

# 850SERIES

## Generation 6 *MX* Ancillaries Range

### Features

- Compatible with *MX* Addressable Loop on SIMPLEX 4100ESi, VIGILANT *MX1* and VIGILANT *MX4428* panels<sup>1</sup>
- Comprehensive range
- Most devices are loop-powered
- Up to 4 I/O per module
- Range of mounting options
- Up to 250 modules per *MX* loop<sup>3</sup>
- Most devices compliant to AS 7240.17 and/or .18

The *MX* series of addressable ancillary modules provide an interface between compatible *MX* Fire Control and Indicating Equipment (CIE) and a wide range of field devices.

Each module has been specifically designed to provide a high degree of system flexibility, suitable for many applications.

Use of the *MX* ancillary modules enables the addressable loop from the CIE to both receive inputs and control outputs from the system.

The broad range of available modules allows the scope of the fire detection system to be significantly expanded beyond a simple fire detector alarm system.

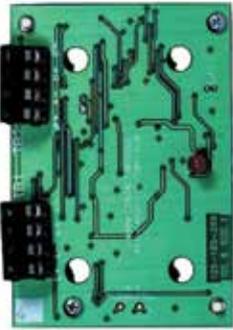
The modules can be programmed and tested using the 801AP *MX* Service Tool or 850EMT Engineering Management Tool.



### *MX* Gen6 Module Features

- Compatible with *MX* Addressable Fire Alarm Panels
- Communication and control/monitoring interface
- Supervision of control wiring
- Control of externally-powered sounders
- Control of loop-powered sounders
- Interface conventional detector circuits
- Monitor external equipment (smoke dampers, etc.)
- Removes the need for separate control circuits
- Some devices include *MX* loop short-circuit isolator
- Two-way infrared programming of Quad I/O modules using 850EMT

## CIM800 Contact Input Module



The CIM800 Addressable Contact Input Module supervises 2 circuits of voltage-free contacts. The CIM800 can be configured to monitor:

- 2 circuits of multiple N/O contacts, with S/C alarm
- 2 circuits of multiple N/C contacts; O/C alarm
- 2 circuits with a single N/O contact; closing for alarm with S/C fault. (Requires a resistor in series with the alarm contact and special CIE programming).

The CIM800 is fully loop powered, and the two inputs can be mapped to different zones on the CIE.

### Technical Specification

Quiescent Current	275µA (max.)
Alarm Current	2.8mA (max, LED on)
Circuit Resistance	10 Ohm (max.)
ELD Resistor	200 Ohm (supplied)
Alarm Resistor	100 Ohm (s/c fault)
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
Dimensions (HWD)	61 x 84 x 25 mm
ActivFire Listed	afp-3164
FPANZ Listed	VF/640
Part Number	CIM800

## DDM800 Universal Fire & Gas Detector Module



The DDM800 Universal Fire & Gas Detector Module is designed to monitor and signal two conventional 2-wire 20V fire detector circuits (or two 4-20mA current loop sensors on MX4428). It can be loop powered for certain applications - especially the low-voltage (LV) mode using the VIGILANT 614 smoke and heat detectors, or powered from an external 24V supply to provide a wide range of detector compatibility including intrinsically safe (IS) detectors and reduced *MX* loop loading.

It includes a short circuit loop isolator such that if either side of the *MX* loop is shorted the DDM800 keeps working and protects the other side of the loop. A yellow indicator lights if the isolator is operated.

### Technical Specification

Quiescent Current	1.2mA (Ext. powered)
Loop Alarm Current	4.2mA (Ext. powered)
Detector Load	2.5mA (std) 1.5mA (LV) 1.0mA (IS)
Detector ELD	4k7 Ohm (5k6 IS)
External Supply <sup>2</sup>	21.9 - 29V
Ext. PSU Current	10mA + Detector Load
Ext. Alarm Current	52mA
Dimensions (HWD)	61 x 84 x 25 mm
Wire Size (max.)	2.5sq. mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-3173
FPANZ Listed	VF/666

### Part Numbers

577.800.006	DDM800 Module
FP1063	4x DDM800 pre-wired on FP1062 Bracket

## DIM800 Detector Input Module



The DIM800 Detector Input Module interfaces two conventional detector circuits onto the *MX* addressable loop. Each circuit can support 3mA of detector quiescent current and requires a 4k7 Ohm End Of Line resistor. Unused circuits must be terminated with an ELD resistor. The DIM800 requires a suitably rated and separately protected external 24V supply to power the detector circuits. The two circuits are available as separate subpoints and can be mapped to different zones on the CIE.

