Bells

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

Output Module Outputs

If an output expander is connected to the Enforcer, it must be addressed in this function. All output programming is also done here. A maximum of 1 output expander can be connected to the Enforcer.

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 outputs on the I/O module, 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 outputs on the zone expander, 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 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] for the next function.

```
CHANGE OUTPUTS?
```

```
Endstation
Outputs?
```

```
BELL O/P  [0014]
Siren Any
```

```
ZEM Outputs?
```

```
Wireless Bells?
```

```
Output Module
Outputs?
```

8. 'User Outputs' will be displayed. User Outputs can be activated from the Master Manager Menu, and can also be programmed to be operated via a keyfob. If required, this is programmed in 'Program Keyfob Buttons', sub-menu 'WIRELESS DEVICE CONTROL' and program a button(s) for types 170-199.

```
User Outputs?
```

ASSIGN KEYPADS/READERS

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

Address

Up to 3 additional wired keypads or readers and 4 wireless arming stations can also be installed. Address 0 is used for the Enforcer on-board keypad.

Please 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.

Please note: Wireless arming stations are learnt to one the 4 wireless arming station allocations on the Enforcer. However, are seen as addresses 4-7 in 'Assign Keypads and Readers'

Type

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

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: 18. The lock open time and door open time can be programmed (in seconds).

Set point sets

A 'Set Point' means that you can program the keypad/reader to set certain areas only, and is used in conjunction with the areas allocated to a user code.

For example, if a user code is programmed to operate areas 'A' and 'B', but the keypad/reader is only programmed to set area 'A', then the system will set only area 'A'.

Selects the area that the device will be defaulted to.

Set point unsets

An 'Unset Point' means that you can program the keypad/reader to unset certain areas only. This is used in conjunction with the areas allocated to a user code.

For example, if a user code is programmed to operate areas 'A' and 'B', but the keypad/reader is only programmed to Unset area 'A', then the system will unset area 'A' only.

Set point in

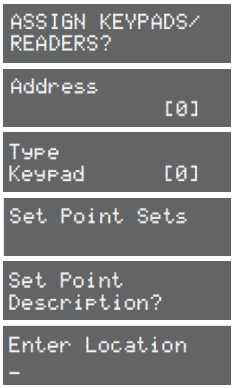
The keypad needs to also be told which Areas it is operating "in". For example, a keypad may only be needed to operate in Area A, but other code users may use the keypad to quick set other Areas (such as a cleaner, director, caretaker etc). Therefore if Areas A and B are selected in the previous options (Arm point sets and unset), but Area A only is selected in 'Set point in', then Area B will quick arm once a valid tag/code has been entered. To program Areas operating with their programmed timer, then the Areas need to be entered into the "Set Point In" function.

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

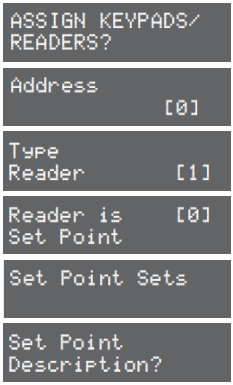
1. Press [B] or [NO] to scroll to 'ASSIGN KEYPADS/READERS'. Press [YES].
2. Press [◄] or [►] to select the address. Press [YES].
3. 'Type' will be displayed. Press [0] to select keypad. Press [YES]
4. 'Set Point Sets' will be displayed. Select the area(s). Press [YES]. Set Point Unsets' will be displayed. Select the area(s). Press [YES]. 'Set Point In' will be displayed. Select the area(s). 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 key to return to the Engineer menu



Programming Readers

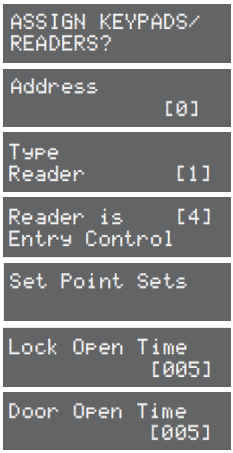
Set Point or Unset Only

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. 'Set Point Sets' will be displayed. Select the area(s). Press [YES]. Set Point Unsets' will be displayed. Select the area(s). Press [YES]. 'Set Point In' will be displayed. Select the area(s). Press [YES].
6. 'Set Point Description' will be displayed. Press [YES] to enter the name and location if required.
7. 'Enter Name' will be displayed. Enter the name of the keypad and press [YES].
8. 'Enter Location' will be displayed. Enter the location of the keypad and press [YES].
9. Press [◄] or [►] to select another device address to program (0-3) or press the [NO] key to return to the Engineer menu.



Entry Control or Access Control

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. 'Set Point Sets' will be displayed. Select the area(s). Press [YES]. Set Point Unsets' will be displayed. Select the area(s). Press [YES]. 'Set Point In' will be displayed. Select the area(s). 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.



Wireless Arming Station Options

Tag Read Enable

Enables the proximity tag reader on the wireless arming station.

Auto Wakeup

Forces the keypad to automatically wake up when an entry time is initiated.

Supervision

When switched to 'Yes' the control panel will supervise the signal of the wireless arming station.

Back Light

Toggles the LCD backlight on or off.

Entry/Exit Sound

When enabled, the arming station will mimic the entry/exit tones of the panel.

Set Point Sets

Enter the areas that the arming station is permitted to set.

Set Points Unsets

Enter the areas that the arming station is permitted to unset.

Set Point In

Enter the areas that the arming station is located in.

Set Point Description

Enter a name and location for the arming station.

CHANGE TIMERS

This function controls all timers of the Enforcer.

Commonly used timers

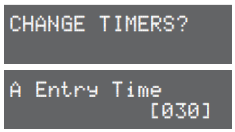
For a list of all timers, refer to Appendix C. Most common programmed timers are:

Entry Time (0-255 seconds)	Exit Time (0-255 seconds)	Siren Time (2-15 minutes)
Confirm Time (1-99 minutes)	Wireless Supervision (0-99 hrs)	App Exit Time (0-199 seconds

Please 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]. Enter the time on the required function and press [YES] for the next timer.
3. Press [NO] to return to the Engineer Menu.



CODES AND USERS

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

Default Codes

User: [None]	Master Manager: 2222	Engineer: 1111

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

5 Digit Pins?

If enabled, all new codes added to the system will require a minimum of 5 digits.

Please note: Any existing 4 digit codes will still be valid.

Delete Users And Fobs

This will delete all the key fobs and user codes from the system.

Please note: that this will not delete the Master Manager and the Engineer codes.

Change Duress Codes

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

Please 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 only after an alarm has been activated for a minimum time (see 'Change Timers' Appendix C). The code will set a system and an output type is available to signal when this code is used (0058 Guard Code).

[4] Dial Out: A dial code is used to force the panel to dial out the UDL software while in 'Day Mode'

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 (menu access)

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.

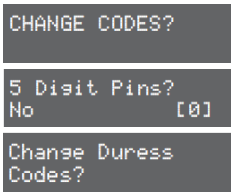
Wards/Access: This will only be displayed if an Entry Control or Access Control reader is installed on the system. If the address of the Entry Control or Access Control device is entered here, then the code will be assigned to that reader only.

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 'CODES AND USERS'. 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.



VOLUME CONTROL

The Volume Control function applies to the loudspeaker output only. Volume levels at the keypad are programmed individually in the keypad menu.

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

Please note: App exit volume overrides other exit volumes when setting using ProControl+.

Volume levels

0	Completely silent.
1	Silent but sounds a beep when the system is set.
2-7	Volume range, 7 being the loudest.

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.

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.

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.

Silent Technical Alert

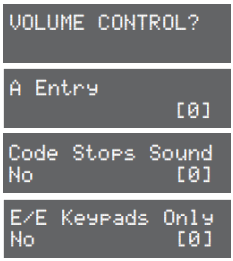
If this function is enabled then any technical alerts will be silenced, e.g. line fault, ARC call fail.

Use Main Sounder

If enabled, all volumes that are programmed as will activate on the main sounder. If disabled, the sounder will only activate on activations programmed 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.



SYSTEM OPTIONS

Site Options

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

Set with Fault

If 'YES', the Enforcer will set regardless of the following faults being present: device fail, mains fail, battery fault, fuse fault.

Set with Tamper

If 'YES', the Enforcer will set regardless of any input tampers.

Set with ATS Fault

If 'YES', the Enforcer will set regardless of the following ATS faults being present: telecom line fail, modem fail, ATE path fail, Digi dial fail, or comms fail.

Set Fail = Alarm

If 'YES', the Enforcer will generate a graduated alarm when the 'Set Fail' timer has expired (See 'CHANGE TIMERS',) 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.

Do Battery Load Test

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

Strobe/Squawk at Set

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

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

Use Level Set

If 'YES': The system becomes a 'level set' (Having one area set only at any one time). If 'NO': The system becomes an 'area' system (setting more than once area at a time).

Autoset Force

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

Restrict PIN use

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

Please note: Enable when BS8243 option 6.4.5 is in use

Simple Set

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

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

Intelligent Set

The system has the facility to automatically initiate a different set mode or area when you activate an input in a certain area (rather than having to choose a different Set mode via the keypad). This is known as "Intelligent Setting".

Please note that when Intelligent Setting has been enabled, the exit tone will commence at 'intelligent' volume. When intelligent set is enabled, then level set B will start to set (if the user code is enabled in level set B). Then if a Final Exit input is activated, which is programmed in level set A during the exit time, then the panel will automatically 'quick set' in level set A.

Please note: Intelligent Set only works when the panel is in Level Set mode. (See Site Options)

Common Lobby

If 'Yes', this will automatically prioritise the exit modes for each area:

(0 = Timed, 1 = Final Door, 2 = Timed/Final Door, 3 = PTS). This option is only relevant when Final Door option is used on a system with different areas using a common lobby.

E.g. If Area C is selected as the 'Final Door' setting mode and the rest of the areas are selected as 'Timed', then because 'Final Door' is higher priority, the users of every individual area must follow the 'Final Door' route to the exit - making this door a 'common for all areas'. If set to 'NO' the exit modes will be individually programmable to each area.

Flexi Unset

When enabled, this setting will allow users to select which areas they unset (from the areas that they have been permitted to unset.)

2 Key HU:

If the 1 and 7 keys are pressed and held together for a period of time (programmed in the keypad menu), 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),Digi-1200/Voice Digi GPRS, Digi LAN or Digi Wi-Fi module.

Tag Opens Doors

This function is only be used in conjunction with a reader being programmed as 'Entry Control' is in 'ASSIGN KEYPADS/READERS'.

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.

Fire Key Enable

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

Set With Polling Fault

If 'YES' the Enforcer will set the system if there is a wireless polling fault.

If 'NO' the user will not be able to set the Enforcer with a polling fault. The Enforcer will display a fault and the arming procedure will be stopped. The input causing the poll fault can be identified in the event log.

Fob Unset Entry

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

Wireless Bell Supervision

If 'YES' then the wireless external sounder will go into alarm if it can no longer communicate with the Enforcer.

