Operating manual and Log book for the range of 1,2,4 and 8 zone fire Control and Repeat panels

The panels are designed in accordance with the requirements of EN54 Part 2:1997 (and include optional clauses 7.8, 7.11 & 10), plus the requirements of EN54 Part 4:1997.

This publication covers the:

- ❑ Conventional fire alarm panels:
  1 zone panels:- XENEX1, 75585-01NMB, 13270-01 and 13270-01LB

  2 zone panels:- XENEX2, 75585-02NMB, 13270-02 and 13270-02LB

  4 zone panels:- XENEX4, 75585-04NMB, 13270-04 and 13270-04LB

  8 zone panels:- XENEX8, 75585-08NMB, 13270-08 and 13270-08LB

- ❑ Fire alarm repeat panels:
  XENEX RPT, 75586-08NMB and 13271-08 and 13271-08LB.

  Panel code ending with LB signify Less batteries.

This manual and logbook is intended for use by the end user and should be located in a secure but accessible position close to the panel. It is the responsibility of the end user to maintain the logbook.

An Installation and Commissioning guide has been supplied for your installer with this panel.

Year 2000 Compliance

The panels are designed in accordance with the requirements of LPS2000.

Contents

Description of main controls and indicators

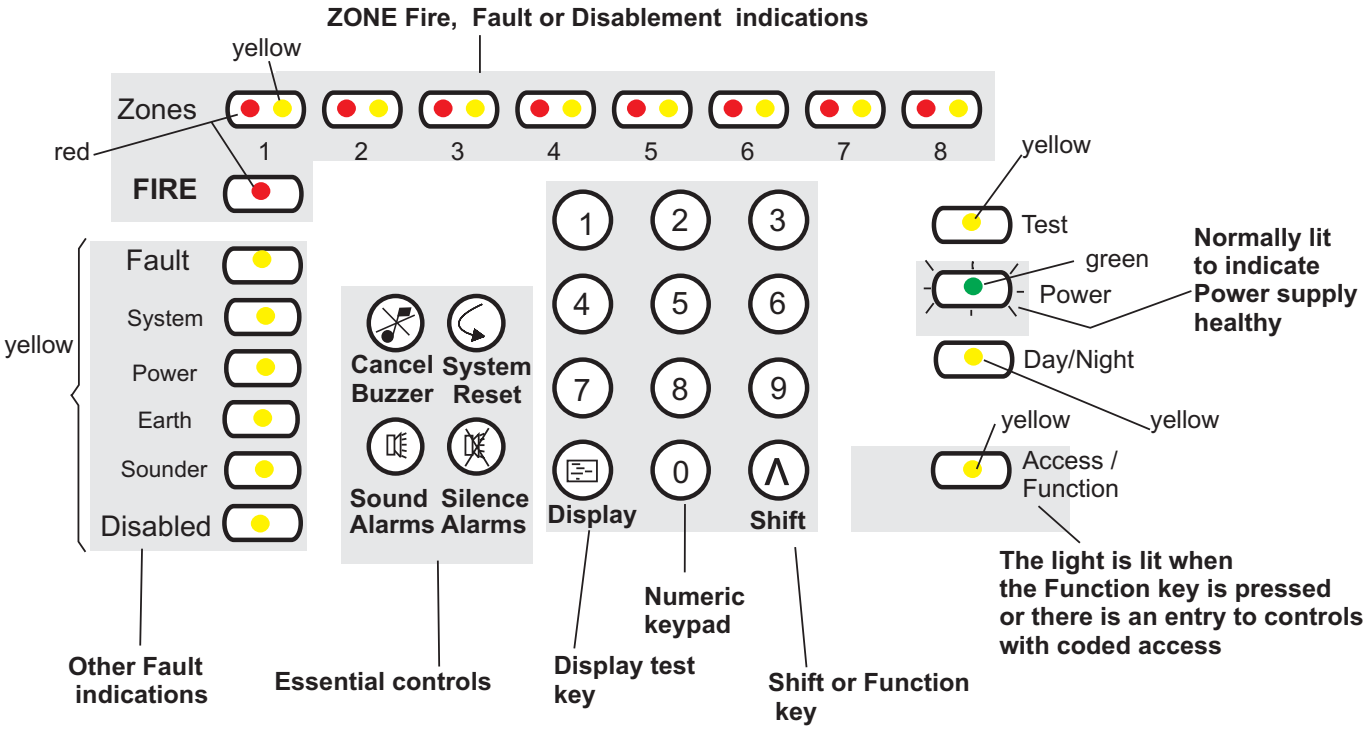

Figure 1 Controls and indications

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Controls (Only available when access code is entered)

