# INFINITY8

#### FIRE ALARM CONTROL PANEL



### USER MANUAL, MAINTENANCE GUIDE & LOG BOOK



Approved Document No: GLT-201-7-2 Issue: 1.2 Authorised: Date: 27/3/2012

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#### 1. FIRE ALARM CONTROL PANEL SAFETY ISSUES

There is no need to open this fire alarm during normal operation. Any work carried out on this system must be performed by a competent person who is familiar with this type of system.

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.



#### **European Union Directives Conformance Statement**

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

#### 2. THE PURPOSE OF A FIRE ALARM SYSTEM

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.

Alarms can come from Smoke or Heat Detectors, or manually be a person operating a Manual Call Point.

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

During an alarm, the panel will start its sounders, and indicate which zone has the fire. It will also activate its auxiliary relay.

#### **Fault Monitoring**

All circuits must be checked 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**

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.

#### **Delays**

In public places, it may be desirable to delay the activation of an alarm until the responsible person has verified the cause of the alarm. (This would avoid a panic evacuation caused by a smoky room, or a maliciously activated call point.) On verification of the alarm, the sounders can be started by pressing the override button, or the panel can be reset in the case of a false alarm. If a delay has been set, it must be recorded on the system configuration chart at the back of this manual.

#### **Power Supply Equipment- General Description.**

The INFINITY 8 FACP has an integral linear power supply capable of supplying 1.2 amps in total. It contains a current limited output for charging sealed lead acid batteries (3.4 Ah maximum). The PSE is monitored for main supply failure, the battery not taking a charge, low battery voltage and resistance. If the battery voltage drops below approximately 20VDC (a fault condition), the battery charging current will be turned off, thus stopping charging. This PSE is only capable of supplying power to the CIE, and is not designed for any other use.

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### 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 (BS5839: Pt 1: 2002), the owner or person having control of the premises should appoint a responsible person to oversee the effective operation of the Fire Alarm System (Clause 47.1).

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 BS5839: Pt 1: 2002 (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 number in brackets shows the relevant BS5839: Pt 1: 2002 clauses.

#### The responsible person must:-

- 1. Have sufficient authority to carry out the duties associated with being the responsible person (47.2.a)
- 2. Check the system at least once every 24 hours to ensure there are no faults present (47.2.b)
- 3. Ensure there are arrangements for testing and maintaining the system (47.2.c)
- 4. Ensure the log book is up to date, and available for inspection (47.2.d)
- 5. Instruct all relevant occupants on the basic operation of the system, including start evacuation, silence alarms, silence faults and system reset (47.2.e)
- 6. Take appropriate action to limit the rate of false alarms (47.2.f)
- 7. Ensure that all detectors and manual call points remain unobstructed at all times (47.2.g)
- 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 (47.2.h).
- 9. Ensure any changes to the system are recorded with updated drawings, operating instructions etc (47.2.i)
- 10. Ensure that there are spare parts (especially Call point elements) held on site (47.2.j.1&2)

With the Infinity 8 Range of Fire Alarm Panels, 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.
- Reset the System by pressing (Stop sounders, Silence fault tone, Reset).
- Enter access code. 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).

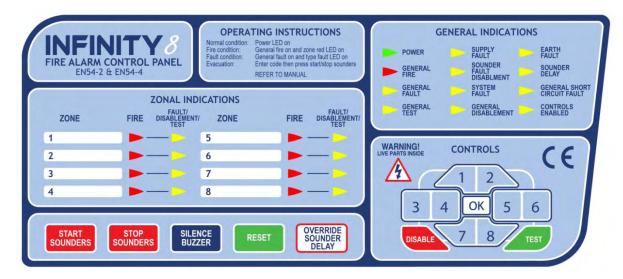
#### Annual Test (to be carried out by authorised service personnel only)

- Check every detector, call point, sounder and all auxiliary equipment for correct operation.
- Check Cage output Voltage (30VDC), Charger Voltage (27.6Vnormal and 29.4V fast charge) & 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



Two levels of control are available to the User(s) of this Fire Alarm Panel.

#### **4.1 GENERAL CONTROLS**

When the Panel is in its Normal state, 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 the table on the opposite page.

The only functions that can be performed by the User when the Panel is in its Normal state are:

Overriding any Delays, which may have been programmed into the Panel by pressing the Override Sounder Delay button.

Putting the Panel into the Accessed state - see below.

#### 4.2 ACCESSED CONTROL (AVAILABLE TO AUTHORISED USERS ONLY)

To avoid unauthorised changes to critical parts of the Fire Alarm System, controls such as silencing the Sounders, resetting an Alarm condition and implementing Disablements are only accessible via a secure method of entry which puts the panel into the Accessed state.

To put the Panel into the Accessed State: Entre the access code (1245) then press OK. To exit accessed state press OK OK OK three times. If the wrong code is entered three times, then the LED display will light a combination of LED's. If this happens you will need to contact GLT Exports for the code.

#### **Changing the Access Code**

- Enter the current access code and press OK (control Enable lit)
- Press OK for 3 seconds panel will beep 2.
- Re-type the access code and press OK
- Type the new code
- Press OK for 5 seconds 5.
- The will give a confirmation beep. New code is active

Information on how to use the accessed control can be found on Pages 8 to 11 of this User Manual.

#### 4.3 SUMMARY OF LED COMBINATIONS AND THEIR MEANING

Use the table below to determine the condition of the panel.

LEDs LIT	LED CONDITION	PANEL STATUS
POWER	CONSTANT GREEN	The panel is supplied with power, and has no faults / fires (System Normal)
GEN FLT ONLY	FLASHING YELLOW	
GEN FLT & SUPPLY FLT	FLASHING YELLOW FLASHING YELLOW	There is a problem with either the mains supply or the battery backup. (Consult Installation manual for details of flash meanings)
GEN FLT & EARTH FLT	FLASHING YELLOW CONSTANT YELLOW	There is a wiring problem. One of the cables is touching the earth screen.
GEN FLT & ZONAL FLT	CONSTANT YELLOW FLASHING YELLOW	There is an open circuit fault in the wiring of the zone indicated.
GEN FLT & ZONAL FLT GEN S/C	FLASHING YELLOW FLASHING YELLOW FLASHING YELLOW	There is a short circuit fault in the wiring of the zone indicated.
GEN FLT & SND FLT	FLASHING YELLOW FLASHING YELLOW	There is an open circuit fault in the wiring of one or both of the sounder circuits
GEN FLT & SND FLT GEN S/C	FLASHING YELLOW FLASHING YELLOW FLASHING YELLOW	There is a short circuit fault in the wiring of one or both of the sounder circuits
GEN FLT & SYSTEM FLT	CONSTANT YELLOW CONSTANT YELLOW	A processor fault has occurred. To reset, If problem persists, consult your dealer.
GEN FIRE ONLY	NOLED	A manual evacuation has occurred. The sounders will be active.
GEN FIRE & ZONE FIRE	CONSTANT RED CONSTANT RED	A fire has occurred in the zone indicated. The sounders will be active.
GEN FIRE & ZONE FIRE & GEN DISABLE & DEL	CONSTANT RED CONSTANT RED CONSTANT YELLOW CONSTANT YELLOW	A fire has occurred in the zone indicated. The sounders have a delay set, and will become active after the programmed delay. To override the display, press override sounder delay.
GEN DISABLE	FLASHING YELLOW (FAST-4HZ)	The panel is ready for selecting disable or test mode
GEN DISABLE	FLASHING YELLOW (SLOW-0.5 HZ)	The panel is in SELECT DISABLEMENT MODE
GEN DISABLE ZONE DISABLE	FLASHING YELLOW (SLOW-0.5 HZ)	The user is scrolling through zones to select which one to disable/or user has just enabled the zone.
GEN DISABLE ZONE DISABLE	CONSTANT YELLOW CONSTANT YELLOW	The indicated zone is disabled.
GEN DISABLE DEL	CONSTANT YELLOW CONSTANT YELLOW	The Sounders are delayed by the amount set on the rotary switch.
GEN TEST ZONE DISABLE	FLASHING YELLOW FLASHING YELLOW (VERY SLOW-0.25 HZ)	The indicated zone is in Test Mode.

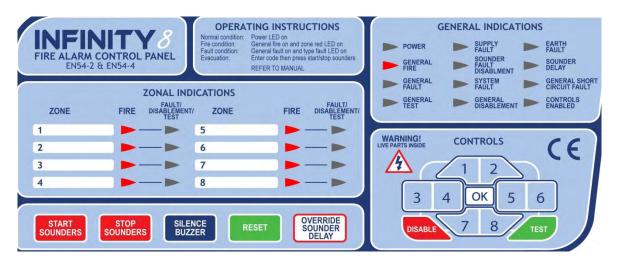
#### **4.4 CHECKING THE PANELS INDICATION LEDS**

To test panel LED's press button. All the LEDs on the front panel will light, and the panel's internal buzzer will also sound. This function is available at **Level 1**.

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#### 5. THE FIRE CONDITION

#### 5.1 HOW THE INFINITY 8 INDICATES AN ALARM



When the Infinity 8 Fire Alarm 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 General Fire LED and appropriate Zone Fire LED(s) on the front of its enclosure
- Sound Internal buzzer
- Start the Alarm Sounder and Auxiliary output, (provided there is no Delay set on the sounders). The building evacuation procedure should now be followed.

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 zones or sounders later in this manual).

#### 5.2 TO TURN OFF THE ALARM SOUNDERS

The Alarm Sounders may be silenced by entering the access code (section 4.2) and momentarily pressing STOP SOUNDERS

The Alarm Sounders will cease to sound but the light(s) for the Zone(s) in Alarm and the red General Fire light will stay lit. The Auxiliary Fire relay will remain active. (The Panels internal buzzer can also be silenced by pressing 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
- Light the Zone Fire LED(s) for any new Zone(s) in alarm
- Keep the light(s) for the previous Zone(s) in fire, and General Fire lit.

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

Enter code and press OK, momentarily pressing the sounders will cause the Alarm sounders to sound.

Pressing the SOUNDERS button again will Silence the Alarm Sounders.

Note: If the Alarm Sounders have been disabled, pressing the 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 resettable type), or fit a new glass element (if glass type). If the cause of the alarm was by detector activation

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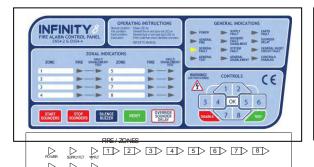
(e.g. cooking smoke), the smoke will have to be cleared from the room before the panel can be reset. Reset the panel by pressing the after the sounders and panel buzzer have been silenced.

• If the call point is still active, or the detector is still smoky, this will cause another alarm straight after the panel is reset, so will set off alarm bells again.

#### 6. THE FAULT CONDITION

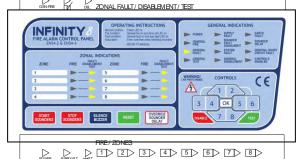
#### **6.1 DIFFERENT TYPES OF FAULT**

The fire alarm 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's Fault relay will also activate. Typical faults are described below: -



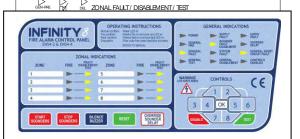
#### **General Fault**

The General Fault LED is a common indicator that flashes when there is a Fault on any part of the Fire Alarm Systems. It is usually lit in tandem with at least one other fault light which conveys more precise information on the type of Fault detected.



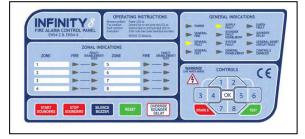
#### **Zone Fault**

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. It can take up to 60 seconds from repairing a fault for the display to clear.



