MULTI-LOOP PANEL

USER MANUAL, MAINTENANCE GUIDE & LOG BOOK

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Contents

1. WHAT TO DO IF THE FIRE ALARM PANEL SHOWS AN ALARM (RED LED)

Follow the building procedures for fire alarm activation to evacuate the building.

If safe to do so, write down the LCD reading and which LEDs are lit (either in the log book, or on a piece of paper for transferring to the log book later)

When the building has been evacuated, the sounders can be silenced, if required, by entering the user access code and pressing the Stop Sounder button, then pressing the Silence Buzzer button. (Note that the sounders may take up to 8 seconds to stop)

If there is no sign of fire, investigate the area that reported the fire CAREFULLY. Check for a detector with its LED on, or SOUNDER BASE STROBE LIGHT flashing or a call point with its RED LED lit.

If a detector caused the alarm, look for any innocent phenomena that could have activated it

(Steam, cooking food, exhaust smoke, excessive dust etc can all activate a smoke detector.).

If anything is found, try to clear the room by opening a window.

If a fire is discovered, call the fire brigade.

To reset the panel press the reset button.

If the panel goes back into alarm, and there is no sign of fire, silence the sounders and call the engineer.

2. WHAT TO DO IF THE FIRE ALARM PANEL SHOWS A FAULT (YELLOW LED)

Write down the LCD reading and which LEDs are lit (either in the log book, or on a piece of paper for transferring to the log book later)

Almost all fault indications will need the service engineer’s attention. Try entering the user password and resetting the panel, but if the fault returns, call the engineer as soon as possible. Note that when the alarm is in a fault condition, the majority of the system may still function correctly. Extra vigilance should be paid in the area with the fault. The alarm may not be operational in this area.

The panel`s internal buzzer can be silenced by pressing the Silence buzzer button. If the fault comes and goes, the panel will buzz every time the fault happens. If this is not acceptable you may be able to disable the zone that has the fault. (see Disablement section)

3. FIRE ALARM CONTROL PANEL SAFETY ISSUES

NOTE: When the Smart Connect Multiloop panel is operating normally, i.e. not being tended by service personnel, the access door must be closed and locked. After locking, the key MUST be removed and ONLY held by the responsible person and / or the service personnel. It must under NO CIRCUMSTANCES be held by the user. This equipment will operate safely provided it has been installed correctly in compliance with the Installation Manual.

It is recommended that the system is serviced frequently. It is customary to arrange a regular maintenance contract with a competent organisation. (Ask the installation company for recommendations). The system needs a thorough maintenance check annually at the very minimum.

If any part of this Fire Alarm Control Panel becomes damaged, contact the company responsible for system maintenance to arrange repair / replacement.

4. THE PURPOSE OF A FIRE ALARM SYSTEM

1. A Fire Alarm System is used to provide an early warning of a fire, so that the property can be evacuated and the fire extinguished if it can be safely tackled, or the local fire brigade called, according to the company evacuation procedure.

2. An Alarm can be raised from Smoke or Heat Detectors, or manually by a person operating a Manual Call Point.

3. To split the building into Zones, each covering a different area of the building. This will indicate which area of the system is giving the alarm (or fault).

4. To start its sounders, and indicate which zone (area of the building) has signalled the fire. It will also activate its auxiliary relay.

In addition to this, it also has the following features

Fault Monitoring

The panel checks all circuits for line integrity. If a part of the system has a problem, which may affect its operation, a fault warning must be given by the fire alarm panel (LED & buzzer indication). The fault relay will also activate.

Disablements

If there is a problem on the fire alarm systed, it may be required for the user to disable part of a system, while waiting for an engineer to visit to fix a problem on the system.

Information on how to disable individual detectors, a zone of detectors, and sounders is given later in this manual.

5. Maintenance

It is recommended that the owner or person having control of the premises should appoint a responsible person to oversee the effective operation of the Fire Alarm System.

Smart Connect Multi-loop control panels do not require any specific maintenance but should the control panel become dirty it can be wiped over with a damp cloth and should then be dried with a dry, lint free cloth. Solvents or detergents should not be used to clean the panel and take care not to allow any water to enter the enclosure.

Below is a summary of the main functions the “Responsible Person” is expected to carry out. This summary is intended to give a brief outline of user responsibilities for the safe upkeep of the Fire Alarm System.

The responsible person must:-

1. Have sufficient authority to carry out the duties associated with being the responsible person

2. Check the system at least once every 24 hours to ensure there are no faults present

3. Ensure there are arrangements for testing and maintaining the system

4. Ensure the log book is up to date, and available for inspection

5. Instruct all relevant occupants on the basic operation of the system, including start evacuation, silence alarms, silence faults and system reset if applicable.

6. Take appropriate action to limit the rate of false alarms, by reporting events to the company maintaining the system

7. Ensure that all detectors and manual call points remain unobstructed at all times

8. Liaise with maintenance personnel to ensure that cleaning, maintenance or building work does not interfere with the functioning and reliability of the fire alarm system

9. Ensure any changes to the system are recorded with updated drawings, operating instructions etc.

10. Ensure that there are spare parts held on site

11. In the event of a pre-alarm, determine the cause & take appropriate action (predetermined fire routine if the cause is the start of a fire, arrange maintenance if the cause is a contaminated detector head)

With the Smart Connect Multi-loop Fire Alarm Panel, we recommend the following tests are carried out: -

Daily Inspection

- Check that the green Power LED is lit.
- If there are any yellow fault LEDs lit, or the green Power LED is not lit, report the fault(s) to the designated site maintenance engineer.

Weekly Test (you may wish to temporarily disable any relay outputs during the following Tests – See Alarm Group section)

- Set off a manual call point or sensor to test the Fire Alarm panel responds and all the sounders activate.
- Do not test the same device each week. Test a different zone each week using a different call point or detector so that eventually, all the devices will be tested.
- To reset the System, enter access code, then press the Reset button).
- Check that no call points or fire detectors are obstructed in any way. (e.g. New furniture or decorations)

Quarterly Test (to be carried out by authorised service personnel only)

- Check that any servicing or repairs required by all previous logbook entries has been undertaken.
- Visual inspection of the batteries and connections. Check the alarm sounders work on battery only.
- Activate a device from each zone to test the fire alarm. (As per weekly test).
- Enter access code and go to the menu. Press the LED Test icon. Check that all LEDs light and the buzzer sounds.

Annual Test (to be carried out by authorised service personnel only)

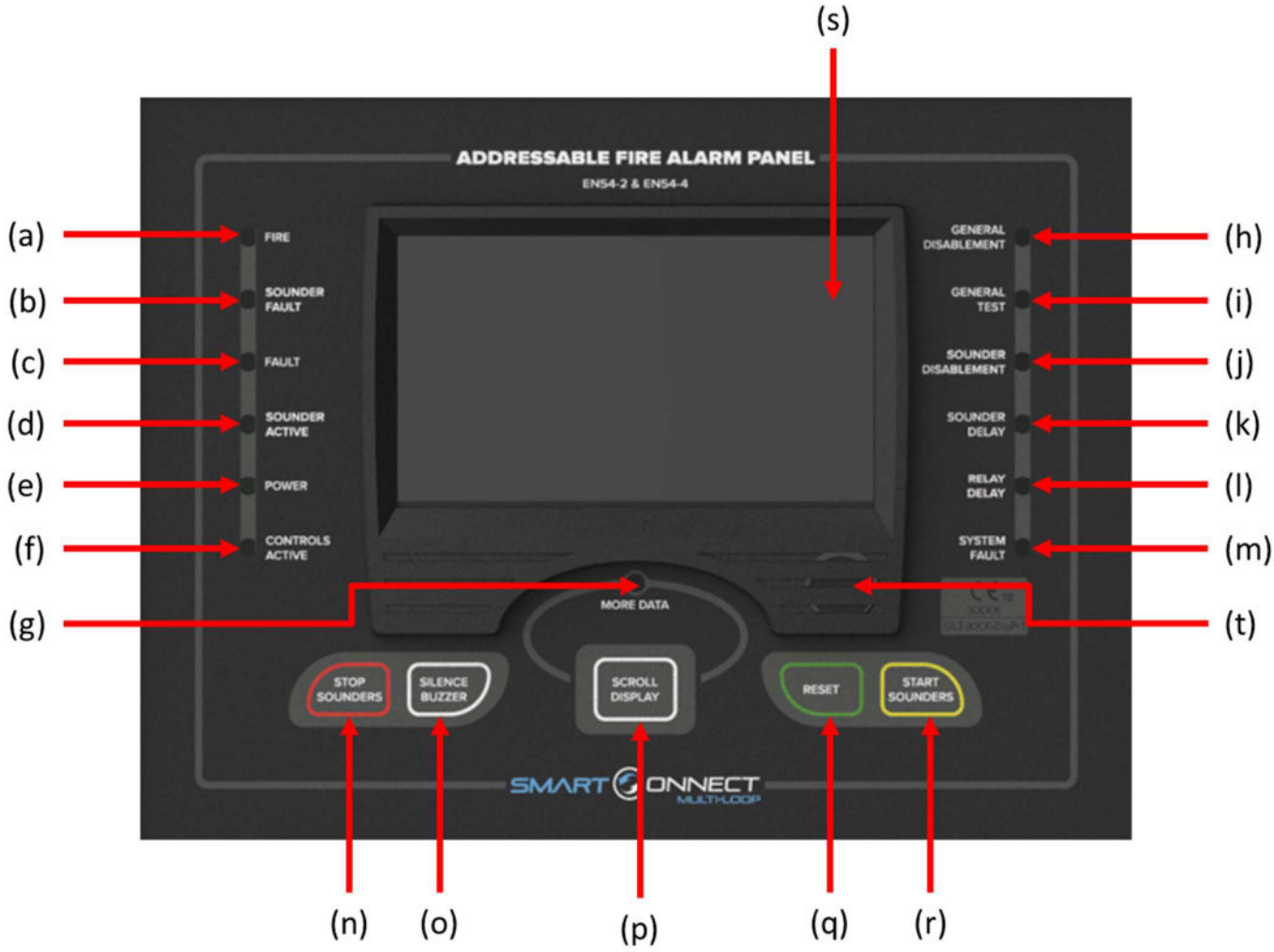
- Check every detector, call point, sounder and all auxiliary equipment for correct operation.
- Check Switch Mode cage Voltage (30 VAC), Charger Voltage (27.3V off load, adjusted with VR1) & Battery Voltage (25-27V)
- Check the backup batteries condition with a suitable test meter

Every Five Years (to be carried out by authorised service personnel only)

- Carry out a complete wiring check in accordance with the testing and inspection requirements of the relevant National wiring regulations (in the UK this is the IEE Wiring Regulations). The Batteries should be replaced because SLA batteries have a working life of 5 years.

