



# ZETA ALARM SYSTEMS

## PREMIER AL MANUAL



And

## PREMIER AL GLOABAL NETWORK REPEATER MANUAL

( see also ZETA ALARMS PREMIER AL GLOBAL NETWORK REPEATER.PDF)  
(FOR USER INSTRUCTIONS AND GUIDE)



***INSTALLATION , COMMISSIONING AND  
MAINTENANCE with USER INSTRUCTIONS AND  
GUIDE***

DOCUMENT	VERSION	AUTHOR	CHECKED	DATE



# *Zeta Alarm Systems*

## *Premier AL Panel*

### *and Premier AL Global Network Repeater*

# *Installation, Commissioning and Maintenance*

## *Manual*

### **1. List Of Contents**

1. List Of Contents.....	1
2. List Of Figures.....	6
3. List of Tables.....	6
4. Introduction.....	7
5. Overview of Installation and Commissioning.....	7
6. General Description.....	8
6.1 Premier AL Panel Description.....	8
6.1.1 XP 150W-30-7 P.S.E.....	8
6.1.2 A1584 P.S.E. Control Board.....	8
6.1.3 A1579 Motherboard.....	9
6.1.4 A1585 Loop Card (WARNING! DO NOT PLUG IN/OUT LOOP CARD WHILE PREMIER AL IS POWERED ON. TURN OFF THE MAINS POWER ALWAYS , WHEN REMOVING OR PLUGGING IN LOOP CARDS) .....	9
6.1.5 A1580 Display Board.....	9
6.1.6 A1619 Interface Board (WARNING! DO NOT PLUG IN/OUT REPEATER / I/OBOARD CARD WHILE PREMIER AL IS POWERED ON. TURN OFF THE MAINS POWER ALWAYS , WHEN REMOVING OR PLUGGING IN REPEATER / I/OBOARD CARDS).....	9
6.1.7 A1620 Network Interface (WARNING! DO NOT PLUG IN/OUT NETWORK INTERFACE CARD WHILE PREMIER AL IS POWERED ON. TURN OFF THE MAINS POWER ALWAYS , WHEN REMOVING OR PLUGGING IN NETWORK INTERFACE CARDS).....	9
6.1.8 A1599 Printer.....	9
6.2 Premier AL Global Network Repeater.....	10
6.2.1 C1541 3A P.S.E.....	10
6.2.2 A1638 Motherboard.....	10
6.2.3 A1637 Display Board.....	10
6.2.4 A1620 Network Interface.....	11
6.2.5 A1599 Printer.....	11
7. Functional Specification.....	11
7.1 Feature List.....	11
7.2 EN54 Optional Functions With Requirements.....	13
7.3 Additional Functions Relating To EN54.....	13
7.4 Ancillary Functions Not Required By EN54.....	13
8. Installation.....	13
8.1 Electrical Safety.....	14

8.2 Installation Instructions.....	14
8.2.1 Premier AL Panel Installation Instructions.....	15
8.3 Installation And Connection Of The A1619 Panel Repeater Interface.....	16
8.4 Installation And Connection Of The A1620 Network Interface.....	17
9. Commissioning.....	19
9.1 Introduction.....	19
9.2 Commissioning Checklist.....	19
9.3 An Overview Of The Commissioning Procedure.....	20
9.4 Pre-Commissioning Wiring Check.....	20
9.5 Commissioning Procedure .....	21
9.5.1 Alarm Circuits.....	21
9.5.2 Commissioning Loops.....	21
9.5.3 Commissioning a Network System.....	22
10. Premier AL Motherboard Features.....	23
11. Premier AL Power Supply Features And Connections.....	25
12. Premier AL Global Network Repeater Motherboard Features.....	26
13. Premier AL Global Network Repeater Power Supply Features And Connections.....	27
14. Compatible Loop Field Devices.....	28
14.1 Approved Field Device Order Codes & Descriptions.....	28
15. Overview Of User Functions.....	29
15.1 Change Time And Date.....	29
15.2 Delay Of Operation Of Outputs.....	29
15.3 Adjustable Sensitivity Modes.....	29
15.4 Enabling And Disabling Of Functions.....	29
15.5 The Event Log.....	30
15.6 Test Functions.....	30
15.7 View Suppressed Events.....	30
15.8 Printer Functions.....	30
16. Overview Of Engineers Functions.....	30
16.1 Engineer Definable Access Code.....	31
16.2 Delay Of Operation Of Outputs.....	31
16.3 Day/Night Sensitivity Mode.....	31
16.4 Enabling Site Specific Data Changes.....	31
16.5 Point Configuration.....	31
16.6 Zone Allocation.....	32
16.7 Group Allocation.....	32
16.8 Programmable Loop Output Cause/Effect.....	32
16.9 Premier AL Global Repeater Panel.....	34
16.10 Panel Input Output Expansion Boards.....	34
16.11 Panel Cause/effect Timers.....	35
16.12 Class –change Modes.....	35
17. Power Supply Load Calculation.....	35
18. Battery Standby Capacity Calculation.....	36
19. Circuit Connection Details.....	37
19.1 Auxiliary Supply.....	37
19.2 Use Of Auxiliary Outputs.....	37
19.3 Use Of Auxiliary Inputs.....	38

19.4 Alarm Circuits.....	39
20. Loop Design.....	39
20.1 Loop Isolators.....	40
20.2 Loop Voltage Drop Calculation.....	40
21. Panel Events.....	41
21.1 The Fire Condition.....	41
21.1.1 User Actions.....	41
21.1.2 Carry out the required fire drill.....	41
21.2 The Alert Condition.....	42
21.2.1 User Actions.....	42
The ALERT and BUZZER SILENCED LEDs go steady.....	42
The internal buzzer silences.....	42
21.3 The Fault Condition.....	43
21.3.1 User Actions.....	43
The FAULT and BUZZER SILENCED LEDs go steady.....	43
The internal buzzer silences.....	43
21.4 The Maintenance Condition.....	44
This facility is not used on the Fyreye detectors and is for future use.....	44
22. The System Fault Condition.....	45
22.1.1 User Actions.....	45
22.1.2 Service Engineer Actions.....	45
22.2 Quiescent Condition.....	45
22.3 Access Mode.....	45
23. User Controls And Indications.....	46
23.1 How To Enter Numbers.....	48
23.2 How To Set The Time And Date.....	48
23.3 How To Enable And Disable The Panel Delay.....	49
23.4 How To Enable Day Sensitivity Mode.....	50
23.5 How To Enable Night Sensitivity Mode.....	50
23.6 How To Enable Timed Sensitivity Mode.....	50
23.7 How To Enable Off Sensitivity Mode.....	51
23.8 How To Enable And Disable A Single Point (Stand-Alone Panel).....	52
23.9 How To Enable And Disable A Single Point (Network Panel).....	53
23.10 How To Enable And Disable A Range Of Points (Stand-Alone Panel).....	54
23.11 How To Enable And Disable A Range Of Points (Network Panel).....	55
23.12 How To View Disabled Points.....	57
23.13 How To Enable All Points (Local Panel Only).....	58
23.14 How To Enable And Disable A Zone Of Devices (Stand-Alone Panel).....	59
23.15 How To Enable And Disable A Zone Of Devices (Network Panel).....	60
23.16 How To Enable And Disable A Range Of Zones (Stand-Alone Panel).....	61
23.17 How To Enable And Disable A Range Of Zones (Network Panel).....	63
23.18 How To View Disabled Zones.....	64
23.19 How To Enable And Disable The Local Printer.....	65
23.20 How To Enable And Disable All Sounding Devices.....	66
23.21 How To Enable And Disable Expansion Board Inputs (Stand-Alone Panel).....	67
23.22 How To Enable And Disable An Expansion Board Input (Network Panel).....	68
23.23 How To Enable And Disable A Range Of Expansion Board Inputs (Stand-Alone Panel).....	69
23.24 How To Enable And Disable A Range Of Expansion Board Inputs (Network Panel).....	70

23.25 How To View Disabled Expansion Board Inputs.....	72
23.26 How To View The Event Log.....	73
23.27 How To View Suppressed Alerts, Faults And Indications.....	73
23.28 How To View Suppressed Disablements.....	74
23.29 How To View The Status Of A Point.....	75
23.30 How To Test Devices Using One Person Test Mode.....	76
23.31 How To Test Sounding Devices Using One Person Test Mode.....	77
23.32 How To Clear The Print Queue.....	78
23.33 How To Print The Event Log.....	78
23.34 How To Print Disablements.....	79
24. Engineer Functions.....	80
24.2 How To Enable Changes To Site Specific Data.....	81
24.3 How To Edit The Panel Delay.....	81
24.4 How To Change Device Configuration Of A Loop.....	82
24.5 How To View Device Configuration Of A Loop.....	83
24.6 How To Print The Device Configuration Of A Loop.....	84
24.7 How To Edit The Sensitivity Of A Point.....	85
24.8 How To Edit The Allocation Of Devices To A Zone.....	85
24.9 How To Print The Allocation Of Devices To A Zone.....	86
24.10 How To View The Allocation Of Devices To A Zone.....	87
24.11 How To Edit The Allocation Of Points To A Group.....	88
24.12 How To View The Allocation Of Devices To A Group.....	90
24.13 How To Print The Allocation Of Devices To A Group.....	91
24.14 How To Edit Loop Output Cause And Effect.....	92
24.15 How To Print Loop Output Cause And Effect.....	92
24.16 How To Change The Remote Evacuate Mode.....	93
24.17 How To Edit The Panel Company Text Display.....	93
24.18 How To Edit Point Location Text.....	93
24.19 How To Edit Expansion Input Text.....	93
24.20 How To Configure The Number Of Panel Repeaters.....	94
24.21 How To Edit The Expansion I/O Board Configuration.....	94
24.22 How To Change The Power Fault Polarity.....	94
24.23 How To Edit The Allocation Of Inputs To A Group.....	95
24.24 How To Edit The Expansion I/O Board Cause/effect.....	96
24.25 How To Print Expansion Output Cause And Effect.....	97
24.26 How To Edit The Panel's Number and Name.....	97
24.27 How To Edit The Panel's Network Display Responses.....	98
24.28 How To Edit The Panel's Network User Control Responses.....	98
24.29 How To Edit The Panel's Network Special Function Responses.....	99
24.30 How To Print The Panel's Network Display Responses.....	99
24.31 How To Change The Class Change Modes.....	100
24.31.1 To change the output bits, enter the engineers menu and select:.....	100
25. Routine Maintenance.....	101
25.1 Quarterly Inspection.....	101
25.2 Annual Inspection.....	101
25.3 Battery Replacement.....	101
APPENDIX A - Engineers Menu Overview.....	102
APPENDIX B - Glossary of Terms.....	102
APPENDIX C - Glossary of Terms.....	104

APPENDIX D - List of Message Abbreviations.....	105
APPENDIX E - Premier AL Mechanical And Environmental Specification.....	106
APPENDIX F - Premier AL Global Network Repeater MechanicalAnd Environmental Specification.....	108
APPENDIX G - Premier AL Input and Output Specification.....	109

## **2.List Of Figures**

Figure 1 – Premier AL panel main components.....	8
Figure 2 – Global Network Repeater.....	10
Figure 3 – Panel Repeater connection diagram.....	17
Figure 4 – Network connection diagram.....	18
Figure 5 - Motherboard layout.....	24
Figure 6 – Power supply layout.....	25
Figure 7 - A1638 Motherboard layout.....	26
Figure 8 –Power supply layout.....	27
Figure 9 – Auxiliary fire contact connection details.....	37
Figure 10 – Auxiliary fault contact connection details.....	38
Figure 11 – Monitored input circuit configuration.....	38
Figure 12 – Class change input circuit configuration.....	39
Figure 13 – Alarm circuit configuration.....	39
Figure 14 – Premier AL Engineers Menu Overview.....	102

## **3.List of Tables**

Table 1 – A1620 node address switch settings.....	18
Table 2 – Default command output bits.....	32



## **4.Introduction**

Thank you for purchasing this Premier AL Control Panel. This document contains all the information necessary for the installation, commissioning and maintenance of the Premier AL control panels and Integra network repeater.

The following supporting documentation is also available:

- Premier AL and Premier AL Repeater User Manual
- Wiring Recommendations
- PC-based Software Programming Guide
- Battery Calculation Spreadsheet
- Repeater Application, Installation and Commissioning Manual

## **5.Overview of Installation and Commissioning**

This section lists the steps that are taken in designing, installing and commissioning a Premier AL System

### **1. Design the system referring to the following:**

- Section 17, Power Supply Load Calculation
- Section 18, Battery Standby Capacity Calculation (The use of the Zeta load calculation spreadsheet is recommended)
- Section 19, Circuit Connection Details
- Section 20, Loop Design (The use of the Zeta load calculation spreadsheet is recommended)
- Field device manuals

### **2. Define the device location texts and panel cause and effect**

- The use of the panel planning chart and cause/effect charts are recommended. These can be found in the PC programming manual.

### **3. Install all field wiring and equipment**

- Refer to the Installation Instructions in section 8.2
- Refer to the field device installation manuals

### **4. Install the panel**

- Refer to the installation instructions in section 8.
- Do not connect the field equipment at this stage.
- Disable networking at this stage.

### **5. Program the cause/effect and location text.**

- Refer to Engineer Functions in section 24
- Use of the PC cause and effect editor is recommended.

Alternatively:

- Basic cause and effect can be edited through the menus
- The location and panel text can be entered using a Cherry keyboard.

### **6. Connect any repeaters (if applicable)**

- Refer to Installation And Connection Of The A1619 Panel Repeater Interface in section 8.3 and the repeater installation and commissioning manual.

### **7. Commission the panel**

- Refer to Commissioning in section 9.

### **8. Enable the network card (if applicable)**

- Refer to Installation And Connection Of The A1620 Network Interface in section 8.4.

## 9. Commission the network cause/effect (if applicable)

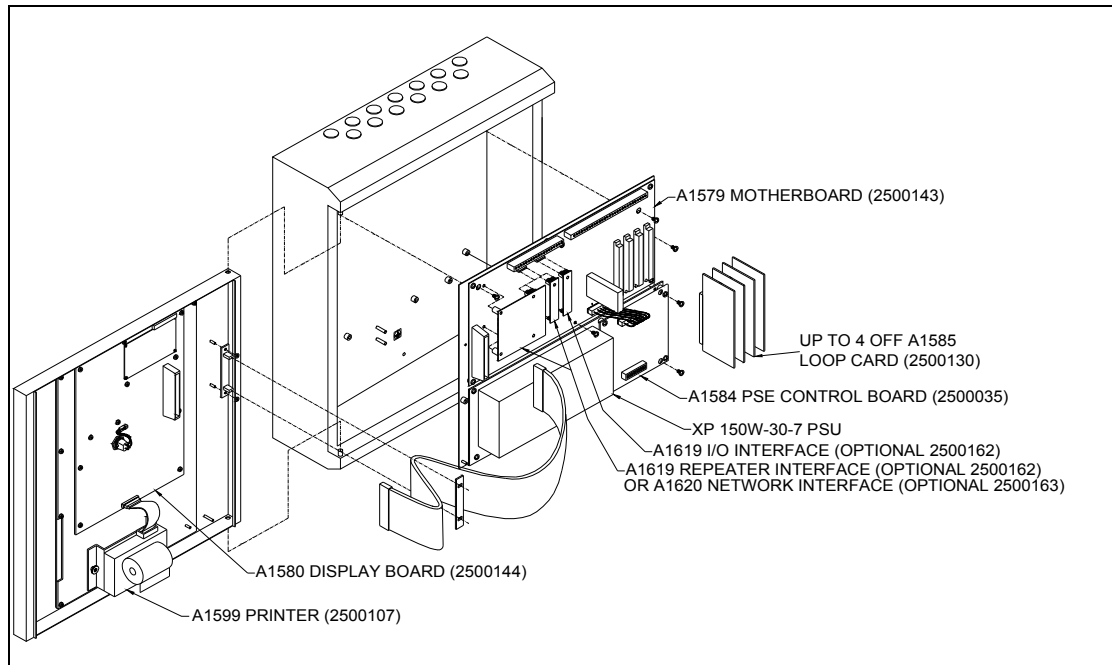
- Refer to the **cause/effect** charts
- Refer to Commissioning a Network System in section 9.5.3

## 6.General Description

The panels are housed in a single metal enclosure with a polyester membrane giving user controls and indications. The mandatory indications are implemented using LEDs and secondary information is provided by a 20 by 4 LCD. The standby batteries are housed within the panel enclosure.

### 6.1Premier AL Panel Description

The panel consists of the modules shown in Figure 1. One loop card is fitted for each loop that is connected to the panel. The Premier AL drives a maximum of four loops



of devices.

**Figure 1 – Premier AL panel main components**

#### 6.1.1XP 150W-30-7 P.S.E.

The XP 150W is a switch mode p.s.e. providing a nominal 29.3V supply to the A1584 control board.

#### 6.1.2A1584 P.S.E. Control Board

The A1584 is a processor controlled supply and generates the following outputs from the 29.3V input:

- 5V regulated logic supply
- 28V supply to motherboard

- Temperature compensated float battery charger. This is current limited during high current drain.
- User fault indications through LEDs
- Signals to the motherboard for common fault and mains failed conditions.

### **6.1.3A1579 Motherboard**

Provides all the field terminations, internal interfaces for up to 4 off plug-in loop cards; connections for an A1619 interface for expansion I/O communication; connections for an A1619 repeater interface or A1620 Network card; and connections to the main display. The CPU and main memory locations are accommodated on this board.

### **6.1.4A1585 Loop Card**

**(WARNING! DO NOT PLUG IN/OUT LOOP CARD WHILE PREMIER AL IS POWERED ON. TURN OFF THE MAINS POWER ALWAYS , WHEN REMOVING OR PLUGGING IN LOOP CARDS)**

This provides communications to the loop devices. The loop card transfers data with the motherboard using a dedicated data bus. The card provides short circuit protection of both ends of the loop. The loop field wiring is terminated on the A1579.

### **6.1.5A1580 Display Board**

Provides visible indications and user switches, access to which is controlled by a keyswitch. The board connects to the motherboard through a 50-way ribbon cable.

### **6.1.6A1619 Interface Board**

**(WARNING! DO NOT PLUG IN/OUT REPEATER / I/OBOARD CARD WHILE PREMIER AL IS POWERED ON. TURN OFF THE MAINS POWER ALWAYS , WHEN REMOVING OR PLUGGING IN REPEATER / I/OBOARD CARDS)**

This optional plug-in board provides an RS485 capability for communication with repeaters and expansion I/O boards. Up to two interfaces can be fitted to the motherboard; one interface is dedicated to repeater communications, the second for expansion I/O. If a network card is fitted this includes a repeater interface and removes the requirement for an A1619 for communication with repeaters.

### **6.1.7A1620 Network Interface**

**(WARNING! DO NOT PLUG IN/OUT NETWORK INTERFACE CARD WHILE PREMIER AL IS POWERED ON. TURN OFF THE MAINS POWER ALWAYS , WHEN REMOVING OR PLUGGING IN NETWORK INTERFACE CARDS)**

This optional plug-in board provides communication with other Premier AL and Premier AL Global network repeater panels. The board plugs into the repeater interface sockets and provides both panel repeater output communications and the network output. An A1619 is not required for panel repeater communications if the A1620 is fitted.

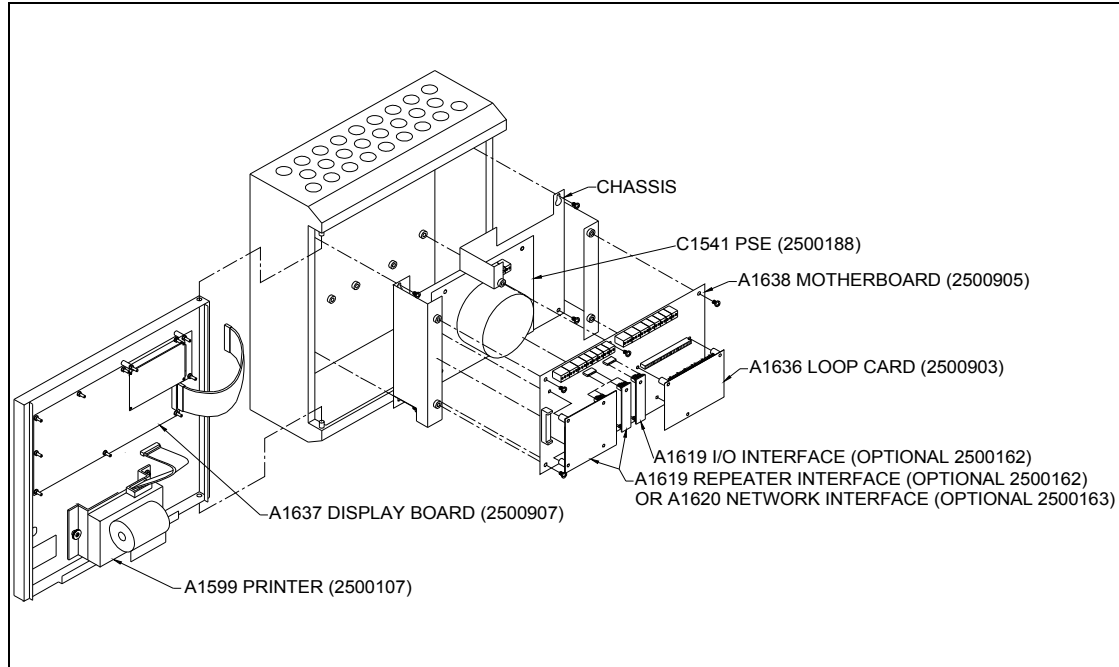
IF ISSUE 1 16/12/2004. this card has extra buffering, to allow smooth network communication. (ISSUE 0 2000 , this card has less buffering)

### **6.1.8A1599 Printer**

The optional 24-column printer mounts on the outer door. Power and data are supplied via a 16-way ribbon cable from the display board.

## 6.2 Premier AL Global Network Repeater

The panel consists of the modules shown in . *There are NO LOOP CARD attached to or integrated on the Motherboard*  
*The Premier AL Global Network Repeater has no LOOPS.*



**Figure 2 – Global Network Repeater**

### 6.2.1 C1541 3A P.S.E.

The C1541 is a 3A linear p.s.e. which provides the following outputs:

- 24V supply to motherboard
- 27.5V float battery charger.
- User fault indications for supply on, mains failed and no charge conditions.
- Signals to the motherboard for a common fault condition.

### 6.2.2 A1638 Motherboard

Provides all the field terminations; an internal interface for up one plug-in loop card; connections for an A1619 interface for expansion I/O communication; connections for an A1620 Network card; and connections to main display. The CPU and main memory locations are accommodated on this board.

### 6.2.3 A1637 Display Board

Provides visible indications and user switches, access to which is controlled by a keyswitch. The board connects to the motherboard through a 50-way ribbon cable.

### 6.2.4A1620 Network Interface

This optional plug-in board provides communication with other Premier AL panels and other Global Network Repeaters. The board plugs into the repeater interface sockets and provides both repeater output communications and the network output.

### 6.2.5A1599 Printer

The optional 24-column printer mounts on the outer door. Power and data are supplied via a 16-way ribbon cable from the display board.

## 7. Functional Specification

### 7.1 Feature List

- ***Networkable with fully configurable responses*** Up to 15 panels may be connected over a 5000m RS485 link. The display and response to events can be configured individually for each node on the system. Additionally 16 passive nodes can display network information.
- ***Full PC upload and download of site specific data*** Upload allows current panel configuration to be edited on the PC even if original data is unavailable or has been edited manually.
- ***Fully programmable cause/effect*** Most functions can be edited through the panel menus. All are available through the PC cause/effect editor.
- ***Panel Repeaters*** Up to 14 panel repeaters may be connected over 1200m RS485 link.
- ***User definable access code*** Changed using PC cause/effect editor.
- ***User definable text for panel name and device location*** Panel and location text is transmitted across the network with event details
- ***Compatible with Fyreye range of detectors & Zeta products only*** Device sensitivity can be adjusted through analogue thresholds.
- ***Loop isolators built into both ends of the loop driver*** Removes the need for isolators at the beginning and end of the loop.
- ***500mA drive current per loop*** Allowing up to 32 addressable loop sounders per loop
- ***Stable loop voltage, even under mains failed conditions*** Loop voltage is not reduced when battery voltage drops during discharge.
- ***2 alarm circuits***
- ***Monitored auxiliary supply (500mA)*** Panel indicates a fault if the fuse fails.
- ***2 change over fire contacts rated 1A @30V***
- ***1 change over fault contact rated 1A @30V***
- ***Battery backed time and date*** Setting the time on one panel will automatically update the time on all panels connected across a network. The time and date will then be maintained during total power failure so there is no need to reset the time after subsequently powering the panel down.

- ***Delay to outputs*** Delay operates on local panel outputs and transmission of cause/effect flags to all network panels.
- ***Enable/Disable Functions:*** Local
- ***Single point*** Local, or via a remote network panel.
- ***Zone*** Local or via a remote network panel.
- ***Range of zones*** Local or via a remote network panel.
- ***Sounders*** Local or via a remote network panel.
- ***Expansion inputs*** Local or via a remote network panel.
- ***View disablements*** Local only function.
- ***Printer*** Local only function.
- ***Event Log*** Records last 200 events. Can be configured to record network responses.
- ***Test functions:***
- ***Zones***
- ***Sounders***
- ***Print functions***
- ***Print event log***
- ***Print disablements***
- ***Site specific data write protect switch*** Prevents corruption or unintentional editing of site specific data.
- ***Automatic configuration of loop devices*** Initiated through menu function.
- ***Device interrogation*** Individual device status can be displayed and outputs operated.

## 7.2 EN54 Optional Functions With Requirements

The Premier AL panel have the following EN54 optional functions.

- Fault signals from points.
- Delay of actioning of outputs to fire alarm devices.
- Disablement of each address point.
- Test condition.
- Output to fire alarm devices.

## 7.3 Additional Functions Relating To EN54

The Premier AL panels have the following functions relating to EN54.

- Two sounder circuits.

## 7.4 Ancillary Functions Not Required By EN54

The Premier AL and Premier AL Global Repeater panels offer several auxiliary functions that are not required by EN54. These are:

1. Auxiliary change over contacts:
  - Two change over contact operating on any fire condition.
  - One change over contact operating on any fault condition.
2. One auxiliary power supply output.
3. An optional 24 column printer.
4. Programmable loop output cause/effect.
5. Programmable remote panel output cause/effect.
6. The ability to download site-specific data from a computer (text, zone information and cause/effect).
7. The ability to upload the data from the panel:
  - Site specific data (text, zone information and cause/effect)
  - Current analogue values

N.B. During the communication sequence between a computer and the panel, the panel cannot respond to any loop or input events, and the LCD display will indicate this.

## 8. Installation

The control panel must be installed by competent engineers familiar with the installation of fire detection systems. In addition, it is recommended to refer to the following information:

- Current edition of the IEE wiring regulations.
- BS5839 Part 1 or the installation standards for the relevant country.
- Any specific site requirements.
- Field device installation instructions.

**Note:** *The mains supply cable should be a minimum of 1mm<sup>2</sup> copper controlled by a 5A fuse.*

**Note:** *An appropriate disconnect device shall be provided as part of the building installation.*

## 8.1 Electrical Safety

**WARNING:** Please read this section completely before commencing installation.

1. Prior to handling any part of the control panel, ensure that adequate precautions are taken against static damage to the sensitive electronic components on the control board. You should discharge any static electricity you may have accumulated by touching a convenient earthed object, e.g. an unpainted copper radiator pipe or the enclosure earth. You should repeat the process at regular intervals during the handling process, especially if you are required to walk over carpets.
2. Check that the panel has been mounted at least 2 metres away from pager systems or any other transmitting equipment.
3. Check that the equipment is correctly connected to a 230V AC supply and earthed. All installation work should be carried out in accordance with the recommendations of BS5839 Part 1 and the current edition of the IEE wiring regulations (BS7671: 1992) by suitably qualified and trained personnel.
4. Check that the control panel is located in a clean, dry position that is not subject to shock or vibration. The temperature must not drop below 0°C or exceed 40°C. The humidity should not exceed 95%.

**DANGER:** Batteries are electrically live at all times, take great care never to short circuit the battery terminals.

**WARNING:** Batteries are often heavy; take great care when lifting and transporting batteries. For weights above 24 kilos, lifting aids should be used.

**WARNING.** Do not attempt to remove battery lid or tamper with the battery internal workings. Electrolyte is a highly corrosive substance, and presents significant danger to you and to anything else it touches. In case of accidental skin or eye contact, flush the affected area with plenty of clean, fresh water and **SEEK IMMEDIATE MEDICAL ATTENTION**. VRLA batteries are “low maintenance” requiring no electrolyte top-up or measurement of specific gravity.

**WARNING.** If required, clean the case with a cloth that has been soaked or dampened with distilled water. Do not use organic solvents (such as petrol, paint thinner, benzene or mineral spirits) and other materials can substantially weaken the case.

**DANGER.** Do not incinerate batteries. If placed in a fire, the batteries may rupture, with the potential to release hazardous gases and electrolyte. VRLA batteries contain substances harmful to the environment. Exhausted batteries must be recycled. Return them to the battery manufacturer or take them to your Council tip for appropriate disposal.

The standby batteries should not be fitted until the commissioning stage.

## 8.2 Installation Instructions

1. Carefully remove the control panel from the packing and lie the panel on a flat surface.
2. Open the outer door.
3. Locate the spares bag and check that the following items are present:

Quantity	Description	Colour/Rating
2	Spare alarm circuit fuses	1A 20mm



1	Spare auxiliary supply fuse	500mA 20mm
1	Spare mains fuse	3.15A 20mm
1	Spare battery fuse	6.3A
2	Spare alarm circuit end of line resistors.	3k9 0.25W
5	Spare remote input circuit end of line resistors.	3k9 0.25W
2	Engineers door keys	Key Ref.: 801
2	Access control keys	Key Ref.: 850 or 901
1	Positive battery lead	Red
1	Negative battery lead	Black
1	Battery connection lead	Blue

### **8.2.1 Premier AL Panel Installation Instructions**

1. Remove the main ribbon cable from the display board header.
2. Remove the ribbon cable clamp on the door to release the cables. Fold the cable into the back box. Replace the ribbon clamp onto the door.
3. Remove the earth strap connecting the door and back box by removing the nut and washer on the door. Carefully note the arrangement and replace the nut and washer.
4. Unscrew the hinge pin at the bottom of the door whilst supporting the door. Swing the bottom of the door clear of the back box and release the top of the door from its hinge pin.
5. Carefully put the door on one side and replace the hinge pin in the back box.
6. Remove the earth strap connecting the back box and chassis by removing the nut and washer on the chassis. Carefully note the arrangement and replace the nut and washer.
7. Unscrew the two lower chassis screws and slacken the top two mounting screws
8. Carefully lift the chassis upward to align the screw heads with the large holes in the chassis keyholes and lift the chassis clear of the back box.
9. Place the chassis carefully to one side.
10. Place the chassis and door into the carton. Store the carton in a safe place until installation is complete.
11. Identify the three indented holes that are used to mount the enclosure.
12. Place the enclosure in the desired location and mark the position of the top indented hole. Remove the enclosure and fit a suitable fixing to the wall. Hang the enclosure from the top fixing point and ensure that it is level. Mark the locations of the other two mounting holes.
13. Remove the enclosure from the wall and fit suitable fixings to the two remaining mounting points. Fit the enclosure to the wall using all three mounting points.

