



QUADNET
R E P E A T E R P A N E L

DUONET
R E P E A T E R P A N E L

Quadnet / Duonet Repeater Panel V3
(Suitable for Quadnet / Duonet repeater panels from V2.00)

Repeater Panel User Guide
(TO BE RETAINED BY USER)

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Due to the complexity and inherent importance of a life risk type system, training on this equipment is essential, and commissioning should only be carried out by competent persons.

Fike cannot guarantee the operation of any equipment unless all documented instructions are complied with, without variation.

E&OE.

Fike equipment is protected by one or more of the following patent numbers: GB2426367, GB2370670, EP1158472, PT1035528T, GB2346758, EP0917121, GB2329056, EP0980056, GB2325018, GB2305284, EP1174835, EP0856828, GB2327752, GB2313690

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Introduction

Purpose of the Guide

This guide is provided to enable the person responsible for the fire alarm system (see Definitions) to operate the system, undertake their responsibilities with regard to testing and maintenance of the system, and to record events and service/maintenance visits.

This is a generic document and therefore refers to the system components in general terms only. The details of the installed system should be recorded in the space provided within this guide, and for further reference, the record drawings (if applicable) should be consulted.

The responsible person, and any other staff who may be required to operate the system in an emergency, should read and understand the basic operating instructions **before an emergency situation occurs**.

Definitions

Responsible person:

The person having control of the premises, whether as an occupier or otherwise, or any person delegated by the person having control of the premises to be responsible for the fire alarm system and the fire procedures.

Competent Person:

A person competent to perform a defined task:

Normally a competent person will be an employee of the manufacturer, installer, or servicing contractor, or a member of the user's staff who has received suitable training from the manufacturer, supplier or installer.

Understanding the Equipment

What are Quadnet and Duonet?

Quadnet and Duonet are the names of two fire alarm control panels that use the associated Sita200plus devices. The panels and devices together form the fire alarm system installed in the premises.

With a Quadnet panel system, up to four addressable device loops may be connected to each control panel. With a Duonet panel system, up to two addressable device loops may be connected to each control panel. In either system, up to a maximum of 4 panels may be networked together. These can be a mixture of control panels and repeater panels.

Advantages of the Quadnet / Duonet system are significantly reduced cabling costs, enhanced flexibility and flexible expansion capacity if required.

What is Multipoint?

This is the name of the automatic detector used in the Quadnet / Duonet installation. The Multipoint is a unique device, which provides several modes of detection & sensitivity options within a single device, enabling it to be easily configured for the application. One detector can function as a smoke detector or heat detector (or both), and with various levels of sensitivity to suit the environment.

The Multipoint detector may also incorporate an integral sounder and strobe for general alarm annunciation or local warning as required and an automatic isolator to maintain maximum cable integrity in the event of a cable fault.

System Configuration

The detectors and call points are arranged in zones to enable the location of a fire alarm to be identified. The number of zones depends on the size and the layout of the premises, and is limited to 128 zones per control panel (there may be more than one). There should be a chart or drawing provided with the system indicating the area and layout of the zones – ensure that you are familiar with the zone layout so that appropriate action can be taken in the event of a fire alarm.

The Repeater Panel display may also give you a zone number, a device description, a device number and a device type; indicating the exact location of the device which has operated.

The system may be interfaced with the building services, e.g., the air conditioning may be shut down when the alarm sounds. Make sure that you know what happens when the fire alarm operates as this can affect routine system testing.

The system is powered from the mains supply and incorporates a standby battery which automatically maintains the system in operation for a time of at least 48 hours in the event of a mains supply failure.

Note: the following controls can be carried out on a Quadnet / Duonet Repeater Panel.

- Silence Alarms
- Reset System
- Sound Alarms
- Silence Buzzer

What to do if . . .

The fire alarm sounds;

CARRY OUT THE PRESCRIBED FIRE DRILL

When it is safe to do so silence the alarms and reset the system, having first established the cause of the alarm (refer to Operation).

The panel buzzer sounds;

If the panel buzzer sounds without the alarm sounders operating it is likely to be a fault or other abnormal condition.

Make a note of **all** illuminated LEDs and displayed messages, record the time that the condition occurred (if known), and other events within the building, eg., power failure, contractors working, etc., (Refer to troubleshooting). Call the service company with as much information as possible.

User Responsibilities

Introduction

The responsible person is required under BS5839 to undertake certain tasks with respect to the testing and maintenance of the fire alarm system. The responsible person should also ensure that written procedures are in place for the actions to be taken by the occupants in a fire condition, and that staff required to operate the system have received adequate training. In a small building the fire procedures can be quite simple, but when larger premises are involved the fire procedures can become more complex and may involve the appointment of fire wardens, reporting procedures, various assembly points, etc.

The responsible person is also required to liaise with the building maintenance personnel to ensure that their work does not impair or otherwise affect the operation of the fire alarm system, and to ensure that a clear space is maintained in the vicinity of detectors, and call points remain unobstructed and conspicuous.

Routine Testing

For details on routine testing see the Quadnet Control Panel User Guide or the Duonet Control Panel User Guide.

Any defects should be recorded in the log book and reported to the responsible person. A certificate of testing should also be completed and given to the responsible person.

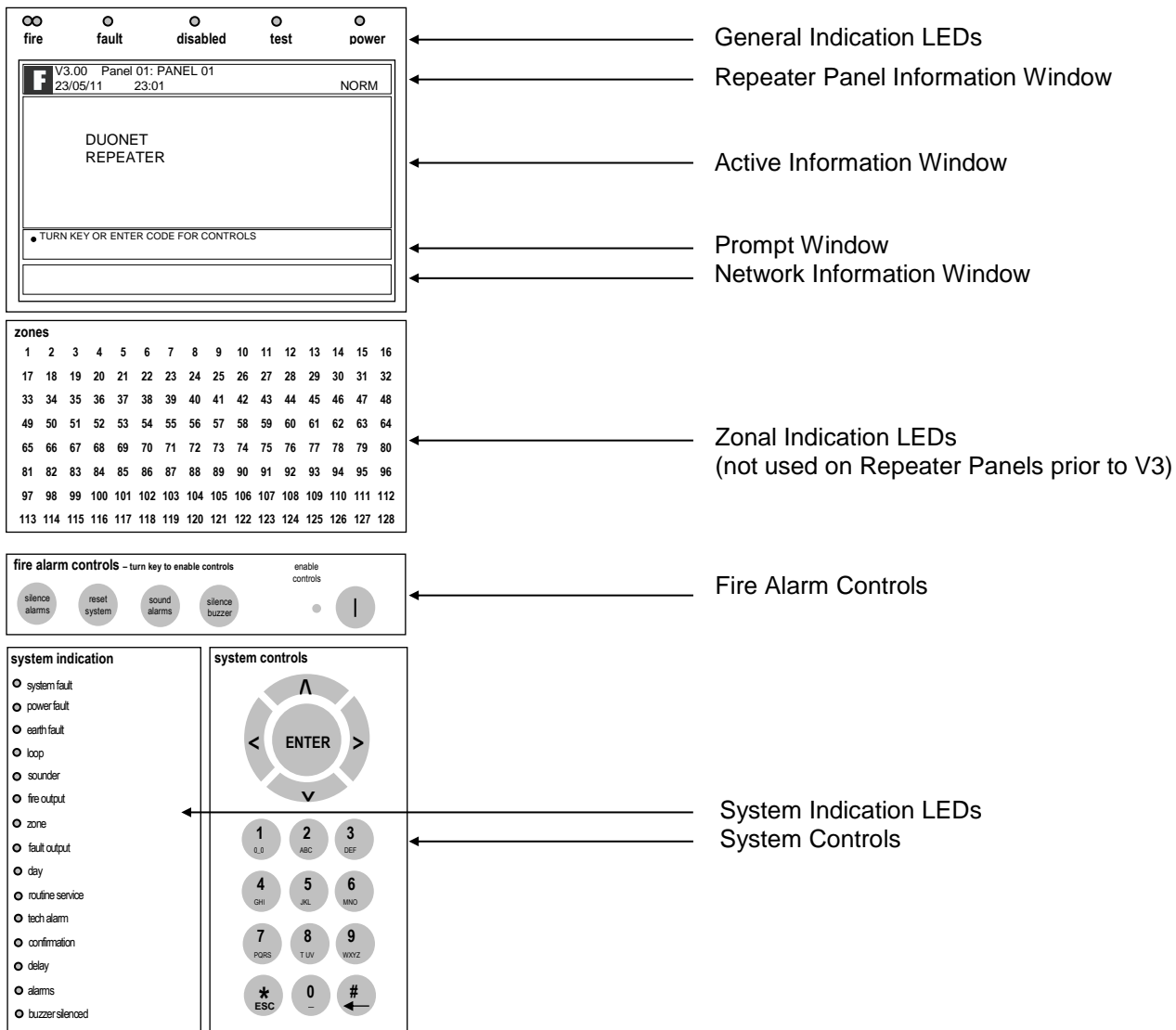
Action by the user following a fault

When a fault is reported by the repeater panel, the user should note all illuminated LEDs and messages displayed, and the circumstances at the time the fault occurred, and report to the servicing company.

The service company will be able to advise if the system is still able to respond to a fire alarm or whether extra vigilance should be observed until the fault is rectified. Faults should not be left unreported.

General Operation

Repeater Panel Front



Normal: Controls Enabled LED off

At Access Level 1 (Normal), the main **Fire Alarm Controls** are **disabled** and the Controls Enabled LED is switched off – see Fire Alarm Controls.

Fire Alarm Controls

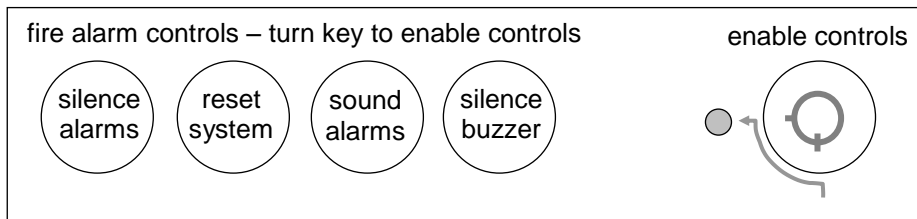
Note:

The Menus on repeater panels are exactly the same as the menus on control panels.

Controls sent from repeater panels are limited but all controls will still appear in the menu structure in the repeater panel.

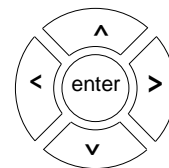
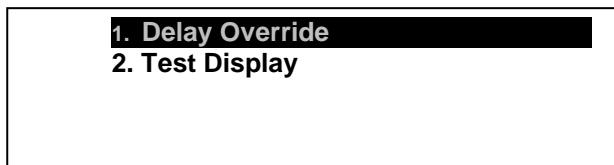
The greyed out controls below are not relevant to repeater panels and therefore should not be used.

The main Fire Alarm Controls may be enabled by turning the key switch to the controls enabled position, or by entering a valid Access code.

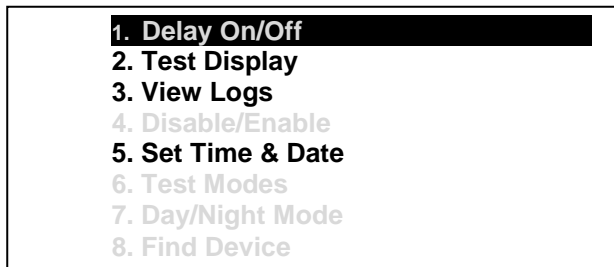


System Controls

User



Supervisor



A context-driven highlighted-selection menu system is used to navigate the menu system, automatically prompting you with the relevant options for your Access Level and system status.

The menus may be navigated in one of two ways as required:

1. Use the **UP** / **DOWN** keys to move the highlighted selection and press **ENTER** to select the chosen one.
2. Enter the desired option number and press **ENTER** to select it.

Press the **Esc** key to exit to the previous menu.

Access Levels and Codes

The menu system is divided into four access levels in order to restrict access to those who require it. For simple indication the status of the **Controls Enabled** light will show the level selected as follows;

Access Level	Description	Shift LED	Key Operation	Default Code
1 – NORM	Normal	OFF	YES	N/A
2A – USER	User	ON	YES	8737
2B – SUPR	Supervisor	SLOW FLASH	NO	7877

The fourth level (Engineer) is not shown above. Access to the menu system requires either the operation of the **enable controls key** for access to Access Level 2A (User), or the correct entry of the relevant code for access to all other levels, in order to protect against unauthorised access to the system. The codes may be changed using the Quadnet / Duonet OSP software.

A valid access level code must be entered in order access any of the menus.

Menu examples shown below are for the V3 panel. Menus in some earlier panel versions may differ.

Fire Alarm

When the panel enters the fire state, the alarms will sound, the fire LEDs will illuminate, the panel buzzer will pulse quickly and the display will show the location and type of alarm.

On Hearing the Alarm

The responsible person should have already prepared written procedures for the action to be taken in the event of a fire alarm. When the alarm sounds these procedures should be implemented.

Accessing the Controls

The user controls are accessed from Access Level 2A (User), or Access Level 2B (Supervisor) which is reached as follows:

1. Turn the key,

Or:

Enter your Access Level 2 (User) or Access Level 2B (Supervisor) code, ie, # # # #

The 'CONTROLS ENABLED' light will light up continuously, and **USER** is displayed in the top right hand corner.

The panel buzzer will be heard on each key press, and when successfully entered the 'CONTROLS ENABLED' light will light up continuously, and **USER** or **SUPR** is displayed in the top right hand corner.

You are now in Access Level 2A (User) or Access Level 2B (Supervisor) and may proceed to silence and reset the system.

Silencing the Alarms

When the fire procedures have been carried out and it is safe to silence the alarm, proceed as follows.

1. Press '**SILENCE ALARMS**'

The alarm sounders should silence, but the panel buzzer and the fire indication lights should remain.

Resetting the System

Before attempting to reset the system, the cause of the alarm should be established.

1. Press '**RESET SYSTEM**' The panel buzzer and the fire indication lights should switch off.

However, if any alarm condition still exists, eg., a manual call point requires resetting, then the panel will revert to the fire state until the cause for the alarm is removed.

Note: if the panel does not reset or a fault condition is displayed, call your maintenance engineer immediately.

Sounding the Alarms

To sound the alarms at any time after they have been silenced, proceed as follows:

1. Press '**SOUND ALARMS**' The alarm sounders will activate. The panel buzzer and the fire indication lights will also switch on.

Silencing the Buzzer

To silence the panel buzzer press the [**SILENCE BUZZER**] button at access level two as above .

1. Press '**SILENCE BUZZER**' The panel buzzer will be silenced.

Exiting Access Level 2A (User) or Access Level 2B (Supervisor)

In order to prevent unauthorised access to the system, return to Access Level 1 (Normal). However, if left untouched the display will time out after a short while and return automatically to Access Level 1 (Normal).

1. Turn the key **OFF** if it is turned on. The '**CONTROLS ENABLED**' light will switch off and the controls are disabled.

Or;

Press '**ESC**' until the system shows **NORM** in the top right hand corner.

NORM is displayed in the top right hand corner.

Troubleshooting

Problem	Possible Cause	Remedial Action
Unable to silence alarms	Panel not in Access Level 2A (User) or Access Level 2B (Supervisor)	Enter Access Level 2A (User) or Access Level 2B (Supervisor) - see section on operation.
Unable to reset system	Alarms not silenced	Silence alarms before attempting to reset the system.
	Panel not in Access Level 2 (User) or Access Level 2B (Supervisor)	Enter Access Level 2 (User) or Access Level 2B (Supervisor) - see section on operation.
	Alarm condition still present	Remove cause of alarm, eg. reset call point element with key
Panel buzzer sounding, FAULT LED lit	Fault or abnormal condition	Note all illuminated LEDs and displayed messages. Call engineer.
Panel buzzer sounding, POWER FAULT LED flashing, 'Mains supply failed' displayed.	Mains supply failure	Wait until mains supply is restored – if panel does not revert to normal operation call engineer.
Panel buzzer sounding, SYSTEM FAULT LED lit	Repeater panel fault	Call engineer immediately.
Any other fault or abnormal behaviour	Various	Note all illuminated LEDs and displayed messages. Call engineer.