6. Controls and Indicators

The diagram below shows the control buttons, LED indicators and switch locations.



a) **LED: Fire**

- Red LED.
- On steady when there is an active alarm event present.
- Off when the alarm condition is cleared, and when the panel has been reset.

b) **LED: Sounder Fault**

- Yellow LED.
- Flashes when there is a fault on either a sounder circuit, or a sounder device.
- Off when the sounder fault has been cleared and the panel has been reset.

c) **LED: Fault**

- Yellow LED.
- Flashes when there's a fault with a monitored circuit or system component, or when the panel is in an off-normal condition.
- On steady once event buzzer has been silenced.
- Off when the fault condition has been cleared (some fault signals may require a system reset if they are latched).

d) **LED: Sounder Active**
- Yellow LED.
- On steady when the output of any sounder circuit or sounder device is currently active.
- Off when there are no sounder circuits or sounder devices active.

e) **LED: Power**
- Green LED.
- On steady when the panel has power.
- Off when the panel has no source of power applied.

f) **LED: Controls Active**
- Yellow LED.
- Indicates that the user now has access to use either the function buttons or the LCD touchscreen display (depending on access level).
- On when the user has entered the access level 2 user password, or when the service engineer has entered the access level 3 engineers password.
- Off when either the access has timed out, or when the user/engineer has locked the panel.

g) **LED: More Data**
- Yellow LED.
- Flashes when there is more event data supressed on the LCD screen.
- On steady when all current events have been accepted and the buzzer is silenced.
- Off when there are no events.

h) **LED: General Disablement**
- Yellow LED.
- On steady when any part of the system has been disabled.
- Off when there are no current disablements.

i) **LED: General Test**
- Yellow LED.
- On steady when any part of the system is in test mode.
- Off when there are no current circuits/devices in test mode.

j) **LED: Sounder Disablement**
- Yellow LED.
- On steady when any sounder circuit or sounder device has been disabled.
- Off when the sounder circuits and sounder devices are in the normal condition.

k) **LED: Sounder Delay**
- Yellow LED.
- On when a sounder circuit or sounder device has been configured to delay its output.
- Off when there is no configured delay to a sounder circuit or a sounder device's output.

l) **LED: Relay Delay**
- Yellow LED.
- On when a relay circuit or relay device has been configured to delay its output
- Off when there is no configured delay to a relay circuit or a relay device's output.

m) **LED: System Fault**
- Yellow LED.
- On when there is an abnormal microprocessor running condition due to various unexpected phenomena.
- Off when the microprocessor is running correctly.

n) **Function Button: Stop Sounders**

- A minimum of Level 2 access (By entering the user password) is required.
- When the **STOP SOUNDERS** key is pressed, the panel's sounder circuits and sounder devices will be silenced.
- The **Alarm Silenced LED** will start flashing and remain until either the panel is reset, or until another alarm retriggers the alarm circuits/sounders. The **RED FIRE LED** shall be maintained.
- NOTE: to silence the panels' internal buzzer, press the silence buzzer button when viewing the event screens.
- It also sends a 'STOP SOUNDERS' message to the printers and history log.

o) Function Button: Silence Buzzer

- A minimum of Level 2 access (By entering the user password) is required.
- When the SILENCE BUZZER button is pressed, the control panel will silence its internal sounder (buzzer).
- The silence buzzer message is sent to the printer and the history log.
- The button is used to acknowledge and silence the internal buzzer for Alarm, Tech. Alarm and Fault events.

p) Function Button: Scroll Display (Scroll Acknowledge Display)

- If there is an event waiting to be acknowledged/silenced, then the MORE DATA LED will be lit.
- Press the scroll display button to view each current Alarm, Technical Alarm and Fault event on the panel.
- The priority will be (Alarm, Technical Alarm, and then Fault).

q) Function Button: Reset

- A minimum of Level 2 access (By entering the user password) is required.
- Pressing the **RESET** button will return the panel to normal operating mode, clear any off-normal condition from the status display; restore the alarm and fault relays to their normal states; extinguish all status LEDs except the green POWER LED, and yellow test/disablement/delay LED's.
- If any alarm or fault still exists after you press the SYSTEM RESET button, all sounder circuits, control outputs, and panel audio and visual indicators will reactivate.
- The reset message is sent to the printer and the event log.

r) Function Button: Start Sounders

- A minimum of Level 2 access (By entering the user password) is required.
- To start the panel sounders, press the START SOUNDERS button.
- Using the START SOUNDERS button will manually activate all silenceable outputs and sounder circuits.
- It will not activate the alarm relays.
- It creates a history log entry of the start sounders and also sends it to installed printers.
- The start sounders can be cancelled via a press of the STOP SOUNDERS button. Any programmed cause & effects will override the start sounders operation if the panel receives an alarm event.

s) 4.3"Touch Screen Display

- Full colour resistive touchscreen.
- Designed to make status information clear and system control functions simple to operate.
- Each system event presents the user with a message describing the location of the alarm report and the type of event (manual alarm, smoke, or heat).
- ***NOTE: To help increase the lifetime of the LCD display, the screen will go into standby mode if left idle for 10 minutes. The panel will still be fully operational and any event will cause the screen to wake up. The screen won't timeout into standby mode if there are any current events on the panel.***

t) Internal Buzzer

- Gives an audible indication if there is a fire, fault or tech. alarm event.
- Audible distinction between fire and fault provided.

7. System Operating Modes and Annunciation

During Normal operation the panel will be in one of the following states depending on the status of the devices connected to the panel, and user intervention. Below is a summary of the different conditions:

Normal Condition (Quiescent)

The following functions will be performed at regular intervals when in normal mode:

- Supervises all loop devices, network nodes and the alarm circuits.
- Checks for valid replies, alarms, faults, etc.
- Checks for power supply and battery conditions.
- Refreshes LCD display and updates time.
- Scans keypad for System RESET.
- Supervises Network communications.
- Performs time-scheduled actions (day/night sensitivity and on/off schedules).

A typical normal display would be as illustrated below:

In the quiescent condition, the panel displays:

- System Healthy
- Zeta Logo
- Panel Site Name WAR
- Time & Date

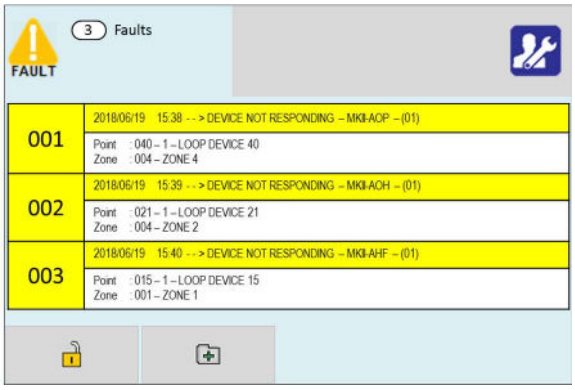
Fault Condition

The following functions will be performed when in the fault condition:

- Will cause the panel's internal buzzer to sound with a pulsed output.
- The common Fault LED will illuminate and flash.
- Any other relevant Fault LED's will illuminate.
- A Fault message will be displayed on the LCD screen.
- The Fault relays will be switched.
- The message is sent to the event log and printer.

If there is a fault signal indicated from an addressable LOOP device, the reported message will show device address, and zone information to aid in locating the problem. The time and date of the fault indication will also be shown to aid in record keeping.

A typical fault display would be as illustrated below:



On the screen, the panel shows:

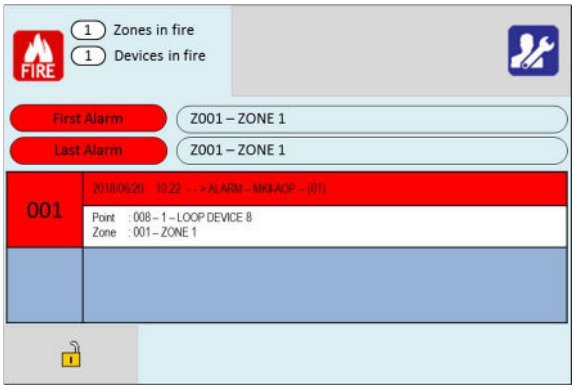
- Fault Icon
- Number of Fault events
- Details of Fault events in chronological order (showing fault type, zone number & label, device address & label)
- Scroll arrows for displaying further events (if there are any).

Fire Condition

The following functions will be performed when in the fire condition:

- Will cause the panel's internal buzzer to sound with a steady output.
- The Fire LED will illuminate and flash.
- The LCD displays the Alarm along with the device name, type, address, associated zones and time/date.
- Alarms latch and are not allowed to clear automatically.
- Alarms activate cause & effects if programmed.
- Alarm relays are activated.
- The fault relays are not activated.
- Stores event in event log and sends message to printer.

A typical fire alarm display would be as illustrated below:



On the screen, the panel shows:

- Fire Icon
- Number of zones in alarm
- Number of devices in alarm
- First & last zones in alarm
- Details of alarms in chronological order (showing device type, Zone number & label, Device address & label)
- Scroll arrows for displaying further events

Technical Alarm Condition

The technical alarm condition can be configured as latching or non-Latching for each tech. alarm input.