- **Numeric keypad.** Allows the entry of numeric data, ie passwords, addresses, data, etc.
- **Shift key.** The shift key gives access to the main functions of the panel.
- **Display test key.** Pressing the Display Test key after entering access code**#**(*) will initiate a sequence which illuminates all the indicators in turn enabling the indicators to be checked.

  # Coded entry is only required if Cancel Buzzer or Display test functions are configured for operation at Access level 2.
- **Cancel Buzzer.** Pressing the Cancel Buzzer button after entering access code**#**(*) will stop the internal buzzer sounding.
- **System Reset.** The system reset key when pressed after entering access code(*) will return the system to its normal operating state. If there are uncleared fires or faults then these conditions will re-occur.
- **Sound Alarms.** Pressing the Sound Alarms button after entering access code(*) will sound all of the system alarms. Should only be pressed in an emergency or at other agreed times, ie sounder tests. Pressing sound alarms does not action the auxiliary relay.
- **Silence Alarms.** Pressing the Silence Alarms button after entering access code(*) will silence the system alarms. Should only be pressed when the emergency is over.

*Three digit code.

Indicators.

- **Fire.** When lit indicates that the system has detected a fire.
- **Fault.** When lit or flashing indicates that there is a fault condition on the system which requires rectification.
- **ZoneFire/Fault/Disablement.** Indicates when there is a fire (red indicator lit or flashing) or a fault (yellow indicator flashing) on the zone applicable to the indicators. A lit yellow indicator in conjunction with other indicators is used to indicate various disabled conditions.
- **System Fault**. This indicator when lit indicates that there is a fault in the panel's processor.
- **Power Fault**. When lit or flashing indicates that there is a power supply fault present.
- **Earth Fault**. This indicator when lit or flashing indicates that there is an Earth Fault on the system.
- **Sounder Fault**. When flashing in conjunction with a flashing fault indicator indicates a sounder fault. When lit in conjunction with the disabled indicator indicates that the sounders are disabled.
- **Disabled**. Indicates in conjunction with the sounder or the zone indicators a disabled condition.
- **Test.** When lit indicates that the panel is in Test mode.
- **Power.** When lit indicates that the panel is powered up.
- **Day/Night**. When lit this indicates that Day Mode has been enabled. Night Mode is indicated by the indicator being unlit.
- **Access/Function**. The Access/Function lamp will flash when the shift key is pressed and be lit when the coded functions are accessed.

User responsibility

Your fire alarm system should have been designed, installed and commissioned to your site specific requirements and in accordance with the requirements of BS5839 Part 1. You should have received instructions about your system during the handover stage and must make arrangement to ensure the system is regularly tested and maintained.

It is recommended that the **person responsible** for the fire alarm system should ensure the system is tested and maintained in accordance with the requirements of BS5839 Part 1 and become familiar with:

- ❑ how to operate the controls and interpret the indications given at the control panel and
- ❑ keep up to date all documentation associated with the system.

CAUTION: *Any servicing work on the fire alarm system must be carried out by a suitably trained person, refer to your servicing organisation.*

Daily

BS 5839:Part 1, states that the system should be inspected daily to ensure

- ❑ That a normal indication is given at the control and indicating equipment.
- ❑ That any previously indicated **fault** condition has received appropriate attention.
- ❑ All the system events are entered into the Log Book for future reference.
- ❑ That the use of the area(s) inspected has not changed since the system was designed.
- ❑ That no unsafe practices that could lead to fire are being undertaken.

Weekly

When testing the system there may be a need to isolate ancillary outputs and to contact the alarm receiving centre before and after the weekly test.

- ❑ A different manual call point of the system should be tested to ensure the system is capable of operating under alarm conditions.
- ❑ The operation of the **alarm** should be checked to remind those occupying the premises that there is a fire alarm system with a particular sound.