#### **Short Circuit Fault**

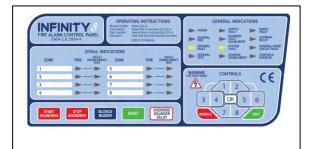
If the Fault is a short circuit fault, then the S/C LED will be flashing. This S/C LED will be flashing for S/C faults on the zone and sounder circuits. It can take up to 60 seconds from repairing a fault for the display to clear.



#### **Power Supply Fault**

The Power supply Fault light flashes when the Mains supply has failed or the standby batteries or its charger is faulty. If the mains supply fails, the panel will only operate for the standby period dictated by the size of the batteries fitted. If the batteries or charger fails at the same time as the Mains, the Panel will be inoperative.

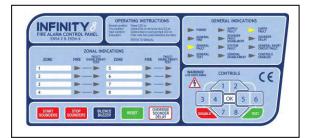
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#### System Fault

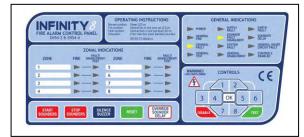
The System Fault LED and Gen fault lights when the Panel's micro-processor

has Reset, typically after excessive electrical interference, or if the contents of its memory have been corrupted. This fault can only be cleared by turning the key switch from off position to control enable position and then back to the off position again. If the fault re-occurs within two minutes, this is indicative of a corrupt memory and expert advice should be sought.



#### **Earth Fault**

The Earth Fault light is constant when the panel detects an earth fault (short circuit to earth) on the wiring to any part of the control panel.



#### **Sounder Fault**

The Sounder status light flashes when there is a wiring fault on the Sounder Circuits. Depending on where the fault has occurred, one or all of the Alarm Sounders may no longer be operative.

If the fault is a short circuit fault, then the S/C LED will also be flashing

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

If a fault occurs, the responsible person should:

- Enter the access code and press OK to enabled controls and press to silence the fault buzzer.
- 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)

On the Infinity 8 panel, the fault indications (except system fault) are non latching. That is, when the fault has been cleared, the fault indication will turn off. When all faults have been cleared, the panel will return to its quiescent (normal) condition.

When a fault has been rectified the indicator light for that Fault is automatically turned off. If all Faults are cleared, the General Fault light will go out and the Panel's Internal Sounder will be silent (if not already muted).

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#### 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 AND/OR EXTERNAL SOUNDERS.

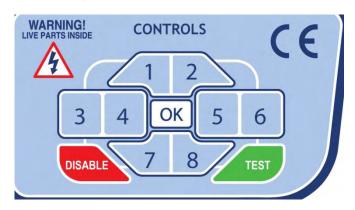
Enter the access code (default 1245) and press 1.

Press to disable the selected zone or sounder.

- button for 3 seconds 2. Hold the Disable
- Type the number of the zone you want to disable. If you want to disable a sounder press "Start Sounders" 3. button







#### Showing all the Disabled Zones.

- Enter access code and press OK 1.
- Press Disable 2.

#### 7.3 TO ENABLE A ZONE AND/OR EXTERNAL SOUNDERS.

- Enter access code and press 1.
- 2. Press and hold Disable button for 3 seconds Disable and zone light flash
- Press OK 3.
- Press and hold the disable button for 3 seconds Disable LED goes out 4.
- Press OK OK three times to exit 5.

#### NOTES:

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The option of disabling or enabling zones 2, 3, 4, 5, 6, 7 and 8 is only available if these zones are present on the

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#### 8. USING SOUNDER DELAYS

#### **8.1 WHAT IS A SOUNDER DELAY**

In certain circumstances it may be desirable to have a delay between the panel detecting a fire, and starting its external sounders, to allow the responsible person to check the cause of the alarm, to stop building evacuation by an obvious false alarm. If the cause of the Alarm is found to be a true fire hazard, the Delay can be overridden and the Alarm Sounders activated immediately. Alternatively, in the case of a false alarm, the Panel can be reset.

