

### Head Office

#### Wellington

PO Box 35-063  
Naenae, 5011  
Lower Hutt  
17 Eastern Hutt Rd  
Wingate  
Lower Hutt 5019  
Tel (04) 567-3229  
Fax (04) 567-3644

www.pertronic.co.nz

sales@pertronic.co.nz  
tech@pertronic.co.nz

#### Auckland Office

PO Box 15-867  
New Lynn  
Auckland 0640  
359 Onehunga Mall  
Onehunga  
Auckland 1061  
Tel (09) 633-0226  
Fax (09) 633-0228



Certificate No:  
205487-2016-  
AQ-AUS-JAS-ANZ

### Product Overview:

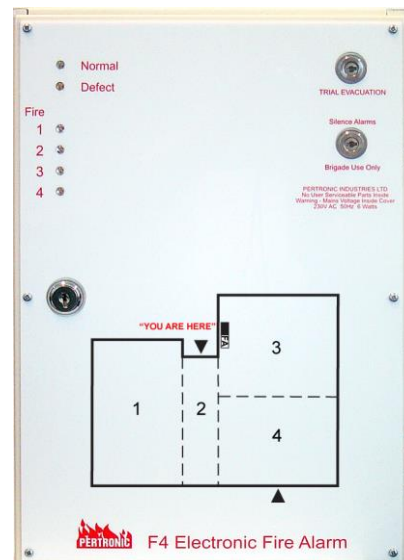
Pertronic Industries **F4-3** is a four-zone Fire Alarm Control Panel designed for low cost fire alarm systems.

The **F4-3** supports Smoke Detectors, indicating Manual Call-Points and indicating Heat Detectors, and has the facility to internally mount one or two 20 Watt evacuation amplifiers.

It provides an option for brigade connection and complies with the requirements of NZS 4512: 2010, and the New Zealand Building Code.

### Features:

- ▶ 'Normal', 'Defect' and per circuit 'Fire' indication on front panel
- ▶ 'Internal Bell Cut-Off' and 'External Bell Cut-Off' (BCO)
- ▶ Alarm reset available from a front panel key-switch
- ▶ Trial Evacuation key-switch
- ▶ Fire & Defect C/O relays with Fire relay Isolate switch
- ▶ Automatic Alarm Verification Facility (AVF) provides substantial protection against transient false alarm activation
- ▶ Monitored Bell circuit, 12 Vdc, 5 Amps
- ▶ Maximum of two 20 Watt 100 Vrms line amplifiers with voice Evacuation message
- ▶ 'Battery Absent' detection circuitry
- ▶ Earth Leakage monitoring
- ▶ Integrated Alarm and Defect piezo for audible warning
- ▶ On-board System 'Defect' LED indicates source of fault
- ▶ Door Interlock
- ▶ Brigade 'Isolate' and 'Test' switches
- ▶ Electrically isolated interface to an alarm transmitter (SGD)
- ▶ DBA mode 'Non Latching, Bell Only' configuration available (on Circuit 4)
- ▶ Automatic Daily Load Test with automatic 'Battery Absent' detection circuitry



### Detector Circuits

- ▶ Four zones terminated with 10 kΩ EOL resistors
- ▶ Accepts a mix of Smoke Detectors, indicating Heat Detectors and indicating Manual Call-Points
- ▶ Zone circuit self-test on start-up and every 24 hours
- ▶ Each Zone Circuit may have:
  - ▶ Up to 30 System Sensor 100 Series or 300 Series Photo-Electric Smoke Detectors, and
  - ▶ A total of 100 Pertronic Indicating Heat Detectors and Pertronic Indicating Manual Call-Points (MCP) (see note on page 2)

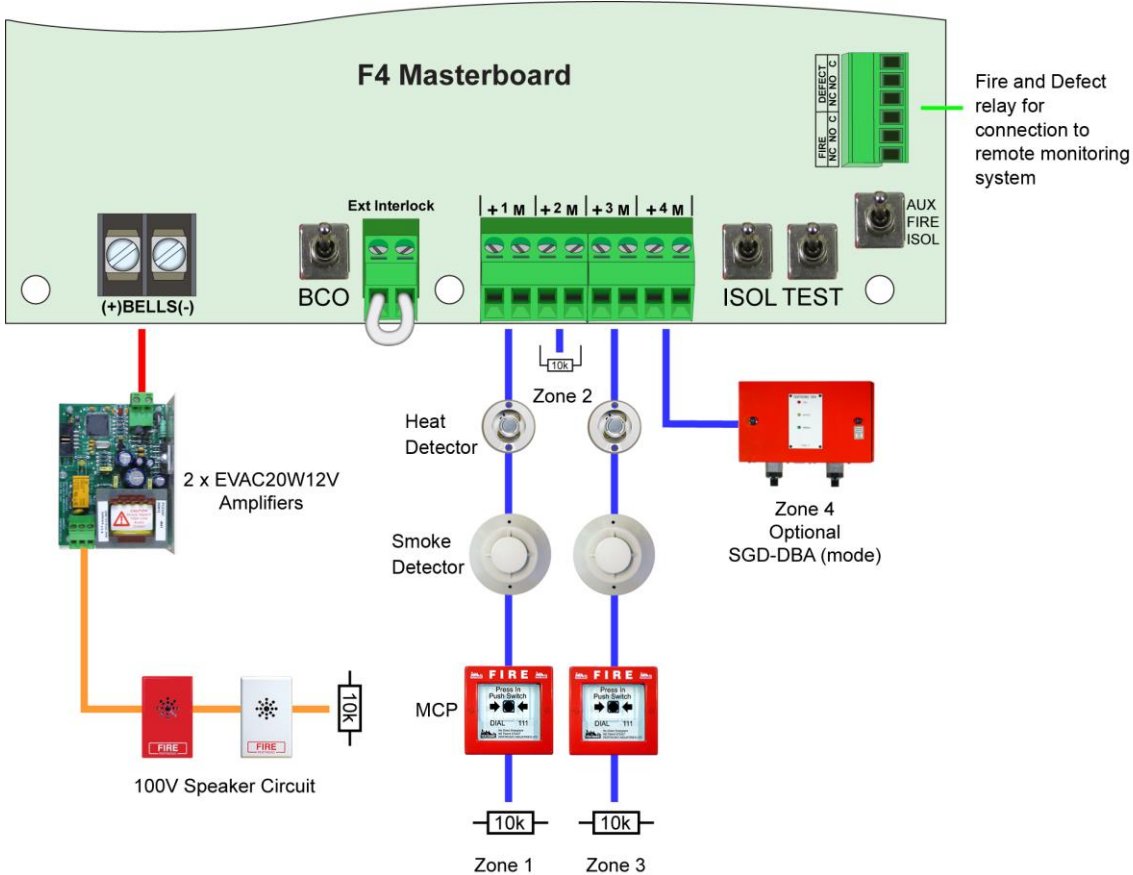
### Options

- ▶ Front or Rear Service cabinet
- ▶ F4-RMAX board for connecting a remote LED mimic and additional Fire and Defect Relay
- ▶ Pertronic SGD7 or SGD8MD for Fire Brigade connection

### Specification:

<b>Electrical:</b>	<b>Power Supply</b> 230 Vac, 50 Hz, 5 W 13.7 Vdc, 400 mA	<b>Quiescent Current</b> 28 mA at 12 Vdc	<b>Defect Current</b> 30 mA at 12 Vdc	<b>Alarm Current</b> 155 mA at 12 Vdc with no load on external sounders
<b>Battery</b>	<b>Battery Charger</b> Integral Float Charger 13.7 Vdc, 372 mA		<b>Battery Type</b> Sealed Lead Acid (GelCell) 12 Vdc, 7 AHr - internally mounted	
<b>Environmental:</b>	<b>Operating Temperature Range</b> 0 to +40 °C		<b>Humidity</b> 10 to 95 % RH (non-condensing)	
<b>Mechanical:</b>	<b>Dimensions</b> (H x W x D mm) Cabinet: FS or RS 350 x 245 x 87 (FS) 350 x 245 x 92 (RS) (see note on page 2)	<b>Weight</b> 2.2 kg - excluding battery	<b>Material</b> 1.2 mm mild steel, powder coated	<b>Colour</b> Beige - other colours optional

## Block Diagram:



## Ordering Information:

Code	Description	Code	Description
<b>Panels</b>		<b>Amplifiers and Speakers</b>	
F4FS-3	F4 Panel Front Service – 12 Volt	EVAC20W12V	Evac Amplifier 20W 12V
F4FS-3EA	F4 Front Service Panel with 20W Evac – 12 Volt	PSS1-R	Pertronic Sounder Speaker 1W Flush - Red
F4RS-3	F4 Panel Rear Service – 12 Volt	PSS1-W	Pertronic Sounder Speaker 1W Flush - White
F4RS-3EA	F4 Rear Service Panel with 20W Evac – 12 Volt	PSSB401	Pertronic Speaker with B401 Conventional Base
F4RS-3EAT5	F4 RS Type 5 c/w 20W Evac & Sound Cont Bd & Hush – 12 Volt	<b>Transmitters</b>	
F4FS-3EAT5	F4 FS Type 5 c/w 20W Evac & Sound Cont Bd & Hush – 12 Volt	SGD7	SGD Board Version 7
<b>Detectors</b>		SGD8MD	SGD8 2 Wire Multidrop
2151BPI	Low Profile Photo Detector excl Base	<b>Accessories</b>	
B401	Base for Conventional Smoke Detectors	F4AUXRLY	F4 Auxiliary Relay Board for small F4 Case
SMK400E	Surface Mount for B401 and B501 Base, (Round 152mm)	F4AUXRLYV2	F4 Auxiliary Relay Board for large F4 Case, 12 Volt
IHDB-V	Indicating Heat Detector, Blue (57°C)	F4T5SCNT	F4 Type 5 Sound Control Board with Hush
IHDY-V	Indicating Heat Detector, Yellow (77°C)	AMRH	Remote Hush Button
CPPIN-3T	Conventional Indicating MCP - Testable	F4-RMAX	Remote LED Mimic/Aux Relay Module
CPPIN-3TWP-MK2	Conventional Indicating MCP Testable – Weatherproof, MK2		

## Important Notes:

- ▶ A hard short-circuit or open-circuit produces a 'Defect' signal.
- ▶ Non-indicating Heat Detectors and Non-Indicating Manual Call-Points MUST NOT be used in NZS 4512: 2003 or NZS 4512: 2010 systems. These devices will not produce a **Fire** signal when triggered.
- ▶ Within the total allowance of 100 indicating devices per zone circuit, the circuit is limited to a maximum of 50 indicating heat detectors.
- ▶ All dimensions are nominal. Actual dimensions may vary slightly due to production tolerances.

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59 Onehunga Mall, Onehunga, Auckland 1061  
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