NOTE: *The test should be performed at a regular time to avoid confusion between a test and a genuine fire alarm. The alarm receiving centre must be contacted before and after the test to check alarms are received and also to avoid unwanted alarms.*

Quarterly

At quarterly intervals the system should be inspected and any work necessary should be performed by a trained maintenance engineer.

NOTE: *For help with service and maintenance please refer to your servicing organisation, see contact details entered in the log book.*

Limitation of false alarm

It is recommended that the person responsible for the fire alarm system should arrange for suitable investigation and appropriate action on occasion of every false alarm. For a system having less than 40 automatic fire detectors installed, an in-depth investigation should be instigated on occurrence of two false alarms in any rolling 12 months. For a system having more than 40 automatic fire detectors an investigation should be instigated if there has been:

- ❑ one false alarm for every 20 detectors installed in the system in any rolling 12 months, or
- ❑ two or more false alarm occurrence from a single device / outstation.

Battery Replacement

NOTE: *Any servicing work on the System must be carried out by a servicing organisation.*

Under normal operating conditions the maintenance free **lead acid** batteries in the Control and Repeat panels can have a useful life of up to **5 years** from the date of manufacture.

NOTE: *It is recommended that these batteries are replaced at 4 Yearly intervals from the date the System is first commissioned.*

CAUTION: *The batteries should only be replaced by trained service personal.*

Testing a Manual Call Point

Push the test key through the hole in the underside of the call point to engage the test cam mechanism and push to operate the cam mechanism.

At this point the test key is retained in the call point and pulling it out will reset the glass.

NOTE: *The alarm sounders in the system will be activated by this test. To* ***silence alarms*** *and* ***reset*** *the system, see* ***operating instructions.***

Replacing a broken Glass

WARNING: *Take appropriate precautions when clearing broken glass to prevent injury.*

NOTE: *A weather resistant version of manual call points will have two gaskets, a Cover/glass gasket and a Spacer/cover gasket, which must be installed in their respective position.*

These procedures assume the cover on the manual call point is open and any broken glass has been cleared.

a) Insert the glass beneath the opaque slider ① and locate bottom of the glass into recess, ensure the thumb wheel is up as shown..

b) Place the test key on the cam (thumb wheel) ②.

c) Fit the call point cover by hooking it into the top of the unit. Make sure that the glass is properly seated (held down). Withdraw the test key from the call point ③ and then use it to fit the screw ④ securing the cover to the back box.

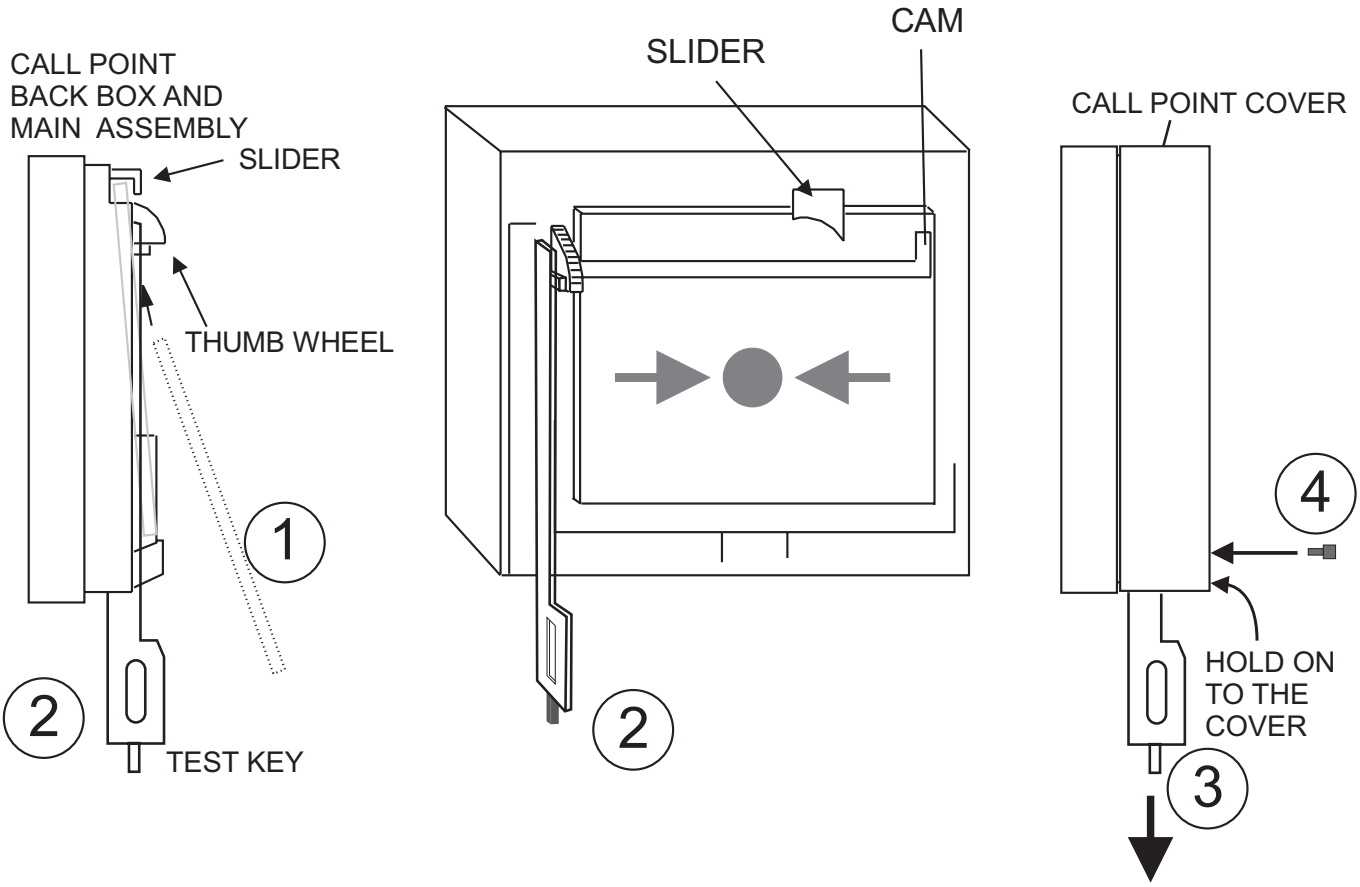

Figure 2 Replacing a broken MCP glass

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Operating instructions

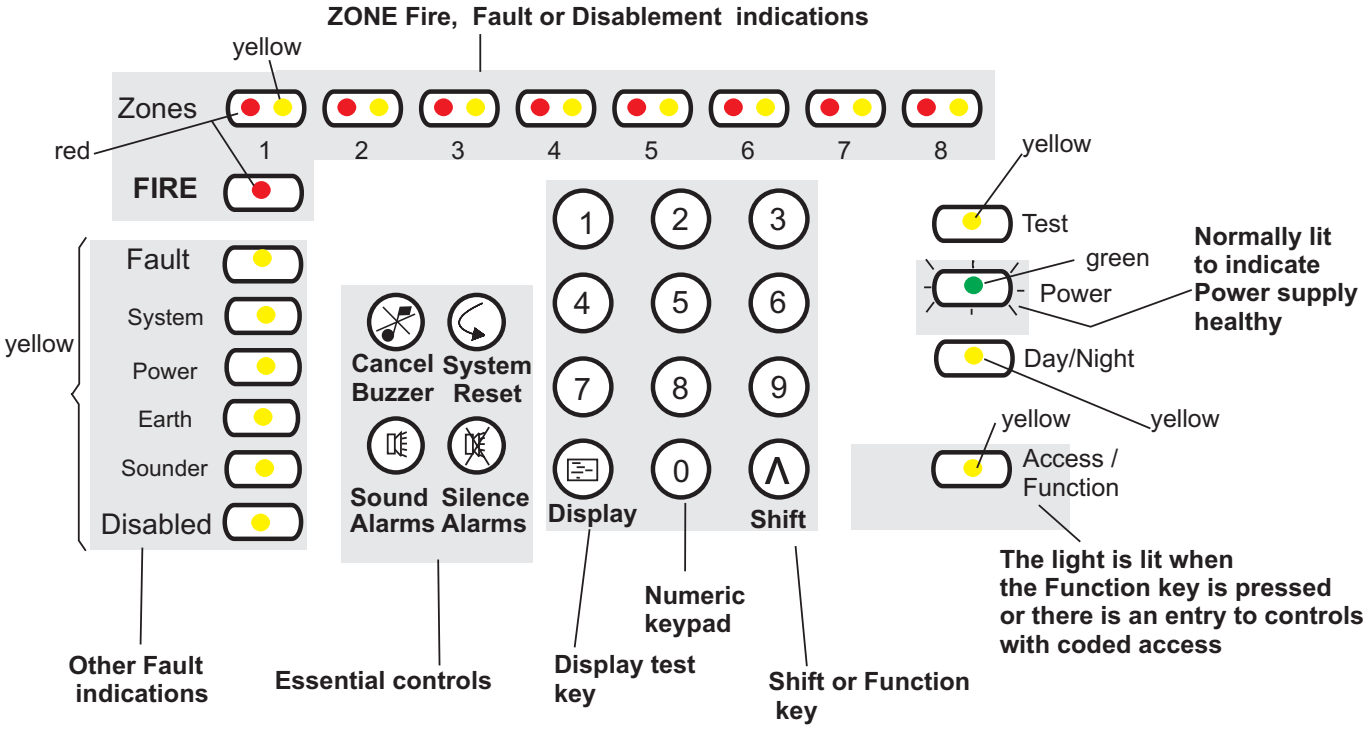

Figure 3 Controls and indications
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Normal indications

Under normal condition the panel should give a healthy indication,

with only the **green** **Power light lit.**

The control panel provides system security by password entry to controls.

Fire Condition

In the event of an automatic fire detection the indications given are:

- ❑ FIRE light is lit.
- ❑ Zones-fire light is lit.
- ❑ buzzer sounds continuous tone.
- ❑ system alarm sounders are activated
- ❑ if applicable, auxiliary equipment is actuated
- ❑ if applicable, automatic link to the Fire Brigade is initiated.

After the emergency is over

After emergency is over silence the alarms and reset the system:

a) Enter the **3 digit code** (n)(n)(n) to gain access to the controls.

b) Press the **Silence Alarms** button.

Notice the system alarm sounders are silenced and local buzzer sounds continuous tone.

c) After the cause of the alarm has been investigated, ensure smoke and excess heat have had time to clear from automatic detectors and broken manual call point glasses have been replaced where necessary. Press the **System Reset** button. Notice the indications return to their pre fire status.

	Visual indications						Audible indication		Signals out		
Condition	Zone Fire (1-8) -Red	Fire Common - Red	Disabled - Yellow	Test - Yellow	Power - Green	Access/ Function - Yellow	Buzzer	Sounder circuits	Aux Relay contacts Normally de-energised	Common fault - Normally active	Common fire- Normally deactive
Normal indication					On				Normal	Active	Deactive
Fire	On	On			On		On	On	Change over	Active	Active
New fire (different zone)	On	On			On		On	On	Change over	Active	Active
AL2, 3 or 4					On	On			Normal	Active	Deactive
Function key press					On	Fast Pulse			Normal	Active	Deactive

Indications on panel

To Sound Alarms

To re-sound the alarm sounders during a fire condition:

a) Enter the **3 digit code** (n)(n)(n) to gain access to the controls.

b) Press the **Sound Alarms** button.
Notice the system alarm Sounders are activated.

To Silence Alarms

To silence system alarm sounders after they have been actuated:

a) Enter the **3 digit code** (n)(n)(n) to gain access to the controls.

b) Press the **Silence Alarms** button.
Notice the system alarm Sounders are silenced.

To carry out a display test

a) #Enter the **3 digit code** (n)(n)(n) to gain access to the controls.
Coded entry is only required if Display test function is configured for operation at Access level 2.

b) Press the 'shift' button and then the **display** button.
Ensure that all the LEDs light in sequence and the buzzer sounds.

Fault Condition

In the event of an automatic fault detection the indications given are:

- ❑ Fault light is lit
- ❑ fault indicators are lit
- ❑ buzzer sounds intermittent. (except for system fault which is a continuous sound)

To Cancel fault buzzer

a) #Enter the **3 digit code** (n)(n)(n) to gain access to the controls.

Coded entry is only required if Cancel Buzzer function is configured for operation at Access level 2.

b) After investigating fault, press the **Cancel Buzzer** button. Notice the buzzer is silenced but other indications remain active.

