



F4-3

Four Zone Conventional Fire Alarm Panel (NZS 4512:2003)

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ISO 9001: 2000

International Standards
Certifications
QAC/R61/0051

Product Overview:

The **F4-3** is a four-zone Fire Alarm control unit designed for low cost Fire Alarm systems. It provides an option for Brigade connection, complies with the requirements of **NZS 4512:2003** and with the requirements of the New Zealand Building Code. The **F4-3** supports Smoke Detectors, indicating Manual Call-Points and indicating Heat Detectors and the facility to internally mount one or two 20W Evacuation amplifiers.

Standard 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.
- Alarm Verification Facility (AVF) provides substantial protection against transient false alarm activation.
- Monitored Bell circuit.
- 'Battery Absent' detection circuitry.
- Earth Leakage monitoring.
- Internal Piezo alarm with selectable 'Piezo on Defect' warning.
- Door Interlock.
- Brigade 'Isolate' and 'Test' switches.
- Electrically isolated interface to an alarm transmitter (SGD).
- System 'Defect' LED indicates source of fault.
- 'Bell Only' configuration available (on Circuit 4) to monitor DBA.

Detector Circuit:

- Four (4) zones terminated with 10kΩ EOL resistors.
- Accepts a mix of Smoke Detectors, indicating Heat Detectors and indicating Manual Call-Points.
- Smoke detectors operate after a 1 second Alarm Verification Facility (AVF) delay.
- Indicating Heat detectors and indicating Manual Call-points give instantaneous (< 0.5 sec) response.
- Zone circuit 'self-test' on start-up and every 24 hours.
- Alarm triggered by Smoke detector operation with 1-second alarm verification (AVF), or instantaneous operation for indicating Heat Detector or indicating Manual Call-point.
- Up to 40 System Sensor Series 100 or Series 300 detectors may be connected to each zone circuit in addition to an unlimited number of **Pertronic** indicating Heat Detectors and indicating Manual Call-Points.

Bell Circuit:

- Bell circuit Relay: 12Vdc, 5A. - monitored with a 10kΩ EOL resistor.
- Recommended Amplifiers and Speakers:
 - One or two **Pertronic** EVAC20W12V Amplifiers.
 - **Pertronic** PSSB401 Speaker Bases.
 - **Pertronic** PSS1 Speakers.

Optional Features:

- Front or Rear Service cabinet.
- 'Fire' and 'Defect' relay output board available as an optional extra.
- Compatible with Pertronic SGD7 or SGD8 for Fire Brigade connection.

Specifications:

Electrical:	Operating Voltage 12Vdc		Normal Current 28mA at 12Vdc	Alarm Current 155mA at 12Vdc
Environmental:	Operating Temperature Range 0 to +40 °C		Humidity 10 to 95% RH (non-condensing)	
Mechanical:	Dimensions (H x W x D mm)	Weight	Material	Colour
Cabinet: FS or RS	350 x 245 x 80	2.2Kg	1.2mm mild steel, powder coated	Beige (other colours optional)

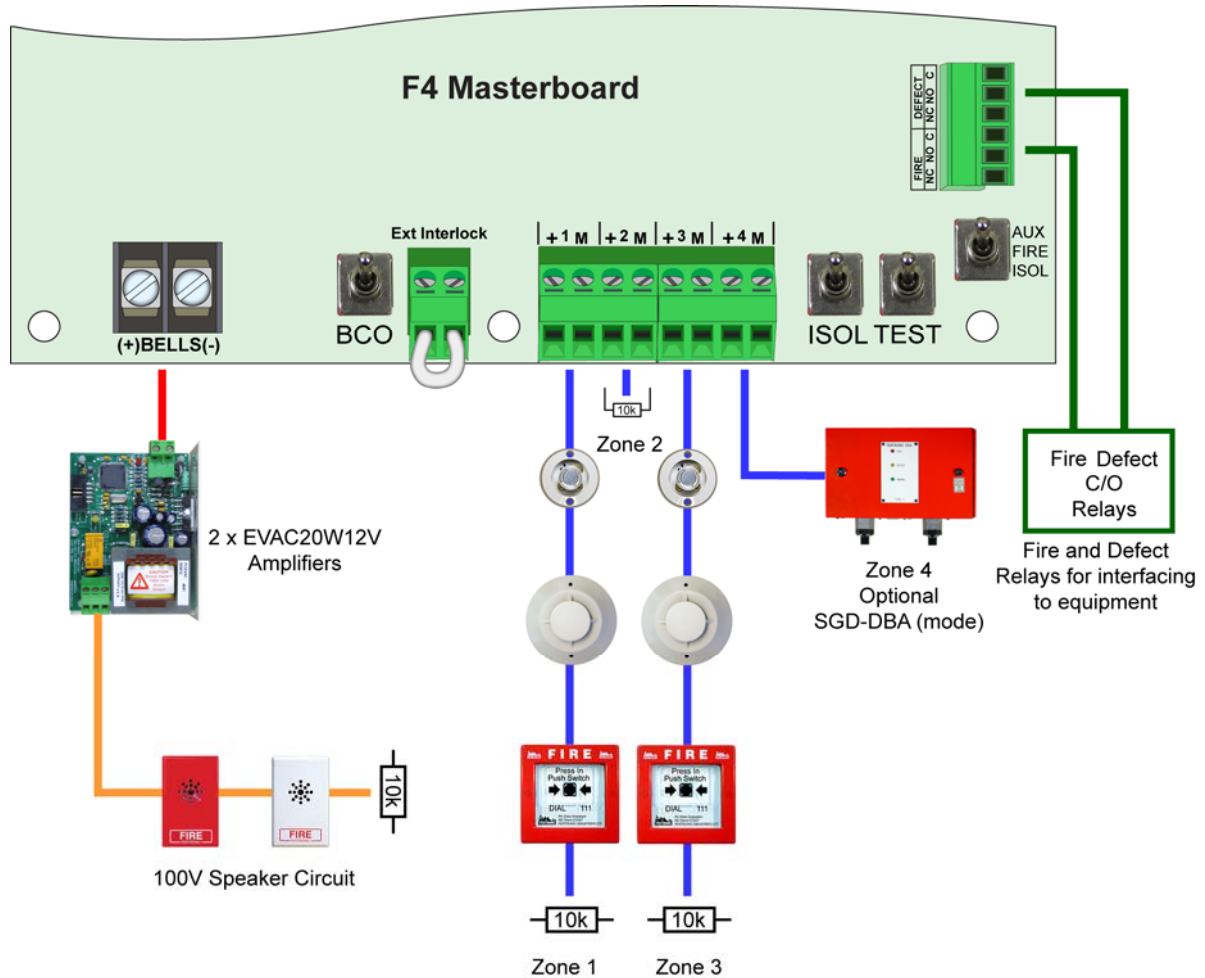
- Power Supply: 230Vac, 50Hz, 5W. 13.7Vdc @ 400mA.
- Battery Type: Sealed Lead Acid 12Vdc, 7Ah - internally mounted.
- Charger: Integral float charger 13.7Vdc.
- Power Supply Timer: Automatic 24-Hour load test with automatic 'Battery Absent' detection circuitry.

Important Note:

A hard short-circuit or open-circuit produces a 'Defect' signal. Non-indicating Heat Detectors and Manual Call-Points will NOT produce a 'Fire' signal when triggered and MUST NOT be used with the NZS4512:2003 standard **F4-3** panel.



Block Diagram:



Product Codes

Code	Description
Panels	
F4FS-3	4cct Panel Front Service NZS4512:2003
F4FS-3EA	4cct Panel Front Service with 20W Evacuate Amp
F4RS-3	4cct Panel Rear Service NZS4512:2003
F4RS-3EA	4cct Panel Rear Service with 20W Evacuate Amp
F4RS-3EAT5	F4 RS Type 5 Rear Service Fire Panel with 20W Amp
F4FS-3EAT5	F4 FS Type 5 Front Service Fire Panel with 20W Amp
Detectors	
2151BPI	2151 Photo Detector excl Base
1151	1151 Low Pro Ion Detector excl Base
B401	B401 2-Wire Conventional Base.
SMK400	Surface Mount for B401 and B501 Base
IHDB-3	Indicating Heat Detector, Blue (57°C)
IHDY-3	Indicating Heat Detector, Yellow (79°C)
CPPIN-3T	Conventional Indicating Call-Point
CPPIN-3TWP	Weatherproof Conventional Indicating Call-Point

Product Codes

Code	Description
Amplifiers and Speakers	
EVAC20W12V	Evacuation Amplifier 20W, 12V, 4512:2003
PSS1-R	Pertronic Sounder Speaker 1W Flush - Red
PSS1-W	Pertronic Sounder Speaker 1W Flush - White
PSSB401	Pertronic Speaker and B401 Base
Transmitters	
SGD7	SGD7 Board Version 7
SGD8	SGD8: optional Isolated-PSU
Accessories	
F4AUXRLY	F4 Auxiliary Relay Board
F4T5SCNT	F4 Type 5 Sound Control Board
F4MICRO	F4 Microprocessor IC vn.nn
AMRH	Remote Hush Unit
NCTFS-LED	"NOT CONNECTED TO FIRE SERVICE" LED

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