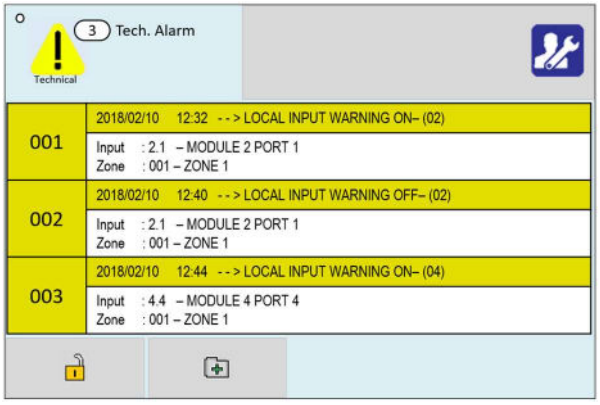
The following functions will be performed when in the tech. alarm condition:

- Will cause the panel's internal buzzer to sound with a pulsed output.
- The LCD displays the local input warning status label along with the device name, type, address, associated zones and time/date.
- Any tech. alarm relays are activated.
- The alarm relay is not activated.
- The fault relay is not activated.
- Silenced alarms are not resounded.
- Stores event in event log and sends message to printer.

If the tech. alarm input is configured as non-latching, and there are no active fault or alarm events, when the tech. alarm event clears, the screen will clear.

If the tech. alarm input is configured as latching, when the tech alarm clears, the screen will display 'Local Input Warning Off', and the panel will need to be reset to clear the screen.

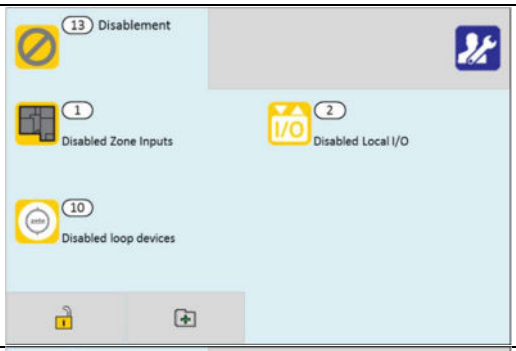
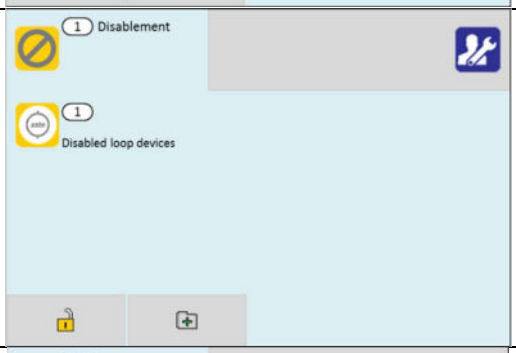
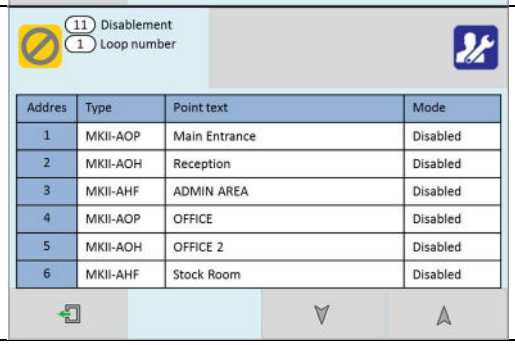
A typical tech. alarm display would be as illustrated below:



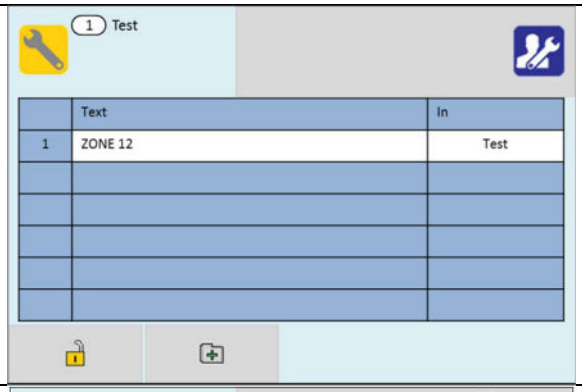
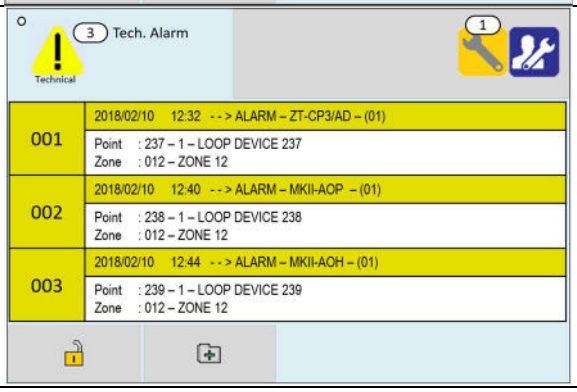
On the screen, the panel shows:

- Tech. Alarm Icon
- Number of technical alarm events
- Details of tech alarm in chronological order (showing type, zone number & label, device address & label)
- Scroll arrows for displaying further events

Disablement Condition

Disablements are indicated with the general disablement LED, and a mixture of other LCD/LED indications. In this example, zone 1 is disabled. The panel shows that one zone is disabled, and that the 10 Loop devices and 2 module inputs/outputs in that zone are also disabled. Press the zone icon, Loop device icon or local I/O for details of the disablements.	
In this example, there is a single loop addressable device disabled. Press the Device icon for details of the disablement.	
In this example, one of the Inputs on a Zone Monitor module has been disabled.	
Pressing one of the zone disablement icons will give further details about which zone has been disabled.	
Or pressing the disabled loop devices icon will give details about which devices are disabled.	

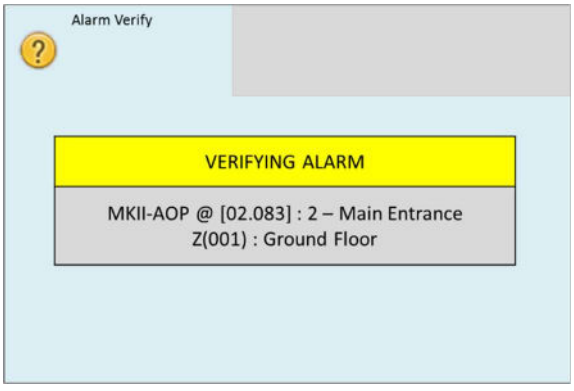
Test Condition

In this example, one zone (Zone 12) is in test mode. A number of zones can be put into test at the same time if required. The test can be silent, or with sounders. If the sounder option is chosen, only sounders within the same zone as the test device are operated.	
As devices are tested, the screen changes to show the recent tests. Use the arrow to scroll to view older tests if required.	

Multiple Conditions

In the event of multiple conditions, the panel will display the highest priority event. It will display the presence of suppressed events as icons on the top right of the screen. The number of events for each category is shown on the icon. To display any of the supressed events, press the icon of that event. *(Priority: Alarms > Technical Alarms > Faults > Disablements/Tests)*	

Alarm Verification Conditions

If Alarm verification has been enabled on the control panel, the panel will indicate the verification as a pop-up window, giving the device type, along with its address, text label and zone. If the alarm clears, the panel will automatically clear it`s screen when the verification time ends. If the alarm is still present, the panel will confirm this as an alarm, and display its usual alarm screen.	

8. Accessing the Panel

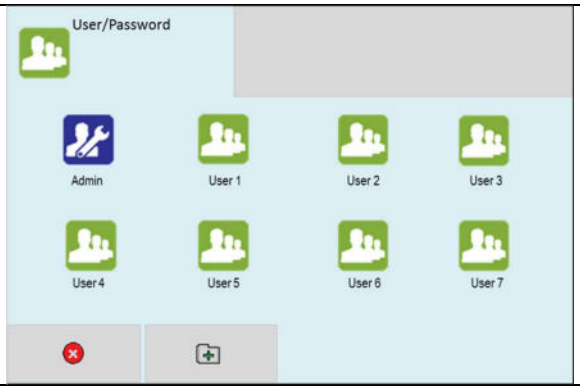
The Smart Connect Multi-loop panel has 2 user access levels and one installer access level.

Access Level 2 - Basic user access

Tap LCD. Select user icon. Enter user access code (Default 0001)

This allows the user to have access to the main control buttons, to silence alarms, acknowledge events and reset the panel.

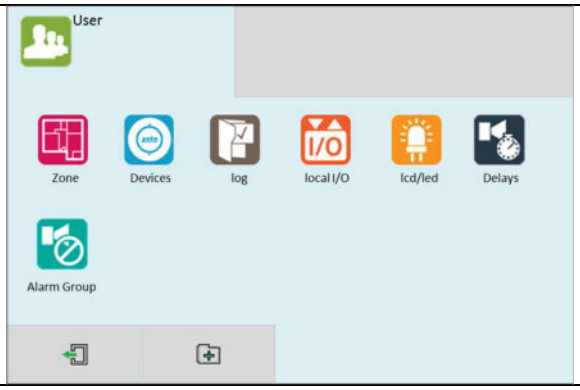
It is indicated by a steady Controls Active LED, and an open padlock icon in the bottom left corner of the LCD screen.



Access Level 2 - Full user access

From access level 2a press the menu access icon.

This allows the user to view the user menus, to view device status, event logs etc.



Turning Off Access

If the panel is in one of the menus, press the exit menu icon in the bottom left corner.

Press the padlock icon in the bottom left corner.
The controls active LCD will turn off and the padlock icon will turn off.

(To help keep the panel secure, access will automatically timeout if the panel is left idle for approx. 5 minutes)

9. Navigating the Panel Menus

The menus are in the form of icons with a text label underneath. To select a particular menu, press the relevant icon.