The fault indications are normally automatically extinguished once the fault condition has been rectified.

Action to rectify fault

Suggested action to rectify fault condition:

> ***NOTE:*** *All fault rectification work must be done by suitably qualified personnel.*

The fault indicators may be extinguished during a fire condition.

The mains failure condition overrides all other fault indications in order to preserve battery standby capacity.

> ***NOTE:*** *A comprehensive fault finding guide is included in the Installation and Commissioning guide.*

Log Book

Fire Alarm System

In order to satisfy the recommendations of BS 5839 Part 1 this log book should be maintained by a responsible person, who should ensure that every entry is properly recorded.

Address of protected premises_____

Responsible person:_____

System designer:_____

System Installer:_____

System commissioned by:_____

System accepted by:_____

Verification undertaken by:_____

The system is maintained under contract by:_____Until:_____

telephone number:_____who should be contacted if maintenance is required

Expendable component replacement periods (list):_____

AL2 password

For each zone record the location description.

Zone number	Description of the zonal location
Zone 1	
Zone 2	
Zone 3	
Zone 4	
Zone 5	
Zone 6	
Zone 7	
Zone 8	

System configuration record

This information will assist the servicing organisation to keep a record of how the system is configured.

Mark in the table below any deviation(s) from the standard factory settings.

Detection and zone circuit configuration

Zone number	**1**	**2**	**3**	**8**	**5**	**6**	**7**	**8**
Normal zone operation *(factory setting)*								
Non latching zone operation								

First fire to be a pulsing indication *(factory setting)*	
First fire to be a steady indication	

Zone short circuit to give a fault *(factory setting)*								
Zone short circuit to give a fire								

Sounders and system reset configuration

Silence alarms and reset to operate independently *(factory setting)*	
Silence alarms and reset to operate as per BS5839: Part 4	
Reset to also action the silence alarms	

Sound alarms to operate in fire condition only (*factory setting)*	
Sound alarms to operate at any time	

Auxiliary relay to energise with fire (factory setting)	
Auxiliary relay to energise with sound alarms	

Access level

Access levels	AL1	AL2
Cancel buzzer (AL1 - factory setting)		
Test A & B mode, Cancel Test (AL2 - factory setting)	N/A	
Display test (AL1 - factory setting)		

Repeat panel information

Repeat panel	**EEPROM location**	**EEPROM Data** (address)	**Name of the area where the panel is installed on site**
1st Repeat panel			
2nd Repeat panel			
3rd Repeat panel			
4th Repeat panel			

Location of system devices

Make copies of this page to record details of the system.
This information will assist the servicing organisation to keep a record of how the system is configured.

		Zone							
Type of system device	Location	**1**	2	3	4	5	6	7	8

Event Log

It is recommended that a Log book is created in which events and work done on the fire system is logged, see tables below.

Events other than false alarms or maintenance work

Do not record False alarms events and Maintenance work details in this log, see respective sections.

Date	Time	Event (eg test, fire alarm signal, fault)	Zone (where applicable)	Device (where applicable)	Action required (where applicable)	Date completed (where applicable)	Initials
30/8/04	*9am*	*Weekly fire test*	*1*	*5*	-	-	*PH*

False Alarms

Do not record other events and maintenance work details in this log, see respective sections.

Categories: Unwanted - unwanted false alarm, Equipment - equipment false alarm, Good intent - false alarm with good intent, Malicious - malicious false alarm and Unknown - cause of alarm not known.

Date	Time	Device that triggered the alarm signal	Cause (if known)	Brief circumstances (where cause is unknown, record activities in the area)	Maintenance visit required (Yes/ No)	Finding of maintenance technician (where applicable)	Category #	Further action required (where applicable)	Action completed (where applicable)
9/9/04	*12:30 pm*	*17*	*fire detected in room 2 floor 1*	*Bin content set on fire*	*Y*	*Fire damaged detector*	*Malicious*	*None*	*Detector replaced*

Maintenance work

Date	Time	Zone (where applicable)	Device (where applicable)	Reason for work	Work carried out	Further work required	Signature
5/3/04	*5pm*	*-*	*-*	*Quarterly maintenance*	*As per schedule*	*customer advised*	*PMH*