



# F4-3 2W

## Four Zone 2-Wire Conventional Fire Alarm Panel

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ISO 9001: 2000

International Standards  
Certifications  
QAC/R61/0051

### Product Overview:

Pertronic Industries **F4-3 2W** is a four-zone 2-Wire Fire Alarm control unit designed for low cost, Housing NZ Fire Alarm systems.

The **F4-3 2W** is modified to meet Housing NZ requirements for small residential applications and meets most requirements of **NZS 4512:2003**.

The **F4-3 2W** supports **Pertronic** Indicating Manual Call-Points, Indicating Heat Detectors, PS1 sounders and **System Sensor** Smoke Detectors with the facility to internally mount one or two 20W Evac. amplifiers.

### Standard Features:

- 'Normal', 'Defect' and per circuit 'Fire' indication.
- 'Internal Bell Cut-Off' and 'External Bell Cut-Off' (BCO).
- Alarm reset available from a front panel key-switch.
- Trial Evacuation key-switch.
- Local or remote Hush button option temporarily silences sounders for 3 minutes.
- Detectors are automatically reset at end of the Hush period
- Combined Detector and Sounder Circuit: monitored with a 10kΩ EOL resistor.
- The combined sounder and detector circuit support a mix of **System Sensor** 2WTA-B Smoke/Thermal Detectors with in-built sounder, **System Sensor** 1151, 2151 smoke detectors, **Pertronic** indicating Heat Detectors and indicating Manual Call-Points and **Pertronic** PS1 sounders and strobes.
- Indicating Heat detectors and indicating Manual Call-Points give instantaneous (less than 0.5 sec) response.
- Zone circuit self-test on start-up and every 24 hours.
- Alarm Verification Facility (AVF) provides substantial protection against transient false alarm activation.
- Zone circuit 'self-test' on start-up and every 24 hours.
- Monitored Bell circuit with optional 100V line amplifier with voiced Evacuation message.
- 'Battery Absent' detection circuitry.
- Earth Leakage monitoring.
- Integrated piezo alarm with selectable 'Piezo on Defect' warning.
- Door Interlock.
- Brigade 'Isolate' and 'Test' switches.
- System 'Defect' LED indicates source of fault.
- 'Bell Only' configuration available (on Circuit 4) to monitor DBA.

### Optional Features:

- Front or Rear Service cabinet.
- 'Fire' and 'Defect' relay output board available as an optional extra.

### 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 (less than 0.5 sec) response.

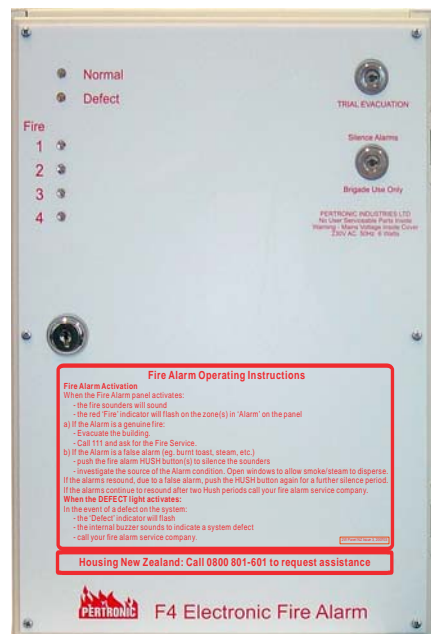
### Specifications:

- |   |  |   |                       |
|---|--|---|-----------------------|
| ➤ Cabinet:  | Dimensions   | 350 x 245 x 80  | H x W x D mm          |
|   | Weight   | 2.2kg   | - excluding battery.  |
|   | Material   | 1.2mm mild steel, powder coated beige (other colours optional). |                       |
| ➤ Power Supply:   |  | 230Vac, 50Hz, 5W.   | 13.7Vdc @ 400mA.      |
| ➤ DC Current Consumption:   | Normal:  | 26mA  |                       |
|   | Alarm:   | 135mA   | - plus sounder load.  |
| ➤ 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. |   |                       |
| ➤ Four (4) zones terminated with a 10kΩ End-of-Line (EOL) resistor.   |  |   |                       |
| ➤ 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 detectors, fitted to B401R relay bases, may be connected to each zone circuit with up to five (5) <b>Pertronic</b> indicating Heat Detectors and indicating Manual Call-Points. |  |   |                       |
| ➤ Bell Relay:   | 12Vdc, 5A.   |   |                       |

Bell circuit monitored with a 10kΩ EOL resistor.

Recommended Sounder: 2WTA-B Detector-Sounder or **Pertronic** PS1 Sounder

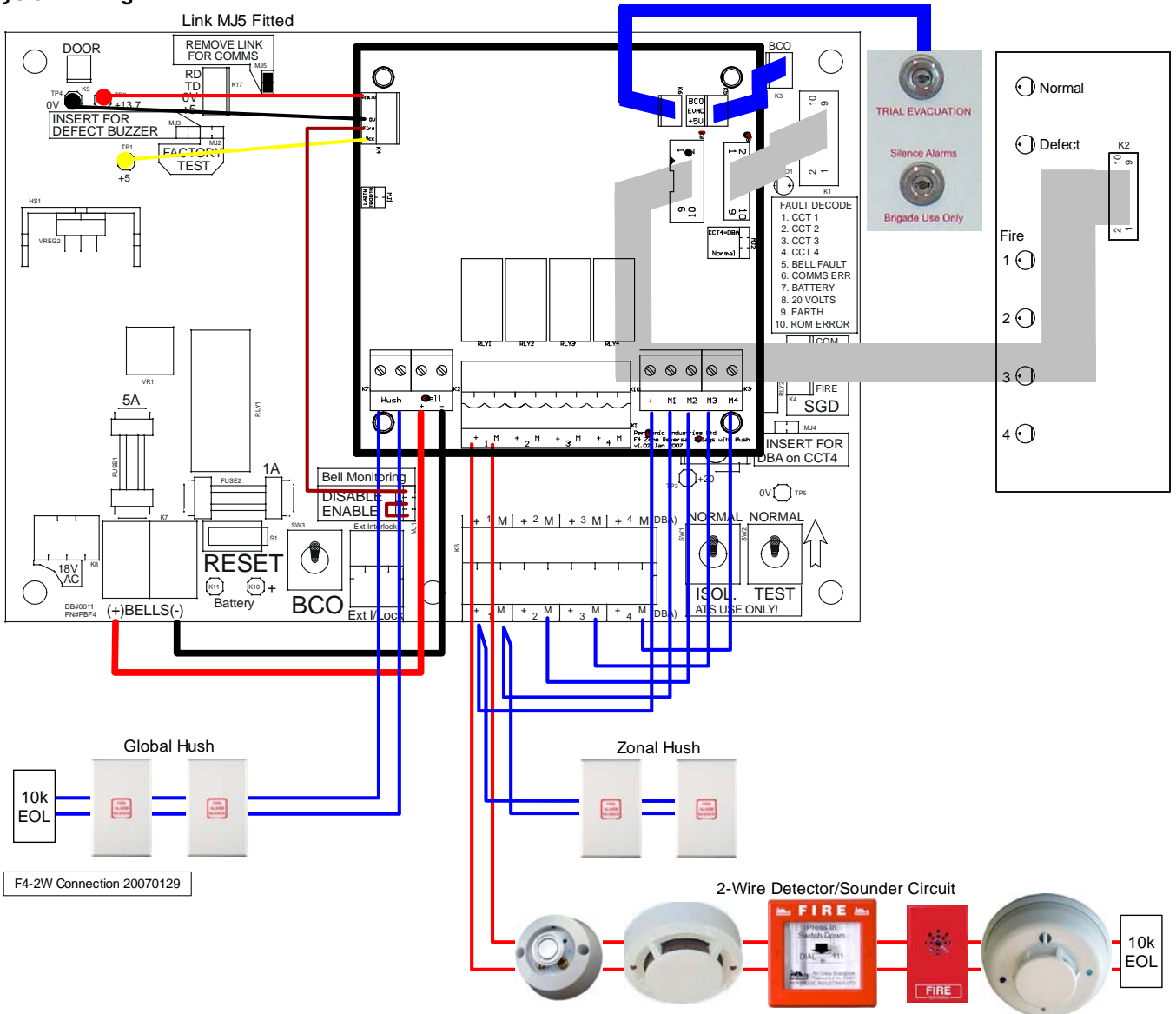
Alternative Sounder: one or two **Pertronic** EVAC20W12V Amplifiers with **Pertronic** PSSB401 Speaker Bases and/or **Pertronic** PSS1 Speakers



**Benefits:**

1. The **F4-3 2W** and its detectors provide a cost effective solution for residential applications.
2. Installation is made simple as the detectors and sounders are wired on the same pair of cables.
3. The sounders and detectors are fully monitored for open and short circuits.
4. Long battery standby period of up to 7 days.
5. The detectors (2WTA-B) have two detection elements (Smoke / Thermal) with built in sounder.
6. Reduced false alarms due to environmental conditions. The 2WTA-B detector sensitivity is automatically adjusted to compensate for contamination caused by environmental conditions such as dust and dirt.
7. Optional Local or remote Hush button facility enables sounders to be silenced for 3 minutes allowing investigation of alarm.
8. Hush facility may be operated globally and/or per zone
9. Detectors automatically resets at end of the Hush period.
10. Panel Silence and Evacuate facility.

**System Wiring:**



**Product Code**

Description	Code	Description	Code
F4 RS Panel with 4-Zone Reversal Relay board	F4RS-3 2W	Evacuation Amplifier 20W, 12V, 4512:2003	EVAC20W12V
F4 FS Panel with 4-Zone Reversal Relay board	F4FS-3 2W	Pertronic Sounder Speaker 1W Flush Red	PSS1-R
F4-2W board	F4-2W	Pertronic Sounder AS2220 Flush- Red	PS1-R
2W-B, 2 Wire PE I3 Detector + Thermal and Sounder	2WTA-B	SpectrAlert Advance 2 Wire Strobe 12/24V	SR
1151 Low Pro Ion Detector excl Base	1151	Remote Hush Unit	AMRH
2151 Low Pro Photo Detector excl Base	2151	Indicating Heat Detector, Blue (57°C)	IHDB-3
B401R 2-wire base with current limiting resistor.	B401R	Conventional Indicating Call-Point	CPPIN-3

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