



MN240 – 4-Wire Smoke Detector

The MN240 photoelectric smoke detector uses a unique, patented chamber to detect both 'flash' fires and slow, smoldering fires equally well. The detector detects light reflected within the chamber from smoke particles. It has a reticulated bottom to gather dust and dirt and since it does not use a reflective surface, cleaning isn't necessary. The detector performs a low sensitivity test every 40 seconds to ensure it can properly detect the presence of smoke.

Several variations are available, including models with a built-in 85dB sounder, a built-in heat detector (57°C or 135°F) and Form 'C' auxiliary relay options.

Compatibility (Version Identification):

All models include Form 'A' alarm relay contacts.

MN240	Standard
MN240T	Fixed-temperature sensor
MN240R	Form 'C' auxiliary relay
MN240RT	Form 'C' auxiliary relay and fixed-temperature sensor
MN240S	Built-in sounder
MN240ST	Built-in sounder and fixed-temperature sensor
MN240SR	Form 'C' auxiliary relay and built-in sounder
MN240SRT	Form 'C' auxiliary relay, built-in sounder and built-in fixed temperature sensor

LED, Auxiliary Relay, Sounder Operation:

Alarm Indications

Condition	Alarm LED	Relay(s)	Sounder (if equipped)
No smoke or heat	Pulse every 40 s	Deactivated	Silent
Smoke or heat	ON steady	Activated	Alarm
Automatic self test functioning normally	Pulse every 40 s	Deactivated	Silent
Automatic self test insufficient sensitivity	Pulse every 40 s	Deactivated	Chirp every 40 s
Sensitivity test functioning normally	ON Steady	Activated	Alarm
Sensitivity test insufficient sensitivity	Pulse every 40 s	Deactivated	Silent
No smoke or heat but latched in alarm	ON steady	Activated	Silent

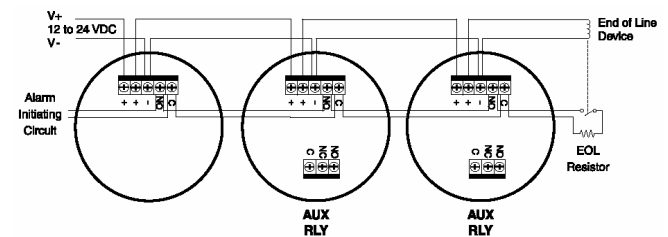
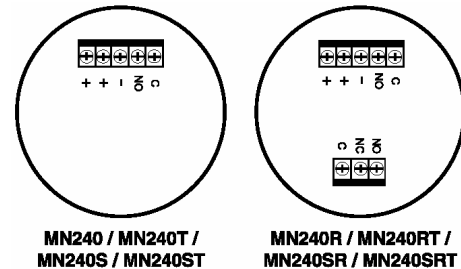
Testing Smoke Detectors:

In addition to the automatic low sensitivity test the detector performs every 40 seconds, the unit can be manually tested. To manually test the detector, perform the following:

- Place a magnet under the raised line on the base of the unit to activate the built-in test reed switch.

The LED should turn ON and the zone on the panel should indicate an alarm condition. The detector will remain latched in alarm until power is removed from the detector.

Wiring:



Troubleshooting:

- During normal operation the LED will flash every 40-50 seconds.
- If the detector 'chirps' every 40-50 seconds the unit has detected it has low sensitivity (the unit cannot reliably detect smoke). Replace the detector.
- It can be difficult to find the correct spot to locate the magnet to activate the built-in reed switch. If a dealer is having a problem, have them move the magnet 1/2 to the left or right and 1/2 inch up and down to find the correct spot.
- If the dealer cannot reset the smoke detector, make sure it is wired to the correct PGM output (one that supports the correct amount of current) and ensure the PGM output is programmed as option [03] – Sensor Reset.
- Smoke not able to be reset: make sure that the smoke is drawing power from the PGM and Aux+, with the PGM programmed as a sensor reset.
- If the zone does not operate properly, make sure a 5.6K resistor is connected at the end of the loop.