MX1 LOOP CARD V2.07 FIRMWARE RELEASE

V2.07 firmware has been released for the MX Loop Card that is used to add more addressable loops to the VIGILANT MX1 fire alarm system.

MX Loop Card V2.07 firmware contains a fix to improve conformance with NZS4512.

Compatibility

V2.07 firmware can be installed in any *MX* Loop Card.
Any *MX* Loop Cards used with *MX*1 firmware V1.40 (or higher) must have *MX* Loop Card firmware V2.02 (or higher). *MX* Loop Cards with earlier firmware must be updated to the latest version as per the Upgrade Procedure below.

Upgrade Procedure

The latest *MX* Loop Card firmware is available from the ***Fireplace*** web site – https://www.vigilant-fire.com.au. Johnson Controls employees should log on then click on the Downloads link then select ***MX1*(Au).** NZ Distributors and Resellers should go to the public Resources (NZ) area of the ***Fireplace***.

Alternatively obtain the files via a Johnson Controls representative.

Details for downloading the new firmware into the *MX* Loop Card are covered in the *MX1* Service Manual (LT0440 for Australia, LT0366 for New Zealand).

Details of Previous Releases

V2.07 (current release)

Contains a fix to improve NZS4512 conformance to open circuit tests.

V2.06

This release was never made available for updating existing cards. The changes related to production of new cards only.

V2.05

MX Loop Card V2.05 firmware was released to production in April 2015. It contains a fix to prevent transient *MX* loop open circuit faults that may be seen on the *MX1* soon after power-up.

V2.04

MX Loop Card V2.04 firmware was released to production in July 2014. It improved noise immunity – particularly that caused by interference from nearby 100V loudspeaker cabling. Typical symptoms are spurious events being generated or *MX* devices going scan fail.

V2.03

MX Loop Card V2.03 firmware was released to production in August 2013. It fixed an issue with the *MX* loop communication when long lengths of SWA (steel wire armoured) cabling are used. Typical symptoms are that some *MX* devices go scan fail, or communicate intermittently.

V2.02

MX Loop Card V2.02 firmware was released to production in November 2011. It fixed an issue in the loop short circuit isolator operation whereby a relay could chatter repeatedly.

V2.00 & V2.01

MX Loop Card V2.00 and V2.01 firmware were early limited-release versions. They had the following new features:

- Support for multiple loop operation with *MX1* V1.40 Controller firmware.
- Built-in short circuit isolator operation on the *MX* loop left and right feeds with *MX* Loop Card Rev 3 (or higher) hardware. The firmware can be used in earlier revision Loop Card hardware, but will not provide the short circuit isolation function.
- Backward compatibility with *MX*1 firmware V1.3x.

Any Loop Cards with V2.00 or V2.01 firmware present must be upgraded to V2.02 (or higher) if used with *MX*1 firmware V1.40 onwards. It is strongly recommended they be upgraded to V2.02 (or higher), even if being used with *MX*1 V1.3x firmware.

V1.06

MX Loop Card V1.06 firmware was released to production early in 2010.

It corrected flaws in the way interrupt messages received from the *MX* loop devices are sent by the *MX* Loop Card to the Controller (*MX1* fire alarm panel). A throttling mechanism exists to prevent the *MX* Controller being overwhelmed by interrupts if lots of *MX* devices/detectors alarm in quick succession.

This throttling mechanism malfunctions in V1.05 and prior versions of the *MX* Loop Card firmware.

Symptoms of the malfunction are not severe – at worst a 5 second delay to alarm on one device. In detail, what can happen is that for the *MX* device which most recently sent an interrupt, future interrupts from that single device may be missed by the *MX1* Controller. Interrupts from all other devices will be seen immediately. Nevertheless, in spite of a missed interrupt, the device will still alarm via the normal poll cycle (5 sec. max, 2.5 sec. average) assuming the alarm condition persists until then. It would be a very unusual alarm condition that did not.

NOTE: *MX* Loop Cards with V1.xx firmware work with only *MX*1 firmware V1.3x. The Loop Card firmware must be upgraded to V2.02 or higher to be used with *MX*1 firmware V1.40 onwards.