XFP NETWORKABLE ANALOGUE ADDRESSABLE FIRE ALARM CONTROL PANEL

user manual and log book

approved document no. DFU2000501 Rev 2

CONTENTS

Important safety notes **3**

Introduction **4**

Fire alarm systems - an overview 4

The XFP fire alarm control panel 4

An overview of the panel's access levels 4

User responsibilities **5**

Panel layout, indicators and controls **6**

General user operation **8**

(Messages that may appear on the panel's display and what they mean)

Normal conditions 8

Fire conditions 9

1st-stage fire conditions 10

Pre-alarm conditions 11

Fault conditions 11

Access level 1 (general user) controls and menu options **12**

Displaying fire, fault, disablement and test events 12

Testing the panel's lamps (its indicators and liquid crystal display) 13

Displaying the panel's alarm counter 13

Access level 2 (authorised user) controls and menu options **14**

Silencing the alarm sounders ***14***

Resounding the alarm sounders ***14***

Resetting the panel ***14***

Displaying fire, fault, disablement and test events 15

Testing the panel's lamps (its indicators and liquid crystal display) 15

Displaying and/or clearing the panel's alarm counter 15

Changing the panel's time and date 16

Printing, displaying and/or resetting the panel's event log 16

Disabling or enabling parts of the system 17

Changing the access level 2 entry code 19

System set-up data chart **20**

Fire alarm log book **21**

Installation certificate **27**

Commissioning certificate **28**

IMPORTANT SAFETY NOTES

The panel is safe to operate provided it has been installed in compliance with the manufacturer's instructions and used in accordance with this manual.

Hazardous voltages are present inside the panel - DO NOT open it unless you are qualified and authorised to do so. There is no need to open the panel's enclosure except to carry out commissioning, maintenance and remedial work. This work must only be carried out by competent service personnel who are fully conversant with the contents of the panel's separate engineering manual and have the necessary skills for maintaining this equipment.

If the enclosure is damaged in any way, expert advice should be sought regarding its repair.

Regular servicing of the fire alarm system is highly recommended, preferably on a continuous maintenance contract and by a competent organisation. A fully-itemised report of the installation should be obtained at least annually.

Disclaimer

No responsibility can be accepted by the manufacturer or distributors of this fire alarm panel for any misinterpretation of an instruction or guidance note or for the compliance of the system as a whole. The manufacturer's policy is one of continuous improvement and we reserve the right to make changes to product specifications at our discretion and without prior notice. E&OE.

INTRODUCTION

Fire alarm systems - an overview

The primary purpose of a fire alarm system is to provide an early warning of a fire so that people and animals can be evacuated and action taken to stop the fire as soon as possible - all according to a predetermined plan.

Alarms may be raised automatically, by smoke or heat detectors, or manually by a person operating a manual call point.

To ensure an alarm is dealt with in an orderly manner, it is important to know where the alarm is coming from. To aid this function, fire alarm systems are usually split into zones, each covering a different area of a building.

When an alarm has been raised, the panel responds by indicating the zone(s) in which the alarm has occurred and activating all relevant outputs (sounders, bells, strobes, beacons, relays, etc) to provide a warning of the fire.

The XFP fire alarm control panel

The XFP is an intelligent 'addressable' fire alarm panel designed to work with a wide range of intelligent fire detection devices. As such, it is able to provide much more detailed information about a fire condition than just the number of the activated zone.

As well as giving prioritised feedback on the status of the system, its easy-to-read 80-character display will indicate the name and location of every detector that has responded to a fire and also show the order in which they went into alarm.

It will also display detailed information on any pre-alarm and/or fault conditions that arise and can be programmed to operate in a number of different ways to help reduce the incidence of false alarms and to encourage the orderly evacuation of a building in a true fire condition.

Controls are available that will allow authorised users to silence or reset a fire condition, to disable or enable parts of the system to suit prevailing conditions, to change the time the system enters day (building occupied) and night (building unoccupied) mode and to test the panel's indicators and liquid crystal display to ensure they are working correctly.

All of these functions - and more - are explained in detail in this user manual.

An overview of the panel's access levels

Three access levels are available at the panel - access level 1 (general user), access level 2 (authorised user) and access level 3 (engineer).

Access level 1 is the normal user level which is accessible to everyone. At this level you can:-

- Scroll through any fire, pre-alarm and fault conditions that are displayed on the panel's display
- View any disablements or zones that are being tested (if applicable)
- Test the panel's lamps (its LED indicators and display) to ensure they are working correctly
- Determine the total number of times the panel has been in a fire condition
- Gain entry to access level 2 (authorised user level) and, if you are an engineer, access level 3.

Access level 2 is the authorised user level which is available to authorised, trained personnel only. Access to this level on push button versions of the panel requires the input of a special four-digit code. On keyswitch versions, access is gained by turning the panel's keyswitch to the armed position. At access level 2, the panel's silence, reset and investigate buttons become active and users are able to:

- Scroll through any fire, pre-alarm or fault conditions that are displayed on the panel's display
- View any disablements or zones that are being tested (if applicable)
- Enable or disable zones, sounders, outputs, relays and devices (as appropriate)
- Print, display and/or reset the panel's event history
- Set the time and date
- Change the entry code to access level 2 from its factory default.

Access level 3 is the panel's engineering/programming level. On no account should access level 3 be accessed by anyone but an authorised system engineer. A fire panel is a piece of life safety equipment and unauthorised access may affect the way the panel functions, endanger life and void its warranty. If you are an authorised engineer, details of access level 3 can be found in the panel's separate Engineering manual.

USER RESPONSIBILITIES

BS5839-1: 2002 is the British Standard code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems for buildings. Section 7 of the standard (User Responsibilities) states that a named responsible person should be appointed to supervise all matters pertaining to the fire alarm system {clause 47.2a}.

Highlighted below is a summary of the main functions the responsible person is expected to carry out with regard to BS5839-1: 2002 only. It does not highlight any other responsibilities that may be required of the user or responsible person that are listed in documentation such as the Employers Guide to Fire Safety, the Fire Precautions (Workplace) regulations and/or any other legislation relevant to the premises. If in doubt, the fire authority can advise on the fire legislation that applies to any given building. For countries outside the UK, different user responsibilities may apply.

BS5839-1: 2002 states the responsible person should:

(The bracketed numbers {xx} identify the BS5839-1: 2002 clauses to which the summary refers).

1 Ensure the fire alarm panel is checked daily to confirm there are no faults on the system {47.2b}

2 Ensure arrangements are in place for the test, maintenance and regular servicing of the system with regard to Section 6 of the standard {47.2c}. Important: Clause 44 of BS5839-1: 2002 recommends weekly and monthly tests that should be carried out by the responsible person. See below for details.

3 Ensure the system log book is kept up to date by recording fire signals, fault signals, work on the system, etc, and make sure it is available for inspection at all times {47.2d / 48}

4 Ensure all relevant occupants of the premises are instructed in the proper use of the system {47.2e}

5 Take steps to limit the number of false alarms on the system {47f}

6 Ensure the effectiveness of the system is not impaired by ensuring there is a space of at least 500mm in all directions around and below every fire detector and that all manual call points are unobstructed and easy to see {47g}

7 Liaise with all relevant building engineers, decorators, etc., to ensure any changes to (or maintenance of), the building's fabric does not compromise the protection given by the fire alarm system, create faults or false alarms {47h}

8 Ensure that any structural or occupancy changes planned for the building are done so with due and early consideration given to any changes that may be required to the fire system {47h}

9 Ensure that a selection of spare parts are held as appropriate within the premises {47j}

Routine weekly and monthly testing to be undertaken by the user/responsible person

To meet the requirements of Clause 44 of BS5839-1:2002 we recommend the following tests are carried out at approximately the same time each week, during normal working hours:-

Note: It is essential any alarm receiving centre is contacted before and after these tests to avoid unwanted alarms and to confirm the fire signal is correctly received.

