

Fire Detection

Device Compatibility Guide

VIGILANT, SIMPLEX
MX1, F3200,
MX4428, 4100ESi
Including detectors
for Hazardous Areas

Johnson
Controls 

Note: The contents of this document may change without notice. Please check the Fireplace web site www.tycosafetyproducts-anz.com for the latest information.

16:10 18 Jul 17

Tyco Australia Group Pty Limited A.B.N. 93076836416. All rights reserved. Tyco reserves the right to make changes to any aspect of this publication at any time without notice. VIGILANT is a trademark of Tyco New Zealand Limited or its affiliates; SIMPLEX, MAPNET II, SAFELINC, TRUEALARM, TRUESTART are trademarks of ADT Services AG or its affiliates; *MX TECHNOLOGY* is a trademark of Thorn Security Limited or its affiliates; WINDOWS is a registered trademark of Microsoft Corporation in the United States and other countries; VESDA is a trademark of Xtralis Technologies Ltd. TYCO is a trademark of Tyco International Services GmbH.
© 2017 Johnson Controls. All rights reserved. All specifications and other information shown were current as of document revision date and are subject to change without notice.

Detector Compatibility Guide - Contents

MX1	4
MX1 Analogue Loop Device Compatibility	4
MX1-NZ Analogue Loop Device Compatibility	5
DIM800 Detector Compatibility.....	6
DIM800 New Zealand Device Compatibility	7
Tyco/VIGILANT	7
DDM800 Australia Actuating Device Compatibility.....	8
DDM800 New Zealand Actuating Device Compatibility	10
Intrinsically Safe Detectors	11
NZ Legacy Smoke Detectors	11
NZ Legacy Combined Detectors	11
AZM800 New Zealand Conventional Device Compatibility	12
F3200	13
Minerva/Thorn/Tyco Detectors	13
Hochiki Detector Range.....	14
Olsen Detector Range	15
SIMPLEX Detectors.....	16
MX4428	18
MXP Actuating Device Compatibility	18
DDM800 Australia Actuating Device Compatibility.....	19
DDM800 New Zealand Actuating Device Compatibility	21
ADR/DIM800 Actuating Device Compatibility	24
Minerva Detectors With ADR And DIM800.....	24
SIMPLEX Detectors With ADR-M And DIM800	25
SU0600 Manual Call Point With ADR-M	25
Tyco Compatible Actuating Devices.....	26
Hochiki Detector Range.....	27
ZAU401 (Rev 2) Detector Compatibility	27
Unlisted (ActivFire) Detector/ADR/DIM800 Combinations	28
MPR Actuating Device Compatibility - EWD Mode	29
MPR Actuating Device Compatibility - 130 Series SS Mode	29
AAR Actuating Device Compatibility.....	29
Intrinsically Safe (I.S.) Detection	30
ActivFire Listed I.S. Detectors	30
Maximum Quantity of I.S. Detectors per Circuit - PA0844 ADR-M	31
4100ESi	32
MX Analogue Loop Device Compatibility - 4100ESi only.....	32
DIM800 Detector Compatibility - 4100ESi only	33
DDM800 Australia Actuating Device Compatibility - 4100ESi only	34
Conventional Detectors	35
SIMPLEX MAPNET II Range – Addressable Field Devices.....	38
Compatible Detectors - IDNet, IDNet+, IDNet2, MAPNET II - Compatible Field Devices - IDNet, IDNet+, IDNet2	39
Hazardous Area Devices.....	41
Operator's Guides	44
MX1 Fire Panel Operator's Guide	44
F3200 Fire Fighter's Guide	46
MX4428 Operator's Guide.....	47
4100ESi Fire Panel Operator's Guide.....	50
VIGILANT QE90 Evacuation Panel Operator's Guide.....	51
VESDA LaserPLUS™ & LaserSCANNER™ Operator's Guide	52
VESDA LaserFOCUS™ Operator's Guide.....	53
VESDA LaserCOMPACT™ Operator's Guide.....	54
VESDA VLI Operator's Guide	55
Tyco Fire Protection Products Contacts.....	57

MX1 4

F3200 13

MX4428 18

4100ESi 32

**HAZARDOUS
AREA** 41

**OPERATOR'S
GUIDE** 44

MX1 Analogue Loop Device Compatibility

Order Code	Device Type	Description	Maximum No. Per Loop	End Of Line
516.800.006	801F	Flame Detector	250	
516.850.051.E	850PH	Photoelectric Smoke + Heat Detector	250	
516.850.053.E	850H	Heat Detector	250	
516.850.052.E	850P	Photoelectric Smoke Detector	250	
516.850.054.E	850PC	CO + Photoelectric Smoke + Heat Multi-Sensor	250	
516.800.510	814PH	Photoelectric Smoke + Heat Detector	250	
516.800.513	814H	Heat Detector	250	
516.800.517	814P	Photoelectric Smoke Detector	250	
516.800.511	814CH	CO + Heat Multi-Sensor Detector	250	
516.800.512	814I	Ionisation Smoke Detector	250	
Refer 4BI	814IB	Isolator Base (Obsolete- refer 4BI)	128	
814RB	814RB	Relay Base	250	
Refer 802SB	814SB	Sounder Base (Low/Med/High volume) (Obsolete)	104/83/66	
802SB	802SB	Sounder Base (Loop Powered)	250	
516.800.911	901SB	Sounder Base (External Power)	250	
577.800.006	DDM800	Universal Fire & Gas Detector Module	15 (loop pwr) 80 (ext. pwr)	4k7 Ohm 5k6 (I.S.)
DIM800	DIM800	Detector Input Module	250	4k7 Ohm
MIM800	MIM800	Mini Input Module (Hard contact s/c alarm)	250	200 Ohm
MIM801	MIM801	Mini Input Module (Hard contact o/c alarm)	250	200 Ohm
CIM800	CIM800	Input Module	250	200 Ohm
555.800.071	QIO850	Quad Input/Output Module	107	3k3 Ohm
555.800.070	QMO850	Quad Monitored Output Module	107	27k Ohm
555.800.073	QRM850	Quad Relay Output Module	250	
555.800.065	MIO800	Multiple Input/Output Module	250	200 Ohm
SNM800	SNM800	Sounder Notification Module	250 (2A max.)	27k 0.5W
RIM800	RIM800	Relay Interface Module	250	
577.800.011	LPS800	Loop Powered Sounder Module	166 (75mA max.)	22k 0.5W
VLC-800MX	VLC800MX	VESDA Laser Compact – 800MX	125	
514.800.611	MCP820	Indoor Manual Call Point with Isolator	250	
514.800.621	MCP830	Outdoor Manual Call Point with Isolator (IP67)	250	
CP820	CP820	Indoor Manual Call Point	250	
514.800.604	CP830	Outdoor Manual Call Point (IP67)	250	
516.800.530	801PHEX	Intrinsically Safe Photoelectric Smoke + Heat Multi-Sensor Detector	250	
516.800.531	801CHEX	Intrinsically Safe CO + Heat Multi-Sensor Detector	250	
516.800.532	801HEX	Intrinsically Safe Heat Detector	250	

Continued on Page 5

MX1 Analogue Loop Device Compatibility *continued from Page 4*

Order Code	Device Type	Description	Maximum No. Per Loop	End Of Line
516.800.066	801FEx	Intrinsically Safe Flame Detector	250	
514.800.513	CP840Ex	Intrinsically Safe Manual Call Point	250	
514.001.062	IF800Ex	Intrinsically Safe Contact Input Module	250	
516.300.411	FV411f	Flameproof Infrared Flame Detector no camera	125	
516.300.412	FV412f	Flameproof Infrared Flame Detector PAL camera	125	
516.300.413	FV413f	Flameproof Infrared Flame Detector NTSC cam.	125	
516.041.004	S271i+	Intrinsically Safe Infrared Flame Detector	125	
516.041.003	S271f+	Flameproof Infrared Flame Detector	125	
516.800.956	SAB801	Sounder Base Driver with LED Beacon	250	
516.800.954	SAM800	Sounder Base Driver	250	
545.800.004	LIM800	Short Circuit Loop Isolator Module	250	
517.050.018	5BI	Short Circuit Isolator Base	250	
517.050.017	5B	Detector Base	250	
517.050.041	4B	Detector Base	250	
517.050.042	4B-C	Continuity Base for 850 Series Detectors	250	
517.050.043	4B-I	Short Circuit Isolator Base	250	

The actual maximum number of devices per loop depends on the mixture of device types, cable type and length.

MX1-NZ Analogue Loop Device Compatibility *additional items*

Order Code	Device Type	Description	Maximum No. Per Loop	End Of Line
516.800.800	801PC	CO + Photoelectric Smoke + Heat Multi-Sensor	250	
FP0839	1841MX	Indoor Manual Call Point	250	
FP0959	AZM800	MX Apartment Zone Module	250	

DIM800 Detector Compatibility

Series	Model	Description	Max. Qty	External Supply Voltage at DIM800
Tyco	614P	Photoelectric Detector	25	20V – 28.7V
	614I	Ionisation Smoke Detector	38	20V – 28.7V
	614CH	CO + Heat Detector	32	20V – 28.7V
	614T	Heat Detector Types A, B, C, and D	23	20V – 28.7V
	601FEx	Flame Detector*	4	20V - 28.7V
	S231f+	IR Flame Detector (flameproof)	7	21.0 – 28.7V
	FV411f	IR Flame Detector (flameproof)	3	23.0 – 28.7V
	FV412f	IR Flame Detector (flameproof)	3	23.0 – 28.7V
	FV413f	IR Flame Detector (flameproof)	3	23.0 – 28.7V
	Minerva	MD614	Heat Detector	40
MR614		Photoelectric Smoke Detector	22	20.7V - 28.7V
MR614T		HPO Photoelectric Smoke Detector	21	20.7V - 28.7V
MU614		CO Detector	40	20.7V - 28.7V
MF614		Ionisation Smoke Detector	30	20.7V - 28.7V
T614		Heat Type A, B, C, D	23	20.7V - 28.7V
SIMPLEX	4098 – 9603EA	Ionisation Smoke Detector	24	18.0V - 28.7V
	4098 – 9601EA	Photoelectric Smoke Detector	24	18.0V - 28.7V
	4098 – 9618EA 4098 – 9619EA 4098 – 9621EA	Heat Detector Type A, B, D	24	18.0V - 28.7V
Olsen	P24B	Photoelectric Detector	24	20.7V - 24.7V
	P29B	Photoelectric Detector	20	20.7V - 26.7V
	C24B	Ionisation Smoke Detector	40	20.7V - 26.7V
	C29B (Ex) *	Ionisation Smoke Detector	40	20.7V - 26.7V
	R23B	Flame Detector	20	20.7V - 24.7V
	R24B	Flame Detector	3	22.7V - 28.7V
	P136	Duct Sampling Unit	5	19.0V - 28.7V
	T56B	Heat Detector (Z56, Z500 bases)	40	18.0V - 28.7V
—	T54B, B111, etc.	Hard Contact Devices	40	18.0V - 28.7V
System Sensor	885WP-B	Weatherproof Heat Detector	40	20.0V - 28.7V
Cerberus	DO1101	Photoelectric Smoke Detector	16	21.7V - 27.7V
	DLO1191	Photoelectric Beam Smoke Detector	1	22.7V - 28.7V

Hard contact devices must be rated for at least 30V and currents up to 50mA.

* Although detector is Ex rated, this is a direct connection without an I.S. barrier

DIM800 New Zealand Device Compatibility *additional items*

Brand	Device Type	Description	Max. No.	External Supply Voltage at DIM800
Tyco/ VIGILANT	PA0443	Contact Conversion Module	113	18.0 – 26.7V (see Bulletin NZ208D)
	Indi-VIGIL	Heat (Indicating)	86	18.0 – 28.7V (see Bulletin NZ221A)
Cerberus	F716	Ion Smoke	130	20.7 – 26.7V
	F906	Ion Smoke	130	20.7 – 26.7V
	F910	Ion Smoke	52	20.0 – 26.6V
	R716	Photo Smoke	24	20.7 – 24.7V
	R910	Photo Smoke	20	20.7 – 26.7V
	R936	Photo Smoke	20	20.6 – 26.6V
	D900	ROR/FT Heat	17	20.7 – 26.7V
	D920	ROR/FT Heat	17	20.7 – 26.7V
	S610	IR Flame	20	20.7 – 24.7V
	S2406	IR Flame	3	22.7 – 28.7V
	A2400	Beam Photo Smoke	1 pair	22.7 – 28.7V
	P29B	Photoelectric Detector	20	20.7V - 26.7V
System Sensor	BEAM 1224 (or 1224S)	Reflected Beam Photo Smoke	No Limit	(see Bulletin NZ223A)
	1400	Ion Smoke	26	18.0 – 28.7V
	1451	Photo Smoke	20	18.0 – 28.7V
	2400	Ion Smoke	20	18.0 – 24.7V
	2451	Photo Smoke	21	18.0 – 28.7V
	1151	Ion Smoke	40	18.0 – 28.7V
	2151	Photo Smoke	32	18.0 – 28.7V
	2351E	Photo Smoke	40	18.0 – 28.7V
	2351TEM	Photo Smoke/Thermal	32	18.0 – 28.7V
	5351E	ROR/FT Heat Detector	28	18.0 – 28.7V
	4351E	FT Heat Detector	32	18.0 – 28.7V

Information on using the System Sensor Beam1224 beam detector is covered in Product Bulletin NZ223A.

DDM800 Australia Actuating Device Compatibility

All Cerberus/Olsen detectors listed here for use with the DDM800 are compatible with the Z52B, Z54, Z54B Mk2, Z56, Z500 bases.

In addition, the T56B heat detector is also compatible with the Z55B, Z56N, Z500N bases.

Brand	Model	Type	Maximum No. per Circuit
Standard Voltage Detectors (Modes 2, 3, 4, 5, 6)			
-	Hard Contact Devices (T54B, B111, etc.)		40
Kidde	Firewire	Linear Heat Detector	5000m
Olsen	C24B	Ionisation Smoke Detector	40
Olsen	C29B	Ionisation Smoke Detector	40
Olsen	P136	Duct Sampling Unit	7
Olsen	P24B	Photoelectric Smoke Detector	25
Olsen	P29B	Photoelectric Smoke Detector	20
Olsen	R23B	Infrared Flame Detector	19
Olsen	R24B	Dual Spectrum Infrared Flame Detector	12
Olsen	T56B	Heat Detector	40
Protectowire	Protectowire	Linear Heat Detector	2000m
SAFE	ThermoCable	Linear Heat Detector	5000m
SIMPLEX	4098-9601EA	Photoelectric Smoke Detector	25
SIMPLEX	4098-9603EA	Ionisation Smoke Detector	31
SIMPLEX	4098-9618EA	Heat Detector Type A	31
SIMPLEX	4098-9619EA	Heat Detector Type B	31
SIMPLEX	4098-9621EA	Heat Detector Type D	31
System Sensor	885WP-B	Weatherproof Heat Type B	40
Tyco	601F ¹	Infrared Flame Detector	5
Tyco	601FEx ¹	Infrared Flame Detector	5
Tyco	614CH	CO + Heat Detector	35
Tyco	614I	Ionisation Smoke Detector	40
Tyco	614P	Photoelectric Smoke Detector	40
Tyco	614T	Heat Detector Type A, B, C, D	29
Tyco	SU0600	15V Manual Call Point	40
Tyco	T614	Heat Detector Type A, B, C, D	29
Tyco/Minerva	MD614	Heat Detector	25
Tyco/Minerva	MF614	Ionisation Smoke Detector	32
Tyco/Minerva	MR614	Photoelectric Smoke Detector	25
Tyco/Minerva	MR614T	Photoelectric Smoke + Heat Detector	21
Tyco/Minerva	MU614	CO Detector	40

1. Not an ActivFire listed combination

Continued on Page 9

DDM800 Australia Actuating Device Compatibility (Continued from Page 8)

Brand	Model	Type	Maximum No. per Circuit
Standard Voltage Detectors (Modes 2, 3, 4, 5, 6)			
Tyco	FV411f	IR Flame Detector (flameproof)	3
Tyco	FV412f	IR Flame Detector (flameproof)	3
Tyco	FV413f	IR Flame Detector (flameproof)	3
Low Voltage Detectors (Modes 7, 9)			
-	Hard Contact Devices (T54B, B111, etc.)		40
Kidde	Firewire	Linear Heat Detector	5000m
Protectowire	Protectowire	Linear Heat Detector	2400m
SAFE	ThermoCable	Linear Heat Detector	5000m
System Sensor	885WP-B	Weatherproof Heat Type B	30
Tyco	614CH	CO + Heat Detector	21
Tyco	614I	Ionisation Smoke Detector	25
Tyco	614P	Photoelectric Smoke Detector	25
Tyco/	614T	Heat Detector	17
Intrinsically Safe Detectors - (Mode 11) with I.S. Repeater			
-	Hard Contact Devices (T54B, etc.)		40
Kidde	Firewire	Linear Heat Detector	5000m
Olsen	C29BEx	Ionisation Smoke Detector	24
Protectowire	Protectowire	Linear Heat Detector	2400m
SAFE	ThermoCable	Linear Heat Detector	5000m
Tyco	601FEx ¹	Infrared Flame Detector	2
Tyco	MD601Ex ¹	ROR Heat Detector	18
Tyco	MD611Ex ¹	Fixed Temp Heat Detector	18
Tyco	MDU601Ex ¹	Enhanced CO + Heat Detector	12
Tyco	MF601Ex ¹	Ionisation Smoke Detector	16
Tyco	MR601TE ¹	High Performance Photoelectric Smoke + Heat Detector	7
Tyco	MU601Ex ¹	CO Detector	12
Tyco	S231i+ ¹	IR Flame Detector (intrinsically safe)	2

1. Not an ActivFire listed combination

DDM800 New Zealand Actuating Device Compatibility *continued on Page 11*

Brand	Model	Type	Maximum No per Circuit
Standard Voltage Detectors			
Cerberus	A2400	Beam Photoelectric Smoke Detector	1
Cerberus	D900	Fixed Temperature & ROR Hea	15
Cerberus	D920	Fixed Temperature & ROR Heat	15
Cerberus	F716	Ionisation Smoke Detector	100
Cerberus	F906	Ionisation Smoke Detector	166
Cerberus	F910	Ionisation Smoke Detector	61
Cerberus	R716	Photoelectric Smoke Detector	20
Cerberus	R906	Photoelectric Smoke Detector	20
Cerberus	R910	Photoelectric Smoke Detector	16
Cerberus	R936	Photoelectric Smoke Detector	15
Cerberus	S2406	IR Flame Detector	12
Cerberus	S610	IR Flame Detector	15
Kidde	Firewire	Linear Heat Detector	5000m
Protectowire	Protectowire	Linear Heat Detector	2000m
SAFE	ThermoCable	Linear Heat Detector	5000m
System Sensor	1151	Ionisation Smoke Detector	45
System Sensor	1400	Ionisation Smoke Detector	25
System Sensor	1451	Photoelectric Smoke Detector	20
System Sensor	2151	Photoelectric Smoke Detector	55
System Sensor	2351E	Photoelectric Smoke Detector	50
System Sensor	2351TEM	Photoelectric Smoke + Heat Detector	38
System Sensor	2400	Ionisation Smoke Detector	16
System Sensor	2451	Photoelectric Smoke Detector	16
System Sensor	4351E	Fixed Temperature Heat Detector	38
System Sensor	5351E	Fixed Temperature & ROR Heat	41
Tyco	601F	IR Flame Detector	5
Tyco	601Fex	Intrinsically Safe IR Flame Detector	5
Tyco	614CH	CO + Heat Detector	35
Tyco	614I	Ionisation Smoke Detector	41
Tyco	614P	Photoelectric Smoke Detector	41
Tyco	FV411f1	IR Flame Detector (flameproof)	3
Tyco	FV412f1	IR Flame Detector (flameproof)	3
Tyco	FV413f1	IR Flame Detector (flameproof)	3
Tyco	S231f+1	IR Flame Detector (flameproof)	7
Tyco/Minerva	MF614	Ionisation Smoke Detector	32
Tyco/Minerva	MR614	Photoelectric Smoke Detector	25
Tyco/Minerva	MR614T	Photoelectric Smoke + Heat Detector	21
Tyco/Minerva	MU614	CO Detector	51
Tyco/VIGILANT	1841	Indicating Manual Call Point	138
Tyco/VIGILANT	Indi-VIG/L Mk II	Heat Detector	83

1. Information on using the FV400 range of flame detectors is covered in Product Bulletin NZ210A.

DDM800 New Zealand Actuating Device Compatibility *continued from Page 10*

Brand.	Model	Type	Maximum No per Circuit
Low Voltage Detectors			
Kidde	Firewire	Linear Heat Detector	5000m
Protectowire	Protectowire	Linear Heat Detector	2400m
SAFE	ThermoCable	Linear Heat Detector	5000m
System Sensor	2351E	Photoelectric Smoke Detector	30
System Sensor	2351TEM	Photoelectric Smoke + Heat Detector	23
System Sensor	4351E	Fixed Temperature Heat	23
System Sensor	5351E	Fixed Temperature & ROR Heat	25
Tyco	614CH	CO + Heat Detector	21
Tyco	614I	Ionisation Smoke Detector	25
Tyco	614P	Photoelectric Smoke Detector	25
Tyco/VIGILANT	1841	Indicating Manual Call Point	83
Tyco/VIGILANT	Indi-VIGIL Mk II	Heat Detector	50
Intrinsically Safe Detectors – Loop Powered or Regulated Supply Required.			
Cerberus	F911Ex	Ionisation Smoke Detector	26
Kidde	Firewire	Linear Heat Detector	5000m
Protectowire	Protectowire	Linear Heat Detector	2400m
SAFE	ThermoCable	Linear Heat Detector	5000m
System Sensor	1151EIS	Ionisation Smoke Detector	26
System Sensor	5451EIS	Fixed Temperature & ROR Heat	7
Tyco	601Fex	Intrinsically Safe IR Flame Detector	2
Tyco	MD601Ex	ROR Heat Detector	18
Tyco	MD611Ex	Fixed Temperature Heat	18
Tyco	MDU601Ex	Enhanced CO & Heat Detector	12
Tyco	MF601Ex	Ionisation Smoke Detector	16
Tyco	MR601Tex	HPO Smoke Detector	7
Tyco	MU601Ex	CO Detector	12
Tyco	S231i+	Intrinsically Safe IR Flame Detector	2
The following are permitted only when O/C = Fast Alarm is configured.			
-	N/C Hard Contact Devices (T54B, 27120 DETECT-AFIRE, VIGIL, FP0330 non-indicating MCP, etc.)		40
NZ Legacy Smoke Detectors - Loop Powered or Regulated Supply Required			
All detectors, except MCPs and heat detectors, as listed for Standard Voltage detector profiles, plus those listed below.			
Tyco/VIGILANT	Indi-VIGIL Mk I	Heat Detector	104
Tyco/VIGILANT	Indi-VIGIL Mk II ²	Heat Detector	83
The following are permitted only when S/C = Fast Alarm is configured.			
Tyco/VIGILANT	PA0443 CCM	Conversion module for N/C heat detectors and MCPs	104
NZ Legacy Combined Detectors - Loop Powered or Regulated Supply Required			
-	Open circuit heat detectors and MCPs (clean contact)		Unlimited

2. For NZ Legacy Smoke circuits, the Indi-VIGIL Mk II must have a 4.7-7.5V zener diode fitted as per Product Bulletin NZ221A. The method described in Product Bulletin NZ208D of using a 100Ω is acceptable provided the configuration, SC = CCM FA (short circuit is fast alarm), is active. However, it must be noted that the latter method is not compliant from NZS4512:2003 onwards.

AZM800 New Zealand Conventional Device Compatibility

Brand	Device Type	Description	Max. No. (Normal setting)	Max. No. (Low Current)
System Sensor	2351E	Photoelectric Smoke + Heat Detector*	10	2
	2351TEM	Photoelectric Smoke + Heat Detector*	8	1
	4351E	Heat Detector*	8	1
	5351E	Heat Detector*	8	1
	1151	Photoelectric Smoke Detector	16	3
	2151	Photoelectric Smoke Detector	16	3
Tyco	614CH	CO + Heat Detector*	10	2
	614P	Photoelectric Smoke Detector	11	2
	614T	Heat Detector*	8	1
VIGILANT	Indi-VIGIL Mk II	Heat Detector/Manual Call Point	35	8
	1841 Indicating MCP	Heat Detector/Manual Call Point	35	8
	PA1022 Clean Contact Adaptor	Heat Detector/Manual Call Point	35	8
	AZM800 - RHU	Remote Hush Unit	1	1

* These heat detectors will not produce a brigade alarm unless the AZM800 is specially configured, in which case, any smoke or heat alarm on that AZM800 will produce a latching brigade alarm.

Compatible Actuating Devices (Detectors) The following detectors are compatible with the F3200 system. The maximum number of detectors per circuit is indicated by the columns 4mA and IS, for Standard and Intrinsically Safe applications respectively. For details on Intrinsically Safe applications refer to the F3200 Installation Manual LT0255.

Mode	End Of Line	No of Ccts	End Of Line for MAF/PSU Inputs
1	Standard 2k7, 5%, 400mW resistor	1	3k3, 5%, 250mW resistor
2	High Current 2k7, 5%, 400mW resistor	2	6k8, 5%, 250mW resistor
3	Low Current 10k, 5%, 400mW resistor	3	10k, 5%, 250mW resistor
4	Tamper EOL002B Active EOL		
5	Disabled None		

Minerva/Thorn/Tyco Detectors

DETECTORS CERTIFIED WITH F3200 FIP			Maximum Number	
TYPE	DESCRIPTION	BASE	4mA	I.S.
614P	Photoelectric Smoke Detector	4B/5B	38	-
614I	Ionisation Smoke Detector	4B/5B	40	-
614CH	Carbon Monoxide & Heat Detector	4B/5B	40	-
614TA	Heat Detector Type A	4B/5B	40	-
614TB	Heat Detector Type B	4B/5B	40	-
614TC	Heat Detector Type C	4B/5B	40	-
614TD	Heat Detector Type D	4B/5B	40	-
MD614A	Heat Detector Type A	4B/5B	40	-
MD614C	Heat Detector Type C	4B/5B	40	-
MF614	Ionisation Smoke Detector	4B/5B	40	-
MR614	Photoelectric Smoke Detector	4B/5B	40	-
MR614T	Photoelectric Smoke Detector	4B/5B	40*1	-
MU614	CO Fire Detector	4B/5B	40	-
T614A / Mk2	Heat Detector Type A	4B/5B	40	-
T614B / Mk2	Heat Detector Type B	4B/5B	40	-
T614C / Mk2	Heat Detector Type C	4B/5B	40	-
T614D / Mk2	Heat Detector Type D	4B/5B	40	-
MF301Ex X	Ionisation Smoke Detector	M300	40	40
MR301Ex X	Photoelectric Smoke Detector	M300	40	40
MR301TEEx X	Photoelectric Smoke Detector	M300	40	40
MS302Ex X	Infrared Flame Detector	M300	40	40
MD601Ex	Heat Detector	5BEx	40	40
MDU601Ex	Carbon Monoxide & Heat Detector	5BEx	40	40
MF601Ex	Ionisation Smoke Detector	5BEx	40	40
MR601TEEx	HPO Photoelectric Smoke Detector	5BEx	36	36
MU601Ex	CO Fire Detector	5BEx	40	40
601FEx	Infrared Flame Detector	5BEx	6	6

Minerva/Thorn/Tyco Detectors Continued from Page 13

F3200

DETECTORS CERTIFIED WITH F3200 FIP			Maximum Number	
TYPE	DESCRIPTION	BASE	4mA	I.S.
S111 X	Infrared Flame Detector (I.S.)	-	40	35
S121 X	Infrared Flame Detector (I.S.)	-	40	35
S131 X	Infrared Flame Detector (I.S.)	-	40	35
S231i+ X	Infrared Flame Detector (I.S.)	-		11
S231i+	Infrared Flame Detector & ZAU401	-	5	5
S231f+	Infrared Flame Detector & ZAU401	-	5	-
S261f+	IR Flame Detector (flameproof)	-	40	-
FV411f/2f/3f	IR Flame Detector (flameproof)	-	4	-
SU0600	15V MCP	-	40	-

*1 For ambient temperature < 30°C. Max Qty is 34 otherwise.
 Devices 'X' refer to F3200 Install manual for I.S. application notes including barriers.

Hochiki Detector Range

DETECTORS CERTIFIED WITH F3200 FIP		Max. No.
TYPE	DESCRIPTION	4mA
DCA-B-60R	Heat Detector Type A	40
DCA-B-90R	Heat Detector Type C	40
DCD-A	Heat Detector Type A With YBO – R/4A Base	40
DCD-C	Heat Detector Type C With YBO – R/4A Base	40
DFE-60B (DFB-60B)	Heat Detector Type B	40
DFE-90D (DFB-90B)	Heat Detector Type D	40
DFJ-60B	Heat Detector Type B With YBO – R/4a Base	40
DFJ-90D	Heat Detector Type D With YBO – R/4a Base	40
SIJ-ASN	Ionisation Smoke Detector With YBO – R/4A Base	40
SLR-AS	Photoelectric Smoke Detector With YBO – R/4A Base	40
SIF-AM	Ionisation Smoke Detector	40
SIH-AM	Ionisation Smoke Detector	40
SLK-A	Photoelectric Smoke Detector	40
SLG-AM	Photoelectric Smoke Detector	40
HF-24A	Ultraviolet Flame Detector	18

With YBC-RL/4AH4, YBF-RL/4AH4 or YBF-RL/4AH4M Bases

Olsen Detector Range

DETECTORS CERTIFIED WITH F3200 FIP			Max. No.	
TYPE	DESCRIPTION	BASE	4mA	I.S.
B111B #	Beam Smoke Detector (Note 7)	-	40	0
B21B	Beam Smoke Detector	-	1	-
C23B *&	Ionisation Smoke Detector	Z23	40	0
C23BEx *X	Ionisation Smoke Detector (I.S.)	Z23	40	35
C24B	Ionisation Smoke Detector	*1	40	0
C29B	Ionisation Smoke Detector	*1	40	0
C29BEx X	Ionisation Smoke Detector (I.S.)	Z94C	40	40
DL01191A	Beam Smoke Detector	-	1	-
FW81B	Heat Detector Cable FW68, FW105 (I.S.)	-	1km	1km
P24B	Photoelectric Smoke Detector	*1	40	0
P29B	Photoelectric Smoke Detector	*1	36	0
P61B *	Photoelectric Smoke Detector (Rev J)	-	40	0
P76B	Photoelectric Smoke Detector Non-Latching	Z72	10	0
P136	Duct Sampling Unit	-	8	-
R23B &	Infrared Flame Detector	-	36	0
R24B	Dual Spectrum Infrared Flame Detector	-	8	0
R24BEx +X	Dual Spectrum Infrared Flame Detector (I.S.)	-	8	7
T54B +X#	Probe Type E Heat Detector (I.S. or Flameproof)	-	40	40
T56B X	Heat Detector Types A, B, C, D (I.S. with Z55, Z56N or Z500N Base)	*1	40	40
V41B +X#	Ultraviolet Flame Detector	-	40	40
V42B +X#	Ultraviolet Flame Detector Slave	-	N/A	N/A
V44B +X#	Ultraviolet Flame Detector	-	40	40
-	Short Circuit Device	-	40	40

*1 = Z54, Z54 MK2, Z55B, Z56, Z500 BASES

Other Detectors

DETECTORS CERTIFIED WITH F3200 FIP		Max. No.
TYPE	DESCRIPTION	4mA
SERIES 60	Apollo Heat Detector Types A, B, C, D	40
SERIES 60	Apollo Photoelectric Smoke Detector	40
SERIES 60	Apollo Ionisation Smoke Detector	40
	All With 45681-200 Bases	
MK VIII *	Flameguard Heat Detector Type A	22
MK VIII *	Flameguard Heat Detector Type C	11
MK5, MK6 *	Intertec Heat Detector Types A, B, C, D	22
	(Note 9) Detector Has Integral LED & Terminals	
885WP-B ^@	Weatherproof Heat Detector Type B	40

Simplex Detectors

SIMPLEX RANGE			Max. No. WITH EOL
TYPE	DESCRIPTION	Iq μ A	
4098-9618EA	Type A Heat Detector	100	40
4098-9619EA	Type B Heat Detector	100	40
4098-9621EA	Type D Heat Detector	100	40
4098-9601EA	Photoelectric Smoke Detector	100	40
4098-9603EA	Ionisation Smoke Detector	100	40
4098-9612	Fixed Temperature Heat Detector	100	40
4098-9613	Fixed Temperature + Rate of Rise Heat Detector	100	40
4098-9614	Fixed Temperature Heat Detector	100	40
4098-9615	Fixed Temperature + Rate of Rise Heat Detector	100	40

All with Simplex 4098-9788EA base except 4098-9612 to 4098-9615 with 4098-9788 base.

F3200 Actuating Device Compatibility Notes

- 1) The maximum number of detectors per AZC allowed by the standard is 40.
- 2) Those detectors shown in brackets have the same characteristics as the current models.
- 3) Detectors indicated by a "X" may be used in INTRINSICALLY SAFE AREAS in conjunction with approved and compatible, intrinsically safe adaptors. The number allowed in a particular circuit may be less than the maximum shown. Refer to the F3200 Installation Manual LT0255 for details.

V41/42/44B detectors have flameproof enclosures.

- 4) Detectors indicated by a "+", which are used in HOSTILE CLIMATIC ENVIRONMENTS, may be directly connected to the panel, if they are not required to be intrinsically safe.
- 5) Detectors indicated by a "*"; are not current models and should not be used for new installations.
- 6) Detectors indicated by an "&"; normally use an incandescent lamp which will have a low intensity when used in mode 1. The lamp can be replaced with an LED kit - contact supplier.
- 7) The B111B beam and V41B/V42B/V44B flame detectors require power from the fused +24 VDC supply.
- 8) Hard Contact devices are indicated by a "#". Where an AZC has only hard contact devices circuit resistance must be less than 150 Ohms (i.e. reduce line voltage to less than 2.5V), to distinguish instant alarms (B1) from alarms (B2) (e.g. to override AVF).
- 9) The Intertec detectors require a series diode to be fitted for compatibility. Consult manufacturer for detail.
- 10) The Olsen FW81B code for fire wire has been replaced by FW followed by the temperature rating in °C, eg. FW68, FW105. Only FW68 is currently approved and listed.
- 11) Detectors indicated by a "^" have not been CSIRO assessed for compatibility.
- 12) Detectors indicated by a "@" cannot have their remote indicator outputs wired in common with Tyco 614 series or the Minerva M614 series (and most other Tyco/Olsen detectors), due to a difference of polarity.

MXP Actuating Device Compatibility

Device Type	Description	Max. No. Per Loop	End Of Line
850PH	Photoelectric Smoke + Heat Detector	200	
850P	Photoelectric Smoke Detector	200	
850H	Heat Detector	200	
850PC	CO + Photoelectric Smoke + Heat Detector	200	
801PC	CO + Photoelectric Smoke + Heat Detector	200	
814P	Photoelectric Smoke Detector	200	
814PH	Photoelectric Smoke + Heat Detector	200	
814CH	CO + Heat Detector	200	
814I	Ionisation Smoke Detector	200	
814H	Heat Detector	200	
814IB	Isolator Base (Obsolete - use 4B-I)	128	
814RB	Relay Base	200	
814SB	Sounder Base (Low/Med/High volume) (Obsolete - use 802SB)	48/30/24	
802SB	Sounder Base (Quiet/Loud)	200/50	
CP820	Indoor Manual Call Point	200	
CP830	Outdoor Manual Call Point (IP67)	200	
MCP820	Indoor Manual Call Point with Isolator	200	
MCP830	Outdoor Manual Call Point with Isolator (IP67)	200	
MIM800 / MIM801	Mini Input Module	200	200 Ohm
CIM800	Input Module	200	200 Ohm
DDM800	Universal Fire & Gas Detector Module	8 (loop) / 59 (external)	4k7 5k6 (I.S.)
DIM800	Detector Input Module	200	4k7 Ohm
LPS800	Loop Powered Sounder Module	<33 (75mA max.)	22k 0.5W
RIM800	Relay Interface Module	200	
SNM800	Sounder Notification Module	200 (2A max.)	27k 0.5W
VLC-800MX	VESDA Laser Compact – 800MX	125	
SAB801	Sounder Addressable Beacon	100	
SAM800	Sounder Addressable Module	200	
FV411f/2f/3f	IR Flame Detector (flameproof)	123	
S271f+	IR Flame Detector (flameproof)	200	
5BI	Isolator Base	200	
4B-I	Isolator Base	200	

The actual maximum number of devices per loop depends on the mixture of types, cable type and cable length. Refer to the MXP Engineering/Technical Manual (LT0273) for further information.

DDM800 Australia Actuating Device Compatibility

All Cerberus/Olsen detectors listed here for use with the DDM800 are compatible with the Z52B, Z54, Z54B Mk2, Z56, Z500 bases.

In addition, the T56B heat detector is also compatible with the Z55B, Z56N, Z500N bases.

Brand	Model	Type	Maximum No. per Circuit
Standard Voltage Detectors (Modes 2, 3, 4, 5, 6)			
-	Hard Contact Devices (T54B, B111, etc.		40
Kidde	Firewire	Linear Heat Detector	5000m
Olsen	C24B	Ionisation Smoke Detector	40
Olsen	C29B	Ionisation Smoke Detector	40
Olsen	P136	Duct Sampling Unit	7
Olsen	P24B	Photoelectric Smoke Detector	25
Olsen	P29B	Photoelectric Smoke Detector	20
Olsen	R23B	Infrared Flame Detector	19
Olsen	R24B	Dual Spectrum Infrared Flame Detector	12
Olsen	T56B	Heat Detector	40
Protectowire	Protectowire	Linear Heat Detector	2000m
SAFE	ThermoCable	Linear Heat Detector	5000m
SIMPLEX	4098-9601EA	Photoelectric Smoke Detector	25
SIMPLEX	4098-9603EA	Ionisation Smoke Detector	31
SIMPLEX	4098-9618EA	Heat Detector Type A	31
SIMPLEX	4098-9619EA	Heat Detector Type B	31
SIMPLEX	4098-9621EA	Heat Detector Type D	31
System Sensor	885WP-B	Weatherproof Heat Type B	40
Tyco	601F ¹	Infrared Flame Detector	5
Tyco	601FEx	Infrared Flame Detector	5
Tyco	614CH	CO + Heat Detector	35
Tyco	614I	Ionisation Smoke Detector	40
Tyco	614P	Photoelectric Smoke Detector	40
Tyco	614T	Heat Detector Type A, B, C, D	29
Tyco	SU0600	15V Manual Call Point	40
Tyco	T614	Heat Detector Type A, B, C, D	29
Tyco/Minerva	MD614	Heat Detector	25
Tyco/Minerva	MF614	Ionisation Smoke Detector	32
Tyco/Minerva	MR614	Photoelectric Smoke Detector	25
Tyco/Minerva	MR614T	Photoelectric Smoke + Heat Detector	21
Tyco/Minerva	MU614	CO Detector	40
Tyco	FV411f/2f/3f	IR Flame Detector (flameproof)	3

Continued on Page 20

DDM800 Australia Actuating Device Compatibility *Continued from Page 19*

Brand	Model	Type	Maximum No. per Circuit
Low Voltage Detectors (Modes 7, 9)			
-	Hard Contact Devices (T54B, B111, etc.)		40
Kidde	Firewire	Linear Heat Detector	5000m
Protectowire	Protectowire	Linear Heat Detector	2400m
SAFE	ThermoCable	Linear Heat Detector	5000m
System Sensor	885WP-B	Weatherproof Heat Detector Type B	30
Tyco	614CH	CO + Heat Detector	21
Tyco	614I	Ionisation Smoke Detector	25
Tyco	614P	Photoelectric Smoke Detector	25
Tyco/	614T	Heat Detector	17
Intrinsically Safe Detectors - (Mode 11)			
-	Hard Contact Devices (T54B, etc.)		40
Kidde	Firewire	Linear Heat Detector	5000m
Olsen	C29BEx	Ionisation Smoke Detector	24
Protectowire	Protectowire	Linear Heat Detector	2400m
SAFE	ThermoCable	Linear Heat Detector	5000m
Tyco	601FEx	Infrared Flame Detector	2
Tyco	MD601Ex	ROR Heat Detector	18
Tyco	MD611Ex	Fixed Temp Heat Detector	18
Tyco	MDU601Ex	Enhanced CO + Heat Detector	12
Tyco	MF601Ex	Ionisation Smoke Detector	16
Tyco	MR601TEEx	High Performance Photoelectric Smoke + Heat Detector	7
Tyco	MU601Ex	CO Detector	12
Tyco	S231i+	IR Flame Detector (intrinsically safe)	2

1. Not an ActivFire Listed combination

MX4428

DDM800 New Zealand Actuating Device Compatibility

Brand	Model	Type	Maximum No. per Circuit
Standard Voltage Detectors - Loop Powered or Regulated Supply Req'd (Modes 2, 3, 4, 5, 6)			
Cerberus	A2400	Beam Photoelectric Smoke Detector	1
Cerberus	D900	Fixed Temp & ROR Heat Detector	15
Cerberus	D920	Fixed Temp & ROR Heat Detector	15
Cerberus	F716	Ionisation Smoke Detector	100
Cerberus	F906	Ionisation Smoke Detector	166
Cerberus	F910	Ionisation Smoke Detector	61
Cerberus	R716	Photoelectric Smoke Detector	20
Cerberus	R906	Photoelectric Smoke Detector	20
Cerberus	R910	Photoelectric Smoke Detector	16
Cerberus	R936	Photoelectric Smoke Detector	15
Cerberus	S2406	Ionisation Smoke Detector	12
Cerberus	S610	Infrared Flame Detector	15
Kidde	Firewire	Linear Heat Detector	5000m
Protectowire	Protectowire	Linear Heat Detector	2000m
SAFE	ThermoCable	Linear Heat Detector	5000m
System Sensor	1151	Ionisation Smoke Detector	45
System Sensor	1400	Ionisation Smoke Detector	25
System Sensor	1451	Photoelectric Smoke Detector	20
System Sensor	2151	Photoelectric Smoke Detector	55
System Sensor	2351E	Photoelectric Smoke Detector	50
System Sensor	2351TEM	Photoelectric Smoke Detector	38
System Sensor	2400	Ionisation Smoke Detector	16
System Sensor	2451	Photoelectric Smoke Detector	16
System Sensor	4351E	Fixed Temp. Heat Detector	38
System Sensor	5351E	Fixed Temp. & ROR Heat Detector	41
Tyco	601F	Infrared Flame Detector	5
Tyco	601FEx	Infrared Flame Detector	5

Continued on Page 22

DDM800 New Zealand Actuating Device Compatibility *Continued from Page 22)*

Brand	Model	Type	Maximum No. per Circuit
Standard Voltage Detectors - Loop Powered or Regulated Supply Req'd (Modes 2, 3, 4, 5, 6)			
Tyco	614CH	CO + Heat Detector	35
Tyco	614I	Ionisation Smoke Detector	41
Tyco	614P	Photoelectric Smoke Detector	41
Tyco	S231f+	Infrared Flame Detector	7
Tyco	FV411f/2f/3f	FlameVision Flame Detector	3
Tyco/Minerva	MF614	Ionisation Smoke Detector	32
Tyco/Minerva	MR614	Photoelectric Smoke Detector	25
Tyco/Minerva	MR614T	High Performance Photoelectric Smoke + Heat Detector	21
Tyco/Minerva	MU614	CO Detector	51
Tyco/VIGILANT	1841	Indicating Manual Call Point	138
Tyco/VIGILANT	Indi-VIGIL MkII	Heat Detector	83
Low Voltage Detectors (Modes 7, 8, 9, 10)			
Kidde	Firewire	Linear Heat Detector	5000m
Protectowire	Protectowire	Linear Heat Detector	2400m
SAFE	ThermoCable	Linear Heat Detector	5000m
System Sensor	2351E	Photoelectric Smoke Detector	30
System Sensor	2351TEM	Photoelectric Smoke + Heat Detector	23
System Sensor	4351E	Fixed Heat Detector	23
System Sensor	5351E	Fixed Temp & ROR Heat Detector	25
Tyco	614CH	CO + Heat Detector	21
Tyco	614I	Ionisation Smoke Detector	25
Tyco	614P	Photoelectric Smoke Detector	25
Tyco/VIGILANT	1841	Indicating Manual Call Point	83
Tyco/VIGILANT	Indi-VIGIL MkII	Heat Detector	50
Intrinsically Safe Detectors - Loop Powered or Regulated Supply Req'd (Mode 11)			
Cerberus	F911Ex	Ionisation Smoke Detector	26
Kidde	Firewire	Linear Heat Detector	5000m
Protectowire	Protectowire	Linear Heat Detector	2400m
SAFE	ThermoCable	Linear Heat Detector	5000m
System Sensor	1151EIS	Ionisation Smoke Detector	26
System Sensor	5451EIS	Fixed Temp & ROR Heat Detector	7

Continued on Page 23

DDM800 New Zealand Actuating Device Compatibility (Continued from Page 22)

Brand	Model	Type	Maximum No. per Circuit
Intrinsically Safe Detectors - Loop Powered or Regulated Supply Req'd (Mode 11)			
Tyco	601FEx	Infrared Flame Detector	2
Tyco	MD601Ex	ROR Heat Detector	18
Tyco	MD611Ex	Fixed Temp Heat Detector	18
Tyco	MDU601Ex	Enhanced CO + Heat Detector	12
Tyco	MF601Ex	Ionisation Smoke Detector	16
Tyco	MR601TEEx	High Performance Photoelectric Smoke + Heat Detector	7
Tyco	MU601Ex	CO Detector	12
Tyco	S231i+	IR Flame Detector (intrinsically safe)	2
The following are permitted only when O/C = Fast Alarm is configured (the default)			
-	N/C Hard Contact Devices (T54B, 27120 DETECT-A-FIRE, VIGIL, FP0330 non-indicating MCP, etc.)		40
NZ Legacy Smoke - Loop Powered or Regulated Supply Req'd (Mode 12)			
All detectors, except MCPs and heat detectors, as listed for Standard Voltage detector modes, plus those listed below.			
Tyco/VIGILANT	Indi-VIGIL MkI	Heat Detector	104
Tyco/VIGILANT	Indi-VIGIL MkII ³	Heat Detector	83
The following are permitted only when O/C = Fast Alarm is configured (the default)			
Tyco/VIGILANT	PA0443 CCM	Conversion module for N/C heat detectors and MCPs	104
NZ Legacy Combined Mode - Loop Powered or Regulated Supply Req'd (Mode 13)			
All detectors, except MCPs and heat detectors, as listed for Standard Voltage detector modes, plus those listed below.			
-	Open circuit heat detectors and MCPs (clean contact)		Unlimited

3. For NZ Legacy Smoke circuits, the Indi-VIGIL Mk II must have a 4.7-7.5V zener diode fitted as per Product Bulletin NZ221A. The method described in Product Bulletin NZ208D of using a 100Ω is acceptable provided the configuration, S/C = Fast Alarm, is active. However, it must be noted that the latter method is not compliant from NZS4512:2003 onwards.

It should be noted that if the 614xx series of detectors have their remote indicator output shorted, the alarm voltage may fall into the fast alarm band. Whilst not preferable, this is acceptable as an alarm is generated, albeit with no AVF.

MX4428

ADR/DIM800 Actuating Device Compatibility

The following detectors, as well as hard contact devices, are compatible with the various MX4428 System ADVANCED DETECTOR RESPONDERS (ADR) and the DIM800 module (DIM).

The responders and End Of Line (EOL) modes are indicated as follows:

2.5 = 2.5mA ADR (FP0472 and PA0452)
 4mA = 4mA ADR (FP0523 and PA0497)
 ADR-M = ADR-M (FP0755 and PA0815)
 ADR-M Special = ADR-M (PA0844) EOL 3k3 nominal - refer to PBF0172D
 P = Pulsing (Active) EOL mode using EOL002Z (obsolete) or EOL002B
 R = Resistive (Passive) EOL mode using 39k resistor

- 1) The maximum number of detectors per AZF/AZC allowed by AS1670.1 is 40.
- 2) Detectors shown in brackets have the same characteristics as the current models.
- 3) Detectors indicated by a "+", which are used in **HOSTILE CLIMATIC ENVIRONMENTS**, may be directly connected to the panel if they are not required to be intrinsically safe.
- 4) Detectors marked "*" are obsolete and should not be used in new installations.
- 5) Detectors indicated by a "&" normally use an incandescent lamp which will have a low intensity when used with this panel. Contact supplier for a replacement LED kit.
- 6) The B111B beam and V41B/V42B flame detectors require power from the fused +24 VDC supply.
- 7) The DIM800 requires an external 24V PSU for correct operation.
Refer to the MXP Engineering/Technical Engineering Manual LT0273.
- 8) Detectors marked "!" require the ADR/ARR LED Pulse to be enabled in the F4000/MX4428 database for the particular detector/responder combination.
- 9) Note the Simplex range of detectors marked "@" must not have their Remote indicator outputs wired in common with most Tyco, Minerva and Olsen detectors.

Minerva Detectors With ADR And DIM800

DETECTORS CERTIFIED WITH MX4428 FIP		Maximum Number of Detectors				
TYPE	DESCRIPTION	4mA & ADR-M P	2.5mA P	4mA & ADR-M R	2.5mA R	DIM800 4k7 EOL
614CH	Carbon Monoxide & Heat Detector	40	20 !	1	1	32
614I	Ionisation Smoke Detector	40	25 !	1	1 !	38
614P	Photoelectric Smoke Detector	38	24 !	1	1 !	25
614T	Type A, B, C, D Heat Detector	40	-	1	-	23
MD614	Heat Detector	40	40	2	2	40
MF614	Ionisation Smoke Detector	40 !	25 !	1	1 !	30
MR614	Photoelectric Smoke Detector	40 !	25 !	1	1 !	22
MR614T	High Performance Detector	40 !	21 !	1	1 !	21
MU614	Carbon Monoxide Detector	40 !	40 !	2	2 !	40
T614 or T614 MK2	Type A, B, C, D Heat Detector	40	-	1	-	23

All With M614, 5B, 4B Base

Simplex Detectors With ADR-M And DIM800

DETECTORS CERTIFIED WITH MX4428 FIP		Max. No.per ADR-M		DIM800 4k7 EOL
TYPE	DESCRIPTION	P	R	
4098-9612 @	Heat Detector Type B	40	1	24
4098-9613 @	Heat Detector Type A	40	1	24
4098-9614 @	Heat Detector Type D	40	1	24
4098-9615 @	Heat Detector Type C	40	1	24
4098-9618EA @	Heat Detector	40	1	24
4098-9619EA @	Heat Detector	40	1	24
4098-9621EA @	Heat Detector	40	1	24
4098-9603EA @	Ionisation Smoke Detector	40	1	24
4098-9601EA @	Photoelectric Smoke Detector	40	1	24

All with 4098-9788EA Base

@ Remote Indicator Output cannot be wired in common with Tyco 614 Series and most other Tyco / Olsen detectors

SU0600 Manual Call Point With ADR-M

DETECTORS CERTIFIED WITH MX4428 FIP		Maximum No. 4mA ADR-M ONLY	
TYPE	DESCRIPTION	P	R
SU0600	Manual Call Point	40	24

MX4428

Tyco Compatible Actuating Devices

DETECTORS CERTIFIED WITH MX4428 FIP (afp-1446)			Maximum Number of Detectors			
Type	Description	Base	4mA & ADR-M P	2.5mA P	All R	DIM
B111B	Beam Type Smoke Detector (See Note 7)	-	40	40	40	40
C23B *&	Ionisation Smoke Detector	Z23	40 !	25 !	1 !	0
C23BEx *	Ionisation Smoke Detector (I.S.)	Z23	40 !	25 !	1 !	0
C24B	Ionisation Smoke Detector	*1	40 !	25 !	1 !	40
C29B	Ionisation Smoke Detector	*1	40 !	40 !	2 !	40
C75B	Ionisation Smoke Detector	Z72	40 !	40 !	4 !	0
FW81B	Heat Detector Cable Fw68 (I.S.)	-	1km	1km	1km *2	1km *3
P24B	Photoelectric Smoke Detector	*1	40 !	25 !	1 !	24
P29B	Photoelectric Smoke Detector	*1	33 !	20 !	1 !	20
P61B *	Photoelectric Smoke Detector (Rev J)	-	40 !	10 !	0	0
P75B	Photoelectric Smoke Detector	Z72	40 !	40 !	1 !	0
P76B	Photoelectric Smoke Detector Non-Latching	Z72	18 !	12 !	1 !	0
P136	Duct Sampling Detector Non-Latching	-	8 !	5 !	-	5
R23B &	Infrared Flame Detector	-	30 !	19 !	4 with DCA001	0
R24B	Dual Spectrum Infrared Flame Detector	-	13 !	3 !	0	3
R24BEx +	Dual Spectrum Infrared Flame Detector (I.S.)	-	13 !	3 !	0	0
T54B +	Probe Type E Heat Detector (I.S. or Flameproof)	-	40	40	40	40
T56B	Heat Detector Types A, B, C, D (I.S. With Z500 Base)	*1	40 !	40 !	40 !	40
V41B +	Ultraviolet Flame Detector (Notes 3, 4, 7, 8)	-	40	40	40	40
V42B +	Ultraviolet Flame Detector (Flameproof – Note 3)	-	40	40	40	40
DLO1191A	Beam Detector	-	1 !	0	0	0
	Short Circuit Device	-	40	40	40	40

*1 Bases = Z54, Z54B Mk2, Z55B, Z56, Z500

*2 Use 33k ELD instead of standard 39k

*3 Use 3k3 ELD instead of standard 4k7

Hochiki Detector Range

DETECTORS CERTIFIED WITH MX4428 FIP (afp-1446)			Maximum No. per ADR		
Type	Description	Base	4mA & ADR-M P	2.5mA P	All R
DCA-B-60R	Heat Detector Type A	1	40 !	40 !	40 !
DCA-B-90R	Heat Detector Type C	1	40 !	40 !	40 !
DCC-A	Heat Detector Type A	2, 4	40 !	40 !	-
DCC-C	Heat Detector Type C	2, 4	40 !	38 !	-
DFE-60B (DFB-60B)	Heat Detector Type B	1	40 !	40 !	40
DFE-90D (DFB-90D)	Heat Detector Type D	1	40 !	40 !	40
SIF-A	Ionisation Smoke Detector	1	40 !	40 !	4
SIH-AM	Ionisation Smoke Detector	1	40 !	40 !	4
SLK-A	Photoelectric Smoke Detector	1	40 !	40 !	1
SLG-AM	Photoelectric Smoke Detector	1	40 !	40 !	1
HF-24A	Ultraviolet Flame Detector	-	17 !	3 !	0
DCD-A	Heat Detector Type A	3	40 !	-	-
DFJ-60B	Heat Detector Type B	3	40 !	-	-
DCD-C	Heat Detector Type C	3	40 !	-	-
DFJ-90D	Heat Detector Type D	3	40 !	-	-
SIJ-ASN	Smoke Detector	3	40 !	-	-
SLR-AS	Smoke Detector	3	40 !	-	-

Base types:

1 = YBC – RL/4AHA 2 = YBF – RL/4AH4M
 3 = YBO – RL/4A 4 = YBC – R/3A

ZAU401 (Rev 2) Detector Compatibility

DETECTORS CERTIFIED WITH ZAU401 (REV 2)		Max. No.	End of Line
S231i+	Flame Detector (I.S.)	5	3k9 Ohm
S231f+	Flame Detector (Flameproof)	5	3k9 Ohm
S231i+	Flame Detector (I.S.) With I.S. Repeater	5	3k9 Ohm
S231f+	Flame Detector (Flameproof) With I.S. Repeater	5	3k9 Ohm
FV411f/2f/3f	FlameVision Flame Detector	2	3k9 Ohm
885WP-B @	Weatherproof Heat Detector Type B	40	470 Ohm 1W

@ Remote indicator output cannot be used in common with Tyco 614 series or the Minerva M614 series (and most other Tyco/Olsen) detectors, due to a difference of polarity.

Unlisted (ActivFire) Detector/ADR/DIM800 Combinations

UNLISTED DETECTOR COMBINATIONS		Maximum Number of Detectors				
Type	Description	4mA & ADR-M P	2.5mA P	All R	ADR-M I.S.	DIM
S121	Flame Detector (I.S.)	40	23	1	36*1	0
S231f+	Flame Detector (Flameproof)	*4	*4	*4	*4	7
FV411f/2f/3f	FlameVision Flame Detector	*4	*4	*4	*4	3
C29BEx	Ionisation Smoke Detector And Z52B, Z55B, Z56N, Z500N Non-Indicating Base				40*1	
MF301Ex	Ionisation Smoke Detector (I.S.)				36*1	
MR301Ex	Photoelectric Smoke Detector (I.S.)				36*1	
MR301TEEx	HPO Detector (I.S.)				36*1	
MS302Ex	Flame Detector (I.S.)				36*1	
885WP-B @	Weatherproof Heat Detector Type B	40	40 !	2 !	-	40
601FEx	Flame Detector (I.S.)	6*2			2*3	
MX301 Detectors With M300 Base						

@ Remote indicator output cannot be used in common with Tyco 614 series or the Minerva M614 series (and most other Tyco/Olsen) detectors, due to a difference of polarity.

*1 ADR-M only, requires IS Isolator and ADR-M programmed as Cct Type 1 or 4.

*2 Non-I.S. application, direct connection.

*3 Use special ADR-M PA0844 and I.S. Isolator.

*4 Requires ZAU401. See page 24.

Blank combinations have not been assessed for compatibility.

Flameguard/Intertec detectors - use FP0574 2-Circuit ADR-M incl. RRM; 2 ccts per ADR. Refer PBF0080.

MPR Actuating Device Compatibility - EWD Mode

Device Type	Description	Max. No. Per Line	Max No. Per Loop	End of Line
C71A/C72A/C73A	Ionisation Smoke Detector - EWD Protocol	40	200	
P71A/P72A/P73A	Photoelectric Smoke Detector - EWD Protocol	40	200	
ADU002	Contact Input Module - EWD Protocol	40	200	10k Ohm
ADU003A	Single I/O Unit - EWD Protocol	40	200	10k Ohm
ADU004A	Universal I/O Unit - EWD Protocol	40	40	
ADU006	2-Wire Detector Circuit Adaptor - EWD Protocol	40	40	
Z54A	Addresable Detector Base - EWD Protocol	40	200	10k Ohm

The actual maximum number of devices and types per line/loop depends on the mixture of types, cable type and cable length. Refer to the F4000 MPR Engineering Manual (LT0140) for further information.

MPR Actuating Device Compatibility - 130 Series SS Mode

Device Type	Description	Max. No. Per Line	Max No. Per Loop	End of Line
C131A/C131A-Mk2	Ionisation Smoke Detector - SS Protocol	40	99	
P131A/P131A-Mk2	Photoelectric Smoke Detector - SS Protocol	40	99	
P132A	Laser Photoelectric Smoke Det. - SS Protocol	40	99	
T131A/T131A-Mk2 - A OR B	Heat Detector - SS Protocol	40	99	
ADC130/ADCU130x	Relay Control Module - SS Protocol	40	99	47k Ohm
ADM130/1/3	Mini Monitor Module - SS Protocol	40	99	47k Ohm
Z134A	Sounder Base - SS Protocol	40	99	
2251BAUS	Photoelectric Smoke Detector - SS Protocol	40	99	

The actual maximum number of devices and types per line/loop depends on the mixture of types, cable type and cable length. Refer to the F4000 MPR Engineering Manual (LT0140) for further information.
Note that the 130 Series mode cannot be selected for MPRs with Version 1.X software.

AAR Actuating Device Compatibility

Device Type	Description	Max. No. Per Line	Max. No. Per Loop	End of Line
C71A/C72A/C73A	Ionisation Smoke Detector - EWD Protocol	40	200	
P71A/P72A/P73A	Photoelectric Smoke Detector - EWD Protocol	40	200	
ADU002	Contact Input Module - EWD Protocol	40	200	10k Ohm
ADU003A	Single I/O Unit - EWD Protocol	40	200	10k Ohm
ADU004A	Universal I/O Unit - EWD Protocol	40	40	50 - 5k
ADU006	2-Wire Detector Circuit Adaptor - EWD Protocol	40	40	4 wire - no FOL
Z54A	Addresable Detector Base - EWD Protocol	40	200	10k Ohm

The actual maximum number of devices and types per line/loop depends on the mixture of types, cable type and cable length. Refer to the F4000 AAR Engineering Manual (LT0096) for further information.
Note that Z54A devices must be configured as ADU002 devices on AARs.

MX4428

Intrinsically Safe (I.S.) Detection

Fire detection in intrinsically safe or hazardous areas may require special detector types, bases, wiring practices, and approved and compatible isolating repeaters. The actual maximum number of detectors per circuit in a particular installation may be less than the number shown, depending on the hazard type, and the inductance and capacitance of the circuit. Refer to the appropriate Standards, Installation and Technical manuals and Product Bulletins for details. The following table lists approved combinations that may be used in I.S. applications. Note isolating repeaters may also be required. Unapproved combinations are included on page 24. On ADRs only Active EOL modes may be used and the EOL type must be an EOL002Z.

ActivFire Listed I.S. Detectors

Detector	Base	Responder	Qty
C23BEx	Z23	ALL	20
C29BEx	Z94C	ADR-M *2	40
R24BEx	-	ALL	3
T54B	-	ALL	40
T56B	*1	ALL	40
V41B	-	ALL	40
V42B	-	ALL	40
FW81	-	ALL	1000m
S/C DEVICE	-	ALL	40

*1 Non-indicating base Z55, Z56N, Z500N

*2 ADR-M only, circuit Type 1 or 4

Maximum Quantity of I.S. Detectors per Circuit - PA0844 ADR-M

DETECTORS NOT ACTIVIFIRE LISTED WITH PA0844 ADR-M					
Type	Description	Qty Per Circuit	IECEX	CSIRO	FPANZ
S121	Infrared Flame Detector	8 ^{*1}		√	
# MD301Ex	Heat Detector	8			
# MF301Ex	Ionisation Smoke Detector	8			
# MR301Ex	Photoelectric Smoke Detector	7			
# MR301TEx	HPO Photoelectric Smoke Detector	7			
# MS302Ex	Infrared Flame Detector	8 ^{*2}			
MD601Ex	Heat(A1R) Detector	17	√		
MD611Ex	Heat(A1S) Detector	17	√		
MDU601Ex	Heat(A1R) & CO Detector	11	√		
MF601Ex	Ionisation Smoke	16			
MR601TEx	HPO Photoelectric Smoke Detector	7	√		
MU601Ex	CO Detector	11			
601FEx	Flame Detector	2	√		
# C23BEx	Ionisation Smoke Detector	8		√	
# C29BEx	Ionisation Smoke Detector	14		√	√
T54B	Heat Probe	40		√	
# T56B & Non-Ind. Base	Heat Detector	40		√	
FW68	Fire Wire (200 Ohm/km)	250m ^{*3}		√	√
FW68	Fire Wire (200 Ohm/km)	4800m ^{*4}		√	√
Protectowire	Fire Wire (660 Ohm/km)	75m ^{*3}			√
Protectowire	Fire Wire (660 Ohm/km)	1400m ^{*4}			√
Shorting Device	Hard Contact Device	40			
1151EIS	Ionisation Smoke Detector	40			√

*1 Qty may be increased to 16 if only S121 detectors on cct.

*2=Qty may be increased to 23 if only MS302Ex detectors on cct.

*3 Where fire wire is used as cct cable for other detectors.

*4=Must use 2k2 0.6W metal film EOL, no other detectors are permitted on circuit.

= Obsolete, but may be still found in field.

MX Analogue Loop Device Compatibility - 4100ESi only

Order Code	Device Type	Description	Maximum No. Per Loop	End Of Line
516.850.051.E	850PH	Photoelectric Smoke + Heat Detector - SCI	250	
516.850.053.E	850H	Heat Detector - SCI	250	
516.850.052.E	850P	Photoelectric Smoke Detector - SCI	250	
516.850.054.E	850PC	CO + Photoelectric Smoke + Heat Multi-Sensor - SCI	250	
814RB	814RB	Relay Base	250	
802SB	802SB	Sounder Base (Loop Powered)	250	
516.800.911	901SB	Sounder Base (External Power)	250	
577.800.006	DDM800	Universal Fire & Gas Detector Module	7 (loop pwr)	4k7 Ohm
DIM800	DIM800	Detector Input Module	250	4k7 Ohm
MIM800	MIM800	Mini Input Module (Hard contact s/c alarm)	250	200 Ohm
CIM800	CIM800	Input Module	250	200 Ohm
555.800.065	MIO800	Multiple Input/Output Module	125	200 Ohm
SNM800	SNM800	Sounder Notification Module	250 (2A max.)	27k 0.5W
545.800.004	LIM800	Loop Isolator Module	250	
RIM800	RIM800	Relay Interface Module	250	
516.800.014	VIO800	VESDA Interface	125	
CP820	CP820	Indoor Manual Call Point	250	
514.800.604.Y	CP830	Outdoor Manual Call Point (IP67)	250	
517.050.018	5BI	Short Circuit Isolator Base	250	
517.050.017	5B	Detector Base	250	
517.050.041	4B	Detector Base	250	
517.050.042	4B-C	Continuity Base for 850 Series Detectors	250	
517.050.043	4B-I	Short Circuit Isolator Base	250	
516.800.957	LPSB3000	LPSB3000 Sounder Base - Loop Powered	191	
516.800.958	LPAV3000	LPAV3000 Sounder/Beacon Base - Loop Powered	87	
516.800.960	LPSY800R	LPSY800R Symphonic Sounder-Red.	147	
516.800.961	LPSY800W	LPSY800W Symphonic Sounder-White.	147	
516.800.962	LPSY865	LPSY865 Symphonic Sounder IP65.	147	
516.800.963	LPAV800R	LPAV800R Symphonic Sounder Beacon-Red.	76	
516.800.964	LPAV800W	LPAV800W Symphonic Sounder Beacon-White.	76	
516.800.965	LPAV865	LPAV865 Symphonic Sounder IP65.	76	

Note: 4100ESi supports a maximum 2,000 points per CPU. An MX Loop may be limited to less than 250 devices due to the characteristics and loadings of the actual devices configured. The 4100Cost tool may be used to validate loop design.

DIM800 Detector Compatibility - 4100ESi only

Series	Model	Description	Max. Qty	External Supply Voltage at DIM800
Tyco	614P	Photoelectric Detector	25	20V – 28.7V
	614I	Ionisation Smoke Detector	38	20V – 28.7V
	614CH	CO + Heat Detector	32	20V – 28.7V
	614T	Heat Detector Types A, B, C, and D	23	20V – 28.7V
	601FEx	Flame Detector*	4	20V - 28.7V
	S231f+	IR Flame Detector (flameproof)	7	21.0 – 28.7V
	FV411f	IR Flame Detector (flameproof)	3	23.0 – 28.7V
	FV412f	IR Flame Detector (flameproof)	3	23.0 – 28.7V
	FV413f	IR Flame Detector (flameproof)	3	23.0 – 28.7V
	Minerva	MD614	Heat Detector	40
MR614		Photoelectric Smoke Detector	22	20.7V - 28.7V
MR614T		HPO Photoelectric Smoke Detector	21	20.7V - 28.7V
MU614		CO Detector	40	20.7V - 28.7V
MF614		Ionisation Smoke Detector	30	20.7V - 28.7V
T614		Heat Type A, B, C, D	23	20.7V - 28.7V
SIMPLEX		4098 – 9603EA	Ionisation Smoke Detector	24
	4098 – 9601EA	Photoelectric Smoke Detector	24	18.0V - 28.7V
	4098 – 9618EA 4098 – 9619EA 4098 – 9621EA	Heat Detector Type A, B, D	24	18.0V - 28.7V
Olsen	P24B	Photoelectric Detector	24	20.7V - 24.7V
	P29B	Photoelectric Detector	20	20.7V - 26.7V
	C24B	Ionisation Smoke Detector	40	20.7V - 26.7V
	C29B (Ex) *	Ionisation Smoke Detector	40	20.7V - 26.7V
	R23B	Flame Detector	20	20.7V - 24.7V
	R24B	Flame Detector	3	22.7V - 28.7V
	P136	Duct Sampling Unit	5	19.0V - 28.7V
	T56B	Heat Detector (Z56, Z500 bases)	40	18.0V - 28.7V
	—	T54B, B111, etc.	Hard Contact Devices	40
System Sensor	885WP-B	Weatherproof Heat Detector	40	20.0V - 28.7V
Cerberus	DO1101	Photoelectric Smoke Detector	16	22.7V - 27.7V
	DLO1191	Photoelectric Beam Smoke Detector	1	22.7V - 28.7V

Hard contact devices must be rated for at least 30V and currents up to 50mA.

* Although detector is Ex rated, this is a direct connection without an I.S. barrier

DDM800 Australia Actuating Device Compatibility - 4100ESi only

Brand	Model	Type	Maximum No. per Circuit
Low Voltage Detectors			
-	Hard Contact Devices (T54B, B111, etc.)		40
Kidde	Firewire	Linear Heat Detector	5000m
Protectowire	Protectowire	Linear Heat Detector	2400m
SAFE	ThermoCable	Linear Heat Detector	5000m
System Sensor	885WP-B	Weatherproof Heat Type B	30
Tyco	614CH	CO + Heat Detector	21
Tyco	614I	Ionisation Smoke Detector	25
Tyco	614P	Photoelectric Smoke Detector	25
Tyco/	614T	Heat Detector	17

Conventional Detectors

For 4100ES/ESi panels, the 562-731 8-Zone Module is sold as 4100-5004K and uses a 3k3 EOL.

Brand	Model	Type	Max. No. with AZF 562-731 Rev B 8 Zone Module	2190-9156 Monitor ZAM	4090-9101 Monitor ZAM
SIMPLEX	4098-9413	Heat Detector Type A	40		
SIMPLEX	4098-9414	Heat Detector Type B	40		
SIMPLEX	4098-9415	Heat Detector Type C	40		
SIMPLEX	4098-9416	Heat Detector Type D	40		
SIMPLEX	2098-9201	Photoelectric Smoke Detector	40		
SIMPLEX	2098-9576	Ionisation Smoke Detector	40		
The following is using 4098-9788EA Base					
SIMPLEX	4098-9601EA	Photoelectric Smoke Detector *	30	20	20
SIMPLEX	4098-9603EA	Ionisation Smoke Detector*	30	20	20
SIMPLEX	4098-9618EA	Heat Detector Type A *	30	20	20
SIMPLEX	4098-9619EA	Heat Detector Type B *	30	20	20
SIMPLEX	4098-9621EA	Heat Detector Type D *	30	20	20
The following is using 4B or 5B Base					
Tyco	614CH	CO + Heat Detector	37	25	25
Tyco	614I	Ionisation Smoke Detector	40	29	29
Tyco	614P	Photoelectric Smoke Detector	28	19	19
Tyco	614Tx	Heat Detectors - Type A, B, C, D	30	20	20
Tyco	T614x Mk2	Heat Detectors - Type A, B, C, D	30	20	20
Tyco	SU0624	Manual Call Point (Red, no back box)	40	20	20
Olsen	B111B	Beam Type Smoke Detector	40	20	20
Olsen	C24B	Ionisation Smoke Detector	33		
Olsen	C29BEx	Ionisation Smoke Detector	40		
Olsen	FW81B	Heat Detector Cable, Type E	1		
Olsen	P24B	Photoelectric Smoke Detector	25		
Olsen	P29B	Photoelectric Smoke Detector	20		
Olsen	R23B	Infrared Flame Detector	19		
Olsen	R24BEx	Dual Spectrum Infrared Flame Detector	3		
Olsen	T54B	Probe Type Heat Detector Type E	40	20	20
Olsen	T56B	Heat Detector Types A,B,C,D with Z55B Base	40		
Olsen	T56B	Heat Detector Types A,B,C,D with Z54B Base	40		
Olsen	V41B/V42B	Ultraviolet Flame Detector	40		

4100ESi

Conventional Detectors *Continued from Page 35*

Brand	Model	Type	Max. No. with AZF 562-731 Rev B 8 Zone Module	2190-9156 Monitor ZAM	4090-9101 Monitor ZAM
Hochiki	DCA-B-60R	Mk V Type A Heat Detector	40		
Hochiki	DCC-A	Heat Detector Type A	40		
Hochiki	DCC-C	Heat Detector Type C	40		
Hochiki	DCD-A	Heat Detector Type A	40	20	20
Hochiki	DCD-C	Heat Detector Type C	40	20	20
Hochiki	DFE-60B	Heat Detector Type B	40		
Hochiki	DCA-B-90R	Mk 1 Heat Detector Type C	40		
Hochiki	DFE-90D	Heat Detector Type D	40		
Hochiki	DFJ-60B	Heat Detector Type B	40		
Hochiki	DFJ-90D	Heat Detector Type D	40		
Hochiki	SIF-A MK 1	Smoke Detector	40		
Hochiki	SIJ-ASN	Smoke Detector	30	20	20
Hochiki	SLK-A	Photoelectric Smoke Detector	40		
Hochiki	SLG-A MK 1	Smoke Detector	40		
Hochiki	SLG-AM MK 1	Photoelectric Smoke Detector	40		
Hochiki	SLR-AS	Smoke Detector	40	20	20
Hochiki	HF-24A MK 1	Ultraviolet Flame Detector	14		
Hochiki	YBF-RL/4AH4	LED Indicating Base			
Apollo	Series 60	Heat Detector Type A	40		
Apollo	Series 60	Heat Detector Type B	40		
Apollo	Series 60	Heat Detector Type C	40		
Apollo	Series 60	Heat Detector Type D	40		
Apollo	Series 60	55000-310 AUS Photoelectric Smoke Detector	40		
Apollo	Series 60	55000-240 AUS Ionisation Smoke Detector	40		

Conventional Detectors *Continued from Page 36*

Brand	Model	Type	Max. No. with AZF 562-731 Rev B 8 Zone Module	2190-9156 Monitor ZAM	4090-9101 Monitor ZAM
Brooks	PFS-A	Heat Detector Type A	40		
Brooks	PFS-B	Heat Detector Type B	40		
Brooks	PFS-C	Heat Detector Type C	40		
Brooks	PFS-D	Heat Detector Type D	40		
Brooks	PFS-P	Photoelectric Smoke Detector	24		
Brooks	PFS-P MK II	Photoelectric Smoke Detector	31		
Brooks	PFS-I	Ionisation Smoke Detector	24		
Brooks	PFS-I MK II	Ionisation Smoke Detector	40		
Cerberus	D01191A	Beam Smoke Detector	1		
Cerberus	DL01191A	Beam Smoke Detector	1		
System Sensor	885WP-B	Weatherproof Heat Detector Type B *	40	40	40
Xtralis	OSID	Open area Smoke Imaging Detection	40	40	40

* Remote indicator output cannot be wired in common with Tyco 614 series or the Minerva M614 series (and most other Tyco/Olsen) detectors, due to a difference of polarity.

Simplex MAPNET II Range – Addressable Field Devices - 4100ES/ESi

Note: The range of devices below are not AS 7240 listed and therefore should be used for only upgrades/additions to existing systems.

Detector Type	Description	EOL
2190-9156	MAPNET II Monitor ZAM	3k3
2190-9162	MAPNET II Signal ZAM	22k
2190-9164	MAPNET II Control ZAM	-
2190-9169	MAPNET II Line Powered Short Circuit Isolator	
2190-9172	MAPNET II Supervised IAM	100k
2190-9173	MAPNET II Loop powered 2 Point Input / Output Module	6k8
4099-9032NL	MAPNET II Addressable Manual Call Point	
4099-9702	MAPNET II Addressable MCP	

Compatible TrueAlarm Detectors - IDNet, IDNet+, IDNet2, MAPNET II - 4100ES/ESi

Note: The range of devices below are not AS 7240 listed and therefore should be used for only upgrades/additions to existing systems.

Detector Type	Description	Operating Current mA	Max. No. Allowed Per Loop	Max. No. Allowed Per Line
4098-9714E	Photoelectric Smoke	0.5 (2 w/ LED on)	250	40*
4098-9717E	Ionisation Smoke	0.5 (2 w/ LED on)	250	40*
4098-9733E	Heat Type A & B	0.5 (2 w/ LED on)	250	40*
4098-9754E	Multi-Sensor (Heat/Photo)	0.5 (2 w/ LED on)	250	40*
4098-9789EA	TrueAlarm Base with Remote LED		250	40
4098-9794EA	TrueAlarm Base with Sounder		250	40
4098-9795EA	TrueAlarm Multi-Sensor Base with Sounder		250	40
4098-9793EA	IDNet Isolator Base	0.2 (7.2 w/ Alarm)	250	40
4098-9755EA	TrueAlarm Duct Housing	0.2 (3.2 w/ Alarm)	250	40

* Maximum allowed by AS1670.1.

The 9714E, 9717E and 9733E detectors use a (4098-) 9789E addressable base or 9794E addressable sounder base, or 9793 addressable isolator base. The 9754E uses a 9796E addressable base or 9795E sounder base.

The maximum specified loop/line resistance is 40 Ohm.

The maximum number of LEDs switched on during Alarm on an IDNet loop is 20.

Compatible Field Devices - IDNet, IDNet+, IDNet2 - 4100ES/ESi

Note: The range of devices below are not AS 7240 listed and therefore should be used for only upgrades/additions to existing systems.

Detector Type	Description	Operating Current mA	Max. No. Allowed Per Loop	Max. No. Allowed Per Line	EOL
4090-9116	IDNet Comms Isolator	0.5 (2 w/ LED on)	250	40*	-
4090-9118	Relay IAM with T-sense	0.5 (2 w/ LED on)	250	40*	6k8 or current limited to 4k7 and 1k8 in series
4090-9117	Addressable Power Isolator	0.5 (2 w/ LED on)	250	40*	6k8 or current limited to 4k7 and 1k8 in series
4090-9119	Relay IAM with unsupervised Input	0.5 (2 w/ LED on)	250	40*	6k8 or current limited to 4k7 and 1k8 in series
4090-9120	6 Point I/O	0.5	250	40*	6k8 or current limited to 4k7 and 1k8 in series
4090-9001	Supervised IAM 0.65	0.65 (2.8 w/ LED on)	250	40*	6k8 or current limited to 4k7 and 1k8 in series
4090-9002	IDNet Relay IAM		250	40*	6k8 or current limited to 4k7 and 1k8 in series
4090-9007	IDNet Signal IAM	0.5 (2 w/ LED on)	250	40*	10k
4190-9050	4-20mA Monitor ZAM	0.3 (3 w/ Alarm)	250	40*	
4090-9051	IDNet Encapsulated IAM	1.7	250	40*	6k8 or current limited to 4k7 and 1k8 in series
4090-9101	Monitor ZAM	0.65 (2.8 with LED on)	250	40*	MBZAM = 3k3
4099-9032	Manual Call Point	0.65 (2.8 with LED on)	250	40*	-
4098-9701	Manual Call Point	0.65 (2.8 with LED on)	250	40	-

* Maximum allowed by AS1670.1.

The maximum specified loop/line resistance is 40 Ohm.

The maximum number of LEDs switched on by IDNet in alarm is 20.

The 6 Point I/O LED is powered from the external 24V supply, not from the loop.

Note: The relays on the 6 Point I/O are not approved for switching externally-wired loads, i.e. the contacts may only be used to switch loads within an earthed cabinet.

Hazardous Area Devices

Key For Hazardous Area Tables on following pages

KEY: Yes = Status of compatibility or certification has been established
Blank = Status of compatibility or certification has NOT been established
No = Not compatible or will not be certified

For more information on compatibility of Fire Indicator Panels & Detectors/Devices, refer to the Fireplace Web Site at www.tycosafetyproducts-anz.com.

- FIP Manuals
- Product Bulletins PBG0081A Intrinsic Safety (IS) Applications With F08 & F3200
- Product Bulletins PBF0172D PA0844 Special ADR-M For Retrofit & Intrinsic Safety Applications
- Product Bulletins PBS0020B "Ex" Rated Detectors on 4100U / 4100ES

Abbreviations used

ActivFire = ActivFire Fire Protection Product Certification

IECEX = International Electronic Commission System for Certification to Standards Relating to Equipment for use in Explosive Atmospheres

LPCB = Loss Prevention Certificate Board

ATEX = Appareils destines a etre utilises en Atmospheres Explosibles (94/9/EC directive)

EMC = Electromagnetic Compatibility

EN54 = European Standard for Fire Alarms and Detection Systems

AS = Australian Standard

Hazardous Area Devices

In PRONTO in Australia	Entries marked OBSOLETE are retained on this list for information only	As at 24-Jul-07	COMPATIBLE C.I.E.				CERTIFICATION							
Model No.	Description	Part No.	MX4428	F3200	4100ES	MX1	IECEX	ActivFire	LPCB	ATEX	EMC	EN54	AS 7240	AS 1603
	Hard Contact Simple Apparatus or Fibre Optic Heat Detection													
T54B Mk 3	Heat Detector, Fixed Temperature only, Stainless Steel, hard contact	Enquire	Yes	Yes	Yes	Yes		Yes			Yes			Yes
FW68	Fire Wire Linear Heat detector 68 deg C	FW68	Yes	Yes	Yes	Yes		Yes			Yes			Yes
MXF-100	Fireline, Optical Fibre Temperature Sensing, Linear Heat detector - OBSOLETE	Enquire	Yes	Yes	Yes	Yes					Yes			
LTS240	SENSALINE II Fibre-Optic Heat Sensing Cable System	Enquire									Yes			
LTS200	SENSALINE II Fibre-Optic Heat Sensing Cable System	Enquire												
	600 Series - Conventional													
601FEx	Conventional Intrinsically Safe Solar Blind Flame Detector	516.600.066	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes		
601FEx-M	Conventional Intrinsically Safe Solar Blind Flame Detector - Marine	516.600.067					Yes			Yes	Yes			
MD601Ex	Conventional Heat Detector	516.052.051	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes		
MD611Ex	Conventional Heat Detector - Marine Approved	516.052.041					Yes		Yes	Yes	Yes	Yes		
MDU601Ex	Conventional Combined Heat and Carbon Monoxide Detector	516.061.001	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes		
MF601Ex	Conventional Ion Chamber Detector - OBSOLETE from 1 August 2006	516.050.004	Yes	Yes	Yes	Yes	No			Yes	Yes	No	No	
MR601TEEx	Conventional HPO Detector	516.054.011.Y	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes		
MR614TEEx	Conventional High Performance Photoelectric Intrinsically Safe - OBSOLETE	516.058.011.Y								Yes				
MU601Ex	Conventional CO Detector - OBSOLETE - use MDU601Ex	516.058.002.Y	Yes	Yes	Yes	Yes				Yes	Yes			
	800 Series - Addressable													
801CHEx	MX Intrinsically Safe Carbon Monoxide/Heat Tyco Branded	516.800.531	No	No	No	Yes	Yes			Yes	Yes			
801FEx	MX Intrinsically Safe Solar Blind Flame Detector	516.800.066	No	No	No	Yes	Yes		Yes	Yes	Yes	Yes		
801HEx	MX Intrinsically Safe Heat Tyco Branded	516.800.532	No	No	No	Yes	Yes		Yes	Yes	Yes			
801PHEx	MX Intrinsically Safe Optical/Heat detector Tyco Branded	516.800.530	No	No	No	Yes	Yes			Yes	Yes			
811FEx-M	MX Intrinsically Safe Solar Blind Flame Detector - Marine	516.800.067	No	No	No	No	Yes			Yes	Yes			
	300 Series - Conventional - Refer TSP-UK Marketing Bulletin MS2617, 22-Nov-04													
M300Ex	Base for 300 Series Ex ia detectors - OBSOLETE	517.025.002	Yes	Yes				No	No		Yes	No	No	
MD301Ex	300 Series Heat detector Grade 1 Rate-of-Rise Intrinsically Safe - OBSOLETE	MD301EX	Yes	Yes				No	No		Yes	No	No	
MD303Ex	300 Series Heat detector Grade 3 Rate-of-Rise Intrinsically Safe - OBSOLETE	MD303EX						No	No		Yes	No	No	
MF301Ex	300 Series Ionisation Smoke detector Intrinsically Safe - OBSOLETE	MF301EX	Yes	Yes				No	No	No		Yes	No	No
MR301Ex	300 Series Photoelectric Smoke detector Intrinsically Safe - OBSOLETE	MR301EX	Yes	Yes				No	No	No		Yes	No	No
MR301TEEx	300 Series Photoelectric Smoke detector Intrinsically Safe - OBSOLETE	MR301TEX	Yes	Yes				No	No					
MS302Ex	300 Series Flame detector Intrinsically Safe - OBSOLETE	MS302EX	Yes	Yes				No	No	No		Yes	No	No
	500 Series - Minerva Addressable													
MS502Ex	Infrared Flame detector - Marine [Australian Maritime Safety Authority]	516.032.001												

HAZARDOUS AREA

In PRONTO in Australia	Entries marked OBSOLETE retained for information only	As at 24-Jul-07	COMPATIBLE C.I.E.				CERTIFICATION							
Model No.	Description	Part No.	MX4428	F3200	4100ES	MX1	IECEX	ActivFire	LPCB	ATEX	EMC	EN54	AS 7240	AS 1603
	Detector Bases, Manual Call Points & Sounders													
5BEx	Base for 600/800 Ex Detectors	517.050.023	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes		
MUBEx	Base for 600/800 Ex Detector (M600Ex) - OBSOLETE	517.050.610	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes		
CP220Ex	Manual Call Point, Red, Intrinsically Safe, Conventional	514.001.009							Yes	Yes	Yes	Yes		
CP840Ex	Manual Call Point, Red, Intrinsically Safe, MX Addressable	514.800.513	No	No	No	Yes	Yes			Yes	Yes			
IS28 MK4	Sounder Banshee, Grey, Low Frequency, Intrinsically Safe	576.501.013					Yes			Yes				
MTL5021 I.S.	Sounder Driver	517.001.245					Yes							
	Isolators & Interface devices													
EXI800	Interface Module for Intrinsically Safe MX Detectors & Devices	514.001.063	No	No	No	Yes								
IF800Ex	Interface Module, Intrinsically Safe, for monitoring switch contacts	514.001.062	No	No	No	Yes	Yes			Yes				
KFD2-CR-Ex1.30 200	Pepperl & Fuchs Galvanic Isolator - OBSOLETE	KFDO-EX130												
KFD2-STC4-Ex 1	Pepperl & Fuchs Smart Transmitter Isolator		Yes	Yes	Yes	Yes	Yes							
KFD0-CS-Ex1.51	Pepperl & Fuchs Transformer Isolated Current Separator - Ex ia - Single Channel	KFDO-EX151	Yes	Yes			Yes							
KFD0-CS-Ex1.54	Pepperl & Fuchs Galvanic Isolator - used with EXI800	517.001.259				Yes	Yes			Yes				
KFD0-CS-Ex2.51P	Pepperl & Fuchs Transformer Isolated Current Separator - Ex ia - Dual Channel	KFDO-EX251	Yes	Yes			Yes	Yes						
	S100 Series Flame Detectors													
S111	Infrared Flame detector - OBSOLETE	S111						Yes		No				
S121	Infrared Flame detector - OBSOLETE	S121	Yes	Yes				Yes		No				
S131	Infrared Flame detector - OBSOLETE	S131						Yes		Yes	Yes			
S161	Infrared Flame detector - OBSOLETE	S161								No				
	Triple IR Flame Detectors - Flameproof													
S231f+	Conventional 2-wire interface, Flameproof	516.037.003	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes		
S232f+	Conventional 2-wire interface, Flameproof, for Simplex ZAM use [FM DRAFT Approval]	516.037.015												
S241f+	4-20mA current loop interface, Flameproof	516.038.003			Yes		Yes		Yes	Yes	Yes	Yes		
S251f+	Minerva Analogue addressable interface, Flameproof	516.039.003					Yes		Yes	Yes	Yes	Yes		
S261f+	Relay interface, Flameproof	516.040.002	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
S262f+	Relay interface, Flameproof, for Simplex ZAM use [FM Listed]- OBSOLETE	516.037.012												
S271f+	MX digital interface, Flameproof	516.041.003	No	No	No	Yes	Yes		Yes	Yes	Yes	Yes		
FV241f+	4-20mA current loop interface, Flameproof						Yes							
FV261f+	Relay interface, Flameproof	516.040.003					Yes							
FV282f+	Relay and 4-20mA interface, FM Listed	516.040.014	Yes	Yes	Yes	Yes								
FV411f/2f/3f	Triple IR Flame none/PAL/NTSC	516.300.411/12/13	Yes			Yes	Yes	Yes		Yes		Yes		
	S200+ Triple IR Flame Detectors - Intrinsically Safe													
S231i+	Conventional 2-wire interface, Intrinsically Safe	516.037.004	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes		
S241i+	4-20mA current loop interface, Intrinsically Safe	516.038.004			Yes		Yes		Yes	Yes	Yes	Yes		
S251i+ Intrinsically Safe	Minerva Analogue addressable interface	516.039.004				Yes	Yes		Yes	Yes	Yes	Yes		
S271i+	MX digital interface, Intrinsically Safe	516.041.004	No	No	No	Yes	Yes		Yes	Yes	Yes	Yes		
	Infrared Test Lamp													
T210+ (Source)	IR test source - 592.001.016	592.001.016					Yes			Yes				

HAZARDOUS AREA

MX1 Fire Panel Operator's Guide

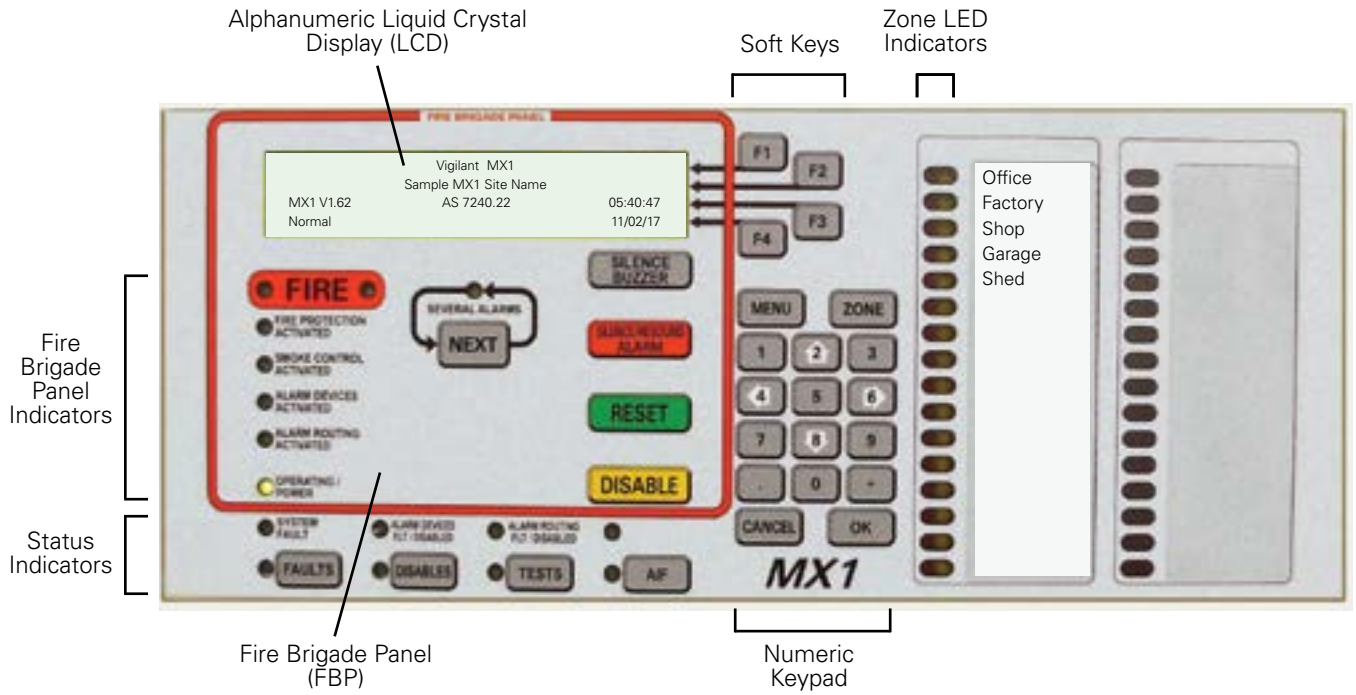


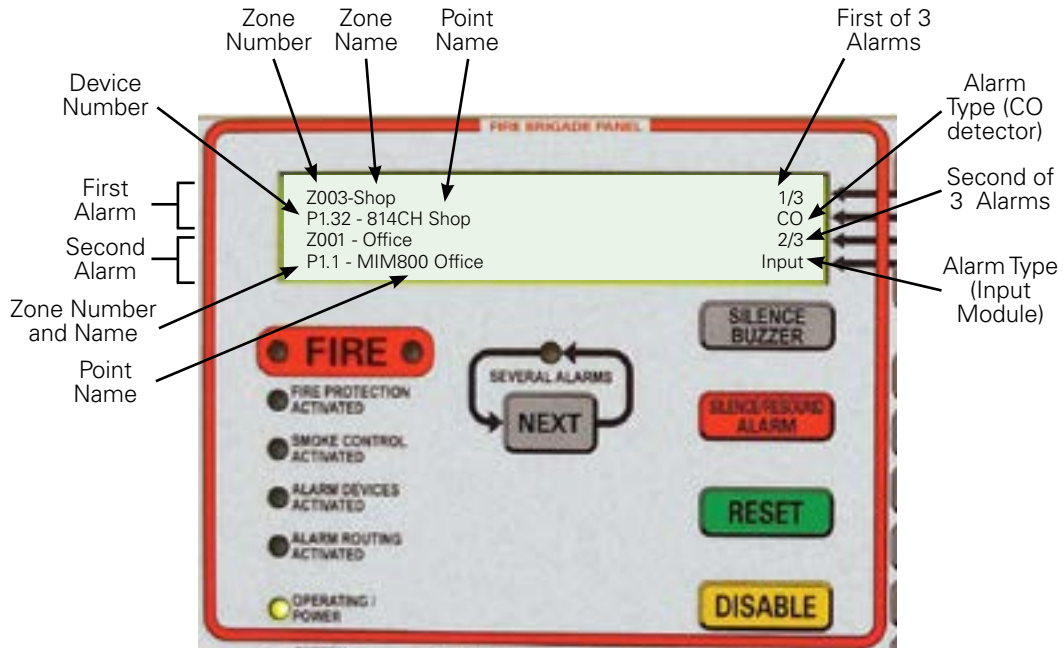
Fig 1-1 Operator Interface

- Green OPERATING/POWER indicator is on – the MX1 is operating on mains power.
- All other LEDs are off.
- The LCD reports that the system is normal and shows the current time and date, as shown in Figure 1.1. If the general state of the operator interface is not as shown in Figure 1.1, refer to the information in LT0439 Chapters 2 and 3 for instructions on managing the alarm, fault, test or disable condition.


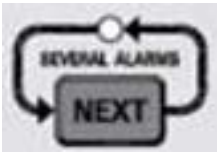


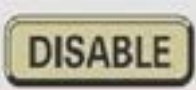
Table 1-1. Components of the Operator Interface

Component	Description
Alphanumeric Liquid Crystal Display (LCD)	Displays details about alarms, faults, and other service-related system information, as well as menus of command options and messages. The information normally displayed in the LCD, without operator intervention, is called the "base display".
Fire Brigade Panel (f.b.p.)	Controls and indicators within the red border are for use by fire brigade personnel during alarm attendance. See the quick reference guide at the front of the manual, or LT0439 page 2-3 for more detail
Soft Keys	These keys have different functions, depending on the current display. Each key's function at any time is shown by the text displayed at the right side of the LCD.
Status Indicators	LED indicators showing the presence of faults, disabled items, tests in progress and power status. The associated keys provide a direct way to display this information.
Numeric Keypad	Numeric keys, plus commonly used keys: OK and CANCEL , to confirm or cancel commands, MENU to display the current possible actions on the item displayed, and ZONE to provide direct access to zone functions. Press CANCEL once to move back one display, or press and hold to return to the base display.
Zone LED Indicators (optional)	These show the state of individual zones or groups of zones. <ul style="list-style-type: none"> • A flashing red indicator is an alarm, • A steady red indicator shows operated, or if the zone is disabled a disabled alarm or operate state, • a flashing yellow indicator is a fault • a steady yellow indicator shows a disabled zone. These indicators may also be configured to convey non-alarm statuses

MX1 Fire Fighter's Guide



1. Handling Displayed Alarm

RESPONSE	PRESS	ACTION
ALARM		Stops the internal buzzer
View Alarm		Scroll Alarm List
Silence Alarm Device		Silence All Alarm Devices
This does NOT silence separate occupant warning systems such as EWIS		
Reset Alarms		Resets all Alarms
Disable Alarms		Disables remaining Alarms and returns LCD to Base Display

F3200 FIRE FIGHTER'S GUIDE

Operator Interface



1. VIEW NEXT/PREVIOUS ALARM



Press "NEXT" key once -
- The LCD will display the next alarm.



Press "PREV" key once -
- The LCD will display the previous alarm.

2. ACKNOWLEDGE DISPLAYED ALARM



Press "ACK" key once.
- LCD will display "ACKD" for the displayed alarm.
- If all alarms are acknowledged, the ALARM LED will go steady.

3. RESET DISPLAYED ALARM



Press "RESET" key once.
- LCD will display "PRESS ACKNOWLEDGE TO CONFIRM RESET"
- Press the ACK key within 10 seconds to reset the alarm.
- If the final alarm is reset the LCD will exit FF mode.

4. ISOLATE DISPLAYED ALARM



Press "ISOLATE" key once.
- LCD will display "PRESS ACKNOWLEDGE TO CONFIRM ISOLATE"
- Press the ACK key within 10 seconds to isolate the zone.
- The isolated LED will turn on.
- If the final alarm is isolated, the LCD will give an option to view isolated alarms.

5. ISOLATE/DE-ISOLATE EXTERNAL BELL



Press the "EXTERNAL BELL ISOLATE" key once.
- If the "External Bell Isolate" LED is off it will turn on steady.
The External Bell will turn OFF if it is on.
- If the "External Bell Isolate" LED is on, it will turn off.
If any un-isolated alarms exist, the External Bell will ring.

6. ISOLATE/DE-ISOLATE WARNING SYSTEM



Press the "WARNING SYSTEM ISOLATE" key once.
- If the "Warning System Isolate" LED is off it will turn on steady.
The Warning System will turn OFF if it is on.
- If the "Warning System Isolate" LED is on, it will turn off.
If any un-isolated alarms exist, the Warning System will sound.

MX4428 FIRE FIGHTER'S GUIDE

Operator Interface



1. VIEW NEXT/PREVIOUS ALARM



- Press "NEXT" key once -
- The LCD will display the next alarm.
- Press "PREV" key once -
- The LCD will display the previous alarm.

2. ACKNOWLEDGE DISPLAYED ALARM



- Press "ACK" key once.
- LCD will display "ACKD" for the displayed alarm.
 - If all alarms are acknowledged, the ALARM LED will go steady.

3. RESET DISPLAYED ALARM



- Press "RESET" key once.
- LCD will display "PRESS ACKNOWLEDGE TO CONFIRM RESET"
 - Press the ACK key within 10 seconds to reset the alarm.
 - If the final alarm is reset the LCD will exit FF mode.

4. ISOLATE DISPLAYED ALARM



- Press "ISOLATE" key once.
- LCD will display "PRESS ACKNOWLEDGE TO CONFIRM ISOLATE"
 - Press the ACK key within 10 seconds to isolate the zone.
 - The isolated LED will turn on.
 - If the final alarm is isolated, the LCD will give an option to view isolated alarms.

5. ISOLATE/DE-ISOLATE EXTERNAL BELL



- Press the "EXTERNAL BELL ISOLATE" key once.
- If the "External Bell Isolate" LED is off it will turn on steady. The External Bell will turn OFF if it is on.
 - If the "External Bell Isolate" LED is on, it will turn off. If any un-isolated alarms exist, the External Bell will ring.





6. ISOLATE/DE-ISOLATE WARNING SYSTEM







- Press the "WARNING SYSTEM ISOLATE" key once.
- If the "Warning System Isolate" LED is off it will turn on steady. The Warning System will turn OFF if it is on.
 - If the "Warning System Isolate" LED is on, it will turn off. If any un-isolated alarms exist, the Warning System will sound.

MX4428 OPERATOR'S GUIDE

1. Acknowledge Displayed Alarm

RESPONSE	PRESS	ACTION
ALARM		Acknowledges Displayed Alarm
More Than One Alarm	 	Acknowledges Displayed Alarm
Return to Previous Viewed Alarm		Returns to Last ACK Alarm

2. Acknowledge Displayed Faults

RESPONSE	PRESS	ACTION
FAULT		Acknowledges Fault to Display Zone Tally
Recall Faults		Display Recall Menu
Menu Option 2. History		Display Last Event Logged to History
Display Previous Event		The Previous Event will be Displayed

3. Reset Acknowledged Alarm

The cause of all alarms must always be investigated BEFORE resetting the alarm. If the condition still exists the alarm will re-annunciate.

RESPONSE	PRESS	ACTION
ALARM RESET		This Command Will Prompt for an Action Confirm
Confirm Reset		The Panel Will Attempt a Reset

MX4428 OPERATOR'S GUIDE

4. Isolate a Zone

CAUTION - Isolating a zone will take the zone off-line. Depending on the zone, this could prevent other systems from operating

RESPONSE	PRESS	ACTION
ISOLATE		Will Display Isolate Options Menu
Select 1. Zone		Type in the Zone Number
After Typing Zone Number Press		This Command will Prompt for an Action Confirm
Confirm Command		The Zone will now Isolate

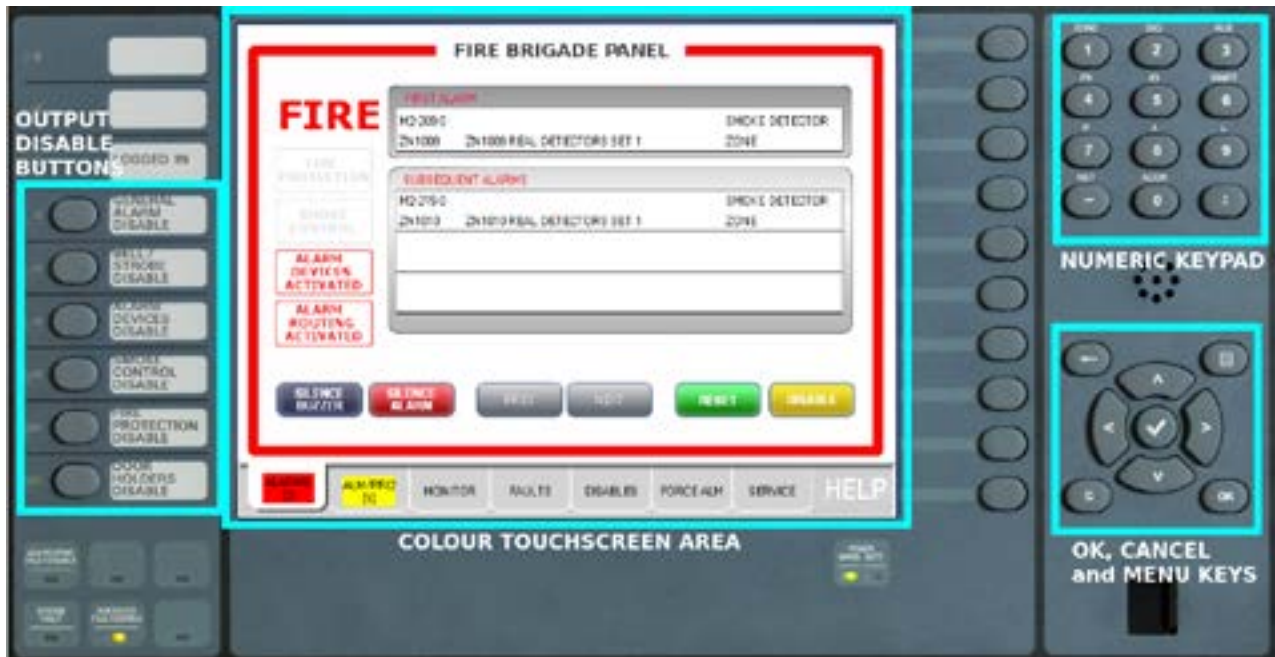
5. De-Isolate a Zone

CAUTION - Before de-isolating a zone, check that the zone is not in alarm and that other zones are not in alarm. Failure to observe this practise can result in unexpected operation of outputs, including suppression systems.

RESPONSE	PRESS	ACTION
DE-ISOLATE		Will Display Isolate Options Menu
Select 1. Zone		Type in the Zone Number
After Typing Zone Number Press		This Command will Prompt for an Action Confirm
Confirm Command		The Zone will now De-Isolate

4100ESi Fire Panel Operator's Guide

Operator Interface



Use the colour touchscreen for most display and control actions. The touchscreen requires a slight pressure to activate it. It can be operated while wearing gloves or other finger covering.

The 4100ESi User Interface consists of three sections, as shown above:

- The colour touchscreen, where most information is displayed and controls are operated.
- The output disable buttons, found to the left of the colour touchscreen.
- The numeric keys and OK/Cancel/Menu keys, found to the right of the touchscreen.

Touch the HELP tab at the bottom right of the colour touchscreen to access the on-line Help facility.

Using The Touchscreen

Use the touchscreen to interact with the 4100ESi and manage alarms.

- Tap OK to confirm commands.
- Tap CANCEL to cancel commands.
- Tap MENU to display the SERVICE tab.

Using the output disable buttons

Use the output disable buttons to disable or enable major groups of alarm activated equipment as required. The disabled state of each equipment group is shown by the associated indicator. If the yellow indicator is lit, the corresponding output group is disabled.

Using the numeric keypad and navigation buttons

Use the numeric keypad to enter zone and point numbers for service operations. Use the navigation buttons for navigation and on screen selection.

Using zone indicators

The 4100ESi panel may have one or more sets of optional eight zone status indicators fitted in addition to the colour touchscreen. Generally, zone indicators are configured to operate as follows:

- A red indicator indicates that the zone is in alarm.
- A yellow indicator indicates that the zone is disabled.

Accessing restricted panel service functions

To access some functions, a PIN is required to log on at a higher access level.

VIGILANT QE90 Evacuation Panel Operator's Guide

The QE90 is divided into 2 functions – Evacuation System on the left, Fire Phone System on the right.
 Activation from the fire panel or alarm input will initiate an EVACUATION tone.
 The Evacuation controls will work only when the Keyswitch is in MANUAL position.

EVACUATION

Stop Tones: Turn the Keyswitch to ISOLATE.

Make an Announcement:

Turn the Keyswitch to MANUAL, press the appropriate BLUE key/s (LED/s will turn on), pick up the microphone & depress the push to talk (PTT) switch (on the microphone). Release PTT switch when finished.

Cancel a Tone or P.A.:

Press the appropriate key again – LED will turn off.



FIRE PHONE

Call A Phone: Pick up the Master phone, press the appropriate RED key. Wait for remote phone to be answered.

Answer A Call: Pick up the Master phone, press the appropriate RED key (the LED will be flashing). The LED will go steady.

Cancel a Call: press the appropriate RED key again – LED will turn off.

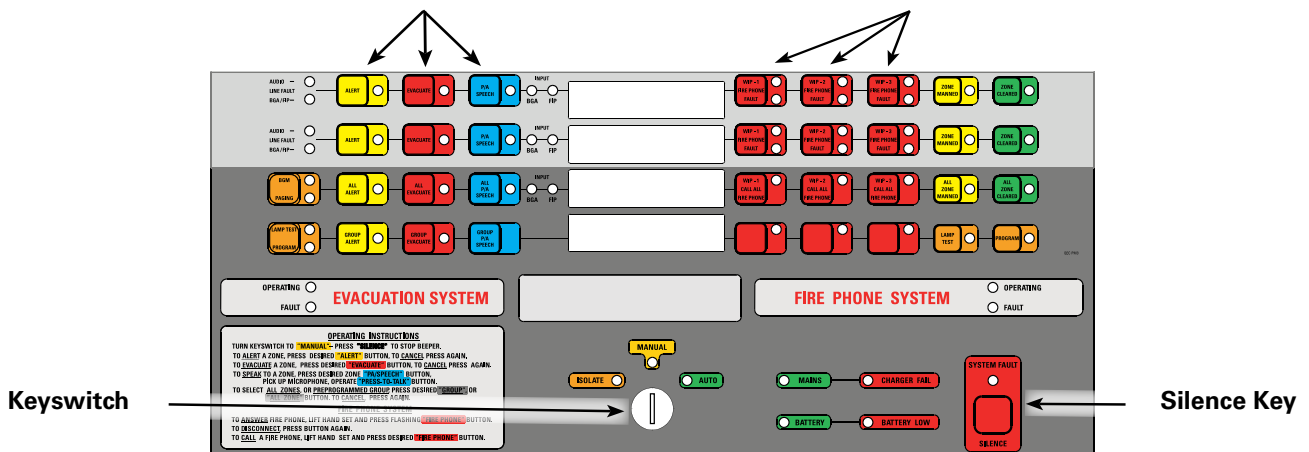
- **To silence the Sounder,** press the SILENCE key.
- **To reset the Automatic Evacuation,** reset the fire panel first, turn the Keyswitch to MANUAL, then keep the SILENCE key pressed for 5 seconds.

When the Keyswitch is in ISOLATE, all Evacuation controls behave the same as MANUAL, but no sound will be generated – used for training.

Normally, the Keyswitch should be in the AUTO position.

Alert, Evac, P.A select/cancel keys

Phone answer, Call, Cancel keys



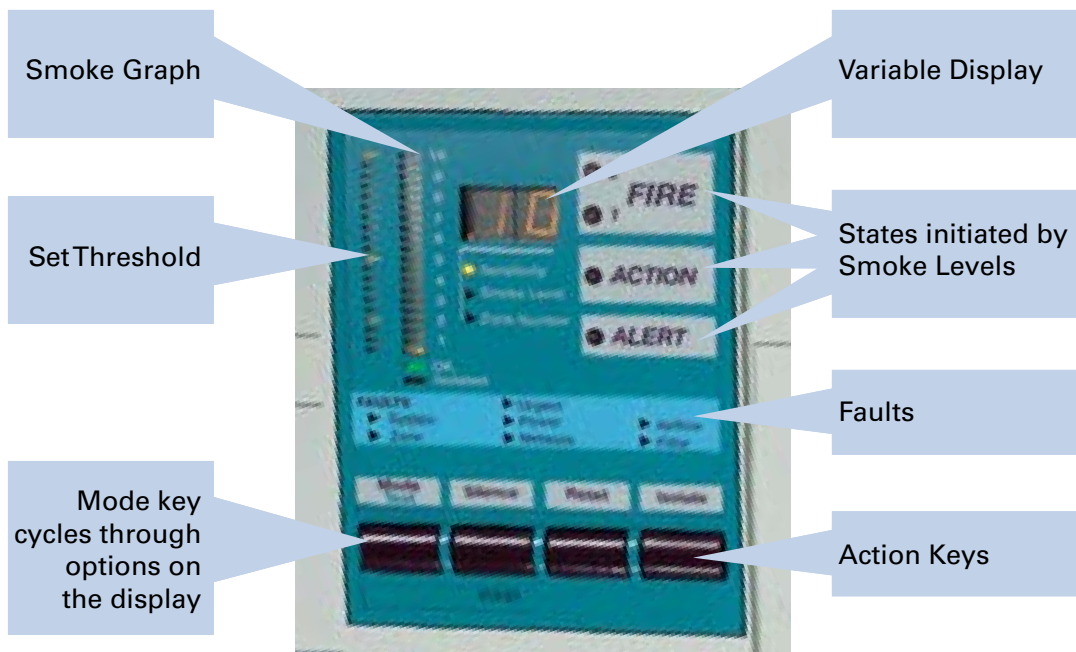
VESDA® LaserPLUS™ & LaserSCANNER™ OPERATOR'S GUIDE

VESDA General

VESDA detectors connected to MX4428 panels will latch the relevant circuits into Alarm or Fault.

The relevant zones that display on the MX4428 can be isolated therefore ignoring the status of the individual VESDA detectors.

When a VESDA is in fault or alarm, unlike point-type detectors, it will need to be reset BEFORE resetting the zone at the fire panel.



VESDA® LaserPLUS in ALARM

Silence the detector by pressing the **"Silence"** key

Before resetting this detector observe that the smoke level is well below the set threshold lower limit.

Reset by pressing the **"Reset"** key.

VESDA® LaserPLUS in FAULT

Silence the detector by pressing the **"Silence"** key

Rectify the fault, then press the **"Reset"** key

VESDA® LaserPLUS ...how to isolate

Before isolating the VESDA, isolate the circuit or zone at the fire panel first.

To isolate press the **"Isolate"** key.

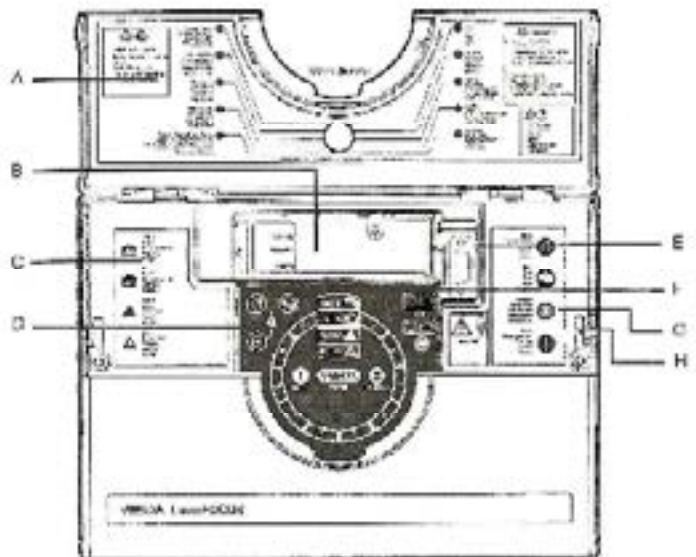
VESDA® LaserPLUS ...how to de-isolate

Before de-isolating a VESDA observe that the smoke level is well below the set threshold lower limit.

To de-isolate press the **"Isolate"** key.

Go back to the fire panel observe that the zone is alarm free before de-isolating the fire panel.

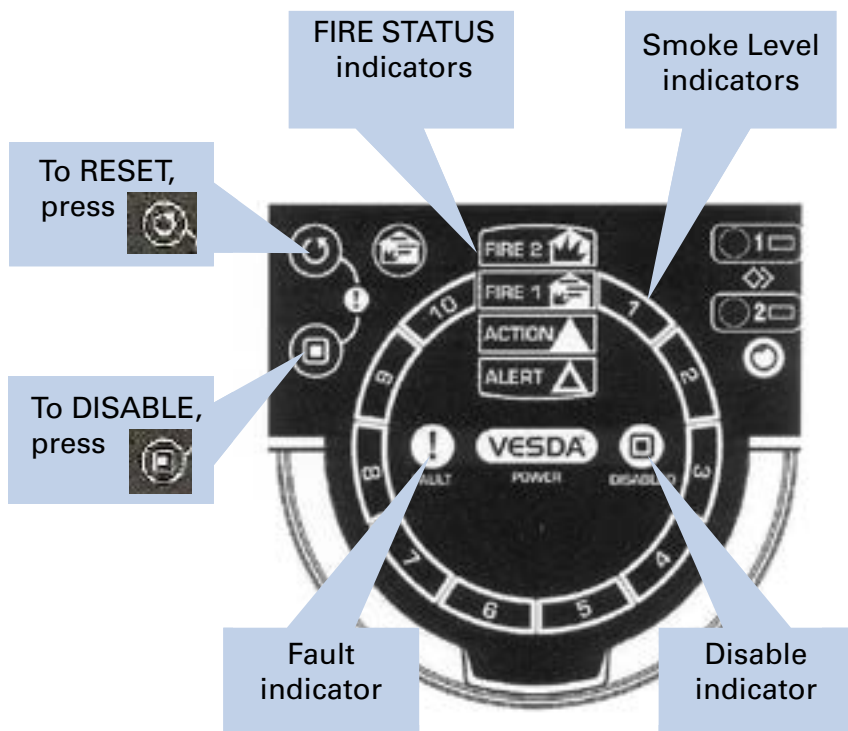
VESDA® LaserFOCUS™ OPERATOR'S GUIDE



Legend


- A Printed fault text
- B Removable filter
- C Description alarm levels
- D Buttons reset, disable
- E RS232 serial port
- F Setup buttons
- G Definitions for buttons
- H Security tab

All items detailed are located behind the hinged service cover.



VESDA® LaserFOCUS in ALARM

Before resetting this detector observe that the smoke level is well below the set threshold lower limit.

Reset by pressing 

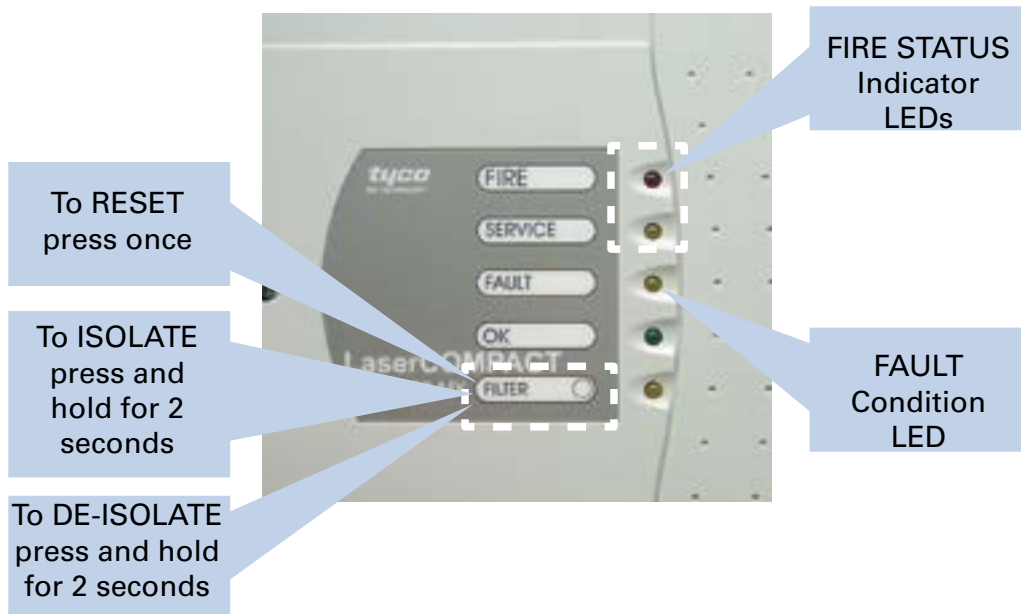
VESDA® LaserFOCUS in
Rectify the fault, then

 **FAULT**
press

VESDA® LaserFOCUS ...how to isolate / de-isolate

To isolate press 

VESDA® LaserCOMPACT™ OPERATOR'S GUIDE



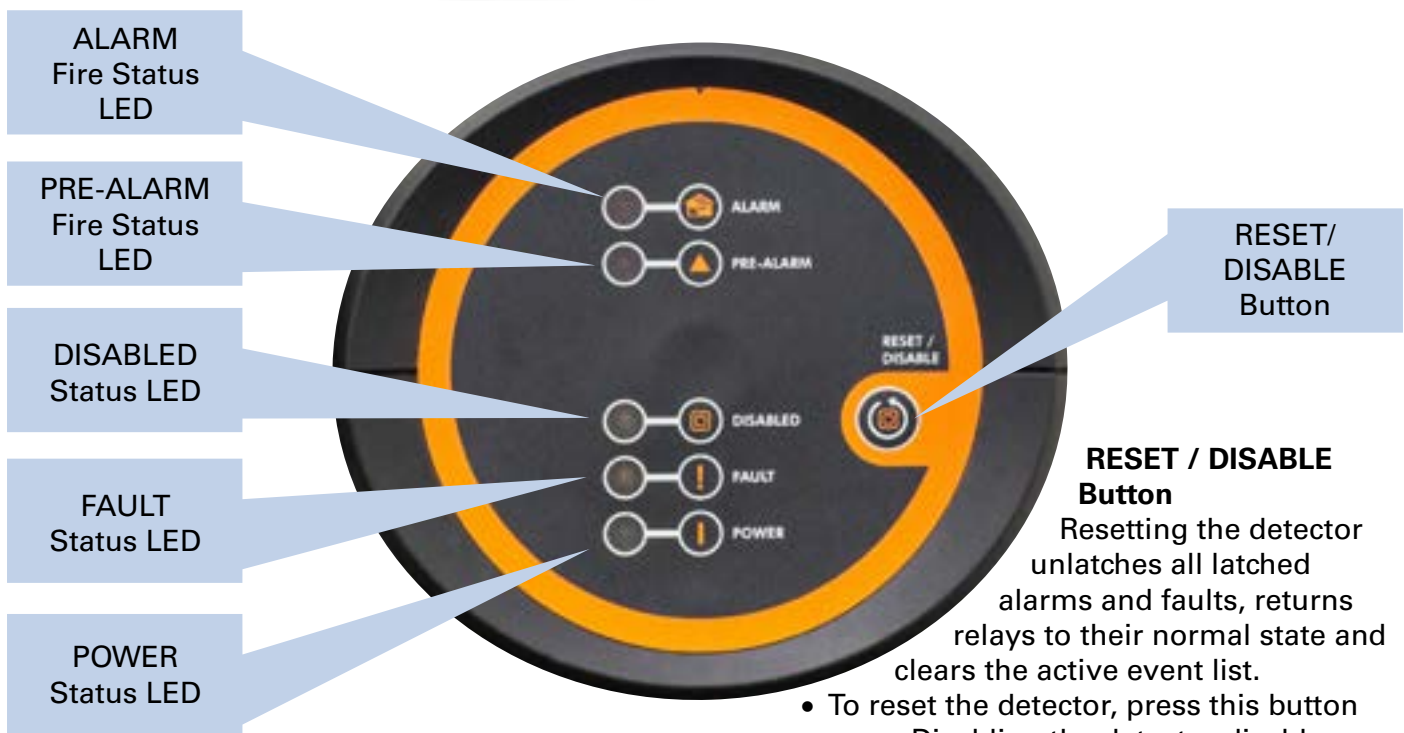
VESDA® Best Practise

RESET - Before resetting this detector observe that the smoke level is well below the set threshold lower limit.

ISOLATE - before isolating the VESDA, isolate the circuit or zone at the fire panel first.

DE-ISOLATE - before de-isolating a VESDA observe that the smoke level is well below the set threshold lower limit. Go back to the fire panel observe that the zone is alarm free before de-isolating the fire panel.

VESDA® VLI OPERATOR'S GUIDE



RESET / DISABLE Button

Resetting the detector unlatches all latched alarms and faults, returns relays to their normal state and clears the active event list.

- To reset the detector, press this button once. Disabling the detector disables all the output relays associated with the detector. The aspirator remains active.
- To disable the detector, press and hold for 2 seconds, until DISABLED LED illuminates.
- To re-enable the unit, press and hold for 2 seconds, until the DISABLED LED deactivates.
- While the detector is disabled, any faults may be cleared by pressing this button once.

The Button will not operate if:

- the detector is disabled through the GPI function; or
- the RESET / DISABLE button has been locked out in the programming.

LED	DESCRIPTION
Alarm	The ALARM LED is lit when the Fire1 Alarm threshold is reached
Pre-Alarm	The PRE-ALARM LED blinks when the Alert threshold is reached The PRE-ALARM LED is lit when the Action threshold is reached
Disabled	The DISABLED LED is lit when the detector is disabled
Fault	The FAULT LED is lit when a fault condition is detected Refer to Chapter 8 in the Product Guide for more information
Power	The POWER LED illuminates when the detector is powered up

Johnson Controls - Fire Detection Contacts

Fire Detection - ANZ Region

<p>Sales Director Australia / New Zealand Patrick Conway</p>	<p>Level 3, 95 Coventry Street Southbank 3006 AUSTRALIA Phone: +61 3 9313 9700</p>
<p>Sales Manager Australia / New Zealand Joe Briganti</p>	<p>Level 3, 95 Coventry Street Southbank 3006 AUSTRALIA Phone: +61 3 9313 9700</p>

<p>Product Manager Dwayne Kuipers</p>	<p>1 Eyre Street Rivervale 6103 AUSTRALIA Phone: +61 8 9479 2926</p>
--	--

My Issue is...	Who Do I Contact?	Telephone
<p>Customer Service/Logistics Purchase Orders, or Lead Time/Delivery, or Part Codes, Price & Availability</p>	<p>Tracey Oliver Emily Mundy Gordana Kish Ben Mengel Dylan Fairbairn</p>	<p>1300 725 688</p>
<p>Special Panels / QE90 Upgrades</p>	<p>Honey Modi</p>	
<p>Sales / Product Applications - Victoria / Tasmania / South Australia - New South Wales / ACT - Queensland - Western Australia / NT</p>	<p>Bernard Gill Dino Josefski Alan Carver Marty Rhodes Nick Katin</p>	<p>+61 3 9313 9725 +61 3 9313 9722 +61 2 8718 2149 +61 7 3498 6751 +61 8 9479 2876</p>
<p>Technical Support XLGraphics/4100ESi Networks/Specials/QE90 Specials/Upgrades MX4428/F3200/QE90/VESDA/Standards and Codes/Product Compliance</p>	<p>Alice Qi Linda Kelley Andrew Duguid Glenn Aldred Joe Gonda Mark Harrison Ruban Vadivelu Shaun Scudds</p>	<p>1300 552 559</p>
<p>Product Training</p>	<p>Martyn Reynolds</p>	<p>+61 3 5460 5284</p>
<p>SmartConfig/QEConfig Licensing, Fireplace Website</p>	<p>Mark Wills</p>	<p>+61 3 9313 9728</p>



Global Strength. Local Expertise.
At your service.

AUSTRALIA

Level 3, 95 Coventry Street
Southbank VIC 3006

Tel : 1300 725 688

Tel : +61 3 9313 9700

Fax : +61 3 9313 9709

Email : tfppcustservice.au@tycofp.com

NEW ZEALAND

17 Mary Muller Drive
Hillsborough PO Box 19-545
Woolston Christchurch 8241

Tel : +64 9 635 0617

Email : tsp.sales.nz@tycoint.com

© 2017 Johnson Controls. All rights reserved. All specifications and other information shown were current as of document revision date and are subject to change without notice.