

F100A

2-4 Loop Analogue Addressable Panel

(NZS 4512:2010)

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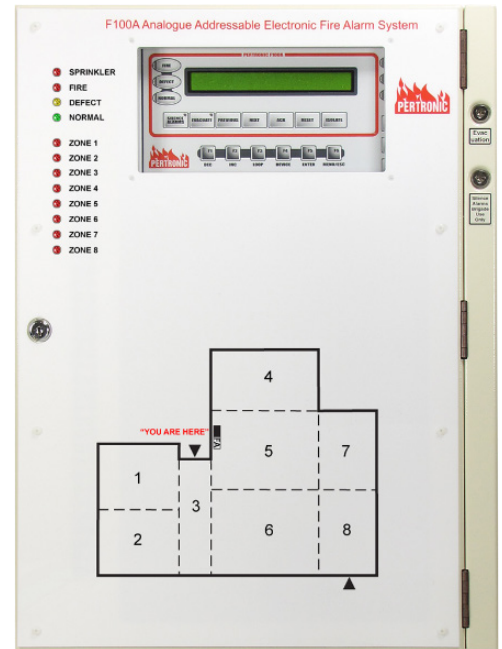
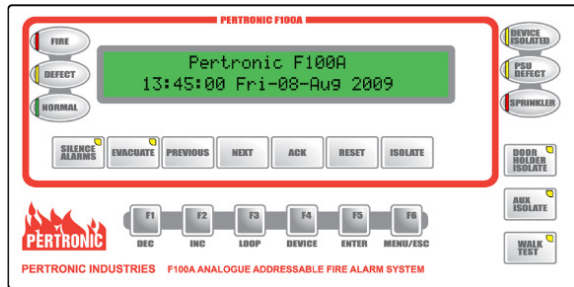
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Product Overview:

The F100A Analogue Addressable panel is a sophisticated and versatile fire alarm control panel, designed for installations that require flexible configuration and control functions. The F100A complies with NZS 4512:2010 and the requirements of the NZ Building Code.



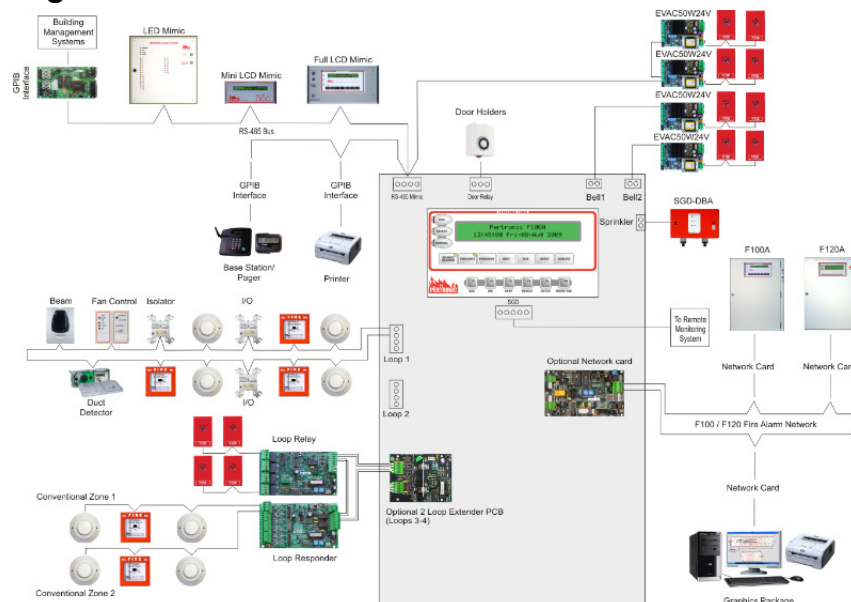
Features:

- ▶ Precise identification of alarm location with user-definable English language text description
- ▶ Large 2 x 40 character back-lit LCD display
- ▶ 24-character configurable text message per address, zone, logic block, timer and network input
- ▶ Automatic 'Pre-Alarm' warnings
- ▶ Automatic daily test of all detectors and battery
- ▶ 2 to 4 loops provides a maximum 396 detectors plus 396 modules or MCPs
- ▶ Supports 127 nodes on the Pertronic network
- ▶ Supports up to 64 outputs to the network and 64 inputs from the network
- ▶ Loop input devices include detectors, call points, loop responders, loop relays and modules
- ▶ Addressable relays configurable as sounder relays, auxiliary relays, door holder relays, etc.
- ▶ User isolation of zones and individual detectors
- ▶ 2560 event historical log
- ▶ Configuration data may be entered via the front panel controls or using PC Configuration Utility
- ▶ Optional seismic battery bracket SBB-17AH

Seismically Tested

A representative Pertronic F100A Fire Alarm Control Panel has comfortably passed an earthquake simulation test based on International Standard ICC-ES AC-156, *Acceptance Criteria for Seismic Certification by Shake-Table Testing of Nonstructural Components*.

System Diagram:



F100A Specification:

- ▶ **Cabinet:** Size 1: 600 x 450 x 130, 15kg (+Batt, PCBs)
Size 2: 900 x 450 x 130, 20kg (+Batt, PCBs)
Material: 1.2mm mild steel, powder coated beige
- ▶ **Power Supply:** 230Vac, 50Hz, 40W
- ▶ **Battery Type:** internal SLA battery, 24V, capacity optional
- ▶ **Charger:** Integral float charger, temperature compensated 27.4Vdc, 1.5A standard or 4A optional
- ▶ **Standby Current:** 2-loop = 165mA; 4-loop = 210mA
- ▶ **Zone Indication:** Up to 128 physical zones
- ▶ **Protocol:** Intelligent System Sensor protocol:
- ▶ **Loop Capacity:** 2 to 4 analogue addressable loops, support 99 Detectors and 99 Modules per loop. Maximum 396 Detectors and 396 Modules.
- ▶ **Loop Characteristics:** Length (max) 1km, 1mm² cable
Loop Resistance (max): 50Ω
Cable Size/Type: 1mm² to 2.5mm², twisted-pair
- ▶ **Serial RS-232 Port:** for panel configuration via PC
- ▶ **Serial RS-485 Ports:** for ancillary equipment
- ▶ **Historic Event Log:** 2560 events
- ▶ **LCD Display:** 2 line x 40 character alphanumeric back-lit display
- ▶ **Mimic Connections:** up to 32 devices: LCD Mimics, LED Mimics, Amplifiers or Network Cards, may be connected to the RS485 port. 16 full function, the remainder slaves.
- ▶ **LCD Mimics:** supports up to 8 remote monitored LCD mimics with either 'full' or 'mini' functionality.
- ▶ **LED Mimics:** supports up to 8 monitored LED Mimics, each capable of driving 128 LEDs plus 'Silence Alarms' (BCO) and 'Evacuate' controls.
- ▶ **Pertronic Network:** provides up to 64 network inputs each Network Card is connected to an **F100A** or **F120A** panel via the serial RS-485 port
- ▶ **Fire Relay:** 1 changeover contact rated at 24Vdc, 2A Normally de-energised
- ▶ **Defect Relay:** 1 changeover contact, rated at 24Vdc, 2A Normally energised
- ▶ **Sounder:** 2 circuits (BELL1 and BELL2), fused at 5A each Monitored and Configurable.
- ▶ **General Purpose (GP):** 2 sets of change-over contacts rated at 24Vdc, 2A. Not monitored; Configurable
- ▶ **Door Holder Relay:** 1 single changeover contact, rated at 24Vdc, 5A. Not monitored; Configurable
- ▶ Door Holder 'Isolate' switch
- ▶ **AUXM Relay:** 1 voltage-reversal output, rated at 24Vdc, 100mA. Monitored. Configurable
- ▶ **AUX Relay:** 1 change-over contact, rated at 24Vdc, 2A resistive. Not monitored. Configurable
- ▶ AUX Isolate switch isolates all AUX outputs
- ▶ **Open Collector:** 8 programmable outputs: switched to 0V
 $I_{PEAK}=500mA$; $I_{CONTINUOUS}=150mA$, $V_{MAX}=50V$
- ▶ **Test Mode:** individual function for detectors and modules
- ▶ **Other Functions:**
 - ▶ Earth Monitoring
 - ▶ Configurable 'Sprinkler' input: monitored, non-latching
 - ▶ Sprinkler operated LED
 - ▶ Brigade interface: 'Fire', 'Defect', 'Isolate', 'Test'. eg SGD
 - ▶ Selectable Standard: NZS4512:2010 or NZS4512:1997
 - ▶ Front panel 'Silence Alarms' and 'Evacuation' key-switches
 - ▶ Walk Test
 - ▶ Door microswitch, Door Interlock and External Defect loops
 - ▶ **System Test:** automatic daily test of all Detectors and Battery or can be individually tested on demand, via the menu
 - ▶ **Isolation:** all devices, detectors, modules, Zones, Groups, Logic Gates and Timers may be individually isolated
 - ▶ **Virtual Detector:** supports 'virtual' detector mode
 - ▶ **Fan Control:** supports control of fan relays
 - ▶ **Brigade Latch:** non-latching detectors latch if and when the 'Alarm' relay operates
 - ▶ **Day/Night Mode:** supports variable sensitivity levels for variable occupation modes
 - ▶ **Configurable Attributes:** detectors can be individually configured for: Bell 1, Bell 2, Brigade Calling, Latching, Auxiliary Relay, Door Holder Relay, Buzzer on Alarm, Alarm Verification Facility (AVF), Detector Sensitivity and Zone assignment
 - ▶ **Configuration:** detectors and modules can be directly configured to any system output
 - ▶ **Configurable Software Groups:** 64 groups, each with 32 outputs can be configured to any system output or other group
 - ▶ **System Events:** 16 events can be configured to control any system output: eg. Common Fire, Defect, Pre-Alarm, etc.
 - ▶ **Logic Block Functions:** 32 Logic Block functions (OR, AND, ANY) can be configured to be activated by any input on the system and can be interconnected to perform complex logic functions. Any Logic Block can turn on any system output
 - ▶ **Configurable Timers:** 16 independent Timers; each configurable for a period of 1 to 65,536 seconds (18+ hours)
 - ▶ Each Timer has configurable panel attributes
 - ▶ 4 Timer modes are available ('Normal', 'Cycle', 'Double-Knock' and 'ReTrigger')
 - ▶ Each Timer can directly turn on one output on Timer 'Run' and one output on timer 'Time Out'
 - ▶ **Configurable 24-Hour Timers:** 4 timers with independent Start and End times include Week-Day and Week-End mode and 2 configurable outputs each
 - ▶ **On-site Configurability:** from front panel menu controls or via the graphical configuration and monitoring PC software.
 - ▶ **Remote Monitoring:** configuration and control via modem, internet connection or suitable mobile phone is available
 - ▶ **Status Reporting:** for individual detectors and modules
 - ▶ **Virtual Panel display:** provides complete control and graphical representation of the panel's LCD, front panel switches and indications at a remote location

Ordering Information:

Code	Description	NZFPA Listing No
F100AR-3	F100A RS 2 Loop AA Panel - NZS4512:2010	PI/120
F100AF-3	F100A FS 2 Loop AA Panel - NZS4512:2010	PI/120
F100ATR-3	F100A RS 900mm 2-Loop Panel - NZS4512:2010	PI/120
F100ATF-3	F100A FS 900mm 2-Loop Panel - NZS4512:2010	PI/120
F100P2LB	F100A 2-Loop Extension Board	PI/120
F100ZMB-3	F100A Master Board NZS4512:2010	PI/120

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