The sub screens are in the form of tabbed screens if there is more than one sub-option, the data will either be displayed in a table, or as separate data fields, depending on the function of the sub screen

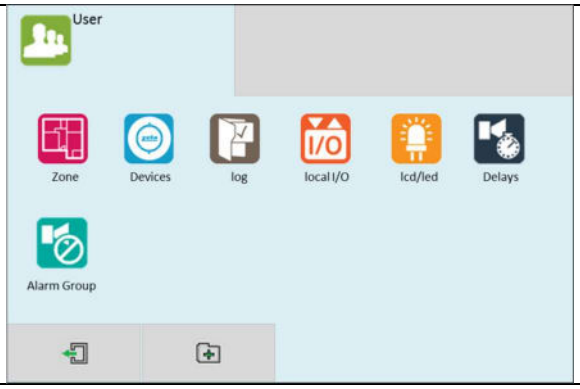
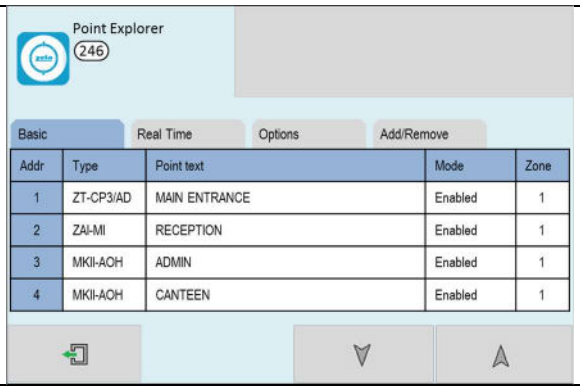


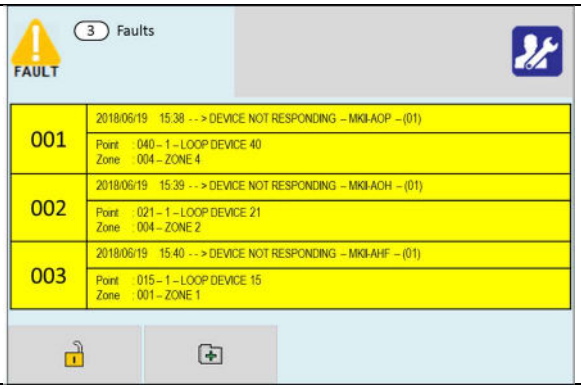
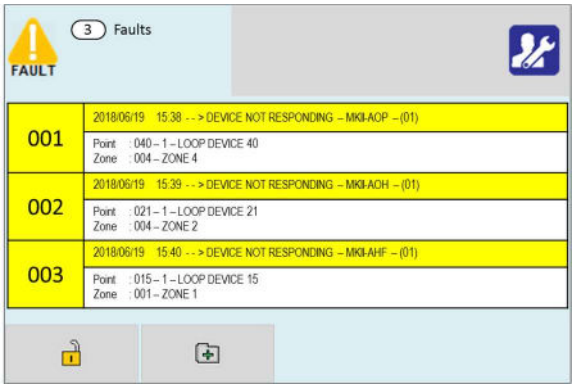
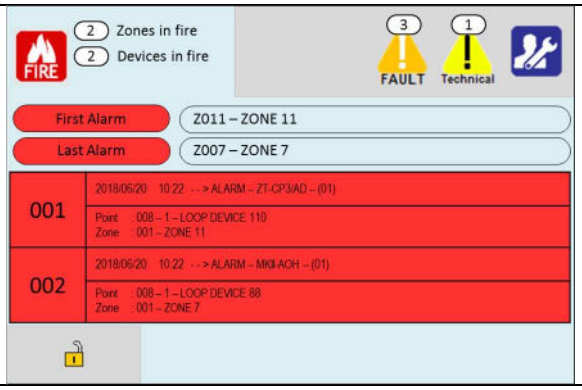
Table View Screen

In some menus. information is presented in a table. Arrows at the bottom of the screen allow scrolling to the next page of the table.



10. Silencing Panel Buzzer

When a Fire, Tech. Alarm or Fault event occurs in the system, the display enters the off-normal mode automatically. The events are displayed in priority order (Fire, Tech. Alarm, and Fault), the local buzzer sounds, and the appropriate LED's will turn on. To silence the panel event buzzer, do the following:

When the panel receives an event that needs to be acknowledged, it will display the relevant event status screen. Events that are unacknowledged will be highlighted (Red for Alarm, Yellow for Fault and Technical Alarm).	
Press the SILENCE BUZZER (SILENCE BUZZER) button to acknowledge the blinking event type. When an event type has been acknowledged, it will no longer be highlighted and blinking, instead it will change to solid white. The panel internal buzzer will also be silenced. If there are multiple number of events, press & to scroll through the pages. The SCROLL DISPLAY (SCROLL DISPLAY) button can also be pressed to scroll through event pages.	
If there are multiple event types waiting to be acknowledged on the panel, press either the FIRE, Technical or FAULT icon to navigate to the required event screen.	

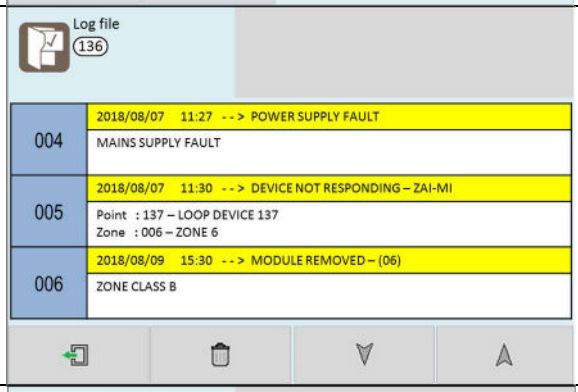
11. Event Logs

The Smart Connect Multi-loop event log has a capacity of storing **8032** events. It saves all alarm, fault, tech. alarm, test and disablement events that occur on the system.

<table>
<tr><td>From the USER MENU, press the ‘log’ icon. The panel will display the log file.</td><td> 
</td></tr>
<tr><td>Fault events are shown with a YELLOW highlight.

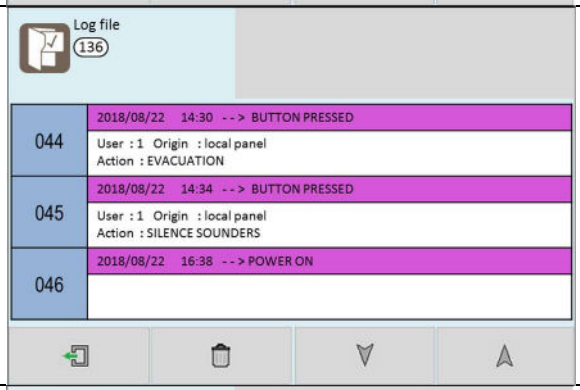
The highlighted section gives the time, date and the general fault information.

The table shows more detail of the fault event.

The left hand column shows the event number.</td><td> 
</td></tr>
<tr><td>Operational events are shown with a MAGENTA highlight.

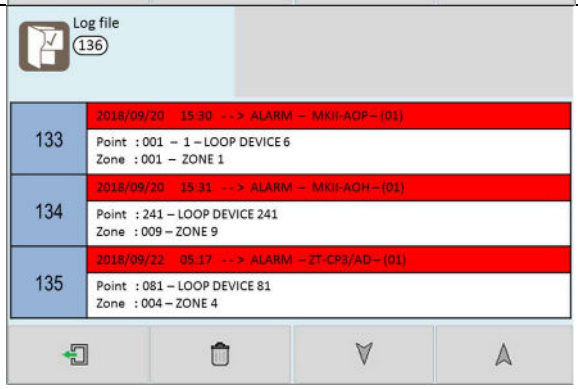
The highlighted section gives the time, date and the operation information.

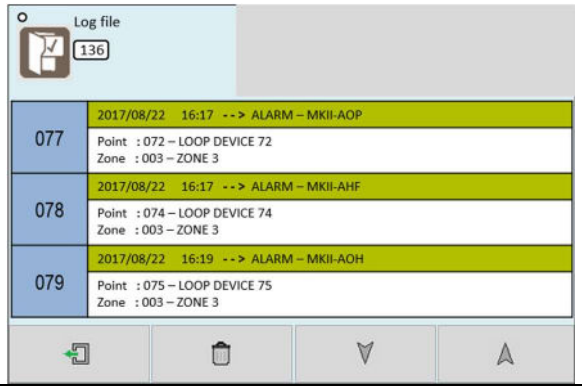
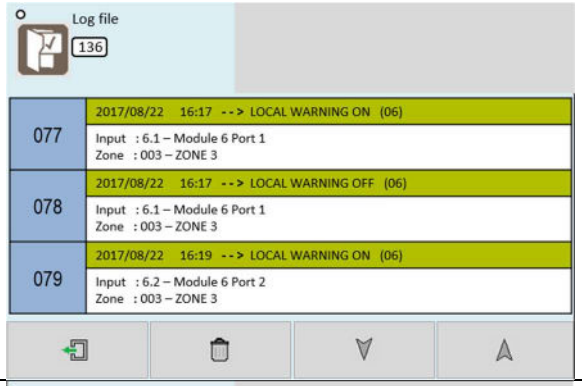
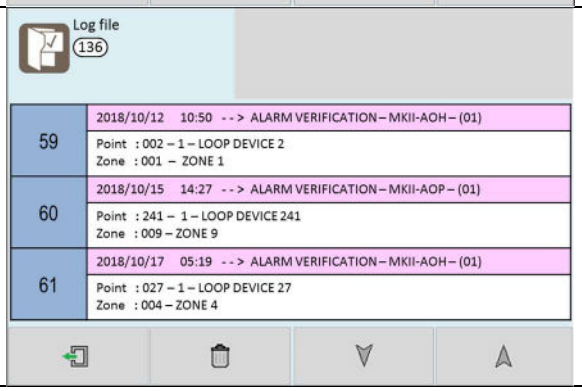
The left hand column shows the event number.

Some operational events are able to show more detailed information when “Click here for more information” is shown. Clicking this will display a table that will show the operational event in more detail.</td><td> 
</td></tr>
<tr><td>Alarm events are shown with a RED highlight.

The highlighted section gives the time, date and the device type that has caused the alarm.

The table shows more detail of the Alarm event (Address, device text label, zone number, zone text label).

