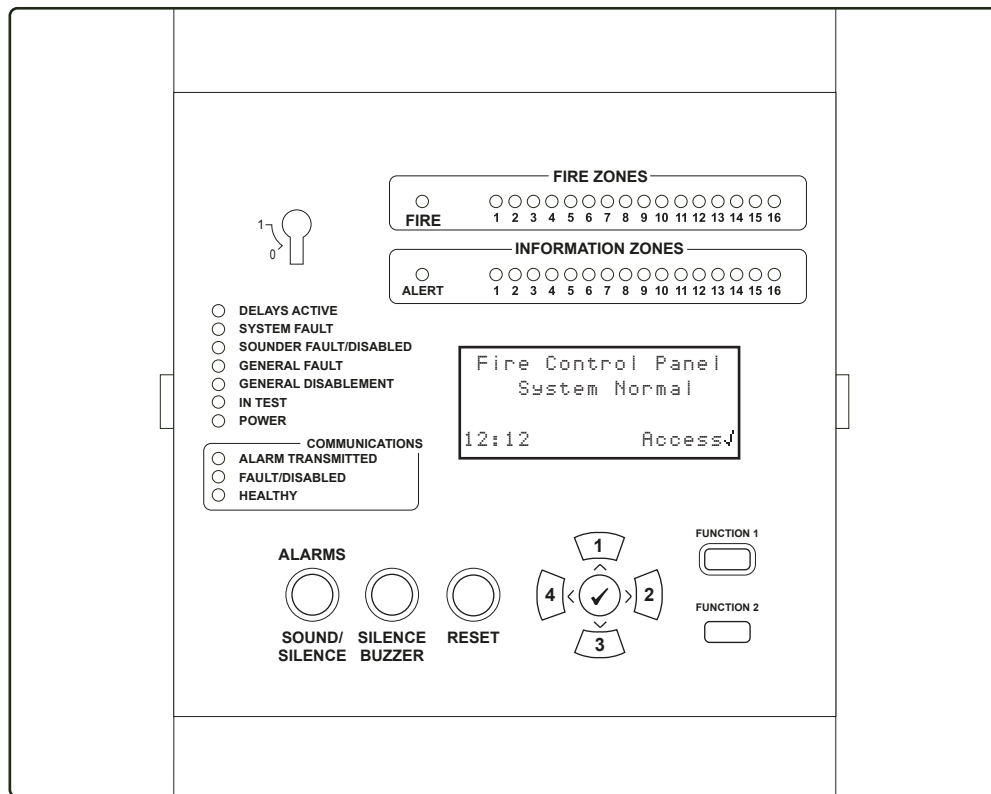


SmartCell



Wireless Control Panel User Guide

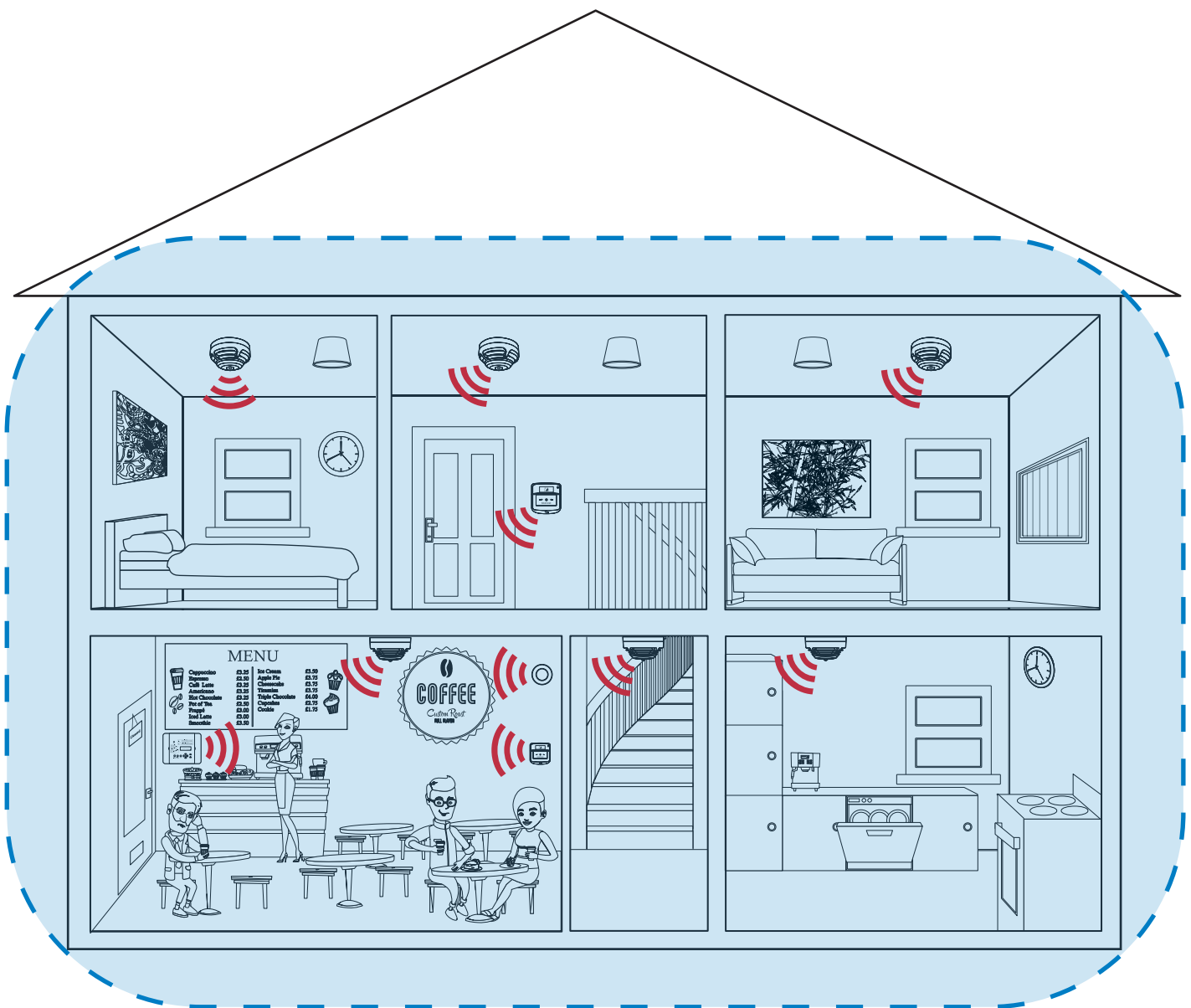
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Introduction

- This user guide contains all of the information required to operate this SmartCell fire system.
- Fire systems are fitted to protect buildings and / or the people inside them, in the event of a fire occurring.
- Your fire system should comply with local fire regulations. Contact your installer/maintenance company for more information.
- This SmartCell fire system is wireless. Unlike hardwired fire systems, cabling is not required to connect fire devices to the fire control panel.

Example SmartCell installation in a Café with a first floor flat:



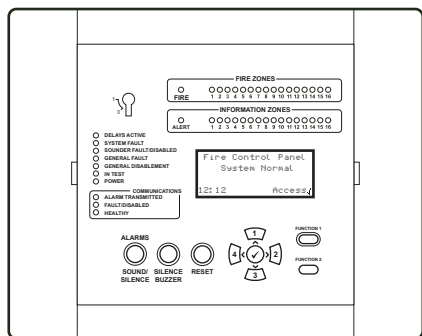
 = wireless communication between the SmartCell control panel and the system's fire devices

 = the SmartCell control panel's area of wireless coverage

A typical fire alarm system

A typical fire alarm system will generally consist of the following equipment:

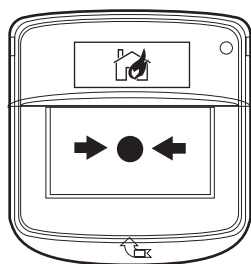
SmartCell fire control panel



Approved to EN54-2, EN54-4, EN54-13, EN54-21* and EN54-25. * Communications module required.