Advanced Operation

Access Level 1 (Normal): Controls Enabled LED off

At Access Level 1 (Normal), the main **Fire Alarm Controls** are disabled and the Controls Enabled LED is switched off.

A valid access level code must be entered or the key switch must be used in order access any of the menus.

Access Level 2A (User): Controls Enabled LED off

At Access Level 2A (User), the main **Fire Alarm Controls** are enabled, and the following **System Controls** are accessible:

1. Delay Override

Delay Override

The Delay Override function overrides any programmed delays.

2. Test Display

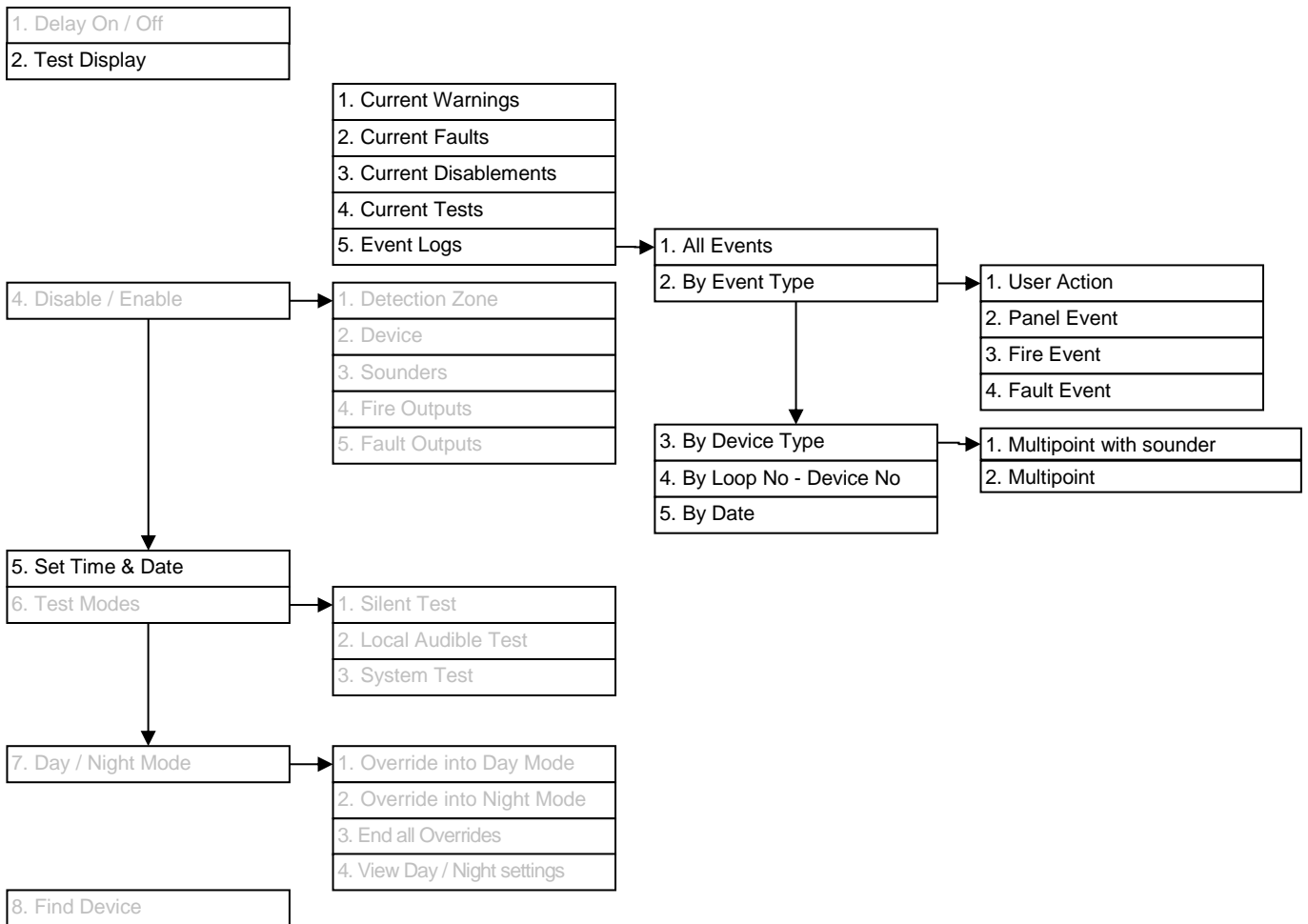
Test Display

The Test Display function causes the panel LEDs to illuminate, and the LCD screen to blacken, and the panel buzzer to sound in order to verify their correct operation.

Press the **Esc** key to exit to the previous menu.

Access Level 2B (Supervisor): Controls Enabled LED flashing slowly

At Access Level 2B (Supervisor), the main **Fire Alarm Controls** are enabled, and the following **System Controls** are accessible:



1. Delay On/Off

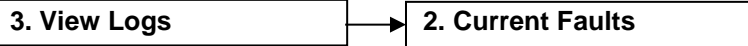
Not applicable.

2. Test Display

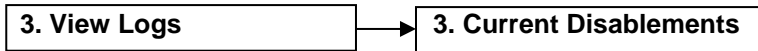
The Test Display function causes the panel LEDs to illuminate, the LCD screen to blacken and the panel buzzer to sound in order to verify their correct operation.

3. View Logs → **1. Current Warnings**

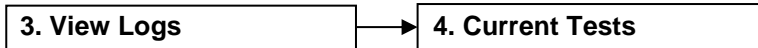
The Active Warnings Log will display any current warnings. These are displayed in text format and may be scrolled through by pressing the **UP** and **DOWN** keys.



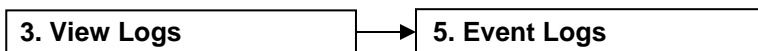
