



F120A

2-20 Loop Analogue Addressable Panel

(NZS 4512:2003 and NZS4512:2010)

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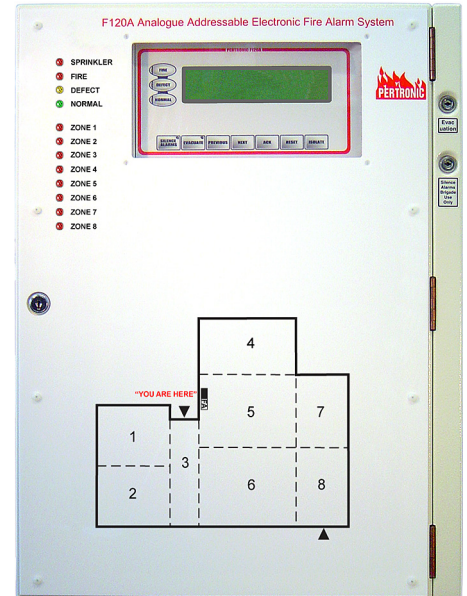
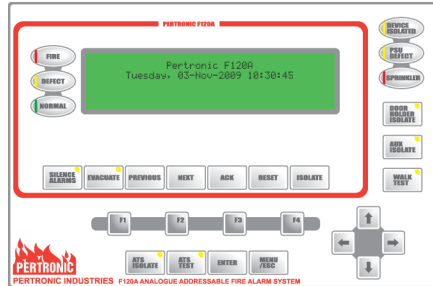
ISO 9001: 2000

International
Standards
Certifications
QAC/R61/0051

Product Overview (V4 firmware and greater):

The **F120A** Analogue Addressable panel is a sophisticated and versatile Fire Alarm panel, designed for all installations that require flexible configuration and control functions.

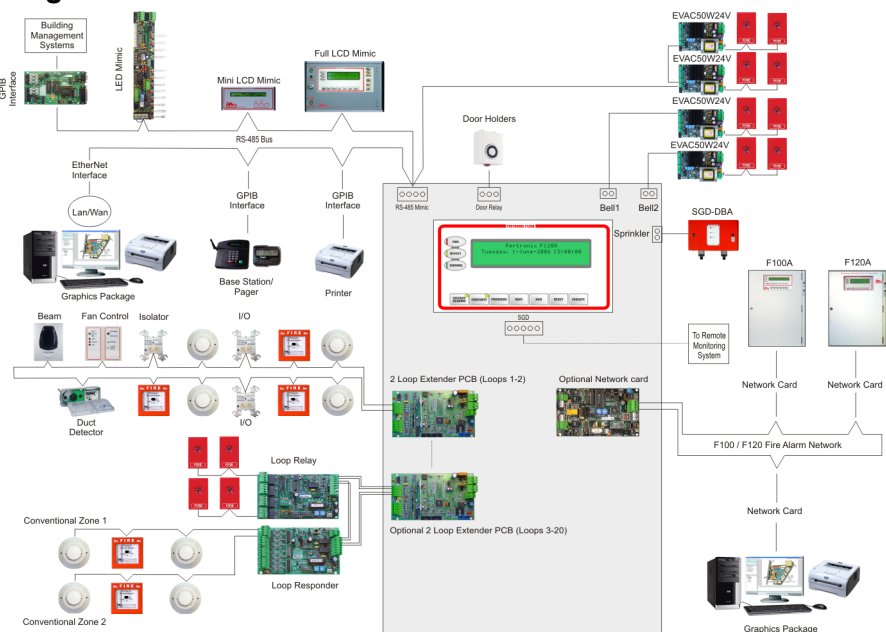
The **F120A** complies with New Zealand Standard NZS4512:2003 / NZS 4512:2010 and with the requirements of the New Zealand Building Code.



Features:

- ▶ Large 4 x 40 character back-lit LCD Display
- ▶ 31 character programmable text message per Address, Zone, and various panel inputs
- ▶ Precise identification of Fire Location with user-definable English language text description
- ▶ Programmable detector Fire sensitivity settings and Pre-Alarm warning
- ▶ Up to 256 physical zones Indication
- ▶ 2 to 20 Loops provides up to 159 Detectors and 99 Modules per loop – a maximum 3180 Detectors plus 1980 Modules
- ▶ Pertronic network supports up to 99 nodes
- ▶ Supports up to 64 outputs to the network and 128 inputs from the network.
- ▶ 24-Hour 'System Test' of all Detectors and Battery
- ▶ Loop input devices include Detectors, Call-Points, Loop Responders, Relay Responders and Modules
- ▶ Loop relays can be configured as Sounder, Auxiliary, and Door Holder relays, etc
- ▶ User Isolation of zones and individual detectors
- ▶ Historical Event Log (999 Events)
- ▶ Configuration data may be entered through the panel menu controls or via the PC Configuration Utility
- ▶ Comprehensive front panel Menu controls

System Diagram:



F120A Specification:

- ▶ **Zone Indication:** Up to 256 physical zones.
- ▶ **Loop Characteristics:** Length (max) 1km, 1mm² cable. Loop Resistance (max): 38Ω.
- ▶ **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:** 999 events.
- ▶ **Mimic Connections:** up to 32 devices: LCD Mimics, LED Mimics, Amplifiers or Network Cards, may be connected to the RS485 port.
- ▶ **LCD Mimics:** supports up to 8 Full LCD or 29 Mini LCD Mimics with full polled controls, the balance being unpolled mimics without monitoring.
- ▶ **LED Mimics:** supports up to 8 monitored LED Mimics, each capable of driving 512 LEDs plus 'Silence Alarms' (BCO) and 'Evacuate' controls.
- ▶ **Network System:** supports a Network of up to 99 nodes. each Network Card is connected to an **F120A** or **F100A** panel via the serial RS-485 port.
- ▶ **Fire Relay:** 1 changeover contact rated 2A @ 24Vdc. normally de-energised.
- ▶ **Defect Relay:** 1 changeover contact, rated 2A @ 24Vdc. normally energised.
- ▶ **Sounder:** 2 circuits (BELL1 and BELL2), fused at 5A each. Optionally monitored; Configurable.
- ▶ **General Purpose (GP):** 2 sets of change-over contacts rated 2A @ 24Vdc. Not monitored; Configurable.
- ▶ **Door Holder Relay:** 1 single change-over contact, rated 5A @ 24Vdc. Not monitored; Configurable.
- ▶ **Door Holder isolate switch.**
- ▶ **AUXM Relay:** 1 voltage-reversal output, fused at 300mA. Monitored; Configurable.
- ▶ **AUX Relay:** 1 change-over contact, rated 1.25A @ 24Vdc resistive. Not monitored; Configurable.
- ▶ **AUX Isolate switch** isolates all AUX outputs.
- ▶ **Open-Drain FETs:** 8 configurable outputs - switch to 0V.
- ▶ **Other Functions:**
 - Configurable 'Sprinkler' input: monitored, non-latching;
 - Sprinkler operated LED.
 - General purpose Brigade interface: 'Fire', 'Defect', 'Isolate', 'Test'. eg SGD
 - Front panel 'Silence Alarms' (BCO) and 'Evacuation' key-switches.
 - Walk Test.
 - Door microswitch, Door Interlock and External Defect loops.
- ▶ **Protocol:** Intelligent System Sensor protocol:
- ▶ **System Test:** automatic 24-Hour test of all Detectors and Battery or can be individually tested on demand, via the menu.
- ▶ **Isolation:** all devices, detectors and modules (eg. Call-Points) can be individually isolated. Zones, Groups, Logic Gates and Timers may also be individually isolated.
- ▶ **Fan Control Block:** software supports control of Fan relays and Duct Detector over-ride.
- ▶ **Brigade Latch:** non-latching detectors latch if and when the 'Alarm' relay operates.
- ▶ **Programmable 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), Sensitivity selection and Zone assignment.
- ▶ **Configurable:** detectors and modules can be directly configured to any system output via 'Alarm', 'Pre-Alarm' or 'Defect'.
- ▶ **Configurable Software Groups:** 200 groups, each with 15 outputs which can be configured to any system output.
- ▶ **Configurable Zones:** 256 zones each with 8 outputs, which can activate any system output.
 - each Zone has Timer with outputs on 'Start' and 'Stop' period.
 - automatic Timer override on second detector activation.
- ▶ **System Events:** 32 events can be configured to control any system output: eg. Common Fire, Defect, Pre-Alarm, etc.
- ▶ **Logic Block Functions:** 200 logic functions can be configured to be activated by any input on the system and can be interconnected to perform complex logic functions.
- ▶ **Time of Day Logic Input:** allows an event to be configured on a daily basis with independent Start Time and Duration.
- ▶ **Configurable Timers:** 50 independent Timers, each with a 1 second to 12 hour configurable time period.
 - 3 Timer types are available - 'One Shot', 'Continuous' and 'Latching'.
- ▶ **Test Mode:** individual function for detectors and modules.
- ▶ **On-Site Configurability:** from front panel menu controls or via the sophisticated graphical configuration and monitoring PC software package.
- ▶ **Remote Monitoring:**
- ▶ **Status Reporting:** available 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.
- ▶ **Daylight Saving:** automatic Clock adjustment for Daylight Saving.
- ▶ **Day/Night Mode:** allows for different detector sensitivity levels during day or night operation
- ▶ **Defect Alerts:** may be filtered and delayed to reduce nuisance alerts
- ▶ **Alarm Acknowledgement Facility (AAF):** implements a delay from a local Non-Brigade Calling 'Alarm' before calling the Brigade.

Product Codes:

Code	Description	NZFPA Listing No
F120AR-3	F120 RS 900mm 2 Loop Panel - NZS4512:2003	PI/123
F120AF-3	F120 FS 900mm 2 Loop AA Panel - NZS4512:2003	PI/123
F120AFDC-3	F120A FS 2 Loop Double Cab 4A PSU :2003	PI/123
F120ARDC-3	F120A RS 2 Loop Double Cab 4A PSU :2003	PI/123
F120A-28UNZ	F120 Panel 2 Loop in 28U Rack Cab no PSU	PI/123
F120A-40UNZ	F120 Panel 2 Loop in 40U Rack Cab (White), no PSU	PI/123
F120P2LMB	F120A 2-Loop Driver 2 Mini Board	PI/123

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