- The fire control panel will often be located in the building's main entrance, ensuring it is easily found by the fire services if a fire occurs.
- The main purpose of a fire control panel is to work in conjunction with the system's fire devices, to detect fire and to alert people via fire sounders and beacons.
- The operation of this SmartCell fire control panel is outlined in more detail in this manual.

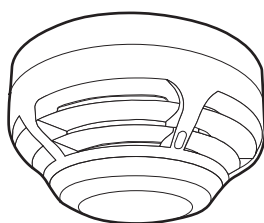
Manual call points



Approved to EN54-11, EN54-13 and EN54-25.

- In the event of a fire, Manual Call Points (MCPs) can be operated to notify other people in the building.
- When operated, the MCP will send a signal to the fire control panel, resulting in the fire alarm's sounders operating.
- The MCP is operated by raising the protective cover and pressing the white rectangular plate. The device's red fire LED will illuminate to confirm operation.

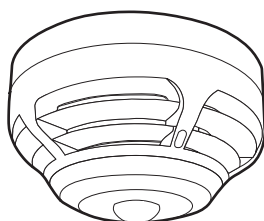
Fire detectors



Approved to EN54-5, EN54-7, EN54-13 and EN54-25.

- Fire detectors will be fitted throughout the building where fire detection is required.
- Fire detectors can be triggered by smoke and / or an increase in heat, depending on their configuration.
- In the event of a fire, the fire detector will send a signal to the fire control panel, resulting in the fire alarm's sounders operating.

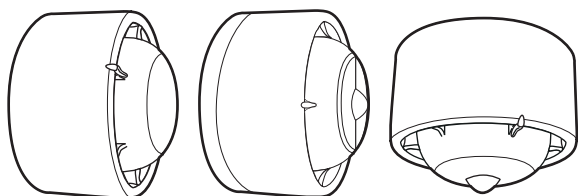
Fire detectors with sounders



Approved to EN54-3, EN54-5, EN54-7, EN54-13, EN54-23* and EN54-25. * Beacon Variants Only.

- Fire detectors with integrated sounders combine the attributes of detectors and sounders avoiding the use of separate units.
- Fire detectors with sounders are also available with integrated beacons.

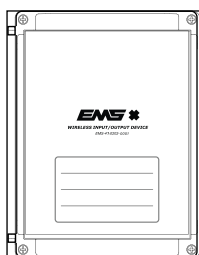
Sounders and sounder beacons



Approved to EN54-3, EN54-13, EN54-23* and EN54-25
*Beacon Variants Only.

- Sounders and sounders with integrated beacons will sound and flash in the event of a fire, in accordance with the system configuration, so that the building can be appropriately evacuated.
- Beacons are used for many applications including notifying individuals with hearing impairment of an alarm, and are also effective in noisy environments.
- For more information on how your sounders and sounder beacons are configured to operate in the event of a fire, contact your installer/maintenance company.

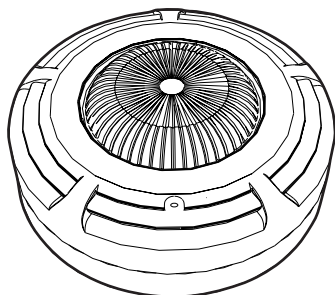
Input / output devices



Approved to EN54-13, EN54-18 and EN54-25.

- Input / output devices are specialist equipment that can be used for connecting to other third party equipment. For more information, contact your installer / maintenance company.

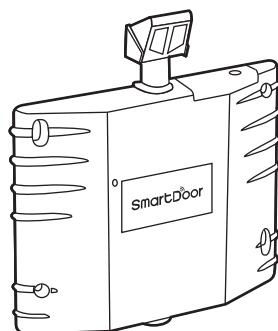
Wireless remote indicators



Approved to EN54-13 and EN54-25.

- Remote indicators are often linked to detectors that are obscured from view, such as in ceiling voids and lift shafts.
- Upon fire activation from an associated detector, remote indicators turn on to provide local visual indication.
- Remote indicators are also fitted outside apartments, for quick and easy identification without entry.
- Remote indicators can be linked to an individual detector, or a group of detectors.
- For more information, contact your installer / maintenance company.

Door controllers



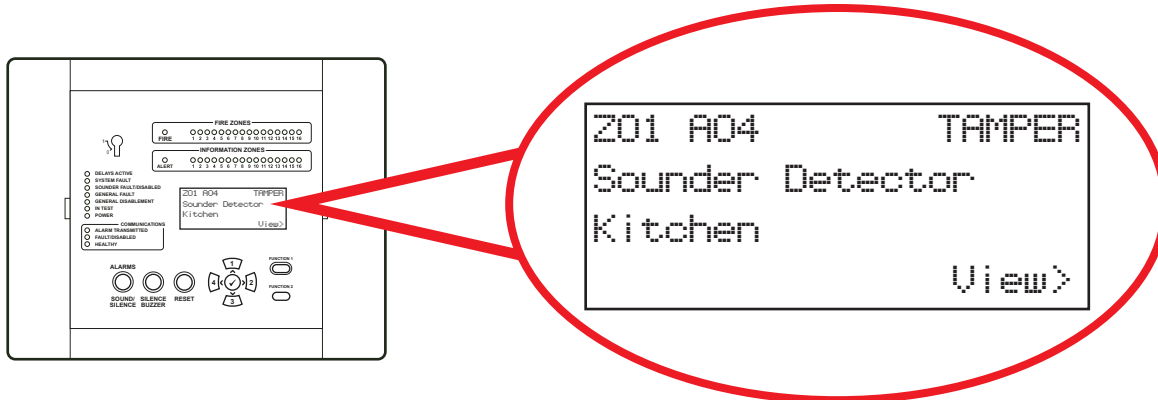
Approved to BS EN1155, BS 7273-4 and EN54-25.

- Door controllers hold heavy fire doors open, improving building ventilation and automatically closes in the event of a fire.
- SmartDoor is 100% wireless and is controlled by the SmartCell control panel.
- For more information, contact your installer / maintenance company.

Text descriptions

- Each fire device can have its own text description programmed to the SmartCell control panel.
- A clear text description will make the device easy to identify, in the event of a fire or fault.

An example is shown below:

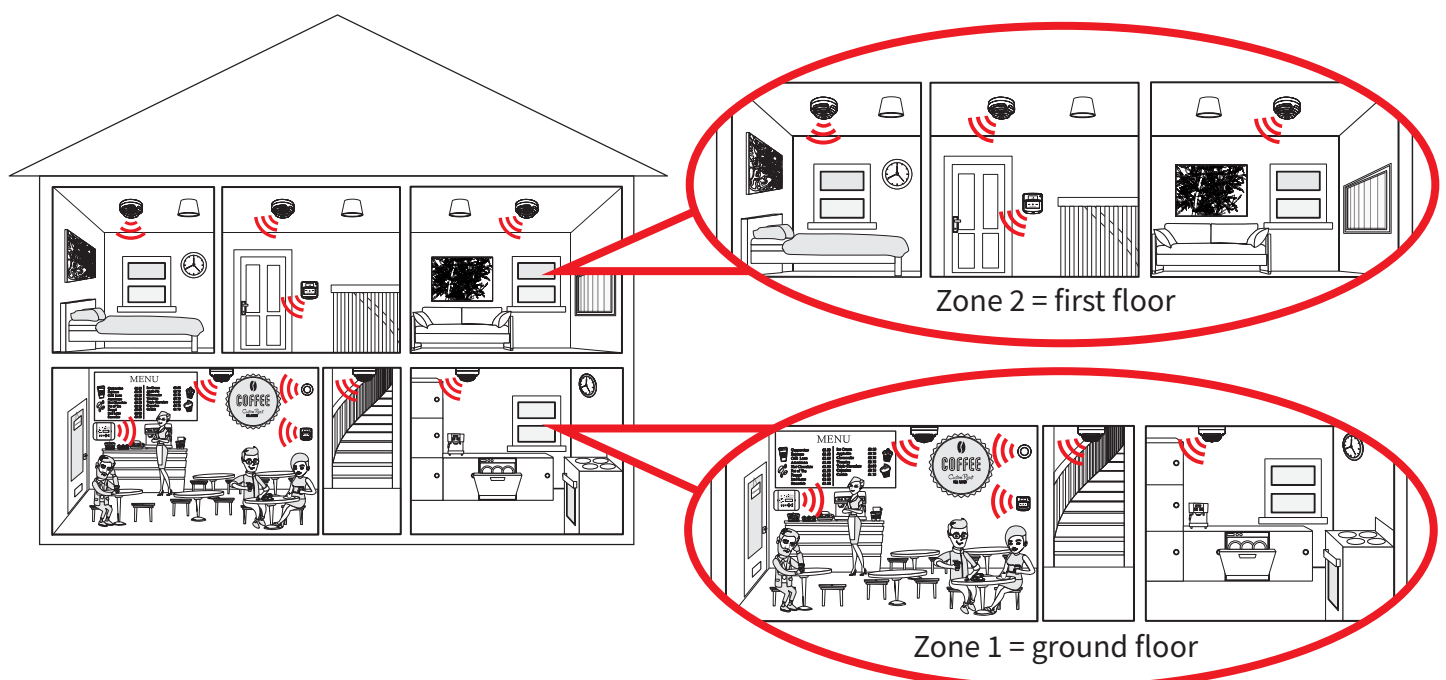


- Up to 40 characters of text can be added per device.
- Text descriptions may be left as default text. Contact your installer/maintenance company for more information.

System zones

- Devices can also be allocated into system zones.
- Zones are essentially areas of the building.

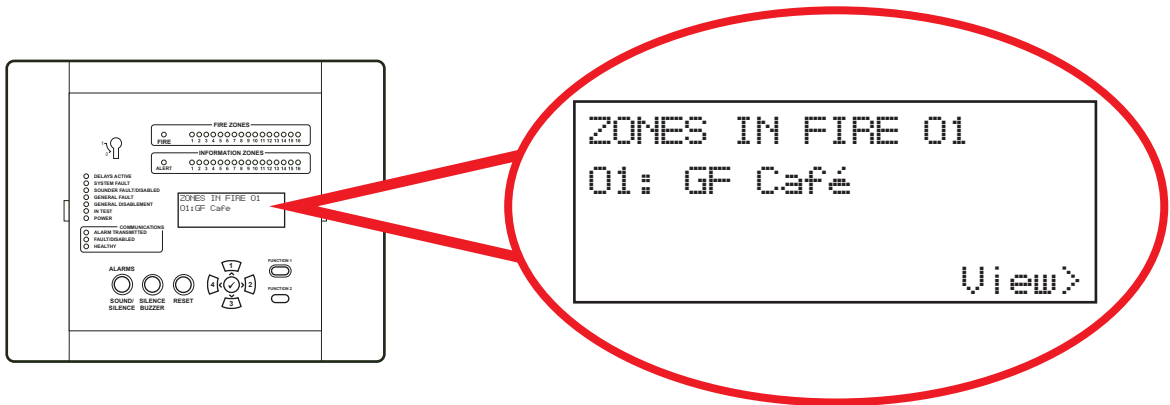
An example is shown below:



Zone text

- Each zone can also have its own text description
- 16 characters of text are available per zone.

An example fire event detailing zone text is shown below:

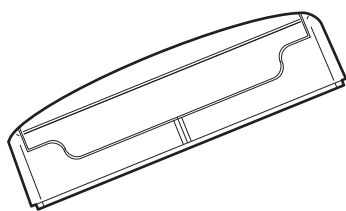


- Zone text may or may not be set. Contact your installer/maintenance company for more information.

Information devices

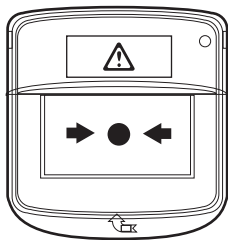
- When triggered; information devices generate information alerts at the SmartCell control panel.
- Upon an information alert, details will be displayed on the SmartCell control panel’s screen and the panel’s buzzer will also sound.
- Typical applications include the monitoring of: doors (opening/closing), a loss of power to your fridge and an alarm condition on your intruder system.
- There are three different types of information devices available and are detailed below.

Information contact transmitter & input



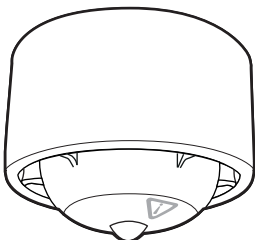
This device offers a wired input connection for monitoring non fire devices. The device also has a magnetic reed switch, allowing the monitoring of windows or doors.

Information manual call point



This device is operated manually, by pressing the white rectangular plate. The device’s alert LED will illuminate, to confirm operation.

Information sounder with visual indicator

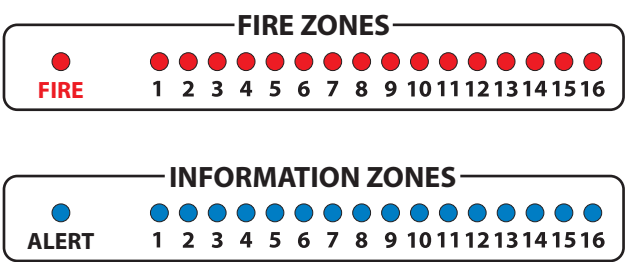


This device offers audio and visual notification, in the event of an information alert event.

Contact your installer/maintenance company for more information.

Zone LED indication

- Fire devices and Information devices have separate zonal LED Indication.
- Fire devices have associated RED fire zone LEDs as shown.
- Information devices have associated BLUE information zone LEDs.



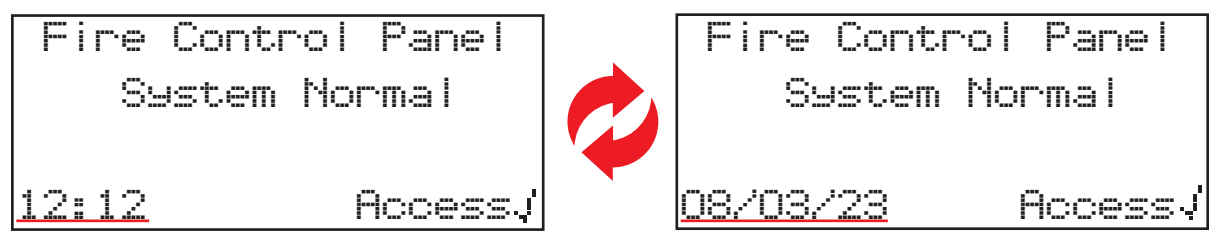
Note: LEDs will only illuminate upon fire and alert events.

Fire control panel display

Normal display

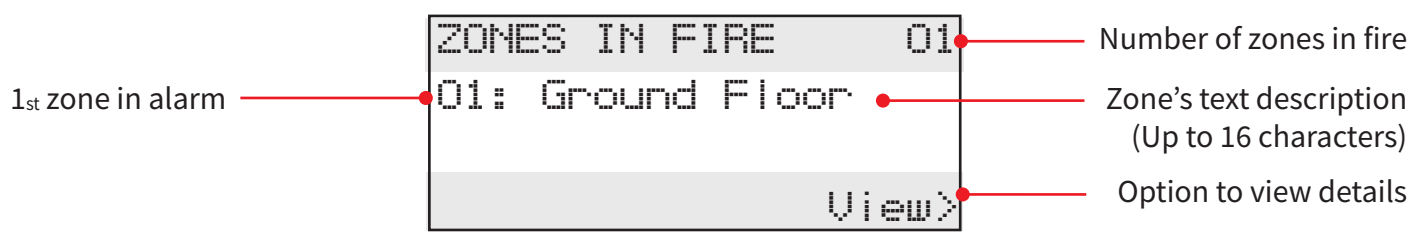
- Whilst the SmartCell control panel is fault free, it's display will state 'System Normal'.
- The time and date will alternate in the bottom left hand corner.

