

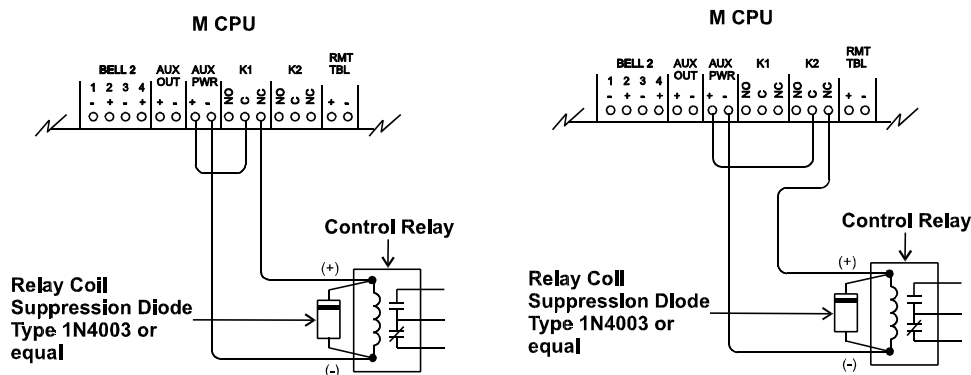
# Product Support Bulletin

## Monaco M Panels Relay Suppression Diode Installation

Monaco's M-1 and M-2 Integrated Radio Transceiver and Fire Alarm Control Panels can support many control operations including external relays. If an external relay is powered by the Aux power of the M Panel, we recommend that a suppression diode be placed across the coil of the relay. The relay coil suppression diode will prevent the high energy pulse that is generated when the coil of a relay is de-energized from being fed back into the M Panel. Failure to suppress the high energy pulse may result in damage to the M Panel.

Shown below are two examples of external relays controlled via K1 or K2 of the M Panel. The relay coil suppression diode is installed in the opposite polarity of the voltage necessary to activate the relay. This is because the high energy pulse created from the coil de-energizing is in the opposite polarity of the supply voltage to the coil. The relay coil suppression diode will absorb and dissipate the energy, preventing the energy pulse from being applied onto the M circuit.

The relay coil suppression diode must be placed next to the external relay coil and be type 1N4003 or equivalent.



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