





Quadnet / Duonet OSP – V3.0x

(Suitable for Quadnet / Duonet control and repeater panels from V3.00)

Software Operating Instructions (TO BE RETAINED BY THE COMMISSIONING ENGINEER)

26-1006 Issue 5

Fike's policy is one of continual improvement and the right to change a specification at any time without notice is reserved. Whilst every care has been taken to ensure that the contents of this document are correct at time of publication, Fike shall be under no liability whatsoever in respect of such contents.

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 no's: GB2426367, GB2370670, EP1158472, PT1035528T, GB2346758, EP0917121, GB2329056, EP0980056, GB2325018, GB2305284, EP1174835, EP0856828, GB2327752, GB2313690

© 2010 Fike Safety Technology Ltd. All rights reserved. Document revised January 2013.

Contents

Introduction	6
Getting Started	6
System Requirements	
Physical Connections	
Software Installation	
Data Transfer	
Control Panel Menu Operation	
Map of System Operations	10
Quadnet / Duonet OSP Layout	
Main Screen	
File Menu	
New	
Open	
Save As.	
Print	
Print Device Details	13
Print DLU Details	13
Open Backup	14
Exit	14
New Files	14
Tools Menu	
Engineer Notes	
Panel Integrity Check	
Site Config Report	
Event Log Report	
Network Event Log Report	
Default Zone to Zone Cause & Effects.	
Engineer Functions	
Engineer Controls	
Help Menu	
About Page	
Upload Data from Panel.	22
Add	22
Delete	22
Сору	23
Import	
Upload Data	
Upload Event Log	
Upload Network Event Log	
Download Data to Panel.	
Panel Details	
Panel Summary	
Panel Details	
Delays & Timers	
Day/Night Mode	
Panel Inputs	
Panel Outputs	32
Network	33
Printer	34

	Device Details – Device Details Tab.	35
	Туре	35
	Zone	35
	Smoke Detector	35
	Heat Detector	
	Alarm Stages for Sounders (3 Stages)	
	Volume Levels for Sounders (3 stages)	
	AC (Alarm Confirmation)	
	Edit Labels	
	Edit Zone	
	Sort by Address	
	Sort by Zone	
	Device Details	
	Zone Details	
	All Details	
	Add Device	
	Delete Device	
	Data Entry	
	Sound Demo	41
	Apply Zone	
	Apply Format	
	Print	
	Device Details – Loop Loading Screen.	
	Loop Load Calcs	
	Reset DLU	
	Device Types	
	Device Details – Device I/O Tab.	
	Edit I/O Labels	
	Edit I/O Zone	
	Sort by Address	
	Sort by Zone	
	Device I/O Details	
	Zone I/O Details	
	All I/O Details	
	Device Details – Graphical View Tab.	
	Editing a Device	
	Device Details – Connection Map Tab.	
	Cause and Effect	
	Zone to Zone Cause and Effect	
	Point to Point Cause and Effect	
	Diagnostics	
	CIE Diagnostic	65
	Loop Diagnostic	65
	Panel Integrity Check	66
Routine	e Operations	67
	Programming a New Installation	
	Adding and Deleting Devices on Existing Systems	68
	Programming Loop Inputs and Outputs	
	I/O Options	
	Output Groups	
	Programming Panel Inputs and Outputs	
	I/O Options	
	Output Groups	
	Programming Alarm Confirmation	
	Alarm Confirmation Delay	
	Alarm Stage 1	

Example Configurations	75
Instant Alarms	
Smoke Alert	
Phased Evacuation	
Alarm Confirmation with Warden Call.	
Panel Details	
Device Details	
Cause & Effect	
Technical Data	
Duonet Control Panel	
Quadnet Control Panel	81
OSP Version Compatibility.	82
Technical Support	82
Configuration Sheets	83
Device Details	83
Detection Zone/Alarm Zone Details	
Your Notes	
Important Points	87

Introduction

Quadnet / Duonet OSP is the name given to the high level software package written to enable the individual configuration of the Duonet and Quadnet fire alarm systems. The Windows based program allows the system to be set up for each application. This includes the setting of detection modes, subsequent actions to be taken and individual sound patterns. Note that whichever panel is used, there is no difference in the mode of operation of the program.

Much thought has taken place to implement operations in as simple a way as possible whilst not losing flexibility through over-simplification. Hence, complicated arrangements with three alarm stages may be arranged as required in order to tailor system operation to the client's building or safety procedures.

Tools are also included to enable you to create reports and specifications from your programming, including both configuration and event log reports.

Getting Started

System Requirements

The Quadnet / Duonet OSP configuration software is available on the Fike Software CD. In order to run the program you will require the following:

- A desktop or laptop PC running the Windows XP or Windows 7 operating system (32-bit versions) with at least 1GB RAM.
 - The PC must have a CD drive in order to install your software.
 - The PC must have a USB port for connection to the panel.
- A USB interface lead for connection of the PC to the control panel.

IMPORTANT NOTE:

OSP v3.xx must not be used with panels prior to v3.00.

Physical Connections

The USB Interface lead connects between the USB port on the control panel and any USB port on the PC.



Software Installation

In order to commence installation, insert the OSP CD-ROM in your CD-ROM drive. The disc will automatically run and open up a browser style menu screen containing a number of different directories, including one that is titled 'Software'. Open this directory and then open the directory titled 'Fike Quadnet v30x' (or Duonet OSP 3.0x.exe) - as the version may vary, simply choose the latest available. Run the 'Setup.exe' file and follow the instructions while the software loads onto your hard disk drive.

The software will be installed in the following location:

C:\ Program Files \ Fike \ QuadnetOSP \

or

C:\ Program Files \ Fike \ DuonetOSP \

A shortcut from the file titled 'Quadnet OSP 3.0x'. (or 'Duonet OSP 3.0x') may then be copied onto the desktop for ease of access, and labelled with the correct version number to prevent confusion with possible future releases, as shown below.



Note that USB drivers for the Quadnet / Duonet will have to be installed before the panel can be connected to the USB port.

Data Transfer.

The Quadnet / Duonet is defined as an Addressable Intelligent Detector System, or an Addressable Fire Detection and Alarm System with Independent Distributed Intelligence. Distributed intelligence signifies that the signal processing is spread throughout the system in the form of a microprocessor in every device, in order that the decisions about fires and faults are taken within the detector itself.

The detector is capable of being remotely programmed for different modes of detection, sound patterns, etc. Thus we have two separate data transfer functions - get-config / re-config between devices and control panel, and upload / download between control panel and computer.

The get-config / re-config functions are operated from the control panel at 'Access level 3 (Engineer)'. If you have not entered Engineer mode at the PC, the functions will not work and the PC will display warning messages. Generally the configuration must be loaded to the control panel (get-config), before any upload to computer, and vice versa - the configuration must be loaded to the devices (re-config) after any download from computer to control panel.

If a device is to be replaced with a similar type, then after re-initialising the loop the system must be reconfigured. The control panel memory holds the system configuration data, so in the event of a device replacement, a PC is not necessarily required to reconfigure the device.



Control Panel Menu Operation

At Access Level 3 (Engineer), the main **Fire Alarm Controls** are enabled, and the following **System Controls** are accessible:



Map of System Operations



Quadnet / Duonet OSP Layout

Main Screen



The 'Status & Menu' screen is the front page, index and guide for programming using Quadnet / Duonet OSP. Functions are controlled via the various on-screen buttons (arranged vertically to the left of the screen) and menus (arranged horizontally at the top of the screen).

When features in the OSP program are selected by pressing buttons, Cancel and OK buttons will appear at the bottom of the screen. OK is pressed to accept any changes to the data that you make. Cancel is pressed to leave the feature without saving any data changes.

'File' Menu



The 'File' menu contains the following options:

New Site

This feature will create a 'New' configuration file with extension (*.site).

This file type may be classed as 'unlocked', allowing modifications to be made to the loop configuration.

Note that a site may consist of more than one panel.

Open Site

This feature will open an existing, or 'Old' configuration file. This function is also repeated in the form of an on-screen button in the toolbar immediately below the file menu.



This file type may be classed as 'locked', allowing no modifications to be made to the loop configuration. Thus you are prevented from downloading an incorrect file into a system.

Save As

This feature will save configuration file to the file name and address of your choice. This function is also repeated in the form of an on-screen button in the toolbar immediately below the file menu.



Print

This feature has two sub options as shown in the sub-menu below.

File	Tools Help	
	New Site	
	Open Site	
	Save as	
	Print 🕨	Print Device Details
	Open Backup	Print DLU Details
	Exit	

Print Device Details

This allows you to send a summary of all the devices to the printer. There is also a print button on the device details screen for this operation.

Print Device Detail	s	
 Save as CSV Print to Printe 	(Comma Seperated Valu er	es)
Printer :	HP LaserJet 1320n	~
Copies :	1	~
From Page :	1	~
To Page :	1	*
Orientation :	Landscape	*
	Print Cance	

Landscape orientation (not portrait) is recommended.

For each device, the following information is given.

Loop Number **Device Number Device Label** Serial Number **Device** Type No of Spurs Zone No Smoke Detection details if applicable Heat Detection details if applicable Sound Pattern 1 if applicable Volume Level 1 if applicable Sound Pattern 2 if applicable Volume Level 2 if applicable Sound Pattern 3 if applicable Volume Level 3 if applicable Alarm Confirmation (ON/OFF)

Print DLU Details

This allows you to send a summary of further information about all the devices (including DLU details) to the printer.

Landscape orientation (not portrait) is recommended.

For each device, the following information is given.

Loop Number Device Number Device Label Serial Number Device Type Sub Type Sound Pattern 1 if applicable Volume Level 1 if applicable Sound Pattern 2 if applicable Volume Level 2 if applicable Sound Pattern 3 if applicable Volume Level 3 if applicable DLU1 value DLU2 value DLU3 value

Open Backup

This allows you to open the backup of the previously saved configuration file. It will have been automatically created in the format *.sitebak

The screen prompt is shown below.

Open Backup		
Open Backup File		
	Save As	Close

Exit

Exit the Quadnet / Duonet OSP program.

New Files

You will be first be prompted with a "Save As" screen for a name for the site. Site data files are saved with type ".site".

There will then be a prompt for the language to be used.

Site Language Se	lection
Language	English (United Kingdom) 🗸 🗸
	OK Cancel

English (United Kingdom) is the default.

A new site data file will now be created. Initially it will consist of a single panel (Panel 001) with a single loop. With a Duonet system, up to 2 loops may be configured. With a Quadnet system, up to 4 loops may be configured.

You may now amend the configuration file as described in the following pages. This 'New' file does not contain initialised device address details or serial numbers.

The file may then be sent to the control panel with the download command. After download, remember to carry out the following:

- 1. 'Initialise' Loop
- 2. 'Reconfig' data to loop devices
- 3. 'Reset' system
- 4. Test system for correct operation

Tools Menu

File	Too	ols	Help
		E	ngineer Notes
		Pé	anel Integrity Check
		Si	te Config Report
		E	vent Log Report (No logs available)
		N	etwork Event Log Report
		D	efault Zone to Zone Cause & Effects
		E	ngineer Functions

Engineer Notes

This feature allows the Engineer to enter assorted notes in free-form format. The file can be saved in ".txt" format by pressing "Save".



Panel Integrity Check

Panel Integrity Report			
	[
		Type	Description Device 3 on loco 1 has sounding turned off
		ERROR	Cannot configure cause & effects (zone to zone) for zone 4, it has no input devices
Checking device settings		FRROR	Cannot configure cause & effects (zone to zone) for zone 5, it has no input devices
 Checking device sectings 		FREOR	Cannot configure cause & effects (zone to zone) for zone 6, it has no input devices
Checking panel settings	5 7	ERROR	Cannot configure cause & effects (zone to zone) for zone 7, it has no input devices
 Cnecking panel settings 		ERROR	Cannot configure cause & effects (zone to zone) for zone B, it has no input devices
/ Checking zone to zone cause		ERROR	Cannot configure cause & effects (zone to zone) for zone 10, it has no input devices
 & effects 		ERROR	Cannot configure cause & effects (zone to zone) for zone 13, it has no input devices
Checking device to device		ERROR	Cannot configure cause & effects (zone to zone) for zone 14, it has no input devices
cause & effects		ERROR	Cannot configure cause & effects (zone to zone) for zone 16, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 17, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 18, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 19, it has no input devices
Errors - 115		ERROR	Cannot configure cause & effects (zone to zone) for zone 20, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 21, it has no input devices
Warnings - 1		ERROR	Cannot configure cause & effects (zone to zone) for zone 22, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 23, it has no input devices Cannot configure cause & effects (zone to zone) for zone 24, it has no input devices
Save as CSV File		ERROR	Cannot configure cause & effects (zone to zone) for zone 24, it has no input devices Cannot configure cause & effects (zone to zone) for zone 25, it has no input devices
Save as CSV File		ERROR	Cannot configure cause & effects (zone to zone) for zone 25, it has no input devices Cannot configure cause & effects (zone to zone) for zone 26, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 27, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 20, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 29, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 30, it has no input devices
	25 0	ERROR	Cannot configure cause & effects (zone to zone) for zone 31, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 32, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 33, it has no input devices
	28 1	ERROR	Cannot configure cause & effects (zone to zone) for zone 34, it has no input devices
	29 8	ERROR	Cannot configure cause & effects (zone to zone) for zone 35, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 36, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 38, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 39, it has no input devices
	33 0	ERROR	Cannot configure cause & effects (zone to zone) for zone 40, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 41, it has no input devices
	35 8	ERROR	Cannot configure cause & effects (zone to zone) for zone 42, it has no input devices
	36 8	ERROR	Cannot configure cause & effects (zone to zone) for zone 43, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 44, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 45, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 46, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 47, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 48, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 49, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 50, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 51, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 52, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 53, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 54, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 55, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 57, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 58, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 59, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 60, it has no input devices Cannot configure cause & effects (zone to zone) for zone 61, it has no input devices
	54 0	FRROR	Cannot configure cause & effects (zone to zone) for zone 61, it has no input devices Cannot configure cause & effects (zone to zone) for zone 62, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 62, it has no input devices Cannot configure cause & effects (zone to zone) for zone 63, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 63, it has no input devices Cannot configure cause & effects (zone to zone) for zone 64, it has no input devices
		ERROR	Cannot configure cause & effects (zone to zone) for zone 64, it has no input devices Cannot configure cause & effects (zone to zone) for zone 66, it has no input devices
		ERROR	
		ERROR	Cannot configure cause & effects (zone to zone) for zone 67, it has no input devices Cannot configure cause & effects (zone to zone) for zone 68, it has no input devices
	22 1	ERROR	Cannot configure cause & effects (zone to zone) for zone 68, it has no input devices

Site Config Report

The Site Config Report option allows the creation of text files from your configuration, in the *.txt format. The following screen offers options that may be ticked so that you can select which details are included in the site report.

Select Report Details	
Select Panels Image: Ool is a constraint of the second	 Show Panel Details Show Devices in Zones Show Cause and Effects Show Device Actions
Show Device Details	Select Device Types
 Detection Details Sounder Details Aux I/O Details Select Loops Loop 1 Loop 2 Loop 3 Loop 4 	 Multipoint with Sounder Manual Call Point Multipoint Loop I/O Module Manual Call Point with Sounder Conventional Zone Module Sounder

Before the report is shown, the engineer is prompted to enter a name.

ngineer Nam	e	
Enter the En	gineer Name :	
ок		
ок		

A typical report is shown below.

File				
QUADNET / DUONET OSP	SITE DATA REPORT			
Site Name	: V3.01 Test 30-06-11			
Engineer Name	: ioe			
Date	: 12-Jul-2011			
Гime	: 03:42:45 PM			
Panel Number	: 1			
Panel Description	: PANEL 1			
Panel Type	: Quadnet			
Installed loops	: 1			
Assigned loops	: 1			
Display line l	: Duonet			
Display line 2	: Multiloop Fire Panel Net	work		
Display line 3	: Fike Safety technology			
Display line 4	: +44 1633 865558			
AC (system level)	: ON			
Alarm Delay 1	: 0 min 00 sec			
Alarm Delay 2	: 0 min 00 sec			
Alarm Delay 3	: 0 min 00 sec			
Alarm Delay 4	: O min OO sec			
Confirm Delay	: Not Specified			
Service Timer	: Not Selected			
Weekly test timer	: Not Selected			
Earth Fault	: OFF			
	to Common Fire Output : OFF			
Day Night Mode	: Not Selected			
No. of devices	: 41			
No. of spurs	: 0			
-				
PANEL I/O CONFIGURAT	ION			
Input 1	: Input 1			
Input 2	: Input 2			
Input 3	: Input 3			
Input 4	: Input 4			
Relay Output 1	: Relay Output 1			
Relay Output 2	: Relay Output 2			
Relay Output 3	: Relay Output 3			
Relay Output 4	: Relay Output 4			
Mon Output 5	: Monitored Output 5			

Open Report Save Report Save As... Print Report Close Report

The site report file may be saved in the format 'file_name'.txt by utilising the 'Save As' command in the File menu at the top of the screen. The file may be opened in Microsoft WordPad or imported into Microsoft Word. However, some fonts will cause the tabulation to alter when using Microsoft Word. The print function may be used directly from the 'File' menu, from within Word or WordPad.

Event Log Report

The Event Log Report option allows the creation of text files from any event logs which have previously been uploaded from the panel. The files will be in the *.txt format. The following screen offers options that may be ticked so that you can select which details are included in the event log report.

Quadnet / Duonet OSP Software Operating Instructions

Select Event Log Filters	
Select Devices	Select Device Types
✓ Loop 1 ✓ Loop 2 □ Loop 3 □ Loop 4	Multipoint with Sounder
▼ 1 I I I I I I I	🗹 Manual Call Point
	✓ Multipoint
	✓ Loop I/O Module
	Manual Call Point with Sounder
	✓ Conventional Zone Module
	✓ Sounder
Select Logs	Select Event Types
Event Log 15-Jul-2011 001 (1)	User Action
	Panel Event
	 ✓ Fire Event ✓ Fault Event
	V Test Event

A typical report is shown below.

E Event Log	Report									
File										
	OMET OSP S	ITE EVENT LOG								
QOIDINDE , DO	0									
Report Date:										
Report Time:	02:01:39	PM								
Site :	V3 00 Tes	t 15-07-11								
	1	0 10 0, 11								
Date :	15-Jul-20	11 02:01								
Date	Time	Event Type	Event Sub Type	Loop	Device	Device Label	Туре	Zone	Zone	Label
01-Jan-1000	03:53:53	Fault Event	Device fault	1	31	LOOP 1 DEVICE 31	SDR			
01-Jan-1000	03:53:53	Fault Event	Device fault	1	30	LOOP 1 DEVICE 30	SDR			
01-Jan-1000	03:53:53	Fault Event	Device fault	1	29	LOOP 1 DEVICE 29	SDR			
01-Jan-1000	03:53:53	Fault Event	Device fault	1	28	LOOP 1 DEVICE 28	SDR			
01-Jan-1000	03:50:52	User Action	Standard init loop	1						
01-Jan-1000	03:01:32	User Action	Stop loop	1						
01-Jan-1000	02:58:52	User Action	Standard init loop	1						
01-Jan-1000	02:56:26	Panel Event	Charger failed!							
01-Jan-1000	02:55:36	Panel Event	Battery fault							
01-Jan-1000	02:55:29	User Action	AL3 entered							
01-Jan-1000	02:00:03	User Action	AL3 entered							
01-Jan-1000	12:13:45	Fault Event	Device fault	1	28	LOOP 1 DEVICE 28	SDR	128	ZONE	128
01-Jan-1000	12:13:45	Fault Event	Device fault	1	29	LOOP 1 DEVICE 29	SDR	128	ZONE	128
01-Jan-1000	12:13:45	Fault Event	Device fault	1	30	LOOP 1 DEVICE 30	SDR	128	ZONE	128
01-Jan-1000	12:13:45	Fault Event	Device fault	1	31	LOOP 1 DEVICE 31	SDR	128	ZONE	128
01-Jan-1000	12:13:15	User Action	Reset system							
01-Jan-1000	12:12:47	Panel Event	Loop card fault	4						
01-Jan-1000	12:12:46	Panel Event	Loop card fault	3						
01-Jan-1000	12:12:39	Panel Event	Loop card fault	3						
01-Jan-1000	12:10:19	User Action	OSP upload							
01-Jan-1000	12:07:29	User Action	OSP download							
01-Jan-1000	12:05:49	User Action	OSP upload							
01-Jan-1000	11:44:57	Fault Event	Device fault	1	29	LOOP 1 DEVICE 29	SDR			
01-Jan-1000	11:44:57	Fault Event	Device fault	1	30	LOOP 1 DEVICE 30	SDR			
01-Jan-1000	11:44:57	Fault Event	Device fault	1	28	LOOP 1 DEVICE 28	SDR			
01-Jan-1000	11:44:57	Fault Event	Device fault	1	31	LOOP 1 DEVICE 31	SDR			
01-Jan-1000	11:44:37	User Action	Reset system							
01-Jan-1000	11:44:07	User Action	AL3 entered							
01-Jan-1000	11:43:59	Fault Event	Device fault	1	31	LOOP 1 DEVICE 31	SDR			
01-Jan-1000	11:43:58	Fault Event	Device fault	1	30	LOOP 1 DEVICE 30	SDR			
01-Jan-1000	11:43:57	Fault Event	Device fault	1	29	LOOP 1 DEVICE 29	SDR			
01-Jan-1000	11:43:55	Fault Event	Device fault	1	28	LOOP 1 DEVICE 28	SDR			
01-Jan-1000	11:43:26	Panel Event	Loop card fault	3						
01-Jan-1000	11:43:26	Panel Event	Loop card fault	4						
01-Jan-1000	11:43:25	User Action	Reset system							
01 041 1000										
01-Jan-1000	11:43:17	Panel Event	Loop card fault	3						

As with the site report file, the event log report may be saved in the format 'file_name'.txt by utilising the 'Save As' command in the File menu at the top of the screen. The file may be opened in Microsoft WordPad or imported into Microsoft Word. However, some fonts will cause the tabulation to alter when using Microsoft Word. The print function may be used directly from the 'File' menu, from within Word or WordPad.

Network Event Log Report

A network event log report may be made in the same way as an event log report. Note that the options which can be selected are fewer as this event log only covers network events.

Select Network Ev	ent Log Filters —		
🗹 Loop 1	🗹 Loop 2	🔽 Loop 3	🔽 Loop 4
▼ 1 ▼ 2 ▼ 3 ▼ 4 ▼ 5 ▼ 6	▼ 1 ▼ 2 ▼ 3 ▼ 4 ▼ 5 ▼ 6	 ▼ 1 ▼ 2 ▼ 3 ▼ 4 ▼ 5 ▼ 6 	▼ 1 ▼ 2 ▼ 3 ▼ 4 ▼ 5 ▼ 6
Select Logs	▼ 7 ▼ 8 ▼	▼ 7 ▼ 8 ▼	 ✓ 7 ✓ 8 ✓ 8
Event Log 30)-Jun-2011 001	(1)	

Default Zone to Zone Cause & Effects

This feature can be used to reset the default Zone to Zone cause and effect data for the currently selected panel to the original factory settings. An "Are You Sure" prompt is given.

Quadnet	t / Duonet OSP
2	Are you sure you want to set the default Zone to Zone Cause & Effects for all detection zones in panel 5 (PANEL 5) ?
	Yes No

For each of the 128 detection zones, the settings will be as follows

Group 1 – ALL Zones (1-28) selected. Links for Smoke alarm /MCP/heat/input set to Alarm stage 3. No delays used.

Group 2 – NO Zones selected. No links set.

Engineer Functions

Certain functions are provided for use by qualified engineers only. These have the drastic effect of deleting all zone to zone Cause and Effect or deleting all point to point Cause and Effect and so they are password protected.

File	Too	ls Help	
		Engineer Notes	
		Panel Integrity Check	
		Site Config Report	
		Event Log Report (No logs available)	
		Network Event Log Report	
		Default Zone to Zone Cause & Effects	
		Engineer Functions	Delete all Zone to Zone C & E
			Delete all Point to Point C & E
			Engineer Controls

Before any of the Engineer Functions can be used, the engineer must enter an AL4 security code.

OSP Security Code Dialog	
Enter AL4 Security Code:	
OK Cancel	

Engineer Controls

The Engineer Controls option is for the use of our engineers only. They can access this feature using a special security code.

'Help' Menu

The Help Menu contains a single option which will display the current software version.

File	Tools	Help	
		2	oftware Version

About Page

The About Page obtained from the Help menu gives details of the current software version of the OSP program. An example is shown below.

About Qua	About Quadnet / Duonet OSP			
	Quadnet / Duonet OSP V3.01 Issue 1			
	ОК			

Upload from

Upload Data from Panel

Note that before uploading panel data, a site data file (either newly created or an existing file) must have been opened on the PC.

Prior to an Upload of the configuration from the control panel to the PC, or a Download of the configuration from PC to the control panel, it is necessary for the panel to be in 'Access Level 3 (Engineer Mode)'. The panel must be connected to the PC via a USB lead.

Note that if the panel is left for a period of time, it will log itself out of Access Level 3 (Engineer Mode) so it is best to check that it is in Engineer mode before doing anything at the PC.

The upload button is found to the left of the main screen

	•	Control Pane
Panel		
Select Panel : 001 : PANEL 1		
Panels on Network		
No Desc		
001 PANEL 1		
Add Delete Copy Import		
	Cancel Upload	Accept Upload
Upload Data Upload Event Log Upload Network Event Log		

Add

The Add button on the upload screen allows you to add a new panel to the current configuration on the PC. This feature is also available on the "Panel Details" screen available from the "Panel Details" button.

Delete

The Delete button on the upload screen allows you to delete a panel to the current configuration on the PC. This feature is also available on the "Panel Details" screen available from the "Panel Details" button.

Сору

The Copy button on the upload screen allows you to copy the details from an existing panel to a new panel number on the PC. This feature is also available on the "Panel Details" screen available from the "Panel Details" button.

Panel Copy Scree	n
Copy panel	001 : PANEL 1
to panel	~
	Copy Cancel

In the above example, we have selected Panel 001 from that site and the data from that panel will be copied into Panel 008 in our configuration. The data may only be copied to a panel number that does not already exist in the configuration. If you want to copy the data to an existing panel, the existing panel should first be deleted using the Delete button.

Import

The Import button allows you to browse for a DIFFERENT site and copy the details of a panel on that site to any panel number on the PC. This feature is also available on the "Panel Details" screen available from the "Panel Details" button.

Panel Import Screen	
Import from site Browse	C:\Documents and Settings\My Documents\FST\Quadnet OSP V3 Files\V3.01 Test 30-06-11\V3.01 Test 30-06-11.site
Import Panel No	001 : PANEL 1
Assign Panel No	003
	Import Cancel

In the above example, we have picked a different site named Test 30-06-11.site. We have selected Panel 001 from that site and the data from that panel will be copied into Panel 003 in our configuration. It does not matter whether Panel 003 already exists in our configuration, but if it does, any data will be overwritten.

Upload Data

The Upload Data button allows you to upload data from the currently connected panel. A progress bar is shown while the data is uploading. If there is a problem, a warning will be given. If this happens, you should disconnect the USB and re-connect it before trying again. Also remember that the panel must be in Engineer Mode.

Note that you must select a panel in the PC configuration which will be given the uploaded data. When this has been selected you can press the Accept Upload button as shown in the example screen below.

Panel							
Select Panel :	001 : PANEL 1			~			
Panels on Netwo	ork						
No Desc 001 PANEL 1							
	-						
Add	Delete	Сору	Import				
Upload com	olete Unload	was from	Panel 001	save as		001 : PANEL 1	~
Opload comp	piete. Opioad	was nom	ranei 001,	ave as			
						Cancel Upload	Accept Upload
Upload Data	Jpload Event Log	Upload Netwo	ork Event Log				

If the panel that you have chosen already has data assigned to it, a prompt as follows will be given so that you can change your mind.



Upload Event Log

It is possible to upload the event log from a panel. It is necessary for the panel to be in 'Access Level 3 (Engineer Mode)' and the panel must be connected to the PC via a USB lead.

You can save event logs with different dates and times from more than one panel on the PC.

Event logs can be viewed at a later date and a hard copy made using the Event Log Report feature in the Tools menu.

Upload Network Event Log

It is possible to upload the network event log from a panel. It is necessary for the panel to be in 'Access Level 3 (Engineer Mode)' and the panel must be connected to the PC via a USB lead.

You can save network event logs with different dates and times on the PC.

Network event logs can be viewed at a later date and a hard copy made using the Network Event Log feature in the Tools menu.

Download Data to Panel

Prior to a Download of configuration data from PC to the control panel, it is necessary for the panel to be in 'Access Level 3 (Engineer Mode)'. The panel must be connected to the PC via a USB lead.

Note that if the panel is left for a period of time, it will log itself out of Access Level 3 (Engineer Mode) so it is best to check that it is in Engineer mode before doing anything at the PC.

The download button is found to the left of the main screen. On pressing it, the following screen is obtained.



Panel		
Select Panel :	001 : PANEL 1	
Panels on Netwo	rk	
No Desc		
001 PANEL	1	
[
Download		Cancel Download Finish

The Download button on this screen allows you to download configuration data from a selected panel in the PC configuration to the panel to which the PC is connected. A progress bar is shown while the data is downloading (as shown below).

Panel			
Select F	Panel :	001 : PANEL 1	
Panels o	on Netwi	work	
No	Desc	sc	
001	PANEL	VEL 1	
Down	loadin	ing in progress39 %	
Dottill			
		Cancel Download	Finish
Downloa	ad		

If there is a problem, a warning will be given. If this happens, you should disconnect the USB and reconnect it before trying again. Also remember that the panel must be in Engineer Mode.

It is recommended that you do not use the Cancel Download button once downloading has begun.

When the downloading is complete, press the Finish button.

Panel Details

Clicking on the 'Panel Details' button brings up the following screen.

	<u> </u>
	//
\mathcal{N}	/

Panel Details

Panel Summary	Panel Details	Delays & Timers	Day/Night Mode	Panel Inputs	Panel Outputs	Network Printer	
Panel							
Select Panel	: 001 : PANEL	1	~]			
Panels on Ne	twork						
No De:	sc						
001 PAN	IEL 1						
Add	Delete	Сору	Import				

Note that there are eight tabs on this screen, each of which is described below.

Panel Summary

On this tab you can use the four buttons at the bottom of the screen to add/delete panels from the configuration data as follows.

Add

The Add button on the upload screen allows you to add a new panel to the current configuration on the PC. This feature is also available on the "Upload Data" screen available from the "Upload from Control Panel" button.

Delete

The Delete button on the upload screen allows you to delete a panel to the current configuration on the PC. This feature is also available on the "Upload Data" screen available from the "Upload from Control Panel" button.

Сору

The Copy button on the upload screen allows you to copy the details from an existing panel to a new panel number on the PC. This feature is also available on the "Upload Data" screen available from the "Upload from Control Panel" button.

Panel Copy Screer	
Copy panel	001 : PANEL 1
to panel	PANEL 002
	Copy Cancel

In the above example, we have selected Panel 001 from that site and the data from that panel will be copied into Panel 002 in our configuration. The data may only be copied to a panel number that does not already exist in the configuration. If you want to copy the data to an existing panel, the existing panel should first be deleted using the Delete button.

Import

The Import button allows you to browse for a DIFFERENT site and copy the details of a panel on that site to a panel number in the current configuration. This feature is also available on the "Upload Data" screen available from the "Upload from Control Panel" button.

Panel Import Screen	
Import from site Browse	C:\Documents and Settings\My Documents\FST\Quadnet OSP V3 Files\V3.01 Test 30-06-11\V3.01 Test 30-06-11.site
Import Panel No	001 : PANEL 1
Assign Panel No	003 🗸
	Import Cancel

In the above example, we have picked a different site named Test 30-06-11.site. We have selected Panel 001 from that site and the data from that panel will be copied into Panel 003 in our configuration. It does not matter whether Panel 003 already exists in our configuration, but if it does, any data will be overwritten.

Panel Details

The Panel Details tab is shown below.

Select Pa	nel : 001	: PANEL 1				~					
anel Deta	ails										
Software Version	v3.00	Panel Type :	Duonet		Par De	nel scription	PANEL	1			
oop Detai	ils										
Loop	Card Installed	Card Assigned	MP	MPS	МСР	MCPS	SDR	1/0	СΖМ	Total	
1			4	12	4	З	14	3	1	41	
2			0	0	0	0	0	0	0	0	
з			0	0	0	0	0	0	0	0	
4			0	0	0	0	0	0	0	0	
Total			4	12	4	3	14	3	1	41	
anel Sett	ings										
Quiescen	nt Display T	ext :		Acc	ess Cod	es:					
Line 1	: Duonet]	Access L	.evel 2A (User) :	8	737		
Line 2	: Multiloop	Fire Panel Net	work		Access L	.evel 2B (Supervis	or): 7	877		
Line 3	: Fike Safe	ty Technology	Ltd		Access L	.evel 3 (E	ngineer)	: 3	647		
Line 4	; +44 163	3 865558		1							

In the top section you can select the panel and the details of the selected panel will appear in the bottom half of the screen where they may be edited.

Panel Modes

The available panel modes are

Quadnet (with up to 4 loops) Duonet (with up to 2 loops) Repeater (with no loops) – this is purely to relay information to remote parts of a panel network.

Panel Description

A panel description (up to 14 characters) may be allocated to the panel.

Loop Details

In the Loop Details section the quantity of the different types of devices on each loop are shown.

Quiescent Display Text

You can set up four lines of user-definable text which is shown on the panel when it is in a quiescent state. The default text is shown in the sample screen above.

Codes

The control panel access codes may be changed as required on this screen.

8737
7877
3647

The default codes for Access Level 2A (user), Access Level 2B (user) and Access Level 3 (engineer) are shown above. They may be changed to any combination of 4 digits.

Upload and download may only be carried out from Access Level 3 (engineer). Changing the engineer code will restrict access to those unauthorised to make such changes.

A **Back Door** code can be provided if the codes chosen are lost. If this is required, contact your supplier with the following information:

- 1. The control panel serial number
- 2. The control panel software version number
- 3. The site name and details
- 4. Your details
- 5. Written authorisation from the legal owner of the system to request back door codes for the system.

Delays & Timers

The Delays and Timers tab is shown below.

Panel Summary Panel Details Delays & Timers Day/Night Mode Panel Inputs Panel Outputs Network Printer
Panel
Select Panel : 001 : PANEL 1
Panel Delays
Alarm Delays Min Sec Min Sec Min Sec Delay 1 0 00 Delay 3 0 00 Delay 4 0
(Delay between alarm stages : Tick the delay check box in cause & effect.)
Min Sec Alarm Confirmation Delay
(Allows automatic reset of an unconfirmed alarm from a smoke Detector. Select the Sound Stage 1 sound pattern and Alarm Confirmation for each device requiring this function.) Display unconfirmed alarm warning at control panel
Panel Timers
Service Occurrence Days
□ Weekly test Timer Day □ □

Alarm Delays

Four alarm delays can be programmed with values between 0:00 and 10:00 minutes.

An Alarm Confirmation delay may be set up so that when an alarm occurs, it is not immediately reported. The system will wait until the end of the delay time and then check that the alarm is still present. If it has cleared, the device which was in alarm will be reset and no further action need be taken.

The delay time for alarm confirmation can be programmed from 1:00 - 4.00 minutes. You must ensure that stage 1 sound pattern is active for every device with alarm confirmation. This option cannot be used at the same time as alarm delay.

There is a tick box to decide whether any unconfirmed alarm warning should be displayed at the panel.

Panel Timers

You can program how often the service timer is to occur so that the end-user is prompted to call for a service. Options are 90, 180 and 360 days.

You can also specify a day and a time (hours and minutes on the 24 hour clock) for a weekly test to be performed on the panel. Leave the fields blank if you do not want a weekly test.

Day/Night Mode

The Day / Night mode tab is shown below.

Panel Summary Panel Details Delays & Timers	Day/Night Mode	Panel Inputs	Panel Outputs	Network Printer	
Panel					
Select Panel : 001 : PANEL 1	~				
Day Night Mode					
 Pre-Programmed Times (RTC) Enabled (Day night mode will operate with daily time settings) (times are in 24 hr format: i.e from 00:00 to 23:59) 	Days Sunday Monday Tuesday Wednesday Thursday Friday Saturday	From H MM H 08 00 11 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01	To IH MM 8 00 9 00 9 00 9 00 9 00 9 00 9 00 9 00	Zones to disabl (smoke detection) 001 : Zone 2) 002 : Zone 2) 003 : Zone 2) 004 : Zone 2) 005 : Zone 2) 006 : Zone 2) 008 : Zone 2) 009 : Zone 2)	disabled in day time)
✓ Panel Input Event (Day night mode will follow inputs set to Day/Night)	 ✓ 1 : Input 1 ✓ 2 : Input 2 3 : Input 3 4 : Input 4 			V 010 : Zone : V 011 : Zone : V 012 : Zone : V 013 : Zone : V 015 : Zone : V 016 : Zone :	11 12 13 14 15
Select All Inputs Select No Inputs Select No Inputs	ect All Zones	Select No Zon	nes	" Zones with MP	and MPS devices

Pre-programmed Times (RTC) Enabled

You can set times throughout the week (hours and minutes on the 24 hour clock) for day/night mode to be operational by filling in the Days "From To" Table as shown in the tab. There can only be one such time range set up per day.

You can also specify (using the zone tick boxes) which zones are to be disabled during the selected times. This could for example be used to disable smoke detection in a zone during the day while enabling it at night.

Note that the zone list can be scrolled down and that there are 128 possible zones. Zones with MP or MPS devices are shown with an asterisk by their number (e.g. Zones 002 and 005 in the example above).

The "Select Zones" button will put a tick in all the zone boxes. The "Select No Zones" button will clear all the zone tick boxes.

Panel Input Event

With this option, you can configure the system so that day / night mode will follow any panel inputs set to day/night mode.

The "Select All Inputs" button will put a tick in all the input tick boxes. The "Select No Inputs" button will clear all the input tick boxes.

Panel Inputs

The Panel Inputs tab is shown below.

Panel Summary Panel Details Del	ays & Timers Day/Night Mode	Panel Inputs Panel Outputs Network	Printer
Panel			
Select Panel : 001 : PANEL 1	*		
Panel Input 1	Panel Input 2	Panel Input 3	Panel Input 4
Description :	Description :	Description :	Description :
INPUT 1	INPUT 2	INPUT 3	INPUT 4
Zone :	Zone :	Zone :	Zone :
001 : Zone 1 🛛 🔽	×	v	×
Latching/Non Latching	Latching/Non Latching	Latching/Non Latching	Latching/Non Latching
Latching 🔽	×	×	×
<u> </u>			
O Not Configured	O Not Configured	Not Configured	Not Configured
● Fire Event	🔘 Fire Event	○ Fire Event	○ Fire Event
○ Control Event	⊙ Control Event	O Control Event	O Control Event
	Reset System		
O Technical Event	O Technical Event	O Technical Event	O Technical Event

For the Quadnet panel, up to 4 Panel Inputs can be configured on this tab.

For the Duonet panel, up to 2 Panel Inputs can be configured on this tab.

A Panel event can be configured as a Fire Event, a Control Event, a Technical Event, or left unconfigured.

Fire Event

A Panel Input configured as a Fire Event will have an associated zone (Zone 1 in the above example). It can also be selected to be latching or non-latching. These values may be changed using the pull-down selection lists.

Control Event

A Panel input can be configured as any of the types of Control Event as shown in the pull-down selection list below. Note that "Day Night Mode" may not be possible unless Day/Night mode has been selected (with zones) on the Day/Night mode tab.

🔘 Not Configured
O Fire Event
Ontrol Event
Reset System
×

Technical Event

A Panel Input configured as a Technical Event will have an associated zone. It can also be selected to be latching or non-latching. These values may be changed using the pull-down selection lists. Note that when a Technical Event takes place, there will be no indication on the panel display and the Fire LED will not light.

Panel Outputs

The Panel Outputs tab is shown below.

Panel Summary Panel Details De	lays & Timers Day/Night Mode P	anel Inputs Panel Outputs Network	Printer
Panel Select Panel : 001 : PANEL 1	v		
Relay Output 1	Relay Output 2	Relay Output 3	Relay Output 4
Description : RELAY OUTPUT 1 Zone : 128 : Zone 128 Not Configured Fire Output (Common) Fire Output (Zonal) Common Fault	Description : RELAY OUTPUT 2 Zone : 128 : Zone 128 Not Configured Fire Output (Common) Fire Output (Common) Common Fault		Description : RELAY OUTPUT 4 Zone : Not Configured Fire Output (Common) Fire Output (Zonal) Common Fault
Monitored Output 1 Description : MONITORED OUTPUT 5 Zone : 128 : Zone 128 V Not Configured Sounders Output Fire Output Common Fault	Monitored Output 2 Description : MONITORED OUTPUT 6 Zone : 128 : Zone 128 Not Configured Sounders Output Fire Output Common Fault		

Relay Outputs

For the Quadnet panel, four relay outputs (1-4) may be configured so that they will be activated when certain conditions occur. Selection is made via radio buttons.

For the Duonet panel, outputs 3 and 4 are not available and they are greyed out.

A Common Fire Output is activated by any Fire on the system.

A Zonal Fire Output (a zone must be specified in the range 1-128) is activated by a Fire in the specified zone.

A Common Fault Output is activated by any Fault on the system.

Monitored Outputs

Two monitored outputs (numbered 5-6 for the Quadnet and 1-2 for the Duonet) may be configured so that they will be activated when certain conditions occur. Selection is made via radio buttons. Note that on the Duonet backplane (Rev B), these outputs are labelled outputs 3 and 4.

Sounder Output (a zone must be specified in the range 1-128) is activated by Sounders in the specified zone and stops on silence command.

A (Zonal) Fire Output (a zone must be specified in the range 1-128) is activated by a Fire in the specified zone and stops on reset command.

A Common Fault Output is activated by any Fault on the system.

Network

The network tab is shown below.

anel Summary Panel De	etails De	elays & Timers	Day/Night Mode	Panel Inputs	Panel Outputs	Network	Printer		
Panel									
Select Panel : 001 :	PANEL 1		*						
Network Connections -									
NET 1: 0									
NET 2: 0									
NET 3 : 0									
NET 4: 0									
Network Settings									
Transmit event to Net	work (Tx) Action if re	ceived (Rx)						
Fire Event		🗹 Sou	nders	Note					
		🗹 Fire	Outputs	Tx: If Tx is on the net		nel will trar	nsmit the e	vent to other pan	iels
		🗹 Disp	ilay	on the net	WURK,				
Fault Event		🗹 Disp	lay and action	Rv [.] If Rv is	selected the na	nel will res	nond if tha	t event is receive	а
Control		🗹 Disp	lay and action	from other	panels on the r	etwork.			-
Technical Alarms		🗹 Disp	lay and action						
Show Network Connect									

On this tab you can specify (for your chosen panel) which events are transmitted to the panel network. This is done by ticking the relevant boxes in the "Transmit Event to Network" list.

You can also select whether the chosen panel is to react to any events received from the network. The choices are made by ticking the relevant boxes in the "Action if Received" list.

Printer

The printer tab is shown below.

Panel Summary	Panel Details	Delays & Timers	Day/Night Mode	Panel Inputs	Panel Outputs	Network	Printer	
Panel								
Select Panel	: 001 : PANEL	. 1	~					
Printer Settin	gs							
🗹 Enable Pr	inter							
📃 All ever	its							
🗹 Fire eve	ents							
🔽 Fault ev	/entsj							
📃 Panel e	vents							

You can select whether the printer is to be enabled on the panel and if so, you can specify which types of event are printed. Options are Fire Events, Fault Events, Panel Events and All Events.

Device Details

Device Details - Device Details Tab

Clicking on the 'Device Details' button leads to the following screen:

1 1 1 1 1 1 1 1 1 0 1	001 002 003 004 005 006 007	LOOP 1 DEVICE 1 LOOP 1 DEVICE 2 LOOP 1 DEVICE 3 LOOP 1 DEVICE 4 LOOP 1 DEVICE 5	90333 154494 300675 303670	MP MPS MPS	128 128	SM2	HM2	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
1 1 1 1 1 1	003 004 005 006 007	LOOP 1 DEVICE 3 LOOP 1 DEVICE 4 LOOP 1 DEVICE 5	300675	=	129									VIII	
1 1 1 1 1	004 005 006 007	LOOP 1 DEVICE 4 LOOP 1 DEVICE 5		MPS	120	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
1 1 1 1	005 006 007	LOOP 1 DEVICE 5	303670		128	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
1 1 1 1	006 007			MP	128	SM2	HM2	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
1 1 1	007		300929	MPS	128	SM2	HM2	SPO	Low	SP2	Low	SP3	Low	OFF	
1 1		LOOP 1 DEVICE 6	303586	MPS	128	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
1		LOOP 1 DEVICE 7	9150	SDR	128	N/A	N/A	SPO	Low	SPO	Low	SPO	Low	OFF	
	008	LOOP 1 DEVICE 8	1030954	MPS	128	SM2	HM2	SPO	Low	SP2	Low	SP3	Low	OFF	
0 1	009	LOOP 1 DEVICE 9	1037881	MP	128	SM2	HM2	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
	010	LOOP 1 DEVICE 10	1000887	MPS	128	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
1 1	011	LOOP 1 DEVICE 11	1036499	MPS	128	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
21	012	LOOP 1 DEVICE 12	1001120	MPS	128	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
31	013	LOOP 1 DEVICE 13	1037483	MPS	128	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
4 1	014	LOOP 1 DEVICE 14	6000001	MPS	128	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
51	015	LOOP 1 DEVICE 15	10012	MCP	128	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
61	016	LOOP 1 DEVICE 16	12767	MCP	128	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
71	017	LOOP 1 DEVICE 17	15008	SDR	128	N/A	N/A	SPO	Low	SPO	Low	SPO	Low	OFF	
8 1	018	LOOP 1 DEVICE 18	10009	MCPS	128	N/A	N/A	SPO	Low	SP2	Low	SP3	Low	OFF	
91	019	LOOP 1 DEVICE 19	6076	MCP	128	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
0 1	020	LOOP 1 DEVICE 20	13500	MCP	128	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
1 1	021	LOOP 1 DEVICE 21	201007	SDR	128	N/A	N/A	SPO	Low	SPO	Low	SPO	Low	OFF	
21	022	LOOP 1 DEVICE 22	4184	MCPS	128	N/A	N/A	SPO	Low	SPO	Low	SPO	Low	OFF	
31	023	LOOP 1 DEVICE 23	13295	MCPS	128	N/A	N/A	SPO	Low	SPO	Low	SPO	Low	OFF	
etails of s		device ype :	Zon			Alarm	stg 1 :		•		/ol stg	1:	-		
	Lo	oop:	Sm	oke:		Alarm	stg 2 :			1	/ol stg	2:			
	A	ddress :	Hea	t:		Alarm	stq 3 :			1	/ol stg	3:			
	S	erial no :	Spu	ır :		I/O ty	-				/O Link				

You can right click on fields as follows to edit the fields. The selection lists below have a tick by the default values.

Type (only available with NEW data)

Multipoint
 Multipoint with Sounder
Manual Call Point
Manual Call Point with Sounder
Sounder
Loop I/O Module
Conventional Zone Module

Zone (only available with NEW data)

A list of all 128 zones is displayed (128 is default)

Smoke Detector (if applicable for the type)

	Not Supported
	SMO : Smoke Detection Off
	SM1 : Standard Sensitivity + Highly Thermal Enhanced
~	SM2 : Standard Sensitivity + Thermal Enhancement
	SM3 : Integrated Low Sensitivity + Thermal Enhancement

Heat Detector (if applicable for the type)

	Not Supported
	HM0 : Heat Detection Off
	HM1 : A1/R Standard Temperature, Fast Response
~	HM2 : A1/5 Standard Temperature, Standard Response
	HM3 : C/S High Temperature, Standard Response

Alarm Stages for Sounders (3 Stages) (if applicable for the type)

	Not Supported
~	SPO : Sounder Off
	SP1 : Continuous Single Tone
	SP2 : Pulse UK Alert
	SP3 : Dual Tone UK Evacuate
	SP4 : Sweep Up
	SP5 : Slow Whoop Up
	SP6 : Sweep Down
	SP7 : Dual Tone French Alert

The system may operate with a total of two out of three Alarm Stages where the sound pattern selected at 'Sound Stage X' will operate.

Alarm Stage	Description	Actions	Next Stage
1.	Alarm Confirmation	Allows local warning and automatic reset of an unconfirmed alarm from a smoke detector. The system does not enter a Fire state until the alarm is confirmed.	Either 2 or 3
2.	Alert	Early warning stage. Sounders only are activated.	3
3.	Evacuate	Full alarm condition, sounders and remote fire outputs are activated.	-

Volume Levels for Sounders (3 stages) (if applicable for the type)

4	VL1 : Low
	VL2 : Medium
	VL3 : High

AC (Alarm Confirmation)



The Multipoint detector/sounder incorporates 'Alarm Confirmation Technology' to reduce unwanted alarms. This enables a detector to generate a local warning in response to the presence of smoke, allowing any persons within the area to react accordingly. If the presence of smoke is removed within the Alarm Confirmation Delay time then the sounder will reset automatically, but if the smoke presence continues after the alarm confirmation delay time, then an alarm will be generated.
The activation of any Heat detector (even in the same device as the smoke detector in 'Alarm Confirmation') generates an instant alarm (depending on the programming of the system 'Cause & Effect').

An 'Alarm Stage 1' sound pattern must be used for every multipoint detector requiring the 'Alarm Confirmation Delay'.

Edit Labels

The device labels are of critical importance in an addressable fire alarm system, so in order to avoid accidentally changing them, the labels are 'write protected' by the Edit Labels button. Simply click on this button to activate the 'Edit Mode', and click again to deactivate it when you have finished.

Device labels may be up to 23 alphanumeric characters long. Remember to press ENTER on your PC keyboard to indicate that you have finished editing the selected label.

Edit Zone

The zone numbers may be edited in a similar way as the labels. In order to avoid accidentally changing them, the zones are 'write protected' by the Edit Zone button. Simply click on this button to activate the 'Edit Mode', and click again to deactivate it when you have finished.

Sort by Address

This button will rearrange the order of the devices as seen on the screen so that they are in order of address. It does NOT renumber the actual order of the devices on a loop.

Sort by Zone

This button will rearrange the order of the devices as seen on the screen so that they are in order of zone. It does NOT renumber the actual order of the devices on a loop.

Device Details

This button allows you to edit properties as shown for the current device. You can also double-click on the current device to obtain this screen.

-Edit Properties for De	evice 2 in Loop 1
Device type:	Multipoint with Sounder Zone : 128 Serial 154494
	Alarm Confirmation
Label	LOOP 1 DEVICE 2 (max 23 characters)
	Auto Label Devices (\L -> Loop Number, \D -> Device Number)
Smoke Detection	SM2 : Standard Sensitivity + Thermal Enhancement
Heat Detection	
near Decedan	HM2 : A1/S Standard Temperature, Standard Response
	Sound Pattern Sound Volume
Alarm Stage 1	SPO : Sounder Off VL1 : Low VL1 : Low (Alarm Stage 1 Sound Pattern is linked to Device and Zone)
Alarm Stage 2	SPO : Sounder Off VL1 : Low (Alert or Early audible warning)
Alarm Stage 3	SP0 : Sounder Off VL1 : Low (Full Alarm including Sounders and Fire Protection outputs)

The 'Device Details' button changes only the fields that have had entries changed. This is done for the selected device only.

This button allows you to edit properties as shown for the zone associated with the point that was currently highlighted when the button was pressed.

Note that you can select which loop(s) are to have their details changed using the loop tickboxes.

🗸 Loop 1 🗸 Loop	2 🔽 Loop 3 🔽 Loop 4
Edit Properties for De	evices in Zone
Device type:	Zone : Serial
	Alarm Confirmation
Label	
Label	(max 23 characters)
	Auto Label Devices (\L -> Loop Number, \D -> Device Number)
Smoke Detection	
Heat Detection	
Heat Detection	
	Sound Pattern Sound Volume
Alarm Stage 1	(Alarm Stage 1 Sound Pattern is linked to Device and Zone)
Alarm Stage 2	(Alert or Early audible warning)
-	
Alarm Stage 3	 (Full Alarm including Sounders and Fire Protection outputs)

The 'Zone Details' screen changes only the fields that have had entries changed. This is done for **all** the devices that are in the same zone in the selected loops.

All Details

This button allows you to edit properties as shown for all points on selected loop(s) in the currently chosen panel.

Note that you can select which loop(s) are to have their details changed using the loop tickboxes.

🗹 Loop 1 🛛 🗹 Loop 2	2 🔽 Loop 3 🔽 Loop 4
Edit Properties for all	devices in panel
Device type:	Zone : Serial
	Alarm Confirmation
Label	(max 23 characters)
	Auto Label Devices (\L -> Loop Number, \D -> Device Number)
Smoke Detection	✓
Heat Detection	▼
	Sound Pattern Sound Volume
Alarm Stage 1	(Alarm Stage 1 Sound Pattern is linked to Device and Zone)
Alarm Stage 2	(Alert or Early audible warning)
Alarm Stage 3	(Full Alarm including Sounders and Fire Protection outputs)

The 'All Details' screen changes only the fields that have had entries changed. This is done for **all** devices that are in the selected loops in the panel and should be used with great caution.

Add Device

This button allows you to add one or more new devices to the system. The prompt given is as follows.

Add Devices		
Enter loop number and	device add	ress
Select Loop :	1	*
Start Address :	42	
Number of Devices :	5	
ок	Cancel	

Note that the start address must either be in the existing range of addresses or be the address immediately after the last address in the list. The system will not allow any gaps.

If the start address lies within the range, the specified number of new devices will be added and devices with higher addresses will be moved down the list to make room for the new devices.

Note that the maximum number of devices per list is 200.

The new devices will have default values as shown in the example below where 5 new devices have been added starting with address 42 on loop 1. You can then edit the fields so that the correct types are used together with your choice of alarm stage parameters.

42	1	042	LOOP 1 DEVICE 42	0	MPS	128	SM2	HM2	SP3	Med	SP3	Med	SP3	Med	OFF	
43	1	043	LOOP 1 DEVICE 43	0	MPS	128	SM2	HM2	SP3	Med	SP3	Med	SP3	Med	OFF	
44	1	044	LOOP 1 DEVICE 44	0	MPS	128	SM2	HM2	SP3	Med	SP3	Med	SP3	Med	OFF	
45	1	045	LOOP 1 DEVICE 45	0	MPS	128	SM2	HM2	SP3	Med	SP3	Med	SP3	Med	OFF	
46	1	046	LOOP 1 DEVICE 46	0	MPS	128	SM2	HM2	SP3	Med	SP3	Med	SP3	Med	OFF	~

Delete Device

This button allows you to delete one or more new devices from the system. The prompt given is as follows.

Delete Devices	
Enter loop number and	device address
Select Loop :	1 🗸
Start Address :	42
Number of Devices :	5
ок	Cancel

Note that the start address must be in the existing range of addresses.

When the devices have been deleted, devices with higher addresses will be moved up the list to remove any gap.

Data Entry

The "Data Entry" button allows you to modify data fields quickly.

Data Entry:	
Select the data yo	u wish to include in your 'Quick Entry' form.
Loop: 1	evices Range From: To:
V Device Ty	be 🗹 Alarm Stage 1 Sound
🗹 Device Lal	el 🗹 Alarm Stage 1 Volume
🔽 Device Zo	ne 🔽 Alarm Stage 2 Sound
🗹 Smoke Ma	de 🗹 Alarm Stage 2 Volume
🗹 Heat Mode	✓ Alarm Stage 3 Sound
	✓ Alarm Stage 3 Volume
	Back Cancel OK

Enter the loop number and the range of addresses that you wish to modify.

Tick only the boxes for fields that you want to modify.

Then click on OK. A prompt screen will then be shown.

Device Label : LOOP 1 DEVICE 3 Alarm Stage 1 Volume : Low Zone No. : 128 Alarm Stage 2 Sound : SPO Smoke Mode : SM2 Alarm Stage 2 Volume : Low Heat Mode : HM2 Alarm Stage 3 Sound : SPO	Device Type : MPS	Alarm Stage 1 Sound : SP0
Zone No. : 128 Alarm Stage 2 Sound : SP0 Smoke Mode : SM2 Alarm Stage 2 Volume : Low Heat Mode : HM2 Alarm Stage 3 Sound : SP0		-
Smoke Mode : SM2 Alarm Stage 2 Volume : Low Heat Mode : HM2 Alarm Stage 3 Sound : SP0	Device Label : LOOP 1 DEVICE 3	Alarm Stage 1 Volume : Low
Heat Mode : HM2 Alarm Stage 3 Sound : SP0	Zone No.: 128	Alarm Stage 2 Sound : SP0
elect Alarm Stage 3 Volume	Smoke Mode : SM2	Alarm Stage 2 Volume : Low
	Heat Mode : HM2	Alarm Stage 3 Sound : SP0
	-	

Prompts will be given with the possible entries for each field in turn. Select your choice and press OK. The fields already configured will be shown on the screen above the option box.

The Back button allows you to undo any changes that you have made. This will only work on the current device being edited. You cannot go back to the previous device.

In the above example, all the fields except for the last two (Alarm Stage 3 Sound and Alarm Stage 3 Volume) have been configured and the user is being prompted to select a value for Alarm Stage 3 Sound.

The Cancel button allows you to discard all changes made in the "Data Entry" section.

Sound Demo

The seven available sound patterns may be demonstrated audibly if your computer has suitable sound facilities by using the "Sounds" button.

The following screen will be displayed. Clicking the buttons marked SP1 – SP7 will demonstrate that sound pattern through the computer speakers.

Sounds	
Sound Patte	erns
SP1	Continuous Single Tone
SP2	Pulse UK Alert
SP3	Dual Tone UK Evacuate
SP4	Sweep Up
SP5	Slow Whoop Up
SP6	Sweep Down
SP7	Dual Tone French Alert
	ОК

Apply Zone

This button allows you to quickly transfer addresses to a chosen zone. Highlight a device in the table with the desired zone number. Now click the Apply Zone button. A prompt will appear as shown below.

No	Lp	Addr	Label	Serial No	Туре	Spur	Zone	Smoke	Heat	Snd1	Vol	Snd2	Vol	Snd3	Vol	AC	-
1	1	001	DEVICE 1 21/07/11	90333	MP		001	SM2	HM2	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
2	1	002	DEVICE 2 21/07/11	154494	MPS		001	SM2	HM2	SPO	Low	SP2	Low	SP3	Low	OFF	
3	1	003	DEVICE 3 21/07/11	300675	MPS		001	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
4	1	004	LOOP 1 DEVICE 4	303670	MP		001	SM1	HM2	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
5	1	005	LOOP 1 DEVICE 5	12767	MCP		001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
6	1	006	DEVICE 6 21/07/11	303586	MPS		001	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
7	1	007	LOOP 1 DEVICE 7	9150	SDR		001	N/A	N/A	SPO	Low	SP2	Low	SP3	Low	OFF	
8	1	008	LOOP 1 DEVICE 8	1030954	MPS		001	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
9	1	009	DEVICE 9 21/07/11	1037881	MP		001	SM2	HM2	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
10	1	010	LOOP 1 DEVICE 10	1000887	MPS		001	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
11	1	011	LOOP 1 DEVICE 11	1036499	MPS		002	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
12	1	012	DEVICE 12 21/07/11	1001120	MPS		002	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
13	1	013	LOOP 1 DEVICE 13	1037483	MPS		002	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	-
14	1	014	LOOP 1 DEVICE 14	Quadnet /	Duonet	OSD					X	SPO	Low	SPO	Low	OFF	
15	1	015	LOOP 1 DEVICE 15	Quadmet	Duomet	03P						N/A	N/A	N/A	N/A	OFF	
16	1	016	DEVICE 16 21/07/11									N/A	N/A	N/A	N/A	OFF	
17	1	017	LOOP 1 DEVICE 17		Double clic	k on othe	r devices	to apply zon	e of LOOP	1 DEVICE	10.	SP2	Low	SP3	Low	OFF	
18	1	018	LOOP 1 DEVICE 18	\sim								SPO	Low	SPO	Low	OFF	
19	1	019	LOOP 1 DEVICE 19									N/A	N/A	N/A	N/A	OFF	
20	1	020	LOOP 1 DEVICE 20				ОК					N/A	N/A	N/A	N/A	OFF	
21	1	021	LOOP 1 DEVICE 21									SPO	Low	SPO	Low	OFF	
22	1	022	LOOP 1 DEVICE 22					1.00				SPO	Low	SPO	Low	OFF	
23	1	023	LOOP 1 DEVICE 23	13295	MCPS		003	N/A	N/A	SPO	Low	SPO	Low	SPO	Low	OFF	

After pressing OK, you can double click on any other devices in the list and they will be assigned to your chosen zone. To exit from this feature, click on the Apply Zone button again.

Apply Format

This button allows you to quickly copy configured data from one address to another. Highlight the device to be copied from in the table. Now click the Apply Format button. A prompt will appear as shown below. In the example, the data will be copied from Loop 1 Device 10.

No	Lp	Addr	Label	Serial No	Туре	Spur	Zone	Smoke	Heat	Snd1	Vol	Snd2	Vol	Snd3	Vol	AC	
1	1	001	DEVICE 1 21/07/11	90333	MP		001	SM2	HM2	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
2	1	002	DEVICE 2 21/07/11	154494	MPS		001	SM2	HM2	SPO	Low	SP2	Low	SP3	Low	OFF	
3	1	003	DEVICE 3 21/07/11	300675	MPS		001	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
4	1	004	LOOP 1 DEVICE 4	303670	MP		001	SM1	HM2	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
5	1	005	LOOP 1 DEVICE 5	12767	MCP		001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
5	1	006	DEVICE 6 21/07/11	303586	MPS		001	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
7	1	007	LOOP 1 DEVICE 7	9150	SDR		001	N/A	N/A	SPO	Low	SP2	Low	SP3	Low	OFF	
з	1	008	LOOP 1 DEVICE 8	1030954	MPS		001	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
Э	1	009	DEVICE 9 21/07/11	1037881	MP		001	SM2	HM2	N/A	N/A	N/A	N/A	N/A	N/A	OFF	
10	1	010	LOOP 1 DEVICE 10	1000887	MPS		001	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
L1	1	011	LOOP 1 DEVICE 11	1036499	MPS		002	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
12	1	012	DEVICE 12 21/07/11	1001120	MPS		002	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
L3	1	013	LOOP 1 DEVICE 13	1037483	MPS		002	SM2	HM2	SPO	Low	SPO	Low	SPO	Low	OFF	
L4	1	014	LOOP 1 DEVICE 14	Quadnet / D	uppet O	en				(X	SPO	Low	SPO	Low	OFF	
15	1	015	LOOP 1 DEVICE 15	Quadhet 7 D	uonet O	5P					<u> </u>	N/A	N/A	N/A	N/A	OFF	
L6	1	016	DEVICE 16 21/07/11	-							A	N/A	N/A	N/A	N/A	OFF	
17	1	017	LOOP 1 DEVICE 17	Dou	ible click or	o other d	levices to	apply forma	F of LOOP 1	DEVICE 1	n. V	SP2	Low	SP3	Low	OFF	
18	1	018	LOOP 1 DEVICE 18	~ ~ ~		rochor a	10111000 00	appiy ronna			N.	SPO	Low	SPO	Low	OFF	
L9	1	019	LOOP 1 DEVICE 19								A	N/A	N/A	N/A	N/A	OFF	
20	1	020	LOOP 1 DEVICE 20			ſ	OV				A	N/A	N/A	N/A	N/A	OFF	
21	1	021	LOOP 1 DEVICE 21			L	ОК				V	SPO	Low	SPO	Low	OFF	
22	1	022	LOOP 1 DEVICE 22								N N	SPO	Low	SPO	Low	OFF	
23	-	023	LOOP 1 DEVICE 23	13295	MCPS		003	N/A	N/A	SPO	Low	SPO	Low	SPO	Low	OFF	

After pressing OK, you can double click on any other devices in the list and the data from your selected device will be copied to them. Note that the label (text description) and serial number will not be copied.

To exit from this feature, click on the Apply Format button again.

Print

This button allows you to print the table of device details on a printer. A prompt is given as follows so that you can select printer details.

Print Device Detail	s	
 Save as CSV Print to Print 	' (Comma Seperated Values) er	
Printer :	HP LaserJet 1320n 🛛 👻	
Copies :	1 💌	
From Page :	1 💌	
To Page :	1 💌	
Orientation :	Landscape 💌	
	Print Cancel	

Press the Print button to send the data to the chosen printer. Note that the "Save as CSV" button can be used to save the data in CSV (Comma Separated Values) format. The file could then be opened in a spreadsheet program such as Microsoft Excel.

Device Details - Loop Loading Screen

In order to allow a method of calculating the maximum loop loading that the system will support, each device has a rating assigned in Device Loading Units (DLUs). A maximum of 450 DLU are permissible on the loop. This relates to the load presented in alarm and does not necessarily affect an input device.

The Quadnet / Duonet OSP programming software v3.00 or later (v3.04 or later required for the latest devices) automatically keeps control of the quantity and will provide warnings if the limits are exceeded.

The main types of current (and earlier) devices and their loadings are listed below.

	PRODU	JCT DESCRIPTION	DLU RATING					
Type Product Code		Subtype	SP0-Off	Low	Medium	High		
MD	203 0003	Multipoint Mk3	1	-	-	-		
MP	205 0003	ASD Mk3	1	-	-	-		
	203 0001	Multipoint with Sounder Mk3	1	1.5	4.5	6		
MPS	205 0001	ASD with Sounder Mk3	1	1.5	4.5	6		
	205 0012	ASD with Sounder/Strobe Mk3	4.5	5	8	10		
MCP	403 0006 403 0007	Manual Call Point Mk3	3	-	-	-		
	313 0001 313 0002	Soundpoint Mk3	1.5	2	4	5.5		
	323 0001	Hipoint Mk3	1.5	2	4	5.5		
	303 0013	Bell Mk2	2	22	22	22		
SOUNDER	303 0012 303 0022	Flashpoint	1.5	4.5	6.5	8		
	326 0021 326 0023	Sounder/Strobe	9	9.5	11.5	13		
	326 0001 326 0003	Sounder	1.5	2	4	5.5		
	326 0015	Strobe	9	-	-	-		
I/O	803 0006	Loop I/O Module Mk2	10.5	-	-	-		
0714	803 0010	Conventional Zone Module (Loop Powered)	23.5	-	-	-		
CZM	803 0010	Conventional Zone Module (Ext PSU)	3.5	-	-	-		
ANCILLARY	803 0003 803 0005	Multipoint I/O Module (in Relay Base) Multipoint I/O Module (in Box)	3	-	-	-		
	600 0092	Remote Indicator	0.5	-	-	-		

OSP will not be able to identify all subtypes of devices on existing systems but can identify all subtypes in production as of March 2010.

Loop Load Calculations

To get details about the DLU values, use the "Loop Load Calculations" button on the Device Details screen. A typical display is shown below.

	Lp	Addr	Label			Seria	No	Туре	SubType	I/О Туре	Snd1	Vol	Snd2	Vol	Snd3	Vol	
1	1	001	DEVICE			90333		MP	Multipoint Mk 1		N/A	N/A	N/A	N/A	N/A	N/A	1
2	1	002	DEVICE			15449		MPS	Multipoint with Sour		SPO	Low	SP2	Low	SP3	Low	1
3	1	003	DEVICE			30067		MPS	Multipoint with Sour	id	SPO	Low	SPO	Low	SPO	Low	1
4	1	004	LOOP 1			30367	-	MP	Multipoint Mk 3		N/A	N/A	N/A	N/A	N/A	N/A	1
5	1	005	LOOP 1	DEVIC	E 5	12767		MCP	Callpoint Mk 2		N/A	N/A	N/A	N/A	N/A	N/A	- 3
6	1	006	DEVICE	6 21/	07/11	30358	6	MPS	Multipoint with Sour	id	SPO	Low	SPO	Low	SPO	Low	- 1
7	1	007	LOOP 1	DEVIC	CE 7	9150		SDR	Flashpoint		SPO	Low	SP2	Low	SP3	Low	- 1
8	1	008	LOOP 1	DEVIC	E 8	10309	54	MPS	ASD with Sounder M	4	SPO	Low	SPO	Low	SPO	Low	1
9	1	009	DEVICE	9 21/	07/11	10378	81	MP	ASD Mk 2		N/A	N/A	N/A	N/A	N/A	N/A	1
10	1	010	LOOP 1	DEVIC	CE 10	10008	87	MPS	ASD with Sounder I	4	SPO	Low	SPO	Low	SPO	Low	1
11	1	011	LOOP 1	DEVIC	CE 11	10364	99	MPS	ASD with Sounder N	4	SPO	Low	SPO	Low	SPO	Low	1
12	1	012	DEVICE	12 21	/07/11	10011	20	MPS	ASD with Sounder N	4	SPO	Low	SPO	Low	SPO	Low	1
13	1	013	LOOP 1	DEVIC	E 13	10374	83	MPS	ASD with Sounder N	4	SPO	Low	SPO	Low	SPO	Low	1
14	1	014	LOOP 1	DEVIC	CE 14	60000	01	MPS	ASD with Sounder S	St	SPO	Low	SPO	Low	SPO	Low	2
15	1	015	LOOP 1	DEVIC	CE 15	10012		MCP	Callpoint Mk 2		N/A	N/A	N/A	N/A	N/A	N/A	3
16	1	016	DEVICE	16 21	/07/11	12767		MCP	Callpoint Mk 2		N/A	N/A	N/A	N/A	N/A	N/A	3
17	1	017	LOOP 1	DEVIC	E 17	15008		SDR	Soundpoint Mk 3		SPO	Low	SP2	Low	SP3	Low	1
10	-	010	1000.4	DEUTO	10	10000		MODO	- Alleria Alleria Alleria	di o	CDO	1	000	1	CDO	1	
																	>
														<u> </u>	R	eset D	LU
Loop	o Load	ing Calc	ulations												R	eset D	LU
	o Load ops	ing Calc MP	ulations MPS	МСР	MCPS	SDR	I/O	сгм	Total Devices	Alarm Stage	1 Al	arm St.	age 2	Alarm	R Stage 3		LU
Lo		-		MCP 5	MCPS 3	SDR 14	1/0 3	CZM 1	Total Devices 41	Alarm Stage 127	1 Ala	arm St. 132.!	-				LU
Lo Lo	ops op 1	MP	MPS				-, -			-	1 Ali		-		Stage 3		LL
Lo Lo Lo	ops op 1 op 2	MP 4 0	MPS 11 0	5 0	3 0	14 0	3 0	1 0	41 0	127 0	1 Ala	132.9 0	-		Stage 3 32.5 0		LU
Lo Lo Lo Lo	ops op 1 op 2 op 3	- MP -4	MPS 11 0 0	5	3	14	3 0 0	1	41 0 0	127	1 Ala	132.9 0 0	-		Stage 3 32.5 0		LL
Lo Lo Lo Lo	ops op 1 op 2 op 3 op 4	MP 4 0 0 0	MPS 11 0 0 0	5 0 0	3 0 0	14 0 0	3 0	1 0 0	41 0	127 0 0	1 Ala	132.9 0	-		Stage 3 32.5 0		LU
Lo Lo Lo Lo	ops op 1 op 2 op 3 op 4	MP 4 0 0 0 selected	MPS 11 0 0 0	5 0 0 0	3 0 0	14 0 0	3 0 0 0	1 0 0 0	41 0 0 0	127 0 0 0	1 Ala	132.9 0 0	5	1	Stage 3 32.5 0 0		
Lo Lo Lo Lo	ops op 1 op 2 op 3 op 4	MP 4 0 0 0 selected	MPS 11 0 0 0	5 0 0	3 0 0	14 0 0	3 0 0 0 2 Zon	1 0 0 0	41 0 0 0	127 0 0 0 Alarm stg 1 : N/A	1 Ala	132.9 0 0	5 Vol St	1 g 1 : N	1 Stage 3 32.5 0 0 0 /A		LU
Lo Lo Lo Lo	ops op 1 op 2 op 3 op 4	MP 4 0 0 0 selected	MPS 11 0 0 0	5 0 0 0	3 0 0	14 0 0	3 0 0 0 2 Zon	1 0 0 0	41 0 0 0	127 0 0 0	1 Ala	132.9 0 0	5 Vol St	1	1 Stage 3 32.5 0 0 0 /A		LU
Lo Lo Lo Lo	ops op 1 op 2 op 3 op 4	MP 4 0 0 selected T	MPS 11 0 0 0 i device	5 0 0 0 0 0 MP 1	3 0 0	14 0 0	3 0 0 0 2 Zon	1 0 0 0 e: 1 oke: Si	41 0 0 0	127 0 0 0 Alarm stg 1 : N/A	1 Ala	132.9 0 0	5 Vol Sto Vol Sto	1 g 1 : N	A Stage 3 32.5 0 0 0 /A		LU

The lower section of the screen provides a summary of attributes for the highlighted device. Note that the device serial number is located in the lower left hand corner of this box.

Versions of the Quadnet / Duonet OSP before V2.02 did not identify the subtype. V2.02 and above of the Quadnet / Duonet OSP uses the type and serial number to calculate the subtype and all devices produced from March 2010 can be identified as well as many previous ones. However, it is not always possible to do this with early devices (as noted in the table above).

The loop loading calculations box gives a running total of the DLU values for the alarm stages on each loop, together with a breakdown of each loop by device type. If any Alarm Stage DLU totals exceed 450, they are printed in bold red text and a warning is given on leaving the screen so that the system can be reconfigured with lower volume stages 1-3 or possibly with devices deleted or put onto a different loop.

Reset DLU button

This button will reset the subtypes of any devices which have had their sub-types reconfigured by the user. The sub-types of any such devices will be returned to the default type.

Device Types

The device types are listed below. The device is depicted pictorially in the left hand lower corner in order to provide quick verification, as follows:

Picture	Туре	
	MP	Multipoint Detector
Subtypes		Sub Types: Multipoint Mk 1 Multipoint Mk 2 Multipoint Mk 3 ASD Mk 1 ASD Mk 2 ASD Mk 3 Note: Early Multipoint detectors with no sounders may be reported as the
ASD		equivalent MPS device (with sounder) in which case the sound patterns must be configured to SP0.

Picture	Туре	
Clic	MPS	Multipoint Detector with Sounder.
Subtypes Multipoint Sounder		 Sub Types: Multipoint with sounder Mk 1 Multipoint with sounder Mk 2 Multipoint with sounder Mk 3 ASD with sounder Mk 1 ASD with sounder Mk 2 ASD with sounder Mk 3 Note: Early Multipoint detectors with no sounders may be reported as the equivalent MPS device (with sounder) in which case the sound patterns must be configured to SP0.
ASD Sounder		Subtypes ASD with sounder/strobe Mk 1 ASD with sounder/strobe Mk 2 ASD with sounder/strobe Mk 3
Sounder Strobe		Note: Early Multipoint detectors with sounders and strobes may be reported as the equivalent ASD device with sounder but no strobe.

Picture	Туре	
	МСР	Manual Call Point
Subtypes		Sub Types: Manual Call Point Mk 1 Manual Call Point Mk 2 Manual Call Point Mk 3

Picture	Туре	
A	MCPS	Manual Call Point with sounder
Subtypes		Sub Types: Manual Call Point with sounder Mk 1 Manual Call Point with sounder Mk 2

Picture	Туре	
	SDR	Sounders
Subtypes		Sub Types: Soundpoint Mk 1 Soundpoint Mk 2 Soundpoint Mk 3 Hipoint Mk 2 Hipoint Mk 2 Bell Mk1 Bell Mk2 Flashpoint NSR Sounder / Strobe NSR Strobe without Strobe NSR Strobe without Sounder Note: Early devices with subtypes SoundPoint, HiPoint or Bell will be reported as "Flashpoint".

Picture	Туре	
· •••• •	I/O	Loop I/O Module
Subtypes		Sub Types: Loop I/O Module Mk 1
		Loop I/O Module Mk 2

Picture	Туре	
0 	CZM	Conventional Zone Module
Subtypes		Sub Types: Conventional Zone Module Mk 1 Conventional Zone Module Mk 2

Versions of the Quadnet / Duonet OSP before V2.02 did not identify the subtype. Quadnet / Duonet OSP v2.02 and later use the device type and serial number to calculate the subtype. With this version all devices produced from March 2010 can be identified as well as many previous ones. It is possible to override the detected subtype on the "Manual Loop Loading Calculations" screen by highlighting the subtype field and right-clicking on the field. A list of available subtypes for that type of device is then shown. Note however, that these override values are NOT sent to the panel and will be lost the next time the loop data is uploaded from the panel.

Overriding the subtype is only to be used when the correct item cannot be automatically detected by the system. This feature should be used with caution and on the advice of Fike technical support. It must not be used to artificially reduce the configured loop loading as this could have an adverse effect on the system during an alarm condition,

No	Lp	Addr	Label	Serial No	Туре	Spur	Zone	I/O Label	I/O Zone	Latch 1	/О Туре	I/O I
L	1	001	DEVICE 1 21/07/11	90333	MP		001	LOOP 1 AXILIARY 1				
2	1	002	DEVICE 2 21/07/11	154494	MPS		001					
;	1	003	DEVICE 3 21/07/11	300675	MPS		001					
ŀ	1	004	LOOP 1 DEVICE 4	303670	MP		001	LOOP 1 AXILIARY 4				
5	1	005	LOOP 1 DEVICE 5	0	MCP		001					
5	1	006	DEVICE 6 21/07/11	303586	MPS		001					
7	1	007	LOOP 1 DEVICE 7	9150	SDR		001					
3	1	008	LOOP 1 DEVICE 8	1030954	MPS		001	LOOP 1 AXILIARY 8				
)	1	009	DEVICE 9 21/07/11	1037881	MP		001					
.0	1	010	LOOP 1 DEVICE 10	1000887	MPS		001	LOOP 1 AUXLIARY 10				
1	1	011	LOOP 1 DEVICE 11	1036499	MPS		002					
.2	1	012	DEVICE 12 21/07/11	1001120	MPS		002	LOOP 1 AXILIARY 12				
.3	1	013	LOOP 1 DEVICE 13	1037483	MPS		002	LOOP 1 AXILIARY 13				
4	1	014	LOOP 1 DEVICE 14	6000001	MPS		002	LOOP 1 AXILIARY 14				
.5	1	015	LOOP 1 DEVICE 15	10012	MCP		002					
.6	1	016	DEVICE 16 21/07/11	12767	MCP		002					
L7	1	017	LOOP 1 DEVICE 17	15008	SDR		002					
.8	1	018	LOOP 1 DEVICE 18	10009	MCPS		002					
L9	1	019	LOOP 1 DEVICE 19	6076	MCP		002					
20	1	020	LOOP 1 DEVICE 20	13500	MCP		002					
21	1	021	LOOP 1 DEVICE 21	201007	SDR		003					
2	1	022	LOOP 1 DEVICE 22	4184	MCPS		003					
												>
eta	ils of s	elected	device									
	0		ype: MPS	Zon	e: 1			Alarm stg 1 : SPO		Vol stg 1 :	Low	
0		🖉 Li	oop: 1	Smo	ike: SM	12		Alarm stg 2 : SP2		Vol stg 2 :	Low	
0-	100	A	ddress : 2	Heat	:: нм	12		Alarm stg 3 : SP3		Vol stg 3 :	Low	
-	U		erial no : 154494	Spu				I/O type : -		I/O Link :		
	-			000				., o ()po (
			Edit I/O Labels E	dit I/O Zone		t by Ad		ort by Zone Device	I/O Details	Zone I/O De		I/O Deta

Device Details - Device I/O Tab

Edit I/O Labels

The I/O labels are of critical importance in an addressable fire alarm system, so in order to avoid accidentally changing them, the labels are 'write protected' by the Edit I/O Labels button. Simply click on this button to activate the 'Edit Mode', and click again to deactivate it when you have finished.

I/O labels may be up to 24 alphanumeric characters long. Remember to press ENTER on your PC keyboard to indicate that you have finished editing the selected label.

Edit I/O Zone

The I/O zone numbers may be edited in a similar way as the labels. In order to avoid accidentally changing them, the I/O zone numbers are 'write protected' by the Edit Zone button. Simply click on this button to activate the 'Edit Mode', and click again to deactivate it when you have finished. Note that you cannot edit the I/O zone number if it has not yet been set up. This can be done with the "Device I/O Details" button.

Sort by Address

This button will rearrange the order of the devices as seen on the screen so that they are in order of address. It does NOT renumber the actual order of the devices on a loop.

Sort by Zone

This button will rearrange the order of the devices as seen on the screen so that they are in order of zone. It does NOT renumber the actual order of the devices on a loop.

Device I/O Details

The following is only applicable to devices of the following types - MP, MPS or I/O - which can be configured for Auxiliary I/O properties. Devices of other types will be "Not Configured". If this button is pressed, you can edit the auxiliary I/O properties for the chosen device only.

-Edit Auxiliary I/O	Properties for Device 38 in	Loop 1	
Device type:	I/O	Serial: 5356	
I/O Description :	LOOP 1 AXILIARY 38		
	Auto Label Devices (\L	-> Loop Number, \D -> Device Numb	er)
I/O Zone :	004 : Zone 4	✓	
Latching :	Latching	~	
- I/O Туре			
🔘 Not Configur	ed 🛛 🔘 Remote Indicator	 Monitored Input 	🔘 Monitored Output
		💿 Fire Event	🔿 Device Output
		🔘 Control Event	O Sounders Output (Linked to a zone)
		×	 Fire Outputs
		*	
		🔘 Technical Event	

There are 3 possible auxiliary types.

1 Remote Indicator (LED).

This can be selected with a radio button. Note that if selected, this will increase the DLU value for the loop.

2 Monitored Input

This can be selected with a radio button. Note that if selected, you will have to specify whether it is to be a Fire Event, a Control Event or a Technical Event. Note that there are several types of Control event as shown below.

💿 Мог	💿 Monitored Input					
🔘 Fire Event						
۲	Control Event					
	~					
0	Silence Alarms Reset System Sound Alarm Silence Buzzer Disable					

If Disable is chosen as the Control event you will have to further specify whether Sounders, Fire Outputs or Fault Outputs are to be disabled.

💿 Мог	nitored Input	
0	Fire Event	
۲	Control Event	
	Disable	*
		~
0	Sounders Fire Outputs Fault Outputs	
0	Fire Outputs	
	Fault Outputs	

3 Monitored Output

This can be selected with a radio button. Note that if selected, you will have to specify whether it is to be a Device Output, Sounder Output (linked to a zone) or a Fire Output

 Monitored Output
🔘 Device Output
O Sounders Output (Linked to a zone)
• Fire Outputs

Zone I/O Details

The following is only applicable if you have highlighted a device which has one of the following types - MP, MPS or I/O.

If this button is pressed, you can edit the auxiliary I/O properties as shown for the zone associated with the point that was currently highlighted.

Note that you can select which loop(s) are to have their details changed for devices in the same zone using the loop tickboxes.

✓ Loop 1 ✓ Lo Edit Auxiliary I/O P		Loop 4	
Device type: I/O Description : [] Auto Label Devices (\L ·	Serial: -> Loop Number, \D -> Dev	vice Number)
I/O Zone :		✓	
 Not Configured 	d (Remote Indicator	 Monitored Input Fire Event Control Event Control Event 	 Monitored Output Device Output Sounders Output (Linked to a zone) Fire Outputs

The 'Zone Details' button changes only the fields that have had entries changed. This is done for **all** the devices that are in the selected loops in the zone.

All I/O Details

This button allows you to edit auxiliary I/O properties as shown for all relevant points (i.e. with type MP, MPS or I/O) on selected loop(s) in the currently chosen panel.

Note that you can select which loop(s) are to have their details changed using the loop tickboxes.

Device type:		Serial:	
I/O Description :			
🗌 Aut	to Label Devices (\L	> Loop Number, \D -> Device	Number)
I/O Zone :		~	
Latching :		~	
I/O Type Not Configured () Remote Indicator	🔘 Monitored Input	🔘 Monitored Output
) Remote Indicator	O Monitored Input	O Monitored Output
) Remote Indicator		O Device Output
) Remote Indicator) Fire Event	O Device Output
) Remote Indicator) Fire Event	O Device Output Sounders Output (Linked to a zone)

The 'All Details' button changes only the fields that have had entries changed. This is done for **all** devices that are in the selected loops in the panel and should be used with great caution.

Device Details – Graphical View Tab

This tab can be used to display an overall view of all the devices configured for the currently selected panel.

Hide Empty Zones		Loop : 💽 A	ll Loops	O Loop 1	🔘 La	op 2	🔿 Loop 3	() Lo	op 4		
ones List		Loop									
001 : Zone 1	~	Loop 1									
002 : Zone 2											
003 : Zone 3		5	en E	1. Contraction (1. Contraction)	4	-	en S	8989 B	a di se	¥.	1. C
004 : Zone 4		DEVICE 1	DEVICE 2	DEVICE 3	LOOP 1	LOOP 1	DEVICE 6	LOOP 1	LOOP 1	DEVICE 9	LOOP 1
005:Zone 5		21/07/11	21/07/11	21/07/11	DEVICE 4	DEVICE 5	21/07/11	DEVICE 7	DEVICE 8	21/07/11	DEVICE 10
006 : Zone 6											
007 : Zone 7		24 ⁶⁶	- C		84 B	-	8	8989 B	-	-	8
008 : Zone 8		LOOP 1	DEVICE 12	LOOP 1	LOOP 1	LOOP 1	DEVICE 16	LOOP 1	LOOP 1	LOOP 1	LOOP 1
009 : Zone 9		DEVICE 11	21/07/11	DEVICE 13	DEVICE 14	DEVICE 15	21/07/11	DEVICE 17	DEVICE 18	DEVICE 19	DEVICE 20
010 : Zone 10 011 : Zone 11											
011 : Zone 11 012 : Zone 12		888 B	5	5	8989 B	8929	5	S	8989	999 -	
012 : Zone 12 013 : Zone 13		LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1
014 : Zone 14		DEVICE 21	DEVICE 22	DEVICE 23	DEVICE 24	DEVICE 25	DEVICE 26	DEVICE 27	DEVICE 28	DEVICE 29	DEVICE 30
015 : Zone 15											
016 : Zone 16		888 B	592F	8989 B	S	19 27	882 B	9 99	100	100	100
017 : Zone 17		LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1	LOOP 1
018 ; Zone 18		DEVICE 31	DEVICE 32	DEVICE 33	DEVICE 34	DEVICE 35	DEVICE 36	DEVICE 37	DEVICE 38	DEVICE 39	DEVICE 40
019 : Zone 19											
020 : Zone 20											
021 : Zone 21		LOOP 1									
022 : Zone 22		DEVICE 41									
023 : Zone 23											
024 : Zone 24											
025 : Zone 25											
026 : Zone 26											
027 : Zone 27											
028 : Zone 28											
029 : Zone 29	~										

There is a different symbol for each possible type of device. A typical display is shown above.

Zones which currently contain devices are shown in **bold type** on the left hand side of the screen.

The "Hide Empty Zones" tickbox can be used to remove zones which currently have no devices configured from the list.

The "Highlight Devices" button can be used so that devices of the selected sort are shown with a thick black border around them on the diagram. The list of options is given below.

None	
Devices with Spur	
Device Types 🔹 🕨	Multipoint
Heat Sensor Disabled	Multipoint with Sounder
Smoke Sensor Disabled	Manual Call Point
Heat Only	Manual Call Point with Sounder
Smoke Only	Sounder
Sounders Activated	Loop I/O Module
Sounders Deactivated	Conventional Zone Module
All Detection Turned Off	

Note that the device types are shown in a sub-menu.

Editing a Device

If you right-click on a device, a menu similar to that shown below will be shown.

Loop 1 Device 34	
Remove from 004 : Zone 4	
Has Spur	
Change Type	×.
Smoke Detection Level	•
Heat Detection Level	•
Sound Pattern Stage 1	•
Sound Pattern Stage 2	•
Sound Pattern Stage 3	•
Volume Level Stage 1	•
Volume Level Stage 2	•
Volume Level Stage 3	•
Alarm Confirmation	×
Properties	

You can now edit any of the available fields for the device. The options are as described in the Device Details Tab section of this manual.

Note that if you click on Properties, you will get the Edit Properties screen for editing the properties of a single device as described in the Device Details Tab section of this manual.

Apply Format

This button allows you to quickly copy configured data from one address to another.

Press the button and the following prompt appears.



Click on the OK on the prompt. Now click on the device from which you would like to copy data. The chosen device will turn blue.

The following prompt will appear.



Click on the OK on the prompt and then click on the devices which are to receive the same formatting as the first device. They will turn black as you click on them When all devices have been selected, click on the OK button at the bottom of the screen. The following prompt will be shown, allowing you to cancel if necessary by clicking on "No".

Quadnet / Duonet OSP 🛛 🛛 🕅
Apply formatting to selected devices?
Yes <u>N</u> o

Click on "Yes" for the copy process to take place.

Note that this feature can only be used once. To perform more formatting, you must exit the Graphical View tab and then select the tab again

Device Details – Connection Map Tab

This tab shows a graphical display showing how the devices on a selected loop are connected.

.oop : 🧿 Loo	p1 (O Loop 2 ○ Loop 3	O Loop	4 Print	Preview		
001 90333 002 154494 003 300675	MP MPS MPS	C Device 1 21/07/11					
004 303670 005 0	MP MCP	Loop 1 Device 4	5				
006 303586	MPS	Device 6 21/07/11					
)07 9150)08 1030954	SDR MPS	號 Loop 1 Device 7 🚭 Loop 1 Device 8					
)09 1037881)10 1000887	MP MPS	🛫 Device 9 21/07/11 🚭 Loop 1 Device 10					
11 1036499	MPS MPS	Loop 1 Device 11	-				
13 1037483		Coop 1 Device 13	-				
<	red devic	e					
	Type :		Zone :		Alarm stg 1 :	Vol stg 1 :	
	Loop :		Smoke :		Alarm stg 2 :	Vol stg 2 :	
	Address Serial n		Heat : Spur :		Alarm stg 3 : I/O type :	Vol stg 3 : I/O Link :	

The loop is selected with the loop radio buttons at the top of the screen. More details are shown on this screen than on the Graphical View tab and you will need the scrollbars to see all the devices on the loop.

Note that the same symbols as on the Graphical View tab are used.

A Print button is available to send a copy of the connection map to the printer.

Quadnet / Duonet OSP Software Operating Instructions



Note that you can select the page to be printed using the pull-down selection box at the top left of the screen. However, when you press Print, there is no option to select a printer. Your default Windows printer will be used.

You can exit this screen without printing by clicking on the Close (X) box in the top right of the screen.

Cause & Effect

Many systems simply operate all sounders and fire protection outputs immediately following the activation of any device. This is known as 'Instant Alarms'.

Sometimes it may be desirable to delay the alarm response, or maybe only to sound the alarms in a certain area, and this may well depend upon the area of origin of the activated device. This is known as 'Phased Evacuation'.

The 'Cause & Effect' area allows programming of different types of zonal based 'Phased Evacuation'.

The flow chart below explains how the Quadnet / Duonet 'Cause & Effect' operates:



Clicking on the 'Cause & Effect' button will bring you to the following screen.



Zone to Zone Cause and Effect

For the majority of simple systems we recommend that a full alarm (stage 3) should be given in all zones for any input type (one out, all out).

If any different 'Cause & Effect' actions are required then follow the instructions in the "Cause and Effect Wizard" which can be found on the Alarm Stage 1 tab. These will remind you of the steps to carry out as listed below.

The initial tab shown on the Zone to Zone Cause and Effect Screen is a summary. Alarm zones 1-5 have been selected for Alarm Stage 1. Cause and Effect links have been set up in Group 1. Group 2 has not had any links set up.

Please note that only two Groups of Zone to Zone Cause and Effect can be set up. Groups 3-6 are currently not available.

Step 1 – Select Detection Zone

Select the detection zone which contains the inputs which will CAUSE the outputs to be turned on at the top of the screen.

As there are 128 possible detection zones, a tickbox "Hide Empty Detection Zones" has been provided. If ticked, this will remove all "empty" detection zones from the pull-down zone list, i.e. all detection zones which do not contain input devices. This makes selecting the correct zone easier to carry out.

Note that you can edit a description for the selected zone. The default text provided is of the form ZONE xxx.

Step 2 – Select Alarm Stage 1 Tab Alarm Conformation

Select the Alarm Stage 1 tab. A typical screen is shown below.

	ool : Zone	-		J mde cimpty c)etection Zones	,			
ummary Ala Link	rm Stage 1 Gr	oup 1 Group	2						
Alarm zones Alarm Zones	selected for Al s : 1-5	arm Stage 1:							
Effect Alarm Zon	es: 🔲 Hide I	Empty Alarm Zo	ones for Alarm	Stage 1					
 ✓ Zone 1 ✓ Zone 2 ✓ Zone 3 ✓ Zone 4 ✓ Zone 5 Zone 6 Zone 7 Zone 8 Zone 9 	Zone 10 Zone 11 Zone 12 Zone 13 Zone 14 Zone 15 Zone 16 Zone 17 Zone 18	 Zone 19 Zone 20 Zone 21 Zone 22 Zone 23 Zone 24 Zone 25 Zone 26 Zone 27 	Zone 28 Zone 29 Zone 30 Zone 31 Zone 32 Zone 32 Zone 34 Zone 35 Zone 36	Zone 37 Zone 38 Zone 39 Zone 40 Zone 41 Zone 42 Zone 43 Zone 44 Zone 45	Zone 46 Zone 47 Zone 47 Zone 48 Zone 50 Zone 50 Zone 51 Zone 52 Zone 53 Zone 54	Zone 55 Zone 56 Zone 57 Zone 58 Zone 59 Zone 60 Zone 61 Zone 62 Zone 63	Zone 64 Zone 65 Zone 66 Zone 67 Zone 68 Zone 69 Zone 70 Zone 71 Zone 72	Zone 73 Zone 74 Zone 75 Zone 76 Zone 77 Zone 78 Zone 79 Zone 80 Zone 81	Zone 82 Zone 83 Zone 84 Zone 84 Zone 86 Zone 86 Zone 87 Zone 87 Zone 90
<]				>
Select All Z	ones Select	No Zones	Select All Alarr	n Zones	Select No Alar	m Zones			

Note that there is a "Hide Empty Alarm Zones for Alarm Stage 1" tick box. If this is ticked only zones which have output devices in them will be included in the list. If this box is NOT ticked, all 128 zones are shown (as in the above screen) and you will have to use the scroll bar to see them all. Note that zones which are not empty (i.e. with output devices in them) are shown with their description underlined. In the above example, these are zones 1 to 5.

Step 3 – Select Alarm Zones for Alarm Stage 1

Put ticks in the boxes for the alarm zones to be affected when the chosen detection zone (zone 1 in our example) has an input in alarm.

There are four buttons which may make ticking the boxes easier.

Select All Zones – This will tick all 128 boxes.

Select No Zones - This will remove the ticks from all 128 boxes.

Select All Alarm Zones – This will put ticks in all the non-empty alarm zone tickboxes – i.e. the ones that have output devices in them and which have their descriptions underlined. In the above example, these are zones 1 to 5.

Select No Alarm Zones – This will remove all ticks from all the non-empty alarm zone tickboxes – i.e. the ones that have output devices in them and which have their descriptions underlined. In the above example, these are zones 1 to 5.

Step 4 – Select Group 1 Tab

		oup 1 Group							
ummary Ala Link	arm Stage 1 Gr	Group	2						
Links for G Smoke alar	rm:go to alarm nput:go to alar				Link Type Smoke ala MCP/heat/i 2nd smoke	rm 💽 input 🚺	n Stage 2 3 Delay 2 0 0 2 0 0		Alarm Stage 2 3
Effect Alarm Zo	nes: 🔲 Hide f	Empty Alarm Z	ones for Group	1					
✓ Zone 1 ✓ Zone 2 ✓ Zone 3 ✓ Zone 4 ✓ Zone 5 ✓ Zone 6 ✓ Zone 7 ✓ Zone 8 ✓ Zone 9	 Zone 10 Zone 11 Zone 12 Zone 13 Zone 14 Zone 14 Zone 16 Zone 17 Zone 18 	 ✓ Zone 19 ✓ Zone 20 ✓ Zone 21 ✓ Zone 22 ✓ Zone 23 ✓ Zone 24 ✓ Zone 25 ✓ Zone 26 ✓ Zone 27 	 ✓ Zone 28 ✓ Zone 29 ✓ Zone 30 ✓ Zone 31 ✓ Zone 32 ✓ Zone 33 ✓ Zone 34 ✓ Zone 35 ✓ Zone 36 	 Zone 37 Zone 38 Zone 39 Zone 40 Zone 41 Zone 42 Zone 43 Zone 44 Zone 45 	 Zone 46 Zone 47 Zone 48 Zone 49 Zone 50 Zone 51 Zone 52 Zone 53 Zone 54 	 Zone 55 Zone 56 Zone 57 Zone 58 Zone 59 Zone 60 Zone 61 Zone 63 	 Zone 64 Zone 65 Zone 66 Zone 67 Zone 68 Zone 70 Zone 70 Zone 71 Zone 72 	 Zone 73 Zone 74 Zone 75 Zone 76 Zone 77 Zone 78 Zone 79 Zone 80 Zone 81 	 Zone 82 Zone 83 Zone 84 Zone 85 Zone 86 Zone 87 Zone 88 Zone 88 Zone 89 Zone 90
									>

A summary of all the currently programmed links is given in the box labelled Link.

Step 5 – Select Links for Group 1

There are 3 link types as follows

Smoke alarm MCP/heat/input 2nd smoke alarm

These links are like filters, and only the options selected will allow a following action to happen (i.e. sounders on). The Alarm Stage chosen here will cause the sounders activated to operate with the sound pattern set earlier in the Device Details screen.

You can program which alarm stages are to result when your chosen link type occurs.

The options are

Alarm stage 2 – Delay 1– Alarm Stage 3 Alarm stage 2 – Delay 2– Alarm Stage 3 Alarm stage 2 – Delay 3– Alarm Stage 3 Alarm stage 2 – Delay 4– Alarm Stage 3 Alarm stage 2 – No Delay Alarm stage 3 – No Delay

Note that the 4 possible delay lengths are configured in the Panel Details Delays and Timers tab. This must be done before any delay type is selected here. Otherwise an error message will be given.

Note that you cannot select both Smoke alarm and 2nd smoke alarm simultaneously for your links.

Use the summary box labelled Link at the top to check your selections before proceeding.

Step 6 – Select Alarm Zones for Group 1

Select the required Alarm Zones for Group 1. These are the areas in which the sounders and outputs will operate when a Group 1 link is activated. Alarm Zones left unchecked will not operate.

Put ticks in the boxes for the alarm zones to be affected when the links from the chosen detection zone (zone 1 in our example) cause further alarm stages to occur.

There are four buttons which may make ticking the boxes easier.

Select All Zones – This will tick all 128 boxes.

Select No Zones - This will remove the ticks from all 128 boxes.

Select All Alarm Zones – This will put ticks in all the non-empty alarm zone tickboxes – i.e. the ones that have output devices in them and which have their descriptions underlined. In the above example, these are zones 1 to 5.

Select No Alarm Zones – This will remove all ticks from all the non-empty alarm zone tickboxes – i.e. the ones that have output devices in them and which have their descriptions underlined. In the above example, these are zones 1 to 5.

Use the summary box labelled Link at the top to check your selections before proceeding.

Step 7 – Select Group 2 Tab (Optional)

This is done in the same way as Step 4 above.

Step 8 – Select Links for Group 2 (Optional)

This is done in the same way as Step 5 above.

Step 9 – Select Alarm Zones for Group 2 (Optional)

This is done in the same way as Step 6 above.

Step 10 – Save Data

Data for the detection zone is saved by clicking on OK. Cancel can be used to leave the screen without saving data.

Point to Point Cause and Effect

As well as configuring Zone to Zone cause and effects, it is also possible to configure point input to output cause and effects. Up to 50 of these "Actions" may be set up. If both zone to zone & point to point cause & effects are used together, the zone to zone actions will be acted on first. Point to point cause and effect should not be used for time critical actions.

A typical screen is shown below. The Cause and Effect tab is shown. A summary tab is also available.

iuse & E	ffect	6 . Cur	nmary										
Input Pa		Sul	innary				ut Points						
	Lp	Addr	Label	Туре	Zone	~	pe Op Type	Lp	Addr	Label	Туре	Zone	~
	1	1	DEVICE 1 21/07/11	MP	1		2	1	1	DEVICE 1 21/07/11	MP	1	
A3.	1	2	DEVICE 2 21/07/11	MPS	1		J	1	2	DEVICE 2 21/07/11	MPS	1	.:
1. C	1	3	DEVICE 3 21/07/11	MPS	1		Ĩ	1	з	DEVICE 3 21/07/11	MPS	1	
	1	4	LOOP 1 DEVICE 4	MP	1		Ψ.	1	4	LOOP 1 DEVICE 4	MP	1	
	1	5	LOOP 1 DEVICE 5	MCP	1		8	1	5	LOOP 1 DEVICE 5	MCP	1	
2	1	6	DEVICE 6 21/07/11	MPS	1		and the	1	6	DEVICE 6 21/07/11	MPS	1	
	1	7	LOOP 1 DEVICE 7	SDR	1		🕎 Sounder	1	7	LOOP 1 DEVICE 7	SDR	1	
 Section 1 	1	8	LOOP 1 DEVICE 8	MPS	1		en C	1	8	LOOP 1 DEVICE 8	MPS	1	_
	1	9	DEVICE 9 21/07/11	MP	1		5	1	9	DEVICE 9 21/07/11	MP	1	
-	1	10	LOOP 1 DEVICE 10	MPS	1		an C	1	10	LOOP 1 DEVICE 10	MPS	1	
-	1	11	LOOP 1 DEVICE 11	MPS	2		and the second se	1	11	LOOP 1 DEVICE 11	MPS	2	
	1	12	DEVICE 12 21/07/11	MPS	2		en C	1	12	DEVICE 12 21/07/11	MPS	2	
	1	13	LOOP 1 DEVICE 13	MPS	2		1. Contraction (1. Contraction)	1	13	LOOP 1 DEVICE 13	MPS	2	
2	1	14	LOOP 1 DEVICE 14	MPS	2		200 C	1	14	LOOP 1 DEVICE 14	MPS	2	
- 😅	1	15	LOOP 1 DEVICE 15	MCP	2		2	1	15	LOOP 1 DEVICE 15	MCP	2	
- 🔛	1	16	DEVICE 16 21/07/11	MCP	2		.	1		DEVICE 16 21/07/11	MCP	2	
	1	17	LOOP 1 DEVICE 17	SDR	2		888 B	1	17	LOOP 1 DEVICE 17	SDR	2	
- 5	1	18	LOOP 1 DEVICE 18	MCPS	2		1	1	18	LOOP 1 DEVICE 18	MCPS	2	
- 🔁	1	19	LOOP 1 DEVICE 19	MCP	2	~	<u></u>	1	19	LOOP 1 DEVICE 19	MCP	2	~

Three different modes of input combination are possible.

OR Function With the OR function the configured outputs will be activated whenever ANY of the inputs in the input list occur.

AND Function With the AND function the configured outputs will only be activated whenever ALL of the inputs in the input list occur.

Double Knock Function The configured outputs will only be activated when TWO OR MORE of the inputs in the input list have occurred. They will not be activated if only one input has occurred.

The inputs and outputs are selected by putting ticks in the relevant boxes.

The Clear Action button will remove ALL ticks from ALL boxes for the currently selected Action.

Note that scroll bars are necessary to view all inputs and outputs current configured in the system.

In the Input Points list any devices which do not contain inputs are greyed out. For example, in the above sample screen, address 7 is greyed out as it is a sounder.

In the Output Points list any devices which do not contain outputs are greyed out. For example, in the above sample screen, address 15 is greyed out as it is a manual callpoint.

Note that devices such as MPS may have auxiliary outputs configured as fire outputs or device outputs as well as sounders. If this is the case, you can select which is to be activated in the output list. The default chosen is "Sounder" (as in the above example screen) but you can change this to Output if an auxiliary

output has been configured. Auxiliary outputs are configured on the Device I/O tab in the Device Details section.

You can use the summary tab to check your selections. A typical summary tab is shown below.

Note that each Action has to be configured separately.

You can use the summary tab to check your configuration. A typical summary tab is shown below.



Note that the output devices will have (s) to indicate sounders and (o) to indicate outputs.

Diagnostics

Diagnostic
Tools

Before diagnostics can be used, the Quadnet Loop Diagnostic program must have been installed on the PC. If this has not been done, a warning screen is displayed.

A typical warning screen is shown below.

<u>.</u>	WARNING !!
	You must ensure that the Quadnet Loop Diagnostic is installed in the following directory.
	C:\Program Files\FST\Quadnet Loop Diagnostic V2.00
	This installable may be located at:
	C:\Quadnet OSP V2\Quadnet Loop Diagnostic V2.00

This program is primarily for the use of Fike engineers. There are 3 tabs as follows:

CIE Diagnostics Loop Diagnostic

CIE Diagnostic

This tab allows the engineer to view the data packets being sent around the system.

Loop :	All L	pops	:	~						,	o r	nes	/wht	ліса	iuon Data (CIE Dia	gnostic Datav	Quadnet CIE Diagnostic data or	17-AUG-2011 (1).txt
Site Nam	e :	V3.	00 I	'n	73.0	02	Osp	02	-08	-11								
Date : 1																		
Time : 1	2:33	: 57	PM															
0000157-	24	4D	43	01	00	17	FF	FF	FF	FF	FF	FF	32	23	*MC \\\\\\\	CTR-MM	No Command	1
															*CAÿÿÿÿÿÿÿ		ACK	-
															*CRÿÿþÿ~#		Poll Presence Reply	1
															*MAÿÿþÿŒ#		ACK	-
															*CRÿÿþÿ″#		Poll Presence Reply	1
															*MAÿÿþÿ.#		ACK	
0000163:	2A	50	5A	00	00	01	FF	FF	FF	FF	FF	FF	A5	23	*PZÿÿÿÿÿÿ¥#	CIE-PSU	CIE-PSU Command	
0000164:	2A	50	52	00	00	01	01	00	00	00	00	00	A4	23	*PR¤#	PSU-CIE	PSU-CIE Reply	
000165:	2A	4D	43	01	00	17	FF	FF	FF	FF	FF	FF	A2	23	*MCÿÿÿÿÿÿ¢#	CIE-MN	No Command	1
000166:	2A	43	41	01	00	17	FF	FF	FF	FF	FF	FF	96	23	*CAÿÿÿÿÿÿ=#	MN-CIE	ACK	
0000167:	2A	43	45	01	00	18	FF	FF	FF	FF	FF	FF	9B	23	*CEÿÿÿÿÿÿ>#	MN-CIE	No Events	1
															*MAÿÿÿÿÿÿ;#		ACK	
															*CEÿÿÿÿÿÿ>#		No Events	1
															*MAÿÿÿÿÿÿ;#		ACK	
															*PZ ÿÿÿÿÿÿ¥ #		CIE-PSU Command	
															*PR¤#		PSU-CIE Reply	
															*MCÿ <u>ÿÿÿÿÿ</u> ¢#		No Command	1
															*CAÿÿÿÿÿÿ=#		ACK	
															CRÿÿÿÿ		Poll Presence Reply	1
															*MAÿÿÿÿŽ#		ACK	
															*CRÿÿÿ¦#		Poll Presence Reply	1
															*MAÿÿÿŸ#		ACK	
																	Logger stop frame	
0000180:	ZA	4C	41	00	00	00	F F	00	00	F F	F F	F F	89	23	*LAÿÿÿÿ%#	CIR-Podder	AUK	

Loop Diagnostic

This tab allows the engineer to view the data packets being sent around the loops on the panel.

Quadnet Loop Diagnostic V2	2.02	
<u>F</u> ile Copy <u>S</u> etup <u>V</u> iew log files <u>C</u>	onfigure	
Command file: Engineer.cmd PC_INITIALISE 01000000 PC_START_LOOP		
0000020 00 FF FF 0000021 00 FF FF 0000022 00 FF FF 0000023 00 FF FF 0000024 00 FF FF 0000025 00 FF FF 0000026 00 A0 80 0000027 00 FF FF 0000028 00 A1 00 0000028 00 A1 00 0000028 00 A2 00 0000031 00 FF FF 0000032 00 A3 FF 0000033 00 FF FF 0000035 00 FF FF 0000035 00 FF FF 0000038 00 A4 FF 0000038 00 A6 FF 0000039 00 FF FF 0000039 00 FF	FF FF FF p2#poll_presence .001.002.003.004.005.006.007.008.009.010.011.012.013.014.015. FF p2#poll_presence.016.017.018.019.020.021.022.023.024.025.026.027.02 FF p2#poll_presence.032.033.034.035.036.037.038.039.040.041.	8,02
<		>
	Select gmd. Start logging Start Rx Setup	

Panel Integrity Check

This feature can be found under the Tools dropdown menu and allows the currently configured data to be checked for inconsistencies and errors.

The following are checked.

Device settings Panel Settings Zone to Zone Cause and Effects Device to Device Cause and Effects

A typical report is shown below. In the example, alarm zones have been configured for cause and effect to turn on outputs in zone 1 group 1. However, no such outputs have been set up.

	No	Туре	Description
	1	WARNING	Device 3 on loop 1 has sounding turned off
1	2	WARNING	Device 6 on loop 1 has sounding turned off
Checking device settings	3	WARNING	Device 8 on loop 1 has sounding turned off
* <u>,</u>	4	WARNING	Device 10 on loop 1 has sounding turned off
Checking panel settings	5	WARNING	Device 11 on loop 1 has sounding turned off
V	6	WARNING	Device 12 on loop 1 has sounding turned off
/ Checking zone to zone cause	7	WARNING	Device 13 on loop 1 has sounding turned off
🗸 & effects	8	WARNING	Device 14 on loop 1 has sounding turned off
🖌 Checking device to device	9	WARNING	Device 18 on loop 1 has sounding turned off
cause & effects	10	WARNING	Device 21 on loop 1 has sounding turned off
	11	WARNING	Device 22 on loop 1 has sounding turned off
	12	WARNING	Device 23 on loop 1 has sounding turned off
	13	WARNING	Device 24 on loop 1 has sounding turned off
Errors - 2	14	WARNING	Device 25 on loop 1 has sounding turned off
	15	WARNING	Device 28 on loop 1 has sounding turned off
Warnings - 22	16	WARNING	Device 29 on loop 1 has sounding turned off
·········	17	WARNING	Device 30 on loop 1 has sounding turned off
	18	WARNING	Device 31 on loop 1 has sounding turned off
Save as CSV File	19	WARNING	Device 32 on loop 1 has sounding turned off
	20	WARNING	Device 33 on loop 1 has sounding turned off
	21	WARNING	Device 35 on loop 1 has sounding turned off
	22	WARNING	Device 37 on loop 1 has sounding turned off
	23	ERROR	Cannot configure cause & effects (zone to zone) for zone 6, it has no input devices
	24	ERROR	Cannot configure cause & effects (zone to zone) for zone 128, it has no input device

Routine Operations

Programming a New Installation

Generally, the simplest manner in which to program a new installation is to let the control panel find its own loop configuration upon initialisation, and then to modify this. It is suggested that you proceed as follows:

- 1. Initialise the system. The control panel will interrogate the loop to build up a database of the configuration. Ensure that the correct number of devices has been found and that initialisation is complete.
- 2. Upload the configuration. Upload the original configuration from the control panel and save it as 'Filename original', i.e., 'HarloweHouse original'. It is good practice to keep this file and not overwrite it with another. If any confusion exists it is handy to investigate the original configuration.
- **3.** Verify the position of the devices. Use the device serial numbers to ensure that your 'As-wired' drawings or connection schematic is correct. The upload configuration will be correct so amend your notes to reflect this.
- 4. Program as required. Configure the control panel and device attributes as required.
- 5. Save this file. Save the file as 'Filename final', i.e., 'HarloweHouse final'. The download option is available without saving the file, but it is good practice to save the file in any case.
- 6. Download the file into the control panel. After download remember to carry out the following:

'Start' or 'Initialise' Loop 'Reconfig' data to loop devices 'Reset' system Test system for correct operation.

Adding and Deleting Devices on Existing Systems

As the address of a device may change if the loop configuration is modified it is important to carry out the operation in a certain manner in order to avoid the need to reprogram the system from that point onwards.

This is only necessary if the configuration of devices on the loop is changed, i.e., adding or removing devices. This procedure **is not** required if a 'like' device is swapped, or if an optical chamber is replaced.

- 1. Upload the original. Upload the original configuration from the control panel and save it as 'Filename original', i.e., 'HarloweHouse original'. It is important to keep this file and not over-write it with another in case anything goes wrong.
- 2. Physically add or remove the required devices Physically add or remove the required devices to the system, record the serial numbers of the detectors, and initialise the system to find the modified loop configuration. Make sure that you know which address numbers are to be added and which are to be deleted as the system will renumber the addresses to remove any gaps.
- 3. Add or remove the required devices to the configuration file. It is generally easier to add or remove devices in order, starting at the lowest address and working up towards the highest address.
- 4. Set the new devices as required. Configure the device type, smoke and heat modes, sound patterns and volumes, I/O types and set the zone allocation. Any added devices will not yet have serial numbers.
- 5. Download the file into the control panel. First check and save the configuration file as 'Filename new', i.e., 'HarloweHouse new'. After download remember to carry out the following:

Start or Initialise Loop Re-config data to loop devices Reset system Test system for correct operation.

6. Upload from the fire panel and save the file. The data will now have the correct serial numbers for any devices which have been added. This will be the finished version of the file.

Programming Loop Inputs and Outputs

The Multipoint detector/sounder has an inbuilt input/output function known as the Multipoint Auxiliary I/O. This may be programmed within the 'Device Details' + Device I/O Tab section by selecting the required device and then clicking on 'Device I/O Details' at the bottom. The required attributes may then be selected.

I/O Options

I/O options may be configured to suit your individual applications as described below. Further details of the electrical configuration may be found in the *Engineering and Commissioning Instructions*. The Loop Powered I/O Module is programmed in a similar manner, but with fewer options. The table indicates whether an EOL resistor is necessary. Note that if Auxiliary I/O is set to 'Not Configured', it will not require an EOL resistor.

	Description	Action	Group	EOL	MP I/O	Loop I/O
1.	NOT CONFIGURED	The aux I/O will not change state		None	Y	Y
2.	REMOTE INDICATOR	Output will follow the fire and fault indication of the Multipoint. The LED will require a 10K series resistor - Default setting	LED	None	Y	Ν
3.	MONITORED INPUT	The input will monitor for fire (680R) and fault (3K3 EOL), and trigger the system into the fire state, indicating 'Aux input' on the display.		3K3		
4.	MONITORED OUTPUT	The output will monitor for fault (3K3 EOL) and the output will cause the relay on the 'I/O Interface Module' to change state.		3K3		
		Device – The relay will follow the fire state of the host detector independent of control panel instruction, including during alarm confirmation.	Device		Y	Ν
		Alarm Zone – The relay will follow the Alarm Zone of the host device.	Sounder		Y	Y
		Auxiliary (I/O) Zone – The relay will follow the I/O zone. Setting the output type to either Sounder or Output (= Remote Fire Output) in 'Cause & Effect' will determine the 'Output Group'	Sounder / Remote Fire		Y	Y

Output Groups

The operations of the output groups are shown in the table below.

	Group	Description	Activate/Start	Deactivate/Stop
1.	LED	Remote Indicator	Mimic host device fire and fault LED	
2.	DEVICE	Follow fire state of host device	Alarm commencement of host device	Reset of host device
3.	SOUNDER	Sounder output	Alarm commencement	Silence
4.	REMOTE FIRE	Fire Protection Output	Alarm commencement	Reset

Programming Panel Inputs and Outputs

I/O Options for Panel Inputs / Outputs

They may be configured to suit your individual applications as described below. Further details of the electrical configuration may be found in the *Engineering and Commissioning Instructions*. Note that if monitored inputs or outputs are set as 'Not Configured', they will not require EOL resistors.

Des	scription	Option	Action	Group	EOL
1.	OUTPUT 1	Not configured	The relay will not change state		None
		Fire Output (Common)	The relay coil will energise in any fire condition	Fire Prot	None
		Fire Output (Zonal)	The relay coil will energise in a fire condition from the specified zone		None
		Common Fault	The relay coil will de-energise in any fault condition		None
2.	OUTPUT 2	Not configured	The relay will not change state		None
		Fire Output (Common)	The relay coil will energise in any fire condition	Fire Prot	None
		Fire Output (Zonal)	The relay coil will energise in a fire condition from the specified zone		None
		Common Fault	The relay coil will de-energise in any fault condition		None
3.	OUTPUT 3	Not configured	The relay will not change state		None
	(NOT AVAILABLE	Fire Output (Common)	The relay coil will energise in any fire condition	Fire Prot	None
	ON DUONET)	Fire Output (Zonal)	The relay coil will energise in a fire condition from the specified zone		None
		Common Fault	The relay coil will de-energise in any fault condition		None
4.	OUTPUT 4	Not configured	The relay will not change state		None
	(NOT AVAILABLE	Fire Output (Common)	The relay coil will energise in any fire condition	Fire Prot	None
	ON DUONET)	Fire Output (Zonal)	The relay coil will energise in a fire condition from the specified zone		None
		Common Fault	The relay coil will de-energise in any fault condition		None
5.	MON	Not configured	The relay will not change state		None
	OUTPUT 5 (MON OUTPUT 1	Sounder s Output (Zone must be specified)	The output will energise in any fire activation from specified zone, de-energise on silence	Sounder	10k
	ON DUONET)	Fire Output (Zone must be specified)	The output will energise in any fire activation from specified zone, de-energise on reset	Fire Prot	10k
		Common Fault	The relay coil will de-energise in any fault condition		10K
6.	MON OUTPUT 6	Not configured	The relay will not change state		None
	(MON OUTPUT 2	Sounder s Output (Zone must be specified)	The output will energise in any fire activation from specified zone, de-energise on silence	Sounder	10k
	ON DUONET)	Fire Output (Zone must be specified)	The output will energise in any fire activation from specified zone, de-energise on reset	Fire Prot	10k
		Common Fault	The relay coil will de-energise in any fault condition		10K

Quadnet / Duonet OSP Software Operating Instructions

7.	INPUTs 1 to 4 (Inputs 3 & 4 NOT AVAILABLE ON	Not configured Fire Event input Latching (for specified zone)	The input is inactive A 680 ohm firing resistor will trigger a fire state in specified Detection Zone) and clear on Reset System	None 3k3
	DUONET)	Fire Event input Non- Latching (for specified zone)	A 680 ohm firing resistor will trigger a technical alarm state in specified Detection Zone) but will clear when the firing resistor is removed	3k3
		Technical Event input Latching (for specified zone)	A 680 ohm firing resistor will trigger a technical alarm state in specified Detection Zone) and clear on Reset System	3k3
		Technical Event input Non- Latching (for specified zone)	A 680 ohm firing resistor will trigger a fire state in specified Detection Zone) but will clear when the firing resistor is removed If the EOL is O/C a fault will be generated.	3k3
		Control event	Silence Alarms Reset System Sound Alarm Silence Buzzer Day/Night Mode Disable Sounders Disable Fire Outputs Disable Fault Outputs	3k3

INPUTS 2-4 have the same options as for INPUT 1 in the above table.

Output Groups

The operations of the output groups are described below:

	Group	Description	Activate/Start	Deactivate/Stop
1.	SOUNDER	Sounder output	Alarm commencement	Silence
2.	FIRE PROT	Fire Protection Output	Alarm commencement	Reset

Quadnet Outputs

Outputs 1 to 4 are derived from single pole change over 'volt-free' relay contacts which are not fault monitored. The relay contacts are rated at 30VDC / 1A max.

The default setting for output 1 causes the relay to operate as a **Common Fire** output where the relay is energised in the fire condition. The default setting for output 2 causes the relay to operate as a **Common Fault** output where the relay is de-energised in the fault condition. Various other states may also be set using the OSP programming software. However, to meet the requirements of EN54-2, Outputs 1 and 2 must be left as **Common Fire** and **Common Fault** respectively.

The default setting for outputs 3 and 4 causes the relay to operate as a **Common Fault** output where the relay is de-energised in the fault condition. Various other states may also be set using the OSP programming software.

Monitored Outputs 5 and 6 are monitored circuits which may be configured to monitor for open and short circuit faults with a 10k EOL resistor, and to be activated with a stage 3 alarm.

Quadnet Inputs

Inputs 1-4 may be configured to monitor for open and short circuit faults using a 3k3 EOL resistor, and to activate an alarm link using a 680R 'firing' resistor.

Duonet Outputs

Outputs 1 and 2 are derived from single pole change over 'volt-free' relay contacts which are not fault monitored. The relay contacts are rated at 30VDC / 1A max.

The default setting for output 1 causes the relay to operate as a **Common Fire** output where the relay is energised in the fire condition. The default setting for output 2 causes the relay to operate as a **Common Fault** output where the relay is de-energised in the fault condition. Various other states may also be set using the OSP programming software. However, to meet the requirements of EN54-2, Outputs 1 and 2 must be left as **Common Fire** and **Common Fault** respectively.

Monitored Outputs 5 and 6 are monitored circuits which may be configured to monitor for open and short circuit faults with a 10k EOL resistor, and to be activated with a stage 3 alarm.

The default setting for these monitored outputs causes the circuits to operate as **Common Fire Sounder Circuits**, where the outputs turn on in the alarm condition. Various other states may also be set using the OSP programming software.

Duonet Inputs

Inputs 1-2 may be configured to monitor for open and short circuit faults using a 3k3 EOL resistor, and to activate an alarm link using a 680R 'firing' resistor.
Programming Alarm Confirmation

Alarm Confirmation Technology (ACT) is the process whereby a smoke detector may be configured to issue a localised warning in specific regions, prior to sounding a general alarm. This is generally of great benefit in dwelling areas where smoke, steam or cooking fumes may trigger a Multipoint detector.

The following diagram demonstrates some of the possibilities:



This function affects the smoke detector only, and operates before the control panel enters the Fire state. Thus, the system 'Cause & Effect' does not need to be adjusted as **Alarm Confirmation takes place before the programmed Cause & Effect sequence is reached**.

In order to activate this function, set the attributes detailed in 'System details' and ensure that 'Stage 1' sound settings have been programmed for every device requiring Alarm Confirmation. Note that Alarm Confirmation cannot be programmed at the panel. It must be done using the OSP program.

Alarm Confirmation Delay

An Alarm Confirmation delay may be set up so that when an alarm occurs, it is not immediately reported. The system will wait until the end of the delay time and then check that the alarm is still present. If it has cleared, the device which was in alarm will be reset and no further action need be taken.

The Alarm Confirmation Delay timers is located within the 'Panel Details' area on the 'Delays and Timers' tab and may be set to give the required Alarm Confirmation Delay time.

The use of this feature allows an automatic reset of an unconfirmed alarm from a smoke detector. It also allows an Alarm Stage 1 sound pattern for each device required, in the 'Device Details' section.

At the end of the 'Alarm Confirmation Delay' time the system will check the detector again to see if the activation has cleared. If so then the device will reset and no further action need be taken.

The sounder operates during the chosen 'Alarm Confirmation Delay' time, and stops for the final 20 seconds, during which time the device is reset to check for further smoke presence.

During the 'Alarm Confirmation Delay', the activation of an additional smoke detector into 'Alarm Confirmation' will cause the delay time to cease and an instant alarm to be generated.

If, however, the detector is still activated when the alarm confirmation delay is finished, then the entire system will go into alarm, operating all the sounders programmed in the 'Cause & Effect' area.

For a further time period (10 min - 'Alarm Confirmation Delay'), the activation of the same smoke detector will cause an instant alarm (depending on the programming of the system in 'Cause & Effect').

The activation of any Heat detector (even in the same device as the smoke detector in 'Alarm Confirmation') generates an instant alarm (depending on the programming of the system 'Cause & Effect').

Alarm Stage 1

These attributes may be set for each device which is to utilise Alarm Confirmation. Smoke detectors without the attributes will operate in a standard manner (depending on the programming of the system 'Cause & Effect').

The 'Alarm Stage 1' sound pattern must be used in conjunction with the 'Alarm Confirmation Delay'.

If Alarm stage 1 is set then the sounder in that device only operates if its smoke detector is in alarm (unless zonal confirmation is set - then all sounders on that zone will operate). This is 'Alarm stage 1'. The device will revert to 'Alarm stage 2 or 3' when Alarm stage 1 is off. (Any subsequent actions may need to be programmed as required under the 'Cause & Effect' section).

If you require the alarm confirmation signal to operate sounders on other zones, then alarm confirmation cause and effect can be programmed by selecting the zones in Alarm Stage 1 under the 'Cause & Effect' section

The activation of any Heat detector (even in the same device as the smoke detector in 'Alarm Confirmation') generates an instant alarm (depending on the programming of the system 'Cause & Effect').

Example Configurations

Following are some examples of the configuration required for varying single and multi stage alarm scenarios.

Group 1 and/or group 2 may be set up as shown in the examples on the following pages. Remember that these groups need to be configured for every 'Detection Zone' required. As the highest priority event always overrides all lower priority events, the groups may be programmed in any order.

This list is not exhaustive and you may find many different ways of configuring your alarm response. Consultation with the End User and the relevant Fire Authority is essential.

In these examples, the panel Monitored outputs 5 and 6 have been put into zones 67 and 68 respectively. Panel Monitored outputs are configured on the Panel Outputs tab on the Panel Details screen.

Instant Alarms

If you require an instant alarm response to any detector, manual call point or input alarm then set Group 1 as follows. This is the standard default configuration supplied with new systems, so generally this will not need any alterations.

Summary Ala	mmary Alarm Stage 1 Group 1 Group 2									
Link										
Links for Group 1 : Smoke alarm : go to alarm stage 3 MCP/heat/input : go to alarm stage 3 Alarm Zones : 1-128				^	Link Type		Stage 3 Delay	1234	Alarm Stag 2 3	
					Smoke ala MCP/heat/i 2nd smoke	input 🗌				
 ✓ Zone 3 ✓ Zone 4 ✓ Zone 5 ✓ Zone 6 ✓ Zone 7 ✓ Zone 8 ✓ Zone 9 	 ✓ Zone 12 ✓ Zone 13 ✓ Zone 14 ✓ Zone 15 ✓ Zone 16 ✓ Zone 17 ✓ Zone 18 	 ✓ Zone 21 ✓ Zone 22 ✓ Zone 23 ✓ Zone 24 ✓ Zone 25 ✓ Zone 26 ✓ Zone 27 	 Zone 30 Zone 31 Zone 32 Zone 33 Zone 34 Zone 35 Zone 36 	 Zone 39 Zone 40 Zone 41 Zone 42 Zone 43 Zone 44 Zone 45 	 Zone 48 Zone 49 Zone 50 Zone 51 Zone 52 Zone 53 Zone 54 	 Zone 57 Zone 58 Zone 59 Zone 60 Zone 61 Zone 62 Zone 63 	 Zone 66 Zone 67 Zone 68 Zone 69 Zone 70 Zone 71 Zone 72 	 ✓ Zone 75 ✓ Zone 76 ✓ Zone 77 ✓ Zone 78 ✓ Zone 79 ✓ Zone 80 ✓ Zone 81 	✓ Zone 8 ✓ Zone 9	
<	E cono ro					El cono co	E cono re	E Lono ol	2010 3	

Group 2 should be set with the links unticked.

Jininiary Miarin s	mary Alarm Stage 1 Group 1 Group 2								
Link	nk								
Links for Group No links selected				~	Link Type Smoke ala MCP/heat/ 2nd smoke	rm 🗌	Stage 3 Dela	y 1 2 3 4	Alarm Stag 2 3
Effect Alarm Zones:	🔲 Hide En	npty Alarm Zo	nes for Group	2					
Zone 1 Zone 2 Zone 3 Zone 4 Zone 5 Zone 6 Zone 7 Zone 8 Zone 9	Zone 11 Zone 12 Zone 13 Zone 14 Zone 15 Zone 16	Zone 19 Zone 20 Zone 21 Zone 22 Zone 23 Zone 24 Zone 25 Zone 26	 Zone 28 Zone 29 Zone 30 Zone 31 Zone 32 Zone 33 Zone 34 Zone 35 Zone 36 	Zone 37 Zone 38 Zone 39 Zone 40 Zone 41 Zone 42 Zone 43 Zone 44 Zone 45	Zone 46 Zone 47 Zone 48 Zone 49 Zone 50 Zone 51 Zone 52 Zone 53 Zone 54	Zone 55 Zone 56 Zone 57 Zone 58 Zone 59 Zone 60 Zone 61 Zone 62 Zone 63	Zone 64 Zone 65 Zone 66 Zone 67 Zone 68 Zone 69 Zone 70 Zone 71 Zone 72	Zone 73 Zone 74 Zone 75 Zone 76 Zone 77 Zone 78 Zone 79 Zone 80 Zone 81	2 20ne 8; 2 20ne 9;
<									>

Any fire input (i.e. smoke, heat, call point input), from this Detection Zone (Zone 1) will cause an 'Alarm stage 3 (Evacuate)' sound in Alarm Zones 1 - 128.

Remember that the group 1 and 2 configuration must be set for every 'Detection Zone' required (not just for Zone 1), both on initial commissioning and during any future alterations to the system.

Note the selection of Alarm Zones 67 and 68 (in Group 1) to enable the operation of the two conventional sounder circuits (Monitored Outputs 5 and 6) at the control panel.

'Smoke Alert'

An early warning (Alert) maybe raised in the event of a smoke detector triggering, in order to give time for staff to investigate. Heat detection and manual call points should normally be left with an instant response. To achieve this result set Group 1 as follows.

Zone to zone C & E Point to point C & E	
Detection Zones 001 : Zone 1	tection Zones
Summary Alarm Stage 1 Group 1 Group 2	
Link	
Links for Group 1 : Smoke alarm : from alarm stage 2 with delay 1 go to alarm stage 3 MCP/heat/input : go to alarm stage 3 Alarm Zones : 1-5	Alarm Stage Alarm Stage Link Type 2 3 Delay 1 2 3 4 2 3 Smoke alarm V V O V
Effect Alarm Zones: 🔽 Hide Empty Alarm Zones for Group 1	
 ✓ Zone 1 ✓ Zone 2 ✓ Zone 3 ✓ Zone 4 ✓ Zone 5 	
Select All Zones) Select No Zones) Select All Alarm Zones) S	ielect No Alarm Zones
C and E Wizard	

Note that Group 2 should be set with all the links unticked as shown below.

Jmmary Alarm	Stage 1 Gr	oup 1 Group	2						
Link									
Links for Grou No links select					Link Type		n Stage : 3 Delay	1234	Alarm Stag 2 3
				~	Smoke ala MCP/heat/i 2nd smoke	input [
Effect Alarm Zones			ones for Group				_		
Zone 1 Zone 2 Zone 3	Zone 10 Zone 11 Zone 12	Zone 19 Zone 20 Zone 21	Zone 28 Zone 29 Zone 30	Zone 37 Zone 38 Zone 39	Zone 46 Zone 47 Zone 48	Zone 55	Zone 64 Zone 65 Zone 66	Zone 73	Zone 82
Zone 4	Zone 13	Zone 22	Zone 31	Zone 40	Zone 49	Zone 58	Zone 67	Zone 76	Zone 85
Zone 6 Zone 7	Zone 15 Zone 16	Zone 24 Zone 25	Zone 33 Zone 34	Zone 42 Zone 43	Zone 51 Zone 52	Zone 60	Zone 69 Zone 70	Zone 78 Zone 79	Zone 8
Zone 8	Zone 17	Zone 26	Zone 35	Zone 44	Zone 53	Zone 62	Zone 71	🗌 Zone 80 📃 Zone 81	Zone 89
<									>
Select All Zon		No Zones	Select All Aları	C	Select No Alar				

In this example, we have programmed Zone 1.

Any smoke alarm input on Detection Zone 1 (Zone Basement) will cause an 'Alarm stage 2 (Alert)' sound in Alarm Zones 1 to 5. Note that the "Hide Empty Alarm Zones" box has been ticked, making it easier to see which zones are actually involved in the outputs.

After a time delay (configured earlier as Alarm Delay 1 in the Delays and Timers tab on the Panel System Details screen), the sound will change to an 'Alarm stage 3 (Evacuate)' sound.

This sound will also be used on a heat or call point activation but with no delay.

Note the selection of Alarm Zones 67 and 68 (in Group 1) to enable the operation of the two conventional sounder circuits (Monitored Outputs 5 and 6) at the control panel. These are only triggered from the 'Alarm stage 3' activation.

Remember that the group 1 and 2 configuration must be set for every 'Detection Zone' required (not just for Zone 1), both on initial commissioning and during any future alterations to the system.

Phased Evacuation

Alternatively, an early warning (Alert) can be raised within the local area in the event of a smoke detector triggering, in order to give time for staff to investigate. Heat detection and manual call points should normally be left with an instant response, but possibly phasing the evacuation from the critical areas.

To achieve this result set Group 1 as follows.

Zone to zone C & E Point to point C & E		
Detection Zones 003 : Zone 3	Hide Empty Detection Zones	
Summary Alarm Stage 1 Group 1 Group 2		
Link-		
Links for Group 1 : Smoke alarm : go to alarm stage 2 Alarm Zones : 3	Alarm Stage Alar Link Type 2 3 Delay 1 2 3 Smoke alarm Image: Compare the strength of the strengt of the strength of the strength of the strength of the s	arm Stage 2 3
Effect Alarm Zones: V Hide Empty Alarm Zones for Group	p 1	
Zone 1 Zone 2 ✓ Zone 3 Zone 4 Zone 5		
Select All Zones Select No Zones Select All Alar	rm Zones Select No Alarm Zones	

Note that Group1 has been configured to only report the event (using alarm stage 2) to zone 3. The result is localised to the zone where the fire occurred.

Set Group 2 as follows.

Zone to zone C & E Point to point C & E		
Detection Zones 003 : Zone 3	Empty Detection Zones	
Summary Alarm Stage 1 Group 1 Group 2		
- Link-		
Links for Group 2 : Smoke alarm : from alarm stage 2 with delay 2 go to alarm stag MCP/heat/input : go to alarm stage 3 Alarm Zones : 3-5	ge 3 Alarm Stage Link Type 2 3 Delay 1 2 3 4 Smoke alarm V V OOO MCP/heat/input V OOOO 2nd smoke alarm OOOOO	Alarm Stage 2 3
Effect Alarm Zones: V Hide Empty Alarm Zones for Group 2 Zone 1 Zone 2 Zone 3 Zone 4 Zone 5		
Select All Zones Select No Zones Select All Alarm Zone:	s Select No Alarm Zones	

In this example, any smoke alarm input on Detection Zone 3 will cause an 'Alarm stage 2' sound in Alarm Zone 3 only (because of the setting of Group 1). After a time delay (configured earlier as Alarm Delay 2 in the Delays and Timers tab on the Panel System Details screen), or immediately after a heat or call point activation, the sound will change to an 'Alarm stage 3' sound in Alarm Zones 3,4 and 5.

Thus, an Alarm Stage 2 (Alert) is generated on the same zone as the smoke detector activation. After a time delay, or immediately after a heat alarm or manual call point activation, an Alarm Stage 3 (Evacuate) is generated on that zone and also zones 4-5.

Thus, only the area at highest risk is initially evacuated, in order to avoid evacuating the entire site at one go.

Remember that the group 1 and 2 configuration must be set for every input 'Detection Zone' required (not just for Zone 3), both on initial commissioning and during any future alterations to the system.

Alarm Confirmation / Warden Call

The following example shows a configuration suitable for use in sheltered housing complexes. This configuration was originally designed in response to an enquiry from a client, and has since been implemented effectively on many sites.

It is required that the system will minimise false alarms from sheltered housing apartments, whilst providing accurate warning of real fire situations.

The Multipoint detection in the apartments utilises the I/O Interface base to signal through the warden call system to the warden (or central station if the warden is off site). This is combined with alarm confirmation in order to provide a means of aborting a full alarm if the occupant is able to remove the cause of a false alarm.

To achieve this result, configure the system as follows:

Panel Details

Within the Panel Details section, select a value for the **Alarm Confirmation Delay.** This is done on the Delays and Timers tab.

Panel Summary Panel Details Delays & Timers Day/Night Mode Panel Inputs Panel Outputs Network Printer
Select Panel : 001 : PANEL 1
Panel Delays
Min Sec Min Sec Min Sec Delay 1 1 20 Delay 2 2 00 Delay 3 3 30 Delay 4 5 00
(Delay between alarm stages : Tick the delay check box in cause & effect.)
Min Sec Alarm Confirmation Delay (Allows automatic reset of an unconfirmed alarm from a smoke Detector. Select the Sound Stage 1 sound pattern and Alarm Confirmation for each device requiring this function.) Display unconfirmed alarm warning at control panel
Panel Timers
Service Occurrence Days Hr Min
Weekly test Timer Day

In our example, an Alarm Confirmation delay of 4 minutes 00 seconds has been set up.

Device Details

Set the devices within the apartments as follows, with the Alarm Stage 1 sound pattern selected to SP1, SP2 or SP3.

Set the devices within communal areas, corridors and escape routes as follows, with the Alarm Stage 1 sound pattern set to SP0 (off).

evice	Detai	ls Dev	rice I/O Graphical View	Connection	n Map												
No	Lp	Addr	Label	Serial No	Туре	Spur	Zone	Smoke	Heat	Snd1	Vol	Snd2	Vol	Snd3	Vol	AC	^
10	1	010	ROOM 24	1000887	MPS		001	SM2	HM2	SP3	Med	SP2	Low	SP3	High	ON	1
11	1	011	ROOM 25	1036499	MPS		002	SM2	HM2	SP3	Med	SP2	Low	SP3	High	ON	
12	1	012	ROOM 26	1001120	MPS		002	SM2	HM2	SP3	Med	SP2	Low	SP3	High	ON	

Alarm confirmation has been turned ON for the devices within the apartments (Rooms 24, 25 and 26).

Also using the Device I/O tab, set the I/O linkage to **Monitored Output / Device** for each of the devices within the apartments. Thus I/O Interface base relays will operate only when its host smoke detector triggers.

Device [Details Device I/O	Graphical View	Conne	ection Map						
Addr	Label	Serial No	Туре	Spur Zone	I/O Label	I/O Zone	Latch	I/О Туре	I/O Linkage	^
010	ROOM 24	1000887	MPS	001	LOOP 1 AUXLIARY 10			Auxiliary Output	Device Output	
011	ROOM 25	1036499	MPS	002	LOOP 1 AUXLIARY 11			Auxiliary Output	Device Output	
012	ROOM 26	1001120	MPS	002	LOOP 1 AUXLIARY 12			Auxiliary Output	Device Output	

Use the Device I/O Details button to obtain the following screen to select the I/O type Monitored Output – Device output as follows. Device 10 is shown as an example.

Edit Auxiliary I/O	Properties for Device 10 in	Loop 1 —		
Device type:	MPS	Serial:	1000887	
I/O Description :	LOOP 1 AUXLIARY 10			
	Auto Label Devices (\L	-> Loop N	umber, \D -> Device N	lumber)
I/O Zone :			~	
Latching :			~	
- I/O Туре				
🚫 Not Configur	ed 🛛 🔘 Remote Indicator	🔘 Monitored Input		💿 Monitored Output
		() F	Fire Event	💿 Device Output
		0	Control Event	 Sounders Output (Linked to a zone)
				Fire Outputs
				×
		0	Fechnical Event	

Cause & Effect

The Cause & Effect section should be set as for instant alarms as described previously (this is the default setting). Set Group 1 as shown below. Remember to set this for each of the detection zones with inputs. Group 2 does not need to be set.

ummary Ala	rm Stage 1 Gr	oup 1 Group	2						
Link									
Links for Gr				~		Alarm	Stage		Alarm Stage
Smoke alarm : go to alarm stage 3 MCP/heat/input : go to alarm stage 3					Link Type	2	3 Delay	1234	2 3
Alarm Zones : 1-128				Smoke ala			0000		
					MCP/heat/			0000	
				\sim	2nd smoke	e alarm		0000	
Zone 1	Zone 10	Zone 19	Zone 28	Zone 37	Zone 46	Zone 55	Zone 64	Zone 73	Zone 8
Zone 2 Zone 3	Zone 11	Zone 20	Zone 29	Zone 38	Zone 47	Zone 56	Zone 65	Zone 74	Zone 8
Zone 4	Zone 13	Zone 22	Zone 31	Zone 40	Zone 49	Zone 58	Zone 67	Zone 76	Zone 8
Zone 5	Zone 14	Zone 23	Zone 32	Zone 41	Zone 50	Zone 59	Zone 68	Zone 77	🗹 Zone 8
🗹 Zone 6	🗹 Zone 15	🗹 Zone 24	🗹 Zone 33	🗹 Zone 42	🗹 Zone 51	🗹 Zone 60	🗹 Zone 69	🗹 Zone 78	🔽 Zone 8
🗹 Zone 7	🗹 Zone 16	🗹 Zone 25	🗹 Zone 34	🗹 Zone 43	🗹 Zone 52	🗹 Zone 61	🗹 Zone 70	🗹 Zone 79	🗹 Zone 8
🗹 Zone 8	🗹 Zone 17	🗹 Zone 26	🗹 Zone 35	🗹 Zone 44	🗹 Zone 53	🗹 Zone 62	🗹 Zone 71	🗹 Zone 80	🗹 Zone 8
🗹 Zone 9	🗹 Zone 18	🗹 Zone 27	🗹 Zone 36	🗹 Zone 45	🗹 Zone 54	🗹 Zone 63	🗹 Zone 72	🗹 Zone 81	🗹 Zone 9
<)				3
Select All Z	opor Solort	No Zones	Select All Alarr	n Zonec	Select No Alar	m Zones			

The Alarm Confirmation routine takes place before the system enters the alarm state.

In this example, an 'Alarm stage 3' sound will operate in all Alarm Zones in response to the operation of the following:

- 1. A heat detector anywhere on the system
- 2. A manual call point anywhere on the system
- 3. A smoke detector (excluding those set for Alarm Confirmation in the apartments)
- 4. Final confirmation of a smoke detector within an apartment.
- 5. The start of Alarm Confirmation from a second smoke detector within an apartment

Whilst a single smoke detector within an apartment is in its alarm confirmation stage, it will operate its own local sounder only, and trigger the I/O interface base relay to which it is attached. Thus, if this is connected to the local warden call unit, the warden is able to rapidly establish contact with the occupier and verify the alarm status of the alarm. If the cause of an unwanted is removed within the selected 4 minute Alarm Confirmation delay period then the device will reset and a full alarm will be avoided.

Remember that the group 1 and 2 configuration must be checked for every input 'Detection Zone' required, both on initial commissioning and during any future alterations to the system.

Technical Data

Duonet Control Panel

	Duonet Control and Ind	licating Equipment
No. of zones	128 zones	
Number of loops	Up to 2 loops via plug- in loop cards	(1 included as standard with panel)
No of devices	Maximum of 200 devices <u>or</u> maximum of 450 DLUs per loop	(whichever is reached first)
Device labels	23 characters	
LCD display	Graphic display Field 1 (top) Field 2 Field 3 Field 4 (bottom)	Control Panel Information Window Active Information Window Prompt Window Network Information Window
Event log	1000 events	
Inputs and Outputs	Relay Outputs x2 Monitored Outputs x2	Volt free contacts SPCO 30V DC @ 1A max per contact 2 x 24V conventional monitored outputs
	Monitored Inputs x2	Fire, Fault, Signal, Technical Alarm 10k EOL, 200mA max per circuit 2 x resistance monitored inputs 3k3 EOL, 680R firing resistor

Quadnet Control Panel

	Quadnet Control and Indicating Equipment		
No. of zones	128 zones		
Number of loops	Up to 4 loops via plug- in loop cards	(1 included as standard with panel)	
No of devices	Maximum of 200 devices <u>or</u> maximum of 450 DLUs per loop	(whichever is reached first)	
Device labels	23 characters		
LCD display	Graphic display Field 1 (top) Field 2 Field 3 Field 4 (bottom)	Control Panel Information Window Active Information Window Prompt Window Network Information Window	
Event log	1000 events		
Inputs and Outputs	Relay Outputs x 4	Volt free contacts SPCO 30V DC @ 1A max per contact	
	Monitored Outputs x 2 Monitored Inputs x 4	2 x 24V conventional monitored outputs Fire, Fault, Signal, Technical Alarm 10k EOL, 200mA max per circuit 4 x resistance monitored inputs 3k3 EOL, 680R firing resistor	

OSP Version Compatibility

The following table explains the compatibility of the various versions of the Duonet/Quadnet system:

REC	RECOMMENDED OSP VERSION				
V0.367	V2.04	V3.04			

PANEL VERSION
Panel Versions up to v1.29
Panel Versions v1.34 to v2.xx
Panel Versions v3.xx

Technical Support

For further technical support please contact your distributor. Do not call the Fike Safety Technology technical support department unless your distributor has first given their advice and attempted to rectify the issue.

Technical support will not be available if the instruction manual has not been read and understood. Please have this instruction manual available whenever you call for technical support. 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.

Configuration Sheets

Device Details Record your device attributes on the following form. Copy as required for all devices in the system.

SITE DETAILS:

DEVICE ADDRESS	SERIAL NUMBER	DEVICE DESCRIPTION (23 CHAI MAX)	RACTERS	ZONE	DEVICE TYPE	SMOKE MODE	HEAT MODE	ALARM CONF'N
E.g., 1	35415	Gnd Flr Front Office		1	MPS	SM2	HM2	NO
					+	+		
						ļ		-
				1				
	TERN IN	SOUND PATTERN	ALAR		ATION - 7:00 MIN):	DEVICE TY		S: S / IO / CZM /

JUND PATTERN IN	SOUND PATTERN	ALARM CONFIRMATION	DEVICE TYPE OPTIONS:
ARM CONFIRMATION:	IN ALARM:	(/	MP / MPS / MCP / MCPS / IO / CZM / FP / SP / HP / BELL / SS

Detection Zone/Alarm Zone Details Record your zonal 'Cause & Effect' here. Copy as required for all zones.

Note:

On a network of control panels, there can be up to 128 zones on each panel (local zones). Version 3 repeater and control panels will illuminate the zone LED corresponding to the zone in alarm on each networked control panel.

If there were 4 networked panels on a system there could be a total of 512 separate zones but all numbered in the range 1-128. This means there could be four different zone 1s, four different zone 2s etc.

It is recommended that on networked systems using version 3 panels, zones are configured so there are a maximum of 128 zones on the whole system and there are no duplications.

SYSTEM DETAILS:

DETECTION ZONE:

GROUP 1:			
LINKS TO GROUP 1:		Stage 2	Stage 3
LINK IF MCP/HEAT/INPUT			
LINK IF SMOKE			
LINK IF SECOND SMOKE			
DELAY (1,2 3 or 4)			

ALARM ZONES TO ACTIVATE FROM GROUP 1:			
ALARM ZONE 1	ALARM ZONE 65		
ALARM ZONE 2	ALARM ZONE 66		
ALARM ZONE 3	ALARM ZONE 67		
ALARM ZONE 4	ALARM ZONE 68		
ALARM ZONE 5	ALARM ZONE 69		
ALARM ZONE 6	ALARM ZONE 70		
ALARM ZONE 7	ALARM ZONE 71		
ALARM ZONE 8	ALARM ZONE 72		
ALARM ZONE 9	ALARM ZONE 73		
ALARM ZONE 10	ALARM ZONE 74		
ALARM ZONE 11	ALARM ZONE 75		
ALARM ZONE 12	ALARM ZONE 76		
ALARM ZONE 13	ALARM ZONE 77		
ALARM ZONE 14	ALARM ZONE 78		
ALARM ZONE 15	ALARM ZONE 79		
ALARM ZONE 16	ALARM ZONE 80		
ALARM ZONE 17	ALARM ZONE 81		
ALARM ZONE 18	ALARM ZONE 82		
ALARM ZONE 19	ALARM ZONE 83		
ALARM ZONE 20	ALARM ZONE 84		
ALARM ZONE 21	ALARM ZONE 85		
ALARM ZONE 22	ALARM ZONE 86		
ALARM ZONE 23	ALARM ZONE 87		
ALARM ZONE 24	ALARM ZONE 88		

GROUP 2:		
LINKS TO GROUP 2:	Stage 2	Stage 3
LINK IF MCP/HEAT/INPUT		
LINK IF SMOKE		
LINK IF SECOND SMOKE		
DELAY (1,2 3 or 4)		

ALARM ZONES 1	O ACTIVATE FROM GROUP 2:
ALARM ZONE 1	ALARM ZONE 65
ALARM ZONE 2	ALARM ZONE 66
ALARM ZONE 3	ALARM ZONE 67
ALARM ZONE 4	ALARM ZONE 68
ALARM ZONE 5	ALARM ZONE 69
ALARM ZONE 6	ALARM ZONE 70
ALARM ZONE 7	ALARM ZONE 71
ALARM ZONE 8	ALARM ZONE 72
ALARM ZONE 9	ALARM ZONE 73
ALARM ZONE 10	ALARM ZONE 74
ALARM ZONE 11	ALARM ZONE 75
ALARM ZONE 12	ALARM ZONE 76
ALARM ZONE 13	ALARM ZONE 77
ALARM ZONE 14	ALARM ZONE 78
ALARM ZONE 15	ALARM ZONE 79
ALARM ZONE 16	ALARM ZONE 80
ALARM ZONE 17	ALARM ZONE 81
ALARM ZONE 18	ALARM ZONE 82
ALARM ZONE 19	ALARM ZONE 83
ALARM ZONE 20	ALARM ZONE 84
ALARM ZONE 21	ALARM ZONE 85
ALARM ZONE 22	ALARM ZONE 86
ALARM ZONE 23	ALARM ZONE 87
ALARM ZONE 24	ALARM ZONE 88

Quadnet / Duonet OSP Software Operating Instructions

ALARM ZONE 25ALARM ZONE 89ALARM ZONE 26ALARM ZONE 90ALARM ZONE 27ALARM ZONE 91ALARM ZONE 28ALARM ZONE 92ALARM ZONE 29ALARM ZONE 93ALARM ZONE 30ALARM ZONE 93ALARM ZONE 31ALARM ZONE 94ALARM ZONE 32ALARM ZONE 95ALARM ZONE 33ALARM ZONE 96ALARM ZONE 33ALARM ZONE 97ALARM ZONE 34ALARM ZONE 98ALARM ZONE 35ALARM ZONE 99ALARM ZONE 36ALARM ZONE 99ALARM ZONE 37ALARM ZONE 99ALARM ZONE 36ALARM ZONE 100ALARM ZONE 37ALARM ZONE 100ALARM ZONE 38ALARM ZONE 101ALARM ZONE 39ALARM ZONE 102ALARM ZONE 39ALARM ZONE 102ALARM ZONE 40ALARM ZONE 103ALARM ZONE 41ALARM ZONE 103ALARM ZONE 42ALARM ZONE 105ALARM ZONE 43ALARM ZONE 106ALARM ZONE 44ALARM ZONE 107ALARM ZONE 45ALARM ZONE 108ALARM ZONE 46ALARM ZONE 110ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 116ALARM ZONE 55ALARM ZONE 117ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 123ALARM ZONE 58ALARM ZONE 124ALARM ZONE 59ALARM ZONE 124ALARM ZONE 62ALARM ZONE 126ALARM ZONE 66ALARM ZONE 127ALARM ZONE 66ALARM ZONE 127		
ALARM ZONE 27ALARM ZONE 91ALARM ZONE 28ALARM ZONE 92ALARM ZONE 29ALARM ZONE 93ALARM ZONE 30ALARM ZONE 93ALARM ZONE 31ALARM ZONE 94ALARM ZONE 32ALARM ZONE 95ALARM ZONE 32ALARM ZONE 96ALARM ZONE 33ALARM ZONE 97ALARM ZONE 33ALARM ZONE 98ALARM ZONE 34ALARM ZONE 99ALARM ZONE 35ALARM ZONE 99ALARM ZONE 36ALARM ZONE 100ALARM ZONE 37ALARM ZONE 101ALARM ZONE 38ALARM ZONE 102ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 103ALARM ZONE 41ALARM ZONE 106ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 108ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 110ALARM ZONE 47ALARM ZONE 111ALARM ZONE 48ALARM ZONE 112ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 114ALARM ZONE 55ALARM ZONE 116ALARM ZONE 55ALARM ZONE 117ALARM ZONE 55ALARM ZONE 120ALARM ZONE 56ALARM ZONE 121ALARM ZONE 57ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 126ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 25	ALARM ZONE 89
ALARM ZONE 28ALARM ZONE 92ALARM ZONE 29ALARM ZONE 93ALARM ZONE 30ALARM ZONE 93ALARM ZONE 31ALARM ZONE 95ALARM ZONE 32ALARM ZONE 96ALARM ZONE 33ALARM ZONE 97ALARM ZONE 33ALARM ZONE 98ALARM ZONE 34ALARM ZONE 98ALARM ZONE 35ALARM ZONE 99ALARM ZONE 36ALARM ZONE 99ALARM ZONE 37ALARM ZONE 100ALARM ZONE 38ALARM ZONE 101ALARM ZONE 39ALARM ZONE 102ALARM ZONE 39ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 103ALARM ZONE 41ALARM ZONE 104ALARM ZONE 42ALARM ZONE 105ALARM ZONE 43ALARM ZONE 106ALARM ZONE 44ALARM ZONE 107ALARM ZONE 45ALARM ZONE 108ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 50ALARM ZONE 112ALARM ZONE 51ALARM ZONE 114ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 55ALARM ZONE 118ALARM ZONE 55ALARM ZONE 120ALARM ZONE 56ALARM ZONE 121ALARM ZONE 57ALARM ZONE 123ALARM ZONE 62ALARM ZONE 126ALARM ZONE 62ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 26	ALARM ZONE 90
ALARM ZONE 29ALARM ZONE 93ALARM ZONE 30ALARM ZONE 94ALARM ZONE 31ALARM ZONE 95ALARM ZONE 32ALARM ZONE 96ALARM ZONE 33ALARM ZONE 97ALARM ZONE 33ALARM ZONE 98ALARM ZONE 34ALARM ZONE 98ALARM ZONE 35ALARM ZONE 99ALARM ZONE 36ALARM ZONE 100ALARM ZONE 37ALARM ZONE 100ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 103ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 108ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 112ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 114ALARM ZONE 55ALARM ZONE 116ALARM ZONE 55ALARM ZONE 119ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 60ALARM ZONE 124ALARM ZONE 62ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 27	ALARM ZONE 91
ALARM ZONE 30ALARM ZONE 94ALARM ZONE 31ALARM ZONE 95ALARM ZONE 32ALARM ZONE 96ALARM ZONE 33ALARM ZONE 97ALARM ZONE 33ALARM ZONE 97ALARM ZONE 35ALARM ZONE 98ALARM ZONE 35ALARM ZONE 99ALARM ZONE 36ALARM ZONE 100ALARM ZONE 37ALARM ZONE 101ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 103ALARM ZONE 41ALARM ZONE 104ALARM ZONE 42ALARM ZONE 105ALARM ZONE 43ALARM ZONE 106ALARM ZONE 44ALARM ZONE 107ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 49ALARM ZONE 112ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 116ALARM ZONE 52ALARM ZONE 117ALARM ZONE 55ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 55ALARM ZONE 120ALARM ZONE 56ALARM ZONE 121ALARM ZONE 57ALARM ZONE 122ALARM ZONE 58ALARM ZONE 124ALARM ZONE 60ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 28	ALARM ZONE 92
ALARM ZONE 31ALARM ZONE 95ALARM ZONE 32ALARM ZONE 96ALARM ZONE 33ALARM ZONE 97ALARM ZONE 33ALARM ZONE 98ALARM ZONE 35ALARM ZONE 99ALARM ZONE 35ALARM ZONE 99ALARM ZONE 36ALARM ZONE 100ALARM ZONE 37ALARM ZONE 101ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 103ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 106ALARM ZONE 44ALARM ZONE 107ALARM ZONE 45ALARM ZONE 108ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 49ALARM ZONE 112ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 116ALARM ZONE 55ALARM ZONE 117ALARM ZONE 55ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 55ALARM ZONE 121ALARM ZONE 56ALARM ZONE 121ALARM ZONE 57ALARM ZONE 123ALARM ZONE 58ALARM ZONE 124ALARM ZONE 60ALARM ZONE 125ALARM ZONE 61ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 29	ALARM ZONE 93
ALARM ZONE 32ALARM ZONE 96ALARM ZONE 33ALARM ZONE 97ALARM ZONE 33ALARM ZONE 98ALARM ZONE 35ALARM ZONE 99ALARM ZONE 36ALARM ZONE 100ALARM ZONE 37ALARM ZONE 101ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 104ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 107ALARM ZONE 45ALARM ZONE 108ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 49ALARM ZONE 112ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 116ALARM ZONE 52ALARM ZONE 117ALARM ZONE 55ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 55ALARM ZONE 120ALARM ZONE 56ALARM ZONE 121ALARM ZONE 57ALARM ZONE 123ALARM ZONE 58ALARM ZONE 124ALARM ZONE 59ALARM ZONE 124ALARM ZONE 60ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 30	ALARM ZONE 94
ALARM ZONE 33ALARM ZONE 97ALARM ZONE 34ALARM ZONE 98ALARM ZONE 35ALARM ZONE 99ALARM ZONE 36ALARM ZONE 100ALARM ZONE 36ALARM ZONE 101ALARM ZONE 37ALARM ZONE 101ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 103ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 108ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 55ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 123ALARM ZONE 59ALARM ZONE 124ALARM ZONE 60ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 31	ALARM ZONE 95
ALARM ZONE 34ALARM ZONE 98ALARM ZONE 35ALARM ZONE 99ALARM ZONE 36ALARM ZONE 100ALARM ZONE 36ALARM ZONE 100ALARM ZONE 37ALARM ZONE 101ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 104ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 107ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 49ALARM ZONE 112ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 55ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 123ALARM ZONE 59ALARM ZONE 124ALARM ZONE 59ALARM ZONE 125ALARM ZONE 60ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 32	ALARM ZONE 96
ALARM ZONE 35ALARM ZONE 99ALARM ZONE 36ALARM ZONE 100ALARM ZONE 37ALARM ZONE 101ALARM ZONE 37ALARM ZONE 101ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 104ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 108ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 49ALARM ZONE 112ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 114ALARM ZONE 52ALARM ZONE 115ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 62ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 33	ALARM ZONE 97
ALARM ZONE 36ALARM ZONE 100ALARM ZONE 37ALARM ZONE 101ALARM ZONE 38ALARM ZONE 102ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 104ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 107ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 49ALARM ZONE 112ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 114ALARM ZONE 52ALARM ZONE 115ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 58ALARM ZONE 124ALARM ZONE 60ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE34	ALARM ZONE 98
ALARM ZONE 37ALARM ZONE 101ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 104ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 108ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 110ALARM ZONE 47ALARM ZONE 111ALARM ZONE 48ALARM ZONE 112ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 114ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 123ALARM ZONE 59ALARM ZONE 123ALARM ZONE 59ALARM ZONE 124ALARM ZONE 60ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 35	ALARM ZONE 99
ALARM ZONE 38ALARM ZONE 102ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 104ALARM ZONE 41ALARM ZONE 105ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 107ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 110ALARM ZONE 47ALARM ZONE 111ALARM ZONE 48ALARM ZONE 112ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 114ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 36	ALARM ZONE 100
ALARM ZONE 39ALARM ZONE 103ALARM ZONE 40ALARM ZONE 104ALARM ZONE 40ALARM ZONE 105ALARM ZONE 41ALARM ZONE 106ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 108ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 49ALARM ZONE 112ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 37	ALARM ZONE 101
ALARM ZONE 40ALARM ZONE 104ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 108ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 109ALARM ZONE 47ALARM ZONE 110ALARM ZONE 48ALARM ZONE 111ALARM ZONE 49ALARM ZONE 112ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 114ALARM ZONE 52ALARM ZONE 115ALARM ZONE 53ALARM ZONE 116ALARM ZONE 54ALARM ZONE 117ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 38	ALARM ZONE 102
ALARM ZONE 41ALARM ZONE 105ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 43ALARM ZONE 108ALARM ZONE 44ALARM ZONE 108ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 109ALARM ZONE 46ALARM ZONE 110ALARM ZONE 47ALARM ZONE 111ALARM ZONE 48ALARM ZONE 112ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 116ALARM ZONE 54ALARM ZONE 117ALARM ZONE 55ALARM ZONE 118ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 125ALARM ZONE 61ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 39	ALARM ZONE 103
ALARM ZONE 42ALARM ZONE 106ALARM ZONE 43ALARM ZONE 107ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 109ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 110ALARM ZONE 47ALARM ZONE 111ALARM ZONE 48ALARM ZONE 112ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 114ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 121ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 40	ALARM ZONE 104
ALARM ZONE 43ALARM ZONE 107ALARM ZONE 44ALARM ZONE 108ALARM ZONE 45ALARM ZONE 109ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 110ALARM ZONE 47ALARM ZONE 111ALARM ZONE 47ALARM ZONE 111ALARM ZONE 48ALARM ZONE 112ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 114ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 115ALARM ZONE 53ALARM ZONE 116ALARM ZONE 54ALARM ZONE 117ALARM ZONE 55ALARM ZONE 118ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 41	ALARM ZONE 105
ALARM ZONE 44ALARM ZONE 108ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 110ALARM ZONE 46ALARM ZONE 110ALARM ZONE 47ALARM ZONE 111ALARM ZONE 47ALARM ZONE 111ALARM ZONE 48ALARM ZONE 112ALARM ZONE 48ALARM ZONE 112ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 113ALARM ZONE 50ALARM ZONE 114ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 125ALARM ZONE 61ALARM ZONE 126ALARM ZONE 62ALARM ZONE 127	ALARM ZONE 42	ALARM ZONE 106
ALARM ZONE 45ALARM ZONE 109ALARM ZONE 46ALARM ZONE 110ALARM ZONE 46ALARM ZONE 110ALARM ZONE 47ALARM ZONE 111ALARM ZONE 47ALARM ZONE 111ALARM ZONE 48ALARM ZONE 112ALARM ZONE 49ALARM ZONE 112ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 113ALARM ZONE 51ALARM ZONE 114ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 43	ALARM ZONE 107
ALARM ZONE 46ALARM ZONE 110ALARM ZONE 47ALARM ZONE 111ALARM ZONE 47ALARM ZONE 111ALARM ZONE 48ALARM ZONE 112ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 113ALARM ZONE 50ALARM ZONE 114ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 44	ALARM ZONE 108
ALARM ZONE 47ALARM ZONE 111ALARM ZONE 48ALARM ZONE 112ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 113ALARM ZONE 50ALARM ZONE 114ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 116ALARM ZONE 54ALARM ZONE 117ALARM ZONE 55ALARM ZONE 118ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 120ALARM ZONE 58ALARM ZONE 121ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 45	ALARM ZONE 109
ALARM ZONE 48ALARM ZONE 112ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 114ALARM ZONE 51ALARM ZONE 115ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 46	ALARM ZONE 110
ALARM ZONE 49ALARM ZONE 113ALARM ZONE 50ALARM ZONE 114ALARM ZONE 51ALARM ZONE 115ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 47	ALARM ZONE 111
ALARM ZONE 50ALARM ZONE 114ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 48	ALARM ZONE 112
ALARM ZONE 51ALARM ZONE 115ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 49	ALARM ZONE 113
ALARM ZONE 52ALARM ZONE 116ALARM ZONE 53ALARM ZONE 117ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 50	ALARM ZONE 114
ALARM ZONE 53ALARM ZONE 117ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 51	ALARM ZONE 115
ALARM ZONE 54ALARM ZONE 118ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 52	ALARM ZONE 116
ALARM ZONE 55ALARM ZONE 119ALARM ZONE 56ALARM ZONE 120ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 53	ALARM ZONE 117
ALARM ZONE 56ALARM ZONE 120ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 54	ALARM ZONE 118
ALARM ZONE 57ALARM ZONE 121ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 55	ALARM ZONE 119
ALARM ZONE 58ALARM ZONE 122ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 56	ALARM ZONE 120
ALARM ZONE 59ALARM ZONE 123ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 57	ALARM ZONE 121
ALARM ZONE 60ALARM ZONE 124ALARM ZONE 61ALARM ZONE 125ALARM ZONE 62ALARM ZONE 126ALARM ZONE 63ALARM ZONE 127	ALARM ZONE 58	ALARM ZONE 122
ALARM ZONE 61 ALARM ZONE 125 ALARM ZONE 62 ALARM ZONE 126 ALARM ZONE 63 ALARM ZONE 127	ALARM ZONE 59	ALARM ZONE 123
ALARM ZONE 62 ALARM ZONE 126 ALARM ZONE 63 ALARM ZONE 127	ALARM ZONE 60	ALARM ZONE 124
ALARM ZONE 63 ALARM ZONE 127	ALARM ZONE 61	ALARM ZONE 125
	ALARM ZONE 62	ALARM ZONE 126
ALARM ZONE 64 ALARM ZONE 128	ALARM ZONE 63	ALARM ZONE 127
· · · /	ALARM ZONE 64	ALARM ZONE 128

ALARM ZONE 25	ALARM ZONE 89
ALARM ZONE 26	ALARM ZONE 90
ALARM ZONE 27	ALARM ZONE 91
ALARM ZONE 28	ALARM ZONE 92
ALARM ZONE 29	ALARM ZONE 93
ALARM ZONE 30	ALARM ZONE 94
ALARM ZONE 31	ALARM ZONE 95
ALARM ZONE 32	ALARM ZONE 96
ALARM ZONE 33	ALARM ZONE 97
ALARM ZONE34	ALARM ZONE 98
ALARM ZONE 35	ALARM ZONE 99
ALARM ZONE 36	ALARM ZONE 100
ALARM ZONE 37	ALARM ZONE 101
ALARM ZONE 38	ALARM ZONE 102
ALARM ZONE 39	ALARM ZONE 103
ALARM ZONE 40	ALARM ZONE 104
ALARM ZONE 41	ALARM ZONE 105
ALARM ZONE 42	ALARM ZONE 106
ALARM ZONE 43	ALARM ZONE 107
ALARM ZONE 44	ALARM ZONE 108
ALARM ZONE 45	ALARM ZONE 109
ALARM ZONE 46	ALARM ZONE 110
ALARM ZONE 47	ALARM ZONE 111
ALARM ZONE 48	ALARM ZONE 112
ALARM ZONE 49	ALARM ZONE 113
ALARM ZONE 50	ALARM ZONE 114
ALARM ZONE 51	ALARM ZONE 115
ALARM ZONE 52	ALARM ZONE 116
ALARM ZONE 53	ALARM ZONE 117
ALARM ZONE 54	ALARM ZONE 118
ALARM ZONE 55	ALARM ZONE 119
ALARM ZONE 56	ALARM ZONE 120
ALARM ZONE 57	ALARM ZONE 121
ALARM ZONE 58	ALARM ZONE 122
ALARM ZONE 59	ALARM ZONE 123
ALARM ZONE 60	ALARM ZONE 124
ALARM ZONE 61	ALARM ZONE 125
ALARM ZONE 62	ALARM ZONE 126
ALARM ZONE 63	ALARM ZONE 127
ALARM ZONE 64	ALARM ZONE 128

Your Notes

Your Notes

Important Points

- You will need a **PC with a serial port, the Quadnet / Duonet OSP** software and a Quadnet / Duonet **USB Lead** (page 6).
- How to get your set-up ready **Getting Started** (page 7).
- How to go about programming your first system (page 67).
- Cause & Effect and how to program it (page 57).
- How to program **Loop Inputs and Outputs** to interface the system to other equipment (page 69).
- How to program **Alarm Confirmation** to reduce unwanted alarms in dwelling places (pages 36 + 73).
- **Programming Examples** of different approaches to your system operation (page 75).
- How to **Add/Delete/Swap** devices on a software allocated addressing system (page 68).

If you have any further queries, please contact your supplier for further information