An example is shown below:

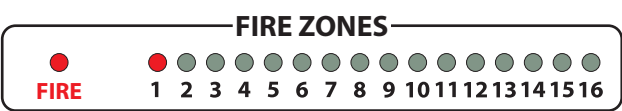


Fire event display

An example fire event display is shown below.



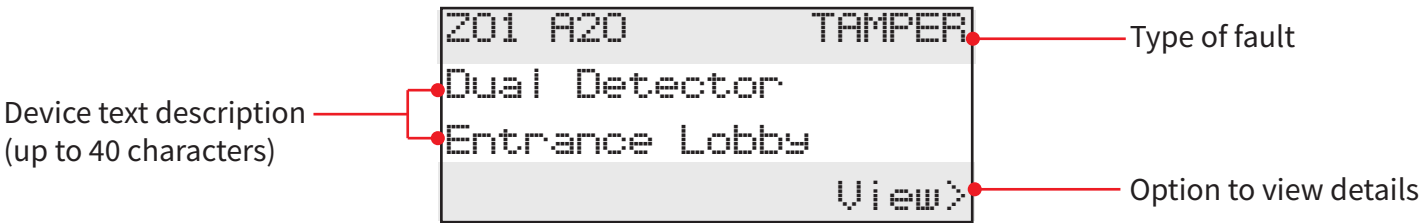
The general red “Fire” LED and the individual zone’s red “Fire” LED will both be illuminate as shown.



The SmartCell control panel’s buzzer will also sound.

Fault event display

An example fault event display is shown below.

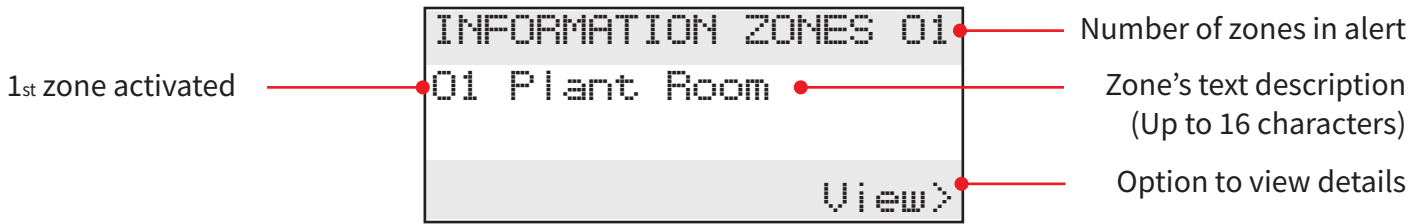
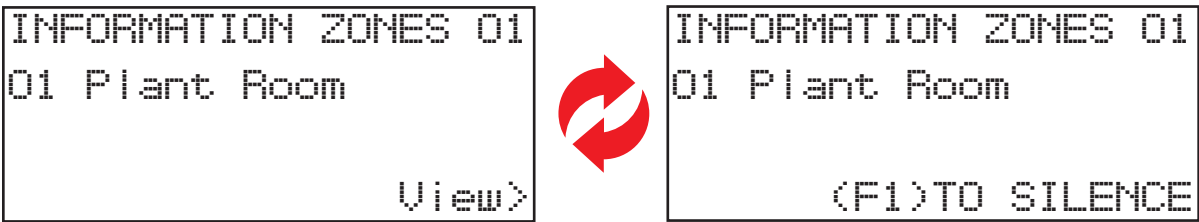


The SmartCell control panel’s buzzer will sound and the yellow “GENERAL FAULT” LED will be illuminated.

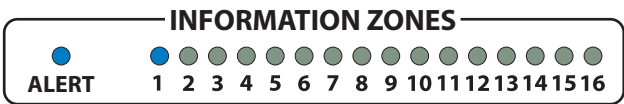


Information event display

An example information event display is shown below, where the ‘View>’ and ‘(F1)TO SILENCE’ options will alternate in the bottom right hand corner.



The general blue “Alert” LED and the individual zone’s blue “Information” LED will be illuminated.



The SmartCell control panel’s buzzer will also sound, together with the information sounders.

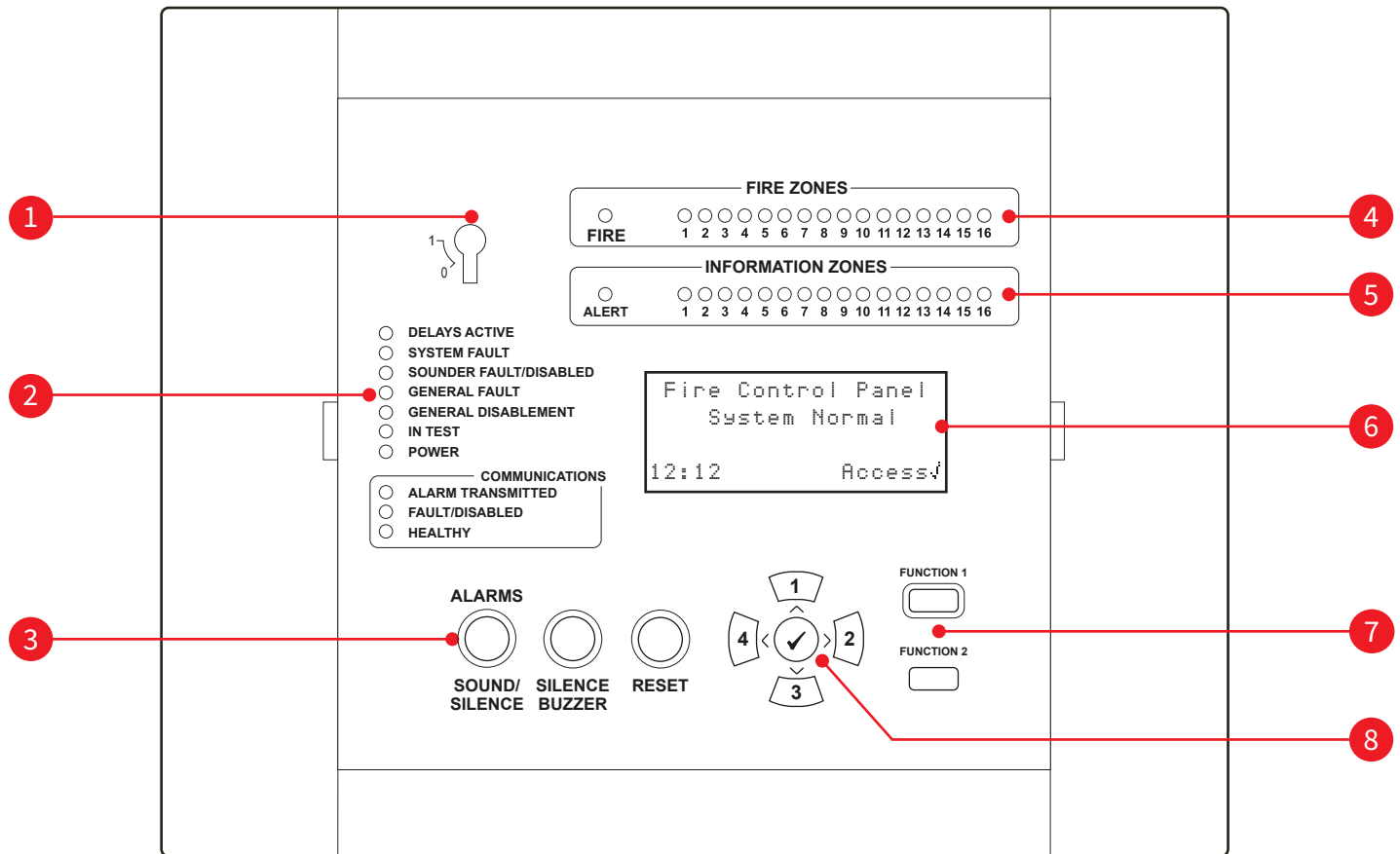
The control panel buzzer can be silenced by pressing the ‘SILENCE BUZZER’ button.

