PERTRONIC INDUSTRIES LTD

FIREBITS

December 2008

Fire Protection Upgrades For Auckland Landmarks

Constructed between 1909-1911, the Auckland Town Hall is a Registered Historic Building and has seen several fire protection systems during its life to date, the most recent being a new Pertronic F120A analogue addressable system. The installation includes 22 duct detectors, three LED mimic displays and a LCD mimic display in the security office. Smoke detectors in the Great Hall and Concert Chamber can be isolated during performances by "Event Mode" switches, also in the security office.

Auckland's Aotea Centre, adjacent to the Town Hall, has also been on the receiving end of a recent fire protection upgrade, with a Pertronic F120A analogue addressable system installed throughout this complex as well.

System Sensor's Acclimate multi-criteria detectors are used in the fly tower and gallery area above the stage, with Pertronic "virtual detector" programming used to treat each Pinnacle as two detectors - a multi-criteria smoke detector and separate heat detector. An "Event Mode" switch isolates the smoke detector inputs during performances, but keeps the heat detector component active. These detectors are in turn programmed, through a "double knock" system to operate the drencher system for the main curtain and the fire dampers in the orchestra pit.

PERTRONIC   SYSTEM SENSOR®   VESDA   FiRETRONiX

Seasons Greetings !

It's hard to believe that 12 months has 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 industry, and we look forward to continuing these relationships in 2009. Please accept our warmest wishes for you and your families to have an enjoyable and safe Christmas and New Year. It looks as if 2009 will hold some special challenges for businesses in general and we look forward to working through those challenges with you.

Christmas - New Year Business Hours

Pertronic Industries' Lower Hutt and Auckland offices will close for the Christmas break on Tuesday 23rd December and reopen on Monday 5th January 2009. A limited emergency supply service will be available between these dates from our Lower Hutt office, although fire alarm servicing companies are encouraged to order stocks of spare parts in advance.

New Design For Pertronic Manual Call Points

Pertronic Industries' analogue addressable and conventional indicating manual call points have been redesigned to incorporate a new switch. The new switch is a square push-in design with the LED built into it. The switch surface illuminates red when the switch is pressed in to generate an alarm, and this switch LED also acts as the polling LED in the analogue version.

An important feature of the new design is the addition of a "key slot" to the underside of the front cover plate. This allows the insertion of a special plastic key, or paddle (supplied by Pertronic), to operate and reset the switch for alarm testing - no more need to remove the cover plate and Snapglaze window when performing commissioning tests, monthly tests or annual surveys.

The compact design of the new switch means a flush-mounted manual call point can be installed into a single flush box and still have room for a fire-rated flush box pad, when one is needed.

The analogue version also has a built-in short circuit isolator, to provide another option for short circuit - or zone - isolation on the data loop. A link is provided to bypass the isolator, if necessary, to simplify loop continuity testing during installation.

The new manual call points will be progressively introduced in January as stocks of the existing models run out, and will be the same price as the existing models.

Product codes are AAMCPT for the Analogue MCP and CPPIN-3T for the Conventional Indicating MCP.

A New Voice In Tech Support

Following Geoff Tustin's transfer to the Pertronic China office, Shane Rempala has joined John Fuge in the Customer Technical Support office. Shane joined the company eight years ago as an R&D engineer and was closely involved with the development of Pertronic Amplifiers and Apartment Modules, the new Isolate Timer Modules and Manual Call Points, as well as providing support on numerous other projects. This background and experience gives Shane valuable knowledge for his new role, and highlights the importance Pertronic Industries places on providing quality technical support for our customers.

Shane is available on extension 807 and John Fuge is on extension 833 in the Lower Hutt offices.

Changes To Type 5 Systems

The Department of Building and Housing recently published changes to Type 5 systems that took effect from 1 November 2008. The changes include an expansion to the building purpose groups that Type 5 systems now cover, and a clearer definition of a Type 5 system's operating requirements is provided. An important addition is the mandatory requirement for a "hush" switch in each fire cell, located at an accessible level, to mute the local alarm tone for a maximum of two minutes.

The updated documents - Acceptable Solutions F7/AS1 and Clauses C1, C2, C3, C4 - can be downloaded from the DBH web site at no charge - dbh.govt.nz/publications.

The **Pertronic Apartment Module**, introduced in 2006, meets all the new and existing requirements for Type 5 systems. It reduces the complexity of a Type 5 installation by combining all of the components required into one compact product, for installation on to Pertronic analogue addressable systems:

- A single zone (responder-type) input circuit supports up to 15 conventional smoke detectors and an unlimited number of indicating heat detectors. The Apartment Module differentiates between a Pertronic indicating heat detector and a System Sensor smoke detector activation, so the fire panel can initiate different responses for local or global alarms.
- Analogue addressable smoke detectors can also be used (and are preferred, for the intelligent options they provide), with panel programming selecting the local or global alarm options as needed.
- An addressable monitored relay is included, capable of switching the 100v audio signal from the amplifier to generate a local alarm tone or global evacuation tone (with speech) into the apartment. That is, only one evacuation system is needed, not two separate systems for local and global alarms.
- A short-circuit zone isolator relay is built into the Apartment Module.
- The Apartment Module supports an inbuilt hush switch. Additional remote hush switches can also be connected throughout the apartment back to the module..
- The hush switch can only silence a local alarm, not a global evacuation. While the hush period can be selected from 30 seconds up to 10 minutes, the maximum delay for F7 compliance is now two minutes.

Improved Aesthetics For Type 5 Systems

A Type 5 installation usually means there are at least three fire alarm devices in each room - a smoke detector, a heat detector and an evacuation speaker. They are different shapes and colours, and do not provide a very appealing look in medium to high quality apartments - or any apartment, for that matter. Some installations may also have an additional "local alarm" sounder in each room.

System Sensor's **Acclimate** multi-criteria detectors can be installed on Pertronic analogue addressable systems in a manner that allows the device to be both the smoke detector for local alarm activation and the heat detector for global alarm operation (and generate the alarm call to the Fire Service). The detectors can also be mounted on a "speaker base" - a detector base with a built-in evacuation speaker. This means only one fire alarm device in each room as shown below (subject to heat detector spacing requirements under NZS4512), not three. If you lived in an apartment, which would you prefer?

Acclimate with speaker base

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Speaker, smoke detector & heat detector

The "Thin Blue Line" Receive Improved Facilities

Several Police Stations throughout the country have recently been upgraded, extended or new ones built. In Gisborne, a new Police Station was built behind the facade of the old Farmers Trading building, with the design and layout based around a new model for Police Stations nationally. A Pertronic F100A analogue addressable system was installed, with the panel programming configured to switch an Alert tone on throughout the complex when any smoke detector initially goes into alarm.

After four minutes, if the smoke detector alarm has not been cleared, the tone changes to full evacuation.

The evacuation amplifier and speakers also double as an emergency PA system for the building, and a Pertronic Fan Control Unit, compliant to AS1668, supervises the interface to the building's air conditioning system.

In South Auckland, stage one of new headquarters for the Counties Manukau Police region was built approximately four years ago, with a Pertronic F100A panel installed at that time. The recent completion of stage two (a second wing behind the original building) effectively doubles the size of the complex. Both stages incorporate cell blocks, with Vesda detectors installed to sample the return air ducts from each cell.