#### **8.2 SOUNDER DELAY SETTING**

On the Infinity 8 panel, the sounder delay can be programmed on zones 2 - 8 (zone 1 cannot have a delay). That is, all zones will be delayed by the same amount. The delay can be set between 1 minute and 10 minutes, or the delay can be left off (sounders activate immediately). Changing the delay time should only be done by the engineer responsible for setting up the system. But turning the delay on or off can be done by the user.

#### Activate/Deactivate Sounder delay

- Enter Access code (default 1245)
- button again to deactivate sounder delay

#### 8.3 HOW THE PANEL INDICATES SOUNDER DELAY

If a Delay has been programmed into the Panel, the General Disablement & DEL(AY) LEDs will be lit. When a zone processes an alarm signal, the panel will indicate fire in the usual way, but the sounders will not be active until the delay period has expired. To override this delay, press Delay Override Switch, which will cause the external sounders to energise. If there is no delay programmed, the Delay Override Switch has no function.

#### 8.4 A FIRE ALARM CONDITION ON A DELAYED PANEL

When an alarm occurs on a Delayed Panel, the panel will: -

- Light its General Fire and appropriate Fire Zone light(s)
- Sound its Internal buzzer
- Start the Delay countdown sequence
- Wait until the end of the delay, and then start the sounders.

#### 8.5 OVERRIDING A DELAY IN THE EVENT OF A GENUINE FIRE ALARM

If on investigation the cause of the Alarm is found to be a true fire hazard, pressing the Sounders and Outputs with immediate effect.

#### 8.6 RESET THE SYSTEM IN THE EVENT OF A FALSE ALARM

If, on investigation, the cause of the Alarm is found to be false, enter the access code and press

#### 8.7 TO TURN OFF THE SOUNDER DELAY

- Enter access code 1245 OK
- Press Sounder Delay 2
- Press Sounder Delay again to deactivate Sounder Delay 3

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#### 9 ZONE TEST

#### 9.1 Why use Zone Test

To aid commissioning and assist routine maintenance checks, a non-latching 'One Man Test' facility is available.

When a detector or manual call point is triggered on any zone in test, the alarm sounders operate for approximately 5 seconds on and 5 seconds off. This cycle continues until the cause of the alarm is removed (either by the test smoke clearing from the detector or the manual call point being reset), At which point, the detector circuit is automatically rest.

Should an alarm occur on a zone that is not programmed to test, the alarm will be processed in the normal way. The testing of the zone in test will temporarily be suspended until the alarm(s) from the other zones are reset. The panel has been designed so it cannot be left in test mode if the user needs to access another function (e.g. disable).

#### 9.2 TO PROGRAMME ZONE IN TEST

- Enter access code and press OK 1
- Hold button for 3 seconds 2
- 3 Select the zone you want to go in test mode by typing the number with the keypad
- Press OK to start test mode 4
- Press OK again to stop test mode 5
- To leave test mode hold button for 3 seconds 6

#### 9.3 NOTES ON TEST MODE

Test mode provides a way to test a system without indicating there is a fire (as the sounders turn off after about 4 seconds). While extremely useful during system testing, careless use of test mode could be dangerous if a real fire occurs in an area under test.

In order to limit the misuse of test mode, the infinity panel uses the following methods:-

- Only one zone at a time can be put into test mode, leaving up to 7 zones fully functional and able to report a
- It is not possible to leave the panel in test mode while performing other panel functions, such as disablement.
- It is not possible to leave a zone in test mode. If the panel is left in test mode, it will time out after a period of

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#### 10. SYSTEM DESCRIPTION

### **FIRE ALARM SYSTEM SUMMARY:**

FIRE ZONE INFORMATION								
ZONE NUMBER	ZONE DES A brief desc		ns and areas contained in each zone	QTY SNDR	QTY MCP	QTY HEADS		
1								
2								
3								
4								
5								
6								
7								
8								
Sounder Circuit		CIRCUIT DESCRIP ription of all the roor	TION ns and areas contained in each circuit		QTY SNDR	QTY BELLS		
Circuit 1								
Circuit 2								
Circuit 3								
Circuit 4								
Any Other I	nformation ab	oout The Sounder Ci	ircuits					
OUTPUT R	OUTING INF	ORMATION						
TYPE OF (		CONNECTED	WHAT HAPPENS WHEN ACTIVATE	D				
Auxiliary O	•	Yes/No						
Fault Outpu	ut	Yes/No						
	AL INFORMA							
			know about should be inserted into this ls of inputs utilised, etc.	s box incl	uding detai	ls		
THE INFOR	MATION ABO	OVE WAS COMPLE	TED BY					
NAME:								
COMPANY:								
POSITION:								
DATE:								

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#### 11. 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:							
_							
·							
	11						
System designed	ed by:						
	•••						
System installe	ed by:						
System commi	ssioned by:						
System mainta	ined by:						
G 4 1N							
Contract No: _							
	47						
Contract valid	until:						
E G . OI							
For Service (N	ormal hours Mon-Fri) Tel:						
F G : (0	41 42 NT 1						
For Service (Other times) Tel:							
Responsible Pa	Responsible Person(s) on Site:						
1 Coponsible 1	ALDON(D) ON DIECE						

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#### MAINTENANCE WORK

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

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#### **FALSE ALARMS**

DATE	TIME	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
								1
								1
								<u> </u>

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

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

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#### 12 COMMISSIONING THE SYSTEM, INCLUDING 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 1:2002 (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 (GLT.MAN-110, section 9) 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: 2002 clause 38.2 for compliance.
- The Earthing should be checked in accordance with BS5839 Pt1: 2002 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 (28.3 with batteries disconnected).
- 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: 2002 clause 16.2
- 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)

#### 12.1 DESIGN, INSTALLATION & COMMISSIONING CERTIFICATES

The guidelines in BS 5839 Pt1: 2002 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 Page 12 as should the relevant parts of the Log Book section on Page 13.

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)

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# Design Certificate (Page 1 of 2)

Certificate of DESIGN for the Infinity 8 Fire Alarm System installed at:

ADDRESS:						
the fire alarn	n systen	n, particulars of w	responsible (as indicated b which are set out below, Cl he best of my/our knowled	ERTIFY that the	said design for	which I/we
section 2 of E	BS 5839	-1:2002 for the sy	system category described	below, except	for the variatior	ns, if any,
stated in this	certific	ate				
Name (Block L	etters):			Position:		
Signature:				Date:		
For & on beh	alf of:					
Address						
The extent o	f liabilit	y of the signatory	y is limited to the system d	escribed belov	٧.	
System Cate	gory (se	e BS 5839-1:2002	2, Clause 5):			
			<u>.</u>			
Variations fro	om the	recommendation	ns of section 2 of BS 5839-2	1:2002 (see Cla	use 7):)	
Extent of sys	tem cov	vered by this certi	tificato:			
Extent of 3y3	terri cov	rerea by this certi	inicate.			
		-				
Brief descrip	tion of a	areas protected (r	(not applicable for Categor	y M, L1 or P1 s	ystems):	
						_

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# Design Certificate (Page 2 of 2)

of BS 5839-1: 2002 and, more specifically (tick as appropriate):
<ul> <li>□ The System is manual. Type &amp; siting of manual call points takes account of the guidelines contained in section 3 of BS 5839-1</li> <li>□ 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</li> <li>□ An appropriate analogue system has been specified</li> <li>□ An appropriate multi-sensor system has been specified</li> <li>□ A time-related system has been specified. Details:</li> </ul>
□ 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) formin. □ 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: 2002 respectively.
SOAK TEST
☐ In accordance with the recommendations of clause 35.2.6 of BS 5839-1:2002, 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 5839-1:2002
VERIFICATION
Verification that the system complies with BS 5839-1:2002 should be carried out, on completion, in accordance with BS 5839-1:2002 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 5839-1:2002
USER RESPONSIBILITIES
The user should appoint a responsible person to supervise all matters pertaining to the fire alarm system in

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accordance with the recommendations of section 7 of BS 5839-1:2002

### **Installation Certificate**

Certificate of INSTALLATION for the Infinity 8 Fire Alarm System installed at:

ADDRESS:												
I/we being the installation of installation for with the spectarily variations, if	of the fir or which cification	e alarm n I/we h ns descr	system, ave beer ibed bel	particul n respor low, and	lars of w	hich are se Implies to t	t out below he best of	w, CERT my/ou	TFY tha	t the saledge a	aid nd belief	ıe
Name (Block L	.etters):						Position:					
Signature:							Date:					
For & on beh	alf 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 t	he syste	em was i	installed	l:						
Variations from the specification and/or section 4 of BS 5839-1:2002 (see clause 7)												
The wiring ha						ecommend	ations of c	lause 3	8 of BS	5839-1	L:2002. Th	e
Unless supplied by others, the "as fitted" drawings have been supplied to the person responsible for commissioning the system (see BS 5839-1:2002 clause 36.2m)												

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## **Commissioning Certificate**

Certificate of COMMISSIONING for the Infinity 8 Fire Alarm System installed at:

ADDRESS:							
	•		e (as indicated by my/our signatures below) for the				
	_	• • • •	llars of which are set out below, CERTIFY that the said wo				
			to the best of my/our knowledge and belief with the				
		Clause 39 of BS5839-1:200	02, except for the variations, if any, stated in this certification				
Name (Block Letters): Position:							
Signature:			Date:				
For & on beh	alf of:						
Address							
The extent o	f liability	of the signatory is limited	to the system described below.				
- · · · · · · · · · · · · · · · · · · ·							
Extent of the	installa	tion work covered by this c	certificate.				
		_					
L							
Variations fro	om the r	ecommendations of clause	e 39 of BS 5839-1:2002 (see clause 7)				
<b> </b>							
		erates correctly					
■ The entire BS 5839-1: 2	system 002.	has been inspected and te	oly ascertained, of an acceptable standard ested in accordance with the recommendations of 39.2.c				
• The system	n perior	rms as required by the spec	incations prepared by:				
☐ Taking inte	0.266011		in section 3 of BS 5839-1: 2002, I/we have not identified				
_		al for an unacceptable rate					
•	•	· •	f BS 5839-1:2002 has been provided to the user				
— The docar	ricircatio	m described in cladse to of	1 BS 3033 1.2002 has been provided to the aser				
The following operational	g work s	hould be completed before	e/after (delete as applicable) the system becomes				
operational							
The following	g potent	ial causes of false alarms sl	hould be considered at the time of the next service visit:				
	6 1						
L							
of Clause 35.	2.6 of B	S 5839-1:2002 for a period	uld be soak tested in accordance with the recommendation of: (enter a period of 1 week, the period iod recommended by the signatory to this certificate,				
whichever pe	whichever period is the greatest, or delete if not applicable)						

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### **Acceptance Certificate**

Certificate of ACCEPTANCE for the Infinity 8 Fire Alarm System installed at:

ADDRESS:	
	oonsible (as indicated by my/our signatures below) for the ticulars of which are set out below, ACCEPT the system on behalf
Name (Block Letters):	Position:
Signature:  For & on behalf of:	Date:
Address	
Address	
The extent of liability of the signatory is	limited to the system described below.
Extent of the system covered by this cert	tificate.
☐ All installation work appears to be sati ☐ The system is capable of giving a fire a ☐ The facility for remote transmission of (Delete if not applicable)	·
The following documents have been pro	vided to the purchaser or user:
alarms.	nasing specification, have been witnessed.
The following work is required before th	e system can be accepted:

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