The information sounders are silenced by pressing the ‘Function 1’ (F1) button.

Fire control panel features

The SmartCell control panel provides status information via the display, zone lamps and status lamps. The full control panel's functions are achieved via the entry of a user access code.

The panel's features are shown below.



- 1 Enable key switch
- 2 Status LEDs
- 3 Control buttons
- 4 Fire zone LEDs
- 5 Information zone LEDs
- 6 80 character OLED display
- 7 Function buttons
- 8 Navigation & confirmation buttons

Fire control panel LEDs

LED indicator	LED colour	SmartCell control panel function
FIRE ZONE		Illuminates when any device is in a fire alarm condition, to indicate the zone that the device is located within.
FIRE		Illuminates when any device is in fire alarm condition, along with the associated FIRE ZONE LED.
INFORMATION ZONE		Illuminates when any device is in an information alert condition, to indicate the zone that the device is located within.
ALERT		Illuminates when any information device is in an alert condition, along with the relevant INFORMATION ZONE LED.
DELAYS ACTIVE		Illuminates when there are any delays programmed on the SmartCell control panel.
SYSTEM FAULT		Illuminates in the event of a fault occurring with the SmartCell control panel's processor.
SOUNDER FAULT/DISABLED		Illuminates when a fire sounder device is in a fault condition, or has been disabled.
GENERAL FAULT		Illuminates when any fault condition is present, with a fire device or the SmartCell control panel itself.
GENERAL DISABLEMENT		Illuminates when any fire type disablement is made on the system.
IN TEST		Illuminates when a "TEST MODE" is initiated.
POWER		Indicates that the SmartCell control panel's 230 VAC / 24 VDC supply is present.
COMMUNICATIONS; ALARM TRANSMITTED		Illuminates when the SmartCell control panel's communications module has transmitted an alarm signal.
COMMUNICATIONS; FAULT/DISABLED		Illuminates when the SmartCell control panel's communications module has a fault condition or has been disabled.
COMMUNICATIONS; HEALTHY		Illuminates when the SmartCell control panel's communication module is connected and healthy.

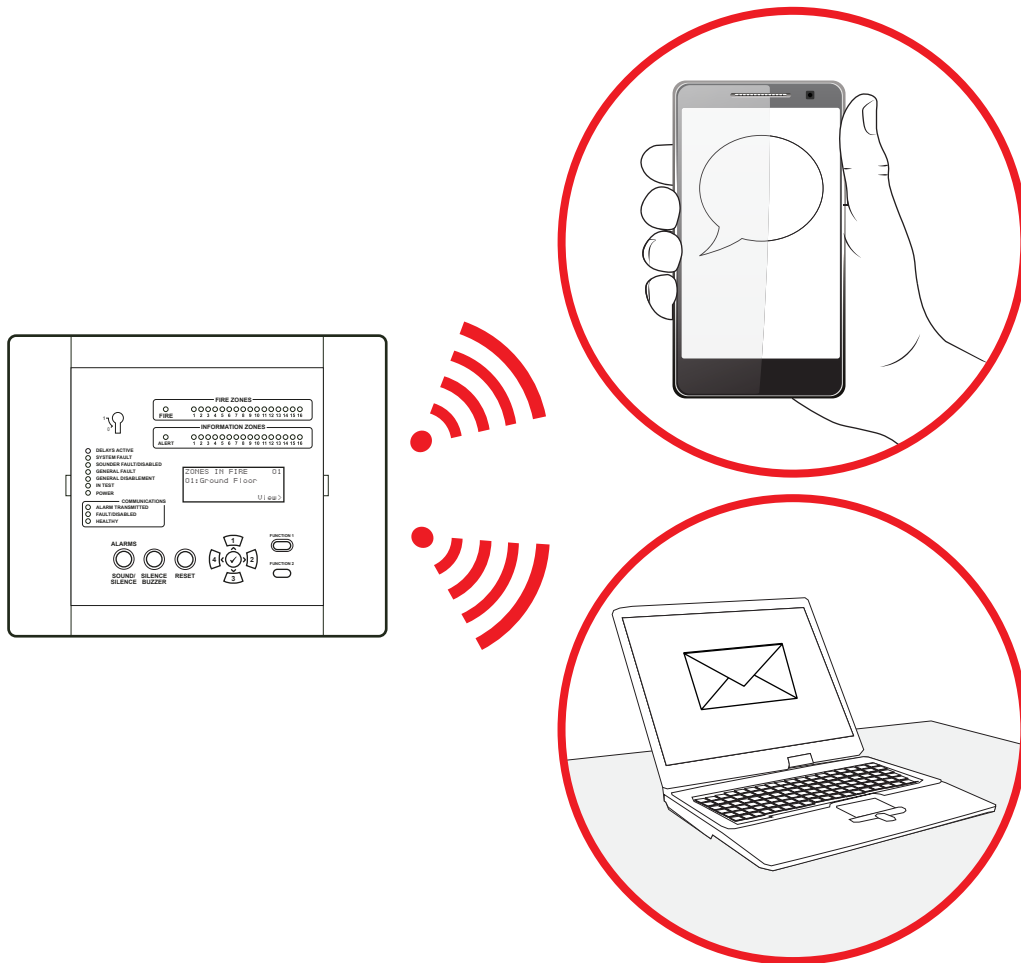
Fire control panel buttons

Control feature	SmartCell control panel function
ALARMS  SOUND/ SILENCE	The ALARMS SOUND/SILENCE button is used to sound the alarms and to silence them when they are ringing. Wireless output devices can also be switched on and off (<i>dependant on programming</i>). This button only becomes active once a valid user access code has been entered, or the keyswitch has been enabled (<i>turned to the on position</i>).
 SILENCE BUZZER	The SILENCE BUZZER button is always active and is used to silence the SmartCell control panel's internal buzzer.
 RESET	The RESET button is used to reset fire and fault events. This button only becomes active once a valid user access code has been entered, or the keyswitch has been enabled (<i>turned to the on position</i>).
	This button is always active and is used for number entry (number 1) and for upwards menu navigation.
	This button is always active and is used for number entry (number 2) and for forwards menu navigation.
	This button is always active and is used for number entry (number 3) and for downwards menu navigation.
	This button is always active and is used for number entry (number 4) and for backwards menu navigation.
	This button is always active and is used as a menu entry button.
FUNCTION 1 	The FUNCTION 1 button is fully programmable. Its default operation, is to toggle between the primary and secondary languages that are programmed to the system. This button only becomes active, once a valid access code has been entered. This button is also used to silence information sounders, upon an information event.
FUNCTION 2 	The FUNCTION 2 button is fully programmable. Its default operation, is to carry out a lamp indicator test on the SmartCell control panel. This button only becomes active, once a valid user access code has been entered.

Additional services

- This system is internet enabled, allowing remote servicing.
- The system is also capable of sending details of fires and faults to smartphones, tablets and laptops by sending SMS text messages and / or emails.

For more information, contact your installer/maintenance company.



Access levels

This SmartCell control panel has four different levels of user access available. They are levels 1, 2, 3 and 4.

Access level 1

This access level is for daily use, where menu entry is not required. Prior to the entry of a user access code or turning the enable key on, only the navigational buttons and the SILENCE BUZZER button are functional. All other buttons are inhibited.