The left hand column shows the event number.</td><td> 
</td></tr>
</table>

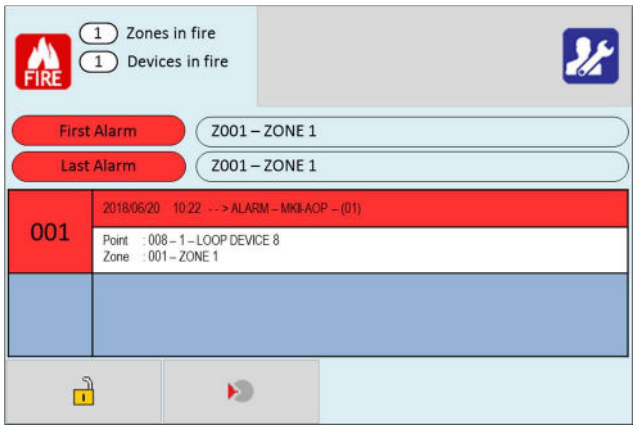
Test events are shown with a DARK YELLOW highlight. The highlighted section gives the time, date and the device type that has caused the alarm. The table shows more detail of the test event (Address, Device text label, zone, zone text label). The left hand column shows the event number.	
Tech. Alarm events are shown with a DARK YELLOW highlight. The highlighted section gives the time, date and the device type that has caused the tech. alarm. The table shows more detail of the tech. alarm event (Address, Device text label, zone, zone text label). The left hand column shows the event number.	
Alarm Verification events are shown with a LILAC highlight. The highlighted section gives the time, date and the device type that has entered alarm verification. The table shows more detail of the alarm verification event (Address, Device text label, zone, zone text label). The left hand column shows the event number.	

12. Sounder Delays

If the operation of Sounders has been delayed in one or more of the programmed ACTIONS, then this will be indicated by the illumination of the **SOUNDER DELAY LED**.

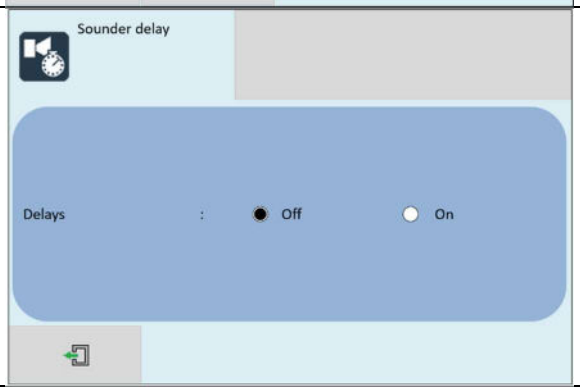
Overriding Delays During an Alarm

During a fire alarm it is possible to override all the Sounder delays (at any access level) by pressing the delay override icon at the bottom of the screen, as shown. When a delay has been overridden, the icon will change to .



Switching Off Delays at Access Level 2

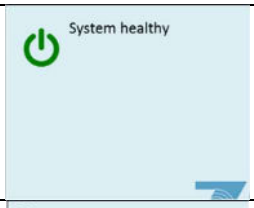
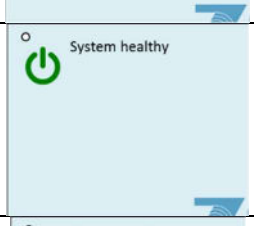
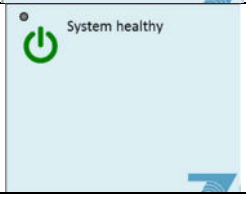
The panel allows the programmed delays to be turned off by the user, as this may be required as part of the normal operation of the panel.

Enter the user menu in the usual way.	
The panel shows 'Delays' with Off & On options. Select Off to cancel the delay, or select On to keep the delay. Press Exit icon and save changes as prompted.	

NOTE: *As the delays can be toggled on & off via the user menu. If the delay is not working as expected, check in the user menu if the delays have been turned off.*

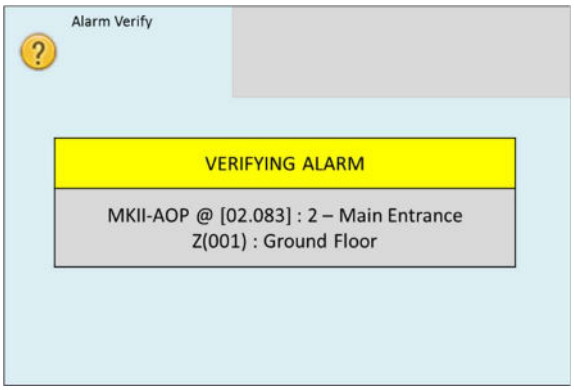
13. Indication of Day/Night Mode

The panel indicates its current operating mode by means of a circle in the top left corner of the LCD.

No Day / Night timer set. No circle in top left corner.		
Day / Night timer set. Panel in **Day Mode**. White circle in top left corner.		
Day / Night timer set. Panel in **Night Mode**. Black bar in top left corner.		

14. Alarm Verification

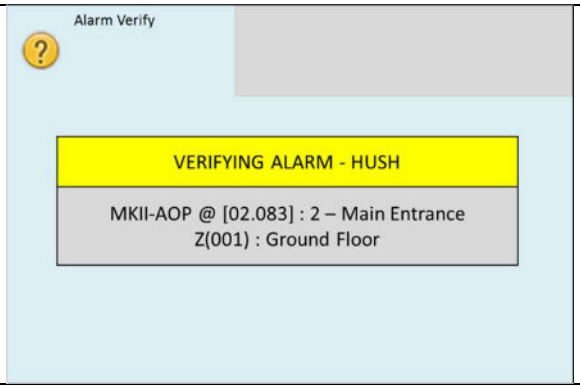
The panel is equipped with an Alarm verification feature that is used to reduce unwanted false alarms. Verification required a smoke detector to be above the alarm threshold for a pre-determined time (usually a few minutes), before the fire panel enters the alarm condition, starting all the alarm sounders. If the detector returns to normal within this time, the panel resets and returns to normal.

If Alarm verification has been enabled on the control panel, the panel will indicate the verification as a pop-up window, giving the device type, along with its address, text label and zone. If the alarm clears, the panel will automatically clear it`s screen when the verification time ends. If the alarm is still present, the panel will confirm this as an alarm, and display its usual alarm screen.	

Hush Button

The Smart Connect Multi-loop allows for a hush button to be used. If a detector has started verification, and a sounder operates, pressing the hush button for around 3 seconds will turn off the verification sounder. Then after the verification time, the sounders will either restart if detector still showing an alarm, or stay off if it has returned to normal.

***NOTE:** *Remote LED triggered sandwich sounders, and wireless sounders may take a little more than 3 seconds to silence.*

When a detector is triggered and enters alarm verification, use the programmed hush button to silence the verification sounder. The hush button will need to be pressed for 3 seconds. The Smart Connect Multi-loop will display an on-screen notification that the verification sounder has been hushed.	

15. Disablements

WARNING: When part of a fire alarm system is disabled, it is no longer operational, so may not detect or report an alarm. Only use disablements when absolutely necessary, and do not leave the panel disabled indefinately.

User Disablements can be used to help prevent a misbehaving fire panel reporting repeated faults or alarms while waiting for a service engineer to investigate the issue

The panel allows disablement of Inputs in a zone, Outputs in an alarm group, individual devices and individual expansion module ports.

Zone Disablement

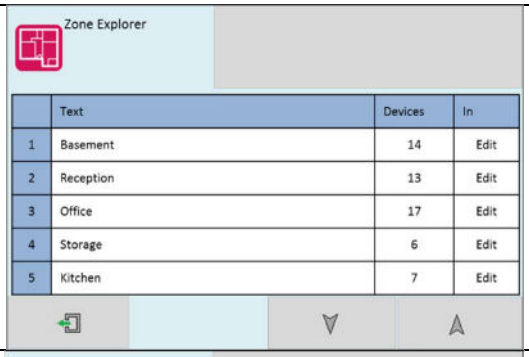
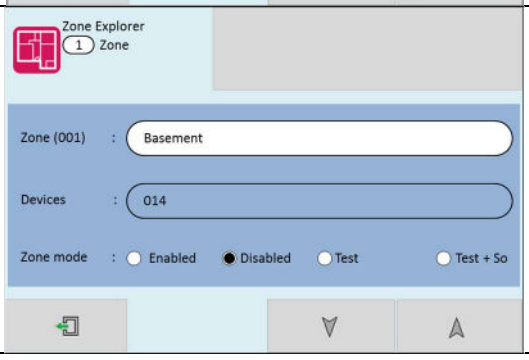
The following options can be selected when disabling a zone:

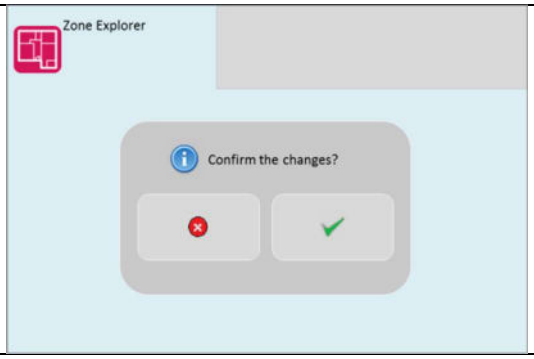
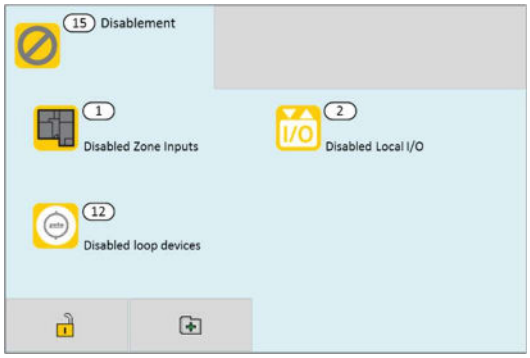
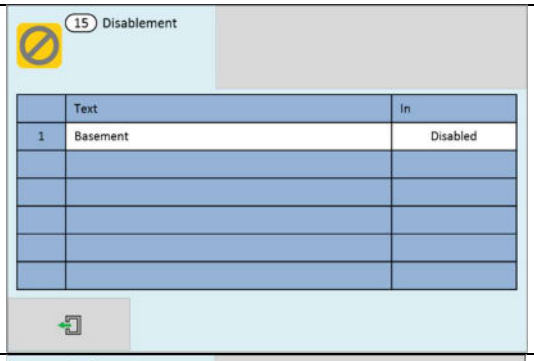
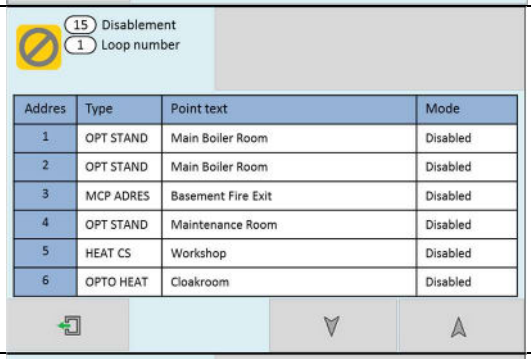
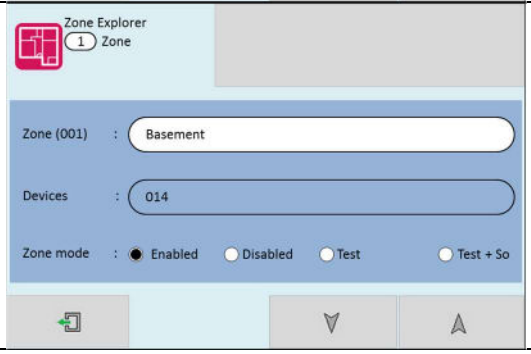
Disabled = the input devices in the zone **will not** trigger an alarm, tech. alarm, or fault signal.
Enabled = the input devices in the zone **will** trigger an alarm, tech. alarm, or fault signal.

This might be used if the system requires routine maintenance, and the user needs the rest of the system to continue running, but doesn't want spurious false alarms.

The panel will respond in the usual manner to any events in any non-disabled zones. Any number of zones can be disabled, but it is good practice to only disable one zone at a time.

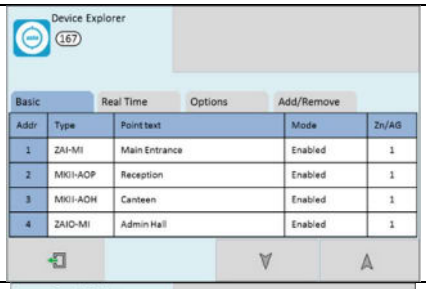
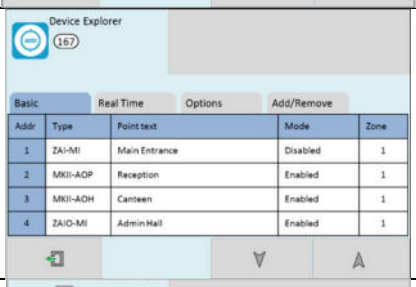
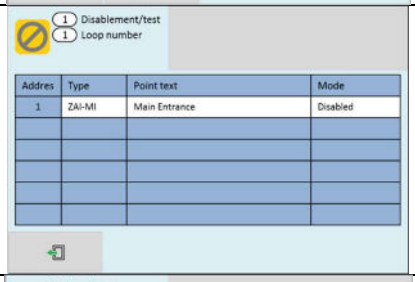
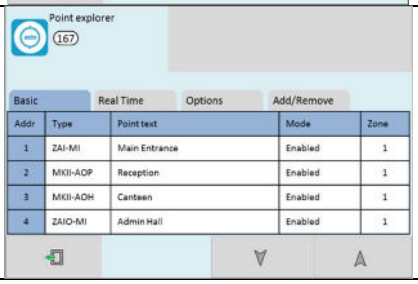
A zone can be disabled as follows:

Enter the User Password, Press the menu access icon. Select the zone icon  The panel shows the Zone menu. To change the disablement options, press the "In" field.	
This will display the zone options menu. Change the Zone mode to 'Disable' by pressing on the selection circle. The  and  icons can be used to scroll to other zone numbers. When finished press the exit icon  .	

The panel will return to the Zone Explorer menu. Select more zones to disable, or if finished, press the exit icon  . The panel will ask if you want to save the changes. Press tick  to save the changes, or press  to discard.	
When zones have been disabled, the LCD display changes from SYSTEM NORMAL to Disablement/Test. The screen shows:- The number of zones disabled. The total number of disabled devices in those zones. The number of module inputs/outputs disabled. The General Disablement LED will be lit and also the zonal disablement LEDs will be lit for any zone that is fully disabled. *(The zonal disablement LEDs only apply to panels that have a ZLX PCB fitted).*	
Details of the disabled zones can be viewed by pressing the disabled zones icon  .	
Details of the individual disabled loop devices can be viewed by pressing the disabled loop devices icon  .	
To re-enable a zone, use the same procedure, pressing the 'Enabled' selection circle. Zone Mode Options:- • Enabled • Disabled • Test • Test + Sounder	

Loop Device Disablement

Rather than disable an entire zone, it is often useful to just disable one or more devices or points (detector, call point, interface or sounder) within a zone, especially if they are malfunctioning and likely to cause an unwanted alarm or repeatedly indicate a fault condition.

Enter the User password , Press the menu access icon, and select the Device icon . The panel shows the Device Explorer menu.	
Press on the 'Mode' field for the device to be disabled. Select further devices to disable if necessary, and then press exit to save.	
When loop devices have been disabled, the LCD display changes from SYSTEM NORMAL to Disablement/Test, as shown. The screen shows the number of devices disabled. The General Disablement LED will be lit, but the zonal disablement LEDs will not light, unless all devices in that zone have been disabled.	
Details of the individual disabled loop devices can be viewed by pressing the 'Disabled loop devices' icon .	
To re-enable a device, use the same procedure, pressing the 'Mode' field until it shows 'Enabled'.	

Once a loop device is disabled, the panel ignores any alarm or fault generated by the device. If all devices in a zone are disabled, the panel will indicate a zone disablement. If subsequently one or more devices in that zone are re-enabled then the zone disablement indication will be automatically cancelled.

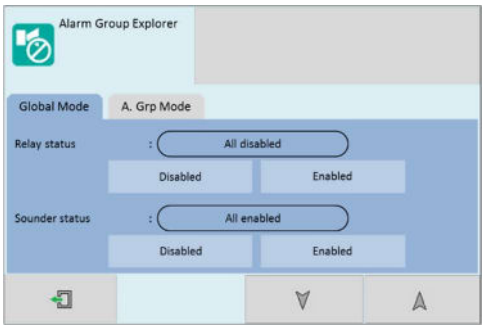
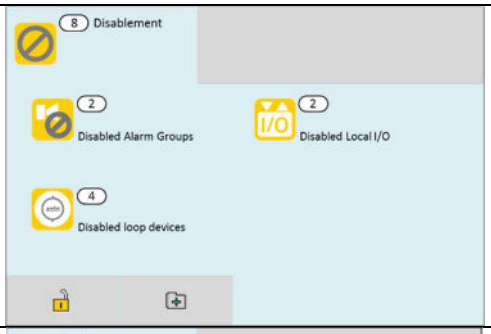
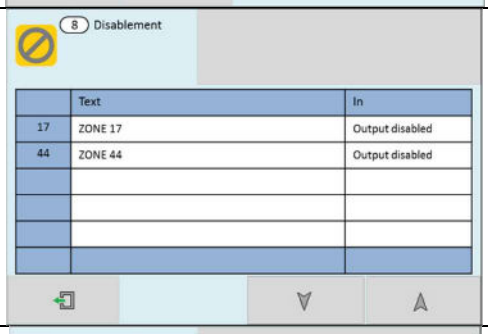
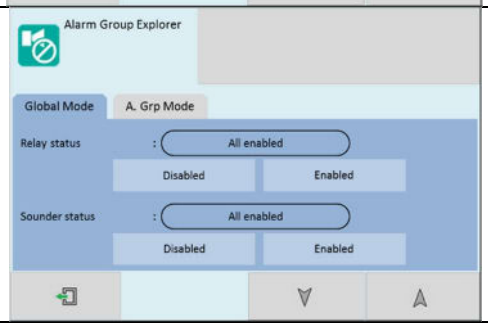
Local I/O circuits can be disabled in a similar way, but it would not normally be required for general users to perform this operation.

Alarm Group Disablement - Global Mode

Global mode is used to disable ALL sounders and/or relays on a panel.

NOTE: When all sounders are disabled, the panel will not be able to produce an evacuation signal if a real fire occurred. Only use this option when absolutely necessary.

If only certain sounders need to be disabled, consider using Loop Device Disablements or Alarm Group Disablements instead.

Change the global mode for **relay status** or **sounder status** to disabled by pressing the 'Disabled' selection area. The text will change from 'All enabled' to 'All disabled' for the selected option. This will disable **ALL** panel Sounders and/or relay output interfaces (*Except the fault & fire relays on the TRM, and SCM-RM relays that are set to Alarm or Fault*). Press the exit icon  . The panel will ask if you want to save the changes. Press tick  to save changes, or press  to discard.	
The LCD display changes from SYSTEM NORMAL to Disablement, as shown. The screen shows the number of outputs disabled. The General Disablement LED will be lit.	
Details of the disabled outputs can be viewed by pressing the disabled loop devices icon  or the disabled local I/O icon  . If any zones have all of their outputs disabled, it will be indicated by the disabled alarm groups icon  .	
To re-enable the outputs, press the 'Enabled' selection area. The text will change from 'All disabled' to 'All enabled' for the selected output. Press the exit icon  . The panel will ask if you want to save the changes. Press tick  to save the changes, or press  to discard.	