Download if Set

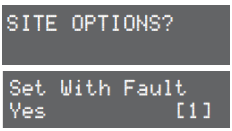
If 'YES' any upload/download procedures will be possible on the InSite software regardless of the set/unset status of the Enforcer.

UDL or Cloud Priority

By default this is set to 'high' meaning that UDL or Cloud signalling will take priority over ARC signalling events to maintain a smooth cloud connection. If the system is graded then this setting will default to 'low' so that UDL or Cloud connections cannot delay ARC signalling events.

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.



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.

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.

Sign on message

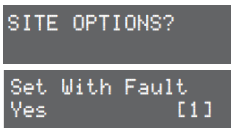
The Sign on Message is the main display on the top line in unset mode.

Display when set, display alarms and display HU's (not compliant)

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.

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. 'Display When Set' will be displayed. Press [◄] or [►] to enable or disable the function. Press [YES]. Repeat for 'Display Alarms', 'Display Hold Ups', and 'Display Inputs'. Press [NO] to return to the Engineer Menu.



Exit Modes

The 'Exit Modes' operate the setting procedure of the Enforcer system. The following 'Exit Modes' are available:

[0] Timed

The Enforcer system will set when the programmed 'Exit Time' has expired.

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

[1] Final Door

The Enforcer 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 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.

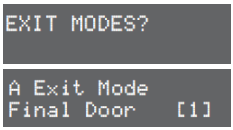
Please note: This is NOT suitable for systems installed to comply with BS8243.

[3] Push to Set (PTS)

The Enforcer 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.



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, i.e. Users entering their codes to set or unset areas, alarm events, failures to arm etc.

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

Panel Log

The Panel log records all events that occur on the Enforcer, 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).

Access Log

The Access log records all events for Access Control events.

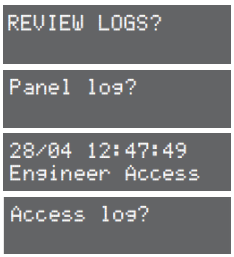
With each log, use the [D] key to move from one event to the previous event. The [B] key will move from one event to the next event that occurred.

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

Please note: For all 'Fault Codes' please refer to Appendix E.

Reviewing Logs

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.



ENGINEER TESTS

The test functions allow the engineer to test inputs, outputs, batteries and the siren.

Sounds To Play

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

Walk test

The walk test feature is used to test all the inputs programmed on the Enforcer. 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, trigger the second detector and trigger the first detector.

Please note: If a just a specific input needs to be walk tested, press [NO] instead of selecting areas. This will then allow specific inputs to be entered with the numerical keys, pressing [YES] after each input. Then press [NO] to walk test them.

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.

Please note: The 'Initial Soak' time should be set to equal or greater than the 'Soak Days Left.'

Test siren

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

Do battery load test

The Enforcer 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 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 outputs are live
- The Enforcer is in Engineer Mode
- Any battery or mains faults exists
- The site option 'Do Battery Load Test' is not selected (see System Options/Site Options).

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.

Test outputs

The engineer can test all the programmable outputs on the Input/Outboard board and the output module.

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.

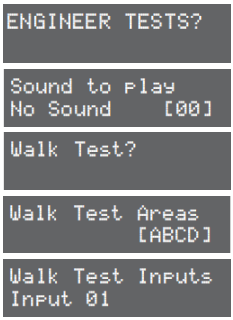
Fetch Time

This function is used to manually request the time from the cloud server if it hasn't updated automatically. NOTE: This will only be visible with an app compatible modem inserted.

Walk Test Programming

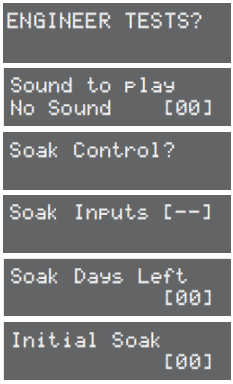
Please note: Wireless detectors may take up to 5 minutes to become active in a walk test.

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] or press [NO] to walk test individual inputs.
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.



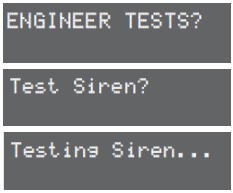
Soak Control Programming

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.

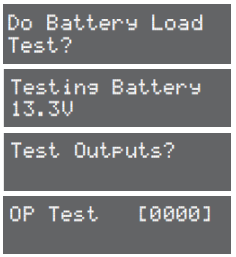


Test Siren, Battery Load Test and Outputs

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.

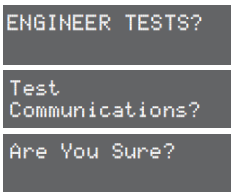


6. 'Do Battery Load Test' will be displayed. Press [YES] to perform a battery load test, the voltage will be displayed, followed by 'Battery Passed' if the test has been successful. Press [NO].
7. 'Test Outputs' will be displayed. Press [YES] to perform a test on any output type. For example if '0006' 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.



Test Communications

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. Press [NO] to go back to the Engineer Menu.



DIAGNOSTICS

This option enables the engineer to perform full diagnostics on all key wired and wireless components of the system.

Wireless Devices

View Inputs

This option views the status of all wireless inputs: O=Open, C=Closed, T=Tamper, F=Fault, S=Supervision fault and B=Battery fault.

Signal Strength

This option is used to view the signal strength for any wireless input, bell or arming station that is learnt to the system. The signal strength is shown on both the individual wireless device and on the panel in the following ways:

If a Green LED is shown on the peripheral, the signal strength is HIGH.

If a Red LED is shown on the peripheral the signal strength is LOW / NONE.

Once one of the signal strength menus has been entered, 'Please Wait' will be displayed and a countdown from 300 seconds will begin. This may last up to five minutes before all of the wireless devices have been analysed. From this point each device is tested every 15 seconds. On the LCD display it is also possible to view each individual device's signal strength as a percentage.

3 = Excellent signal – Shows GREEN on the wireless Device / 80 to 100%

2 = Good signal – Shows GREEN on the wireless Device / between 30 to 80%

1 = Weak signal – Shows RED on the wireless Device / between 10 to 30%

0 = Missing – Shows RED on the wireless Device / between 0 to 10%

'?' = Waiting for device signal strength information

Battery Status

This option is used to measure the battery levels for wireless inputs and bells. The battery level is shown on the control panel.

Once the battery status menu has been entered, 'Please Wait' will be displayed and a countdown from 300 seconds will begin. This may last up to five minutes before all of the wireless devices have been analysed. From this point each device is tested every 15 seconds.

Testing = Waiting for a Battery result

Good = At least one month of battery life remaining

Replace = Battery needs to be replaced immediately

Wireless Dual Frequency Menu

This option shows information on whether the panel/wireless ZEM are working as a Single or Dual Frequency system. It will also display which inputs (if any) are single frequency and stopping the panel from operating in dual frequency mode.

Wired Devices

View Inputs

This option views the status of all wired inputs: Open, Close, Tamper, and Fault.

Endstation Inputs: The status of the inputs will be shown. C = Closed. O = Open. F = Fault, T = Tamper. The resistance reading can also be shown by pressing YES for any of the above for statuses.

ZEM Inputs: Choose the ZEM ID from [0] to [3] to view the input status.

View PSUs

This option allows diagnostics of the power supply information for the PSU on the control panel, as well as all the additional peripheral devices, such as ZEM or Output modules that have a PSU on board.

Endstation PSU: End station voltage readings are displayed = Voltage: 13.7V.

ZEM PSUs: Choose the ZEM ID from [0] to [3] to read the PSU voltage readings.

OP Mod PSU: Choose the Output Module ID to read the PSU voltage readings.

Keypad Volts: Choose the Keypad ID from [1] to [3] to read the keypad voltage.

Reader Volts: Choose the Reader ID from [1] to [3] to read the reader voltage.

Communications

This function displays the information gathered from the communication device currently fitted.

GPRS Module

GPRS Signal Strength: The range '0-31' indicates the signal (31 = Excellent. >10 = Poor). '--.--' indicates no signal.

App or ARC Status messages: Displays the current connection status of the PyronixCloud.

Initialising – The panel is attempting to connect to the mobile network

No Network – There is no network available

Basic Network – The GSM network is available

Full Network – The panel is logged onto the GPRS network

Polling Cloud (App only) – The panel is polling the cloud

Polling ARC (ARC only) – The panel is polling the ARC

Last App Contact: Displays the time period since the last successful connection to the ProControl+ App.

Last Polled Cloud: Displays the time period since the last successful poll to the PyronixCloud.

Last Polled ARC: Displays the time since the last successful poll to the ARC.

LAN or WiFi Module:

(Wi-Fi Only) Signal Strength: The range '0-31' indicates the signal

(31 = Excellent. >10 = Poor). 'No Signal' indicates no signal.

IP Address: Displays the IP address of the LAN Module (if installed).

Subnet Mask: Displays the Subnet Mask of the LAN Module (if installed).

Gateway: Displays the IP address of the Gateway.

App or ARC Status messages: Displays the current connection status of the PyronixCloud.

Initialising – The panel is attempting to connect to the network

No Network – There is no network available

Polling Cloud (App only) – The panel is polling the cloud

Polling ARC (ARC only) – The panel is polling the ARC

Last App Contact: The time period since the last successful connection to the ProControl+ App.

Last Polled Cloud: The time period since the last successful poll to the PyronixCloud.

Last Polled ARC: The time since the last successful poll to the ARC.

PSTN and PSTN/VOICE Modem

This will display the PSTN line status of whether there is a line present or missing.

GSM Modem

GSM Signal Strength: The range '0-31' indicates the signal (31 = Excellent. >15 = Poor). '--.--' indicates no signal.

Wireless Device Diagnostics

1. Press [B] or [NO] to scroll to 'DIAGNOSTICS'. Press [YES].
2. 'Wireless Devices':. Press [YES].
3. 'View Inputs': To view each input status, press [YES].
4. Use [◄] or [►] to choose which inputs to view. Press [YES].
5. The status of each input will be shown:

   O=Open, C=Closed, T=Tamper, and F=Fault.

6. Press [NO] twice to exit, and [NO] again for the next sub-menu item.
7. 'View Input Signal Strength': To view each inputs signal strength press [YES].
8. Use [◄] or [►] to choose which inputs to view. Press [YES].
9. The status of each input will be shown:

   3 = Excellent signal – Shows GREEN on the wireless Device / 80 to 100%.

   2 = Good signal – Shows GREEN on the wireless Device / between 30 to 80%.

   1 = Weak signal – Shows RED on the wireless Device / between 10 to 30%.

   0 = Missing – Shows RED on the wireless Device / between 0 to 10%.

   '?' = Waiting for device signal strength information.

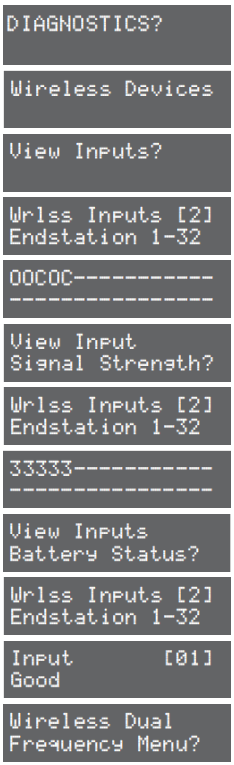
10. Press [NO] twice to exit, and [NO] again for the next sub-menu item.
11. Repeat the above for 'View Bells Signal Strength', and 'View Arming Station Signal Strength'.
12. 'View Inputs Battery Status':. Press [YES].
13. Use [◄] or [►] to choose which inputs to view. Press [YES].
14. The status of each input will be shown

    Testing = Waiting for a Battery result

    Good = At least one month of battery life remaining

    Replace = Battery needs to be replaced immediately

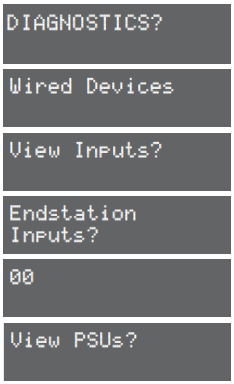
15. Press [NO] twice to exit, and [NO] again for the next sub-menu item.
16. Repeat the above for 'View Bells Battery Status', and 'View Arming Station Battery Status'
17. 'Wireless Dual Frequency Menu':. To view Dual Frequency menu information. Press [YES].
18. Press [NO] to exit.



Wired Device Diagnostics

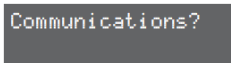
1. Press [B] or [NO] to scroll to 'DIAGNOSTICS'. Press [YES].
2. Press [NO] until 'Wired Devices' is displayed:. Press [YES].
3. 'View Inputs': To view each input status, press [YES].
4. 'Endstation Inputs': To view each input status on the I/O board, press [YES].
5. The status of each input will be shown:

   O=Open, C=Closed, T=Tamper, and F=Fault. Press [YES] again to view each input individually, and the resistor readings.
6. Press [NO] twice to exit, and [NO] again for the next sub-menu item.
7. Repeat the above for 'ZEM Inputs'.
8. 'View PSUs': To view the power supply information press [YES].
9. 'Endstation PSUs': The voltage will be displayed. Press [YES]. Press [YES] to view the power supply information for ZEMs, Output Modules, Keypads and readers.
10. Press [NO] twice to exit.



Communications Diagnostics

1. Press [B] or [NO] to scroll to 'DIAGNOSTICS'. Press [YES].
2. Press [NO] until 'Communications: is displayed. Press [YES].



Please note: For more information, please refer to the 'Modem and Communication Guide'.

ENGINEER RESET OPTIONS

The Engineer Reset Options are used so that once an alarm has occurred; the Enforcer system can only be reset by an engineer code or anti-code.

Engineer Restore of Intruder

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

Engineer Restore of Hold Up

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

Engineer Restore of Tamper

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

Engineer Restore of Soak

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

Engineer Restore of Confirmed

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

Engineer Restore of Faults

If 'YES', an Engineer code must be used to reset the Enforcer 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.

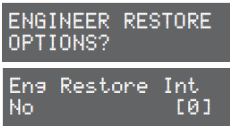
Anti-Code Restore

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

Please note: 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.



ALARM RESPONSE

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

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.

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.

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.

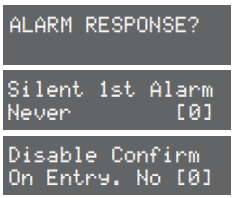
If the Alarm Response for Area A is programmed as 'Start At' "Keypads" and 'Stop at' "Bells Only" then it will take 15 seconds to go through each alarm responses before stopping at "Bells Only".

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 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.



SET UP DOWNLOADING

If required, the Enforcer can be programmed remotely, or directly via a PC/Laptop.

To upload/download remotely, a communications module must be installed.

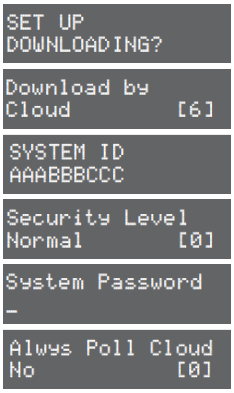
To upload/download directly, an RS232 must be used and connected directly to the Enforcer.

Set Up Downloading via Cloud

1. Press [B] or [NO] to scroll to 'SET UP DOWNLOADING?'. Press [YES].
2. 'Download By': Use [◄] or [►] to scroll to 'Cloud'. Press [YES].
3. The SYSTEM ID will be displayed will be displayed. Press [YES].
4. Use [◄] or [►] to select either Normal or High Security Level. NOTE: If High is selected, encrypted keys will need to be created. Press [YES].
5. Enter a System Password. Press [YES]

Please note: A system password is compulsory.

6. Always Poll Cloud' - use the [◄] or [►] keys to enable/disable polling to the cloud. Press [YES] (Recommended to 'Yes')
7. Roving Dial - use the [◄] or [►] keys to enable/disable roving dial
8. UDL Password – if the UDL software that the panel is connecting to has a password, use the numerical keys to enter it here. Press [YES]



9. Site Name – Using the numerical keys to enter the site name from 'System Displays' Press [YES].

Please note: Make sure that the SIM card in use is enabled for GPRS data and that the correct APN settings have been entered for your network (See 'COMMUNICATIONS').

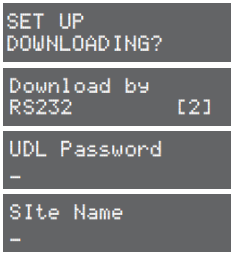
Connecting to the InSite software:

1. Click on 'Roving Dial customer' (or hold Ctrl and press the F10 key).
2. Click on the 'Dial Out Mode' drop down list and select 'Cloud'
3. Enter the 'System ID' of your Control Panel (See 'Set Up Downloading' in the panel's Engineer menu)
4. Enter the 'System Password' (as entered in 'Set Up Downloading' in the Engineer menu)
5. Leave the UDL security level at 'low' for the initial connection test in the 'System Security Level' field.
6. Enter the Engineer code as used on the Control Panel you are trying to connect to.
7. Enter the 'Site Name' as entered in the panel ONLY if it was entered on the panel, to otherwise, leave this blank.
8. In the 'Enter Customer In Database As' field, simply give the panel you are connecting to an appropriate name.
9. Click 'Dial'. If the connection is successful, the Cloud Icon will become blue. A dialogue box will appear asking if you would like to create a customer, click 'yes' to continue.
10. The system is now successfully connected to the Insite UDL Software. Now select 'Data from Panel' to download panel settings and proceed to make changes remotely.

Set Up Downloading via RS232

1. Press [B] or [NO] to scroll to 'SET UP DOWNLOADING?'. Press [YES].
2. 'Download By': Use [◄] or [►] to scroll to 'RS232'. Press [YES].
3. Enter a UDL password. This will need to be referenced in the InSite software. Press [YES].
4. Enter a Site Name. This will need to be referenced in the InSite software. Press [YES].

Please note: If a 'Site Name' is set up on the panel, the UDL 'Site Name' must be exactly the same, otherwise the connection will fail.



Connecting to the InSite software:

1. To set up the COM port associated to 'modem', open the software, click on 'Configuration', choose 'Modem Settings' and select the 'RS-232' option
2. Make sure that the serial COM used by the UDL software is set the same as in youR PC.

   E.g. Control Panel -> Device Manager -> Ports (Typical Windows PC)

3. Make sure that the RS-232 icon (at the bottom of the screen) has turned green

4. Click on 'Roving Dial customer' (or hold Ctrl and press the F10 key).
5. Set the 'Dial Out Mode' field to 'RS-232'
6. Enter the Engineer code in the 'Engineer Code' field
7. Enter the 'Site Name' if one has been put in the panel in 'System Displays'
8. In the 'Enter Customer In Database As' field, simply give the panel you are connecting to an appropriate name.
9. Click on 'Dial'
10. If the connection is successful, the RS-232 icon will become blue

SOFTWARE REVISION

This option identifies all software revisions.

Press [B] or [NO] to scroll to 'SOFTWARE REVISION'. Press [YES].

The software revision will be displayed (e.g. V10.00c) Press [YES].

The Hub software revision will be displayed (e.g. V3.54). Press [YES].

If any modems are connected, the display will show the software revision here. Press [YES].

CLEAN START

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

Clear Wireless Data

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

Clear Codes

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

Clear Logs

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

Please note

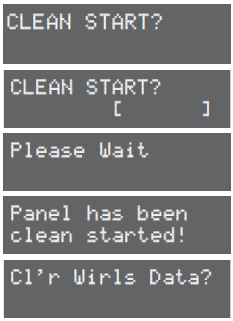
1. If everything is defaulted, the system memory will also be restored to factory defaults except the following:

2. Keypad address '0' remains enabled at all times & the keypad in use remains enabled

3. Additional keypads connected will keep the area information

Clean Start Programming

1. Press [B] or [NO] keys to scroll to 'CLEAN START'. Press [YES]. Enter the default code 2000 for Ungraded defaults
2. '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.
3. '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.
4. 'CLEAR LOGS' will be displayed. To delete all event log data press [YES], or press [NO] to keep the event log data.



APPENDIX A. DEFAULTS

MENU OPTIONS	CLEAN START [2020]	CLEAN START [2000]
SET DATE & TIME		
Year (00-99)	[07]	[07]
Month (1-12)	[01]	[01]
Day (1-31)	[01]	[01]
Hours (0-23)	[02]	[02]
Minutes (0-59)	[52]	[52]
DST Adjust?	No [0]	No [0]
WIRELESS DEVICE CONTROL		
Program Keyfob Buttons		
Lock [1]	Set Area [2]: Area A	Set Area [2]: Area A
Unlock [2]	Unset Area [3]	Unset Area [3]
I [3]	Set Area [2]: Area B	Set Area [2]: Area B
II [4]	Show Status [1]	Show Status [1]
Lock + Unlock [5]	No Action [0]	No Action [0]
I + II [6]	No Action [0]	Hold up [6]
Lock + I [7]	No Action [0]	No Action [0]
Unlock + II [8]	No Action [0]	No Action [0]
CHANGE INPUTS		
Inputs	All inputs unused	All inputs unused
Input Area	A (if input programmed)	A (if input programmed)
Input Areas	Any [0]	Any [0]
Input Attributes		
Chime	No [0]	No [0]
Omittable	No [0]	No [0]
Double Knock	No [0]	No [0]
Normally Open	No [0]	No [0]
Monitor Activity	No [0]	No [0]
Confirm Group	[00]	[00]
Input Description		
Enter Name	Input 01	Input 01
Enter Location	_	_
CHOOSE MODE		
EOL Range	4k7/2k2 [1]	4k7/2k2 [1]
EOL Mode	DR [1]	DR [1]

MENU OPTIONS	CLEAN START [2020]	CLEAN START [2000]
Input Response	300ms	300ms
INSTALL ZEMs		
ZEM Address	No [0] (for all ZEM addresses)	No [0] (for all ZEM addresses)
CHANGE OUTPUTS		
Endstation Outputs		
BELL O/P	Siren Any [0014]	Siren Any [0014]
STB O/P	Strobe Any [0016]	Strobe Any [0016]
PGM O/P	Not Used [0000]	Not Used [0000]
ZEM Outputs		
ZEM Address		
Output 1-4	Unused [00]	Unused [00]
Wireless Bells		
BELL O/P	Siren Any [0014]	Siren Any [0014]
STB O/P	Strobe Any [0016]	Strobe Any [0016]
Output Module Outputs		
OP Mod Address		
OP Mod Installed	No [0]	No [0]
Keypad Outputs		
Address [0]-[3]		
Output 1	Unused [0000]	Unused [0000]
Reader Outputs		
Address [1]-[3]		
Output 1	Unused [0000]	Unused [0000]
User Outputs?		
User Output Type	Latched [0]	Latched [0]
User Output Name	_	_
ASSIGN KEYPADS/READERS		
Address	Address [0]: Keypad [1]	
Addresses [1]-[3]: Unused [0]	Address [0]: Keypad [1]	
Addresses [1]-[3]: Unused [0]		
Set Point Sets	[ABCD]	[ABCD]
Set Point Unsets	[ABCD]	[ABCD]
Set Point In	[ABCD]	[ABCD]
Set Point Description		
Enter Name	Device 0	Device 0
Enter Location		
If programmed as Reader:		

MENU OPTIONS	CLEAN START [2020]	CLEAN START [2000]
Reader Is:	Set Point [0]	Set Point [0]
If programmed as Reader, Entry		
Control or Access Control	Lock Open Time [005]	
Door Open Time [010]	Lock Open Time [005]	
Door Open Time [010]		
CHANGE TIMERS		
A, B, C, D: Entry Time	[030]	[030]
A, B, C, D: Exit Time	[020]	[020]
A, B, C, D: App Exit Time	[030]	[030]
A, B, C, D: Siren Time	[04]	[04]
A, B, C, D: Siren Delay	[00]	[00]
Confirm Time	[30]	[30]
HU Confirm Time	[08]	[08]
Strobe Time	[00]	[00]
Re-Arm No	[3]	[3]
AC Signal Delay	[040]	[040]
Settle	[005]	[005]
Double Knock	[10]	[10]
Pre-Alarm	[030]	[000]
Comm Fault Delay	[180]	[020]
Set Fail	[040]	[120]
Fire Siren Time	[04]	[04]
Set Fail Warning	[00]	[00]
Input NAT Days	[14]	[14]
Input NAT Hours	[00]	[00]
Wireless Supervision Time	[02]	[24]
Wireless Jamming Time	[100]	[100]
Service Time	[000]	[000]
CODES AND USERS		
5 Digit PINs	No [0]	No [0]
Change Duress Codes	All codes empty	All codes empty
Change Master Manager Code		
Master Manager Code	2222	2222
User Areas	ABCD	ABCD
User Set Options	Unset/Set [0]	Unset/Set [0]
Flexi Set	Yes [1]	Yes [1]
User Name	_	_

MENU OPTIONS	CLEAN START [2020]	CLEAN START [2000]
Change Engineer Code	1111	1111
VOLUME CONTROL		
A, B, C, D Entry	[4]	[4]
A,C, D Exit	[4]	[4]
B Exit	[1]	[1]
App Exit	[4]	[4]
Alarm	[7]	[7]
Fire	[7]	[7]
Tamper	[6]	[6]
Day Alarm	[6]	[6]
Chime	[3]	[3]
Code Stops Sound	Yes [1]	Yes [1]
E/E Keypads Only	No [0]	No [0]
Alert Kps Only	Yes [1]	Yes [1]
Silent Tech Alert	No [0]	No [0]
Use Main Sounder	Yes [1]	Yes [1]
SYSTEM OPTIONS		
Site Options		
Set With Fault	Yes [1]	Yes [1]
Set With Tamper+	No [0]	Yes [1]
Set with ATS Fault	No [0]	Yes [1]
Set Fail = Alarm	Yes [1]	Yes [1]
Do Bat Load Test	No [0]	No [0]
Strb/Sqwk At Set	None [0]	None [0]
Use Level Set	Yes [1]	Yes [1]
Autoset Force	No [0]	No [0]
Restrict PIN Use	Yes [1]	No [0]
Simple Set	No [0]	No [0]
Intelligent Set	No [0]	No [0]
Common Lobby	Yes [1]	Yes [1]
Flexi Unset	No [0]	No [0]
2 Key HU	None [3]	Both [2]
Tag Opens Doors	No [0]	No [0]
Fire Key Enable	No [0]	No [0]
Set with Poll Fault	No [0]	Yes [1]
Fob Unset Entry	No [0]	No [0]
Wireless Bell Supervision	Yes [1]	No [0]

MENU OPTIONS	CLEAN START [2020]	CLEAN START [2000]
Download if Set	No [0]	No [0]
UDL/Cloud Priority	Low [1]	High [0]
System Displays		
Area A Text	Full Set	Full Set
Area B Text	Night Set	Night Set
Area C Text	Area C	Area C
Area D Text	Area D	Area D
Full Area Text	Full	Full
Sign on Message	Enforcer	Enforcer
Display When Set	No [0]	No [0]
Display Alarms	No [0]	No [0]
Display HUs	No [0]	No [0]
Display Inputs	No [0]	No [0]
Exit Modes		
A Exit Mode	Final Door [1]	Timed/Final [2]
B Exit Mode	Timed [0]	Timed [0]
C Exit Mode	Timed [0]	Timed [0]
D Exit Mode	Timed [0]	Timed [0]
REVIEW LOGS		
ENGINEER TESTS		
DIAGNOSTICS		
ENGINEER RESTORE OPTIONS		
Engineer Restore Intruder	No [0]	No [0]
Engineer Restore Hold Up	No [0]	No [0]
Engineer Restore Tamper	Yes [1]	Yes [1]
Engineer Restore Soak	No [0]	No [0]
Engineer Restore Confirmed	Yes [1]	Yes [1]
Engineer Restore Faults	No [0]	No [0]
Anti-Code Restore	No [0]	No [0]
COMMUNICATIONS		
App Set UP		
Use App	No [0]	No [0]
System ID	Displays unique System ID	Displays unique System ID
Cloud Password	_	_
Security Level	Normal [0]	Normal [0]
App Password	_	_
Always Poll Cloud	No [0]	No [0]

MENU OPTIONS	CLEAN START [2020]	CLEAN START [2000]
Data Network Set Up?	6	6
Programming Signalling	.	.
ARC Details	[1]	[1]
Format	Not Used [254]	Not Used [254]
Digi Channel 1	Fire [0001]	Fire [0001]
Digi Channel 2	HU Any [0002]	HU Any [0002]
Digi Channel 3	Unconfirmed Any [0018]	Unconfirmed Any [0018]
Digi Channel 4	Final Set Any [0022]	Final Set Any [0022]
Digi Channel 5	Confirmed Any [0006]	Confirmed Any [0006]
Digi Channel 6	Misoperation[0005]	Misoperation[0005]
Digi Channel 7	Omit Rearm Any [0017]	Omit Rearm Any [0017]
Digi Channel 8	Mains Fail [0052]	Mains Fail [0052]
Digi Channel 9	Global Fault 1 [0055]	Global Fault 1 [0055]
Digi Channel 10	Test ATS [0064]	Test ATS [0064]
Digi Channel 11-16	Not Used [0000]	Not Used [0000]
User SMS Signalling		
SMS Details	[1]	[1]
Mobile Number	_	_
ALARM RESPONSE		
Silent 1st Alarm	Never [0]	Never [0]
Disable Confirm On Entry	No [0]	No [0]
Area A, B, C, D Starts At	Digi [3]	Digi [3]
Area A ,B, C, D Stops At	Confirm [4]	Confirm [4]
Fire, Gas, HU Start At	Digi [3]	Digi [3]
Fire Stops At	Digi [3]	Digi [3]
HU Stops at	Confirm [4]	Confirm [4]
Day Alarm Starts	Sirens Only [2]	Sirens Only [2]
Day Alarm Stops	Sirens Only [2]	Sirens Only [2]
SET UP DOWNLOADING		
Download By	None [0]	None [0]
SOFTWARE REVISION		
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).

NUMBER & TYPE		OPERATION
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 35 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.
42	Medical	This input type will work as a 24hr input, any inputs that are programmed for Medical 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
APP Exit Time	Exit time when set via the HomeControl+ app	0 – 199 seconds
Siren Time	Cut off time for external sounder. Separate for each area.	2 – 15 minutes
Siren Delay	Delay after intruder alarm before siren live. Not valid within 3 minutes of final arm or after entry time started.	0 – 20 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

TIMER	FUNCTION	RANGE
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. Please 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
Comm Fault Delay	Duration of communication fault before 'Comms 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. **Please note: Setting this to '250' disables line fault monitoring and will not notify at the keypad/readers**	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
Input NAT Days	NAT stands for Non-Activity Timer. This is used in conjunction with the input attribute 'Non Activity Input', and will monitor the chosen input for the selected number of days. At expiration of timer, and if the input has not opened within that time, then this will be stored in the panel log. Non Activity fault and there will be an output activated if programmed to it. Send SMS message if "Special Log" is on.	0-14 days
Input NAT Hours	NAT stands for Non-Activity Timer. This is used in conjunction with the input attribute 'Non Activity Input', and will monitor the chosen input for the selected number of hours. At expiration of timer, and if the input has not opened within that time, then this will be stored in the panel log. Non Activity fault and there will be an output activated if programmed to it. Send SMS message if "Special Log" is on.	00-23 hours

TIMER	FUNCTION	RANGE
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

NO.	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.

NO.	TYPE	ACTIVE	RESTORE
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	
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
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

NO.	TYPE	ACTIVE	RESTORE
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	When the input voltage from the transformer is too low	When the control panel reads the correct voltage.
0055	"Global Fault 1 (Faults: Modem, Battery, Fuse, Line, Mains)"	At fault	When fault clears
0056	"Global Fault 2 (Faults: as above)"	Activates if fault occurs only when system is armed	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	N/A	N/A
0170-0199	User Defined 1-30	Can be used to trigger outputs via the keyfob. For example, an output can be programmed as type '[0171] User Defined 02' and then wired to a garage door. If a user keyfob button is programmed as '[0171] User Defined 02,' when that button is pressed, the output will trigger opening the garage door.	
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

APPENDIX E. FAULT FINDING

If a device on the Enforcer 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.

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	**Please 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.

FAULT	DESCRIPTION	SOLUTION
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. Note: 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.
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'. **Note: 'Line Fault' timer operative.**

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