Access level 2

This access level is for advanced end users and is available via the entry of a user access code, or via the enable key switch. All end user menu features and all SmartCell control panel buttons will be available.

Access levels 3 & 4

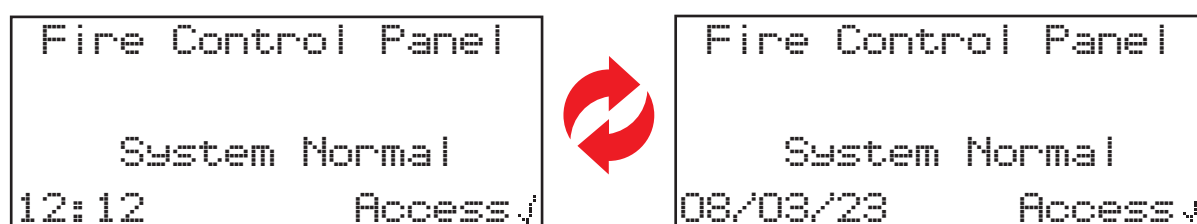
These access levels are intended for engineer use only.

Default master user access code

The system requires a user access code to enter the user menu (access level 2). The default master user access code is 2222. This can be changed by your installer/maintenance company if required.

User menu entry (access level 2)

In order to navigate the user menu (access level 2), either turn the control key switch to the ON position, or follow the steps listed below.



To enter access level 2 options press the (✓) button. The display will change to show:

For Access
Enter Code:

Press ✓ to complete

The user access code is now required. Press the relevant numbered buttons to enter the code (1=, 2=, 3=, 4=). I.e. If the user access code is still the default 2222, press the  button once and then the  button four times. Complete the access code entry by pressing the  button once. Upon completion, the display will momentarily change, welcoming the user to the system, then changing to show the available menu options.

```
+ Welcome User +  
Access Level 2  
Now Available  
All Buttons Active
```



```
+View System Status  
Enable/Disablenents  
Maintenance/Test  
Panel Information <
```

How to clear a fire event



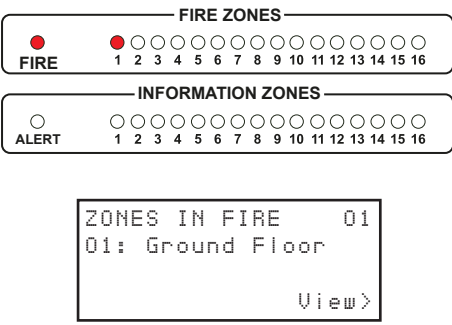
THE SMARTCELL SYSTEM SHOULD ONLY BE OPERATED WHEN IT IS SAFE TO DO SO.

UPON THE REPORTING OF A FIRE EVENT, SYSTEM OPERATORS MUST ENSURE THAT THE BUILDING'S FIRE EVACUATION PROCEDURES ARE FOLLOWED.

Once it has been established that it is safe to clear the fire event, the following steps must be taken:

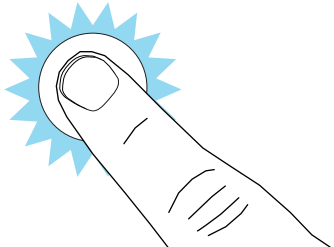
1

The SmartCell control panel is in fire condition.



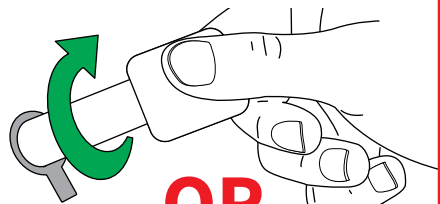
2

Press the 'SILENCE BUZZER' button. *The panel should stop buzzing*



3

Either turn the enable keyswitch, or enter a valid user access code.


OR

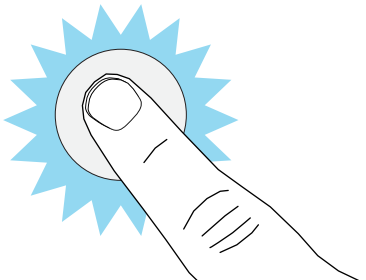

4

Silence the sounders by pressing the 'ALARMS SOUND / SILENCE' button ONCE.



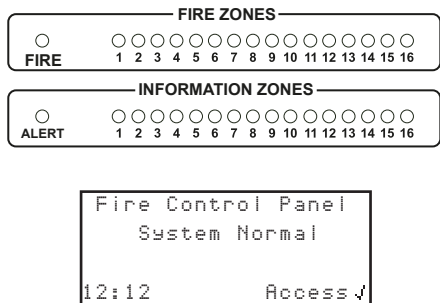
5

Reset the fire event, by pressing the 'RESET' button.



6

The SmartCell control panel should now return to the 'System Normal' screen.

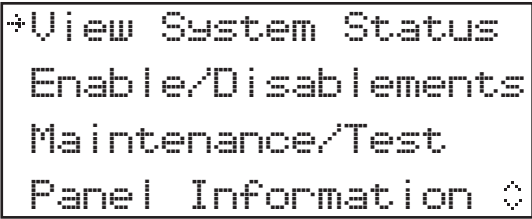


- If the fire event doesn't reset, your device is still in fire and will require clearing prior to resetting.
- If a manual call point has been operated, ensure that the element has been reset with a reset key.
- Should problems persist, contact your installer/maintenance company.

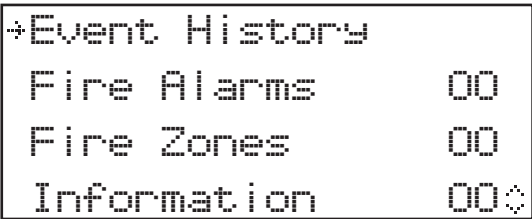
How to view the event history

From the access level 2 (shown on page 14), follow the steps listed below:

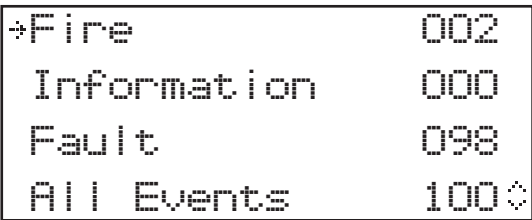
The display should show:



With the → next to 'View System Status', press the (✓) button. The display will change to show:



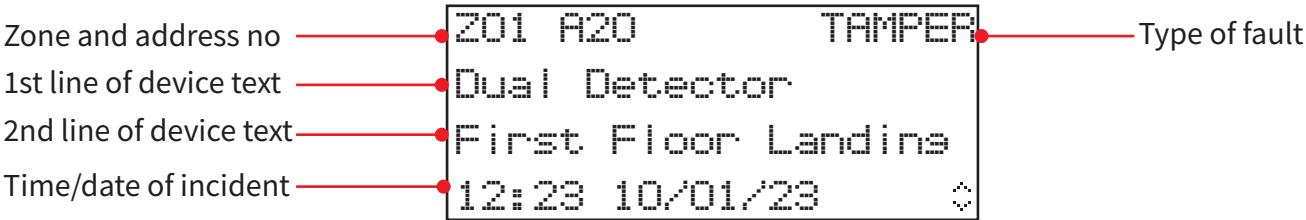
With the → next to 'Event History', press the (✓) button. The display will change to show:-



The events can be filtered by 'Fire', 'Information' and 'Fault'. Alternatively 'All Events' can be viewed. The total number of events for each type are shown to the right of the display.