### Technical Specification

Quiescent Current	280µA (max.)
Loop Alarm Current	280µA (max.)
Detector Load	3mA (max per input)
Detector ELD	4k7 Ohm
External Supply <sup>2</sup>	20 to 28.7Vdc
Ext. Current/Circuit	7.5mA (normal)
Ext. Alarm Current	30 to 50mA
Dimensions (HWD)	61 x 84 x 25 mm
Ambient Temperature	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-3179
FPANZ Listed	VF/643
Part Number	DIM800

## LIM800 Loop Isolator Module



The LIM800 Loop Isolator Module can be used to provide short circuit isolation between zones or portions of an *MX* addressable loop. LIM800s are installed at appropriate positions around the *MX* loop to monitor the loop voltage either side of the device. If a short circuit is detected, the two LIM800s either side of the short isolate the shorted section allowing the rest of the loop to be driven by the CIE.

A yellow LED indicates when one of the outputs is shorted. The LIM800 includes an additional spur output that can be wired to additional *MX* devices (all in one zone). The LIM800 supports up to 100 IB units of *MX* load on each connection, so additional LIM800s can be installed on long sections of cable to isolate each block of devices.

### Technical Specification

Quiescent Current	Normal 80µA Tripped (max) 10mA
Series Resistance	0.25 Ohm (max)
Equivalent Capac.	0.5nF
IB Units btwn Isolator	100 (max.)
Dimensions (HWD)	61 x 84 x 14 mm
Wire Size (max.)	2.5sq. mm
Ambient Temperature	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-3170
FPANZ Listed	VF/657
Part Number	545.800.004

## LPS800 Loop Powered Sounder Module



The LPS800 Loop Powered Sounder Driver Module provides a loop-powered controllable output that can supply up to 75mA to 24V rated load devices, such as sounders, relays, etc. It also provides supervision of the wiring to the loads. Therefore each load device must have an integral series diode, or one must be fitted externally to allow the reverse voltage supervision to work. A 22k Ohm End of Line Device (ELD) resistor is required. The wiring to the load devices can be arranged as a spur (Class B), or as a loop (Class A) so that an open circuit does not stop operation of the devices.

### Technical Specification

Quiescent Current	450µA
Op. Current (<8mA load)	12mA
Op. Current (>8mA load)	Load Current + 4mA
Output Current	75mA @ 24Vdc <sup>4</sup> (max.)
Output EOL	22k Ohm 0.5W
Dimensions (HWD)	61 x 84 x 25 mm
Wire Size (max.)	2.5sq. mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
FPANZ Listed	VF/652
Part Number	577.800.011

## MCP820 Indoor Manual Call Point



The MCP820 Addressable Manual Call Point is suitable for indoor applications. As supplied, it is suitable for flush mounting. A surface mounting back box is available separately. The MCP820 is designed to monitor and signal the condition of the switch contact that is operated by breaking a plastic coated glass frangible element (flexible plastic option available). Any change in the status of the switch is immediately communicated to the Control and Indicating Equipment (CIE). The MCP820 has an integral short-circuit isolator for protecting the addressable loop wiring.

The CP820 is an alternative *MX* addressable call point which does not have an integral short circuit isolator.