14. Gland the mains power cable into one of the holes provided at the bottom of the enclosure. To meet the European EMC directives it is essential that these are the only entry points used for mains power.
15. Gland all field wiring in place ensuring that the cable conductors are of sufficient length. Ensure that all conductors are clearly labelled.
19. Connect the earth drain wires of any field cabling to either of the 6 way earth blocks positioned at the top of the back box. Up to two drain wires may be connected to each terminal.
16. Ensure that continuity of any cable shield is maintained around the loop. The shield must only be connected to enclosure earth in the panel by using the earth bars provided.
17. Connect the mains-in earth to the primary earth point on the back box indicated in . This is the lower of the two earth studs by the mains entry hole labelled ☺ .
18. Clear any dust and debris from the cabinet.
19. Reinstallation of the chassis is the reverse of removal. Ensure that all earth straps are reconnected correctly.
20. Connect the mains-in live to the mains terminal block on the power supply as indicated in .
21. Connect the mains-in neutral to the mains terminal block on the power supply as indicated in Figure 5.
22. Replace the door, the refitting procedure is the reverse of removal. Ensure that the earth strap and ribbon cable are reconnected correctly. Do not connect the field wiring at this stage.
23. Remove the two screws securing each battery clamp and place the battery clamps to one side.
24. Place the left battery into the bottom of the panel. The terminals should be positioned to the left of the enclosure and the battery adjacent to the left side of the back box. This is shown in .
25. Place the right battery into the bottom of the panel. The terminals should be positioned to the right of the enclosure and the battery adjacent to the right side of the back box. This is shown in .
26. Refit the battery clamps to secure the batteries in place. Take care not to short the battery terminals with a screw driver.
27. Connect the black battery lead to one of the negative battery terminals on the p.s.e. The position is shown in . Push the connector on the other end of the lead onto the negative (black) terminal of the left-hand battery.
28. Connect the red battery lead to one of the positive battery terminals on the p.s.e. The position is shown in . Push the connector on the other end of the lead onto the positive (red) terminal of the right-hand battery.
29. Connect the blue battery lead between the positive (red) terminal of the left-hand battery and the negative (black) terminal of the right-hand battery. Note that the batteries will not power the panel until the mains supply is energised.

### **8.3 Installation And Connection Of The A1619 Panel Repeater Interface**

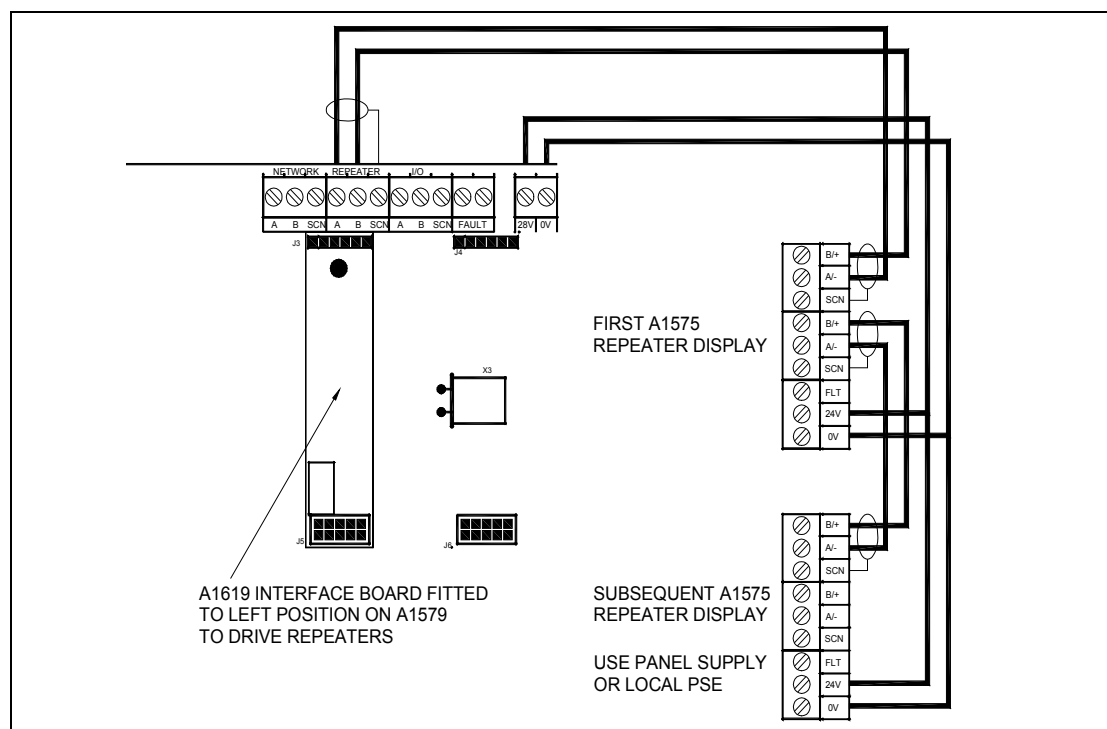
***Warning: Observe anti-static precautions***

1. Ensure that the main and standby supplies are disconnected.

2. Fit the A1619 panel repeater interface to headers J3 and J5 on the A1579 panel motherboard (J2 and J3 on A1638). The board should be held in place by a 12mm high plastic spacer.
3. Connect the panel repeater RS485 wiring as shown in Figure 3.

**Notes:**

1. *Use only RS485 shielded data cable.*
2. *Do not connect the cable shield to earth.*
4. If the panel repeater is to be powered from the panel connect the 28V auxiliary output from the motherboard to the A1575 repeater display. This is also shown in Figure 3.



**Figure 3 – Panel Repeater connection diagram**

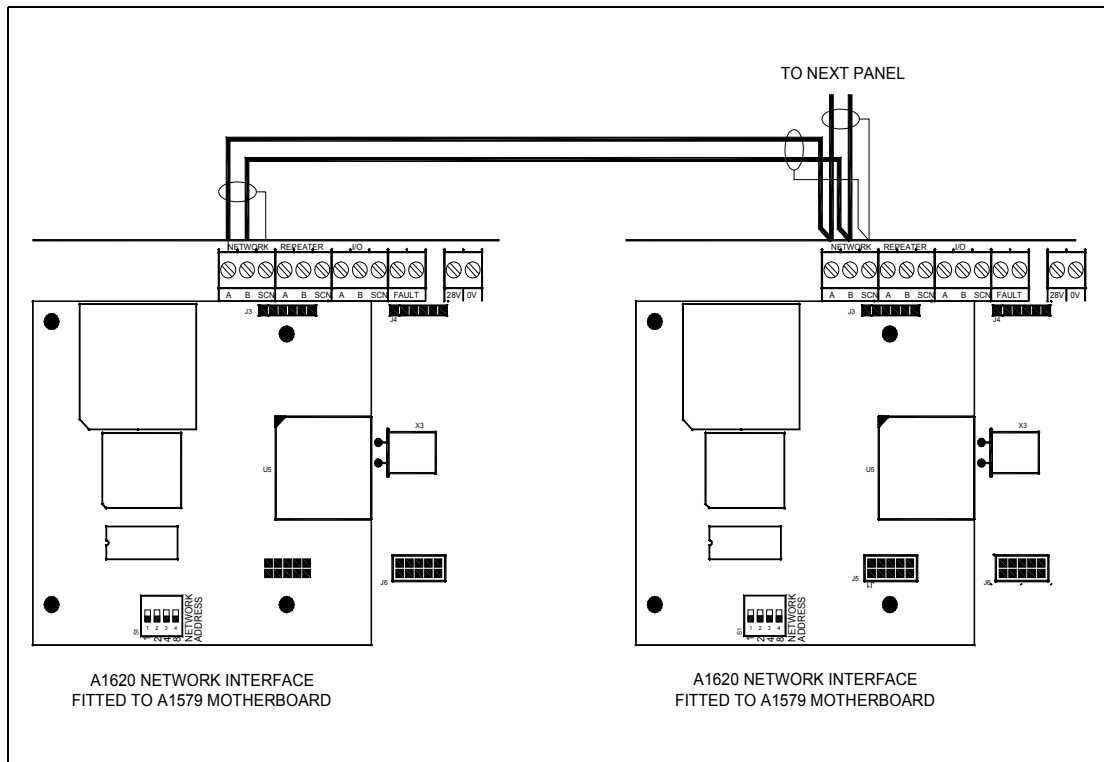
### 8.4 Installation And Connection Of The A1620 Network Interface

**Warning: Observe anti-static precautions**

1. Ensure that the main and standby supplies are disconnected.
2. Fit the A1620 network interface to headers J3 and J5 on the A1579 panel motherboard (J2 and J3 on A1638). The board should be held in place by a 4 off 12mm high plastic spacers.
3. Connect the network RS485 wiring as shown in Figure 4. A maximum of 15 active panels can be connected together in this way. Any number of panels can be added as passive panels provided the total number of panels on the network does not exceed 32.

**Notes:**

1. *Use only RS485 shielded data cable.*
2. *Do not connect the cable shield to earth.*



**Figure 4 – Network connection diagram**

4. Set the network node address on the A1620 NETWORK ADDRESS switch as shown Table 1. It should be noted that any number of panels can be configured as address 0. This configures the panel as a passive node. A passive node can receive data but cannot transmit data to other network panels.
5. To enable networking, S4 switch 4 on the A1579 should be moved to the ON position (switch 2 on the A1638 Premier AL Global Repeater motherboard). This should be done after stand-alone panel commissioning is complete.

**Table 1 – A1620 node address switch settings**

<b>Panel Node Address</b>	<b>Switch 1 (Binary value: 1)</b>	<b>Switch 2 (Binary value: 2)</b>	<b>Switch 3 (Binary value: 4)</b>	<b>Switch 4 (Binary value: 8)</b>
0	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF
4	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF
8	OFF	OFF	OFF	ON
9	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON
11	ON	ON	OFF	ON
12	OFF	OFF	ON	ON
13	ON	OFF	ON	ON
14	OFF	ON	ON	ON
15	ON	ON	ON	ON

## **9. Commissioning**

### **9.1 Introduction**

The following equipment should be available where possible to minimise commissioning time:

- i) VHF/UHF Portable Radio (for two engineers)
- ii) Multi-meter or equivalent

### **9.2 Commissioning Checklist**

1. Before commissioning, the engineer should check the following:
  - i) All field wiring has been inspected and tested in accordance with Premier AL wiring recommendations, BS5839 part 1 and current IEE wiring regulations.
  - ii) All field cables are glanded into the control panel cabinet.
  - iii) Detector bases are terminated but detector heads are not fitted. Any devices with electronic components are not fitted. Terminations to devices with electronic components should be linked through to maintain cable continuity.
  - iv) Call points are not connected but cable is linked through to maintain continuity.
  - v) No end-of-line devices (e.g. alarm circuit EOL resistor) are fitted.
  
2. The following information should be available to the commissioning team:
  - i) Detection layout drawings and address information
  - ii) Wiring schematic diagram
  - iii) Panel Planning Sheet and Cause/Effect Sheet (where applicable)
  - iv) PC or QWERTY keyboard for programming
  - v) Control Panel installation manuals
  - vi) Installation manuals for all equipment connected to the system

Experience has shown that tracing wiring faults on long circuits which are routed through risers etc. can be difficult without knowledge of the wiring route. It is recommended that the electrical installer is made available until basic wiring continuity is proven. A minimum of two persons (e.g. engineer and mate) is recommended for efficient commissioning.

### 9.3 An Overview Of The Commissioning Procedure

The approach to be used when commissioning a fire alarm system is to check each circuit and function in turn to ensure correct operation of the entire system. In this way any faults may be located quickly and accurately. For network systems, each panel should be commissioned as a stand-alone unit before it is linked into the network for final network testing. The general procedures are as follows

:

- i) Alarm circuits should be checked first. The correct operation of each sounder should be checked for correct audibility as specified in BS5839 part 1, using the “Test Alarms” facility.
- ii) Detection loops should be commissioned next. The purpose is to establish the correct functioning of each device and checking for correct indication at the control panel. Cause/effect is tested at this time.
- iii) Commission network functionality. The procedure is to test that the panels are communicating and configured correctly

:

1. Check that each panel displays different types of events from every other appropriate panel. This confirms that the display events response configuration is correct.
2. Check that each panel responds correctly to controls from every other appropriate panel. This confirms that the control events response configuration is correct.
3. Check each item of network cause/effect. Any event (cause) which triggers an action (effect) on a different panel is called network cause/effect.

***WARNING: Before testing, the engineer must be aware both of the operation of all devices fitted to the auxiliary circuits and of the consequences of their operation.***

### 9.4 Pre-Commissioning Wiring Check

***NOTE: This pre-commissioning wiring check procedure should be followed to test all wiring prior to specific commissioning of any detection, alarm and auxiliary circuits.***

1. The following assumes that the control panel has been installed in accordance with the installation procedure and is powered with only the “Power On” LED illuminated. Do not connect field wiring at this stage.
2. Ensure that there are no devices connected to the loop and alarm circuits but the cables are linked through at the device locations to achieve a continuous circuit
- .
3. Ensure that resistance of all cables to earth and between cores is more than 1M $\Omega$ .
4. Check the following

:

- i) Positive to earth resistance is greater than  $1M\Omega$
  - ii) Negative to earth resistance is greater than  $1M\Omega$
  - iii) Positive to negative resistance is greater than  $1M\Omega$
5. Place a short circuit across the ends of the loop and alarm circuits. Measure the resistance across the positive and negative cables of each of the circuits and ensure that the value does not exceed the calculated value. Remember to remove the short circuits after the tests.
  6. Correct polarity throughout all circuits must be maintained. Rectify any faults.
  7. All bells, detector heads and call points should now be connected and alarm circuit end-of-line resistors fitted. Use the spare end-of-line resistors supplied and leave the EOL resistors in the panel terminals at this stage. Be very careful to maintain correct polarity at each device.

## 9.5 Commissioning Procedure

### 9.5.1 Alarm Circuits

After completion of the pre-commissioning wiring check, this procedure should be followed:

1. Remove the resistor from the first alarm circuit terminal and connect the first alarm circuit wiring to the terminals, observing correct polarity. Check that any alarm fault indications clear after a few seconds.
2. Press the “Evacuate” switch. Check that all sounders connected to the alarm circuit operate.
3. Press “Silence Alarms” and “Reset”

Repeat steps 1 to 3 for the second and any subsequent alarm circuits.

### 9.5.2 Commissioning Loops

1. Ensure that the control panel is switched off.
2. Ensure that all loop isolators are fitted and wired correctly. Any isolator connected with reverse polarity will cause a short circuit condition at the previous isolator.

***WARNING: If the isolator polarity is found to be incorrect, it is absolutely essential that the polarity is corrected at each termination point throughout the wiring. Failure to observe this will result in the polarity of the return end of the cable becoming incorrect with the possibility of damage to the control panel.***

3. Insulate and physically protect the positive and negative ends of one end of the detection loop wiring. Connect the other end of the wiring to the panel terminals O1+ and O1- for loop 1.
4. Switch on the control panel. Note that the panel will indicate a line fault condition for all loops which are not connected. This can be ignored at this stage.
5. Configure the loop 1 devices as described in 24.4 on page 82. After the configuration period, the panel will report the numbers of the different types of sensors. If the numbers and types of sensor agree with the physical check already carried out, proceed to the next stage.

**Note: If more than one device has the same address the LCD display will show a report of the device numbers affected. The engineer may also notice a device missing from the expected total quantity of loop devices.**

6. Interrogate the devices on an individual basis as described in section 23.29 on page 75. To view correct electronic operation, press button 2 to set command bit 1 (self test mode). Press again to return detector to quiescent state. To turn a device LED on (to identify its correct location), press button 3 to set command bit 2. Press again to return the detector to quiescent state. To turn a remote device LED on (to identify its correct location), press button 1 to set command bit 0. Press again to return detector to quiescent state.
7. Repeat sections 1 to 6 for each loop.

**WARNING: Before connecting the return leg of the loop, ensure that the returning polarity is correct.**

8. Sensor installation is now complete. Switch off the control panel.
9. Connect the return leg of loop 1 to the I1+ and I1- terminals. Repeat for all remaining loops.
10. Switch on the control panel and observe that the no fault conditions are indicated. If there are any loop faults caused by open circuit conditions or operation of a loop isolator then the panel will indicate a line fault for the corresponding loop.

### **9.5.3 Commissioning a Network System**

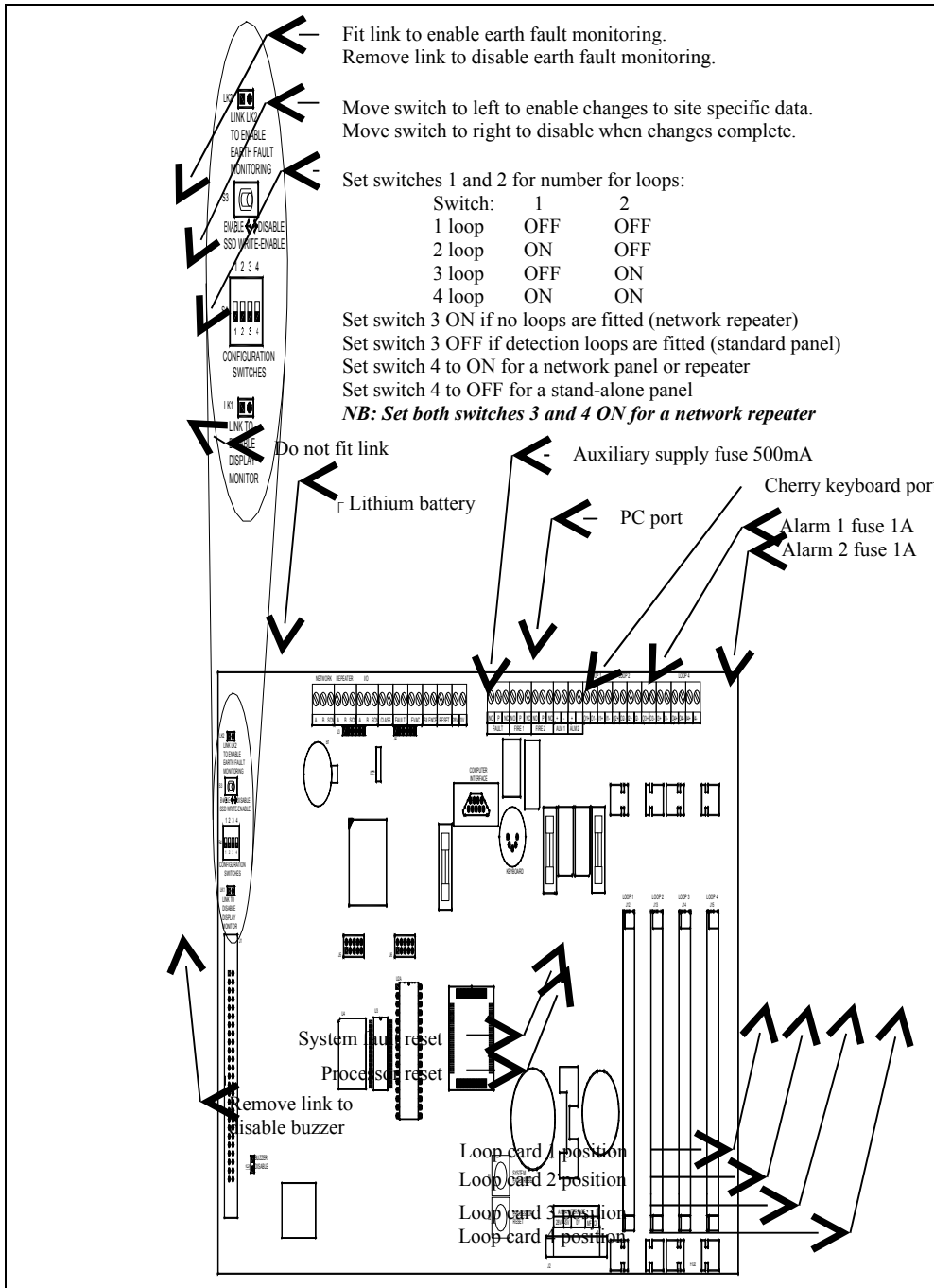
1. Ensure the network card is fitted in each panel and that the network cabling is correctly installed.
2. Ensure that each panel has been commissioned as a stand-alone panel as detailed above.
3. Enable the network card on each panel. The panels will automatically recognise the other panels on the network - a manual configuration process is not required.
4. Generate a fire condition on each panel in turn and observe that the event is displayed correctly at each other panel. The response of each panel depends on its response configuration.
5. Repeat step 4 for alert, fault and indication only conditions.
6. Test each panel on the network as follows:
  - i) Operate evacuate on the next network panel.
  - ii) Observe that the event is displayed at the panel under test.
  - iii) Operate silence alarms and reset at the panel under test and observe that the system responds as expected.
  - iv) Repeat i, ii and iii for all other nodes except the panel under test
7. Identify each item of network cause/effect cause. i.e. cause and effect where the panel response is on a different node to the event which causes that action.
8. Action each event in turn and observe that the network cause and effect operates correctly.

**Note: It is not necessary to re-test each item of local cause/effect, i.e. cause/effect where the event and response are on the same panel. this is tested as part of the stand-alone panel commissioning.**



## **10. Premier AL Motherboard Features**

Figure 5 illustrates the Premier motherboard features referred to elsewhere in the documentation.

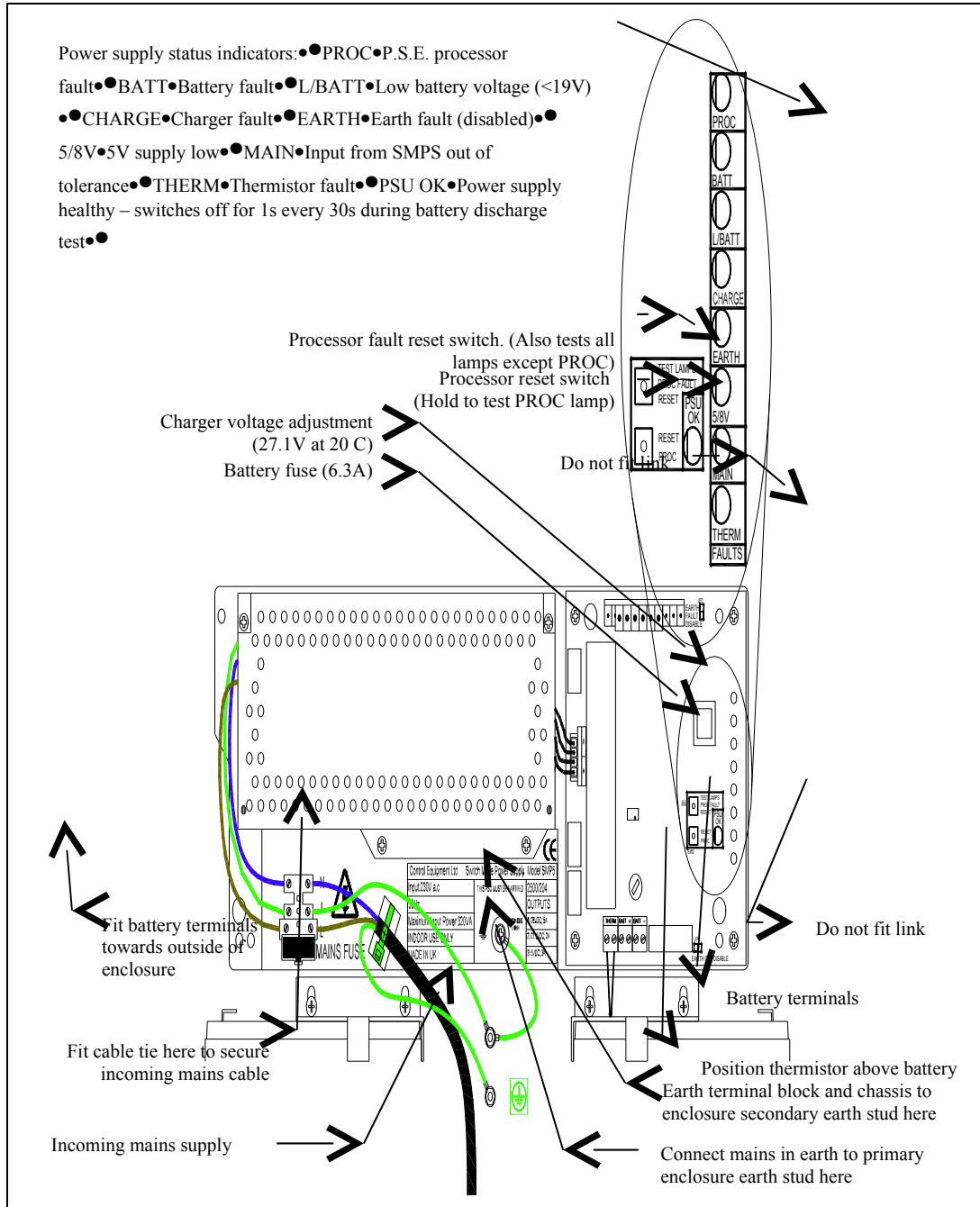


**Figure 5 - Motherboard layout**

**⚠ Lithium battery caution - danger of explosion if battery is incorrectly replaced. Replace only with CR1620 3V or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Only trained service personnel should replace this battery.**

## 11. Premier AL Power Supply Features And Connections

Figure 6 – Power supply layout shows the layout of the Premier AL panel power supply. The supply should be earthed as illustrated.



## 12.Premier AL Global Network Repeater Motherboard Features

illustrates the Premier AL Repeater motherboard features referred to elsewhere in the documentation.

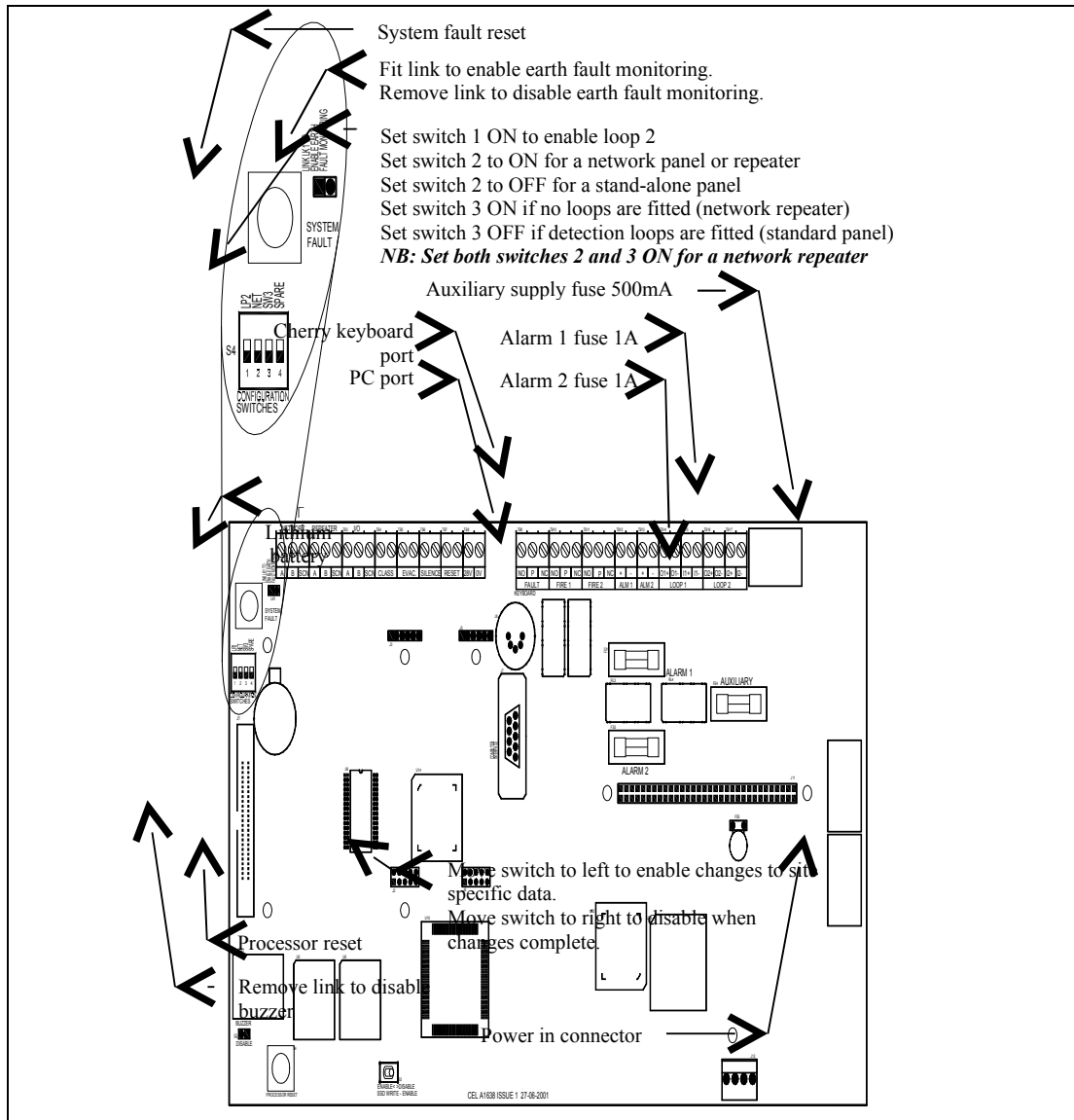


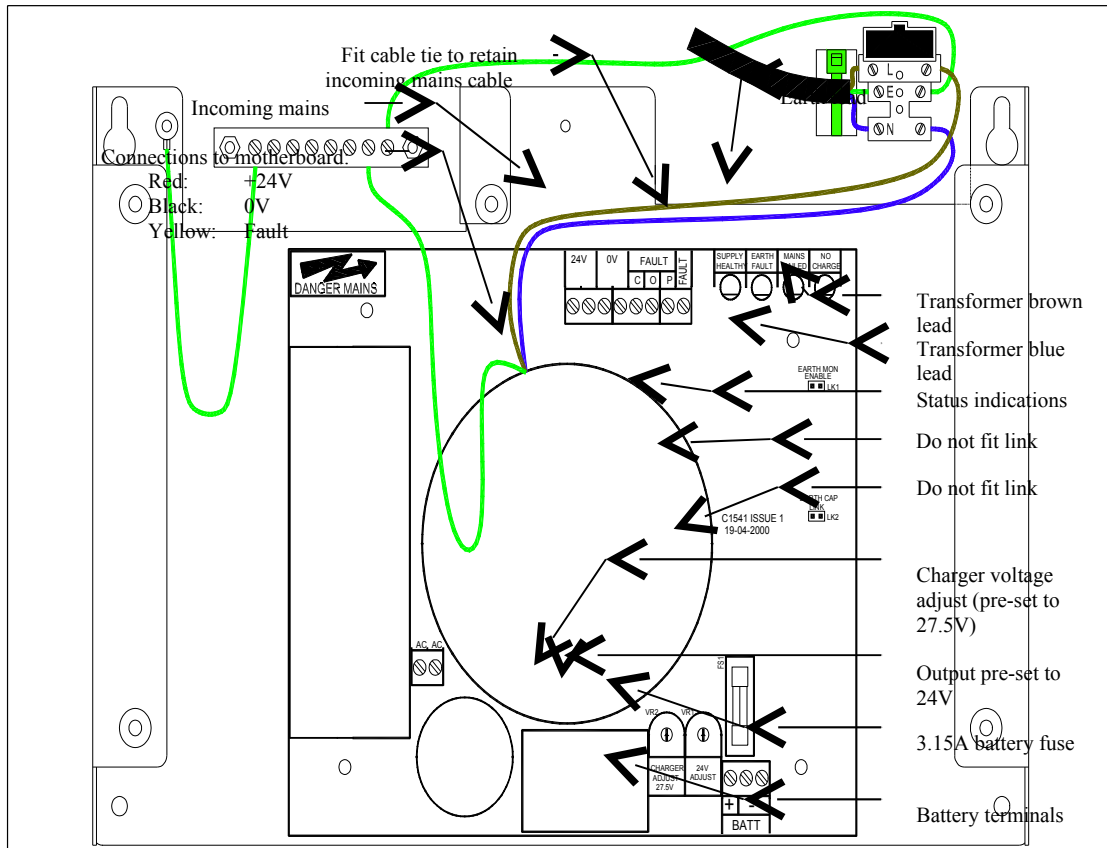
Figure 7 - A1638 Motherboard layout



**Lithium battery caution - danger of explosion if battery is incorrectly replaced. Replace only with CR1620 3V or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Only trained service personnel should replace this battery.**

### 13.Premier AL Global Network Repeater Power Supply Features And Connections

Figure 8 shows the layout of the Premier Global Network Repeater panel power supply. The supply should be earthed as illustrated.



**Figure 8 –Power supply layout**

## 14. Compatible Loop Field Devices

The Premier AL is compatible with all the devices listed in section 14.1 The Premier AL panel is warranted for use with the devices listed in section 14.1.

### 14.1 Approved Field Device Order Codes & Descriptions

Part No	Description
37-250	REP-AL Premier AL Repeater Panel
37-255	REP-AL/G Premier AL Global Network Repeater Panel
80-120	FEAO2000 Fyreye Addressable Optical Detector
80-110	FEAI2000 Fyreye Addressable Ionisation Detector
80-130	FEAH2000 Fyreye Rate of Rise Heat
80-131	FEAHH2000 Fyreye Fixed High Temperature Heat
80-140	FEAOH Fyreye Multisensor
47-055	ZTA-FR50 Fyreye Addressable Reflective Beam Detector 50 meters
47-056	ZTA-FR100 Fyreye Addressable Reflective Beam Detector 100 meters
37-150	FECO2000 Fyreye Carbon Monoxide Detector
47-110	FE+50/AD Fyreye Plus Aspiration Detector
80-050	FE-CB Fyreye Common Base
80-080	FE-ARB Fyreye Relay Base
80-090	FE-IB Fyreye Loop Isolator Base
80-101	FEA-ISB Fyreye Isolator sounder base
80-100	FEA-SB Fyreye sounder base
43-001	ZT-MCP AD Addressable Call Point (Software version V and above)
43-002	ZT-MCP AD/WP Addressable Call Point Weatherproof (Software version V and above)
42-007	ZAMT Zeta Addressable Maxitone Sounder (Software version V and above)
48-100	ZIU zeta Input unit (Software version V and above)
48105	ZIOU Zeta Input Output Unit (Software version V and above)
48-110	ZSCC Zeta Sounder Control Module
48-115	ZT-ZM Zeta Zone Monitor Unit
42-008	ZAMD Zeta Addressable Miditytone sounder
42-030	ZAST Zeta Addressable Securetone Sounder
48-020	ZTA-LE2 Zeta Addressable Remote LED Indicator

## **15.Overview Of User Functions**

This section describes an overview of the functions available to the end user.

### **15.1Change Time And Date**

The user can manually set the time and date although this should not normally be required. The current time is maintained by a dedicated battery when all power removed from the system. How to set the time and date is described in the user manual. On a network system, setting the date and time at any panel will also update the date and time at all other panels and repeaters connected to the network.

### **15.2Delay Of Operation Of Outputs**

The activation of panel outputs (alarm circuit and cause/effect) can be delayed upon detection of an automatic alarm condition to allow for the cause of the alarm to be investigated. The delay can be programmed for a period of between 1 and 10 minutes.

The delay is active for one period every day, and off for the remainder of the time.

This period is user definable and would typically be during working hours.

The delay is not operated if the alarm condition is initiated by a call point or an evacuate function. The delay may be overridden by operating the override delay button.

The user can only enable and disable the delay function.

In a network system, any outputs on another panel programmed to operate from a fire on this panel will also be delayed.

### **15.3Adjustable Sensitivity Modes**

The Premier AL panels can be configured to automatically adjust device sensitivity according to the time of day. Three different sensitivity levels can be assigned to each point. These are referred to as the day mode sensitivity level, night mode sensitivity level and the default sensitivity level.

The sensitivity modes are set as follows:

- Selecting the DAY sensitivity mode forces the appropriate trip levels the day mode value regardless of the time.
- Selecting the NIGHT sensitivity mode forces the appropriate trip levels the night mode value regardless of the time.
- Selecting the TIMER sensitivity mode alternates the appropriate trip levels between the day and night modes according to the time. The day and night times are defined through the PC cause/effect editor. A separate time can be defined for each day of the week.
- Switching OFF the day/night sensitivity mode forces the appropriate trip levels to the default value regardless of the time.

On network systems, changes to the day/night mode of a panel are passed to the network, and the other panels can be configured to automatically update their day/night mode or not as required.

### **15.4Enabling And Disabling Of Functions**

The following functions can be disabled and enabled through the user menu:

- Points (local or at another panel if part of a network)
- Zones of points (local or at another panel if part of a network)
- Sounding devices (can be global on network systems)

- Printer (local only even on network systems)
- Inputs (local or at another panel if part of a network)

### **15.5 The Event Log**

The panel stores a record of the last 200 events (local or from network) in the event log. These are individually time-stamped and can be viewed or printed as required.

### **15.6 Test Functions**

The following test functions are local only, and are available through the user menu:

- View point status – displays current analogue value type code and status bits for an address.
- Device Test – allows one or more zones of devices to be tested without operating sounder devices and panel cause/effect. The panel switches on a device LED to acknowledge correct operation of the test. No other indication is given at the panel and the device LED is automatically reset after 10 seconds. If a printer is fitted then a test confirmation message is printed for each successful device test. During the test device test the panel buzzer sounds for 2s every 30s.

Any device in a zone not in test that detects a fire responds as normal.

- Alarm test – The panel automatically operates all sounding devices for 30 seconds every 60 seconds.

### **15.7 View Suppressed Events**

System events are prioritised to clarify the display of information by the system. The events are classified in the following levels in decreasing order of priority:

- Fire
- Alert
- Fault

If events at more than one level exist on the panel, only events at the highest level will be displayed on the LCD. The scroll events switch can be used to scroll all events at this level. As events at a lower level are not shown they are called suppressed events.

A suppressed event is indicated by an LED indication on the display but the LCD message is suppressed. Suppressed events can be viewed through the user menu as described in section 23.27 and section 23.28.

For example, if fire events occur whilst a fault is present on the system, only the fire events will be displayed on the LCD. The fire condition will cause the faults to be suppressed. The scroll events switch can then be used to cycle the fire events on the LCD and the faults can be viewed through the menu function.

### **15.8 Printer Functions**

If a printer is fitted to the panel the following functions are available to the user:

- Disable printer
- Print disablements
- Print event log
- Print of device test results during one person walk testing

## **16. Overview Of Engineers Functions**

This section describes an overview of the functions available to the engineer.



On network systems these functions only affect the local panel directly, although changes to zone or control group allocation may indirectly affect other panels that use those zones or control groups in their own cause/effect.

### 16.1 Engineer Definable Access Code

The engineer's access code can be changed using the PC cause/effect editor.

**Note: If the new code is mislaid then it will not be possible to access the engineer's functions. If this occurs, contact your panel supplier. A chargeable site visit will be required.**

### 16.2 Delay Of Operation Of Outputs

This is described in section 15.2.

The engineer can set the delay start and end times, set the delay duration and enable or disable the delay.

### 16.3 Day/Night Sensitivity Mode

The times of day are only programmable via the P.C. cause/effect editor, and consist of a start time and an end time for each day of the week. The sensitivity level for each mode can be set via the menu or the PC cause/effect tool.

### 16.4 Enabling Site Specific Data Changes

All site-specific data is held in non-volatile memory. To protect this from errors the memory is protected by a write enable switch on the motherboard. This switch has to be set to the write enable position to allow any changes. If the switch is inadvertently left in the enable position when the changes are complete the panel indicates a fault condition.

### 16.5 Point Configuration

The panel loop devices can be automatically reconfigured through an engineer's menu command. The panel stores each device address and type on configuration. Any changes to the loop devices are then indicated as a fault. The system configuration can also be printed out. This shows all devices on a loop with their status.

The sensitivity of each point can also be changed to allow for ambient conditions.

Fyreye detectors can have the trip level for fire and alert configured.

It is possible using the PC Editor to define addresses on any loop for Platform Sounders. Any addresses thus configured will have their output command bit 0 operated for the standard sounder controls (evacuate, test alarms, class-change and one-person alarm walk test).

**Note: For compliance with EN54 the fire sensitivity level must be set to 55. The pre-alarm value can be set to any value**

**Note: Do not adjust the fire sensitivity level of the Fyreye high temperature heat detector. This device has an analogue count of 55 at 90 C.**

**Note: The default levels are:**

	<i>Fyreye sensor</i>
<i>Default Alert level</i>	<i>45</i>
<i>Default Fire level</i>	<i>55</i>
<i>Valid Alert Levels</i>	<i>35, 40, 45, 50</i>
<i>Valid fire levels</i>	<i>55, 60, 65, 70</i>

## 16.6 Zone Allocation

The Premier AL panels have 32 programmable zones, which are used to represent a physical area. All loop devices can be programmed into one of these zones through the engineers menu. Activation of a fire or a fault on a device will cause operation of the fire or fault indicator associated with the zone. The panel alphanumeric display will also indicate the zone number. The panel has an insert fitted to the front door suitable for text descriptions of each zone location.

The engineer can also print out all the zones with the devices allocated to the zones.

## 16.7 Group Allocation

Points can be associated with groups for cause/effect programming. These are similar in concept to zones so that cause and effect can be defined on devices within a group.

Each device may be in up to seven groups. Groups are numbered from 33 to 255.

**Note: Groups 252 to 255 are reserved for manual sensitivity override mode operation.**

## 16.8 Programmable Loop Output Cause/Effect

The Premier AL panels send output command bits to addressable points according to the system status. The bits control device functions. Some panel responses are automatic; others can be programmed by the engineer according to site-specific requirements. The default cause and effect is shown in Table 2.

**Table 2 – Default command output bits**

Device type	Output command bit operation
Addressable Sounder Devices	Bit 0 is set on evacuate, test alarms, or class-change to operate continuous alarms. The bit is cleared when the alarms are silenced, or the cause is cleared. Bit 0 is operated intermittently under one-person alarm walk test.
All smoke and heat detectors	Bit 2 is set when the device is in a fire condition to illuminate the device LED. These are cleared when the panel is reset (see note 1 below). Bit 0 (remote led) may be controlled through the site-specific programmable cause and effect. When a device is configured to support a sounder base Platform sounder, bit 0 is set to drive the sounder for evacuate, test alarms and class change. Bit 0 is also operated intermittently under one-person alarm walk test.
Zone monitor	Bit 0 is set for 3 seconds to reset the detection zone when the panel is reset. Bit 2 is set when the zone is in a fire condition to operate the zone LEDs. These are cleared when the panel is reset (see note 1 below).
BGU	Bit 2 is set when in a fire condition to operate the local LED. The bit is cleared when the panel is reset (see note 2 below).
All other device types	Site-specific programmable cause and effect.

**Note 1:** *The panel will light a maximum of 8 device LEDs on one loop to limit the total loop current in the alarm condition. A zone monitor is treated as one device for this purpose.*

**Note 2:** *Any BGU output bits programmed to operate under cause/effect will be ignored.*

Site specific cause and effect is individually programmed for each of the three output bits at each device point, although bits 1 and 2 will be ignored for smoke and heat detectors. The output bit is associated with a cause so that when the cause is active, the output is operated. The causes can be either common events or zone or group based events. In addition to these local causes, on network systems further network causes may be programmed via the PC Editing Tool, which also allows outputs to be inhibited by a cause where required.

The common events that can be used to operate loop outputs are:

- **Common fire, output cleared on silence alarms:**  
The output is operated if any fire condition is active on the panel. When the panel alarms are silenced by the user the output is cleared.
- **Common fire, output cleared on reset:**  
The output is operated if any fire condition is active on the panel. When the panel is reset by the user the output is cleared.
- 
- **Common alert, output cleared on cause clear:**  
The output is operated if any alert condition is active on the panel. When the panel is reset by the user, or the alert condition is removed, the output is cleared.
- **Common fault, output cleared on cause clear:**  
The output is operated if any fault condition is active on the panel. When the panel is reset by the user, or the fault condition is removed, the output is cleared.
- **Common indication, output cleared on cause clear:**  
The output is operated if any indication condition is active on the panel. When the panel is reset by the user, or the indication condition is removed, the output is cleared.
- **Alarms silenced:**  
The output is operated when the alarms are silenced on the panel. When the panel is reset by the user, the output is cleared.
- **Panel reset:**  
The output is set for 3 seconds when the panel is reset by the user.
- **Evacuate (including remote evacuate):**  
The output is operated when an evacuate condition is active on the panel. When the panel alarms are silenced by the user the output is cleared
- **Common disablement, output cleared on cause clear:**  
The output is operated while the Disabled led is on. The output clears when the Disabled led clears.
- **Common buzzer, output cleared on cause clear:**  
The output is operated whenever either the fire buzzer or fault buzzer is active on the panel. When the panel is reset by the user, or the fault condition is removed, the output is cleared.
-

The zone and group based events can occur on any device, or devices within the specified zone or group:

- **Fire in a zone or group, output cleared on silence alarms:**  
The output is operated if a fire condition is active in the specified group or zone. When the panel alarms are silenced by the user the output is cleared
- **Fire in a zone or group, output cleared on reset:**  
The output is operated if a fire condition is active in the specified group or zone. When the panel is reset by the user the output is cleared
- **Any two fires in a zone or group, output cleared on silence alarms:**  
The output is operated if any two fire conditions are active in the specified group or zone. When the panel alarms are silenced by the user the output is cleared
- **Any two fires in a zone or group, output cleared on reset:**  
The output is operated if any two fire conditions are active in the specified group or zone. When the panel is reset by the user the output is cleared
- **Alert in a zone or group, output cleared on cause clear:**  
The output is operated if any alert condition is active in the specified group or zone. When the panel is reset by the user, or the alert condition is removed, the output is cleared
- **Fault in a zone or group, output cleared on cause clear:**  
The output is operated if any fault condition is active in the specified group or zone. When the panel is reset by the user, or the fault condition is removed, the output is cleared
- **Indication in a zone or group, output cleared on cause clear:**  
The output is operated when an indication only event is active in the specified group or zone. When the panel is reset by the user, or the indication condition is removed, the output is cleared.

*Note: A group contains device points in the same way as a zone, but the group is used solely for cause/effect programming.*

## 16.9 Premier AL Global Repeater Panel

The Premier AL [panel] repeaters duplicate the panel indications and user controls at a location remote from the main panel. Up to 14 repeaters can be connected to a single panel using an RS485 serial connection.

*Note: The menu functions are not available at panel repeaters.*

## 16.10 Panel Input Output Expansion Boards

The Premier panels can be expanded by the use of the A1535 and A1536 expansion boards. These are located in an expanded cabinet that has an extra compartment dedicated to the expansion boards.

The A1535 provides 8 fully monitored inputs and 8 outputs. Two types of A1535 are available, one with open collector outputs and one with change over relay contacts.

The A1536 provides 8 non-monitored inputs and 8 fully monitored alarm circuits.

All expansion board inputs and outputs can be configured as part of the panel cause/effect using the menu functions or the PC configuration software. For full details of the expansion boards see documents A1535 Application, Installation and

The panel requires an A1619 interface module fitted to the motherboard to communicate with I/O boards. Note that if panel repeaters are fitted to the panel two A1619 interfaces will be required, one for the repeater communication and one for the I/O connection.

### 16.11 Panel Cause/effect Timers

The panel contains four timers for use in cause/effect programming. These are configured to operate as panel inputs and outputs. Each timer is started by driving a panel output; when the timer delay ends a corresponding panel input is operated. The timer period can be set in 1 second increments between 1 and 32000s (8 hours, 53 minutes and 20 seconds). Each timer is configured using the PC cause/effect editor and cannot be accessed through the menu.

### 16.12 Class –change Modes

The operation of the class change input, may be selected to operate output bit 0 (steady) or 1 (pulsed), of any loop sounder controllers.

## 17. Power Supply Load Calculation

The power supply load must not exceed a maximum of 4A for Premier AL Panel. To determine the maximum power supply load perform the following steps:

1. Look-up the mains failed panel load in alarm. Enter this value as  $I_{panel}$ .
2. Calculate the maximum alarm load on each loop in mA. Enter the sum of the values as  $I_{loops}$ .
3. Calculate the maximum load on the alarm circuits in mA in an alarm condition. Enter this value as  $I_{alarms}$ .
4. Calculate the load on the auxiliary supply in mA in an alarm condition. Enter this value as  $I_{aux}$ .
5. Calculate the maximum power supply load using the formula below:

$I_{panel}$       .....mA  
 $I_{loops}$       .....mA  
 $I_{alarms}$       .....mA  
 $I_{aux}$       .....mA

$$\begin{aligned}
 I_{psc} &= (I_{panel} + I_{aux} + I_{alarms} + 2 \times I_{loops})/1000 \text{ A} \\
 &= (\dots\dots\dots + \dots\dots\dots + \dots\dots\dots + 2 \times \dots\dots\dots)/1000 \text{ A} \\
 &= (\dots\dots\dots + \dots\dots\dots + \dots\dots\dots + \dots\dots\dots)/1000 \text{ A} \\
 &= (\dots\dots\dots)/1000 \text{ A} \\
 &= \dots\dots\dots \text{ A}
 \end{aligned}$$

**Warning:**  
***This current must not exceed 4A.***

**Note: A battery and loop calculation spreadsheet is available from your panel supplier to assist in site calculations**

**18. Battery Standby Capacity Calculation**

This section describes how to calculate the minimum required standby battery capacity for the control panel. To determine the battery capacity, perform the following steps:

1. Look-up the mains failed fault battery current. Enter this value as  $I_{\text{panel fault}}$ .
2. Look-up the mains failed alarm battery current. Enter this value as  $I_{\text{panel alarm}}$ .
3. Calculate the quiescent load on each loop in mA. Add these values and enter the result as  $I_{\text{loops fault}}$ . Multiply the figure by 1.5 to derive the current drawn from the battery and enter this figure in the table.
4. Calculate the maximum alarm load on each loop in mA. Add these values and enter the result as  $I_{\text{loops alarm}}$ . Multiply the figure by 1.5 to derive the current drawn from the battery
5. Calculate the maximum load on the alarm circuits in mA in an alarm condition. Enter this value as  $I_{\text{alarms}}$  and enter this figure in the table.
6. Calculate the load on the auxiliary supply in mA in an alarm condition. Enter this value as  $I_{\text{aux fault}}$ .
7. Calculate the load on the auxiliary supply in mA in an alarm condition. Enter this value as  $I_{\text{aux alarm}}$ .
8. Calculate the total battery load in fault,  $I_{\text{fault}}$ .
9. Calculate the total battery load in alarm,  $I_{\text{alarm}}$ .
10. Enter the required standby time in hours,  $T_{\text{fault}}$ .
11. Enter the required time in alarm in hours,  $T_{\text{alarm}}$ .

$I_{\text{panel fault}} =$	.....mA	$I_{\text{panel alarm}} =$	.....mA
$I_{\text{loops fault}} =$	$1.5 \times$ .....mA	$I_{\text{loops alarm}} =$	$1.5 \times$ .....mA
	=		=
		$I_{\text{alarms}} =$	.....mA
$I_{\text{aux fault}} =$	.....mA	$I_{\text{aux alarm}} =$	.....mA
$I_{\text{fault}} =$	.....mA	$I_{\text{alarm}} =$	.....mA
$T_{\text{fault}} =$	.....hrs	$T_{\text{alarm}} =$	.....hrs

12. Substitute the values in to the formula below.

$$\begin{aligned}
 C_{\text{min}} &= 1.25 \times ((T_{\text{fault}} \times I_{\text{fault}}) + 2 \times (T_{\text{alarm}} \times I_{\text{alarm}}))/1000 \text{ Ah} \\
 &= 1.25 \times ((\dots \times \dots) + 2 \times (\dots + \dots))/1000 \\
 &\quad \text{Ah} \\
 &= 1.25 \times (\dots \times 2 \times \dots)/1000 \text{ Ah} \\
 &= 1.25 \times (\dots + \dots)/1000 \text{ Ah} \\
 &= 1.25 \times \dots/1000 \text{ Ah} \\
 &= \dots/1000 \text{ Ah} \\
 &= \dots \text{ Ah}
 \end{aligned}$$

13. Select the next highest available battery size.

**Notes:**

1. *The maximum battery capacities which can be charged according to BFPSA recommendations are - 34Ah*
2. *Any battery which cannot be contained in the c.i.e. enclosure must be located in an enclosure adjacent to the c.i.e.*
3. *The approved Premier AL panel comprises internally mounted 12Ah batteries.*

## **19.Circuit Connection Details**

### **19.1Auxiliary Supply**

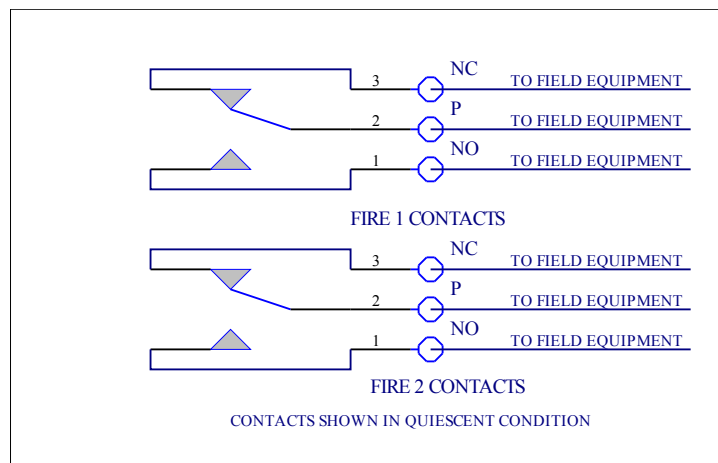
An auxiliary supply is available to power external field equipment from the panel. This is nominally rated at 28V (24V for Premier AL Global Network Repeater) but varies during mains failed conditions. The maximum load is 500mA, the output is fused and fuse failure will be indicated as a panel fault. The auxiliary supply terminals are labelled 28V and 0V.

**Note: If equipment draws current from the auxiliary supply during the mains failed condition this must be included in the battery capacity calculations.**

### **19.2Use Of Auxiliary Outputs**

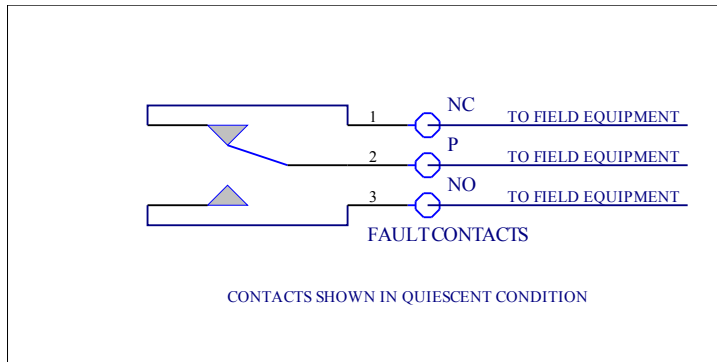
**Warning: The volt-free auxiliary relay contacts must not be used to directly switch any voltage which exceeds 30VDC.**

Auxiliary changeover contacts are provided which operate on fire and fault conditions. There are two sets of auxiliary fire contacts. These switch on any fire condition and can be programmed to operate on remote evacuate (full remote evacuate mode) or to remain inactive on remote evacuate (partial remote evacuate mode). Programming the remote evacuate mode is described in section 24.16. The configuration of the relay contacts is shown in Figure 9.



**Figure 9 – Auxiliary fire contact connection details**

The single set of auxiliary fault contacts operate on any panel fault condition. This output is failsafe and is active in a system fault, or if the system suffers failure of all power supplies. The configuration of the relay contacts is shown in Figure 10.



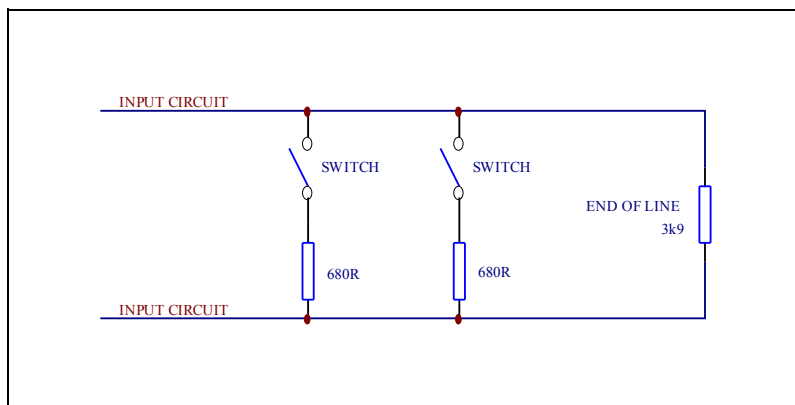
**Figure 10 – Auxiliary fault contact connection details**

### 19.3 Use Of Auxiliary Inputs

Auxiliary inputs are provided to allow remote operation of the following functions:

- Fault
- Evacuate
- Silence
- Reset

Each input circuit is fully monitored for open and short circuit faults. To activate an input a 680 ohm resistor should be connected across the input circuit by a normally open switch contact. Two switches are shown in Figure 11 although there is no limit to the number of switches.

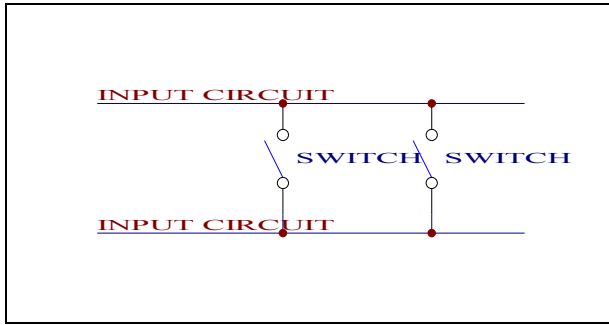


**Figure 11 – Monitored input circuit configuration**

**Note:** *To prevent unauthorised operation of the systems all auxiliary inputs must be operated by key-switches. The keys to these switches should be held with the access control key.*

Additionally there is a class change input. This is a non-monitored, normally open circuit which operates all sounders whilst active. The panel does not display any indication whilst this input is active. The connection diagram for the class change input is shown in Figure 12.

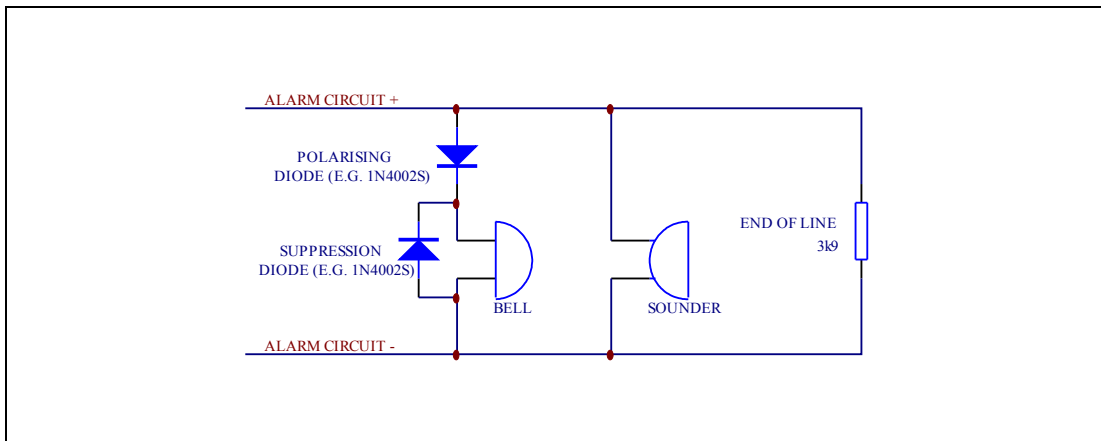




**Figure 12 – Class change input circuit configuration**

### 19.4 Alarm Circuits

The Premier AL panel have two alarm circuits, each rated at 1A. The circuits are reverse polarity monitored for open and short circuit faults. To allow monitoring all devices must be polarised. To prevent damage to the control panel bells must also have a suppression diode fitted as shown in Figure 13. The circuit must be terminated with a 3k9 end of line resistor.



**Figure 13 – Alarm circuit configuration**

The voltage drop on each alarm circuit should be calculated to ensure that the minimum voltage at the end of each circuit exceeds the minimum required by each sounding device.

The voltage at the end of the circuit is given by:

$$\text{Minimum alarm voltage} = 21\text{V} - (\text{Alarm current in amps} \times 2 \times \text{alarm circuit length in metres} \times \text{cable resistance per core per m})$$

The resistance per metre as follows:

- 1.5mm<sup>2</sup> – 15mΩ per metre per core
- 2.5mm<sup>2</sup> – 9mΩ per metre per core

### 20. Loop Design

To reduce the impact of short circuits on loop cabling, isolators must be fitted between the physical boundaries on zones. For guidance on the design of zone see BS5839 part 1. The minimum operating voltage of all loop devices must also be maintained under maximum load conditions.

## 20.1 Loop Isolators

Loop isolators should be fitted to all loops at the boundaries between zones. These restrict the devices lost during a short circuit condition to those between the two isolators either side of the fault. To comply with EN54-2 there should be no more than 32 devices fitted between isolators. This includes conventional devices fitted to zone monitor outstation, however Zeta Alarm systems recommends that no more than 20 detectors or the equivalent load between two isolators. Exceeding this quantity may prevent the loop from powering up correctly.

## 20.2 Loop Voltage Drop Calculation

The minimum voltage on the loop must always exceed 17V. To determine the maximum voltage drop for each loop perform the following steps:

1. Calculate the maximum alarm load on the loop in mA. Enter this value as  $I_{loop}$ .
2. Count the total number of isolators. Enter this value as  $N_{iso}$ .
3. Calculate the length of loop cable in kilometres. Enter this value as  $L_{loop}$ .
4. Enter the resistance per metre as follows:
  - $1.5\text{mm}^2 - 15\text{m}\Omega$  per metre per core
  - $2.5\text{mm}^2 - 9\text{m}\Omega$  per metre per core
 This is value  $R_{core}$ .
5. Calculate the minimum voltage at the end of the loop using the equation below:

$I_{loop}$       .....mA  
 $N_{iso}$       .....  
 $L_{loop}$       .....km  
 $R_{core}$       ..... $\Omega\text{m}^{-1}$  core<sup>-1</sup>

$$\begin{aligned}
 V_{loop} &= 27 - ((I_{loop}/1000) \times (3.9 + (0.2 \times N_{iso}) + (2 \times L_{loop} \times R_{core}))) \text{ V} \\
 &= 27 - (((...../1000) \times (3.9 + (0.2 \times .....)) + (2 \times ..... \times ... \\
 &\quad \dots))) \text{ V} \\
 &= 27 - (..... \times (3.9 + ..... + .....)) \text{ V} \\
 &= 27 - (..... \times .....) \text{ V} \\
 &= 27 - ..... \text{ V} \\
 &= ..... \text{ V}
 \end{aligned}$$

This figure is a worst case voltage with all devices located at the end of the loop.

**Warning: This voltage must not be below 17V.**

*Note: A battery and loop calculation spreadsheet is available from your panel supplier to assist in site calculations*

## **21.Panel Events**

This section describes how events are reported and how the user should respond.

### **21.1The Fire Condition**

When a fire condition is detected automatically by a sensor, operation of a manual call point or operation of the evacuate switch the panel responds as follows.

- The COMMON FIRE and relevant zone LEDs pulse.
- The internal buzzer sounds intermittently.
- The top two lines of the LCD display details of the event.
- Note that in a network system, if the fire condition is on another panel, the top line message will give the number of the source panel, but will not give a zone number. This also applies to other types of event.

1:001	Z01	OPT	FIRE
DEVICE		LOCATION	

- The sounder circuits are operated.
- System outputs are operated according to the panel programming.
- The event is printed if a printer is fitted.

Subsequent fires will be displayed in the lower half of the window. The top two lines retain the first fire information. The scroll messages key will scroll current fires in the top window. The lower window always shows the last event. During a fire condition the display of events of a lower priority is suppressed. To view these events refer to section 23.27.

#### **21.1.1User Actions**

#### **21.1.2Carry out the required fire drill.**

**If a printer is fitted the user actions will be printed out in addition to the automatic system events.**

## 21.2 The Alert Condition

A pre-alarm is indicated if the analogue value of a smoke detector rises above a pre-determined level, but not sufficiently to indicate a fire condition. It may indicate that a fire condition is imminent.

The panel responds as follows:

- The ALERT LED pulses.
- The internal buzzer sounds continuously.
- The LCD displays details of the event.

1:001	Z01	OPT	ALERT
DEVICE			LOCATION

- The event is printed if a printer is fitted.
- Subsequent events will be displayed in the same way as for fire events.
- 

During an alert condition the display of events of a lower priority is suppressed. To view these events refer to section 23.27.

### 21.2.1 User Actions

- Switch the ACCESS CONTROLS keyswitch to the ON position to enable the controls.
- Press the SILENCE BUZZER switch.

**The ALERT and BUZZER SILENCED LEDs go steady.**

**The internal buzzer silences.**

- Investigate and rectify the cause of the alarm.
- When the cause of the alarm is cleared press the RESET switch to return the system to the quiescent condition.
- 

**If a printer is fitted the user actions will be printed out in addition to the automatic system events.**

### 21.3 The Fault Condition

A fault is indicated if any part of the system enters an abnormal condition.

The panel responds as follows:

- The COMMON FAULT LED pulses. If the fault is with an alarm circuit the ALARM FAULT/DISABLEMENT LED will also pulse.
- The internal buzzer sounds continuously.
- The LCD displays details of the event.

1:001	Z01	OPT	FAULT
DEVICE LOCATION			

- The event is printed if a printer is fitted.

During a fault condition the display of events of a lower priority is suppressed. To view these events refer to section 23.27.

#### 21.3.1 User Actions

- Switch the ACCESS CONTROLS keyswitch to the ON position to enable the controls.
- Press the SILENCE BUZZER switch.

**The FAULT and BUZZER SILENCED LEDs go steady.**

**The internal buzzer silences.**

- Investigate and rectify the cause of the fault.
- When the cause of the fault is cleared press the RESET switch to return the system to the quiescent condition.

**If a printer is fitted the user actions will be printed out in addition to the automatic system events.**

#### **21.4The Maintenance Condition**

This facility is not used on the Fyreye detectors and is for future use.

## **22.The System Fault Condition**

In the event of a complete system failure, a system fault will be indicated.

The panel responds as follows:

- The SYSTEM FAULT and GENERAL FAULT LED illuminate. All other LEDs will be extinguished.
- The internal buzzer sounds continuously.
- The LCD backlight switches off. The text will display the details of the last condition. This should be ignored.
- The local alarm circuits will be silenced if they are active.
- All loop devices will remain in the condition they were in when the fault occurred. Some sounders may thus remain active.

***Warning: The system is completely inactive.***

### **22.1.1User Actions**

- Call your service engineer immediately.

### **22.1.2Service Engineer Actions**

- Open the outer panel door.
- Operate the SYSTEM FAULT RESET switch on the motherboard. This is identified in Figure 5
- Operate the PROCESSOR RESET switch on the motherboard. This is identified in Figure 5
- Observe that the panel restarts and displays the POWER UP DELAY message on the LCD.
- If the panel does not restart properly then the panel requires replacement.

## **22.2Quiescent Condition**

In its normal or quiescent condition the supply healthy LED will be illuminated to indicate that mains power is present on the system. The LCD will display the time and the company name.

If the delay is active the delay LED will be illuminated. There will be no other LEDs illuminated

## **22.3Access Mode**

When the access controls key is inserted and turned to the ON position the LCD backlight will be switched on.

## 23. User Controls And Indications

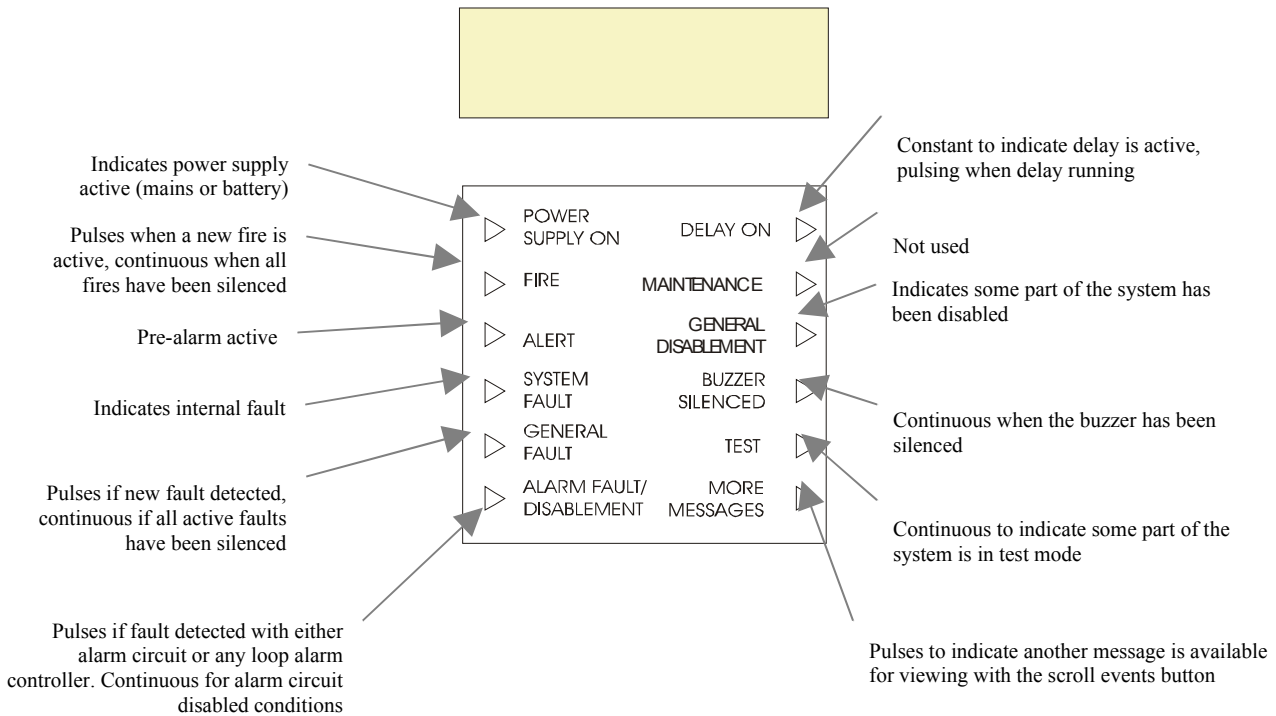
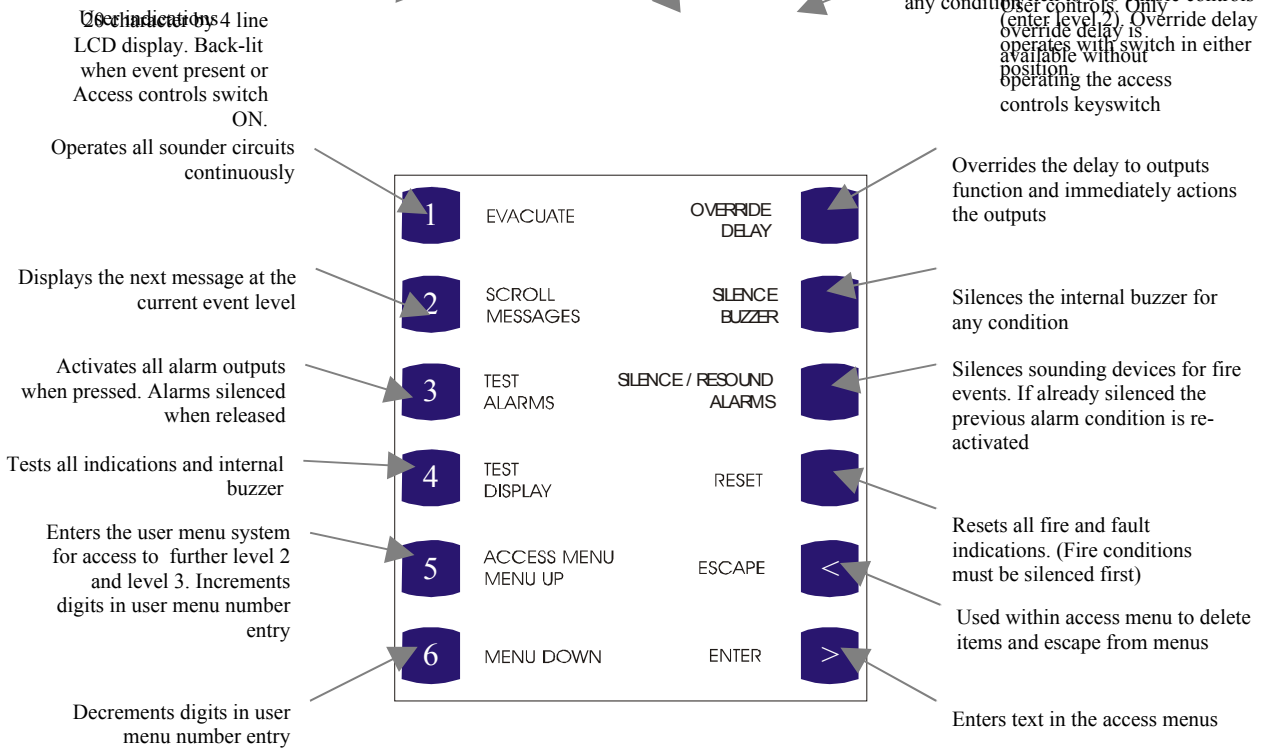
The diagram illustrates the user controls and indications on a fire alarm control panel. It is divided into several sections:

- Top Left:** A blank rectangular area.
- Top Right:** A vertical column of six numbered buttons:
  - 1: EVACUATE
  - 2: SCROLL MESSAGES
  - 3: TEST ALARMS
  - 4: TEST DISPLAY
  - 5: ACCESS MENU MENU UP
  - 6: MENU DOWN
- Middle Right:** A vertical column of six function buttons:
  - OVERRIDE DELAY
  - SILENCE BUZZER
  - SILENCE/ RESOUND ALARMS
  - RESET
  - ESCAPE
  - ENTER
- Middle Left:** A grid of 16 pairs of indicator lights, each with a right-pointing triangle symbol. The pairs are labeled:
  - POWER SUPPLY ON / DELAY ON
  - FIRE / MAINTENANCE
  - ALERT / GENERAL DISABLEMENT
  - SYSTEM FAULT / BUZZER SILENCED
  - GENERAL FAULT / TEST
  - ALARM FAULT/ DISABLEMENT / MORE MESSAGES
- Center:** A circular 'ACCESS CONTROLS' button with a pencil icon.
- Bottom Left:** A 4x4 grid of 32 indicator lights, numbered 1 to 32. An arrow points to light 27.
- Bottom Center:** A table titled 'ZONAL FIRE AND FAULT INDICATION' with two columns of numbers 1 through 16.
- Bottom Right:** A CE mark and a horizontal slot.

**Zonal fire (red) and fault (yellow) indications. Pulse to indicate a non-silenced event, continuous to indicate an event has been silenced**

Zonal fire (red) and fault (yellow) indications. Pulse to indicate a non-silenced event, continuous to indicate an event has been silenced





Indication by 4 line  
LCD display. Back-lit  
when event present or  
Access controls switch  
ON.

## 24. User Functions

To access the user menu perform the following operations:

1. Move the ACCESS CONTROLS lock switch to position 1 using the access controls key.
2. Press 5 on the user controls to access the menu function. The following menu will be displayed:

```
1 = USER MENU
ENTER ACCESS CODE
FOR ENGINEERS MENU
  0000
```

3. Press 1 to enter the user menu. The following menu will be displayed:

```
1=TIME/DATE  2=MODES
3=EN/DIS     4=VIEW
5=TEST       6=PRINT
SELECT 1..6, <=EXIT
```

This is referred to as the user main menu screen and the description of the user functions begin from this screen.

**Note: The system automatically leaves the user menu after a period of time. This automatic timeout prevents the system being left in the user or engineers access mode unintentionally. The timeout period depends on the function selected and is between 1 and 15 minutes.**

### 23.1 How To Enter Numbers

All menu selections are made using direct key access using keys 1 to 6.

Entry of digits is performed by the following method:

1. On entering a menu screen which requires a number to be entered a default number will be displayed. For example when setting the time the current time is displayed. The cursor will underline the first digit.
2. Press MENU UP or MENU DOWN to increment or decrement the digit.
3. When the digit is correct press > (ENTER) to move onto the next digit.
4. Press < to cancel the menu screen and move to the previous screen.
5. Change the remaining digits as required. On all but the first digit the < key moves to the previous digit. When the cursor is positioned on the last digit pressing > (ENTER) enters the value.

### 23.2 How To Set The Time And Date

1. Enter the user menu as described in section 23.
2. Press 1 to select option 1. The screen will display the current date:

```
SET DATE?  30/05/99

>=ENTER VALUE
<=BACK/EXIT
```

Silences the internal buzzer for  
any condition. Only  
silenced re-arms the  
previous alarm condition  
available without  
operating the access  
controls keyswitch

3. Make any changes to the date as described in 23.1. The separators will be added automatically. The following screen gives an example:

```
SET DATE?   31/05/99
           >=ENTER VALUE
           <=BACK/EXIT
```

4. With the cursor positioned under the last digit press enter to save the date. A new screen will appear.
5. Enter the time as 2 hour digits (24 hour clock), 2 minute digits and 2 second digits. The separators will be added automatically. The following screen gives an example:

```
SET TIME?   15:12:00
           >=ENTER VALUE
           <=BACK/EXIT
```

6. Change the time as required and press enter to save the value and return to the user menu screen.

### 23.3 How To Enable And Disable The Panel Delay

1. Enter the user menu as described in section 23.
2. Press 2 to select option 2. The following screen will be displayed:

```
PANEL MODES
1 = PANEL DELAY
2 = DAY/NIGHT
SELECT 1..2, <=EXIT
```

3. Press 1 to select option 1. The following screen will be displayed:

```
DELAY IS 01 MINUTES
09:00:00 TO 17:00:00
DELAY IS ENABLED
1=DISABLE, <=EXIT
```

4. Press 1 to toggle the delay to a disabled condition. The following screen will be displayed:

```
DELAY IS 01 MINUTES
09:00:00 TO 17:00:00
DELAY IS DISABLED
1=ENABLE, <=EXIT
```

5. Press 1 to toggle the delay to an enabled condition if required.
6. Press escape to return to the user menu screen.

### 23.4 How To Enable Day Sensitivity Mode.

1. Enter the user menu as described in section 23.
2. Press 2 to select option. The following screen will be displayed:

```
PANEL MODES
1 = PANEL DELAY
2 = DAY/NIGHT
SELECT 1..2, <=EXIT
```

3. Press 2 to select option 2. The following screen will be displayed:

```
DAY/NIGHT MODE 1
1=DAY,      2=NIGHT,
3=TIMER,   4=OFF
<=EXIT
```

4. The display shows the day mode 1 selected. Selecting this option forces the appropriate trip levels and sensitivity codes to the 'Day Time' value regardless of the time.

### 23.5 How To Enable Night Sensitivity Mode.

1. Enter the user menu as described in section 23.
2. Press 2 to select option. The following screen will be displayed:

```
PANEL MODES
1 = PANEL DELAY
2 = DAY/NIGHT
SELECT 1..2, <=EXIT
```

3. Press 2 to select option 2. The following screen will be displayed:

```
DAY/NIGHT MODE 1
1=DAY,      2=NIGHT,
3=TIMER,   4=OFF
<=EXIT
```

4. Display shows the day mode 1 selected, to select Night mode press 2. The following screen will be displayed.

```
DAY/NIGHT MODE 2
1=DAY,      2=NIGHT,
3=TIMER,   4=OFF
<=EXIT
```

5. Selecting the Night mode option forces the appropriate trip levels and sensitivity codes to the 'Night Time' value regardless of the time.

### 23.6 How To Enable Timed Sensitivity Mode.

1. Enter the user menu as described in section 23.
2. Press 2 to select option. The following screen will be displayed:

```
PANEL MODES
1 = PANEL DELAY
2 = DAY/NIGHT
SELECT 1..2, <=EXIT
```

3. Press 2 to select option 2. The following screen will be displayed:

```
DAY/NIGHT MODE 2
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

4. Display shows the night mode 2 selected, to select Timed mode press 3. The following screen will be displayed.

```
DAY/NIGHT MODE 3
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

5. Selecting the Timer option enables the active trip levels and sensitivity codes depend upon the day of the week and the time.

### **23.7How To Enable Off Sensitivity Mode.**

1. Enter the user menu as described in section 23.
2. Press 2 to select option. The following screen will be displayed:

```
PANEL MODES
1 = PANEL DELAY
2 = DAY/NIGHT
SELECT 1..2, <=EXIT
```

3. Press 2 to select option 2. The following screen will be displayed:

```
DAY/NIGHT MODE 3
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

4. Display shows the Timer mode 3 selected, to select the Off mode press 4. The following screen will be displayed.

```
DAY/NIGHT MODE 4
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

5. Selecting the Off option forces the active trip levels and sensitivity codes to their Default value regardless of the time.

### 23.8 How To Enable And Disable A Single Point (Stand-Alone Panel)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS, 000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS: 1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE, 2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4, <=EXIT
```

5. To disable a single point press 1. The following screen will be displayed:

```
SINGLE POINT EN/DIS
LOOP? 1

>=ENTER, <=BACK/EXIT
```

6. Change the loop number and press enter to continue.

```
SINGLE POINT EN/DIS
LOOP 01
POINT? 001
>=ENTER, <=BACK
```

7. Enter the point number and press enter. The next screen displays the current device disablement status. The following screen shows the device is enabled with the option to disable.

```
SINGLE POINT EN/DIS
1:023 ENABLED
1=DISABLE POINT
SELECT 1, <=EXIT
```

8. Press 1 to toggle the point disablement status. The screen will display the previous page:

```
ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW,      4=ENABLE ALL
SELECT 1..4,  <=EXIT
```

Press escape to exit the menu one level at a time.

### 23.9 How To Enable And Disable A Single Point (Network Panel)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS, 000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS: 1=POINTS
2=ZONES,  3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW,      4=ENABLE ALL
SELECT 1..4,  <=EXIT
```

6. To disable a single point press 1. The following screen will be displayed:

```
SINGLE POINT EN/DIS
PANEL? 001

>=ENTER, <=BACK/EXIT
```

7. Enter the panel number and press enter to continue.

```
PAN001 POINT EN/DIS
LOOP? 1

>=ENTER, <=BACK/EXIT
```

8. Change the loop number and press enter to continue.

```
PAN001 POINT EN/DIS
LOOP 01
POINT? 001
>=ENTER,      <=BACK
```

9. Enter the point number and press enter. The next screen displays the current device disablement status. The following screen shows the device is enabled with the option to disable.

```
PAN001 POINT EN/DIS
1:023 ENABLED
1=DISABLE POINT
SELECT 1,      <=EXIT
```

10. Press 1 to toggle the point disablement status. The screen will display the previous page:

```
ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4,  <=EXIT
```

Press escape to exit the menu one level at a time.

### 23.10 How To Enable And Disable A Range Of Points (Stand-Alone Panel)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 1. The following screen will be displayed:



```
ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW,  4=ENABLE ALL
SELECT 1..4,  <=EXIT
```

5. To disable a range of points press 2. The following screen will be displayed:

```
RANGE POINTS EN/DIS
LOOP? 1

>=ENTER,  <=BACK/EXIT
```

6. Enter the loop number and press enter to continue.

```
RANGE POINTS EN/DIS
LOOP 01
POINT? 001
>=ENTER,      <=BACK
```

7. Enter the number of the first point and press enter.

```
RANGE POINTS EN/DIS
LOOP 01
POINTS 015 TO 015
>=ENTER,      <=BACK
```

8. Enter the number of the second point and press enter.

```
1:015-030 EN/DIS
1=ENABLE POINTS
2=DISABLE POINTS
SELECT 1..2,  <=EXIT
```

9. Choose the option required:
- To enable the range of points displayed press 1
  - To disable the range of points press 2
  - To exit without making any changes press escape

The screen will display the previous page:

```
ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW,  4=ENABLE ALL
SELECT 1..4,  <=EXIT
```

10. Press escape to exit the menu one level at a time.

### 23.11 How To Enable And Disable A Range Of Points (Network Panel)

- Enter the user menu as described in section 23.
- Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS,>=MENU,<=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE, 2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4, <=EXIT
```

To disable a range of points press 2. The following screen will be displayed:

```
RANGE POINTS EN/DIS
PANEL? 001
>=ENTER, <=BACK/EXIT
```

Enter the panel number and press enter to continue.

```
PAN001 POINTS EN/DIS
LOOP? 1
>=ENTER, <=BACK/EXIT
```

6. Enter the loop number and press enter to continue.

```
PAN001 POINTS EN/DIS
LOOP 01
POINT? 001
>=ENTER, <=BACK
```

7. Enter the number of the first point and press enter.

```
PAN001 POINTS EN/DIS
LOOP 01
POINTS 015 TO 015
>=ENTER,      <=BACK
```

8. Enter the number of the second point and press enter.

```
PAN001 POINTS EN/DIS
1:015-030
1=ENABLE, 2=DISABLE
SELECT 1..2, <=EXIT
```

9. Choose the option required:

- i) To enable the range of points displayed press 1
- ii) To disable the range of points press 2
- iii) To exit without making any changes press escape

If the local panel number was entered then the appropriate local points will be enabled/disabled.

If another panel number was entered then a suitable command will be sent via the network to the appropriate panel.

The screen will display the previous page:

```
ENABLE/DISABLE POINT
1=SINGLE, 2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4, <=EXIT
```

10. Press escape to exit the menu one level at a time.

### 23.12 How To View Disabled Points

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS, 000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE, 2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4, <=EXIT
```

5. To view the disabled points press 3. The following screen will be displayed:

```
DISABLED POINTS
PREPARING REPORT
PLEASE WAIT
<=EXIT
```

The report will be displayed as follows for a stand-alone panel:

```
DISABLED POINTS
1:1-5, 9, 22-30, 125
2:55-70
1=BACK, 2=NEXT, <=EXIT
```

or as follows for a network panel:

```
DISABLED POINTS
5:1:1-5, 9, 22-30, 125
5:2:55-70
1=BACK, 2=NEXT, <=EXIT
```

Where the indicated disablements are for panel 5.

6. Press 1 and 2 to scroll through the screens displaying the disabled devices. When all the devices have been viewed the following messages appears

```
DISABLED POINTS
NO MORE DISABLEMENTS
1=BACK, <=EXIT
```

7. Press escape to exit the menu one level at a time.

### 23.13 How To Enable All Points (Local Panel Only)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS, 000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE,    2=RANGE
3=VIEW,    4=ENABLE ALL
SELECT 1..4, <=EXIT
```

5. Press 4 to enable all the points. This operates on points disabled individually, as a range or as a zone. The following screen will be displayed:

```
ALL POINTS ENABLED

<=EXIT
```

6. Press escape to exit the menu one level at a time.

### 23.14 How To Enable And Disable A Zone Of Devices (Stand-Alone Panel)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS,>=MENU,<=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 2. The following screen will be displayed:

```
ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

5. To disable a single zone press 1. The following screen will be displayed:

```
SINGLE ZONE EN/DIS
ZONE? 01

>=ENTER, <=BACK/EXIT
```

6. Enter the zone number and press enter to continue. The next screen displays the current zone disablement status. The example below shows zone 31 is enabled with the option to disable.

```
SINGLE ZONE EN/DIS
ZONE 31 ENABLED
1=DISABLE ZONE
SELECT 1, <=EXIT
```

7. Press 1 to toggle the zone disablement status. The screen will display the previous page:

```
ENABLE/DISABLE ZONE
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

8. Press escape to exit the menu one level at a time.

### 23.15 How To Enable And Disable A Zone Of Devices (Network Panel)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices

:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 2. The following screen will be displayed:

```
ENABLE/DISABLE ZONE
1=SINGLE,      2=RANGE
3=VIEW
SELECT 1..3,  <=EXIT
```

5. To disable a single zone press 1. The following screen will be displayed:

```
SINGLE ZONE EN/DIS
PANEL? 001

>=ENTER, <=BACK/EXIT
```

6. Enter the panel number and press enter to continue.

```
PAN001 ZONE EN/DIS
ZONE? 01

>=ENTER, <=BACK/EXIT
```

7. Enter the zone number and press enter to continue. The next screen displays the current zone disablement status. The example below shows zone 31 is enabled with the option to disable.

```
PAN001 ZONE EN/DIS
ZONE 31 ENABLED
1=DISABLE ZONE
SELECT 1,      <=EXIT
```

8. Press 1 to toggle the zone disablement status. The screen will display the previous page:

```
ENABLE/DISABLE ZONE
1=SINGLE,      2=RANGE
3=VIEW
SELECT 1..3,  <=EXIT
```

9. Press escape to exit the menu one level at a time.

### 23.16 How To Enable And Disable A Range Of Zones (Stand-Alone Panel)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS, 000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUT
SELECT 1..5, <=EXIT
```

4. Press 2. The following screen will be displayed:

```
ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

5. To disable a range of zones press 2. The following screen will be displayed:

```
RANGE ZONES EN/DIS
ZONE? 01
>=ENTER, <=BACK/EXIT
```

6. Enter the first zone number and press enter to continue.

```
RANGE ZONES EN/DIS
ZONES 11 TO 11
>=ENTER, <=BACK/EXIT
```

7. Enter the number of the second zone and press enter.

```
RANGE ZONES EN/DIS
ZONES 11 TO 12
1=ENABLE,  2=DISABLE
SELECT 1..2, <=EXIT
```

8. Choose the option required:  
i) To enable the range of points displayed press 1  
ii) To disable the range of points press 2  
iii) To exit without making any changes press escape

The screen will display the previous page:

```
ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

9. Press escape to exit the menu one level at a time.



### 23.17 How To Enable And Disable A Range Of Zones (Network Panel)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS,>=MENU,<=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUT
SELECT 1..5, <=EXIT
```

4. Press 2. The following screen will be displayed:

```
ENABLE/DISABLE ZONE
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

5. To disable a range of zones press 2. The following screen will be displayed:

```
RANGE ZONES EN/DIS
PANEL? 001

>=ENTER, <=BACK/EXIT
```

6. Enter the panel number and press enter to continue.

```
PAN001 ZONES EN/DIS
ZONE? 01

>=ENTER, <=BACK/EXIT
```

6. Enter the first zone number and press enter to continue.

```
PAN001 ZONES EN/DIS
ZONES 11 TO 11

>=ENTER, <=BACK/EXIT
```

7. Enter the number of the second zone and press enter.

```
PAN001 ZONES EN/DIS
ZONES 11 TO 12
1=ENABLE, 2=DISABLE
SELECT 1..2, <=EXIT
```

8. Choose the option required:
  - i) To enable the range of points displayed press 1
  - ii) To disable the range of points press 2
  - iii) To exit without making any changes press escape

If the local panel number was entered then the appropriate local zones will be enabled/disabled.

If another panel number was entered then a suitable command will be sent via the network to the appropriate panel.

The screen will display the previous page:

```
ENABLE/DISABLE ZONE
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

9. Press escape to exit the menu one level at a time.

### 23.18 How To View Disabled Zones

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS,>=MENU,<=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 2. The following screen will be displayed:

```
ENABLE/DISABLE ZONE
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

5. To view the disabled zones press 3. The following screen will be displayed:

```
DISABLED ZONES
PREPARING REPORT
PLEASE WAIT
<=EXIT
```

The report will be displayed as follows for a stand-alone panel:

```
DISABLED ZONES
1-3, 10, 12, 15-18, 25,
30
1=BACK, 2=NEXT, <=EXIT
```

or will be displayed as follows for a network panel:

```
DISABLED ZONES
5: 1-3, 10, 12, 15-18, 25,
6: 30
1=BACK, 2=NEXT, <=EXIT
```

6. Press 1 and 2 to scroll through the screens displaying the disabled devices. When all the devices have been viewed the following messages appears

```
DISABLED ZONES
NO MORE DISABLEMENTS
1=BACK, <=EXIT
```

7. Press escape to exit the menu one level at a time.

### 23.19 How To Enable And Disable The Local Printer

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS, 000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS: 1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 3. The screen will display the current printer disablement status. This example shows the printer is disabled:

```
PRINTER IS DISABLED
1=ENABLE PRINTER

SELECT 1,      <=EXIT
```

5. Press 1 to toggle the printer disablement status or escape to exit without changing the printer disablement status. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

6. Press escape to exit the menu one level at a time.

### 23.20 How To Enable And Disable All Sounding Devices

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS,>=MENU,<=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 4. The screen will display the current sounder disablement status. This example shows the sounding devices are disabled:

```
SOUNDERS DISABLED
1=ENABLE SOUNDERS

SELECT 1,      <=EXIT
```

5. Press 1 to toggle the sounder disablement status or escape to exit without changing the sounder disablement status. On a network system, if the status is changed then this will be reported to the network, and any other panels that are configured to accept this condition will update their own sounder disablement status. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

6. Press escape to exit the menu one level at a time.

### 23.21 How To Enable And Disable Expansion Board Inputs (Stand-Alone Panel)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS,>=MENU,<=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 5. The following screen will be displayed:

```
INPUT DISABLEMENT
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

5. To disable a single input press 1. The following screen will be displayed:

```
IDENTIFY INPUT
INPUT? Q01

>=ENTER, <=BACK/EXIT
```

6. Enter the input number and press enter to continue. The next screen displays the current input disablement status. The example below shows input 1 is enabled with the option to disable.

```
IDENTIFY INPUT
INPUT 010 ENABLED
1=DISABLE INPUT
SELECT 1, <=EXIT
```

7. Press 1 to toggle the input disablement status. The screen will display the previous page:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

8. Press escape to exit the menu one level at a time.

### 23.22 How To Enable And Disable An Expansion Board Input (Network Panel)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS, 000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS: 1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press 5. The following screen will be displayed:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

5. To disable a single input press 1. The following screen will be displayed:

```
RANGE INPUTS EN/DIS
PANEL? 001

>=ENTER, <=BACK/EXIT
```

6. Enter the panel number and press enter to continue.

```
PAN001 INPUT EN/DIS
INPUT? 001

>=ENTER, <=BACK/EXIT
```

7. Enter the input number and press enter to continue. The next screen displays the current input disablement status. The example below shows input 1 is enabled with the option to disable.

```
PAN001 INPUT EN/DIS
INPUT 010 ENABLED
1=DISABLE INPUT
SELECT 1, <=EXIT
```

8. Press 1 to toggle the input disablement status. The screen will display the previous page:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

9. Press escape to exit the menu one level at a time.

### 23.23 How To Enable And Disable A Range Of Expansion Board Inputs (Stand-Alone Panel)

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS,>=MENU,<=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUT
SELECT 1..5, <=EXIT
```

4. Press 5. The following screen will be displayed:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

5. To disable a range of inputs press 2. The following screen will be displayed:

```
IDENTIFY INPUT RANGE
INPUT? 001

>=ENTER, <=BACK/EXIT
```

6. Enter the first input number and press enter to continue.

```
IDENTIFY INPUT RANGE
INPUTS 001 TO 001

>=ENTER, <=BACK/EXIT
```

7. Enter the number of the second zone and press enter.

```
IDENTIFY INPUT RANGE
INPUTS 001 TO 002
1=ENABLE, 2=DISABLE
SELECT 1..2, <=EXIT
```

8. Choose the option required:  
I) To enable the range of inputs displayed press 1  
ii) To disable the range of inputs press 2  
iii) To exit without making any changes press escape

The screen will display the previous page:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

9. Press escape to exit the menu one level at a time.

### **23.24 How To Enable And Disable A Range Of Expansion Board Inputs (Network Panel)**

1. Enter the user menu as described in section 23.  
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS, 000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs; all sounders and the printer are disabled. These values only relate to the status of the local panel.



3. Press enter to continue. The following screen will be displayed :

```
EN/DIS: 1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUT
SELECT 1..5, <=EXIT
```

4. Press 5. The following screen will be displayed:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

5. To disable a range of inputs press 2. The following screen will be displayed:

```
RANGE INPUTS EN/DIS
PANEL? 001

>=ENTER, <=BACK/EXIT
```

6. Enter the panel number and press enter to continue

```
PAN001 INPUTS EN/DIS
INPUT? 001

>=ENTER, <=BACK/EXIT
```

7. Enter the first input number and press enter to continue

```
PAN001 INPUTS EN/DIS
INPUTS 001 TO ? 001

>=ENTER, <=BACK/EXIT
```

8. Enter the number of the second zone and press enter.

```
PAN001 INPUTS EN/DIS
INPUTS 001 TO 002
1=ENABLE, 2=DISABLE
SELECT 1..2, <=EXIT
```

9. Choose the option required:
- i) To enable the range of inputs displayed press 1
  - ii) To disable the range of inputs press 2
  - iii) To exit without making any changes press escape

If the local panel number was entered then the appropriate local inputs will be enabled/disabled.

If another panel number was entered then a suitable command will be sent via the network to the appropriate panel.

The screen will display the previous page

:

```
INPUT DISABLEMENT
1=SINGLE,      2=RANGE
3=VIEW
SELECT 1..3,  <=EXIT
```

9. Press escape to exit the menu one level at a time.

### 23.25 How To View Disabled Expansion Board Inputs

1. Enter the user menu as described in section 23.
2. Press 3 to select option 3. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs, all sounders and the printer are disabled. These values only relate to the status of the local panel.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES,      3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5,  <=EXIT
```

4. Press 5. The following screen will be displayed:

```
INPUT DISABLEMENT
1=SINGLE,      2=RANGE
3=VIEW
SELECT 1..3,  <=EXIT
```

5. To view the disabled inputs press 3. The following screen will be displayed:

```
DISABLED INPUTS
PREPARING REPORT
PLEASE WAIT
<=EXIT
```

The report will be displayed as follows for a stand-alone panel:

```
DISABLED INPUTS
1-3, 10, 12, 15-18, 25,
30
1=BACK, 2=NEXT, <=EXIT
```

or displayed as follows for a network panel:

```
DISABLED INPUTS
1:1-3,10,12,15-18,25
2:30
1=BACK,2=NEXT,<=EXIT
```

6. Press 1 and 2 to scroll through the screens displaying the disabled devices. When all the devices have been viewed the following messages appears

```
DISABLED INPUTS
NO MORE DISABLEMENTS
1=BACK, <=EXIT
```

7. Press escape to exit the menu one level at a time.

### 23.26 How To View The Event Log

1. Enter the user menu as described in section 23.
2. Press 4 to select option 4. The following screen will be displayed:

```
1=VIEW EVENT LOG
2=VIEW SUPPRESSED
EVENTS
SELECT 1..2, <=EXIT
```

3. Press 1 to view the event log. A screen showing the first event in the log will be displayed:

```
20/05/96 13:24:08
1:007 Z02 BGU FIRE
text for point 1:007
1=BACK,2=NEXT,<=EXIT
```

4. Press 1 or 2 to scroll forwards or backwards through the event log. The first line shows the event time and date. When the last event is displayed and 2 is pressed, the following screen will be displayed:

```
END OF EVENT LOG
NO MORE EVENTS TO
DISPLAY
1=BACK, <=EXIT
```

5. Press escape to exit the menu one level at a time.

### 23.27 How To View Suppressed Alerts, Faults And Indications

1. Enter the user menu as described in section 23.
2. Press 4 to select option 4. The following screen will be displayed:

```

1=VIEW EVENT LOG
2=VIEW SUPPRESSED
EVENTS
SELECT 1..2, <=EXIT

```

3. Press 2 to view the suppressed events. A screen showing the different event types will be displayed

:

```

1=ALERTS 2=FAULTS
3=INDICATIONS
4=DISABLEMENTS
SELECT 1..4, <=EXIT

```

4. Select the type of event to be viewed by pressing 1, 2 or 3. The first event will be displayed.

```

1:011 Z02 HEAT ALERT
text for point 1:011

1=BACK, 2=NEXT, <=EXIT

```

5. Scroll through the events by pressing 1 or 2. When the last event is reached a screen will display a message similar to the following:

```

NO MORE SUPPRESSED
ALERTS

1=BACK, <=EXIT

```

6. Press escape to exit the menu one level at a time.

### **23.28 How To View Suppressed Disablements**

1. Enter the user menu as described in section 23.
2. Press 4 to select option 4. The following screen will be displayed:

```

1=VIEW EVENT LOG
2=VIEW SUPPRESSED
EVENTS
SELECT 1..2, <=EXIT

```

3. Press 2 to view the suppressed events. A screen showing the different event types will be displayed:

```

1=ALERTS 2=FAULTS
3=INDICATIONS
4=DISABLEMENTS
SELECT 1..4, <=EXIT

```

4. Select disablements by pressing 4. The screen will display the current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS,000 INPS
SOUNDERS, PRINTER
00 ZNS,>=MENU,<=EXIT
```

This example shows no zones, 3 points, no inputs, all sounders and the printer are disabled.

5. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

6. Select the appropriate option. If there is more than one screen available use the keys to scroll through the pages.
7. Press escape to exit the menu one level at a time.

### 23.29 How To View The Status Of A Point

There are two status display modes. In the enabled mode the panel will respond to all device events. If a device is operated manually or a self test changes the device condition the panel will respond to the event.

If a point status is viewed in the disabled mode then the panel will no longer respond to device events, although any change in status will be displayed. This is useful for testing the analogue devices using the self test command bit, or for testing ancillary devices without putting the panel into a fire condition.

1. Enter the user menu as described in section 23.
2. Press 5 to select option 5 - Test. The following screen will be displayed:

```
TEST MODE
1=VIEW POINT STATUS
2=ONE PERSON TESTS
SELECT 1..2, <=EXIT
```

3. Press 1 to view point status. The following screen will be displayed:

```
POINT TEST
1=POINT DISABLED
2=POINT ENABLED
SELECT 1..2, <=EXIT
```

- Select 1 or 2. If the point is disabled the panel will no longer respond to events from this point. The screen display indicates whether the device is enabled or disabled throughout the test. This shows the disabled mode.

```
POINT STATUS DISABLE.
LOOP? 1
>=ENTER, <=BACK/EXIT
```

- Enter the loop number and press enter. Enter the point address number and press enter. The following screen will be displayed:

```
ADR VML TYPE STS CMD
001 025 HEAT 000 000
ZONE 001 CMD BITS=321
4=PREV, 5=NEXT, <=EXIT
```

Keys to toggle the command bits:  
 Bit 2 is toggled by key 3;  
 bit 1 is toggled by key 2;  
 bit 0 is toggled by key 1.

- To display other points press 4 or 5 to change the device number. To view devices on another loop press escape to return to the previous menu screen.

Upon exiting the status mode the command bits are returned to panel control. If a device has undergone a self test in the disabled status mode the panel may detect a fire condition before the analogue value returns to normal.

### 23.30 How To Test Devices Using One Person Test Mode

In this test any fire event within any of the selected zones will not be reported on the panel display, but is printed and recorded in the event log with the description “TEST” instead of “FIRE”. No alarms or relays will be operated, but the led on the point in fire will illuminate for ten seconds

Any fire events from zones not in test mode will clear the menu page from the screen in order to report the genuine fire. The test mode will remain active, even though the menu is not active, and will continue to be indicated by the test and zone fault LEDs.

If this occurs it will be necessary to re-enter the menu system to cancel the test. As soon as point walk test is selected the currently selected test zones will be identified on the LCD. This menu function **DOES NOT** time out although the buzzer sounds every 10s as a reminder.

- Enter the user menu as described in section 23.
- Press 5 to select option 5 - Test. The following screen will be displayed:

```
TEST MODE
1=VIEW POINT STATUS
2=ONE PERSON TESTS
SELECT 1..2, <=EXIT
```

3. Press 2 to enter the one person test mode. The following screen will be displayed :

```
ONE PERSON TEST
1=POINT WALK TEST
2=ALARM WALK TEST
SELECT 1..2, <=EXIT
```

4. Select option 1. The following screen will be displayed:

```
POINT TEST ZONES
ZONE? Q01

>=ENTER, <=BACK/EXIT
```

5. Enter the zone to be tested and press enter. The following screen will be displayed:

```
POINT TEST ZONES

1,
1=ZONE, 2=TEST, <=EXIT
```

6. If another zone is to be included in the test press 1 and add further zones as necessary. Press 2 to begin the test. The screen will indicate test mode is active.

```
POINT TEST ACTIVE
IN ZONES
1,
1=CANCEL TEST, <=EXIT
```

In addition the TEST LED will be illuminated  
When the test is complete press 1 to cancel the test mode.

### **23.31 How To Test Sounding Devices Using One Person Test Mode**

In this test all of the alarms will sound for 30 seconds every 60 seconds for audibility checking. This applies to the local alarm circuits, all alarm controller ancillary devices and loop powered sounders. This test mode will be automatically cancelled if a fire condition occurs.

1. Enter the user menu as described in section 23.
2. Press 5 to select option 5 - Test. The following screen will be displayed:

```
TEST MODE
1=VIEW POINT STATUS
2=ONE PERSON TESTS
SELECT 1..2, <=EXIT
```

3. Press 2 to enter the one person test mode. The following screen will be displayed:

```
ONE PERSON TEST
1=POINT WALK TEST
2=ALARM WALK TEST
SELECT 1..2, <=EXIT
```

4. Select option 2 to begin the alarm test. The following screen will be displayed:

```
ALARM TEST IS ON

<=CANCEL
```

5. Press escape to cancel the test.

### 23.32 How To Clear The Print Queue

1. Enter the user menu as described in section 23.
2. Press 6. The following screen will be displayed  
:

```
1=CLEAR PRINT QUEUE
2=PRINT EVENT LOG
3=PRINT DISABLEMENTS
SELECT 1..3, <=EXIT
```

3. Press 1 to clear the print queue. The following screen will confirm the operation:

```
PRINT QUEUE CLEARED

<=EXIT
```

4. Press escape to exit to the printer main menu.

### 23.33 How To Print The Event Log

1. Enter the user menu as described in section 23.
2. Press 6. The following screen will be displayed  
:

```
1=CLEAR PRINT QUEUE
2=PRINT EVENT LOG
3=PRINT DISABLEMENTS
SELECT 1..3, <=EXIT
```

3. Press 2 to print the event log. If the printer is currently disabled a message will appear. Press 1 to override the disablement.

```
PRINT EVENT LOG
PRINTER IS DISABLED
1=IGNORE DISABLEMENT
<=EXIT
```



4. The following screen will be displayed while the event log is printed:

```
PRINTING
      EVENT LOG
      <=CANCEL
```

Press escape at any time to cancel printing.

5. When the event log is printed the following screen will appear:

```
PRINTING
      EVENT LOG
      COMPLETE
      <=EXIT
```

6. Press escape to exit to the printer main menu.

### 23.34 How To Print Disablements

1. Enter the user menu as described in section 23.
2. Press 6. The following screen will be displayed:

```
1=CLEAR PRINT QUEUE
2=PRINT EVENT LOG
3=PRINT DISABLEMENTS
SELECT 1..3, <=EXIT
```

3. Press 3 to print the disablements. If the printer is currently disabled a message will appear. Press 1 to override the disablement.

```
PRINT EVENT LOG
PRINTER IS DISABLED
1=IGNORE DISABLEMENT
<=EXIT
```

4. The following screen will be displayed while the disablement report is prepared:

```
PRINT DISABLEMENTS
PREPARING REPORT
PLEASE WAIT
<=CANCEL
```

**1 Press escape at any time to cancel the report**

5. While the report is being printed the following screen will be displayed:

```
PRINTING
  DISABLEMENTS

<=CANCEL
```

Press escape at any time to cancel the report.

6. When the disablement report is printed the following screen will appear:

```
PRINTING
  DISABLEMENTS
  COMPLETE
  <=EXIT
```

7. Press escape to exit to the printer main menu.

## **24.Engineer Functions**

### **1To access the engineers menu functions perform the following operations**

:

1. Move the lock switch to position 1 using the access controls key.
2. Press 5 on the user controls to access the menu function. The following menu will be displayed:

```
1 = USER MENU
ENTER ACCESS CODE FOR
ENGINEER MENU
  0000
```

3. Enter the engineer's access code 8812 as described in section 23.1. Press \* to enter the engineer's access menu

:

```
ENGINEER ACCESS MENU
1=USER FUNCTIONS
2=ENGINEER FUNCTIONS
SELECT 1..2, <=EXIT
```

5. Either press 1 to enter the user's main menu (see user functions for details) or press 2 to enter the engineer's main menu:

```
1=PANEL SETUP
2=TEXT EDIT
3=NETWORK SETUP
SELECT 1..3, <=EXIT
```

This is referred to as the engineer's main menu screen and the description of the engineers functions begin from this screen except for editing the panel delay.  
**Note: The system automatically leaves the engineers menu after a period of time. This automatic timeout prevents the system being left in the user or engineers**

*access mode unintentionally. The timeout period depends on the function selected and is between 1 and 15 minutes.*

## 24.2 How To Enable Changes To Site Specific Data

The engineer's functions allow changes to site-specific data (SSD). This data is held in flash EEPROM that is write protected by a manual switch motherboard. This is labelled "SSD WRITE-ENABLE".

The switch must normally be positioned in the disable mode. If it is not the panel will indicate a SSD write protect fault. When site-specific data is to be saved the panel will check the position of the switch and request it is moved to the enable position. After saving changes move the switch into the disable position.

***Warning: When the panel requests the switch is moved to the write enable position it is possible to escape without moving the switch. If this occurs then the changes to the site-specific data WILL NOT BE SAVED. This can occur unintentionally if the escape switch is pressed several times in succession to exit from a site-specific data editing menu screen.***

## 24.3 How To Edit The Panel Delay

1. Enter the user menu by pressing 1 in action 1 of section 24. If the engineer's access code is not entered the function will only allow the delay to be enabled and disabled.
2. Press 2 to select option 2. The following screen will be displayed:

```
PANEL MODES
1=PANEL DELAY
2=DAY/NIGHT
SELECT 1..2, <=EXIT
```

3. Press 1 to select option 1. The following screen will be displayed:

```
1=DELAY ENABLE
2=DELAY TIMES
3=DELAY DURATION
SELECT 1..3, <=EXIT
```

4. Press 1 to select option 1. The following screen will be displayed:

```
DELAY IS 01 MINUTES
09:00:00 TO 17:00:00
DELAY IS ENABLED
1=DISABLE, <=EXIT
```

5. Press 1 to toggle the delay to a disabled or enabled condition. The following screen will be displayed:

```
DELAY IS 01 MINUTES
09:00:00 TO 17:00:00
DELAY IS DISABLED
1=ENABLE, <=EXIT
```

6. Press escape to return to the delay menu screen:

```
1=DELAY ENABLE
2=DELAY TIMES
3=DELAY DURATION
SELECT 1..3, <=EXIT
```

7. Press 2 to edit the delay start and finish times. The following screen will be displayed:

```
START TIME: 09:00:00

>=ENTER VALUE
<=BACK/EXIT
```

8. Edit the time and press enter when it is correct. The following screen will be displayed:

```
START TIME: 09:00:00
END TIME: 17:00:00
>=ENTER VALUE
<=BACK/EXIT
```

9. The end time is displayed. Edit the time and press enter when the time is correct. The delay menu will be displayed

:

```
1=DELAY ENABLE
2=DELAY TIMES
3=DELAY DURATION
SELECT 1..3, <=EXIT
```

10. Press 3 to set the delay duration. The following screen will be displayed:

```
DELAY IS 01 MINUTES
5=UP, 6=DOWN
>=SAVE VALUE
<=EXIT
```

11. Press 5 or 6 to increment or decrement the delay in 1 minute steps. When the required value is displayed press enter to save the delay or press escape to exit without changing the delay.

12. Press escape to return to the user menu screen.

#### **24.4 How To Change Device Configuration Of A Loop**

1. Enter the engineers menu as described in section 24.
2. Press 1 to select panel set-up. The following screen will be displayed:

```
1=LOOP SETUP
2=INPUT/OUTPUT SETUP
3=REPEATER SETUP
SELECT 1..2, <=EXIT
```

3. Press 1, 1, 1, 3. The following screen will be displayed:

```
CONFIGURE LOOP
LOOP? 1

>=ENTER, <=BACK/EXIT
```

4. Enter the loop number and press enter. A configuration message will be displayed while the loop is configured:

```
CONFIGURING LOOP 1

<=CANCEL
```

Loop configuration takes around 30 seconds per loop. Pressing escape at any time will cancel the configuration process without overwriting the current loop configuration data.

When the configuration process is complete a loop contents report will be generated. This indicates the types of devices on the loop.

```
LOOP 1:009 MCP
          082 SENSORS
          012 MODULES
>=SAVE, <=EXIT
```

Press enter to save the configuration data or escape to exit without overwriting the current loop configuration.

## 24.5 How To View Device Configuration Of A Loop

1. Enter the engineers menu as described in section 24.
2. Press 1 to select panel set-up. The following screen will be displayed:

```
1=LOOP SETUP
2=INPUT/OUTPUT SETUP
3=REPEATER SETUP
SELECT 1..2, <=EXIT
```

3. Press 1, 1, 1, 1. The following screen will be displayed:

```
VIEW LOOP CONTENTS
LOOP? 1

>=ENTER, <=BACK/EXIT
```

4. Enter the loop number and press enter. A loop contents report will be generated. This indicates the types of devices on the loop

```
LOOP 1:009 MCP
      082 SENSORS
      012 MODULES
      <=EXIT
```

5. Press escape to exit the menu screen.

## 24.6 How To Print The Device Configuration Of A Loop

1. Enter the engineers menu as described in section 24.
2. Press 1 to select panel set-up. The following screen will be displayed:

```
1=LOOP SETUP
2=INPUT/OUTPUT SETUP
3=REPEATER SETUP
SELECT 1..2, <=EXIT
```

3. Press 1, 1, 1, 2. The following screen will be displayed:

```
PRINT LOOP CONTENTS
LOOP? 1

>=ENTER, <=BACK/EXIT
```

4. Enter the loop number and press enter. If the printer is disabled at this can be overridden by pressing 1:

```
PRINT LOOP CONTENT
PRINTER IS DISABLED
1=IGNORE DISABLEMENT
<=EXIT
```

5. The following screen will be displayed while the report is generated:

```
PRINT LOOP CONTENT
PREPARING REPORT
PLEASE WAIT
<=CANCEL
```

Press escape to cancel the report generation at any time.

6. The report will be printed while the screen displays a message. Printing can be cancelled at any time by pressing escape.

```
PRINTING
LOOP 1 CONTENT

<=CANCEL
```

7. When printing is complete the following screen will be displayed:

```
PRINTING
  LOOP 1 CONTENT
  COMPLETE
  <=EXIT
```

8. Press escape to exit the menu screen.

#### 24.7 How To Edit The Sensitivity Of A Point

The sensitivity of a point for both alert and fire conditions can be adjusted. For the Fyreye sensors the analogue trip levels for alert and fire can be changed.

Note: For compliance with EN54 the fire sensitivity level must be set to 55. The pre-alarm value can be set to any value

**Note: Do not adjust the fire sensitivity level of the Fyreye high temperature heat detector. This device has an analogue count of 55 at 90 C.**

**Note: Changing the sensitivity of a point only changes the current point sensitivity. For example, changing the sensitivity of a point whilst the panel is in day mode does not affect the sensitivity values of that point for the default or night mode sensitivity.**

#### 24.8 How To Edit The Allocation Of Devices To A Zone

1. Enter the engineers menu as described in section 24.
2. Press 1 to select panel set-up. The following screen will be displayed:

```
1=LOOP SETUP
2=INPUT/OUTPUT SETUP
3=REPEATER SETUP
SELECT 1..2, <=EXIT
```

3. Press 1, 2. The following screen will be displayed:

```
1=EDIT POINT ZONES
2=PRINT POINT ZONES
3=VIEW POINT ZONES
SELECT 1..3, <=EXIT
```

4. Press 1 to edit the point zone allocation:

```
EDIT ZONES
ENTER ZONE? 001
>=ENTER, <=BACK/EXIT
```

5. Enter the number of the zone to be edited and press enter. The following screen will be displayed if zone 7 is entered:

```
EDIT ZONE 07
LOOP? 1
>=ENTER, <=BACK/EXIT
```

6. Enter the loop number of the devices to be added or removed from the zone and press enter. The following screen is displayed if loop 1 is entered:

```
EDIT ZONE 07
LOOP 01
POINT? 001
>=ENTER,      <=BACK
```

7. Enter the first device in a range to be added or removed from the zone. This example shows device 15:

```
EDIT ZONE 07
LOOP 01
POINTS 015 TO 015
>=ENTER,      <=BACK
```

8. Enter the last device to be added or removed from the zone. If a single device is to be edited then enter the same number as the first device.

```
EDIT ZONE 07
LOOP 01
POINTS 015 TO 022
1=ADD, 2=REM, <=EXIT
```

9. Press 1 to add the devices to the zone or 2 to remove the devices from the zone. If no changes are required press escape to exit. The menu will return to the zone allocation menu:

```
1=EDIT POINT ZONES
2=PRINT POINT ZONES
3=VIEW POINT ZONES
SELECT 1..3, <=EXIT
```

## 24.9 How To Print The Allocation Of Devices To A Zone

1. Enter the engineers menu as described in section 24.
2. Press 1 to select panel set-up. The following screen will be displayed:

```
1=LOOP SETUP
2=INPUT/OUTPUT SETUP
3=REPEATER SETUP
SELECT 1..2, <=EXIT
```



3. Press 1, 2. The following screen will be displayed:

```
1=EDIT POINT ZONES
2=PRINT POINT ZONES
3=VIEW POINT ZONES
SELECT 1..3, <=EXIT
```

4. Press 2 to print the point zone allocation. If the printer is disabled press 1 to override the disablement when prompted to do so. The report will be prepared:

```
PRINT POINT ZONES
PREPARING REPORT
PLEASE WAIT
<=CANCEL
```

Press escape to cancel the report at any time.

5. While the report is printing the following message is displayed:

```
PRINTING
POINT ZONES

<=CANCEL
```

Press escape to cancel the report at any time.

6. When the report is complete the following message is displayed:

```
PRINTING
POINT ZONES
COMPLETE
<=EXIT
```

7. Press escape to exit the screen.

#### **24.10 How To View The Allocation Of Devices To A Zone**

1. Enter the engineers menu as described in section 24.
2. Press 1 to select panel set-up. The following screen will be displayed:

```
1=LOOP SETUP
2=INPUT/OUTPUT SETUP
3=REPEATER SETUP
SELECT 1..2, <=EXIT
```

3. Press 1, 2. The following screen will be displayed:

```
1=EDIT POINT ZONES
2=PRINT POINT ZONES
3=VIEW POINT ZONES
SELECT 1..3, <=EXIT
```

4. Press 3 to view the allocation of points to a zone:

```
VIEW ZONES
ZONE? 001

>=ENTER, <=BACK/EXIT
```

5. Enter the zone to be viewed and press enter. While the report is generated the following message is displayed:

```
VIEW ZONE 13
PREPARING REPORT
PLEASE WAIT
<=EXIT
```

Press escape to cancel the report at any time.

6. The first screen of the report is displayed:

```
VIEW ZONE 13
LIST OF POINTS HERE

1=BACK, 2=NEXT, <=EXIT
```

7. Press 1 and 2 to move through the list of points in the zone indicated. When the last page has been displayed The following screen will be displayed:

```
VIEW ZONE 13
NO MORE POINTS

1=BACK, <=EXIT
```

8. Press escape to exit the screen.

### **24.11 How To Edit The Allocation Of Points To A Group**

1. Enter the engineers menu as described in section 24.
2. Press 1 to select panel set-up. The following screen will be displayed:

```
1=LOOP SETUP
2=INPUT/OUTPUT SETUP
3=REPEATER SETUP
SELECT 1..2, <=EXIT
```

3. Press 1, 3, 1. The following screen will be displayed:

```
1=EDIT POINT GROUPS
2=PRINT POINT GROUPS
3=VIEW POINT GROUPS
SELECT 1..3, <=EXIT
```

4. Press 1 to edit the point group allocation:

```
EDIT POINT GROUPS
GROUP? 033

>=ENTER, <=BACK/EXIT
```

5. Enter the number of the group to be edited and press enter. The following screen will be displayed if group 68 is entered:

```
EDIT GROUP 068
LOOP? 1

>=ENTER, <=BACK/EXIT
```

6. Enter the loop of the devices to be added or removed from the group and press enter. The following screen is displayed if group 68 is entered:

```
EDIT GROUP 068
LOOP 01
POINT? 001
>=ENTER, <=BACK
```

7. Enter the first device in a range to be added or removed from the group. This example shows device 15:

```
EDIT GROUP 068
LOOP 01
POINTS 015 TO 015
>=ENTER, <=BACK
```

8. Enter the last device to be added or removed from the group. If a single device is to be edited then enter the same number as the first device.

```
EDIT GROUP 068
LOOP 01
POINTS 015 TO 022
1=ADD, 2=REM, <=EXIT
```

9. Press 1 to add the devices to the group or 2 to remove the devices from the group. If no changes are required press escape to exit. The menu will return to the group allocation menu:

```
1=EDIT POINT GROUPS
2=PRINT POINT
GROUPS
3=VIEW POINT GROUPS
SELECT 1..3,
<=EXIT
```

## 24.12 How To View The Allocation Of Devices To A Group

1. Enter the engineers menu as described in section 24.
2. Press 1 to select panel set-up. The following screen will be displayed:

```
1=LOOP SETUP
2=INPUT/OUTPUT
SETUP
3=REPEATER SETUP
SELECT      1..2,
<=EXIT
```

3. Press 1, 3, 1. The following screen will be displayed:

```
1=EDIT POINT GROUPS
2=PRINT      POINT
GROUPS
3=VIEW POINT GROUPS
SELECT      1..3,
<=EXIT
```

4. Press 3 to view the allocation of points to a group:

```
VIEW GROUPS
GROUP? 033

>=ENTER,
<=BACK/EXIT
```

5. Enter the group to be viewed and press enter. While the report is generated the following message is displayed:

```
VIEW GROUP 68
  PREPARING REPORT
  PLEASE WAIT
  <=EXIT
```

Press escape to cancel the report at any time.

6. The first screen of the report is displayed:

```
VIEW GROUP 68
LIST OF POINTS HERE

1=BACK, 2=NEXT, <=EXIT
```

7. Press 1 and 2 to move through the list of points in the group indicated. When the last page has been displayed The following screen will be displayed:

```
VIEW GROUP 68
NO MORE POINTS

1=BACK,
<=EXIT
```

8. Press escape to exit the screen.

**24.13 How To Print The Allocation Of Devices To A Group**

1. Enter the engineers menu as described in section 24.
2. Press 1 to select panel set-up. The following screen will be displayed:

```
1=LOOP SETUP
2=INPUT/OUTPUT SETUP
3=REPEATER SETUP
SELECT 1..2, <=EXIT
```

3. Press 1, 3, 1. The following screen will be displayed:

```
1=EDIT POINT GROUPS
2=PRINT POINT GROUPS
3=VIEW POINT GROUPS
SELECT 1..3, <=EXIT
```

4. Press 2 to print the point group allocation. If the printer is disabled press 1 to override the disablement when prompted to do so. The report will be prepared:

```
PRINT POINT GROUPS
PREPARING REPORT
PLEASE WAIT
<=CANCEL
```

Press escape to cancel the report at any time.

5. While the report is printing the following message is displayed:

```
PRINTING
POINT GROUPS

<=CANCEL
```

Press escape to cancel the report at any time.

6. When the report is complete the following message is displayed:

```
PRINTING
POINT GROUPS
COMPLETE
<=EXIT
```

7. Press escape to exit the screen.

## 24.14 How To Edit Loop Output Cause And Effect

To edit the loop output cause/effect enter the engineers menu and select:

1:Panel set-up; 1:Loop set-up; 3:Loop Cause Effect; 2:Edit Loop Output C/E

1. Enter the loop number of the device.
2. Enter the point number.
3. The cause/effect for output bit 0 for the device is displayed

```
CAUSES FOR 1:001 BT0
NO MORE CAUSES

>=OK, 3=NX, 4=+, <=EXIT
```

4. Either:
  - i) Press > to save the data and move to the next output bit for the same point and return to step 1.
  - ii) Press < to exit without saving changes to the current device.
  - iii) Press 3 to move to the next screen if more cause/effect is available. The display will show NO MORE CAUSES if no more data is available.
  - iv) Press 4 to add more causes. The display is as follows:

```
CAUSES FOR 1:001 BT0
1=GROUP CAUSE
2=COMMON CAUSE
SELECT 1..2, <=EXIT
```

5. Either:
  - i) Select option 1 to add a group cause. Enter the group number.
  - ii) Select option 2 to add a common cause.
6. Select the cause by moving between the menu pages with the > key and entering a number on the keypad.
7. Repeat steps 3, 4 and 5 until all causes have been added.

## 24.15 How To Print Loop Output Cause And Effect

To edit the loop output cause/effect enter the engineers menu and select:

1:Panel set-up; 1:Loop set-up; 3:Loop Cause Effect; 3:Print Loop Output C/E

1. The following screen is displayed:

```
PRINT LOOP OP C/E
1=SINGLE 2=RANGE
3=ALL
SELECT 1..3 <=EXIT
```

2. Select the option and enter the device specification accordingly.
3. When printing is complete the following message will appear:

```
PRINTING LOOP OUTPUT
CAUSE EFFECT
COMPLETE
<=EXIT
```

4. Press < to exit the print loop output cause/effect menu.

#### **24.16 How To Change The Remote Evacuate Mode**

The panel can be configured to respond to the activation of the remote evacuate input in two ways. In both modes the panel operates all sounding devices. In partial evacuate the auxiliary fire contact is not operated. In full evacuate mode the auxiliary fire contact is operated whilst the input is active.

To change the evacuate mode enter the engineers menu and select:

1:Panel set-up; 2:input/output set-up; 1:Remote evacuate mode.

1. Press 1 to toggle the remote evacuate mode.
2. Press > to enter the new mode or press < to escape without changing the remote evacuate mode.

#### **24.17 How To Edit The Panel Company Text Display**

1. Plug a Cherry keyboard into the 5-pin DIN connector on the motherboard.
2. Enter the engineers menu.
3. Select 2:Text edit; 1:Edit Company Name
4. Enter text using the keyboard.
5. Press return on the keyboard or > to store the text. Alternatively, press escape on the keyboard or < on the keypad to retain the existing text.

#### **24.18 How To Edit Point Location Text**

1. Plug a Cherry keyboard into the 5-pin DIN connector on the motherboard.
2. Enter the engineers menu.
3. Select 2:Text edit; 2:Edit point text
4. Select the loop number.
5. Select the point number.
6. Enter the point text using the keyboard.
7. Press return on the keyboard or > to store the text. The next address is displayed. Repeat steps 1 to 7.
8. When text entry is complete press escape on the keyboard or < on the keypad to exit the menu.

#### **24.19 How To Edit Expansion Input Text**

1. Plug a Cherry keyboard into the 5-pin DIN connector on the motherboard.
2. Enter the engineers menu.
3. Select 2:Text edit; 3:Edit input text
4. Select the input number.
5. Enter the input text using the keyboard.
6. Press return on the keyboard or > to store the text. The next input is displayed. Repeat steps 1 to 7.
7. When text entry is complete press escape on the keyboard or < on the keypad to exit the menu.

## 24.20 How To Configure The Number Of Panel Repeaters

To change the number of panel repeaters enter the engineers menu and select:  
1:Panel set-up; 3:Repeater Set-up.

The display will show the number of repeaters:

```
NUMBER REPEATERS  00
1=UP,             2=DOWN
  >=SAVE VALUE
  <=EXIT
```

1. Press 1 or 2 to change the number of repeaters.
2. Press > to save the number of repeaters, or press < to escape without changing the number of repeaters. You will be prompted to move the site-specific data write enable switch.

## 24.21 How To Edit The Expansion I/O Board Configuration

To change the expansion I/O board configuration enter the engineers menu and select:  
1:Panel set-up; 2:input/output set-up; 2:I/O board types.

The following screen will be displayed:

```
I/O BOARD TYPES
BOARD? 01
  >=ENTER, <=BACK/EXIT
```

1. Change the address of the board to be configured using the menu up and down keys.
2. Press > to enter the board number or press < to escape without changing the board configuration. If the board number is entered the following screen is displayed:

```
I/O BOARD TYPES
BD:01 CCT 001 TO 008
TP00:NONE
1=NEXT, 2=EDIT, <=EXIT
```

The display shows the board number, the corresponding output circuit numbers and the board type.

3. Select one of the following options:
  - i) Press 1 to move to the next board address or,
  - ii) Press 2 to edit the type of board at this board number and proceed to the next step or,
  - iii) Press < to exit without changing the board configuration.
4. Select the board type from the pages of board options. Press > to exit when the board type is selected. You will be prompted to enable site specific data when all changes have been made.
5. Program the cause/effect for all inputs and outputs as described in section 24.22

## 24.22 How To Change The Power Fault Polarity



The panel can respond to either polarity on its power supply fault inputs. Note that this is a factory configuration procedure that should not require changing by the engineer.

To change the polarity enter the engineers menu and select:

1:Panel set-up; 2:input/output set-up; 4:Power Fault Polarity.

1. Press 1 to toggle the power fault polarity.
2. Press > to enter the new polarity or press < to escape without changing the power fault polarity.

#### 24.23 How To Edit The Allocation Of Inputs To A Group

To change the expansion I/O board configuration enter the engineers menu and select:

1:Panel set-up; 2:Input/output set-up; 3:Panel output c/e;

1:Input group allocation; 1:Edit I/P groups.

1. The following screen will be displayed:

```
1=EDIT INPUT GROUPS
2=PRINT INPUT GROUPS
3=VIEW INPUT GROUPS
SELECT 1..3, <=EXIT
```

2. Press 1 to edit the point group allocation:

```
EDIT INPUT GROUPS
GROUP? 033
>=ENTER, <=BACK/EXIT
```

3. Enter the number of the group to be edited and press enter. The following screen will be displayed if group 68 is entered:

```
EDIT GROUP 068
INPUT? 001
>=ENTER, <=BACK
```

4. Enter the first input in a range to be added or removed from the group. This example shows input 15:

```
EDIT GROUP 068
LOOP 01
INPUT? 015
>=ENTER, <=BACK
```

5. Enter the last input to be added or removed from the group. If a single input is to be edited then enter the same number as the first input.

```

EDIT GROUP 068
LOOP 01
INPUTS 015 TO 022
1=ADD, 2=REM, <=EXIT

```

6. Press 1 to add the inputs to the group or 2 to remove the inputs from the group. If no changes are required press escape to exit. The menu will return to the group allocation menu:

```

1=EDIT INPUT GROUPS
2=PRINT INPUT GROUPS
3=VIEW INPUT GROUPS
SELECT 1..3, <=EXIT

```

7. To view or print the input group allocation select option 2 or option 3.

#### 24.24 How To Edit The Expansion I/O Board Cause/effect

Each I/O board has 8 inputs and 8 outputs so board number 1 will have inputs 1 to 8 and outputs 1 to 8. Each output circuit has two channels associated with it, channel 0 and channel 1. If channel 0 is active then the output will be active continuously. If channel 1 is active, the output will pulse for 1s on, 1s off. If both channel 0 and channel 1 are active the output will be continuous.

The expansion I/O cause/effect is edited in exactly the same manner as the loop output cause/effect. The steps are as follows:

Enter the engineer's menu and select:

1:Panel set-up; 1:Input/output set-up; 2:Panel outputs; 2:Remote Output C/E

1. Enter the number of the output circuit to be edited.
2. The cause/effect for the output circuit is displayed

```

CAUSES FOR OP001 CH0
NO MORE CAUSES

>=OK, 3=NX, 4=+, <=EXIT

```

3. Either
  - i) Press > to save the data and move to the next output circuit or channel and return to step 1.
  - ii) Press < to exit without saving changes to the current output.
  - iii) Press 3 to move to the next screen if more cause/effect is available. The display will show NO MORE CAUSES if no more data is available.
  - iv) Press 4 to add more causes. The display is as follows:

```

CAUSES FOR OP001 CH0
1=GROUP CAUSE
2=COMMON CAUSE
SELECT 1..2, <=EXIT

```

4. Either:
  - i) Select option 1 to add a group cause. Enter the group number.
  - ii) Select option 2 to add a common cause.
5. Select the cause by moving between the menu pages with the > key and entering a number on the keypad.
6. Repeat steps 3, 4 and 5 until all causes have been added.

#### 24.25 How To Print Expansion Output Cause And Effect

To edit the loop output cause/effect enter the engineers menu and select:

1:Panel set-up; 2:Input/output set-up; 3:Panel output; 3:Print Remote O/P C/E

1. The following screen is displayed:

```

PRINT PANEL OP C/E
1=SINGLE  2=RANGE
3=ALL
SELECT 1..3  <=EXIT
```

2. Select the option and enter the device specification accordingly.
3. When printing is complete the following message will appear:

```

PRINTING PANEL
OUTPUT C/E
COMPLETE
<=EXIT
```

4. Press < to exit the remote output cause/effect menu.

#### 24.26 How To Edit The Panel's Number and Name

1. Plug a Cherry keyboard into the 5-pin DIN connector on the motherboard.
2. Enter the engineers menu.
5. Select 3:Network Setup; 1:Identify Panel

```

PANEL IDENTIFICATION
PANEL NUMBER? 001
>=ENTER,          <=EXIT
```

6. Enter the panel number using the MENU UP and MENU DOWN buttons as for normal number entry.
- 7.

```

PANEL IDENTIFICATION
PANEL 001 NAME?
Premier AL Panel 1
>=SAVE,          <=EXIT
```

4. Enter text using the keyboard.
5. Press return on the keyboard or > to store the text. Alternatively, press escape on the keyboard or < on the keypad to retain the existing text.

## 24.27 How To Edit The Panel's Network Display Responses.

1. Enter the engineers menu.
2. Select 3: Network Setup; 2: Edit Responses

```
NETWORK RESPONSES
1=DISPLAY, 2=PRINTER
3=MEMORY, 4=CONTROLS
5=SPECIAL      <=EXIT
```

3. Select 1: Display

```
DISPLAY RESPONSES
PANEL? 001

>=ENTER,      <=EXIT
```

4. Enter panel number.

```
DISPLAY FROM PAN.001
1=FIRE -2, 2=ALERT-2
3=FAULT-2, 4=IND. -2
1-4=CHG., >=NXT, <=END
```

Pressing 1, 2, 3 or 4 will toggle the value opposite the corresponding alarm type between values 0, 1, 2. These values have the following meaning:-

0 = ignore events in this category.

1 = display events with just the panel name on line 2.

2 = display events with actual user text on line 2.

Pressing > will display the values for the next panel number.

Pressing < will return the display to the panel number prompt.

8. Press < to exit the network responses menu.

**Note: Editing the Printer and Memory Responses follows the same process as editing the Display responses.**

## 24.28 How To Edit The Panel's Network User Control Responses.

1. Enter the engineers menu.
2. Select 3: Network Setup; 2: Edit Responses

```
NETWORK RESPONSES
1=DISPLAY, 2=PRINTER
3=MEMORY, 4=CONTROLS
5=SPECIAL      <=EXIT
```

3. Select 4: Controls

```
CONTROL RESPONSES
PANEL? 001

>=ENTER,      <=EXIT
```

4. Enter panel number.

```
CONTROL FROM PAN.001
1=SILAL-1, 2=RESET-1
3=TSTAL-1, 4=EVAC -1
5=CLR. -1, >=NXT, <=END
```

5. Pressing 1, 2, 3, 4 or 5 will toggle the value opposite the corresponding user control type between values 0, 1. (1 = silence alarms, 2 = reset system, 3 = test alarms, 4 = evacuate, 5 = reset faults) These values have the following meaning:-

0 = ignore controls in this category.

1 = react normally to controls in this category.

6. Pressing > will display the values for the next panel number.

7. Pressing < will return the display to the panel number prompt.

8. Press < to exit the network responses menu.

#### **24.29 How To Edit The Panel's Network Special Function Responses.**

1. Enter the engineers menu.

2. Select 3: Network Setup; 2: Edit Responses

```
NETWORK RESPONSES
1=DISPLAY, 2=PRINTER
3=MEMORY, 4=CONTROLS
5=SPECIAL <=EXIT
```

3. Select 5: Special

```
SPECIAL RESPONSES
PANEL? 001
>=ENTER, <=EXIT
```

4. Enter panel number.

```
ACCEPT FROM PAN.001
1=DAY/NIGHT MODE-1
2=SOUNDER EN/DIS-1
1-2=CHG. , >=NXT, <=END
```

5. Pressing 1 or 2 will toggle the value opposite the corresponding function type between values 0, 1. (1 = day/night mode, 2 = sounder disablement) These values have the following meaning:-

0 = ignore changes in this category.

1 = accept changes in this category.

6. Pressing > will display the values for the next panel number.

7. Pressing < will return the display to the panel number prompt.

8. Press < to exit the network responses menu.

#### **24.30 How To Print The Panel's Network Display Responses.**

1. Enter the engineers menu.

2. Select 3: Network Setup; 3: Print Responses

```
PRINT NET.RESPONSES
1=DISPLAY, 2=PRINTER
3=MEMORY, 4=CONTROLS
5=SPECIAL      <=EXIT
```

3. Select 1: Display
4. The panel will proceed to prepare a report of the panel's network display responses, then will print it out.
8. Press < to exit the network responses menu.

### **24.31 How To Change The Class Change Modes**

The panel can drive either channel 0 (steady) or channel 1 (pulsing) of loop sounders in response to the class-change input.

#### **24.31.1 To change the output bits, enter the engineers menu and select:**

- 1:Panel set-up; 2:General Config; >=next page ; 2:Class Change Modes
1. Press 1 to toggle the pulsed or steady mode.
  2. Press > to enter the new mode or < to escape without changing class change mode.

*Note: Printing the Printer, Memory, Control and Special Function Responses follows a similar sequence.*

## **25. Routine Maintenance**

This section gives an outline of the maintenance schedule and activities. For further guidance refer to BS5839 part 1:1998.

### **25.1 Quarterly Inspection**

The following checks should be made every 3 months:

1. Entries in the logbook should be checked and any remedial action taken.
2. The batteries should be examined to ensure they are in good serviceable condition and are unlikely to fail before the next quarterly inspection.
3. The alarm functions of the control and indicating equipment should be checked by operating a device in each zone.
4. A visual inspection should be made to check whether structural or occupancy changes have affected the siting of manual call points or sounders.

Any defects should be recorded in the logbook and reported to the responsible person, and action should be taken to correct it.

### **25.2 Annual Inspection**

The following checks should be made every 12 months:

1. All tests in the Quarterly inspection should be carried out.
2. Each detector should be checked for correct operation in accordance with the manufacture's recommendations.
3. A visual inspection should be made to confirm that all cable fittings and equipment are secure, undamaged and adequately protected.

Any defects should be recorded in the logbook and reported to the responsible person, and action should be taken to correct it.

### **25.3 Battery Replacement**

The useful life of the standby batteries in this application is three years. The batteries must be replaced after this time.

## APPENDIX A - Engineers Menu Overview

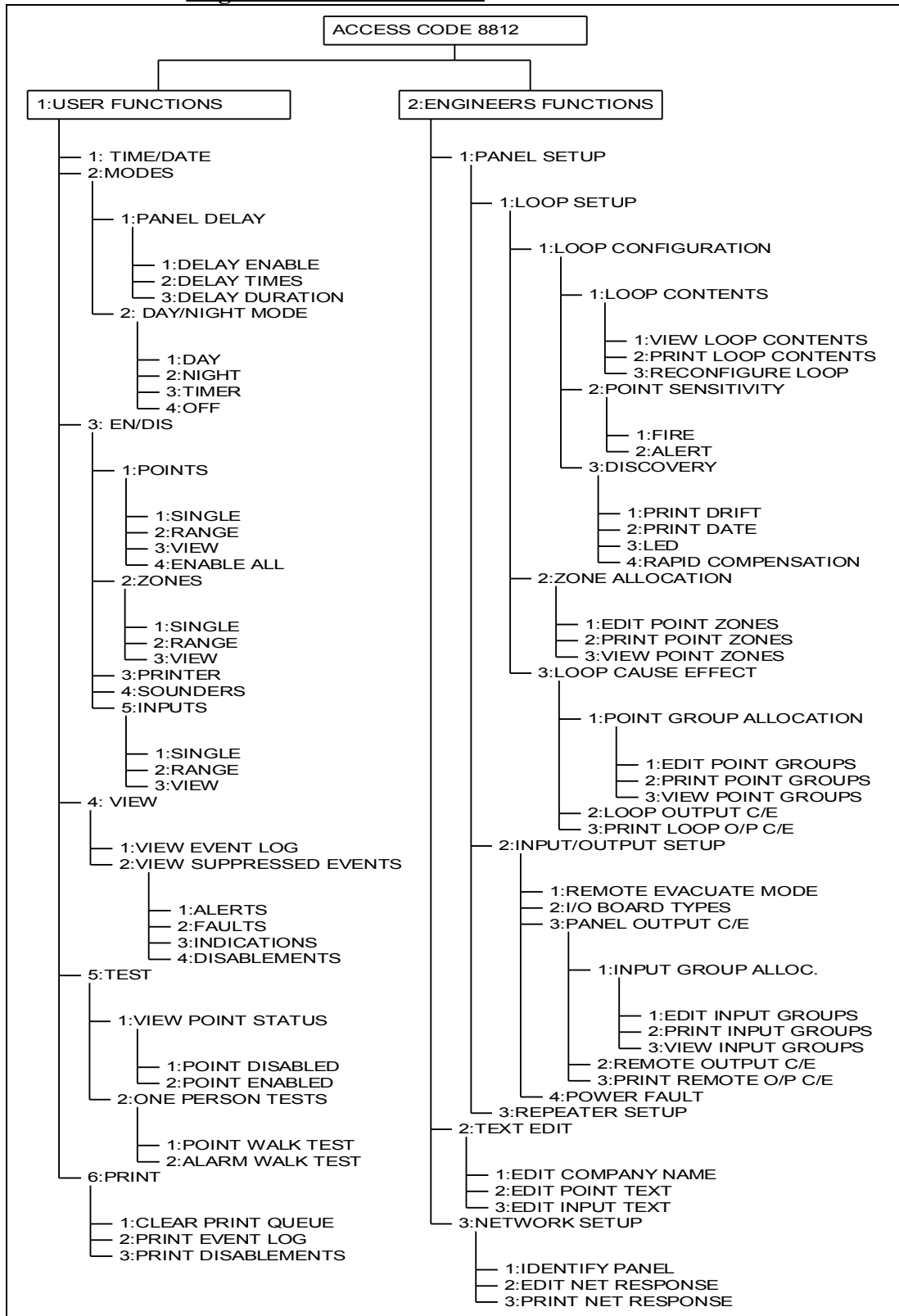


Figure 14 – Premier AL Engineers Menu Overview

## APPENDIX B - Glossary of Terms



A	Amp - unit of current.
ac	Alternating Current
Ah	Amp hour – capacity of standby batteries.
BGU	Break Glass Unit. Also know as manual call point.
CIE	Control and indicating equipment (the control panel)
c/w	complete with
dc	Direct Current
EMC	Electro-Magnetic Compatibility.
EOL	End Of Line resistor.
ESD	Electro-Static Discharge.
I/O	Input/output
LCD	Liquid Crystal Display. Alphanumeric display used for textual information.
LED	Light Emitting Diode. Display indicator.
MCP	Manual Call Point also know as BGU.
PC	Personal Computer.
PCB	Printed Circuit Board.
P.s.e.	Power Supply Equipment.
RS485	Serial communications standard used for interconnection of equipment
SLA	Sealed Lead Acid – type of standby battery.
V	Volt – unit of electrical potential.

## APPENDIX C - Glossary of Terms

A	Amp - unit of current.
ac	Alternating Current
Ah	Amp hour – unit of capacity for standby batteries.
BGU	Break Glass Unit. Also know as manual call point.
Cause/effect	The relationship between programmable actions and the events which cause those actions.
CIE	Control and indicating equipment (the control panel)
c/w	complete with
CPU	central processing unit
dc	Direct Current
EMC	Electro-Magnetic Compatibility.
EOL	End Of Line resistor.
I/O	Input/output
LCD	Liquid Crystal Display. Alphanumeric display used for textual information.
LED	Light Emitting Diode. Display indicator.
Local cause/effect	Cause and effect where an event on a panel does not cause an action on any other panel. (c.f. network cause/effect)
MCP	Manual Call Point also know as BGU.
Network cause/effect	Cause/effect where an event on one panel causes an action on another panel (c.f. local cause/effect).
Network panel	A panel connected to another panel using the Integra network card to create a larger system.
Node	One panel on a network system. Also called a network node.
PC	Personal Computer.
PCB	Printed Circuit Board.
P.s.e.	Power Supply Equipment.
RS485	Serial communications standard used for interconnection of equipment. It is commonly used to refer to connections using this type of communications.
Stand-alone panel	A panel not connected to any other panel using the Integra network card network
SLA	Sealed Lead Acid – type of standby battery.
V	Volt – unit of electrical potential.

### **APPENDIX D - List of Message Abbreviations**

<b>LCD Message Text</b>	<b>Device Type</b>
BGU	Break Glass Unit ZT-MCP/AD
CO	Carbon monoxide detector
DUAL	Optical/heat multi-sensor detector
HEAT	Heat detector
INV	Invalid sensor type
ION	Ionisation detector
MON	Monitor outstation/ancillary
O/S	Outstation
OPT	Optical detector

<b>LCD Message Text</b>	<b>Event Description</b>
D.FLT	Data Fault – the analogue value reported by the device is not valid.
DADDR	Double Address - two or more devices exist with the same address
FUSE FAILED	Auxiliary power supply fuse failed
LINE FAULT	Open circuit fault detected in loop cable. This may be due to an operation of short circuit isolators.
R.FLT	Remote Fault - at the address indicated.
RMVD	Removed – the loop device is not responding.
TEST	Device is in test mode
W.TYPE/WTYPE	Wrong Type – the device at this address is different from that configured for the address.

## APPENDIX E - Premier AL Mechanical And Environmental Specification

<b>Mechanical Specification</b>	
Size: Height:	480mm
Width:	410mm
Depth:	160mm including lock and indented holes
Weight excluding batteries:	15kg

<b>Environmental Specification</b>	
Operating temperature:	-5°C to 40°C
Operating humidity:	5% to 95%

<b>Mains Input Specification</b>	
Voltage:	230V AC +10%/-15%
Maximum Input Power:	320VA
Protection:	T3.15A anti-surge sand filled fuse
Cable requirements:	Minimum of 1mm <sup>2</sup> copper controlled by a 5A fuse.

<b>Power Supply Output Specification</b>	
28V output:	25-28V @ 4A mains on 21-27V @ 4A mains failed
28V output protection:	Electronic current limiting
5V output:	4.7-5.4V @ 3A
5V output protection:	Electronic current limiting
Common fault output:	Open collector output labelled CF
Mains failed fault output:	Open collector output labelled MF

<b>Battery Specification</b>	
Battery charger output:	Temperature compensated float charger 27.4V ±0.1V @20°C; maximum current 1.5A (limited if 28V load greater than 3.5A).
Maximum battery load:	5A
Battery type:	2 off 12V 12Ah sealed lead acid standby battery
Battery size:	151mm x 98mm x 97.5mm
Battery circuit protection:	5A fast blow glass fuse
Mains failed fault battery current:	
1 Loop panel:	145mA
2 Loop panel:	170mA
3 Loop panel:	195mA
4 Loop panel:	220mA
Mains failed alarm battery current:	
1 Loop panel:	260mA

2	Loop	panel:	285mA
3	Loop	panel:	310mA
4	Loop	panel:	335mA

**APPENDIX F - Premier AL Global Network Repeater Mechanical And Environmental Specification**

<b>Mechanical Specification</b>	
Size: Height:	370mm
Width:	325mm
Depth:	135mm including lock and indented holes
Weight excluding batteries:	7.4kg

<b>Environmental Specification</b>	
Operating temperature:	-5°C to 40°C
Operating humidity:	5% to 95%

<b>Mains Input Specification</b>	
Voltage:	230V AC +10%/-15%
Maximum Input Power:	120VA
Protection:	T3.15A anti-surge sand filled fuse
Cable requirements:	Minimum of 1mm <sup>2</sup> copper controlled by a 5A fuse.

<b>Power Supply Output Specification</b>	
24V output:	24V ±0.5V @ 3A mains on 21-26V @ 3A mains failed
24V output protection:	Electronic current limiting
Common fault output:	Open collector output labelled FAULT

<b>Battery Specification</b>	
Battery charger output:	float charger 27.5V ±0.1V @ 1.5A maximum
Maximum battery load:	3A
Battery type:	2 off 12V 12Ah sealed lead acid standby battery
Battery size:	151mm x 98mm x 97.5mm
Battery circuit protection:	3A fast blow glass fuse
Mains failed fault battery current:	
1 Loop panel:	120mA
2 Loop panel:	140mA
Mains failed alarm battery current:	
1 Loop panel:	255mA
2 Loop panel:	275mA

## APPENDIX G - Premier AL Input and Output Specification

<b>Panel Input Specification</b>	
Remote Fault:	Fully monitored circuit, 3k9 EOL, 680R active
Remote Evacuate:	Fully monitored circuit, 3k9 EOL, 680R active
Remote Silence:	Fully monitored circuit, 3k9 EOL, 680R active
Remote Reset:	Fully monitored circuit, 3k9 EOL, 680R active
Class-change:	Non- circuit, normally open, <50R active
Input Protection:	Internal current limit to 1mA
Cable requirements:	No special requirements, total resistance must be less than 50 ohms

<b>Loop Output Specification</b>	
Loop 1 Terminals:	O1+ Loop out +ve O1- Loop out -ve I1+ Loop return +ve I1- Loop return -ve
Loop 2 Terminals:	O2+ Loop out +ve O2- Loop out -ve I2+ Loop return +ve I2- Loop return -ve
Loop 3 Terminals: (Premier AL only)	O3+ Loop out +ve O3- Loop out -ve I3+ Loop return +ve I3- Loop return -ve
Loop 4 Terminals: Premier AL	O4+ Loop out +ve O4- Loop out -ve I4+ Loop return +ve I4- Loop return -ve
Maximum Current:	500mA per loop
Protection:	Negative leg isolation circuit for loop out and loop in. Common positive leg fused at 650mA.
Communications:	FYREYE /ZETA ADDRESSABLE protocol
Pedestal voltage:	27.8V to 28.5V
Pulse voltage:	7.5V to 9V
Maximum points per loop:	126
Maximum number of zones:	32 total with no restriction on allocation to loops
Cable requirements:	No special requirements, total resistance must be less than value calculated in section 20.2. Maximum core to core capacitance is 0.5µF

<b>Alarm Circuit Specification</b>	
Quantity:	2
Output Voltage (mains)	25-29V

operation):	
Output Voltage (battery operation):	21-27V
Maximum Current:	1A per circuit
Fault Monitoring:	Reverse polarity for open and short circuit faults
Protection:	1A fast blow glass fuse
Cable requirements:	No special requirements, 1A minimum current rating. Minimum voltage at end of line must be above sounding device minimum operating voltage.

#### **Auxiliary Supply Specification**

Auxiliary supply (mains operation):	25-29V
Auxiliary supply (battery operation):	21V-27V
Maximum Current:	500mA
Fault Monitoring:	Monitored for fuse failure
Protection:	500mA fast blow glass fuse
Cable requirements:	No special requirements, 1A minimum current rating. Minimum voltage at end of line must be above sounding device minimum operating voltage.

#### **Premier AL Repeater Panel Output Specification**

Number of repeaters:	1 to 14
Maximum repeater cable length:	2000m
Communication protocol:	RS485 serial data 9600 baud
Protection:	Electronic current limited
Cable Type:	Single pair RS485 shielded cable (see below)

#### **Input/Output Expansion Board Specification**

Board types:	A1535 I/O board
Number of boards:	0 to 31
Maximum cable length:	Boards should be mounted within, or adjacent to the panel enclosure
Communication protocol:	RS485 serial data 4800 baud
Protection:	Electronic current limited
Cable Type:	Single pair RS485 shielded cable (see below)

#### **Alarm Expansion Board Specification**

Board type:	A1536 I/O board
Number of boards:	0 to 31
Maximum cable length:	Boards should be mounted within, or adjacent



	to the panel enclosure
Communication protocol:	RS485 serial data 4800 baud
Protection:	Electronic current limited
Cable Type:	Single pair RS485 shielded cable (see below)

<b>Network Output Specification</b>	
Number of nodes:	1 to 15
Maximum network cable length:	5000m
Communication protocol:	RS485 serial data 9600 baud
Protection:	Electronic current limited
Cable Type:	Single pair RS485 shielded cable (see below)

<b>RS485 Cable Specification</b>	
Generic Type:	RS422/RS485 data cable.
Conductors:	Single pair plus screen.
Alpha cable:	3492C, 6222C, 6412 or equivalent
Belden cable:	8102, 8132, 9841 or equivalent

# **ZETA ALARM SYSTEMS**

## **PREMIER AL**

### **GLOBAL NETWORK REPEATER**

#### **Table of Contents**

1. Introduction.....	3
2. Panel Events .....	3
2.1 The Fire Condition .....	3
2.2 The Alert Condition.....	4
2.3 The Fault Condition .....	5
2.4 The Maintenance Condition.....	6
2.5 The System Fault Condition .....	7
2.6 Quiescent Condition .....	7
2.7 Access Mode.....	7
3. Routine Maintenance.....	8
3.1 Daily Attention .....	8
3.2 Weekly Attention.....	8
3.3 Quarterly Inspection .....	8
3.4 Annual Inspection .....	8
3.5 Battery Replacement .....	8
4. Overview Of User Functions.....	8
4.1 Change Time And Date .....	8
4.2 Delay Of Operation Of Outputs .....	8
4.3 Adjustable Sensitivity Modes.....	9
4.4 Enabling And Disabling Of Functions .....	9
4.5 The Event Log .....	9
4.6 Test Functions .....	10
4.7 View Suppressed Events.....	10
4.8 Printer Functions .....	10
5. User Controls and Indications .....	11
6. User Functions .....	13
6.1 How To Enter Numbers .....	13
6.2 How To Set The Time And Date.....	13
6.3 How To Enable And Disable The Panel Delay .....	14
6.4 How To Enable Day Sensitivity Mode. ....	15
6.5 How To Enable Night Sensitivity Mode. ....	15
6.6 How To Enable Timed Sensitivity Mode.....	16
6.7 How To Enable Off Sensitivity Mode. ....	16
6.8 How To Access The Disablement Menu Via The Summary Screen. ....	17
6.9 How To Enable And Disable A Single Point (Stand-Alone Panel).....	17
6.10 How To Enable And Disable A Single Point (Network Panel) .....	18
6.11 How To Enable And Disable A Range Of Points (Stand-Alone Panel) .....	19
6.12 How To Enable And Disable A Range Of Points (Network Panel) .....	20
6.13 How To View Disabled Points .....	21
6.14 How To Enable All Points (Stand-Alone Panel).....	22
6.15 How To Enable All Local Points (Network Panel).....	23
6.16 How To Enable All Points Globally (Network Panel) .....	23

6.17 How To Enable All Points At Selected Panel (Network Panel).....	24
6.18 How To Enable And Disable A Zone Of Devices (Stand-Alone Panel) .....	25
6.19 How To Enable And Disable A Zone Of Devices (Network Panel).....	25
6.20 How To Enable And Disable A Range Of Zones (Stand-Alone Panel) .....	27
6.21 How To Enable And Disable A Range Of Zones (Network Panel) .....	27
6.22 How To View Disabled Zones .....	29
6.23 How To Enable And Disable The Local Printer .....	29
6.24 How To Enable And Disable All Sounding Devices.....	30
6.25 How To Enable And Disable An Expansion Board Input (Stand-Alone Panel)	30
6.26 How To Enable And Disable An Expansion Board Input (Network Panel) .....	31
6.27 How To Enable And Disable A Range Of Expansion Board Inputs (Stand- Alone Panel) .....	32
6.28 How To Enable And Disable A Range Of Expansion Board Inputs (Network Panel) .....	33
6.29 How To View Disabled Expansion Board Inputs .....	34
6.30 How To Enable And Disable All Non-Sounder Devices .....	35
6.31 How To View The Event Log .....	36
6.32 How To View Suppressed Alerts, Faults And Indications.....	36
6.33 How To View Suppressed Disablements .....	37
6.34 How To View The Status Of A Point.....	38
6.35 How To Test Devices Using One Person Test Mode .....	39
6.36 How To Test Sounding Devices Using One Person Test Mode.....	40
6.37 How To Clear The Print Queue .....	41
6.38 How To Print The Event Log .....	41
6.39 How To Print Disablements .....	42
6.40 How To Print Texts and Analogue Values.....	43
APPENDIX A – Premier AL Mechanical and Environmental Specification .....	45
Global Network Repeater Mechanical And Environmental Specification .....	45
Premier AL Global Network Repeater Panel Diagram .....	45
Glossary of Terms.....	47
List of Abbreviations.....	48
Global Network Repeater Mechanical And Environmental Specification.....	49

## 1. Introduction

Thank you for purchasing this ZETA ALARM SYSTEMS control panel , PREMIER AL GLOBAL NETWORK REPEATER

This document contains all the information necessary for the end user to operate the GLOBAL NETWORK REPEATER. These panels are functionally identical and differ only in the number of loops and the physical packaging.

***Warning: This equipment contains dangerous voltages. To prevent electric shock do not open the display door. No user-serviceable parts inside – for servicing contact suitably qualified personnel.***

## 2. Panel Events

This section describes how events are reported and how the user should respond.

### 2.1 The Fire Condition

When a fire condition is detected automatically by a sensor, operation of a manual call point or operation of the evacuate switch the panel responds as follows.

- The COMMON FIRE and relevant zone LEDs pulse.
- The internal buzzer sounds intermittently if the device is allocated to a zone.
- The top two lines of the LCD display details of the event.

1:001 Z01 OPT FIRE DEVICE LOCATION
---------------------------------------

- The sounder circuits are operated (see Note below).
- System outputs are operated according to the panel programming (see Note below).
- The event is printed if a printer is fitted.

Subsequent fires will be displayed in the lower half of the window. The top two lines retain the first fire information. The scroll messages key will scroll current fires in the top window. The lower window always shows the last event.

During a fire condition the display of events of a lower priority is suppressed. To view these events refer to section 6.32.

Note:- The fire and alarm relays, and the cause/effect outputs, may be delayed via the Panel Delay function.

### User Actions

**Carry out the required fire drill.**

**If a printer is fitted the user actions will be printed out in addition to the automatic system events.**

## 2.2 The Alert Condition

A pre-alarm is indicated if the analogue value of a smoke detector rises above a pre-determined level, but not sufficiently to indicate a fire condition. It may indicate that a fire condition is imminent.

The panel responds as follows:

- The ALERT LED pulses.
- The internal buzzer sounds continuously.
- The LCD displays details of the event.

```
1:001 Z01 OPT ALERT  
DEVICE LOCATION
```

- The event is printed if a printer is fitted.
- Subsequent events will be displayed in the same way as for fire events.

During an alert condition the display of events of a lower priority is suppressed. To view these events refer to section 6.32.

### User Actions

- Switch the ACCESS CONTROLS keyswitch to the ON position to enable the controls.
- Press the SILENCE BUZZER switch.

**The BUZZER SILENCED LED illuminates.**

**The internal buzzer silences.**

- Investigate and rectify the cause of the alarm.
- When the cause of the alarm is cleared press the RESET switch to return the system to the quiescent condition.
- Record the event in the system log book.

**If a printer is fitted the user actions will be printed out in addition to the automatic system events.**

### 2.3 The Fault Condition

A fault is indicated if any part of the system enters an abnormal condition.

The panel responds as follows:

- The COMMON FAULT LED pulses. If the fault is with an alarm circuit the ALARM FAULT/DISABLEMENT LED will also pulse.
- The internal buzzer sounds continuously.
- The LCD displays details of the event.

```
1:001 Z01 OPT FAULT  
DEVICE LOCATION
```

- The event is printed if a printer is fitted.

During a fault condition the display of events of a lower priority is suppressed. To view these events refer to section 6.32.

#### User Actions

- Switch the ACCESS CONTROLS keyswitch to the ON position to enable the controls.
- Press the SILENCE BUZZER switch.

**The BUZZER SILENCED LED illuminates.**

**The internal buzzer silences.**

- Investigate and rectify the cause of the fault. If the fault cannot be rectified immediately determine the area affected by the fault and decide whether special action (such as fire patrols) are needed in that area.
- When the cause of the fault is cleared press the RESET switch to return the system to the quiescent condition.
- Record the event in the system log book.

**If a printer is fitted the user actions will be printed out in addition to the automatic system events.**

## 2.5 The System Fault Condition

In the event of a complete system failure a system fault will be indicated.

The panel responds as follows:

- The SYSTEM FAULT and GENERAL FAULT LED illuminate. All other LEDs will be extinguished.
- The internal buzzer sounds continuously.
- The LCD backlight switches off. The text will display the details of the last condition. This should be ignored.
- The local alarm circuits will be silenced if they are active.
- All loop devices will remain in the condition they were in when the fault occurred. Some sounders may thus remain active.

***Warning: The system is completely inactive.***

### User Actions

- Determine the area affected by the fault and decide whether special action (such as fire patrols) are needed in that area.
- Call your service engineer immediately.
- Record the event in the system log book.

## 2.6 Quiescent Condition

In its normal, or quiescent condition the supply healthy LED will be illuminated to indicate that mains power is present on the system. The LCD will display the time and the company name.

If the delay is active the delay LED will be illuminated. There will be no other LEDs illuminated

## 2.7 Access Mode

When the access controls key is inserted and turned to the ON position the LCD backlight will be switched on.

### **3. Routine Maintenance**

The following maintenance program should be followed.

#### **3.1 Daily Attention**

A check should be made every day to ascertain the following:

1. The panel indicates normal operation or, if not, that any fault has been recorded in the log-book and the recommended actions have been taken.
2. Any fault warning recorded the previous day has received attention.

#### **3.2 Weekly Attention**

The tests described in the log-book should be applied every week.

#### **3.3 Quarterly Inspection**

A quarterly inspection and test should be made by a competent person.

#### **3.4 Annual Inspection**

An annual inspection should be made by a competent person. In addition to the Quarterly inspection each detector should be checked for correct operation and wiring inspected.

#### **3.5 Battery Replacement**

The useful life of the standby batteries in this application is three years. The batteries must be replaced after this time.

### **4. Overview Of User Functions**

This section describes an overview of the functions available to the end user.

#### **4.1 Change Time And Date**

The user can manually set the time and date although this should not normally be required. The current time is maintained by a dedicated battery when all power removed from the system. How to set the time and date is described in the user manual. On a network system, setting the date and time at any panel will also update the date and time at all other panels and repeaters connected to the network.

#### **4.2 Delay Of Operation Of Outputs**

The activation of panel outputs (alarm circuit and cause effect) can be delayed upon detection of an automatic alarm condition to allow for the cause of the alarm to be investigated. The delay can be programmed for a period of between 1 and 10 minutes. The delay is active for one period every day, and off for the remainder of the time. This period is user definable and would typically be during working hours.

The delay is not operated if the alarm condition is initiated by a call point or an evacuate function. The delay may be overridden by a the override delay button on the panel.

The user can only enable and disable the delay function.



In a network system, any outputs on another panel programmed to operate from a fire on this panel will also be delayed.

### **4.3 Adjustable Sensitivity Modes**

The Premier AL and Global Network Repeater panels can be configured to automatically adjust device sensitivity according to the time of day. Three different sensitivity levels can be assigned to each point. These are referred to as the day mode sensitivity level, night mode sensitivity level and the default sensitivity level.

The sensitivity modes are set as follows:

- Selecting the DAY sensitivity mode forces the appropriate trip levels and sensitivity codes to the day mode value regardless of the time.
- Selecting the NIGHT sensitivity mode forces the appropriate trip levels and sensitivity codes to the night mode value regardless of the time.
- Selecting the TIMER sensitivity mode alternates the appropriate trip levels and sensitivity codes between the day and night modes according to the time. The day and night times are defined through the PC cause effect editor. A separate time can be defined for each day of the week.
- Switching OFF the day/night sensitivity mode forces the appropriate trip levels and sensitivity codes to the default value regardless of the time.

On network systems, changes to the day/night mode of a panel are passed to the network, and the other panels can be configured to automatically update their day/night mode or not as required.

### **4.4 Enabling And Disabling Of Functions**

The following functions can be disabled and enabled through the user menu:

- Points (local or at another panel if part of a network)
- Zones of points (local or at another panel if part of a network)
- Sounding devices (can be global on network systems)
- Printer (local only even on network systems)
- Inputs (local or at another panel if part of a network)
- Non-Sounder Outputs (local only even on network systems)

### **4.5 The Event Log**

The panel stores a record of the last 200 events (local or from network) in the event log. These are individually time-stamped and can be viewed or printed as required.

## 4.6 Test Functions

The following test functions are local only, and are available through the user menu:

- View point status – displays current analogue value type code and status bits for an address.
- Device Test – allows one or more zones of devices to be tested without operating panel cause/effect and with or without operating sounder devices.

The panel switches on a device LED to acknowledge correct operation of the test. No other indication is given at the panel and the device LED (plus the sounders if required) is automatically reset after 10 seconds. If a printer is fitted then a test confirmation message is printed for each successful device test. During the test device test the panel buzzer sounds for 2s every 30s. Any device in a zone not in test that detects a fire responds as normal.

- Alarm test – The panel automatically operates all sounding devices for 5 seconds every 10 seconds.

## 4.7 View Suppressed Events

System events are prioritised to clarify the display of information by the system. The events are classified in to the following levels in decreasing order of priority:

- Fire
- Alert
- Fault
- Indication

If events at more than one level exist on the panel, only events at the highest level will be displayed on the LCD. The scroll events switch can be used to scroll all events at this level. As events at a lower level are not shown they are called suppressed events. A suppressed event is indicated by an LED indication on the display but the LCD message is suppressed. Suppressed events can be viewed through the user menu as described in section 6.32 and section 6.33.

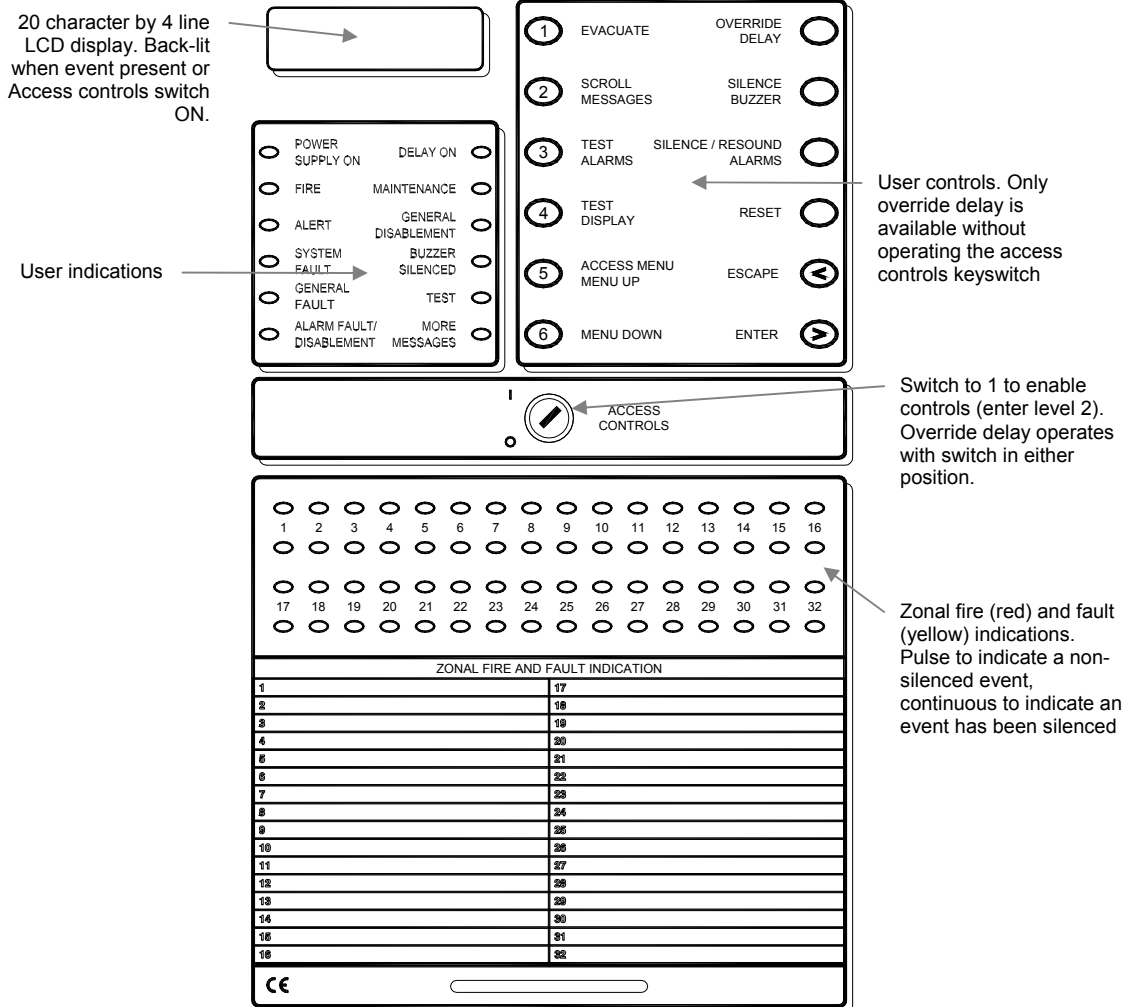
For example, if fire events occur whilst a fault is present on the system, only the fire events will be displayed on the LCD. The fire condition will cause the faults to be suppressed. The scroll events switch can then be used to cycle the fire events on the LCD and the faults can be viewed through the menu function.

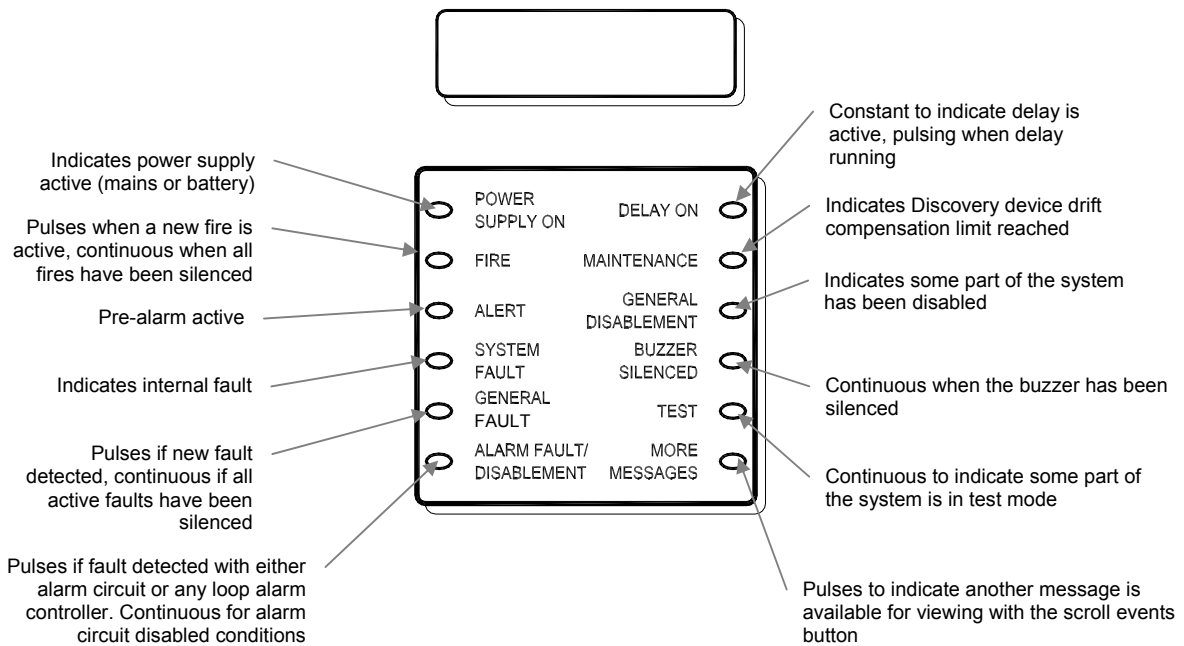
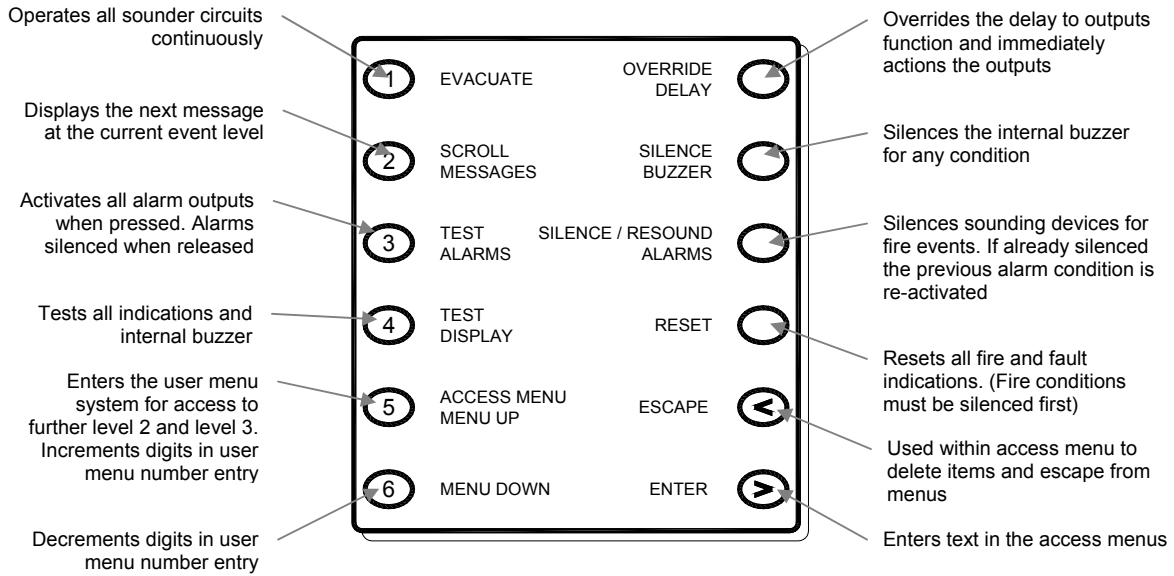
## 4.8 Printer Functions

If a printer is fitted to the panel the following functions are available to the user:

- Disable printer
- Print disablements
- Print user texts and analogue values
- Print event log
- Print of device test results during one person walk testing

### 5. User Controls and Indications





## 6. User Functions

To access the user menu perform the following operations:

1. Move the ACCESS CONTROLS lockswitch to position 1 using the access controls key.
2. Press 5 on the user controls to access the menu function. The following menu will be displayed:

```

1 = USER MENU
ENTER ACCESS CODE
FOR ENGINEERS MENU
  0000
  
```

3. Press 1 to enter the user menu. The following menu will be displayed:

```

1=TIME/DATE   2=MODES
3=EN/DIS     4=VIEW
5=TEST       6=PRINT
SELECT 1..6, <=EXIT
  
```

This is referred to as the user main menu screen and the description of the user functions begin from this screen.

**Note: The system automatically leaves the user menu after a period of time. This automatic timeout prevents the system being left in the user menu mode unintentionally. The timeout period depends on the function selected and is between 1 and 15 minutes.**

### 6.1 How To Enter Numbers

All menu selections are made using direct key access using keys 1 to 6.

Entry of digits is performed by the following method:

1. On entering a menu screen which requires a number to be entered a default number will be displayed. For example when setting the time the current time is displayed. The cursor will underline the first digit.
2. Press MENU UP or MENU DOWN to increment or decrement the digit.
3. When the digit is correct press > (ENTER) to move onto the next digit.
4. Press < to cancel the menu screen and move to the previous screen.
5. Change the remaining digits as required. On all but the first digit the < key moves to the previous digit. When the cursor is positioned on the last digit pressing > (ENTER) enters the value.

### 6.2 How To Set The Time And Date

1. Enter the user menu as described in section 6.
2. Press 1 to select option 1. The screen will display the current date:

```

SET DATE?   30/05/99
           >=ENTER VALUE
           <=BACK/EXIT
  
```

3. Make any changes to the date as described in 6.1. The separators will be added automatically. The following screen gives an example:

```

SET DATE?   31/05/99
              >=ENTER VALUE
              <=BACK/EXIT

```

4. With the cursor positioned under the last digit press enter to save the date. A new screen will appear.
5. Enter the time as 2 hour digits (24 hour clock), 2 minute digits and 2 second digits. The separators will be added automatically. The following screen gives an example:

```

SET TIME?   15:12:00
              >=ENTER VALUE
              <=BACK/EXIT

```

6. Change the time as required and press enter to save the value and return to the user menu screen.

### 6.3 How To Enable And Disable The Panel Delay

1. Enter the user menu as described in section 6.
2. Press 2 to select option 2. The following screen will be displayed:

```

PANEL MODES
1=PANEL DELAY
2=DAY/NIGHT
SELECT 1..2, <=EXIT

```

3. Press 1 to select option 1. The following screen will be displayed:

```

DELAY IS 01 MINUTES
09:00:00 TO 17:00:00
DELAY IS ENABLED
1=DISABLE, <=EXIT

```

4. Press 1 to toggle the delay to a disabled condition. The following screen will be displayed:

```

DELAY IS 01 MINUTES
09:00:00 TO 17:00:00
DELAY IS DISABLED
1=ENABLE, <=EXIT

```

5. Press 1 to toggle the delay to an enabled condition if required.
6. Press escape to return to the user menu screen.

### 6.4 How To Enable Day Sensitivity Mode.

1. Enter the user menu as described in section 6.
2. Press 2 to select option. The following screen will be displayed:

```
PANEL MODES
1=PANEL DELAY
2=DAY/NIGHT
SELECT 1..2, <=EXIT
```

3. Press 2 to select option 2. The following screen will be displayed:

```
DAY/NIGHT MODE 1
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

4. The display shows the day mode 1 selected. Selecting this option forces the appropriate trip levels and sensitivity codes to the 'Day Time' value regardless of the time.

### 6.5 How To Enable Night Sensitivity Mode.

1. Enter the user menu as described in section 6.
2. Press 2 to select option. The following screen will be displayed:

```
PANEL MODES
1=PANEL DELAY
2=DAY/NIGHT
SELECT 1..2, <=EXIT
```

3. Press 2 to select option 2. The following screen will be displayed:

```
DAY/NIGHT MODE 1
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

4. Display shows the day mode 1 selected, to select Night mode press 2. The following screen will be displayed.

```
DAY/NIGHT MODE 2
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

5. Selecting the Night mode option forces the appropriate trip levels and sensitivity codes to the 'Night Time' value regardless of the time.

## 6.6 How To Enable Timed Sensitivity Mode.

1. Enter the user menu as described in section 6.
2. Press 2 to select option. The following screen will be displayed:

```
PANEL MODES
1=PANEL DELAY
2=DAY/NIGHT
SELECT 1..2, <=EXIT
```

3. Press 2 to select option 2. The following screen will be displayed:

```
DAY/NIGHT MODE 2
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

4. Display shows the night mode 2 selected, to select Timed mode press 3. The following screen will be displayed.

```
DAY/NIGHT MODE 3
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

5. Selecting the Timer option enables the active trip levels and sensitivity codes depend upon the day of the week and the time.

## 6.7 How To Enable Off Sensitivity Mode.

1. Enter the user menu as described in section 6.
2. Press 2 to select option. The following screen will be displayed:

```
PANEL MODES
1=PANEL DELAY
2=DAY/NIGHT
SELECT 1..2, <=EXIT
```

3. Press 2 to select option 2. The following screen will be displayed:

```
DAY/NIGHT MODE 3
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

4. Display shows the Timer mode 3 selected, to select the Off mode press 4. The following screen will be displayed.

```
DAY/NIGHT MODE 4
1=DAY,      2=NIGHT,
3=TIMER,    4=OFF
<=EXIT
```

5. Selecting the Off option forces the active trip levels and sensitivity codes to their Default value regardless of the time.



## 6.8 How To Access The Disablement Menu Via The Summary Screen.

1. Enter the user menu as described in section 6.
2. Press 3 to select option 3. The screen will display the first page of current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS DISABLED
00 ZONES DISABLED
1=NEXT, >=MENU, <=EXIT
```

Pressing 1 will cycle through the other pages of the disablement summary.

```
DISABLEMENT SUMMARY
000 INPUTS DISABLED
PRINTER DISABLED
1=NEXT, >=MENU, <=EXIT
```

```
DISABLEMENT SUMMARY
SOUNDERS DISABLED
OUTPUTS ENABLED
1=NEXT, >=MENU, <=EXIT
```

```
DISABLEMENT SUMMARY
BUZZER ENABLED

1=NEXT, >=MENU, <=EXIT
```

This example shows no zones, 3 points, no inputs, all sounders and the printer are disabled, while outputs and the buzzer are enabled.

3. Press enter to continue. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS, <=EXIT
```

## 6.9 How To Enable And Disable A Single Point (Stand-Alone Panel)

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS, <=EXIT
```

2. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE, 2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4, <=EXIT
```

3. To disable a single point press 1. The following screen will be displayed:

```
SINGLE POINT EN/DIS
LOOP? 1

>=ENTER, <=BACK/EXIT
```

4. Change the loop number and press enter to continue.

```
SINGLE POINT EN/DIS
LOOP 01
POINT? 001
>=ENTER,      <=BACK
```

5. Enter the point number and press enter. The next screen displays the current device disablement status. The following screen shows the device is enabled with the option to disable.

```
SINGLE POINT EN/DIS
1:023 ENABLED
1=DISABLE POINT
SELECT 1,      <=EXIT
```

6. Press 1 to toggle the point disablement status. The point will be disabled and the screen will update to show the new status.

```
SINGLE POINT EN/DIS
1:023 DISABLED
1=ENABLE POINT
SELECT 1,      <=EXIT
```

7. Press escape to return to the previous page:

```
ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4,  <=EXIT
```

Press escape to exit the menu one level at a time.

## 6.10 How To Enable And Disable A Single Point (Network Panel)

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES,      3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,    <=EXIT
```

2. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4,  <=EXIT
```

3. To disable a single point press 1. The following screen will be displayed:

```
SINGLE POINT EN/DIS
PANEL? 001
>=ENTER, <=BACK/EXIT
```

4. Enter the panel number and press enter to continue.

```
PAN001 POINT EN/DIS
LOOP? 1
>=ENTER, <=BACK/EXIT
```

5. Change the loop number and press enter to continue.

```
PAN001 POINT EN/DIS
LOOP 01
POINT? 001
>=ENTER, <=BACK
```

6. Enter the point number and press enter. The next screen displays the current device disablement status. The following screen shows the device is enabled with the option to disable.

```
PAN001 POINT EN/DIS
1:023 ENABLED
1=DISABLE POINT
SELECT 1, <=EXIT
```

7. Press 1 to toggle the point disablement status. Either the local point will be disabled, or a message will be sent to the network, and the screen will be updated to show the new status.

```
PAN001 POINT EN/DIS
1:023 DISABLED
1=ENABLE POINT
SELECT 1, <=EXIT
```

8. Press escape to return to the previous page:

```
ENABLE/DISABLE POINT
1=SINGLE, 2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4, <=EXIT
```

Press escape to exit the menu one level at a time.

## 6.11 How To Enable And Disable A Range Of Points (Stand-Alone Panel)

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS, <=EXIT
```

2. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE, 2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4, <=EXIT
```

3. To disable a range of points press 2. The following screen will be displayed:

```
RANGE POINTS EN/DIS
LOOP? 1
>=ENTER, <=BACK/EXIT
```

4. Enter the loop number and press enter to continue.

```
RANGE POINTS EN/DIS
LOOP 01
POINT? 001
>=ENTER, <=BACK
```

5. Enter the number of the first point and press enter.

```
RANGE POINTS EN/DIS
LOOP 01
POINTS 015 TO 015
>=ENTER, <=BACK
```

6. Enter the number of the second point and press enter.

```
1:015-030 EN/DIS
1=ENABLE POINTS
2=DISABLE POINTS
SELECT 1..2, <=EXIT
```

7. Choose the option required:

- i) To enable the range of points displayed press 1
- ii) To disable the range of points press 2
- iii) To exit without making any changes press escape

The screen will display the previous page:

```
ENABLE/DISABLE POINT
1=SINGLE, 2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4, <=EXIT
```

8. Press escape to exit the menu one level at a time.

## 6.12 How To Enable And Disable A Range Of Points (Network Panel)

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS, <=EXIT
```

2. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE, 2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4, <=EXIT
```

3. To disable a range of points press 2. The following screen will be displayed:

```
RANGE POINTS EN/DIS
PANEL? 001

>=ENTER, <=BACK/EXIT
```

4. Enter the panel number and press enter to continue.

```
PAN001 POINTS EN/DIS
LOOP? 1

>=ENTER, <=BACK/EXIT
```

5. Enter the loop number and press enter to continue.

```
PAN001 POINTS EN/DIS
LOOP 01
POINT? 001

>=ENTER, <=BACK
```

6. Enter the number of the first point and press enter.

```
PAN001 POINTS EN/DIS
LOOP 01
POINTS 015 TO 015

>=ENTER, <=BACK
```

7. Enter the number of the second point and press enter.

```
PAN001 POINTS EN/DIS
1:015-030
1=ENABLE, 2=DISABLE
SELECT 1..2, <=EXIT
```

8. Choose the option required:

- i) To enable the range of points displayed press 1
- ii) To disable the range of points press 2
- iii) To exit without making any changes press escape

If the local panel number was entered then the appropriate local points will be enabled/disabled.

If another panel number was entered then a suitable command will be sent via the network to the appropriate panel.

The screen will display the previous page:

```
ENABLE/DISABLE POINT
1=SINGLE, 2=RANGE
3=VIEW, 4=ENABLE ALL
SELECT 1..4, <=EXIT
```

9. Press escape to exit the menu one level at a time.

### 6.13 How To View Disabled Points

1. Enter the disablement menu as described in section 1.1.

```

EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,    <=EXIT

```

2. Press 1. The following screen will be displayed:

```

ENABLE/DISABLE POINT
1=SINGLE,    2=RANGE
3=VIEW,    4=ENABLE ALL
SELECT 1..4,    <=EXIT

```

3. To view the disabled points press 3. The following screen will be displayed:

```

DISABLED POINTS
PREPARING REPORT
PLEASE WAIT
<=EXIT

```

The report will be displayed as follows for a stand-alone panel:

```

DISABLED POINTS
1:1-5,9,22-30,125
2:55-70
1=BACK,2=NEXT,<=EXIT

```

or as follows for a network panel:

```

DISABLED POINTS
5>1:1-5,9,22-30,125
5>2:55-70
1=BACK,2=NEXT,<=EXIT

```

Where the indicated disablements are for panel 5.

4. Press 1 and 2 to scroll through the screens displaying the disabled devices. When all the devices have been viewed the following messages appears

```

DISABLED POINTS
NO MORE DISABLEMENTS
1=BACK,    <=EXIT

```

5. Press escape to exit the menu one level at a time.

## 6.14 How To Enable All Points (Stand-Alone Panel)

1. Enter the disablement menu as described in section 1.1.

```

EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,    <=EXIT

```

2. Press 1. The following screen will be displayed:

```

ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW,      4=ENABLE ALL
SELECT 1..4,  <=EXIT

```

3. Press 4 to enable all the points. This operates on points disabled individually, as a range or as a zone. The following screen will be displayed:

```

ALL POINTS ENABLED

<=EXIT

```

4. Press escape to exit the menu one level at a time.

### 6.15 How To Enable All Local Points (Network Panel)

1. Enter the disablement menu as described in section 1.1.

```

EN/DIS:1=POINTS
2=ZONES,      3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,    <=EXIT

```

2. Press 1. The following screen will be displayed:

```

ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW,      4=ENABLE ALL
SELECT 1..4,  <=EXIT

```

3. Press 4 to see the enable all points menu. The following screen will be displayed:

```

ENABLE ALL POINTS
1.LOCAL  2.GLOBAL
3.SPECIFY PANEL
<=EXIT

```

4. Press 1 to enable all local points.

```

ALL LOCAL POINTS
ENABLED
<=EXIT

```

5. Press escape to exit the menu one level at a time.

### 6.16 How To Enable All Points Globally (Network Panel)

1. Enter the disablement menu as described in section 1.1.

```

EN/DIS:1=POINTS
2=ZONES,      3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,    <=EXIT

```

2. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW,      4=ENABLE ALL
SELECT 1..4,  <=EXIT
```

3. Press 4 to see the enable all points menu. The following screen will be displayed:

```
ENABLE ALL POINTS
1.LOCAL  2.GLOBAL
3.SPECIFY PANEL
<=EXIT
```

6. Press 2 to enable all points globally.

```
ALL POINTS ENABLED
AT ALL PANELS
<=EXIT
```

7. Press escape to exit the menu one level at a time.

### 6.17 How To Enable All Points At Selected Panel (Network Panel)

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES,      3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,    <=EXIT
```

2. Press 1. The following screen will be displayed:

```
ENABLE/DISABLE POINT
1=SINGLE,      2=RANGE
3=VIEW,      4=ENABLE ALL
SELECT 1..4,  <=EXIT
```

3. Press 4 to see the enable all points menu. The following screen will be displayed:

```
ENABLE ALL POINTS
1.LOCAL  2.GLOBAL
3.SPECIFY PANEL
<=EXIT
```

4. Press 3 to select the panel.

```
ENABLE ALL POINTS
AT PANEL? 001
<=EXIT
```

5. Press > to enable all points at selected panel.

```
ALL POINTS ENABLED
AT PANEL 001
<=EXIT
```

6. Press escape to exit the menu one level at a time.



## 6.18 How To Enable And Disable A Zone Of Devices (Stand-Alone Panel)

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,  <=EXIT
```

2. Press 2. The following screen will be displayed:

```
ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

3. To disable a single zone press 1. The following screen will be displayed:

```
SINGLE ZONE EN/DIS
ZONE? 01
>=ENTER, <=BACK/EXIT
```

4. Enter the zone number and press enter to continue. The next screen displays the current zone disablement status. The example below shows zone 31 is enabled with the option to disable.

```
SINGLE ZONE EN/DIS
ZONE 31 ENABLED
1=DISABLE ZONE
SELECT 1,    <=EXIT
```

5. Press 1 to toggle the zone disablement status. If the selected zone is valid (i.e. is allocated to at least one point) then zone will be disabled, and the display will update to show the new status.

```
SINGLE ZONE EN/DIS
ZONE 31 DISABLED
1=ENABLE ZONE
SELECT 1,    <=EXIT
```

6. Press escape to return to the previous page:

```
ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

7. Press escape to exit the menu one level at a time.

## 6.19 How To Enable And Disable A Zone Of Devices (Network Panel)

1. Enter the disablement menu as described in section 1.1.

```

EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,  <=EXIT

```

2. Press 2. The following screen will be displayed:

```

ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT

```

3. To disable a single zone press 1. The following screen will be displayed:

```

SINGLE ZONE EN/DIS
PANEL? 001
>=ENTER, <=BACK/EXIT

```

4. Enter the panel number and press enter to continue.

```

PAN001 ZONE EN/DIS
ZONE? 01
>=ENTER, <=BACK/EXIT

```

5. Enter the zone number and press enter to continue. The next screen displays the current zone disablement status. The example below shows zone 31 is enabled with the option to disable.

```

PAN001 ZONE EN/DIS
ZONE 31 ENABLED
1=DISABLE ZONE
SELECT 1,    <=EXIT

```

6. Press 1 to toggle the zone disablement status. If the local panel is specified, and the selected zone is valid (i.e. has at least one point allocated to it), then the zone is disabled and the display is updated to show the new status. If a remote panel is specified then the appropriate command is sent to the network, and the screen is updated to show the expected new status. If the zone disablement command has been accepted at the remote panel, then an appropriate message should be seen on the printer and/or event log after a few seconds, and viewing zone disablements should indicate the disabled zone.

```

PAN001 ZONE EN/DIS
ZONE 31 DISABLED
1=ENABLE ZONE
SELECT 1,    <=EXIT

```

7. Press escape to return to the previous page:

```

ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT

```

9. Press escape to exit the menu one level at a time.

## 6.20 How To Enable And Disable A Range Of Zones (Stand-Alone Panel)

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,  <=EXIT
```

2. Press 2. The following screen will be displayed:

```
ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

3. To disable a range of zones press 2. The following screen will be displayed:

```
RANGE ZONES EN/DIS
ZONE? 01
>=ENTER, <=BACK/EXIT
```

4. Enter the first zone number and press enter to continue.

```
RANGE ZONES EN/DIS
ZONES 11 TO 11
>=ENTER, <=BACK/EXIT
```

5. Enter the number of the second zone and press enter.

```
RANGE ZONES EN/DIS
ZONES 11 TO 12
1=ENABLE,  2=DISABLE
SELECT 1..2, <=EXIT
```

6. Choose the option required:

- i) To enable the range of points displayed press 1
- ii) To disable the range of points press 2
- iii) To exit without making any changes press escape

n.b. Only zones allocated to devices may be disabled.

The screen will display the previous page:

```
ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

7. Press escape to exit the menu one level at a time.

## 6.21 How To Enable And Disable A Range Of Zones (Network Panel)

1. Enter the disablement menu as described in section 1.1.

```

EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,    <=EXIT

```

2. Press 2. The following screen will be displayed:

```

ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3,    <=EXIT

```

3. To disable a range of zones press 2. The following screen will be displayed:

```

RANGE ZONES EN/DIS
PANEL? 001
>=ENTER,    <=BACK/EXIT

```

4. Enter the panel number and press enter to continue.

```

PAN001 ZONES EN/DIS
ZONE? 01
>=ENTER,    <=BACK/EXIT

```

5. Enter the first zone number and press enter to continue.

```

PAN001 ZONES EN/DIS
ZONES 11 TO 11
>=ENTER,    <=BACK/EXIT

```

6. Enter the number of the second zone and press enter.

```

PAN001 ZONES EN/DIS
ZONES 11 TO 12
1=ENABLE,    2=DISABLE
SELECT 1..2,    <=EXIT

```

7. Choose the option required:

- i) To enable the range of points displayed press 1
- ii) To disable the range of points press 2
- iii) To exit without making any changes press escape

If the local panel number was entered then the appropriate local zones that have devices allocated will be enabled/disabled.

If another panel number was entered then a suitable command will be sent via the network to the appropriate panel.

The screen will display the previous page:

```

ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3,    <=EXIT

```

8. Press escape to exit the menu one level at a time.

## 6.22 How To View Disabled Zones

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,  <=EXIT
```

2. Press 2. The following screen will be displayed:

```
ENABLE/DISABLE ZONE
1=SINGLE,    2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

3. To view the disabled zones press 3. The following screen will be displayed:

```
DISABLED ZONES
PREPARING REPORT
PLEASE WAIT
<=EXIT
```

The report will be displayed as follows for a stand-alone panel:

```
DISABLED ZONES
1-3, 10, 12, 15-18, 25,
30
1=BACK, 2=NEXT, <=EXIT
```

or will be displayed as follows for a network panel:

```
DISABLED ZONES
5>1-3, 10, 12, 15-18, 25
6>30
1=BACK, 2=NEXT, <=EXIT
```

4. Press 1 and 2 to scroll through the screens displaying the disabled devices. When all the devices have been viewed the following messages appears

```
DISABLED ZONES
NO MORE DISABLEMENTS
1=BACK,    <=EXIT
```

5. Press escape to exit the menu one level at a time.

## 6.23 How To Enable And Disable The Local Printer

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,  <=EXIT
```

2. Press 3. The screen will display the current printer disablement status. This example shows the printer is disabled:

```

PRINTER IS DISABLED
1=ENABLE PRINTER

SELECT 1,      <=EXIT

```

3. Press 1 to toggle the printer disablement status or escape to exit without changing the printer disablement status. The following screen will be displayed:

```

EN/DIS:1=POINTS
2=ZONES,      3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5,  <=EXIT

```

4. Press escape to exit the menu one level at a time.

## 6.24 How To Enable And Disable All Sounding Devices

1. Enter the disablement menu as described in section 1.1.

```

EN/DIS:1=POINTS
2=ZONES,      3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,    <=EXIT

```

2. Press 4. The screen will display the current sounder disablement status. This example shows the sounding devices are disabled:

```

SOUNDERS DISABLED
1=ENABLE SOUNDERS

SELECT 1,      <=EXIT

```

3. Press 1 to toggle the sounder disablement status or escape to exit without changing the sounder disablement status. On a network system, if the status is changed then this will be reported to the network, and any other panels that are configured to accept this condition will update their own sounder disablement status. The following screen will be displayed:

```

EN/DIS:1=POINTS
2=ZONES,      3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5,  <=EXIT

```

4. Press escape to exit the menu one level at a time.

## 6.25 How To Enable And Disable An Expansion Board Input (Stand-Alone Panel)

1. Enter the disablement menu as described in section 1.1.

```

EN/DIS:1=POINTS
2=ZONES,      3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,    <=EXIT

```

2. Press 5. The following screen will be displayed:

```

INPUT DISABLEMENT
1=SINGLE,      2=RANGE
3=VIEW
SELECT 1..3,  <=EXIT

```

3. To disable a single input press 1. The following screen will be displayed:

```

IDENTIFY INPUT
INPUT? 001
>=ENTER, <=BACK/EXIT

```

4. Enter the input number and press enter to continue. The next screen displays the current input disablement status. The example below shows input 1 is enabled with the option to disable.

```

IDENTIFY INPUT
INPUT 010 ENABLED
1=DISABLE INPUT
SELECT 1,      <=EXIT

```

5. Press 1 to toggle the input disablement status. The screen will display the previous page:

```

INPUT DISABLEMENT
1=SINGLE,      2=RANGE
3=VIEW
SELECT 1..3,  <=EXIT

```

6. Press escape to exit the menu one level at a time.

## 6.26 How To Enable And Disable An Expansion Board Input (Network Panel)

1. Enter the disablement menu as described in section 1.1.

```

EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS,  <=EXIT

```

2. Press 5. The following screen will be displayed:

```

INPUT DISABLEMENT
1=SINGLE,      2=RANGE
3=VIEW
SELECT 1..3,  <=EXIT

```

3. To disable a single input press 1. The following screen will be displayed:

```

RANGE INPUTS EN/DIS
PANEL? 001
>=ENTER, <=BACK/EXIT

```

4. Enter the panel number and press enter to continue.

```
PAN001 INPUT EN/DIS
INPUT? 001

>=ENTER, <=BACK/EXIT
```

5. Enter the input number and press enter to continue. The next screen displays the current input disablement status. The example below shows input 1 is enabled with the option to disable.

```
PAN001 INPUT EN/DIS
INPUT 010 ENABLED
1=DISABLE INPUT
SELECT 1, <=EXIT
```

6. Press 1 to toggle the input disablement status. The screen will display the previous page:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

7. Press escape to exit the menu one level at a time.

## 6.27 How To Enable And Disable A Range Of Expansion Board Inputs (Stand-Alone Panel)

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS, <=EXIT
```

2. Press 5. The following screen will be displayed:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

3. To disable a range of inputs press 2. The following screen will be displayed:

```
IDENTIFY INPUT RANGE
INPUT? 001

>=ENTER, <=BACK/EXIT
```

4. Enter the first input number and press enter to continue.

```
IDENTIFY INPUT RANGE
INPUTS 001 TO 001

>=ENTER, <=BACK/EXIT
```



5. Enter the number of the second input and press enter.

```
IDENTIFY INPUT RANGE
INPUTS 001 TO 002
1=ENABLE, 2=DISABLE
SELECT 1..2, <=EXIT
```

6. Choose the option required:

- i) To enable the range of inputs displayed press 1
- ii) To disable the range of inputs press 2
- iii) To exit without making any changes press escape

The screen will display the previous page:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

7. Press escape to exit the menu one level at a time.

## 6.28 How To Enable And Disable A Range Of Expansion Board Inputs (Network Panel)

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS, <=EXIT
```

2. Press 5. The following screen will be displayed:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

3. To disable a range of inputs press 2. The following screen will be displayed:

```
RANGE INPUTS EN/DIS
PANEL? 001
>=ENTER, <=BACK/EXIT
```

4. Enter the panel number and press enter to continue.

```
PAN001 INPUTS EN/DIS
INPUT? 001
>=ENTER, <=BACK/EXIT
```

5. Enter the first input number and press enter to continue.

```
PAN001 INPUTS EN/DIS
INPUTS 001 TO ? 001

>=ENTER, <=BACK/EXIT
```

6. Enter the number of the second input and press enter.

```
PAN001 INPUTS EN/DIS
INPUTS 001 TO 002
1=ENABLE, 2=DISABLE
SELECT 1..2, <=EXIT
```

7. Choose the option required:

- i) To enable the range of inputs displayed press 1
- ii) To disable the range of inputs press 2
- iii) To exit without making any changes press escape

If the local panel number was entered then the appropriate local inputs will be enabled/disabled.

If another panel number was entered then a suitable command will be sent via the network to the appropriate panel.

The screen will display the previous page:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

8. Press escape to exit the menu one level at a time.

## 6.29 How To View Disabled Expansion Board Inputs

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS:1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS, <=EXIT
```

2. Press 5. The following screen will be displayed:

```
INPUT DISABLEMENT
1=SINGLE, 2=RANGE
3=VIEW
SELECT 1..3, <=EXIT
```

3. To view the disabled inputs press 3. The following screen will be displayed:

```
DISABLED INPUTS
PREPARING REPORT
PLEASE WAIT
<=EXIT
```

The report will be displayed as follows for a stand-alone panel:

```
DISABLED INPUTS
1-3, 10, 12, 15-18, 25,
30
1=BACK, 2=NEXT, <=EXIT
```

or displayed as follows for a network panel:

```
DISABLED INPUTS
1>1-3, 10, 12, 15-18, 25
2>30
1=BACK, 2=NEXT, <=EXIT
```

4. Press 1 and 2 to scroll through the screens displaying the disabled devices. When all the devices have been viewed the following messages appears

```
DISABLED INPUTS
NO MORE DISABLEMENTS
1=BACK, <=EXIT
```

5. Press escape to exit the menu one level at a time.

### 6.30 How To Enable And Disable All Non-Sounder Devices

1. Enter the disablement menu as described in section 1.1.

```
EN/DIS: 1=POINTS
2=ZONES, 3=PRINTER
4=SOUNDERS 5=INPUTS
6=OUTPUTS, <=EXIT
```

2. Press 6. The screen will display the current output disablement status. This example shows the sounding devices are disabled:

```
OUTPUTS DISABLED
1=ENABLE OUTPUTS
SELECT 1, <=EXIT
```

3. Press 1 to toggle the output disablement status or escape to exit without changing the output disablement status. The following screen will be displayed:

```
EN/DIS:1=POINTS
2=ZONES,    3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT
```

4. Press escape to exit the menu one level at a time.

### 6.31 How To View The Event Log

1. Enter the user menu as described in section 6.
2. Press 4 to select option 4. The following screen will be displayed:

```
1=VIEW EVENT LOG
2=VIEW SUPPRESSED
EVENTS
SELECT 1..2, <=EXIT
```

3. Press 1 to view the event log. A screen showing the first event in the log will be displayed:

```
20/05/96    13:24:08
1:007 Z02 BGU FIRE
text for point 1:007
1=BACK,2=NEXT,<=EXIT
```

4. Press 1 or 2 to scroll forwards or backwards through the event log. The first line shows the event time and date. When the last event is displayed and 2 is pressed the following screen will be displayed:

```
END OF EVENT LOG
NO MORE EVENTS TO
DISPLAY
1=BACK,    <=EXIT
```

5. Press escape to exit the menu one level at a time.

### 6.32 How To View Suppressed Alerts, Faults And Indications

1. Enter the user menu as described in section 6.
2. Press 4 to select option 4. The following screen will be displayed:

```
1=VIEW EVENT LOG
2=VIEW SUPPRESSED
EVENTS
SELECT 1..2, <=EXIT
```

3. Press 2 to view the suppressed events. A screen showing the different event types will be displayed:

```
1=ALERTS 2=FAULTS
3=INDICATIONS
4=DISABLEMENTS
SELECT 1..4, <=EXIT
```

- Select the type of event to be viewed by pressing 1, 2 or 3. The first event will be displayed.

```
1:011 Z02 HEAT ALERT
text for point 1:011

1=BACK, 2=NEXT, <=EXIT
```

- Scroll through the events by pressing 1 or 2. When the last event is reached a screen will display a message similar to the following:

```
NO MORE SUPPRESSED
ALERTS

1=BACK, <=EXIT
```

- Press escape to exit the menu one level at a time.

### 6.33 How To View Suppressed Disablements

- Enter the user menu as described in section 6.
- Press 4 to select option 4. The following screen will be displayed:

```
1=VIEW EVENT LOG
2=VIEW SUPPRESSED
EVENTS
SELECT 1..2, <=EXIT
```

- Press 2 to view the suppressed events. A screen showing the different event types will be displayed:

```
1=ALERTS 2=FAULTS
3=INDICATIONS
4=DISABLEMENTS
SELECT 1..4, <=EXIT
```

- Select disablements by pressing 4. The screen will display the first page of current disabled devices:

```
DISABLEMENT SUMMARY
0003 POINTS DISABLED
00 ZONES DISABLED
1=NEXT, >=MENU, <=EXIT
```

This example shows no zones and 3 points disabled.

5. Press enter to continue. The following screen will be displayed:

```

EN/DIS: 1=POINTS
2=ZONES,   3=PRINTER
4=SOUNDERS 5=INPUTS
SELECT 1..5, <=EXIT

```

6. Select the appropriate option. If there is more than one screen available use the keys to scroll through the pages.
7. Press escape to exit the menu one level at a time.

### 6.34 How To View The Status Of A Point

There are two status display modes. In the enabled mode the panel will respond to all device events. If a device is operated manually or a self test changes the device condition the panel will respond to the event.

If a point status is viewed in the disabled mode then the panel will no longer respond to device events, although any change in status will be displayed. This is useful for testing the analogue devices using the self test command bit, or for testing ancillary devices without putting the panel into a fire condition.

1. Enter the user menu as described in section 6.
2. Press 5 to select option 5 - Test. The following screen will be displayed:

```

TEST MODE
1=VIEW POINT STATUS
2=ONE PERSON TESTS
SELECT 1..2, <=EXIT

```

3. Press 1 to view point status. The following screen will be displayed:

```

POINT TEST
1=POINT DISABLED
2=POINT ENABLED
SELECT 1..2, <=EXIT

```

4. Select 1 or 2. If the point is disabled the panel will no longer respond to events from this point. The screen display indicates whether the device is enabled or disabled throughout the test. This shows the disabled mode.

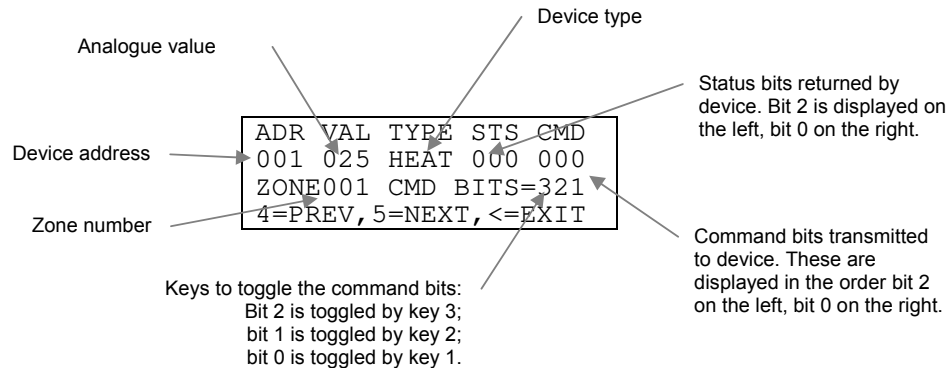
```

POINT STATUS DISABL.
LOOP? 1

>=ENTER, <=BACK/EXIT

```

- Enter the loop number and press enter. Enter the point address number and press enter. The following screen will be displayed:



- To display other points press 4 or 5 to change the device number. To view devices on another loop press escape to return to the previous menu screen.

Upon exiting the status mode the command bits are returned to panel control. If a device has undergone a self test in the disabled status mode the panel may detect a fire condition before the analogue value returns to normal.

### How To Test Devices Using One Person Test Mode

In this test any fire event within any of the selected zones will not be reported on the panel display, but is printed and recorded in the event log with the description "TEST" instead of "FIRE". No relays or cause/effect will be operated, but the sounders may operate for ten seconds if the appropriate mode is selected. The LED on the point in fire will illuminate for ten seconds. Any fire events from other zones will clear the menu page from the screen in order to report the genuine fire. If this occurs it will be necessary to re-enter the menu system. As soon as point walk test is selected the currently selected test zones will be identified.

- Enter the user menu as described in section 6.
- Press 5 to select option 5 - Test. The following screen will be displayed:

```

TEST MODE
1=VIEW POINT STATUS
2=ONE PERSON TESTS
SELECT 1..2, <=EXIT
  
```

- Press 2 to enter the one person test mode. The following screen will be displayed:

```

ONE PERSON TEST
1=POINT WALK TEST
2=ALARM WALK TEST
SELECT 1..2, <=EXIT
  
```

4. Select option 1. The following screen will be displayed:

```
POINT TEST ZONES
ZONE? 001
>=ENTER, <=BACK/EXIT
```

5. Enter the zone to be tested and press enter. The following screen will be displayed:

```
POINT TEST ZONES
1,
1=ZONE, 2=TEST, <=EXIT
```

6. If another zone is to be included in the test press 1 and add further zones as necessary. Press 2 to select the test mode.

```
POINT TEST OPTIONS
1=SILENT
2=WITH SOUNDERS
SELECT 1..2, <=EXIT
```

7. Select the required test mode by pressing '1' or '2' as appropriate. The screen will indicate test mode is active.

```
POINT TEST ACTIVE
1,
1=CANCEL TEST, <=EXIT
```

In addition the TEST LED will be illuminated

When the test is complete press 1 to cancel the test mode.

### How To Test Sounding Devices Using One Person Test Mode

In this test all of the alarms will sound for 5 seconds every 10 seconds for audibility checking. This applies to the local alarm circuits, all alarm controller ancillary devices and loop powered sounders. This test mode will be automatically cancelled if a fire condition occurs.

1. Enter the user menu as described in section 6.
2. Press 5 to select option 5 - Test. The following screen will be displayed:

```
TEST MODE
1=VIEW POINT STATUS
2=ONE PERSON TESTS
SELECT 1..2, <=EXIT
```

3. Press 2 to enter the one person test mode. The following screen will be displayed:

```
ONE PERSON TEST
1=POINT WALK TEST
2=ALARM WALK TEST
SELECT 1..2, <=EXIT
```

4. Select option 2 to begin the alarm test. The following screen will be displayed:



```
ALARM TEST IS ON
<=CANCEL
```

5. Press escape to cancel the test.

### 6.37 How To Clear The Print Queue

1. Enter the user menu as described in section 6.
2. Press 6. The following screen will be displayed:

```
PRINTER MENU
1=CLEAR PRINT QUEUE
2=PRINT EVENT LOG
>=NEXT PAGE   <=EXIT
```

3. Press 1 to clear the print queue. The following screen will confirm the operation:

```
PRINT QUEUE CLEARED
<=EXIT
```

4. Press escape to exit to the printer main menu.

### 6.38 How To Print The Event Log

1. Enter the user menu as described in section 6.
2. Press 6. The following screen will be displayed:

```
PRINTER MENU
1=CLEAR PRINT QUEUE
2=PRINT EVENT LOG
>=NEXT PAGE   <=EXIT
```

3. Press 2 to print the event log. If the printer is currently disabled a message will appear. Press 1 to override the disablement.

```
PRINT EVENT LOG
PRINTER IS DISABLED
1=IGNORE DISABLEMENT
<=EXIT
```

4. The following screen will be displayed while the event log is printed:

```
PRINTING
EVENT LOG
<=CANCEL
```

Press escape at any time to cancel printing.

5. When the event log is printed the following screen will appear:

```
PRINTING
EVENT LOG
COMPLETE
<=EXIT
```

6. Press escape to exit to the printer main menu.

### 6.39 How To Print Disablements

1. Enter the user menu as described in section 6.
2. Press 6. The following screen will be displayed:

```
PRINTER MENU
1=CLEAR PRINT QUEUE
2=PRINT EVENT LOG
>=NEXT PAGE <=EXIT
```

3. Press enter. The following screen will be displayed:

```
PRINTER MENU
1=PRINT DISABLEMENTS
2=PRINT LP TEXT/VAL
>=NEXT PAGE <=EXIT
```

4. Press 1 to print the disablements. If the printer is currently disabled a message will appear. Press 1 to override the disablement.

```
PRINT DISABLEMENTS
PRINTER IS DISABLED
1=IGNORE DISABLEMENT
<=EXIT
```

5. The following screen will be displayed while the disablement report is prepared:

```
PRINT DISABLEMENTS
PREPARING REPORT
PLEASE WAIT
<=CANCEL
```

Press escape at any time to cancel the report.

6. While the report is being printed the following screen will be displayed:

```
PRINTING
DISABLEMENTS
<=CANCEL
```

Press escape at any time to cancel the report.

7. When the disablement report is printed the following screen will appear:

```
PRINTING
DISABLEMENTS
COMPLETE
<=EXIT
```

8. Press escape to exit to the printer main menu.

## 6.40 How To Print Texts and Analogue Values

1. Enter the user menu as described in section 6.
2. Press 6. The following screen will be displayed:

```
PRINTER MENU
1=CLEAR PRINT QUEUE
2=PRINT EVENT LOG
>=NEXT PAGE   <=EXIT
```

3. Press enter. The following screen will be displayed:

```
PRINTER MENU
1=PRINT DISABLEMENTS
2=PRINT LP TEXT/VAL
>=NEXT PAGE   <=EXIT
```

4. Press 2 to print texts and analogue values.

```
PRINT LOOP TEXT/VALS
LOOP? 1

>=ENTER, <=BACK/EXIT
```

5. If the printer is currently disabled a message will appear. Press 1 to override the disablement.

```
PRINT LOOP TEXT/VALS
PRINTER IS DISABLED
1=IGNORE DISABLEMENT
<=EXIT
```

6. The following screen will be displayed while the disablement report is prepared:

```
PRINT LOOP TEXT/VALS  
PREPARING REPORT  
PLEASE WAIT  
<=CANCEL
```

Press escape at any time to cancel the report.

7. While the report is being printed the following screen will be displayed:

```
PRINTING  
LOOP 1 TEXT/VALS  
  
<=CANCEL
```

Press escape at any time to cancel the report.

8. When the disablement report is printed the following screen will appear:

```
PRINTING  
LOOP 1 TEXT/VALS  
COMPLETE  
<=EXIT
```

9. Press escape to exit to the printer main menu.

## **APPENDIX A –Premier AL Mechanical and Environmental Specification**

### **Mechanical Specification**

Size: Height: 480mm  
Width: 410mm  
Depth: 160mm including lock and indented holes  
Weight excluding batteries: 15kg

### **Environmental Specification**

Operating temperature: -5°C to 40°C  
Operating humidity: 5% to 95%

### **Mains Input Specification**

Voltage: 230V AC +10%/-15%  
Maximum Input Power: 320VA  
Protection: T3.15A anti-surge sand filled fuse  
Cable requirements: Minimum of 1mm<sup>2</sup> copper controlled by a 5A fuse

## **APPENDIX B – Gloabal Network Repeater Mechanical And Environmental Specification**

### **Mechanical Specification**

Size: Height: 370mm  
Width: 325mm  
Depth: 135mm including lock and indented holes  
Weight excluding batteries: 7.4kg

### **Environmental Specification**

Operating temperature: -5°C to 40°C  
Operating humidity: 5% to 95%

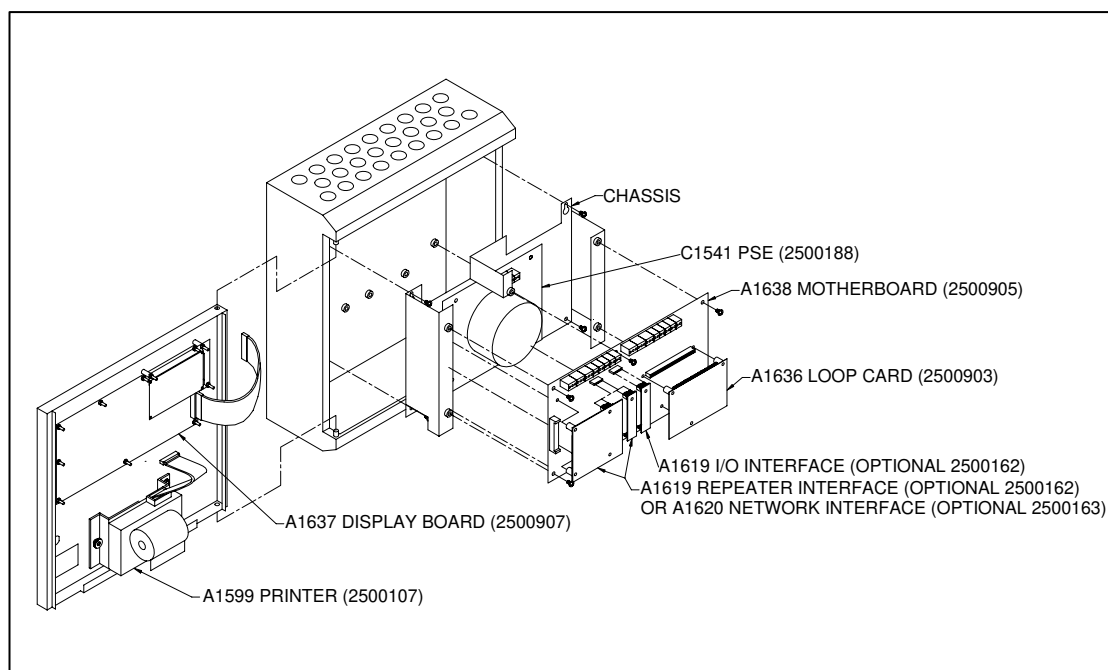
### **Mains Input Specification**

Voltage: 230V AC +10%/-15%  
Maximum Input Power: 120VA  
Protection: T3.15A anti-surge sand filled fuse  
Cable requirements: Minimum of 1mm<sup>2</sup> copper controlled by a 5A fuse

## Premier AL Global Network Repeater

### 1.1 The panel consists of the modules shown in

Figure 1. *There are NO LOOP CARD attached to or integrated on the Motherboard*  
*The Premier AL Global Network Repeater has no LOOPS.*



**Figure 1 – Global Network Repeater**

### **C1541 3A P.S.E.**

The C1541 is a 3A linear p.s.e. which provides the following outputs:

- 24V supply to motherboard
- 27.5V float battery charger.
- User fault indications for supply on, mains failed and no charge conditions.
- Signals to the motherboard for a common fault condition.

### **A1638 Motherboard**

Provides all the field terminations; an internal interface for up one plug-in loop card; connections for an A1619 interface for expansion I/O communication; connections for an A1620 Network card; and connections to main display. The CPU and main memory locations are accommodated on this board.

### **A1637 Display Board**

Provides visible indications and user switches, access to which is controlled by a keyswitch. The board connects to the motherboard through a 50-way ribbon cable. memory locations are accommodated on this board.

### **A1637 Display Board**

Provides visible indications and user switches, access to which is controlled by a keyswitch. The board connects to the motherboard through a 50-way ribbon cable.

### **A1620 Network Interface**

This optional plug-in board provides communication with other Premier AL panels and other Global Network Repeaters. The board plugs into the repeater interface sockets and provides both repeater output communications and the network output.

### **A1599 Printer**

The optional 24-column printer mounts on the outer door. Power and data are supplied via a 16-way ribbon cable from the display board.

## Glossary of Terms

A	Amp - unit of current.
ac	Alternating Current
Ah	Amp hour – unit of capacity for standby batteries.
BGU	Break Glass Unit. Also know as manual call point.
Cause/effect	The relationship between programmable actions and the events which cause those actions.
CIE	Control and indicating equipment (the control panel)
c/w	complete with
CPU	central processing unit
dc	Direct Current
EMC	Electro-Magnetic Compatibility.
EOL	End Of Line resistor.
I/O	Input/output
LCD	Liquid Crystal Display. Alphanumeric display used for textual information.
LED	Light Emitting Diode. Display indicator.
Local cause/effect	Cause and effect where an event on a panel does not cause an action on any other panel. (c.f. network cause/effect)
MCP	Manual Call Point also know as BGU.
Network cause/effect	Cause/effect where an event on one panel causes an action on another panel (c.f. local cause/effect).
Network panel	A panel connected to another panel using the Integra network card to create a larger system.
Node	One panel on a network system. Also called a network node.
PC	Personal Computer.
PCB	Printed Circuit Board.
P.s.e.	Power Supply Equipment.
RS485	Serial communications standard used for interconnection of equipment. It is commonly used to refer to connections using this type of communications.
Stand-alone panel	A panel not connected to any other panel using the Integra network card network
SLA	Sealed Lead Acid – type of standby battery.
V	Volt – unit of electrical potential.



### **List of Message Abbreviations**

<b>LCD Message Text</b>	<b>Device Type</b>
BGU	Break Glass Unit ZT-MCP/AD
CO	Carbon monoxide detector
DUAL	Optical/heat multi-sensor detector
HEAT	Heat detector
INV	Invalid sensor type
ION	Ionisation detector
MON	Monitor outstation/ancillary
O/S	Outstation
OPT	Optical detector

<b>LCD Message Text</b>	<b>Event Description</b>
D.FLT	Data Fault – the analogue value reported by the device is not valid.
DADDR	Double Address - two or more devices exist with the same address
FUSE FAILED	Auxiliary power supply fuse failed
LINE FAULT	Open circuit fault detected in loop cable. This may be due to an operation of short circuit isolators.
R.FLT	Remote Fault - at the address indicated.
RMVD	Removed – the loop device is not responding.
TEST	Device is in test mode
W.TYPE/WTYPE	Wrong Type – the device at this address is different from that configured for the address.

## **Premier AL Global Network Repeater Mechanical And Environmental Specification**

<b>Mechanical Specification</b>	
Size: Height:	370mm
Width:	325mm
Depth:	135mm including lock and indented holes
Weight excluding batteries:	7.4kg

<b>Environmental Specification</b>	
Operating temperature:	-5°C to 40°C
Operating humidity:	5% to 95%

<b>Mains Input Specification</b>	
Voltage:	230V AC +10%/-15%
Maximum Input Power:	120VA
Protection:	T3.15A anti-surge sand filled fuse
Cable requirements:	Minimum of 1mm <sup>2</sup> copper controlled by a 5A fuse.

<b>Power Supply Output Specification</b>	
24V output:	24V $\pm 0.5V$ @ 3A mains on 21-26V @ 3A mains failed
24V output protection:	Electronic current limiting
Common fault output:	Open collector output labelled FAULT

<b>Battery Specification</b>	
Battery charger output:	float charger 27.5V $\pm 0.1V$ @ 1.5A maximum
Maximum battery load:	3A
Battery type:	2 off 12V 12Ah sealed lead acid standby battery
Battery size:	151mm x 98mm x 97.5mm
Battery circuit protection:	3A fast blow glass fuse