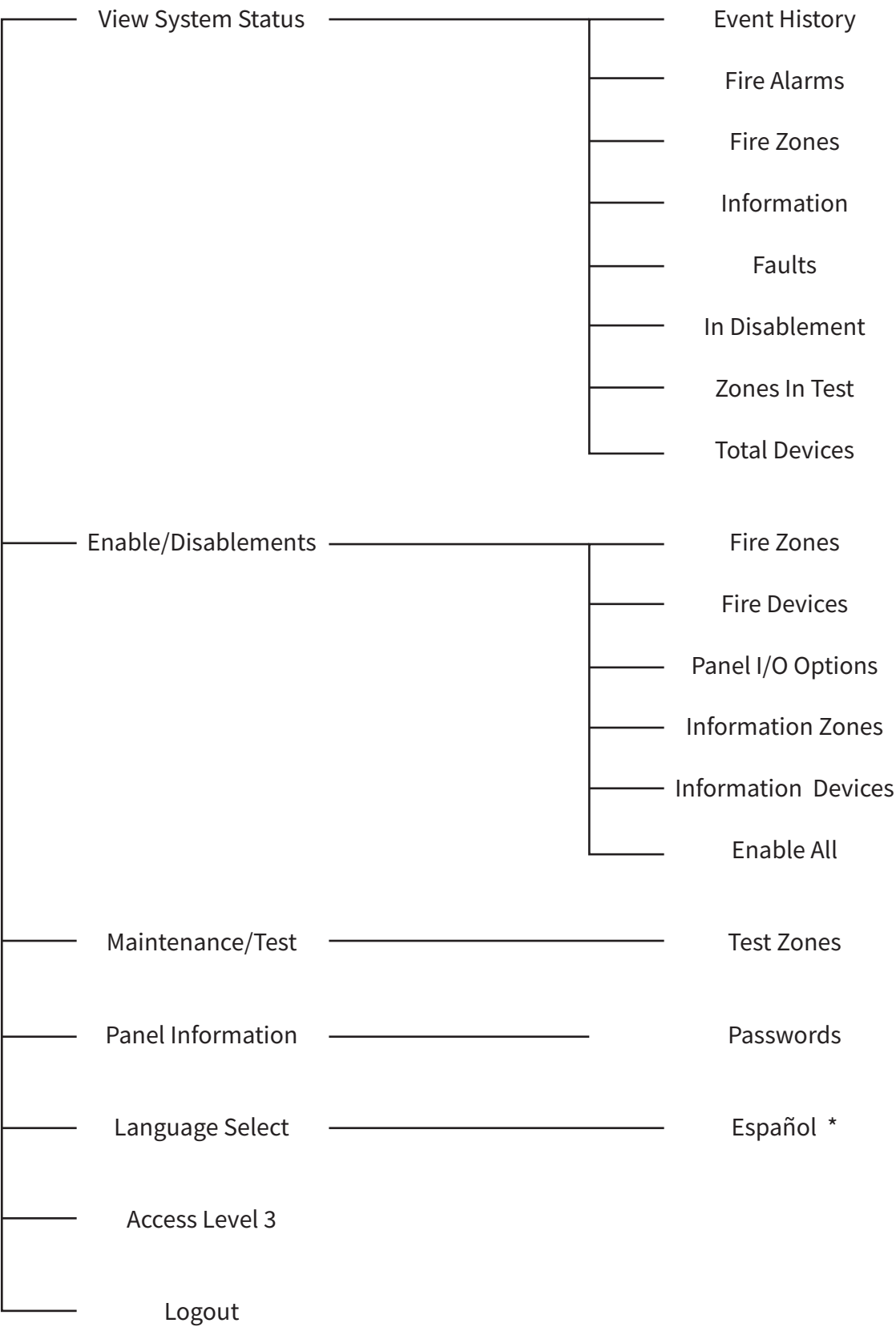
Press the (1) and (3) buttons, until the → is next to the desired option. Press the (✓) button top enter the event history.

An example display is shown below.



Press the (1) and (3) buttons to scroll through events. When completed press the (4) button to return to previous menu.

User menu structure (access level 2)



* Secondary language selection.
Example of Español is shown.

View system status

The 'View System Status' menu allows the user to view the event historical log, along with the status of devices, including current disablements/test states.

Event history

The 'Event History' option enables the user to view the event history in multiple formats. Events can be filtered as 'Fire only', 'Info only', 'Fault only' or 'All events'. A total number of events for each option is also indicated. Upon the entry of event history, the latest event will be displayed first. The events can then be scrolled through by using the  and  buttons.

Fire alarms

The 'Fire Alarms' option displays the amount of fire alarms that are currently on the system. The total number is shown next to the fire alarm text. Pressing the  button details the individual devices in fire alarm. The devices in fire alarm condition can then be scrolled through, using the  and  buttons.

Fire zones

The 'Fire Zones' option displays the amount of fire zones that are currently in the fire condition on the system. The total number is shown next to the fire zone text. Pressing the  button details the individual zones in fire alarm. The zones in fire alarm condition can then be scrolled through, using the  and  buttons.

Information

The 'Information' option displays the amount of Information alerts that are currently on the system. The total number is shown next to the information alert text. Pressing the  button details the individual devices in an information alert condition. The devices in this condition can then be scrolled through, using the  and  buttons.

Faults

The 'Faults' option displays the amount of faults that are currently on the system. The total number is shown next to the fault text. Pressing the  button shows the individual devices in a fault condition. The devices which can be either information or fire devices, can be scrolled through, using the  and  buttons. A fault description will be detailed with each device.

In disablement

The 'In Disablement' option displays the amount of disablements currently on the system. Upon entry, any devices, zones or groups that are currently disabled will be shown. If there are multiple disablements on the system, these can be scrolled through, using the  and  buttons.

Zones in test

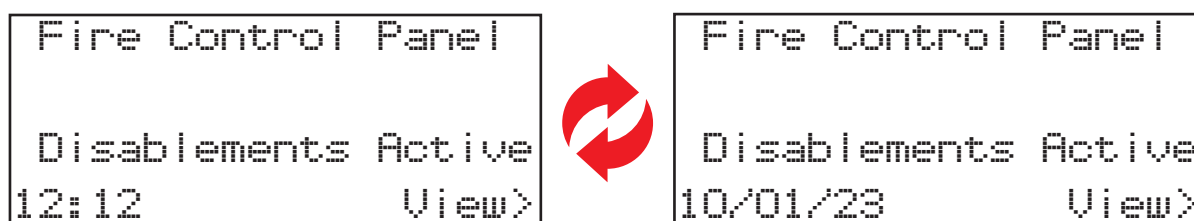
The 'Zones In Test' option indicates the total number of zones in test. Upon entry, any zones that are currently in the test state will be shown. If there are multiple zones in test on the system, these can be scrolled through, using the  and  buttons.

Total devices

The 'Total Devices' option indicates the total number of devices on the system. Upon entry, the individual device details along with its current status are shown. The device list starts at the lowest device address number and can be scrolled through, using the  and  buttons.

Enable/disablements

The 'Enable/Disablements' menu allows the user to enable or disable individual devices or zones on the system. The user has the ability to make permanent or timed disablements. Timed disablements can be made for durations between 1 to 24 hours, in 1 hour increments. The front display will change to indicate active disablements, as detailed below.



Fire zones

The 'Fire Zones' option allows the user to select individual zones ranging between the fire zones programmed on the system (max 1-48). The zones can be disabled or enabled from this menu. The zones can also be disabled for a time period from this menu programmable between 1-24 hours in 1 hour steps. No fault or fire conditions will be displayed from any device that is associated to a disabled zone.

Fire devices

The 'Fire Devices' option allows the user to select individual devices. The device can be disabled or enabled from this menu. The devices can also be disabled for a time period from this menu programmable between 1-24 hours in 1 hour steps. No fault or fire conditions will be displayed from any device that is currently disabled.