### Technical Specification

Quiescent Current	275µA
Alarm Current	2.8mA
Ingress Protection	IP24D
Dimensions (HWD)	87x87x52
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-2874 (MCP820) afp-1503 (CP820)

### Part Numbers

514.800.611	MCP820
CP820	CP820 (no S/C isolator)
SU0632	Back Box
515.001.025	Spare Glass (Pkt 5)
515.001.127	Flexible Plastic Element
SU0615	Transparent Hinged Cover

## MCP830 Outdoor Manual Call Point



The MCP830 Addressable surface mounting Manual Call Point has an International Protection rating of IP67, making it suitable for outdoor applications. It is designed to monitor and signal the condition of the switch contact that is operated by breaking a plastic coated frangible glass element (flexible plastic option available). Any change in the status of the switch is immediately communicated to the Control and Indicating Equipment (CIE). The MCP830 has an integral short-circuit isolator for protecting the addressable loop wiring. Note MCP830 does not have a formal UV exposure rating. Installation in full sun should be avoided.

The CP830 is an alternative IP67 *MX* addressable call point which does not have an integral short circuit isolator.

### Technical Specification

Quiescent Current	275µA (max.)
Alarm Current	2.8mA (max.)
Ingress Protection	IP67
Dimensions (HWD)	93x98x73 mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-2875 (MCP830) afp-2798 (CP830)

### Part Numbers

514.800.612	MCP830 incl. Back Box
518.800.604.Y	CP830 incl. Back Box (no S/C isolator)
515.001.119	Spare Glass (Pkt 5)
515.001.127	Flexible Plastic Element
SU0615	Transparent Hinged Cover

## MIM800 Mini Input Module



The MIM800 Mini Input Module monitors a voltage-free contact and transmits its state to the CIE. It can be programmed to monitor either Normally Open (default) or Normally Closed contacts. The MIM800 can be programmed to monitor:

- 1 circuit of multiple N/O contacts, with S/C alarm
- 1 circuit of multiple N/C contacts, with O/C alarm
- 1 circuit with a single N/O contact, closing for alarm, with fault detection for short circuit.

The MIM800 has an output suitable for driving an LED. The MIM801 is also available; it is optimised for normally closed applications and can generate an interrupt (only used when a fast response is required) on an open circuit.

### Technical Specification

Quiescent Current	275µA (typ)
Operated Current	2.8mA (max, LED on)
Circuit Resistance	10 Ohm (max.)
ELD Resistor	200 Ohm (supplied)
Alarm Resistor	100 Ohm (s/c fault)
Input Cable Length	10m (maximum)
Dimensions (HWD)	57 x 48 x 13 mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-3165
FPANZ Listed	VF/641 (MIM800) VF/645 (MIM801)

### Part Numbers

MIM800	MIM800
FP0837	MIM801 (NZ only)

## MIO800 Multi-Input Output Module



The MIO800 Multi-Input/Output Module has three inputs and two outputs from latching relays. Each input and output can be programmed independently to provide customised functionality. Each input supports:

- Multiple N/O contacts with S/C alarm
- Multiple N/C contacts with O/C alarm
- Single N/O contact, closing for alarm, with S/C fault
- Single N/C contact, opening for alarm, with S/C and O/C fault.

The two relay outputs are available as voltage-free change-over contacts, that are not suitable for switching mains voltage.

The on-board LED will turn on when any input is in the alarm condition, and can also be programmed to blink when polled by the CIE.

### Technical Specification

Quiescent Current	480µA (max.)
Oper. Current (LED on)	3mA
Input EOL	330 Ohm
Input Alarm Resistor	150 Ohm
Circuit Resistance	40 Ohm (max.)
Relay Contact Rating <sup>5</sup>	2A @ 24Vdc <sup>4</sup>
Dimensions (HWD)	72 x 110 x 18 mm
Wire Size (max.)	2.5sq. mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-3166
FPANZ Listed	VF/655

### Part Numbers

555.800.065	MIO800
MIO800	MIO800 (NZ only)

## QIO850 Quad Input/Output Module



The Quad Input / Output module provides four monitored inputs and four changeover relay outputs. The inputs can be used in different modes, supporting normally open or normally closed alarm contacts, short circuit alarm or fault, and open circuit fault. Interrupts can be enabled to supply immediate recognition. The outputs can be voltage-free change-over contacts or a switched auxiliary supply (24V/48V selectable). Supervision of the auxiliary supply can be enabled to detect disconnection or failure. The QIO850 includes a MX loop short-circuit isolator and can be programmed using the IR link from the 850EMT. The QIO850 is supplied in a plastic enclosure suitable for mounting on top-hat style DIN rails and includes demountable screw terminals. To assist commissioning and fault finding, on-board LED indicators show the state of each output.

