PowerSeries – Two-Wire Smoke Detectors

Panels:
PC1555 (Power632), PC5010 (Power832), PC5020 (Power864)

Overview:
Two-wire smoke detectors use PGM2 of the main control panel and therefore do not take up a zone.

Programming two-wire smoke detectors is a three-step process:

- Program the PGM2 for two-wire smoke support
- Wire the two-wire smoke detector
- Remove the jumper J1 or (CON1)

Program Sections:

[009] PGM Output Programming

Step 1 – Program PGM2
In Section [009], program PGM2 as data [04] (two-wire smoke support).

Step 2 – Wiring Two-wire Smoke Detectors
Connect the two-wire smoke detector to Aux+ (+) and PGM2 (-). Connect additional two-wire smoke detectors daisy chained from the previous one. At the last smoke detector, connect a 2.2K-Ohm resistor across the (+) and (-) terminals.

Step 3 – Remove the Jumper J1 (or CON1)
There is a jumper marked J1 or CON1. This must be removed if two-wire smoke detectors are being used. The panel will show a fire trouble if the jumper is not removed.

Note: If J1 or CON1 is not present on the panel, the version of control panel does not support two-wire smoke detectors.

Technical Tips:

1. Do not connect heat detectors to PGM2. They must be connected to a zone input.
2. To reset two-smoke detectors, press [*] [7] [2] (or the RESET function key). The panel will remove power from PGM2 for five (5) seconds.

Quick Test:
Create an alarm on a two-wire smoke detector. Verify the siren activates and the panel reports the two-wire smoke or auxiliary input alarm found in Section [329].