Please note; if disabled is selected and a dual device input device is being used I.e. dual heat/smoke detection or a dual input/output device, both elements will be disabled. It is possible to select individual elements of the device to be disabled. This is achieved by selecting the 'Individual' menu option. Upon selection, it is possible to select the individual elements that you wish to disable. See the example display below, detailing the available options for a dual detector with combined sounder:

Heat	ENABLED
Smoke	ENABLED
Sound	ENABLED
Option	Change>

Panel I/O options

'Panel I/O options' allows the user to select to disable and enable the control panel's hardwired inputs and relay outputs, plus alarm and fault communication to the Alarm Receiving Centre (ARC). All options can also be disabled for a time period from this menu, programmable between 1-24 hours in 1 hour steps.

Note: when disabling alarm and fault communication to the ARC (via the 'Alarm Comms' and 'Fault Comms' options), communication to SmartCell Services will be unaffected.

For more information, contact your installer/maintenance company.

Information zones

The 'Information Zones' option allows the user to select individual zones ranging between the information zones programmed on the system (max 1-48). The zones can be disabled or enabled from this menu. The zones can also be disabled for a time period from this menu programmable between 1-24 hours in 1 hour steps. No fault or fire conditions will be displayed from any device that is associated to a disabled zone.

Information devices

The 'Information Devices' option allows the user to select individual devices. The device can be disabled or enabled from this menu. The devices can also be disabled for a time period from this menu programmable between 1-24 hours in 1 hour steps. No fault or alert conditions will be displayed from any device that is currently disabled.

Enable all

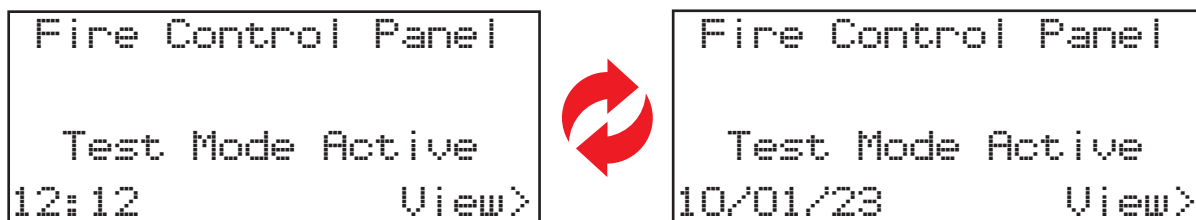
The 'Enable All' option allows the user to enable all currently disabled devices and zones in one action.

Maintenance/test

The 'Maintenance Test' option allows the user to 'Select All Zones' or 'Individual Zones' into a test mode. Additionally there is the option to inhibit sounder operation during the testing by selecting 'In Test No Sound' or to retain sounder functionality by selecting 'In Test Sound'.

An incoming fire event from a device within the associated zone will result in the LCD display showing 'Test Alarm'. If sounders have not been inhibited, the sounders within that zone will operate for five seconds.

The LCD display will also indicate that test mode is active as shown below.



Test all zones

The 'Test All Zones' option allows the user to put all zones into test mode. When selected, the option will be available to include or exclude sounders as previously detailed.

Individual zones

The 'Individual Zones' option allows the user to put individual zones into test mode. Options available are:

- 'Fire Zones'
- 'Information Zones'

When selected, the option will be available to include or exclude sounders as previously detailed.

Restore zones

The 'Restore Zones' option allows the user to restore all zones, returning the system to its normal operation.

Panel information

The 'Panel Information' option allows the user to edit user access codes, set the systems time and date and to carry out a lamp and buzzer test on the panel.

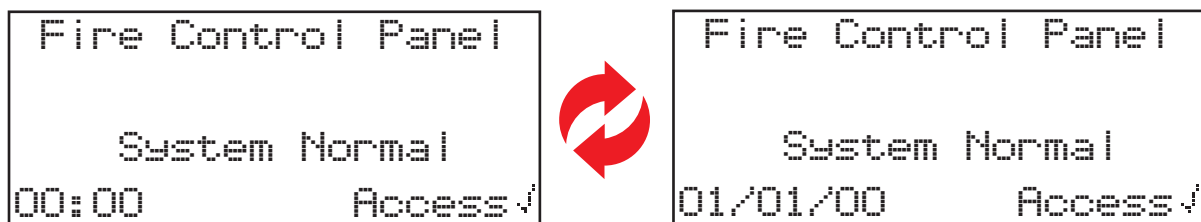
Passwords

The Passwords menu allows the Access Level 2 master user to manage ten other Access Level 2 non-master users. The master user can add, remove, change names and change the codes for all Access Level 2 users.

All Access Level 2 functions are available to the Access Level 2 users.

Panel options > Set time & date

The 'Set Time & Date' menu allows the user to programme the systems time and date. The time and date will be displayed on the LCD display and is also used for time stamping events in the historic event log. Whilst the time and date is not set, the following display will be shown:



Note: The time will require updating twice yearly for GMT/BST, unless 'Daylight Saving Mode' is activated at the engineers access level 3. For more information, contact your installer/maintenance company.

Panel options > Lamp / buzzer test

Once selected, the SmartCell control panel will perform a lamp buzzer test.

Language select

The 'Language select' option allows the user to change the SmartCell control panel's language selection to the secondary language that has been programmed. Once selected, the menu structure will be displayed in the selected language, for the duration that the users menu access. Once the user exits the menu to the front display, plus a further 30 seconds of inactivity, the system will revert back to the primary language.

For more information, contact your installer/maintenance company.

Access level 3

Access level 3 is intended for use by the system installer/service contractor via an engineers code.

Logout

The 'Logout' option allows the user to exit the menu immediately. Further access to the SmartCell control panel's menus will require the user code to be re-entered.

Routine system testing



The following steps have been created using weekly test recommendations, provided in BS5839-1:2017. This guidance is intended only to provide the end user with a greater understanding of the operation of this wireless fire system. Ensure that you follow regulations provided by your local fire authorities at all times.

It is recommended that you seek guidance from your installer/maintenance company, or your local fire authority.

1 Inform the Alarm Receiving Centre (ARC) that a test is about to be carried out. (If applicable)

2 Activate a Call Point. Press the resettable element. The device's red LED will illuminate once in alarm.

3 The system's fire sounders should start ringing to confirm the fire alarm condition.

4 Reset the call point, by inserting the test key and push it up to return the element to it's normal position.

5 Check the panel correctly displays the fire alarm zone text and zonal LED indication.

6 Note: full device details can also be viewed by pressing the **2** button.

7 Enter access level 2, either by turning the enable key to the on (1) position, or by entering a valid user code.

OR

8 The sounders can be stopped, by pressing the 'ALARMS SOUND / SILENCE' button ONCE.

9 Clear the fire alarm by pressing the 'RESET' button.

10 The fire event should reset with the screen reverting to the 'System Normal' display.

11 Call the ARC to check that the alarm was received. (If applicable)

12 Now testing is complete, update the logbook.

Logbook

It is important to maintain a logbook and to oversee all entries and record all events resulting from or affecting the system.

The logbook should be kept in a safe place, closely situated to the SmartCell control panel. It should only be accessible to all authorised persons.

It is recommended that service visits also be recorded. Such recordings should be accompanied with brief notes of any work that has been or is to be carried out.

An example reference data table is shown below:

Reference data table

Address of protected premises:	
Person within premises management responsible for the fire detection and fire alarm system:	
The system was designed by:	
The system was installed by:	
The system was commissioned by:	
The system was accepted by:	
Verification was undertaken by:	
The system is maintained under contract by:	Until:
Telephone number: , who should be contacted if maintenance is required	
Normal maximum attendance time for a maintenance technician is:	
Expendable component replacement periods (list):	

On the next page, is a sample page of the logbook. This can be photocopied to produce a suitable logbook:

Events (other than unwanted alarms or maintenance work)

Time	Date	Device address	Zone address	Details of event	Action required	Date completed	Initials

Unwanted alarms

Time	Date	Device/zone address	Details of event	Engineer visit req?	Engineer's findings	Date completed	Initials

Maintenance work

Time	Date	Device/zone address	Reason for work	Work carried out	Further work required	Signature

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