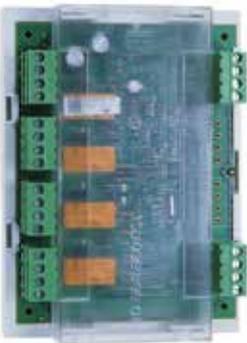
### Technical Specification

Quiescent Current	
Normal	1.1mA
Tripped (max)	5.9mA
Relay Contacts <sup>5</sup>	2A @ 30Vdc (resistive) <sup>4</sup>
Dimensions (HWD)	103 x 134 x 49 mm (including enclosure and terminal conn.)
Weight	0.15g
Wire Size (max.)	2.5sq. mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-3174
FPANZ Listed	VF/669

### Part Number

555.800.071

## QMO850 Quad Monitored Output Module



The Quad Monitored Output module provides 4 supervised switched outputs suitable for driving sounders, relays, indicators, etc.

The outputs are powered by a 24V/48V selectable power source, which is supervised for connection/failure. Each output is supervised for open circuit or short circuit faults.

The QMO850 includes an MX loop short-circuit isolator and can be programmed using the IR link from the 850EMT.

The QMO850 is supplied in a plastic enclosure suitable for mounting on top-hat style DIN rails and includes demountable screw terminals. To assist commissioning and fault finding, on-board LED indicators show the state of each output.

### Technical Specification

Quiescent Current	
Normal	2.1mA
Tripped (max)	6.7mA
Relay Contacts	2A @ 30Vdc (resistive)
Dimensions (HWD)	103 x 134 x 49 mm (including enclosure and terminal conn.)
Weight	0.15g
Wire Size (max.)	2.5sq. mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-3177
FPANZ Listed	VF/668

### Part Number

555.800.070

## QRM850 Quad Relay Output Module



The Quad Relay Output module provides four voltage-free change-over relay outputs or switched auxiliary supply (24V/48V selectable) outputs. Supervision of the auxiliary supply can be enabled to detect disconnection or failure. The QRM850 includes an MX loop short-circuit isolator and can be programmed using the IR link from the 850EMT.

The QRM850 is supplied in a plastic enclosure suitable for mounting on top-hat style DIN rails and includes demountable screw terminals. To assist commissioning and fault finding, on-board LED indicators show the state of each output.

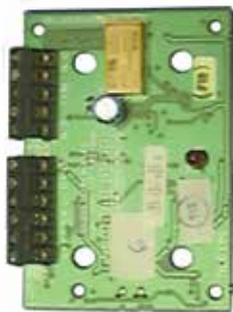
### Technical Specification

Quiescent Current	
Normal	1.1mA
Tripped (max)	5.9mA
Relay Contacts <sup>5</sup>	2A @ 30Vdc (resistive) <sup>4</sup>
Switching Power	60W, 125VA (resistive) max.
Dimensions (HWD)	103 x 134 x 49 mm (including enclosure and terminal conn.)
Weight	0.15g
Wire Size (max.)	2.5sq. mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-3175
FPANZ Listed	VF/670

### Part Number

555.800.073

## RIM800 Relay Interface Module



The RIM800 Relay Interface Module provides one volt-free changeover contact which is not supervised. The relay is controlled by a command sent from the CIE via the addressable loop and may be used to signal a state to other systems (security system, for example) or to energise loads such as door holders. The relay operation is determined by the CIE programming. The RIM800 has a red LED which may be configured to indicate relay activation and CIE polling. Note that the RIM800 is not rated to switch mains voltage directly.

### Technical Specification

Quiescent Current	285µA (max.)
Operated Current	2.8mA (max, LED on)
Relay Contact <sup>5</sup>	2A @ 30Vdc (max.) <sup>4</sup>
Dimensions (HWD)	61 x 84 x 25 mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-3167
FPANZ Listed	VF/642
<b>Part Number</b>	<b>RIM800</b>

## SIO800 Single Input Output Module



The SIO800 Addressable Single Input/Output Module is an MX addressable module that provides one clean contact input and a voltage-free changeover relay output. The input supports normally-open or normally-closed contacts and short/open circuit faults – depending on the input mode selected by the Control and Indicating Equipment (CIE). The relay is controlled by a command sent from the CIE via the MX addressable loop. The LED illuminates when the input goes into alarm, and can also be programmed to blink when polled by the CIE. The MX1 CIE supports the following modes for the input circuit:

- Normally-open contact, closing for alarm, with open circuit fault.
- Normally-open contact, closing for alarm, with short and open circuit fault.
- Normally-closed contact, opening for alarm, with short circuit fault.
- Normally-closed contact, opening for alarm, with short and open circuit fault.

### Technical Specification

Quiescent Current	300µA (max.)
Alarm Current	3mA (max, LED on)
Circuit Resistance	50 Ohm
Relay Contact Rating	2A @ 24Vdc (max.)
EOL Resistor	3k3 Ohm
Alarm Resistor	680 Ohm
Ambient Temp	-25 to +70°C
Relative Humidity	10% to 95% (n/cond)
Dimensions (HWD)	61 x 84 x 25mm
ActivFire Listed	afp-3168
FPANZ Listed	VF/671
<b>Part Number</b>	<b>555.800.063</b>

1. MX addressable loop voltage

## SNM800 Sounder Notification Module



The SNM800 Sounder Notification Module can be used to switch an external power source to sounders, extinguishing devices or other auxiliary equipment. The output is activated in response to a command from the CIE. The wiring to the controlled devices can be supervised for open and short circuit fault conditions and the external power source for the devices can be optionally supervised. Each output device (sounders etc.) must have a suitable diode wired in series (if not already contained in the device) so that the whole line is supervised up to the End of Line Device (27k Ohm resistor).

### Technical Specification

Quiescent Current	450µA (max.)
Operating Current	3mA (max, LED on)
Output Current <sup>5</sup>	2A @ 30Vdc (max.) <sup>4</sup>
Output ELD	27k Ohm 0.5W
External 24V Supply	18 to 28Vdc
Dimensions (HWD)	61 x 84 x 25 mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
ActivFire Listed	afp-3169
FPANZ Listed	VF/644
<b>Part Number</b>	<b>SNM800</b>

## VIO800 VESDA Interface Module



The VIO800 VESDA Interface Module is an arrangement of the MIO800 Addressable Multi-I/O Module. The MIO800 is supplied fitted on to a mounting bracket suitable for installation within all models of VESDA LaserPLUS or a LaserSCANNER which have relays fitted. The MIO800's inputs and outputs are wired to the relay outputs and control inputs of the LaserPLUS or LaserSCANNER to allow the compatible MX CIE to monitor and control the VESDA unit (VESDA not included). Wiring is not included.

### Technical Specification

Quiescent Current	480µA
Operating Current	3mA (max, LED on)
Dimensions (HWD)	72 x 110 x 18 mm
Ambient Temp.	-25°C to +70°C
Relative Humidity	10% to 95% (non cond.)
Wire Size (max.)	2.5sq. mm
ActivFire Listed	afp-2320
FPANZ Listed	VF/655
<b>Part Numbers</b>	

516.018.014	VIO800
VIO800	VIO800 (NZ only)

## MX Module Housings



K2142 Double Gang Back Box



M520 MX Module Cover including PCB cover & screws.



517.035.011 K2214 Aluminium Back Box



517.035.015 QFB/2 Flush Mount Back Box

### Technical Specification

	<b>K2142</b>
Dimensions (HWD)	85 x 146 x 38 mm
Material	PC/ABS
Part Numbers	517.035.010

	<b>M520</b>
Dimensions (HWD)	87 x 148 x 14 mm
Material	PC/ABS
Part Numbers	517.035.007

### Technical Specification

	<b>K2214</b>
Dimensions (HWD)	86 x 146 x 40 mm
Material	Aluminium
Part Numbers	517.035.011

	<b>QFB/2</b>
Dimensions (HWD)	85 x 146 x 38 mm
Material	PC/ABS
Part Numbers	517.035.015



FP0529 Empty Responder Box showing 2 standard MX modules fitted. The recommended module mounting combinations are:  
 4x standard modules (61 x 84mm)  
 or 2x large modules (MIO800)  
 or 2x standard modules and 1x large module  
 or 1x responder (ADR/MPR/MXP)  
 Hardware included:-  
 16 x HW0130 plastic PCB stand-offs  
 2 x HW0168 1" body plugs, fitted to box  
 4 x HW0310 M3 x 10 hex Nylon barrel nut  
 1 ea. LB0283/LB0296/LB0370/LB0568 labels  
 8 x SC0172 M3 x 6 Pan Head Phillips screws  
 1x LT0401 Instructions.

### Technical Specification

Dimensions (HWD)	240x185x53 mm
Material	1.2mm Galv. Steel
Part Number	FP0529

## D800 Ancillary Housing



The D800 Ancillary Housing provides an IP55 rated enclosure for all unpackaged MX modules. It incorporates a window to view the module LED.

### Technical Specification

Dimensions (HWD)	140 x120 x70 mm
Material	PC/ABS
Ingress Protection	IP55
Part Number	557.201.401

## Mounting Brackets



547.004.002 DIN Rail Mounting Bracket



DIN Rail Mounting Bracket shown with RIM800 (not included).

The DIN Rail Mounting Bracket can be used to mount standard sized MX Ancillary Modules (61 x 84mm) onto a standard 35mm DIN Rail by simply clipping the PCB onto four pre-fitted plastic pillars. The MX1 Loop Card/Module Bracket provides an alternative module mounting facility for in-cabinet MX1 installations.

### Part Numbers

547.004.002	DIN Rail Bracket
FP1027	MX1 Loop Card/2x Module Bracket (not shown)
FP1062	MX1 Loop Card/4x Module Bracket (not shown)

## DIN Rail Mounting Kit (MIO800)



The DIN Rail Mounting Kit provides a convenient way to fix the large format modules (72 x 110mm) onto a standard DIN rail for in-cabinet installations. The MIO800 Module is fitted to the Mounting Kit by sliding the two Base elements onto the MIO800 PCB. Two foot elements are then attached into slots on the bottom side of the Base elements. Finally slide two Side elements onto the ends of the Base elements.

### Technical Specification

Dimensions (HWD)	78 x113 x 31 mm
Material	PC/ABS

### Part Numbers

557.201.303	DIN Rail Mounting Kit
DIN800	DIN Rail Kit (NZ only)

## MX Loop Tester



The MX Loop Tester can be used to test, commission and fault-find a loop of MX analogue addressable detectors and ancillary devices, without having to connect the loop to a fire panel. Up to 250 MX devices may be connected. One Person Installation Mode allows new devices to be installed and field tested to confirm operation. Automatic Addressing Mode automatically sets the address of any un-programmed device that is added. Walk Test Mode provides a fast alarm response. A laptop (running a terminal program) connected to the unit can be used for operation, display and additional tests and commands.

Users outside Australia and New Zealand need to satisfy themselves that the mains adaptor meets local requirements.

### Technical Specification

Power Source	24V batteries or 230VAC to 24V/3A plug pack
Dimensions (HWD)	
Unit only	220x122x46mm
Carry Bag	250x250x70mm
Weight	2kg (excluding batteries)
Part Numbers	
FP0898 <sup>6</sup>	Loop Tester
SU0256	Spare 230VAC Plug Pack

## 850EMT Engineering Management Tool



The 850EMTK MX Service Tool Kit consists of:

- 850EMT Service Tool
- 6x AA NiMH rechargeable batteries
- 230VAC mains adaptor
- 12Vdc car adaptor
- Ancillary programming lead
- Spare pins for the programming lead
- Carry case and shoulder strap.

Where 850 Series detectors are connected to a VIGILANT MX1 or SIMPLEX 4100ESI<sup>8</sup> system, the 850EMT can be used to remotely interrogate, address and test the 850 Series detectors. Alternatively, any MX detector can be plugged on directly. MX modules are connected using an ancillary lead (supplied).

The 850EMT features a 90mm QVGA TFT backlit LCD alphanumeric display with a resolution of 320 x 240 pixels and 262k colours.

The ability of the 850EMT to communicate with the 850 series detectors using a bidirectional infrared wireless link is unique. This feature allows you to better manage the commissioning and servicing of 850 Series detectors from ground level without the requirements of high ladders or cherry pickers.

Programming, testing and verification of a detector can be carried out by a single visit to the device - from the ground. This is a major benefit: saving you time, costs and the health and safety of your commissioning technicians.

Users outside Australia and New Zealand need to satisfy themselves that the mains adaptor meets local requirements.

### Technical Specification

Batteries	6xAA NiMH
Batt. Operating Time	up to 15 hours
Ambient Temp.	0 to +50°C
Relative Humidity	10% to 90% (non cond.)
Dimensions (HWD) <sup>7</sup>	48 x 200 x 112 mm
Weight <sup>7</sup>	500g incl. batteries

### Part Numbers

850EMTK	Service Tool Kit
516.800.922	Ancillary Lead
516.800.924	Anc. Lead Spare Pins



### Notes:

1. Refer to Table 1 for compatibility.
2. Voltage restrictions for some detectors; refer to panel system design manuals.
3. Maximum 250 modules on MX1 or 4100ESI; max. 200 modules on MX4428.
4. Output current is for a resistive load.
5. Relay must not be used to switch mains voltages.
6. FP0898 includes test unit, carry bag, 230VAC plug pack, manual and loom.
7. For 850EMT unit only.
8. IR programming is not supported on MX4428.

### Typical Specifications unless otherwise stated:-

- (i) Operating voltage 20 to 40Vdc is supplied by MX addressable loop.
- (ii) Remote Indicator: E500 Mk2 Series.
- (iii) Devices are suitable for indoor applications only.
- (iv) Ambient temperature -25°C to +70°C.
- (v) Relative humidity 10% to 95% (non condensing).
- (vi) Up to 250 modules per MX detector loop (panel dependant)<sup>3</sup>.

<b>Table 1 MX Ancillary Device / MX Panel Compatibility</b>			
<b>Compatibility</b>	<b>MX1</b>	<b>MX4428</b>	<b>4100ESi</b>
CP820 Call Point - Indoor	√	√	√
CP830 Call Point - Outdoor	√	√	√
CIM800 Contact Input Module	√	√	√
DDM800 Universal Fire & Gas Detector Module	√	√	√
DIM800 Detector Input Module	√	√	√
LIM800 Loop Isolator module	√	√	√
LPS800 Loop Powered Sounder Module	√	√	-
MCP820 S/C Isolator Call Point - Indoor	√	√	-
MCP830 S/C Isolator Call Point - Outdoor	√	√	-
MIM800 Mini Input Module	√	√	√
MIO800 Multi Input/Output Module	√	-	√
QIO800 Quad Input/Output Module	√	-	-
QMO800 Quad Monitored Output Module	√	-	-
QRM800 Quad Relay Output Module	√	-	-
RIM800 Relay Interface Module	√	√	√
SIO800 Single I/O Module	√	-	-
SNM800 Sounder Notification Module	√	√	√
VIO800 VESDA Input Module	√	-	√

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VIGILANT, a respected regional brand of Johnson Controls, is a technology leader in the Australian and New Zealand fire detection markets with AS and NZS product approvals. The VIGILANT product line includes a comprehensive range of MX TECHNOLOGY fire detection products and the market-leading QE90 voice evacuation systems. VIGILANT product is widely supported throughout Australia and New Zealand by a network of installation companies, service companies and distributors.

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