- Carry out an Indicator lamp test to check all zone lights show and the beeper sounds.
- Operate a manual call point or smoke/heat detector to test the fire alarm.
- Check that the alarm sounders operate.
- Reset the system by pressing the Silence/Activate Sounders button and Control Panel Reset button.
- Verify that no manual call points or smoke/heat detectors are obstructed in any way.
- Test a different zone each week using a different call point or detector so all are tested in rotation.

Monthly attention: Ensure authorised service personnel verify the system's standby power supply (or supplies) are in good working order.

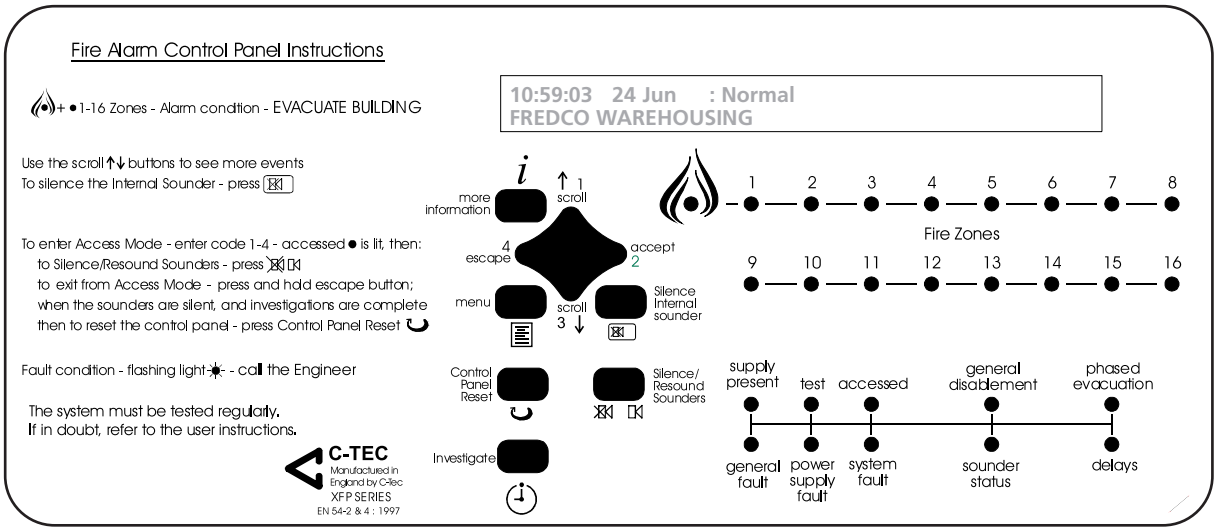
Quarterly and periodic inspection, testing, servicing and maintenance

It is the user's responsibility to ensure that an ongoing periodic plan is in place that meets Clause 45 (Inspection and Maintenance) of BS5839-1:2002. The work required to meet this Clause must be carried out by a competent person with specialist knowledge of fire detection and alarm systems. The standard recognises this will normally be an outside specialist fire alarm servicing organisation.

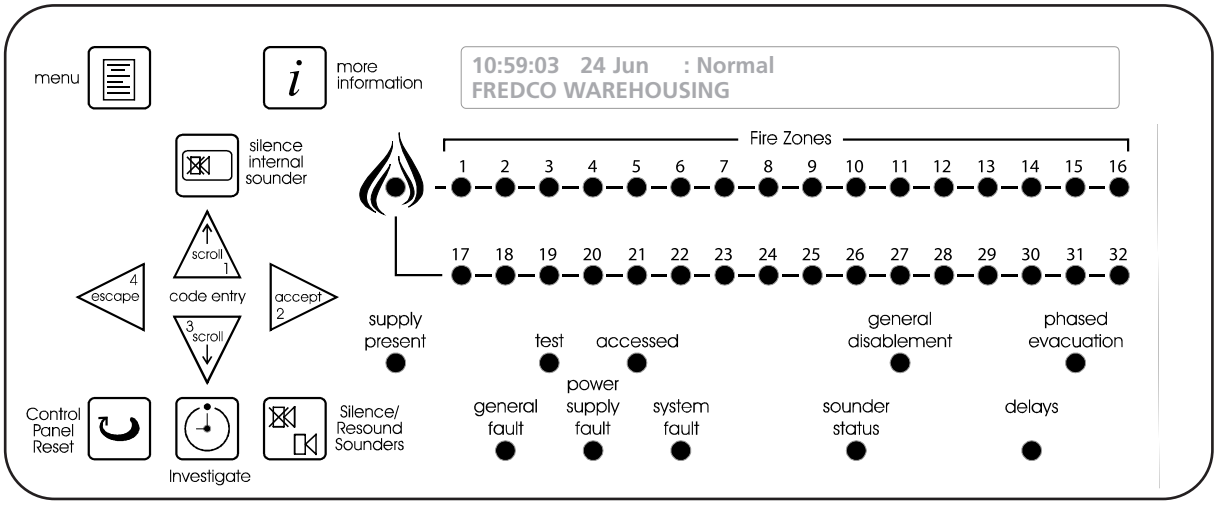
Please note: the above summaries do not replace Sections 6 and 7 of BS5839-1: 2002 but are intended to help the user gain a greater understanding of his or her responsibilities. We strongly recommend the named responsible person familiarises themselves with the full standard, copies of which are available from your local reference library or can be purchased from the British Standards Institute, Customer Services Dept., 389 Chiswick High Road, London, W4 4AL. Tel: +44 (0)20 8996 9001. Web: www.bsi-global.com

PANEL LAYOUT, INDICATORS & CONTROLS

Layout of single loop 16 zone fire panel (code entry version)



Layout of one to two loop 32 zone fire panel (code entry version)



LED Indicators

Liquid crystal display	Provides detailed information on the status of the fire alarm system, see pages 8-11
General Fire	Flashes red when there is a fire condition on any zone and goes steady red when the alarm is silenced. Subsequent fire conditions will restart the General Fire LED flashing until it is silenced again
Fire Zones LEDs (1-16 or 1-32)	One or more of these LEDs will flash red in an alarm condition (to show which zone(s) the fire is in) and will go steady when silenced
Supply Present	Normally lit green to show that all of the panel's power supplies are functioning correctly
Test	Lit yellow when the panel is in walk test mode. This LED does NOT illuminate for any other test condition

Accessed	Lit yellow when the panel is in access level 2 or 3
General disablement	Lit yellow when one or more zone, sounder, output or relay is disabled
Phased evacuation	Flashes yellow when there is a phased evacuation in process
General fault	Flashes yellow when there is a fault condition on the panel. Will always be lit in conjunction with at least one other fault LED
Power supply fault	Lit yellow when the panel's power supply or mains has failed or the panel's standby battery is in poor condition
System fault	Lit yellow when a system error, such as a microprocessor fault, occurs. Remains lit even if the panel automatically clears the fault
Sounder status	Flashes yellow if there is a faulty sounder or a sounder disablement anywhere on the system
Delays	Lit yellow when one or more output delays have been programmed into the panel. Flashes yellow when one or more output delay is running.

Button controls

More Information	Displays additional information on any fire, pre-alarm or fault conditions that appear on the panel's display
Silence Internal Sounder	Silences the panel's internal sounder
Menu	Provides access to the panel's user menus
Scroll up / down ▲ ▼	Dependent on the status of the panel, these buttons:- • scroll vertically through any fire, pre-alarm or fault conditions that appear on the panel's display • scroll vertically through the panel's user menus • manipulate date, time and disablement settings, etc • serve as code input buttons to access levels 2 or 3
Escape / accept ◀ ▶	Dependent on the status of the panel, these buttons:- • scroll horizontally through the panel's user menus • escape or accept options available in the panel's user menus • serve as code input buttons to access levels 2 or 3
Silence / Resound Sounders	Silences or resounds the system's sounders (access levels 2 & 3 only)
Control Panel Reset	Resets the panel when the sounders are silenced (access levels 2 & 3 only)
Investigate	Starts the panel's investigate timer function (access levels 2 & 3 only). Only available if the panel's investigate timer function has been enabled by an engineer.

Keyswitch control (if fitted)

Turning the keyswitch to the armed position gives the user instant access to access level 2 (authorised user level).

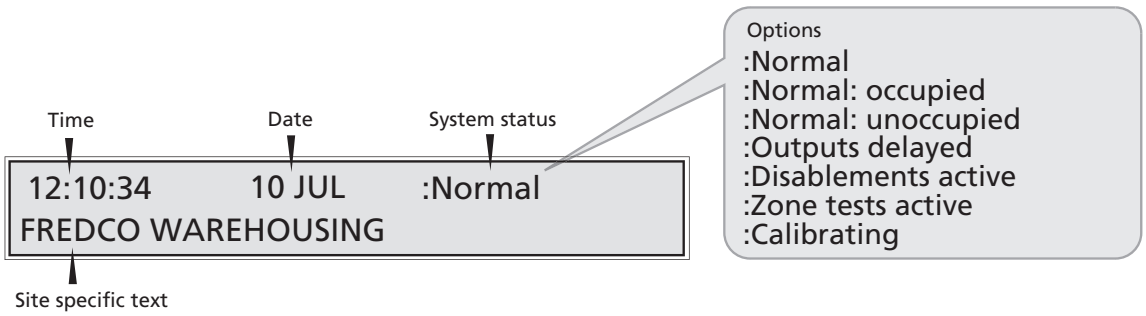
GENERAL USER OPERATION

(MESSAGES THAT MAY APPEAR ON THE PANEL'S DISPLAY AND WHAT THEY MEAN)

At access level 1, the panel's display provides feedback on the system's current status. Priority is always given to the most important current event, i.e. fire conditions will override pre-alarms and/or fault conditions. This section (pages 8-11) outlines the various messages that may be displayed, what they mean and what action is required.

NORMAL CONDITIONS

In normal mode (when no fires, faults or pre-alarms are occurring), one of the following messages will be displayed at the panel:-



Normal is displayed when there are no fires, faults or pre-alarms on the system and the panel's day/night (building occupied/unoccupied) facility HAS NOT been set up by the system engineer.

Normal: occupied is displayed when there are no fires, faults or pre-alarms on the system and the panel is in day (building occupied) mode.

Normal: unoccupied is displayed when there are no fires, faults or pre-alarms on the system and the panel is in night (building unoccupied) mode.



Day/night (building occupied/unoccupied) settings are normally programmed into the panel by a system engineer. They allow the system to operate differently dependent on the time of day with, for example, different detector sensitivity settings and lower sounder volumes. If required, authorised users can manually alter the time the panel enters day and night mode using the access level 2 menu options - see pages 14-19.

Outputs delayed is displayed if one or more delays to outputs have been programmed into the panel. It indicates that certain outputs (which may include sounders, relays and/or output units) will not trigger in the event of a fire alarm condition for a set period of time, as programmmed by the system engineer. Pressing the **more information** button in a fire alarm condition will give more information about delays.

Disablements active is displayed if one or more disablements have been programmed into the panel by an authorised user or engineer. If required, you can view these disablements at access level 1 (or, if you are an authorised user, you can cancel them (or set additional disablements) at access level 2.

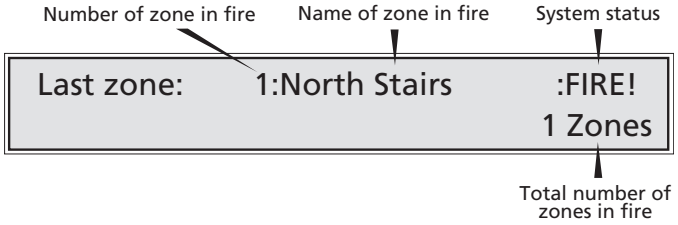
Zone tests active is displayed if one or more of the fire alarm system's zones have been programmed into test mode by an authorised engineer. When a zone is in test mode, any fire alarm conditions raised on it WILL NOT be reported to the panel in the normal way. As such, this message should only appear when an engineer is working on the system. If required, you can view which zones are in test mode at access levels 1 or 2. Zones can only be taken out of test mode by an authorised engineer.

Calibrating... is displayed if automatic adjustments are taking place to allow the system's smoke and heat detectors to perform at their optimum level. Normally, this message only appears at 04:00 hours although it is possible that an engineer may have programmed this to happen at an alternative time. Whilst calibrating, the display will list the ID code of the device being calibrated, i.e. "L:1 D:154" and the system will not return to normal until the process is complete.

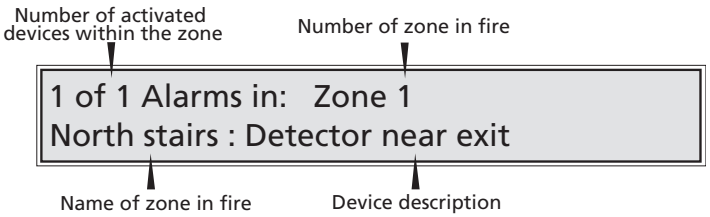
FIRE CONDITIONS

In the event of a fire condition:-

- the panel's general fire indicator will flash;
- the panel's internal sounder (if enabled) will pulse;
- the relevant Fire Zone indicator on the panel will flash;
- the panel's display will show the number and name of the zone in fire (see example below); and
- the system's sounders, relays and other output devices will operate as programmed.



Pressing the **more information** button will display the actual device that has triggered the fire condition, for example:-



If more than one device is in a fire condition on the zone, the top left corner of the display will show, for example "1 of 3" and can be scrolled through using the ▲ and ▼ buttons.

In the event of a fire condition on multiple zones:-

- the panel's general fire indicator will flash, its internal sounder (if enabled) will pulse and its relevant Fire Zone indicators will flash;
- the panel's display will show the first and last zones that went into fire together with the total number of zones that are in fire. For example, if a fire condition has occurred in zones 1, 2 and 3 in that order, the display will show a message similar to the one below.
- the system's sounders, relays and other output devices will operate as programmed.



To view any additional zones that are in fire, press the ▲ or ▼ buttons as appropriate. The display will continue to show the last zone that went into fire but all previous zones will now appear on a step-by-step basis with details of which order they went into fire, i.e. 1st zone, 2nd zone, etc.

Pressing the **more information** button at any time will give you details of the actual device(s) that are in a fire condition on the zone that is on the top line of the display. These can be scrolled through using the ▲ and ▼ buttons.

In the event of a fire condition, the building's fire management plan should always be executed.

Authorised users can silence or reset the system as appropriate by entering access level 2 and pressing the buttons on the panel's front. Details on how to do this can be found on page 14.

FIRE CONDITIONS WITH OUTPUT DELAYS

If a fire condition occurs on a zone that has been programmed with one or more output delays, the panel will report the fire condition as described above but the panel's **delays** LED will flash yellow to indicate that one or more of the zone's assigned outputs has not yet triggered. Details of which outputs have delays running can be viewed by pressing the **more information** button.

1ST-STAGE FIRE CONDITIONS

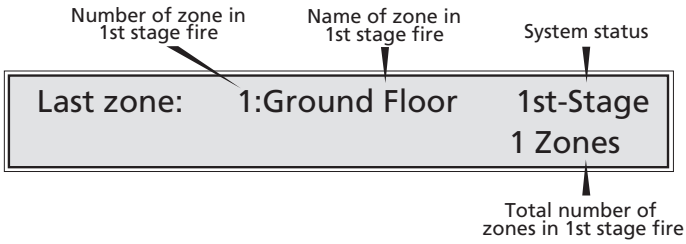
On sites where there is a high incidence of nuisance alarms or where the consequence of a false alarm could result in the activation of, say, a sprinkler system, the fire officer may have permitted certain zones to be set up with:-

- a 1st-Stage **zone dependency function** - to prevent the zone going into full alarm until certain other events have occurred on the same zone, such as a second device going into alarm; or
- a 1st-Stage **investigation delay period** - to give the user time to investigate the cause of an alarm before a full alarm is initiated.

Details of any zones set up with 1st-Stage alarm function will appear on the system set-up data chart on page 20, provided it has been completed by the system engineer.

In the event of a 1st-Stage fire condition (zone dependency or investigation delay):-

- the panel's internal sounder (if enabled) will pulse;
- the relevant Fire Zone LED on the panel will flash;
- the panel's display will show the number and name of the last zone which entered a "1st-Stage" fire condition (see example below).



If the 1st-Stage alarm is in a zone set up with a zone dependency function:-

Press the **more information** button to display the actual device that has triggered the 1st-stage fire condition (the display will also confirm that the panel is waiting for a confirmatory signal before going into full alarm). Pressing the **more information** again will show how long is left before the panel auto-resets (returns to normal mode) should a confirmatory signal not be received.

If the 1st-Stage alarm is in a zone set up with an investigation delay period:-

Press the **more information** button to display the actual device that has triggered the 1st-stage fire condition (pressing **more information** again will count down how long you have to invoke the zone's investigation delay period before it goes into full alarm)

To start the zone's investigation delay period:-

Enter access level 2 (see page 14) and press the **investigate** button. The period the investigation delay runs for will be as programmed by the system engineer. Pressing **more information** after the investigate button has been pressed will display how long is left before the investigation period expires and the zone goes into full alarm

If upon investigation you discover the fire condition is correct, you can override the delay by activating any manual call point in that zone.

Should any additional detection device(s) be activated in the zone being investigated during the recognition or delay periods, the panel will automatically put the zone into full alarm.

Should you discover the fire condition is false, you can silence or reset the 1st-stage fire condition at access level 2 (see page 14) and take appropriate action to clear the nuisance alarm.

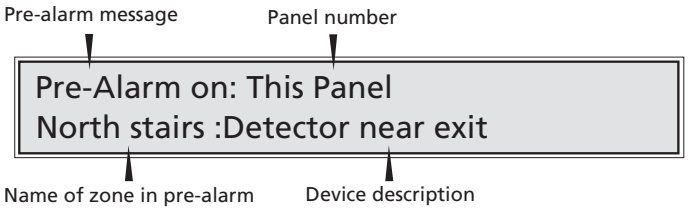
In effect, the 1st-Stage delay on a zone set up for investigation comprises two delays - the initial recognition period (where the user is expected to acknowledge the delay) followed by the investigation period itself.

PRE-ALARM CONDITIONS

Pre-alarm conditions are designed to warn the user that a smoke or heat detector is registering an increase in conditions that could lead to a fire. Pre-alarms must be taken seriously as a fire condition could be imminent.

In the event of a pre-alarm condition:-

- the panel's internal sounder (if enabled) will pulse;
- the panel's display will show details of the smoke or heat detector which is in pre-alarm, for example:

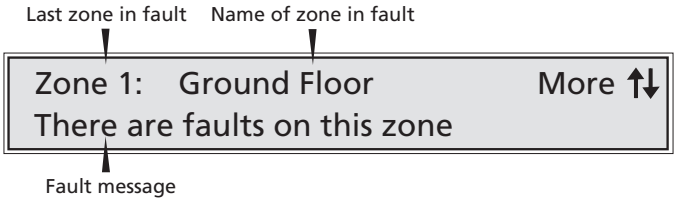


Should there be more than one detector in pre-alarm, the top right hand corner of the display will read '**More.** ↑↓' and can be scrolled through using the panel's ▲ or ▼ buttons

FAULT CONDITIONS

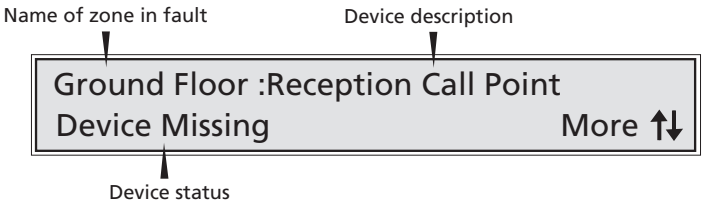
If a part of the fire alarm system fails due to detector failure, wiring fault, etc:-

- one or more of the panel's fault indicators will flash;
- the panel's internal sounder (if enabled) will pulse;
- the panel's display will show an appropriate fault message (in the case of a faulty manual call point, for example, the zone on which the faulty call point is located will be displayed):-



Should there be more than one fault condition, the top right side of the display will read '**More.** ↑↓' and you can scroll through them using the panel's ▲ or ▼ buttons.

Press the **more information** button to view additional details about the displayed fault. For device specific faults, the actual device that has triggered the fault condition will be shown. For other faults, information pertinent to that fault will be displayed instead (if available).



For device specific faults, pressing the **more information** again will display the unique ID code and address location of the faulty device for the benefit of service engineers, etc.

In the event of a fault condition, the designated responsible person on site should:

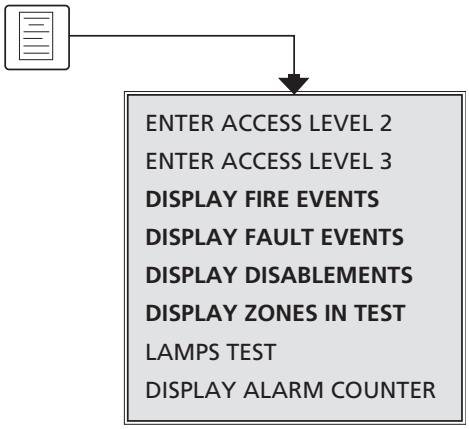
- Mute the panel's internal beeper by pressing the **silence internal sounder** button. (Note that any new faults will restart the beeper).
- Note down the nature of the fault(s) in the fire system's log book (pages 21 to 26)
- Take appropriate steps to ensure the fault(s) is/are rectified.

ACCESS LEVEL 1 (General User) CONTROLS & MENU OPTIONS

Access level 1 is the normal user level which is accessible to everyone. At this level you can:-

- Scroll through any fire, pre-alarm and fault conditions (as described on pages 8-11)
- View any disablements or zones that are being tested (if applicable)
- Test the panel's lamps (its LED indicators and display) to ensure they are working correctly
- Determine the total number of times the panel has been in a fire condition
- Gain entry to access level 2 (authorised user level) and, if you are an engineer, access level 3.

Pressing the panel's MENU button at access level 1 activates the panel's general user menu which can be navigated using the panel's scroll (▲ ▼), accept (▶) and escape (◀) buttons as appropriate. The menu options available at access level 1 are explained in detail over the next two pages.



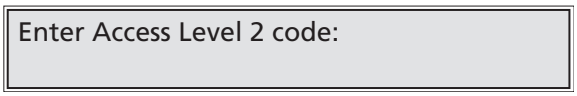
Note that menu options shown in bold will only appear if relevant to the panel's status. For example, the DISPLAY FIRE EVENTS function will not show if there are no active fire conditions on the system.

Enter Access Level 2

Access level 2 is for authorised users only and access to it requires the input of a special four digit code.

THIS MENU OPTION WILL NOT BE APPEAR ON KEYSWITCH VERSIONS OF THE PANEL WHERE ENTRY TO ACCESS LEVEL 2 IS GAINED BY TURNING THE PANEL'S KEYSWITCH TO THE ARMED POSITION.

On push button panels, when the ENTER ACCESS LEVEL 2? prompt appears, press the accept ▶ button and you will be asked to enter the code:



Enter the code using the ▲ (1) ▶ (2) ▼ (3) ◀ (4) buttons as appropriate. The default code to access level 2 is 3 3 3 3 (four presses of the ▼ button). If this does not work, the code may have been changed by an authorised user/engineer. A record of any changes should appear on the System Setup Data Chart on page 20 of this user manual. If they do not, contact your maintenance company for advice.

As soon as the code has been entered correctly you will be taken into access level 2. Additional panel controls (see page 14) and menu options (see pages 15-19) will now be available to you.

Enter Access Level 3

Access level 3 is the panel's engineering/programming level. ON NO ACCOUNT SHOULD ACCESS LEVEL 3 BE ACCESSED BY ANYONE BUT AN AUTHORISED SYSTEM ENGINEER. A FIRE PANEL IS A PIECE OF LIFE SAFETY EQUIPMENT AND UNAUTHORISED ACCESS MAY AFFECT THE WAY THE PANEL FUNCTIONS, ENDANGER LIFE AND VOID ITS WARRANTY. If you are an authorised engineer, details of access level 3 can be found in the panel's separate Engineering manual.

Display Fire Events

This function is only available if there are active fire conditions on the system. If available, press the accept ▶ button once and a window similar to the one below will appear:-



Pressing the ▲ and ▼ buttons will scroll the display through all active fire conditions. More detailed information (if applicable) can be viewed by pressing the panel's more information button. To return to the main access level 1 menu press the escape ◀ button.

Display Fault Events

This function is only available if there are active faults on the system. If available, press the accept ▶ button once and a window similar to the one below will appear:-

```
Zone 1: Ground Floor
There are faults on this zone
```

Pressing the ▲ and ▼ buttons will scroll the display through all active faults. More detailed information (if applicable) can be viewed by pressing the panel's more information button. To return to the main access level 1 menu press the escape ◀ button.

Display Disablements

This function is only available when there are active disablements on the system. If available, press the accept ▶ button once and a window similar to the one below will appear:-

```
1st Zone: 1: Shop floor
On: This Panel: Is Disabled
```

Pressing the ▲ and ▼ buttons will scroll the display through all active disablements. More detailed information (if applicable) can be viewed by pressing the panel's more information button. To return to the main access level 1 menu press the escape ◀ button.

Display Zones In Test

This function is only available if there are zones being tested. If available, press the accept ▶ button once and a window similar to the one below will appear:-

```
Zone 1: North Stairs
Is On Test
```

Pressing the ▲ and ▼ buttons will scroll the display through all zones in test mode. More detailed information (if applicable) can be viewed by pressing the panel's more information button. To return to the main access level 1 menu press the escape ◀ button.

Lamp test

This function tests the panel's lamps (its LED indicators and display) to ensure they are working correctly.

```
LAMP TEST?                    AL1
Display Alarm Counter
```

When selected, press the accept ▶ button and all of the panel's LED indicators will illuminate steady for approximately two seconds and its display will progressively block fill. The panel's internal sounder (if enabled) will also sound. Upon completion, the panel will return to the main access level 1 menu. If any of the LEDs fail to illuminate or the display does not function correctly, report the fault(s) to the designated site engineer and make a note of it in the fire system's log book.

Display Alarm Counter

This function displays the total number of times the panel has been in a fire alarm condition. When selected, press the accept ▶ button once and the display will show the total number of times the panel has been in a fire condition since it was installed AND the total number of times it has been in alarm since its alarm counter was last cleared, for example:-

```
Total Alarms = 12
Alarms since 01/01/05 = 7
```

To return to the main access level 1 menu press the escape ◀ or accept ▶ button.

ACCESS LEVEL 2 (Authorised User) CONTROLS & MENU OPTIONS

Access level 2 is available to authorised, trained personnel only. At this level, the panel's SILENCE/RESOUND SOUNDERS, CONTROL PANEL RESET and INVESTIGATE buttons become active and you are able to:

- Scroll through any fire, pre-alarm or fault conditions that are displayed on the panel's display
- View any disablements or zones that are being tested (if applicable)
- Enable or disable zones, sounders, outputs, relays and devices (as appropriate)
- Print, display and/or reset the panel's event history
- Set the time and date
- Change the entry code to access level 2 from its factory default.

Details of how to use the panel's SILENCE/RESOUND SOUNDERS, CONTROL PANEL RESET and INVESTIGATE buttons can be found below.

Entering access level 2

ON PUSH BUTTON VERSIONS OF THE PANEL:-

Entry to access level 2 requires the input of a special four digit code. Press the MENU button on the panel's front and when the ENTER ACCESS LEVEL 2? prompt appears, press the accept ▶ button. The following message will appear on the display:-

Enter Access Level 2 code:

Enter the access level 2 code using the ▲ (1) ▶ (2) ▼ (3) ◀ (4) buttons as appropriate. The default code is 3 3 3 3 (four presses of the ▼ button). If this does not work, the code may have been changed by an authorised user/engineer. A record of any changes should appear on the System Setup Data Chart on page 20 of this user manual. If they do not, contact your maintenance company for advice.

ON KEYSWITCH VERSIONS OF THE PANEL:-

Entry to access level 2 is gained by turning the panel's keyswitch to the armed position.

Silencing the alarm sounders

To silence any active alarm sounders, enter access level 2 (see above) and momentarily press the SILENCE/RESOUND SOUNDERS button. The alarm sounders will cease to sound and the panel's General Fire and relevant Fire Zone LEDs will go steady.

Should a fire condition occur on another zone whilst the alarm sounders are silenced, the panel:-

- Will sound the sounders programmed for activation by the new zone(s) in alarm
- Will flash its General Fire and appropriate Zone LED(s) for any new zone(s) in alarm
- May, if programmed, automatically reactivate the silenced alarm sounders and flash any related Fire Zone LED(s).

Resounding the alarm sounders

Momentarily pressing the SILENCE/RESOUND SOUNDERS button when the alarm sounders are silenced will resound them. Pressing the SILENCE/RESOUND SOUNDERS button again will silence the alarm sounders.

Resetting the panel

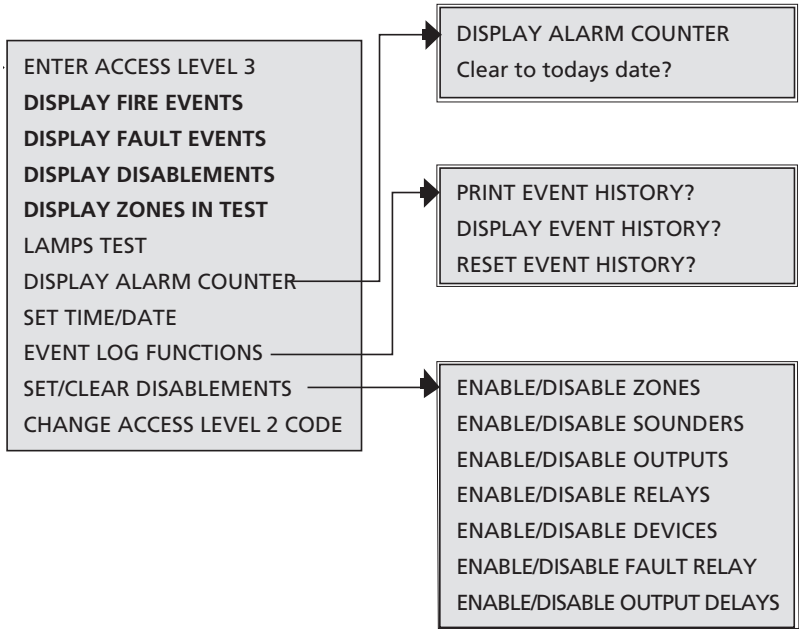
After the cause of an alarm has been cleared and the alarm sounders have been silenced (see above), the panel can be reset by pressing the CONTROL PANEL RESET button.

The panel will give a double beep to indicate the reset process has started and, after a few seconds, the Fire Zone LEDs and General Fire LED will go out to indicate the process is complete. If there are still any fire conditions on any zones, the panel will go back into alarm as before.



Note that the panel's INVESTIGATE button is only active if an engineer has programmed one or more zones to operate with a 1st-stage investigation delay period (see page 10 for detailed information on this feature).

When in access level 2 (see page 14) the following menu options wil be available at the panel's display for authorised users. They can be navigated using the panel's scroll (▲ ▼), accept (▶) and escape (◀) buttons as appropriate.





The menu options shown in bold will only appear if relevant to the panel's status. For example, the DISPLAY FIRE EVENTS function will not show if there are no active fire conditions on the system. If any of these bold menus appear, refer to their listings in access level 1 (pages 12-13) for details of how they work.

Enter Access Level 3

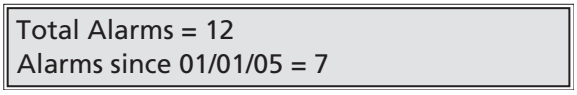
Access Level 3 is the panel's engineering/programming level. ON NO ACCOUNT SHOULD ACCESS LEVEL 3 BE ACCESSED BY ANYONE BUT AN AUTHORISED SYSTEM ENGINEER. A FIRE PANEL IS A PIECE OF LIFE SAFETY EQUIPMENT AND UNAUTHORISED ACCESS MAY AFFECT THE WAY THE PANEL FUNCTIONS, ENDANGER LIFE AND VOID ITS WARRANTY. If you are an authorised engineer, details of access level 3 can be found in the panel's separate Engineering manual.

Lamp test

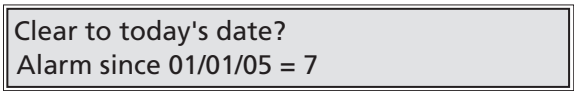
This function tests the panel's lamps (its LED indicators and display) to ensure they are working correctly. When selected, press the accept ▶ button and all of the panel's LED indicators will illuminate steady for approximately two seconds and its display will progressively block fill. The panel's internal sounder (if enabled) will also sound. Upon completion, the panel will return to the main access level 2 menu. If any of the LEDs fail to illuminate or the display does not function correctly, report the fault(s) to the designated site engineer and make a note of it in the fire system's log book.

Display alarm counter

This function displays the total number of times the panel has been in a fire alarm condition. When selected, press the accept ▶ button and the display will show the total number of times the panel has been in a fire condition since it was installed AND the total number of times it has been in alarm since its alarm counter was last cleared, for example:-



Press the escape ◀ button to return to the main access level 2 menu or, to clear the alarm counter, press the accept ▶ button. A window similar to the one overleaf will appear:-



Press the accept ▶ button once and the alarm counter will reset and start counting any new fire conditions from today's date (assuming that the date programmed into the panel is today's date). A short confirmation message will confirm the change has been made before the display returns to the main access level 2 menu.

Set time and date

This function allows the panel's time and date to be adjusted. When selected, press the accept ▶ button and the following window (or similar) will appear:

```
Set the time:- 00:00
```

Use the ▲ and ▼ buttons to adjust the hour (the panel has a 24 hour clock so hours 0 to 23 are available).
When the correct hour is displayed, press the accept ▶ button to move to the minutes field.
Use the ▲ and ▶ buttons to adjust the minutes.
When the correct time is displayed, press the accept ▶ button to alter the date.
A window similar to the one below will appear:-

```
Set the time:- 16:52
Set the date:- xx:xx:xx
```

Use the scroll ▲ ▼ and accept ▶ buttons to set the day/month/year as appropriate. When correct, press the accept ▶ button again and you will be returned to the main access level 2 menu.

Event log functions

This function allows you to print a hard copy of the panel's event log to an external printer (if connected), to view it on the panel's display or to reset it. When the EVENT LOG FUNCTIONS? prompt appears, press the accept ▶ button and scroll down to the desired event log function using the ▼ button.

The **PRINT EVENT HISTORY** function, when selected, will print the panel's log to a printer. When selected, the following window will appear:-

```
Printing Event 56...
Press ESC to stop printing
```

If you try to print the event history when no printer is connected, the following window will appear:

```
Printer fault, Check connections, paper
Ensure the printer is on-line
```

The **DISPLAY EVENT HISTORY** menu option, when selected, displays the panel's 500 event log on the display. For example:-

```
Event 499 at 05/02/05  11:31:19
Access Level 2 entered
```

Initially only the last event will appear in the window but you can scroll through the list using the ▲ button to see previous saved events. When the log is full, the oldest record is replaced by the newest record. Events are listed in chronological order. When you have finished viewing the required events, press the escape ◀ button to return to the previous menu.

The **RESET EVENT HISTORY?** menu option, when selected, clears the log from the panel's memory. To help ensure it is not erased by mistake, a warning will appear when the accept ▶ button is pressed:

```
Are you sure you want to erase
the Event log?
```

Press the accept ▶ button to confirm you want to erase the log. The following window will appear whilst the log resets after which the panel will return you to the EVENT HISTORY MENU.

```
Resetting the Event History...
Resetting entry 499
```

Set/clear disablements

Selecting this menu option takes you to the disablements sub-menu which allows you to enable or disable zones, sounders, outputs, relays, individual devices and/or the panel's fault relay.
We strongly recommend all disablements are regularly reviewed and immediately enabled when no longer necessary as they can have a major effect on how the system works.

ENABLE/DISABLE ZONES

This function allows you to disable zones from reporting faults, fires, pre-alarms, etc., and is normally used to temporarily disable a zone of detectors/call points in areas such as loading bays where they are prone to nuisance triggering from vehicle fumes. When selected, press the accept ▶ button and a window similar to the one below will appear:-

Zone: 1: Shop Floor Enabled

Select the zone to be disabled/enabled using the ▲ and ▼ buttons. Press the accept ▶ button and the zone's status (Enabled or Disabled) will flash. Next, use the ▲ and ▼ buttons to toggle between enabled and disabled and press the accept ▶ button to select the desired option.

The window will now move to the next available zone allowing further enablements or disablements to be made. Alternatively, to return to the previous menu press the escape ◀ button.

Please note: if all the input devices on a zone have been individually disabled using the ENABLE/DISABLE DEVICES function described on page 18, the zone they belong to will also be disabled. If you try to re-enable a zone which has no enabled devices on it, a prompt appears saying this cannot be done. Instead you must first enable at least one device on the zone using the ENABLE/DISABLE DEVICES function before re-enabling the zone itself.

ENABLE/DISABLE SOUNDERS

This function allows you to disable one or more sounder groups from sounding in a fire condition. When selected, press the accept ▶ button and a window similar to the one below will appear:-

Sounder Group: 1

Select the sounder group (1 to 16 or ALL) to be disabled/enabled using the ▲ and ▼ buttons.

When the desired sounder group has been selected, press the accept ▶ button once and the sounder group's status (Enabled or Disabled) will flash. Next, use the ▲ and ▼ buttons to toggle between enabled and disabled and press the accept ▶ button to select the desired option. The window will now move to the next sounder group allowing further enablements or disablements to be made. Alternatively, to return to the previous menu press the escape ◀ button.

ENABLE/DISABLE OUTPUTS

This function allows you to disable one or more output sets from sounding in a fire condition. It is typically used to disable, for example, auto-diallers and other ancillary equipment from activating during routine maintenance. When selected, press the accept ▶ button and a window similar to the one below will appear:-

Output Set: 1

Select the output set (1 to 16 or ALL) to be disabled/enabled using the ▲ and ▼ buttons.

When the desired output set has been selected, press the accept ▶ button once and the output set's status (Enabled or Disabled) will flash. Next, use the ▲ and ▼ buttons to toggle between enabled and disabled and press the accept ▶ button to select the desired option. The window will now move to the next output set allowing further enablements or disablements to be made. Alternatively, to return to the previous menu press the escape ◀ button.

ENABLE/DISABLE RELAYS

This function allows the disablement of one or more of the panel's 3 auxiliary relays from activating as programmed. When selected, press the accept ▶ button and a window similar to the one below will appear:-

Panel Relay:- 1

Select the relay (1, 2 or 3) to be disabled/enabled using the ▲ and ▼ buttons.
When the desired relay has been selected, press the accept ▶ button and the relay's status (Enabled or Disabled) will flash. Next, use the ▲ and ▼ buttons to toggle between enabled and disabled and press accept ▶ button to select the desired option. The window will now move to the next relay allowing further enablements or disablements to be made. Alternatively, to return to the previous menu press the escape ◀ button.

ENABLE/DISABLE DEVICES

This function allows loop devices to be disabled from reporting faults, fires, pre-alarms, etc., and is normally used to temporarily disable detectors/call points that are nuisance tripping. When selected, press the accept ▶ button and a window similar to the one below will appear:-

Select Zones:- 1: Shop Floor

Use the ▲ and ▼ buttons to select the zone where the device you wish to disable/enable is located. When selected, press the accept ▶ button and a list of all devices that can be disabled or enabled in that zone will appear, e.g

Shop Floor:- 1: Gent WC Loop 1, Device 3: Enabled

Use the ▲ and ▼ buttons to scroll through the available devices. When the desired device appears, press the accept ▶ button and the device's status (Enabled or Disabled) will flash. Next, use the ▲ and ▼ buttons to toggle between enabled and disabled and press the accept ▶ button to select the desired option. The window will now move to the next device allowing further enablements or disablements to be made. Alternatively, to return to the previous menu press the escape ◀ button.

Please note: if all the input devices on a zone are individually disabled, the zone they belong to will also be disabled. If you try to re-enable a zone which has no enabled devices on it using the ENABLE/DISABLE ZONES function described on page 17, a prompt appears saying this cannot be done. Instead you must first enable at least one device on the zone before re-enabling the zone itself.

ENABLE/DISABLE FAULT RELAY

This function can be used to suppress the panel's fault relay from activating in a fault condition. When selected, press the accept ▶ button and the following window will appear:-

Fault relay is:- Enabled

Use the ▲ and ▼ buttons to toggle between enabled and disabled and press the accept ▶ button to select the desired option. Alternatively, to return to the previous menu press the escape ◀ button.

ENABLE/DISABLE OUTPUT DELAYS

This function can be used to globally disable or enable any delays to outputs that have been programmed into the panel. When selected, press the accept ▶ button and the following window will appear:-

Delays to Outputs are:- Enabled

Use the ▲ and ▼ buttons to toggle between enabled and disabled and press the accept ▶ button to select the desired option. Alternatively, to return to the previous menu press the escape ◀ button.

Change the access level 2 code

This function allows you to change the four digit code needed to activate the panel's access level 2 menu options. When selected, press the accept ▼ button and the following window will appear:

Enter NEW Access Level 2 Code

Using the ▲ (1) ▶ (2) ▼ (3) ◀ (4) buttons, enter the new four digit access level 2 entry code. After the fourth digit has been entered, the panel will request you confirm the new code by re-entering it.

Enter NEW Access Level 2 Code: ****
Confirm NEW Access Level 2 Code:

Enter the code again by pressing the ▲ (1) ▶ (2) ▼ (3) ◀ (4) buttons in same sequence. If the two codes match, the panel will accept the code and you will be taken back to access level 2. If you type an incorrect confirmation code you will be prompted to start the new code entry sequence again.

BE SURE TO KEEP A RECORD OF THE NEW CODE ON PAGE 20 OF THIS USER MANUAL.



Although the CHANGE ACCESS LEVEL 2 CODE menu option IS available on keyswitch versions of the panel, any changes to the code WILL NOT affect the panel's operation, i.e. access to the panel's authorised user menu will still be available via the panel's keyswitch.

SYSTEM SET-UP DATA CHART

Important: this page should be carefully completed by the system engineer prior to handover.

ZONE FUNCTIONS

Tick the appropriate column for each zone. Note that zones 17-32 are only available on 1-32 zone panels.

Zone No.	Zone description	Set up for normal operation	Set up with dependencies	Set up with an investigate facility	Set up with output delays
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

ACCESS LEVEL 2 (AUTHORISED USER) CODE

The factory default code for access level 2 (required on push button versions of the panel only) is 3 3 3 3 (four presses of the ▼ key). If this code is changed, make a note of the changes here:-

New access level 2 code ❑ ❑ ❑ ❑ Date changed _____

ADDITIONAL INFORMATION

We recommend any additional information the user needs to be aware of is detailed below:-

_____

_____

_____

_____

_____

Completed by _____ **of** _____ **on** ____ / ____ / ____

FIRE ALARM LOG BOOK

It is recommended that this log book be maintained by a responsible person, who should ensure that every entry is properly recorded. In the UK, this is necessary to satisfy the recommendations of BS5839-1: 2002, compliance with which may be a requirement of legislation. If your premises are certificated under the Fire Precautions Act 1971, failure to keep a suitable log book may be a breach of the requirements of the certificate, which is a criminal offence. In order to satisfy the requirements of BS5839-1: 2002, the following must be recorded:-

- The name of the responsible person;
- Brief details of the maintenance arrangements;
- Dates and times of all tests, including fire drills;
- Dates and times of all fires to which the system responds;
- Dates and times of all false alarms;
- Causes, circumstances surrounding, and category of false alarms (if known);
- The identity of any manual call point or fire detector that triggers any of the above fire alarm signals (if known);
- Dates, times and type of all faults and defects.
- Dates and times of all maintenance (e.g service visit or non-routine attention).

USER:
SITE ADDRESS:
RESPONSIBLE PERSON(S) ON SITE:
THE SYSTEM WAS DESIGNED BY:
THE SYSTEM WAS INSTALLED BY:
THE SYSTEM WAS COMMISSIONED BY:
THE SYSTEM WAS ACCEPTED BY:
VERIFICATION WAS UNDERTAKEN BY:

FOR SERVICE (DETAILS OF WHO YOU SHOULD CONTACT IF MAINTENANCE IS REQUIRED)

THE SYSTEM IS MAINTAINED UNDER CONTRACT BY:

Company: _____

Address: _____

_____

Contact No: _____ Expiry Date: _____

NORMAL HOURS (MON-FRI) TEL: _____

OUTSIDE NORMAL HOURS TEL: _____

MANNED CENTRE TEL: _____

MANNED CENTRE CODE: _____

THE NORMAL MAXIMUM ATTENDANCE TIME FOR A MAINTENANCE TECHNICIAN IS: _____

EXPENDABLE COMPONENT REPLACEMENT PERIODS (LIST):-

Details of tests (including fire drills), actual fire alarms, disablements or enablements and faults should be recorded here. False alarms and maintenance work should be recorded on page 26.

DATE	TIME	EVENT e.g. test, fire alarm signal, fault	ZONE	DEVICE	ACTION REQUIRED	COMPLETED	INITIALS

DATE	TIME	EVENT e.g. test, fire alarm signal, fault	ZONE	DEVICE	ACTION REQUIRED	COMPLETED	INITIALS

DATE	TIME	EVENT e.g. test, fire alarm signal, fault	ZONE	DEVICE	ACTION REQUIRED	COMPLETED	INITIALS

DATE	TIME	EVENT e.g. test, fire alarm signal, fault	ZONE	DEVICE	ACTION REQUIRED	COMPLETED	INITIALS

False alarms

DATE	TIME	ZONE	DEVICE THAT TRIGGERED THE ALARM SIGNAL	CAUSE (IF KNOWN)	BRIEF CIRCUMSTANCES (WHERE CAUSE IS UNKNOWN, RECORD ACTIVITIES IN THE AREA)	MAINTENANCE VISIT REQUIRED? (YES OR NO)	FINDINGS OF MAINTENANCE TECHNICIAN	CATEGORY OF FALSE ALARM	FURTHER ACTION REQUIRED	DONE PLEASE TICK

Maintenance work

DATE	TIME	ZONE (WHERE APPLICABLE)	DEVICE (WHERE APPLICABLE)	REASONS FOR WORK	WORK CARRIED OUT	FURTHER WORK REQUIRED	SIGNATURE

BS5839-1:2002 recommends that certificates be issued for all aspects of the fire alarm system including design, installation, commissioning, acceptance, verification (optional) and maintenance. Therefore, before this user manual is handed over, the following installation certificate and the commissioning certificate (overleaf) should be completed as appropriate by the relevant installation/commissioning engineer(s). Please ensure that the system set-up data chart on page 20 and the relevant parts of the system Log Book on page 21 are also completed as appropriate. For countries outside the UK, different certification requirements may apply.

Certificate

of INSTALLATION

for the fire alarm system at:

Address: _____

_____

I/we being the competent person(s) responsible (as indicated by my/our signatures below) for the installation of the fire alarm system, particulars of which are set out below, CERTIFY that the said installation for which I/we have been responsible complies to the best of my/our knowledge and belief with the specification described below and with the recommendations of Section 4 of BS5839-1: 2002, except for the variations, if any, stated in this certificate.

Name (in block letters): _____
Position (in block letters): _____
Signature: _____
Date: _____
For and on behalf of: _____
Address & postcode: _____

_____

The extent of the liability of the signatory is limited to the system described below.

Extent of installation work covered by this certificate:

_____
_____
_____
_____

Specification against which the system was installed:

_____
_____
_____
_____

Variations from the specification and/or Section 4 of BS5839-1:2002 (see BS5839-1:2002, Clause 7):

_____
_____
_____
_____
_____

Wiring has been tested in accordance with the recommendations of Clause 38 of BS5839-1: 2002.
Test results have been recorded and provided to: _____

Unless supplied by others, the “as fitted” drawings have been supplied to the person responsible for commissioning the system (see 36.2m) of BS5839-1: 2002: _____

BS5839-1:2002 recommends that certificates be issued for all aspects of the fire alarm system including design,installation, commissioning, acceptance, verification (optional) and maintenance. Therefore, before this user manual is handed over, the following commissioning certificate and the installation certificate (overleaf) should be completed as appropriate by the relevant installation/commissioning engineer(s). Please ensure that the system set-up data chart on page 20 and the relevant parts of the Log Book on page 21 are also completed as appropriate. For countries outside the UK, different certification requirements may apply.

Certificate

of COMMISSIONING

for the fire alarm system at:

Address: _____

_____

I/we being the competent person(s) responsible (as indicated by my/our signatures below) for the commissioning of the fire alarm system, particulars of which are set out below, CERTIFY that the said work for which I/we have been responsible complies to the best of my/our knowledge and belief with the specification described below and with the recommendations of Clause 39 of BS5839-1: 2002, except for the variations, if any, stated in this certificate.

Name (in block letters): _____
Position (in block letters): _____
Signature: _____
Date: _____
For and on behalf of: _____
Address & postcode: _____

_____

The extent of the liability of the signatory is limited to the system described below.

Extent of system covered by this certificate:

_____
_____
_____
_____

Variations from the recommendations of Clause 39 of BS5839-1:2002 (see BS5839-1:2002, Clause 7):

_____
_____
_____

- ❑ All equipment operates correctly
- ❑ Installation work is, as far as can reasonably ascertained, of an acceptable standard
- ❑ The entire system has been inspected and tested in accordance with the recommendations of 39.2c of BS5839-1:2002.
- ❑ The system performs as required by the specification prepared by: _____ a copy of which I/we have been given.
- ❑ Taking into account the guidance contained in Section 3 of BS 5839-1:2002, I/we have not identified any obvious potential for an unacceptable rate of false alarms.
- ❑ The documentation described in Clause 40 of BS5839-1:2002 has been provided to the user.

The following work should be completed before/after (delete as applicable) the system becomes operational:

_____
_____
_____

The following potential cause(s) of false alarms should be considered at the time of the next service visit:

_____
_____

Before the system becomes operational, it should be soak tested in accordance with the recommendations of 35.2.6 of BS5839-1:2002 for a period of: _____ (enter a period of either one week, such period as required by the specification, or such period as recommended by the signatory of this certificate, whichever is the greatest, or delete if not applicable).