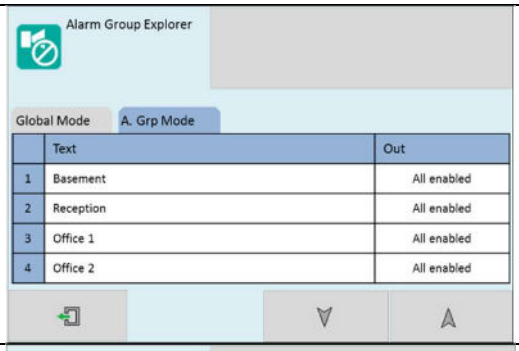
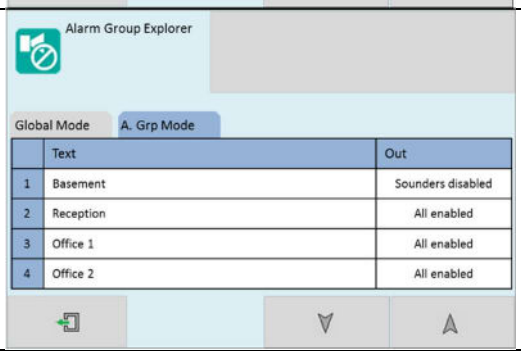
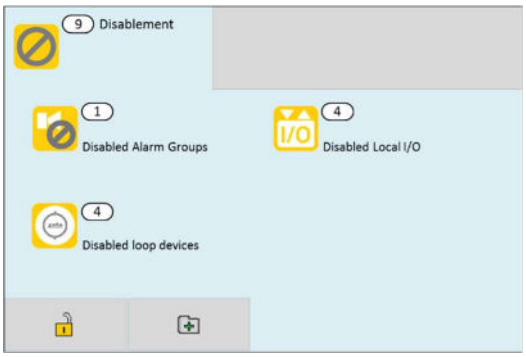
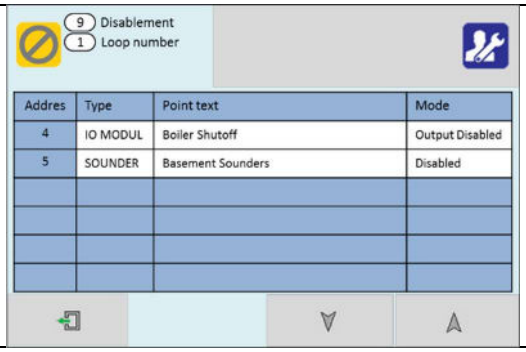
Alarm Group Disablement - Alarm Group Mode

Alarm Group mode is used to disable all sounders and/or relays in a specific alarm group.

The panel will respond in the usual manner to any events in any non-disabled alarm groups.

Any number of alarm group (zones) can be disabled, but it is good practice to only disable one alarm group/zone at a time.

An alarm group can be disabled as follows:

Enter the User Password, Press the menu access icon, select the Alarm group Icon and select the “A. Grp Mode” tab. The panel shows the Alarm Group mode menu.	
Set the alarm group to disabled by pressing the ‘Out’ field. The status will change from ‘All enabled’ to ‘Sounders disabled’ / ‘Relay disabled’ / ‘All disabled’. Choose the required option for the selected Alarm Group. Disable further alarm groups in the same way, or press exit to save.	
When Alarm group mode has been disabled, the LCD display changes from SYSTEM NORMAL to Disablement. The screen shows:- The number of disabled alarm groups. The number of disabled loop devices. The number of disabled module outputs (local/IO). The General Disablement and Sounder disablement LED will be lit if either Sounder disabled or All disabled was selected. Only the General Disablement LED will be lit if just Relay disabled was selected.	
Details of the disabled alarm group outputs can be viewed by pressing the disabled loop devices icon or the disabled local I/O icon . If any alarm groups have all of their outputs disabled, it will be indicated by the disabled alarm groups icon .	
To re-enable an alarm group, use the same procedure, pressing the “Out” field until it shows ‘All Enabled’. Then save changes.	

16. Test Mode

Why Use Test Mode?

To aid commissioning and assist routine maintenance checks, a non-latching 'one man test' facility is available. Test mode can be used either with or without sounder operation, depending on the engineer's requirements.

When a detector, manual call point or input unit is triggered on any zone in Test, the Alarm sounders operate for approximately 3 seconds on and then switch off (If selected). The triggered device is automatically reset. The panel will display the tested device on a test alarm screen, with the event highlighted in blue. The device automatically resets from the fire condition, but the LCD indication remains until the panel is manually reset.

If the device is still in the fire condition, e.g. MCP still activated or the analogue value of a detector still above the alarm threshold, the device will be triggered again and the Alarm sounders will operate again.

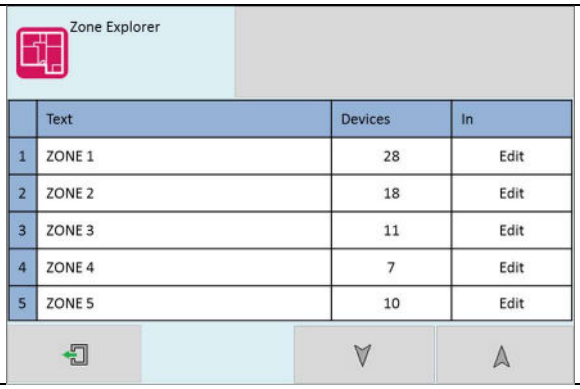
Should an Alarm occur on a zone that is not programmed to test, the Fire Alarm Panel will operate as normal and signal an alarm.

To Programme a Zone into Test Mode

Enter the User password , Press the menu access icon, and select the 'Zone' icon .

The panel shows the zone explorer menu.

Select the zone(s) to be placed into test by pressing 'Edit' on the 'In' Field.



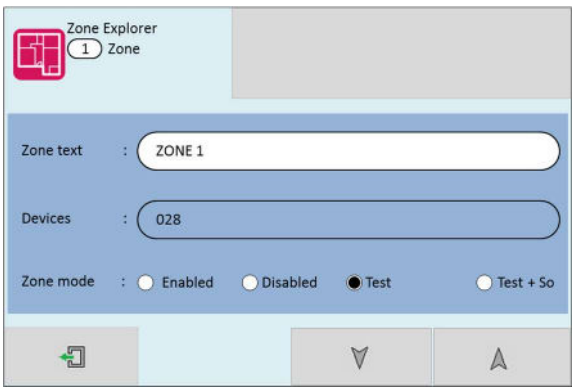
The panel will show the zone options menu.

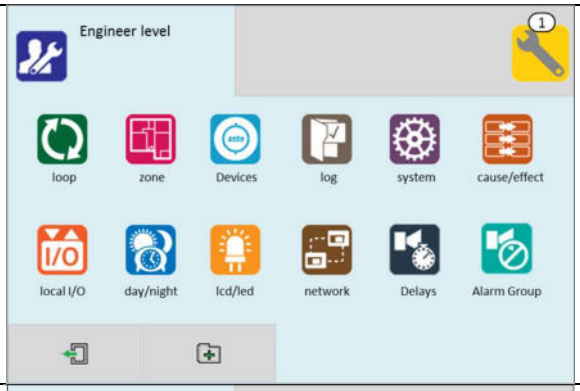
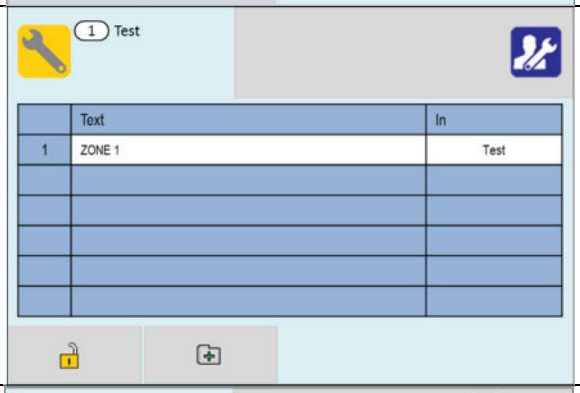
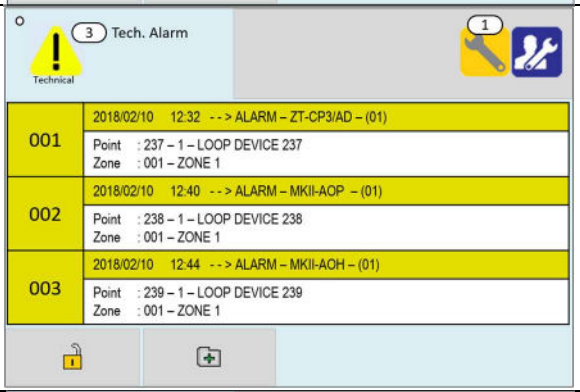
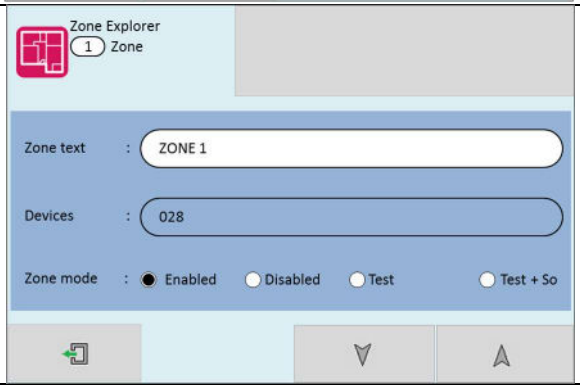
There will be two test modes to choose from:

<u>Test</u>
This will give a silent test, with no sounders operating.

<u>Test + Sounder</u>
This will operate all the sounders in that zone for approximately 3 seconds, regardless of the cause and effect programming.

Change the Zone mode to either 'Test' or 'Test + Sounder' by pressing on the selection circle.



When all required zones have been selected, press exit and accept the change. The panel will return to the menu, showing that there is a test condition present  .	
To view which zones are in test mode, press the zones in test icon  .	
Proceed to test the devices. As we are checking the devices, the test alarms are reported on the Tech. Alarm screen.	
When the testing is complete, take the panel out of test mode by entering the user menu and selecting the ‘zone’ icon. Select the zone(s) to be taken out of test by pressing on the ‘In’ Field. Change the Zone mode to ‘Enabled’ by pressing on the selection circle. Press exit and save changes in order to return the panel to normal.	

Appendix A: User Menu Summary

Default Password 0001 (User 1) – Access level 2

Icon	Tab Screen	Description
Zone	Zone Explorer	View Zone text label View Quantity of devices per zone
	Zone Edit	View Zone text label View Quantity of devices per zone View/Edit zone mode (Enabled/Disabled/Test/Test+Sounder)
Devices	Basic	View Address & Device type View Device text label View/Edit device mode (Enabled/disabled) View Device Zone/Alarm Group allocation
	Real Time	View Address & Device type View Device text label View device Analogue Values
Log	-	View Event Log
Local I/O	Zone Class B	View input (1-6) text label View input (1-6) zone allocation View input (1-6) type (Alarm/Tech. Alarm) View/Edit input (1-6) status (Disabled/Enabled)
	Input Class B	View input (1-3) text label View input (1-3) zone allocation View input (1-3) type (Alarm/Tech. Alarm) View/Edit input (1-3) status (Disabled/Enabled)
	Relay	View output (1-3) text label View output (1-3) alarm group allocation View output (1-3) type (Alarm/Fault/Tech. Alarm/Programmable) View/Edit output (1-3) mode (Disabled/Enabled)
	Sounder Class B	View output (1-2) text label View output (1-2) alarm group allocation View output (1-2) type (Sounder/Bell/Voltage) View/Edit output (1-2) mode (Disabled/Enabled)
LCD/LED	-	Test panel LEDs, LCD & Buzzer
Delays	-	Toggle panel delays on or off
Alarm Group	Global Mode	View/Edit Relay Status (Disabled/Enabled) View/Edit Sounder Status (Disabled/Enabled)
	A. Grp Mode	View text label View/Edit A. Grp mode (All enabled/Sounder disabled/Relay disabled/All disabled)

Appendix B: FIRE ALARM LOG BOOK

It is recommended that this LOG BOOK section of the Manual be maintained by the responsible person(s) on site, who should ensure every event is properly recorded (including fire alarm conditions, failures, tests, temporary disconnections, disablements, enablements, dates of installing engineers' visits together with a note of any outstanding work or panel conditions). This LOG BOOK must be available for inspection at all times.
You can photocopy this log book to provide extra pages for when this book is full.
BS5839 part 1 recommends that fire alarm events should be subdivided & recorded on separate sheets in the log book. The event categories are:

- Maintenance work.
- False alarms - where the sounders have activated with no signs of a fire.
- Any other events - this would be genuine alarms or faults.

COMPANY:
SITE ADDRESS:
SYSTEM DESIGNED BY:
SYSTEM INSTALLED BY:
SYSTEM COMMISSIONED BY:
SYSTEM MAINTAINED BY:
CONTRACT NO:
CONTRACT VALID UNTIL:
FOR SERVICE (NORMAL HOURS MON-FRI) TEL:
FOR SERVICE (OTHER TIMES) TEL:
RESPONSIBLE PERSON(S) ONSITE:

MAINTENANCE WORK

DATE	TIME	LOOP & ADDRESS	ZONE/ LOCATION	REASON FOR WORK	WORK CARRIED OUT	ADDITIONAL WORK REQUIRED	SIGNED

MAINTENANCE WORK (CONTINUED)

DATE	TIME	LOOP & ADDRESS	ZONE/ LOCATION	REASON FOR WORK	WORK CARRIED OUT	ADDITIONAL WORK REQUIRED	SIGNED

UNWANTED (FALSE) ALARMS

DATE	TIME	LOOP & ADDRESS	ZONE/ LOCATION	CAUSE (IF KNOWN) OR ACTIVITIES IN ALARM AREA	MAINTENANCE VISIT NEEDED (YES/NO)	MAINTENANCE FINDINGS	CATEGORY OF FALSE ALARM	FURTHER ACTION REQUIRED	SIGNED

UNWANTED (FALSE) ALARMS (CONTINUED)

DATE	TIME	LOOP & ADDRESS	ZONE/ LOCATION	CAUSE (IF KNOWN) OR ACTIVITIES IN ALARM AREA	MAINTENANCE VISIT NEEDED (YES/NO)	MAINTENANCE FINDINGS	CATEGORY OF FALSE ALARM	FURTHER ACTION REQUIRED	SIGNED

ALL EVENTS OTHER THAN MAINTENANCE WORK OR FALSE ALARMS

DATE	TIME	LOOP & ADDRESS	ZONE/ LOCATION	DETAILS OF EVENT (INCLUDING CAUSE IF KNOWN)	ACTION REQUIRED	DATE COMPLETED	INITIALS

ALL EVENTS OTHER THAN MAINTENANCE WORK OR FALSE ALARMS (CONTINUED)

DATE	TIME	LOOP & ADDRESS	ZONE/ LOCATION	DETAILS OF EVENT (INCLUDING CAUSE IF KNOWN)	ACTION REQUIRED	DATE COMPLETED	INITIALS

Design Certificate (Page 1 of 2)

Certificate of DESIGN for the ***Smart Connect Multiloop*** Fire Alarm System installed at:

ADDRESS:	

I/we being the competent person(s) responsible (as indicated by my/our signatures below) for the design of the fire alarm system, particulars of which are set out below, CERTIFY that the said design for which I/we have been responsible complies to the best of my/our knowledge and belief with the recommendations of of BS 5839-1 for the system category described below, except for the variations, if any, stated in this certificate

Name (Block Letters):		Position:	
Signature:		Date:	
For & on behalf of:			
Address			

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

System Category (see BS 5839-1):

Variations from the recommendations of BS 5839-1:

Extent of system covered by this certificate:

Brief description of areas protected (not applicable for Category M, L1 or P1 systems):

Design Certificate (Page 2 of 2)

Measures incorporated to limit false alarms. Account has to be taken of the guidance contained in of BS 5839-1and, more specifically (tick as appropriate):

❏ The System is manual. Type & siting of manual call points takes account of the guidelines contained in of BS 5839-1
❏ The system incorporates automatic fire detectors, and account has been taken of reasonably foreseeable causes of unwanted alarms, particularly in the selection and siting of detectors
❏ An appropriate analogue system has been specified
❏ An appropriate multi-sensor system has been specified
❏ A time-related system has been specified. Details:

❏ Fire signals from automatic fire detectors result initially in a staff alarm, which delays a general alarm / transmission of signals to an alarm receiving centre (delete as applicable) for min.
❏ Appropriate guidance has been provided to the user to enable limitation of false alarms.
❏ Other measures as follows:

INSTALLATION & COMMISSIONING RECOMMENDATIONS
It is strongly recommended that installation and commissioning be undertaken in accordance with the recommendations of BS 5839-1

SOAK TEST
❏ In accordance with the recommendationsof BS 5839-1, it is recommended that following commissioning a soak period of _____ should follow.
(enter a period of at least 1 week)

❏ As the system incorporates no more than 50 automatic fire detectors, no soak test is necessary to satisfy the recommendations of BS 5839-1

VERIFICATION
Verification that the system complies with BS 5839-1should be carried out, on completion, in accordance with BS 5839-1
❏ Yes ❏No ❏ To be decided by the purchaser or user

MAINTENANCE
It is strongly recommended that, after completion, the system is maintained in accordance with section 6 of BS 5839-1

USER RESPONSIBILITIES
The user should appoint a responsible person to supervise all matters pertaining to the fire alarm system in accordance with the recommendations of BS 5839-1

Installation Certificate

Certificate of INSTALLATION for the ***Smart Connect Multiloop*** Fire Alarm System installed 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 specifications described below, and with the recommendations of BS5839-1, except for the variations, if any, stated in this certificate

Name (Block Letters) :		Position:	
Signature:		Date:	
For & on behalf of:			
Address			

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

Extent of the installation work covered by this certificate.

Specification against which the system was installed:

Variations from the specification and/or BS 5839-1

The wiring has been tested in accordance with the recommendations of BS 5839-1. The 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 BS 5839-1)

Commissioning Certificate

Certificate of COMMISSIONING for the ***Smart Connect Multiloop*** Fire Alarm System installed 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 recommendations of BS5839-1, except for the variations, if any, stated in this certificate

Name (Block Letters) :		Position:	
Signature:		Date:	
For & on behalf of:			
Address			

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

Extent of the installation work covered by this certificate.

Variations from the recommendations of BS 5839-1

❏ All equipment operates correctly
❏ Installation work is, as far as can be reasonably ascertained, of an acceptable standard
❏ The entire system has been inspected and tested in accordance with the recommendations of BS 5839-1
❏ The system performs as required by the specifications prepared by:

❏ Taking into account the guidance contained in BS 5839-1, I/we have not identified any obvious potential for an unacceptable rate of false alarms.
❏ The documentation described in BS 5839-1 has been provided to the user

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

The following potential causes 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 BS 5839-1 for a period of: _____ (enter a period of 1 week, the period required by the design specification, or the period recommended by the signatory to this certificate, whichever period is the greatest, or delete if not applicable)

Acceptance Certificate

Certificate of ACCEPTANCE for the ***Smart Connect Multiloop*** Fire Alarm System installed at:

ADDRESS:	

I/we being the competent person(s) responsible (as indicated by my/our signatures below) for the acceptance of the fire alarm system, particulars of which are set out below, ACCEPT the system on behalf of:

Name (Block Letters):		Position:	
Signature:		Date:	
For & on behalf of:			
Address			

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

Extent of the system covered by this certificate.

❑ All installation work appears to be satisfactory.
❑ The system is capable of giving a fire alarm signal
❑ The facility for remote transmission of alarms to an alarm receiving centre operates correctly.
(Delete if not applicable)

The following documents have been provided to the purchaser or user:

❑ "As fitted" drawings.
❑ Operating and maintenance instructions
❑ Certificates of Design, Installation and Commissioning.
❑ A log book.
❑ Sufficient representatives of the user have been properly instructed in the use of the system, including, at least, all means of triggering fire signals, silencing and resetting the system, and avoidance of false alarms.
❑ All relevant tests, defined in the purchasing specification, have been witnessed.
(Delete if not applicable.)

The following work is required before the system can be accepted:

User Manual Modification History

Issue	Date	Changes
000	03/09/2021	First Release