The Active Faults Log will display any current faults. These are displayed in text format and may be scrolled through by pressing the **UP** and **DOWN** keys.



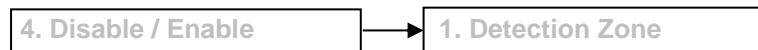
The Active Disablingment Log will display any current disablingments. These are displayed in text format and may be scrolled through by pressing the **UP** and **DOWN** keys.



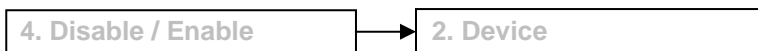
The Active Tests Log will display any current test modes. These are displayed in text format and may be scrolled through by pressing the **UP** and **DOWN** keys.



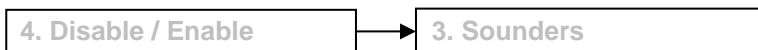
The Event Log stores 1000 local fire / fault events and 1000 network events which may be displayed in entirety, or displayed by category. These are displayed in text format and may be scrolled through by pressing the **UP** and **DOWN** keys.



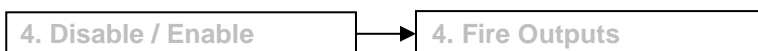
Not applicable.



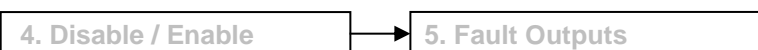
Not applicable.



Not applicable.



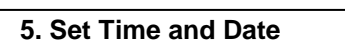
Not applicable.



Not applicable.



Not applicable.



This allows the time and date to be adjusted. These settings will need to be re-entered after the complete removal of power, as the system will simply resume from the point that power was removed.

6. Test Modes → **1. Silent Test**

Not applicable.

6. Test Modes → **2. Local Audible Test**

Not applicable.

6. Test Modes → **3. System Test**

Not applicable.

7. Day / Night Mode → **1. Override into Day Mode**

Not applicable.

7. Day / Night Mode → **2. Override into Night Mode**

Not applicable.

7. Day Night Mode → **3. End all Overrides**

Not applicable.

