

# ONE LOOP TOUCH SCREEN ANALOGUE ADDRESSABLE FIRE ALARM PANEL



## SMART CONNECT USER MANUAL

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## **WHAT TO DO IF THE FIRE ALARM PANEL SHOWS AN ALARM (RED 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).

Follow the building procedures for fire alarm activation.

When the building has been evacuated, the sounders can be silenced by:-

Entering the user access code (default code is 0001), which will cause the CONTROLS ACTIVE LED to light.

Press the STOP SOUNDERS button and the SILENCE BUZZER button.

If there is no sign of fire, and are suitably trained, investigate the area that reported the fire CAREFULLY. Check for a detector 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, either tackle it with fire extinguishers if suitably trained, or call the fire brigade.

To reset the panel press the RESET button.

If the panel goes back into alarm, stop the sounders and call the engineer.


## **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).

If the panel is showing a SUPPLY FAULT, check if there is a power cut to the building. Check that the mains supply to the fire alarm has not been turned off.

All other fault indications will need the service engineer's attention. Call the engineer as soon as possible. Note that when the Smart Connect panel 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 entering the user access code and pressing the SILENCE BUZZER button.

Details of the service company can be seen by pressing the  icon.

## 1. FIRE ALARM CONTROL PANEL SAFETY ISSUES

When the Smart Connect panel is operating normally, i.e. not being tended by service personnel, the front cover must be closed.

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

<b>C E</b>	<b>European Union Directives Conformance Statement</b> This product has been manufactured in conformance with the requirements of all applicable EU Council Directives. The Declaration of Conformance for this product is located at the following Address: GLT Exports Ltd, 72-78 Morfa Road, Hafod, Swansea, SA1 2EN, United Kingdom.
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## 2. 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 fire relay.

### 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.

### Disables

An engineer may be required to work on part of a system, while the system is still active (e.g. extending a detection zone). During such circumstances, it would be advisable to disable that zone, so that it will not give false alarms. Similarly you may wish to disable a zone that has a fault that has not been fixed, or a zone covering an area with a temporary unusual environment, such as an area which is dusty because of construction work etc.

### Power Supply Equipment- General Description

The Smart Connect panel has a switch mode power supply capable of supplying 2.5 Amps in total. It contains a current limited output for charging sealed lead acid batteries (7 Ah maximum). The PSE is monitored for mains supply failure, the battery not taking a charge, the battery having a high resistance, and low battery voltage. If the battery voltage drops below approximately 20VDC (a fault condition), the battery charging current will be turned off, thus stopping charging. If there is also a mains failure at this time, the PSE will turn off.

### **3. USER RESPONSIBILITIES & MAINTAINENCE OF THE FIRE ALARM SYSTEM, INCLUDING THE FACP & ITS INTEGRAL PSE**

According to the British Standard Code for Fire Detection and Alarm Systems for Commercial Buildings (**BS 5839-1**), the owner or person having control of the premises should appoint a responsible person to oversee the effective operation of the Fire Alarm System.

Below is a summary of the main functions the “Responsible Person” is expected to carry out. This summary is not intended to replace Section seven (User responsibilities) of BS 5839-1 (available from BSI, or your local library). It is meant 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
6. Take appropriate action to limit the rate of false alarms
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 (especially Call point elements) 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 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 disconnect the Aux relay during the following Tests)**

- 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.
- Enter user access code. Reset the System by pressing STOP SOUNDERS, SILENCE BUZZER, and RESET.
- Press the LED Test button. Check that all LEDs light, and the buzzer sounds
- 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).

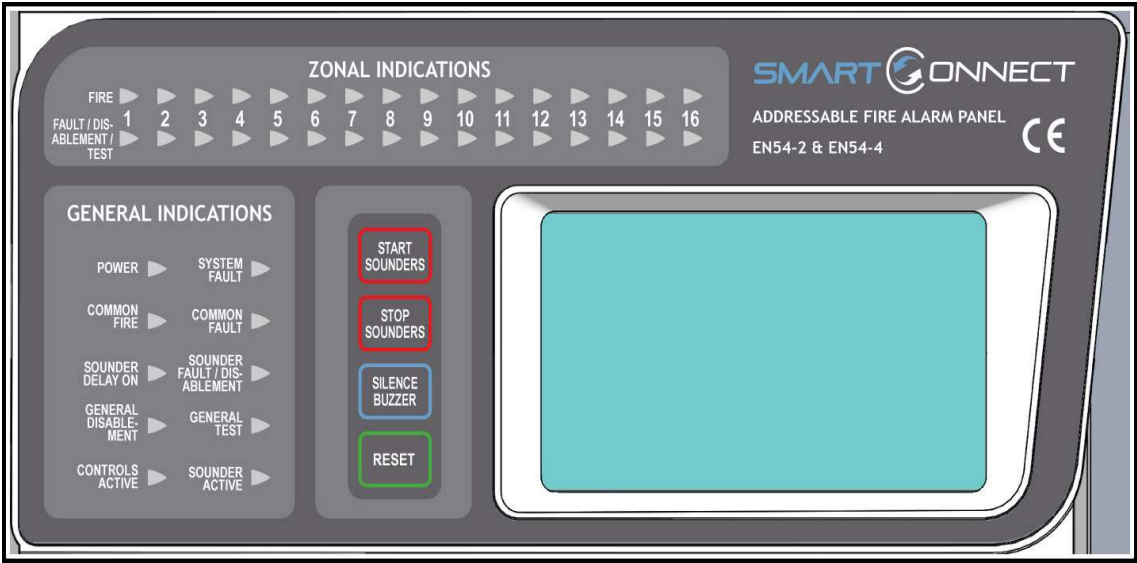
**Annual Test (to be carried out by authorised service personnel only)**

- Check every detector, call point, sounder and all auxiliary equipment for correct operation.
- Check Switch Mode cage INPUT Voltage (29.5 VAC), Charger Voltage (27.3V off load, adjusted with VR1) & Battery Voltage (25-27V)

**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.

4. PANEL INDICATIONS & CONTROLS



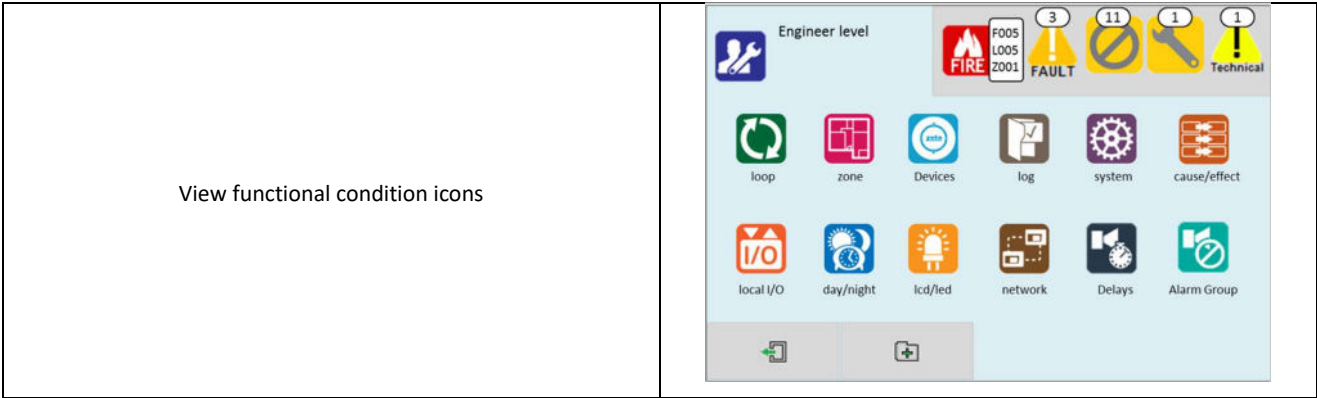
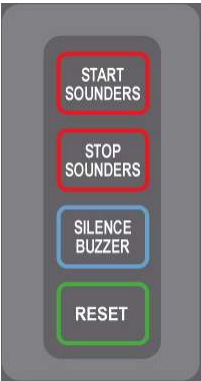
4.1 PANEL INDICATIONS

The LEDs used for zonal fire indication are reserved solely for this purpose. The other LEDs in this zonal range are shared between fault, disable and test. These are accompanied by the Common Fault LED, the General Disablement LED and the Test LED, respectively. A zonal fault LED can be distinguished from disablement and test by the zonal fault LED flashing, and the other two zonal conditions are indicated by a steady LED.

4.2 PANEL CONTROLS

The controls on the Smart Connect are divided into 2 types: the main control buttons, and the on screen buttons.

The **Start Sounder**, **Stop Sounder**, **Silence Buzzer**, & **Reset** buttons are the main control buttons. The user access code must be entered to enable these buttons.



Main Menu Icons	
Sub menu tabs	
Numeric keypad	
Alpha keypad	
Scroll buttons	



### 4.3 IN THE EVENT OF AN ALARM

After the site has been deemed safe for return, to return the panel to normal: -

1. Enter the user access code.
2. Press the STOP SOUNDERS button to turn off the alarm sounders.
3. Press the SILENCE BUZZER button to turn off the panel's buzzer.
4. Record the LCD screen details in the Fire Alarm Log Book.
5. Press the RESET button to return the panel to its normal condition.


### 4.4 ACCESS LEVELS

The Smart Connect has the following access levels:

#### i. QUIESCENT STATE

When the Panel is in its Normal state (i.e. access is OFF), the indicator lights on the front of the enclosure give a comprehensive overview of the System's current status. Any Fire and Fault conditions are clearly displayed, and any disablements highlighted. For detailed descriptions of what each indicator means, please refer to Section 4.6.


The only functions that can be performed by the user when the panel is in the normal or quiescent state are:

- ✦ Ending a programmed delay when the panel is in alarm. For example, if the installation engineer has instructed the panel to wait for 2 minutes after a fire has been detected before sounding the alarm, a user can override this delay if it is obvious that the building needs to be evacuated immediately. The user can override the delay by pressing the delay override icon  on the screen).
- ✦ Putting the Panel into the Controls Enabled state – see below.

#### ii. CONTROLS ENABLED

This access level is obtained by Selecting a user, and entering the password for that user . When the controls are enabled you can start or stop the external sounders, silence the panel's internal buzzer, or reset the panel.


#### iii. USER MENU – FOR EACH AUTHORISED USER OF THE PANEL

This access level is obtained by selecting the user menu icon  after entering a password which has been assigned to an authorised user. Here the user can view the panel's zone and point info, event log contents; disable / enable zones, points, sounders and relays; cancel programmed delays; and test the LEDs and LCD. The user can also enter the test mode, which permits points in selected zone(s) to be tested without causing the alarm to be raised throughout the building.

#### iv. INSTALLER MENU – FOR INSTALLATION / COMMISSIONING ENGINEERS ONLY

This access level is entered via the installation / commissioning engineer's password. At the installer level, the engineer can set up or modify a panel's site configuration, and use the available menus to fault find the alarm system. The engineer's password must not be revealed to the users.

### 4.5 CHECKING THE PANELS INDICATION LEDS

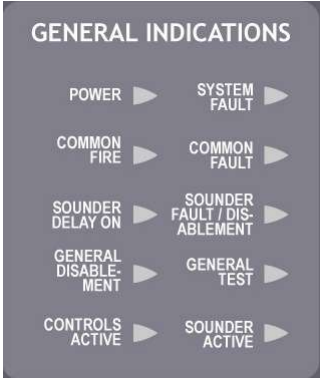
Enter the user code and press the  icon to enter the user menu. Press the LED test icon to Test LEDs & LCD. All the LEDs on the front panel will light, and the LCD screen will fill light up red, blue and green and the internal buzzer will sound. After a couple of seconds all these events will automatically reset.

4.6 WHAT THE LEDS MEAN

The LEDs on the Smart Connect can be grouped into the following sections:

General Indications:

These are Common Fire & Common Fault. This light in conjunction with another LED which indicates the fire or fault condition, as a backup indication. They also include some specific indications such as system fault, sounder fault, sounder delay etc.



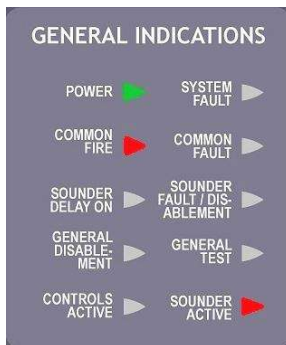
Zone Indications:

These are used to show a fire, fault, test mode, or disablement on a zone.



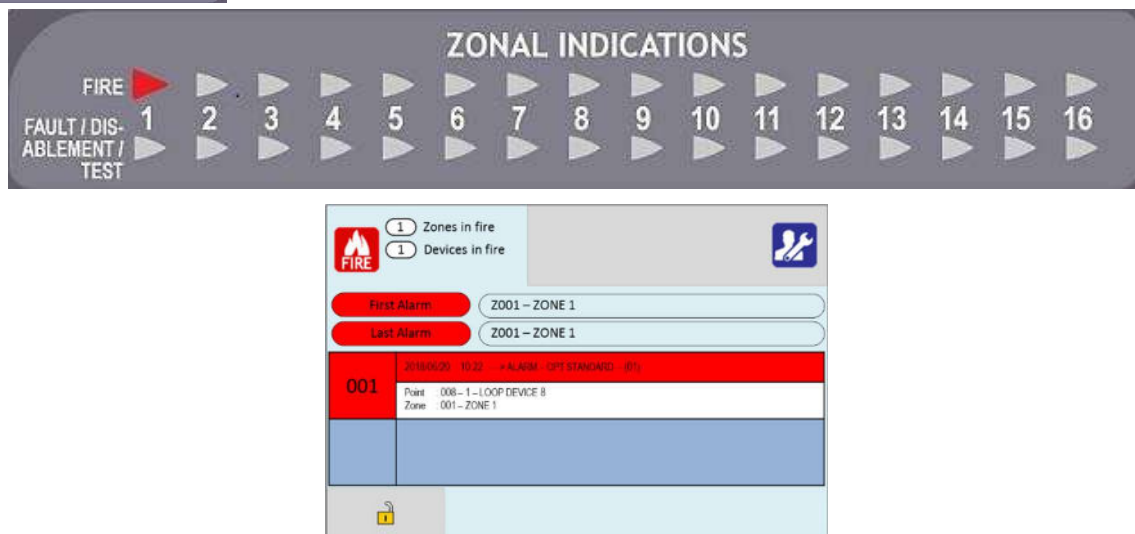
## 5. THE FIRE CONDITION

### 5.1 HOW THE Smart Connect INDICATES AN ALARM



When the Panel is set into alarm by a Detector or Manual Call Point located in a zone that is not already in alarm it will: -

- Light the COMMON FIRE LED and appropriate ZONE FIRE LED(s) on the front of its enclosure.
- Display fires from any zone on the LCD display.
- Sound the Internal buzzer.
- Start the Alarm Sounders and Auxiliary Outputs, (unless a delay has been programmed).
- The building evacuation procedure should now be followed.



The LCD gives all the alarm information, such as the time & date of the alarm, the address, the device type, the device label, and the zone it is allocated to.

**IMPORTANT NOTE:** If a zone has been disabled, it cannot be triggered into Alarm. This should be remembered when disabling part of the system. (see Disabling in Section 7).

### 5.2 HOW TO TURN OFF THE ALARM SOUNDERS

- The Alarm Sounders may be silenced by entering the user code and momentarily pressing the STOP SOUNDERS button.

The Alarm Sounders will cease to sound\* but the light(s) for the Zone(s) in Alarm and the red COMMON FIRE light will stay lit. The Auxiliary Outputs will remain active. (The Panels internal buzzer can also be silenced by pressing the SILENCE BUZZER button).

### 5.3 A SECOND ALARM SIGNAL FROM A NEW DETECTION ZONE

If another detection Zone is activated after the Alarm Sounders have been silenced, the panel will: -

- Restart the sounders (if the cause & effect has been configured to resound the sounders)
- Light the Zone Fire LED(s) for any new Zone(s) in alarm
- Keep the LED(s) for the previous Zone(s) in fire, and General Fire, lit.

### 5.4 TURNING ON THE ALARM SOUNDERS FROM THE FACP (TO EVACUATE THE BUILDING)

- If a user comes across a fire in the protected building, the alarm can also be raised by operating the START SOUNDERS button on the front of the Fire Alarm Control Panel.
- First enter the user access code, and then press the Start Sounder button to operate the Alarm sounders.
- Pressing the STOP SOUNDERS button will Silence the Alarm Sounders.

Note: If ALL of the Alarm Sounders have been disabled, pressing the STOP or START SOUNDERS BUTTON will have no effect.

## **5.5 RESETTING THE PANEL**

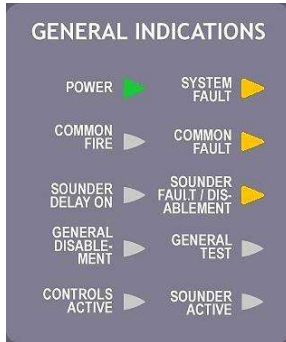
- Check the cause of the alarm activation. If the cause of the alarm was an activated call point, reset it (if a resettable type), or fit a new glass element (if a glass type). If the cause of the alarm was by detector activation the smoke (or steam or other stimulus) will have to be cleared from the room before the panel can be reset. Reset the panel by pressing the reset button after the sounders and panel buzzer have been silenced.
- If the call point is still active, or the detector is still smoky, this will cause another alarm straight after the panel is reset, and the alarm sounders will start again.

## 6. THE FAULT CONDITION

The fire alarm panel monitors itself, and any equipment connected to it, for any faults that can occur. If a fault occurs, the panel responds by activating its Internal buzzer and lighting the General Fault light and any other Fault light(s) relevant to the particular fault. The panel will also display the fault on its LCD display. The Panel's Fault relay will also activate. If there is more than one fault, the MORE DATA LED will light. The user can either wait for each fault to be scrolled automatically on the LCD, or scroll manually through the list of faults using the up and down buttons.

### 6.1 FAULT INDICATIONS

The panel has the following yellow FAULT LEDs:



COMMON FAULT, SYSTEM FAULT, SOUNDER FAULT/DISABLEMENT/TEST.



There are 16 Zone LEDs which are used to indicate Zone Faults / Disablement / Test in Zones 1 – 16. (Conditions in zones 17 to 254 are displayed on the LCD Screen)

#### COMMON FAULT

The Common fault LED is lit for all types of fault.

#### ZONE FAULT

The relevant Zone Fault light flashes when there is a wiring problem on a Zone or detector has been removed from its base. It should be noted that any alarms raised on the fault zone(s) may not be recognised by the Fire Alarm Panel until the Fault Conditions have been cleared.

#### SYSTEM FAULT

The System Fault LED lights when the Panel's micro-processor has Reset, typically after excessive electrical interference, or if the contents of its memory have been corrupted.

#### SOUNDER FAULT

If there is a fault on the loop sounders, the line sounder fault LED will light along with the zone that contains that sounder. Because the sounder is addressable, any fault will be indicated as a device fault.

### 6.2 WHAT TO DO IF A FAULT CONDITION OCCURS

If a fault occurs, the responsible person should:

- Enter user access code and press the SILENCE BUZZER button.
- Write down the fault (s) in the Log Book at the back of this Manual. Take appropriate action to correct the fault (usually by contacting the service engineer).

When a fault has been rectified the indicator light for that fault stays on until the RESET button is pressed. If the fault condition has not been rectified, the fault indication will only clear temporarily when the RESET button is pressed.

Similarly, pressing the RESET button will clear the General Fault light (LED) and silence the Panel's Internal Sounder (buzzer). If any fault(s) have not been rectified these will come back on again a short time later.

## 7. DISABLEMENTS

### 7.1 REASONS FOR DISABLING CERTAIN PARTS OF A FIRE ALARM SYSTEM



Certain parts of this Fire Alarm Panel can be temporarily disabled (i.e. switched off) to suit prevailing conditions. For example, if there is a risk of a False Alarm in a zone, for example, from vehicle exhaust smoke in a loading bay, it is possible for the user to disable that zone during the risk period and then enable it again afterwards. During a disablement of a zone(s), no fire or fault signal will be processed for that zone(s). Only zone(s) in a non-alarm state can be disabled, that is zones already in fire cannot be disabled.

External sounders can also be disabled as could be required in certain conditions.

### 7.2 TO DISABLE A ZONE

A zone can be disabled as follows:

Enter the user access code (Default code is 0001). The controls Active LED will light. Press the menu access icon to bring up the user menu. Select ZONES icon. Scroll to the required zone, and then press edit for that zone in the "IN" field. This brings up a new screen to allow that zone to be disabled. Disable further zones as required. Then select exit. The panel asks to confirm the disablements.

Select Zone				Edit Zone																									
 Zone Explorer <table border="1"> <thead> <tr> <th></th> <th>Text</th> <th>Devices</th> <th>In</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Basement</td> <td>14</td> <td>Edit</td> </tr> <tr> <td>2</td> <td>Reception</td> <td>13</td> <td>Edit</td> </tr> <tr> <td>3</td> <td>Office</td> <td>17</td> <td>Edit</td> </tr> <tr> <td>4</td> <td>Storage</td> <td>6</td> <td>Edit</td> </tr> <tr> <td>5</td> <td>Kitchen</td> <td>7</td> <td>Edit</td> </tr> </tbody> </table>					Text	Devices	In	1	Basement	14	Edit	2	Reception	13	Edit	3	Office	17	Edit	4	Storage	6	Edit	5	Kitchen	7	Edit	 Zone Explorer 1 Zone <div>             Zone (001) : <input type="text" value="Basement"/> </div> <div>             Devices : <input type="text" value="014"/> </div> <div>             Zone mode : <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="radio"/> Test <input type="radio"/> Test + So           </div>	
	Text	Devices	In																										
1	Basement	14	Edit																										
2	Reception	13	Edit																										
3	Office	17	Edit																										
4	Storage	6	Edit																										
5	Kitchen	7	Edit																										

When a zone has been disabled, the General Disablement LED will be lit and also the zonal disablement LED. The LCD also displays the disablements

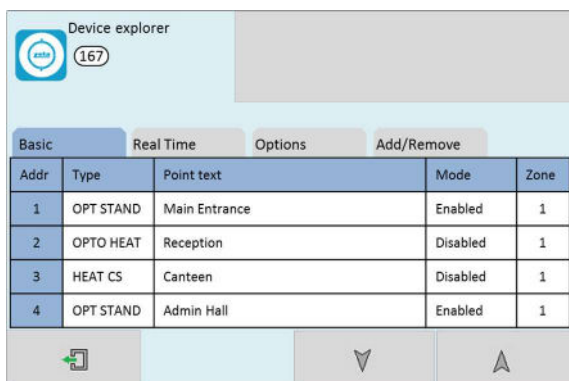
To re-enable a disabled zone, repeat the same procedure used for disabling the zone, selecting Enable instead of Disable.

### 7.3 TO DISABLE A POINT

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

To disable a device, enter the user access code, then press the device icon. In the mode column, tap the point to be disabled. Press exit icon to save the changes.

Once a point is disabled, the panel ignores any alarms or faults generated by it.



Addr	Type	Point text	Mode	Zone
1	OPT STAND	Main Entrance	Enabled	1
2	OPTO HEAT	Reception	Disabled	1
3	HEAT CS	Canteen	Disabled	1
4	OPT STAND	Admin Hall	Enabled	1

If all points in a zone are disabled, the panel will indicate a zone disablement. If subsequently one or more devices are re-enabled then the zone disablement indication will be automatically cancelled.

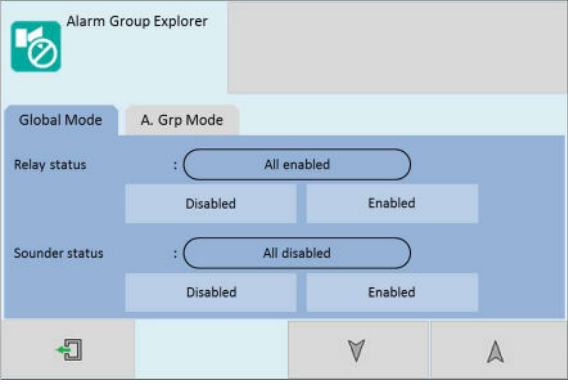
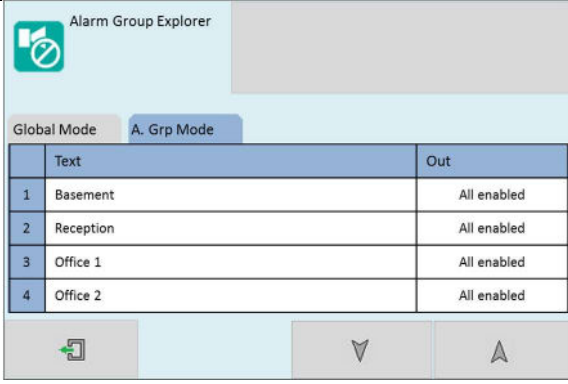
To display any disabled point, press the disabled loop devices icon. The panel will show a list of disabled addresses

To re-enable a disabled point, repeat the same procedure used for disabling the point, selecting Enable instead of Disable.

## 7.4 TO DISABLE A SOUNDER

Enter the user access code (Default code is 0001). The controls Active LED will light. Press the menu access icon to bring up the user menu.

Select either the Alarm Group Icon to disable all sounders or sounders relating to a particular zone, or select point menu to disable individual sounders.

To disable all sounders	To disable sounders relating to a particular zone(s)
	

The on board conventional sounder outputs are disabled through the LOCAL I/O menu.

When any sounder has been disabled, the General Disablement and Sounders Disablements LED will light up.

## 7.5 TO DISABLE A RELAY

Relay outputs can also be disabled. These are disabled in the same way as sounders

## 8. SYSTEM DESCRIPTION

### FIRE ALARM SYSTEM SUMMARY

FIRE ZONE INFORMATION					
ZONE NO.	ZONE DESCRIPTION <i>A brief description of all the rooms and areas contained in each zone.</i>	NO. OF DETECTORS	NO. OF MCPS	NO. OF SOUNDERS	NO. OF I/OS
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

SOUNDER CIRCUIT INFORMATION			
SOUNDER CIRCUIT	SOUNDER CIRCUIT DESCRIPTION <i>A brief description of all the rooms and areas contained in each circuit.</i>	NO. OF SOUNDERS	NO. OF BELLS
1			
2			

INPUTS & OUTPUTS INFORMATION	
Description of the programming configured in the panel	
Cause	Effect



### Smart Connect Single loop touch screen panel

FIRE & FAULT RELAYS INFORMATION		
TYPE OF OUTPUT	CONNECTED	WHAT HAPPENS WHEN ACTIVATED?
FIRE RELAY	YES/NO	
FAULT RELAY	YES/NO	

<b>ADDITIONAL INFORMATION</b>
<i>Any additional information the User needs to know about should be inserted into this box including details of the routing of any additional outputs, details of inputs utilised, etc.</i>

<b>THE INFORMATION ABOVE WAS COMPLETED BY</b>	
<b>NAME:</b>	
<b>COMPANY:</b>	
<b>POSITION:</b>	
<b>DATE:</b>	

**DETAILED LOOP CONTENTS:**

This must be fully recorded by an authorised Engineer before system handover. (A Loop Report from the *Smart Connect PC Configuration software* will also be acceptable)

ADDR	ZONE	TYPE	LABEL	ADDR	ZONE	TYPE	LABEL	ADDR	ZONE	TYPE	LABEL
1				43				85			
2				44				86			
3				45				87			
4				46				88			
5				47				89			
6				48				90			
7				49				91			
8				50				92			
9				51				93			
10				52				94			
11				53				95			
12				54				96			
13				55				97			
14				56				98			
15				57				99			
16				58				100			
17				59				101			
18				60				102			
19				61				103			
20				62				104			
21				63				105			
22				64				106			
23				65				107			
24				66				108			
25				67				109			
26				68				110			
27				69				111			
28				70				112			
29				71				113			
30				72				114			
31				73				115			
32				74				116			
33				75				117			
34				76				118			
35				77				119			
36				78				120			
37				79				121			
38				80				122			
39				81				123			
40				82				124			
41				83				125			
42				84				126			

## Smart Connect Single loop touch screen panel

### DETAILED LOOP CONTENTS:

continued

ADDR	ZONE	TYPE	LABEL	ADDR	ZONE	TYPE	LABEL	ADDR	ZONE	TYPE	LABEL
127				170				213			
128				171				214			
129				172				215			
130				173				216			
131				174				217			
132				175				218			
133				176				219			
134				177				220			
135				178				221			
136				179				222			
137				180				223			
138				181				224			
139				182				225			
140				183				226			
141				184				227			
142				185				228			
143				186				229			
144				187				230			
145				188				231			
146				189				232			
147				190				233			
148				191				234			
149				192				235			
150				193				236			
151				194				237			
152				195				238			
153				196				239			
154				197				240			
155				198				241			
156				199				242			
157				200				243			
158				201				244			
159				202				245			
160				203				246			
161				204				247			
162				205				248			
163				206				249			
164				207				250			
165				208				251			
166				209				252			
167				210				253			
168				211				254			
169				212							

## 9. 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, enablement's, 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 INSTALLED 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

[illegible]

**MAINTENANCE WORK (CONTINUED)**[illegible]

### Smart Connect Single loop touch screen panel

## UNWANTED (FALSE) ALARMS

[illegible]

## UNWANTED (FALSE) ALARMS (CONTINUED)

[illegible]



### ALL EVENTS OTHER THAN MAINTENANCE WORK OR FALSE ALARMS

[illegible]

**ALL EVENTS OTHER THAN MAINTENANCE WORK OR FALSE ALARMS (CONTINUED)**[illegible]

## **10. COMMISSIONING THE SYSTEM, INCLUDING POWER SUPPLY EQUIPMENT P.S.E.**

- The commissioning of this fire alarm system should be performed by a qualified commissioning engineer, who has an understanding of sections 2, 3, & 4 of BS5839 pt 1 (i.e. Design considerations, Limitations of false alarms, Installation recommendations).
- The system layout drawing should be checked for accuracy & stored in a safe place, accessible to any fire officer.
- The system set-up data chart (section 8) should be checked for accuracy.
- The fire alarm log book contact details should be checked for completeness.
- The insulation of cables should be checked in accordance with BS5839 Pt1: for compliance.
- The Earthing should be checked in accordance with BS5839 Pt1 clause 38.2 for compliance.
- The PSE mains feed from a 3A spur should be checked. It should be protected by an over current device (MCB) NOT an earth leakage device (RCD).
- The PSE Charger voltage should be checked & adjusted if necessary.
- The battery voltage should be checked (should be between 24 & 27V).
- All call points & detectors can signal an alarm condition and indicate the correct zone (and text message) on the fire alarm panel.
- The Sound pressure level throughout the building should be checked for compliance with the recommendations of BS5839 Pt1:
- Any deviations from BS5839 Pt1 clause 7.2 should be listed in the Certificate of Installation & Commissioning.
- The Certificate of Installation & Commissioning should be completed, and the whole user manual passed to the relevant person on site. (They should be given a brief training on the basic operation of the FACP).

### **10.1 DESIGN, INSTALLATION & COMMISSIONING CERTIFICATES**

The guidelines in BS 5839 Pt1 say that each stage of the system design and installation should have a separate certificate. Before this User Manual is handed over to the relevant person(s) on site, the following certificates (or the relevant company's equivalent) should be completed by the system designer, the installation engineer and the commissioning engineer. The System Description sheet should also be completed on Pages 12-17 as should the relevant parts of the Log Book section starting on Page 18.

The user or responsible person should then complete the acceptance certificate to acknowledge that they have been instructed in the use of the fire alarm, have witnessed that it is operational, and have been given all the relevant paperwork (drawings, log book, user manual, etc.).

# Design Certificate (Page 1 of 2)

Certificate of DESIGN for the Zeta Smart Connect 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 section 2 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, Clause 5):

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Variations from the recommendations of section 2 of BS 5839-1 (see Clause 7):


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 section 3 of BS 5839-1 and, more specifically (tick as appropriate):

- ☐ The System is manual. Type & siting of manual call points takes account of the guidelines contained in section 3 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 section 4 and section 5 of BS 5839-1 respectively.

## SOAK TEST

- ☐ In accordance with the recommendations of clause 35.2.6 of 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 5839-1 should be carried out, on completion, in accordance with BS 5839-1 Clause 43

- ☐ 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 section 7 of BS 5839-1

# Installation Certificate

Certificate of INSTALLATION for the Smart Connect 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 section 4 of BS 5839-1 (see clause 7)


The wiring has been tested in accordance with the recommendations of clause 38 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 clause 36.2m)

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# Commissioning Certificate

Certificate of COMMISSIONING for the Zeta Smart Connect 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 Clause 39 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 clause 39 of BS 5839-1 (see clause 7)


- ☐ 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 39.2.c of BS 5839-1.
- ☐ The system performs as required by the specifications prepared by:

--

- ☐ Taking into account the guidance contained in section 3 of BS 5839-1, I/we have not identified any obvious potential for an unacceptable rate of false alarms.
- ☐ The documentation described in Clause 40 of 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 Clause 35.2.6 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 Zeta Smart Connect 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:
