# PERTRONIC INDUSTRIES LTD

# FIREBITS

## December 2007

## Pertronic F120 Panels in Latest Ryman Complex



Ryman Healthcare's largest retirement complex to date opened recently in the Auckland suburb of Ellerslie. The first stage of the Edmund Hillary Retirement Village incorporates serviced and independent apartments, a rest home with hospital wing, and free standing villas. The second stage, currently under construction to the left of the photo, adds on a dementia unit and additional apartments.

Two Pertronic F120 analogue addressable fire alarm panels are networked together to cover this extensive site, with LCD mini mimics placed at work stations to provide staff with information, in plain English text, on the type and location of all alarm events. Pertronic Apartment Modules are installed in the apartments and serve a dual purpose. The modules provide residents with a hush button to mute the sounders for their apartment (for up to five minutes) if the alarm has been activated by smoke detectors within that apartment. The modules also allow this local alarm system to be included in the site wide evacuation system, eliminating the need for - and cost of - separate evac systems for local and global alarm tones/messages. For safety reasons a global evacuation overrides all local apartment hush button activations.

**PERTRONIC**
**1982 - 2007**

## 25 years of alarming New Zealand - for all the right reasons!

# *Seasons Greetings !*

It's hard to believe that 12 months have passed since we last printed this message, but another busy year at Pertronic Industries is drawing to a close. From everyone in the company, a big thank you to our friends and colleagues in the fire protection community for your ongoing support during the year. It has again been a pleasure to work with people and companies in all sectors of the fire protection community, and we look forward to continuing these relationships in 2008. Please accept our warmest wishes for you and your families to have an enjoyable and safe Christmas and New Year.

## Christmas - New Year Business Hours

Pertronic Industries' Wellington and Auckland offices will close for the Christmas break on Friday 21st December and reopen on Monday 7th January 2008, although some warehouse operations will resume with reduced staffing on Thursday 3rd January. A limited emergency supply service will be available between 24th December and 2nd January from our Wellington office, although fire alarm servicing companies are encouraged to order stocks of spare parts in advance.

## Mini Mimics Network Capable

Pertronic LCD Mini Mimics are popular units for installation at nurse call stations, hotel and office reception areas, etc, to provide staff with important information on the status of the fire alarm system. The Mini Mimics were originally designed for direct connection to Pertronic F100 or F120 analogue addressable fire alarm panels, to display events from the host panel only. With networked fire alarm systems becoming more common, the Mini Mimic's software has now been modified to allow these units to also function on Pertronic Network installations, displaying information from all panels on the Network. The Mini Mimics are connected to a Pertronic Network through a NDU Network Card, in the same manner as a Network Display Unit. An updated manual on the LCD Mini Mimic is available from the Pertronic web site.

Some Mini Mimic models connected directly to F100 or F120 panels support the use of a *Local Alarm Reset* button, or a *Next* button to scroll the display onto other events. The *Local Alarm Reset* function is not available on networked Mini Mimics, although the *Next* function is. Mini Mimic model F100AMM-3 is the correct unit to use for network applications, and the updated manual details the different addressing requirements for this Mini Mimic when connected to a network. The layout of the two line text display also differs slightly as some additional network/panel data has to be incorporated into the display.

## Connecting Clean Contact Devices to NZS4512:2003 Systems

To help reduce false alarms, NZS4512:2003 does not allow an open or short circuit to generate an alarm call (clause 204.9). Conventional heat detectors and manual call points were modified to meet this requirement. But interfacing clean contact devices, for example Vesda systems, onto conventional circuits has been difficult to achieve in a compliant manner, particularly if multiple devices are required on the same circuit.
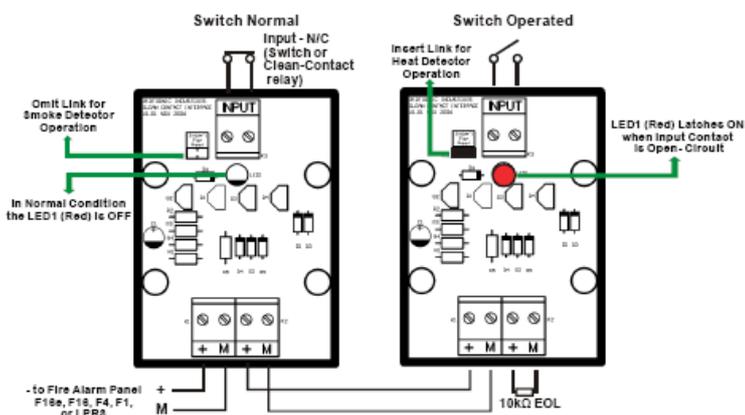


To simplify this interfacing, Pertronic Industries has developed the **Clean Contact Interface Board**. The board is compatible with all Pertronic conventional panels and loop responder boards, and a link on the board determines whether the clean contact input looks like a heat detector or smoke detector activation to the fire alarm panel. The board should ideally be placed inside, or hard against, the other device to protect the connection between the two units. Product code is CCCI, and the data sheet is available on the Pertronic web site.

# New Sensitivity Readers for System Sensor's Conventional Detectors

**FIREBITS** June 2007 highlighted the release of redesigned detectors from System Sensor, for conventional and analogue addressable models. The redesign is to both the external appearance of the detectors and the detection chamber itself. With the new conventional photoelectric detectors, an important feature has been added - a hand-held **Sensitivity Reader** can now be used to test the sensitivity, or obscuration level, of the detection chamber. The new photoelectric detectors transmit an obscuration signal every ten seconds. After switching the Sensitivity Reader on and getting a READY message, it is placed against a dimple on the detector's outer case (positioned between the two LED's, as shown below), and beeps when the signal has been received. The reader displays the detection chamber's obscuration level as a percentage per foot, and then displays one of three words - CLEAN, SERVICE, or REPLACE.

After recording the result, the technician can then move onto the next detector. The Sensitivity Reader is powered by two AA batteries and can be easily mounted onto an extension pole. It considerably simplifies the testing of conventional detectors over previous methods, and makes compliance with the smoke detector testing requirements of NZS4512 section 603.3 (b) much easier to achieve.



We all know that many false alarms are generated by dirty or dusty conventional detectors. With this new detector model, the Sensitivity Reader will quickly help the service technician identify, in the future, which detectors are dirty and prone to false alarming, to allow preventative detector maintenance.

The Sensitivity Readers are being released at a subsidised price to help ensure they become widely used. Please contact Pertronic Industries' Wellington or Auckland office for purchasing details.

# New Detector Order Codes

The redesigned System Sensor detectors have been allocated different product codes to simplify ordering the new models. Old style detectors are still available under the old codes, to ensure that installations started earlier this year have matching detector heads. There is no price difference between new and old models.

The new codes are:

| Code | Description |
|------|-------------|
| 2151BPI | Conventional Photoelectric |
| 2251BPI | Analogue Addressable Photoelectric |
| 2251TMBPI | Acclimate Multi Criteria (Analogue Addressable) |
| 5251BPI | Analogue Addressable Heat Detector - fixed temperature |
| 5251RBPI | Analogue Addressable Heat Detector - rate of rise & fixed temperature |

# Change To System Sensor PA400 Sounders

System Sensor have advised that the PA400 sounder - used in many installations under earlier Standards - has been discontinued. The replacement product produces a different sound, meaning it cannot be used in existing PA400 installations as a replacement or for extensions to the fire alarm system (NZS4512 requires the same sound throughout a building).

As a result, Pertronic Industries has developed a modified version of the Pertronic PS1 sounder which produces the equivalent PA400 tone. Product code for this replacement sounder is PS1400, and is available with red or white covers, as for the other PS1 sounder and PSS1 speaker products produced by the company.

# False Alarms From Unused Panel Circuits

A contractor recently experienced a false alarm call from a loose terminal on an unused circuit in a conventional fire alarm panel designed to NZS4512:1997. As part of good installation practice, it is recommended that unused circuits on any conventional panels (with some basic programming capability) are set to be non-brigade calling and non-bell ringing, regardless of which Standard the panels comply to.

# New F100 Programming Software Available

An updated version of the Pertronic F100 Programming Utilities, v3.20, is being released and has some new features that contractors have requested.  This version of F100 Utilities is compatible with all firmware versions in F100 'AVR' panels (ie panels with a RS232 serial port on the masterboard). Once the laptop is connected and Online to any F100 AVR panel, the new Utilities package automatically identifies the panel's firmware version and opens the correct programming software in the laptop.  Or, if developing a configuration while Offline from the panel, the Utilities has a drop-down box to select the panel firmware (rather than utilities software).  Other features of version 3.20 Utilities include:

- 'Copy' and 'Paste' functions for device details
- 'Print' and 'Open in Excel' functions for all report options
- A 'Configuration Summary' report is added
- Updated Help files for all new functions
- Individual log downloads for Fire, Defect, Isolate and System Events lists
- Windows Vista compatible

Contractors can download v3.20 Utilities from the password protected section of the Pertronic web site.

A version of F120 Programming Utilities which is Windows Vista compatible will be released early in 2008.

Ryman Healthcare have also opened a new complex in Palmerston North. The first stage of the Julia Wallace Retirement Village is protected by a F100 analogue addressable panel, with Apartment Modules interfaced with analogue addressable smoke detectors in the serviced apartments.  The panel's intelligence is also used to supervise a staged zonal evacuation system.

Beam detectors are used in the atrium for HVAC shutdown, and there is a high level interface to the nurse call system.  The village's  second stage will be covered by another F100 panel, networked to the first.

A new apartment development has opened on Napier's foreshore. Appropriately named 'The Waterfront,' the 52 apartment complex is protected by a Pertronic F100 analogue addressable panel, with Apartment Modules interfaced with conventional smoke detectors in this case.  The panel is interfaced to the security system  to ensure full egress in alarm conditions.