7. Day Night Mode → **4. View Day / Night Setting**

Not applicable.

8. Find Device

Not applicable.

LED Indication

The operation of the LED indications on the front of the panel is described below. As this is a repeater panel, not all of the following indications are applicable.

	Description	Colour	State	Reason
1.	FIRE	Red	Continuous	The repeater panel is in the fire state. Other indicators will show the origin
2.	FAULT	Yellow	Continuous	The repeater panel is in the fault state. Other indicators will show the origin
3.	DISABLED	Yellow	Continuous	This indicates that a disablement action is in place. Enable all devices / actions to clear.
4.	TEST	Yellow	Continuous	This indicates that a test routine is in place. End all tests to clear.
5.	POWER	Green	Continuous	This indicates that power is being supplied to the repeater panel from either the 230V AC mains supply, or the standby batteries.
6.	'ZONE 1-128'	Red	Flashing	A Manual Call Point in the zone indicated is in the alarm state and sending an alarm signal to the panel.
			Continuous	A Detector in the zone indicated is in the alarm state and sending an alarm signal to the panel.
7.	SYSTEM FAULT	Yellow	Continuous	The system Fault LED indicates the presence of a processor or a checksum error. Power the system down to clear, reprogram all settings and test the system.
8.	POWER FAULT	Yellow	Flashing	The mains supply has failed (check the fuse and the 230V AC supply on the PCB Ac terminals).
			Continuous	A battery supply / charger fault has been detected (check the fuse and the battery voltages).
9.	EARTH FAULT	Yellow	Flashing	An earth fault has been detected where a path exists from the circuit wiring to earth. Remove circuits one at a time to discover which one, and then rectify.
10.	LOOP	Yellow	Flashing	A fault condition is present on one or more addressable device loops, or one or more addressable devices.
			Continuous	A device or an action associated with the addressable device loop has been disabled
11.	SOUNDER	Yellow	Flashing	A fault condition is present on a monitored sounder circuit or on the addressable device loop sounders.
			Continuous	A device or an action associated with the monitored sounder circuits or an addressable sounders has been disabled.
12.	FIRE OUTPUT	Yellow	Flashing	A fault condition is present on a monitored Relay circuit or on the addressable device loop outputs.
			Continuous	A device or an action associated with the monitored relay circuits or an addressable output has been disabled.
13.	ZONE	Yellow	Continuous	A device or zone, or an action associated with them has been disabled.

14.	FAULT OUTPUT	Yellow	Flashing	A monitored output programmed to operate as a Fire Output is in the fault state.
			Continuous	A monitored output programmed to operate as a Fire Output has been disabled.
15.	DAY	Yellow	Flashing	The system Day / Night mode timing has been overridden, and forced into the less sensitive day mode.
			Continuous	The system has gone in the less sensitive day mode as programmed.
16.	SERVICE	Yellow	Flashing	The pre programmed service interval has expired and a routine maintenance check is due.
17.	TECHNICAL ALARM	Yellow	Flashing	A device programmed as Technical Alarm is in the alarm state and sending a Technical Alarm signal to the panel.
18.	ALARM CONFIRMATION	Yellow	Flashing	A smoke detector is in the alarm confirmation state, awaiting confirmation or reset.
19.	DELAY	Yellow	Continuous	An action has been started which utilises a programmed delay.
20.	ALARMS SILENCED	Yellow	Continuous	The alarm sounders have been silenced whilst operating, and the system is awaiting a reset.
21.	BUZZER SILENCED	Yellow	Continuous	The repeater panel buzzer has been silenced whilst operating and will stay silenced until another fault or relevant action occurs.
			Flashing	The repeater panel buzzer has been disabled at Access Level 3 (Engineer), and will remain silent until it is reinstated. However, the buzzer will still operate in the fire alarm state.

Installation Details

This section should be completed by the commissioning engineer at handover.

Name of Responsible Person:

Name and Address of Installation:

.....

Ref. No. (if applicable):

Date of Handover:

Name and Address of Installer:

.....

Tel: Fax:

In an emergency call:

Normal Hours: Out of Hours: