

## Limited Warranty

DSC warrants that for a period of one year from the date of purchase, the product shall be free of defects in material and workmanship under normal use and that in fulfillment of any breach of such warranty, DSC shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in materials and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of DSC such as, lightning, excessive voltage, mechanical shock, water damage or damage arising out of abuse, alteration or improper application of the product.

The foregoing warranty shall apply only to the original buyer, and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of DSC. This warranty contains the entire warranty. DSC neither assumes, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor assume for it any other warranty or liability concerning this product.

In no event shall DSC be liable for any direct, indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

### *Important!*

**DSC recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to but not limited to criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.**



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# INSTALLATION INSTRUCTIONS

## AML-770 Loop Isolator



The AML-770 loop isolator provides short circuit isolation for devices on an AML loop. In the event of a short circuit, the loop isolator will open the positive side of the loop, isolating all detectors connected between it and the next AML-770 loop isolator. When the short circuit condition is removed, the isolator will automatically return to normal operation. A red LED on the isolator flashes at 10 second intervals to indicate normal operation (no short). During a shorted condition, the LED stays on (not flashing) until the short is removed.

### SPECIFICATIONS

- Voltage...11 to 27Vdc (12 or 24Vdc Nom)
- Current...Normal Mode - 300µA  
Isolation Mode - 10mA
- Short Circuit Detection  
...2.0 to 3.0Vdc (2.5Vdc Nom)
- Current Capacity...1.5A (MAX)
- Temp ...0°-50°C (32° - 122°F)
- Humidity ... 0 to 95% RH, non-condensing

### Models

- AML-770A - ULC ver.
- AML-770B - UL ver.
- AML-770C - Intl ver.

### Compatible Control Panels

- PC4010/4020
- PC4010CF/4020CF
- P-8-64/P-16-128

### Class A/Style 7 Operation

In Class A/Style 7 configuration, each detector is connected between two AML-770 loop isolators. If the detector or wiring between two loop isolators short circuits, terminal 3 (+) on the preceding isolator and terminal 1(+) on the following isolator will open, isolating the detector and wiring. Terminal 1(+) on the preceding isolator and terminal 3(+) on the following isolator are still operational, supplying +12/24 Vdc to the detectors before and after the shorted wiring.

### Class A/Style 6 Operation

In Class A/Style 6 configuration, all detectors and wiring connected between two AML-770 loop isolators are isolated in the event of a short circuit condition. If any detector or wiring between two loop isolators short circuits, terminal 3 (+) on the preceding isolator and terminal 1(+) on the following isolator will open, isolating the detectors and wiring. Terminal 1(+) on the preceding isolator and terminal 3(+) on the following isolator are still operational, supplying +12/24 Vdc to the detectors before and after the shorted wiring. A maximum of 50 detectors may be connected between two AM-770 loop isolators.

### Class B/Style 4 Operation

In Class B/Style 4 configuration, one AML-770 loop isolator is used on each detector branch. A short circuit condition on one branch will isolate that branch, leaving the remaining branches in operation. A maximum of 50 detectors may be connected to each branch.

# AML-770 LOOP SOLATOR

## INSTALLATION

The AML-770 loop isolator mounts in a standard 2 gang electrical junction box, 4 inch junction box or an AML-900 surface mounted box.

Refer to the accompanying illustrations

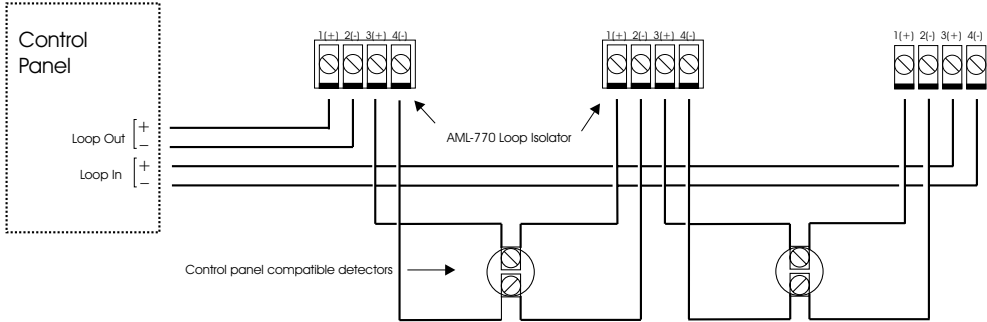
1. Wire system as required for Class A/Style 6, Class A/Style 7 or Class B/Style 4 as indicated.

**CAUTION**

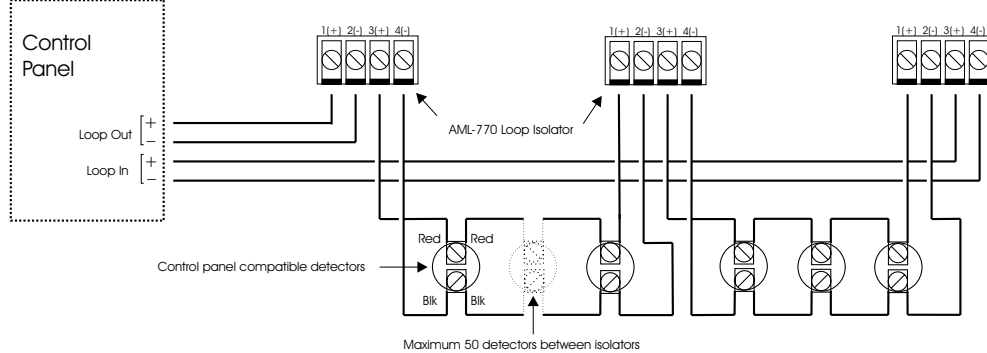
**Do NOT use looped wire under detector terminals. Break wire run to provide supervision of connections.**

2. Route AML loop wiring through the junction box. Connect the 4 wires to the terminals on the PC Board.
3. Position the module on the junction box and secure module to the junction box with the screws provided.
4. Align the cover over the the module using the two screw holes as a guide. Secure cover to module with the screws provided
5. Perform system test to verify correct operation.

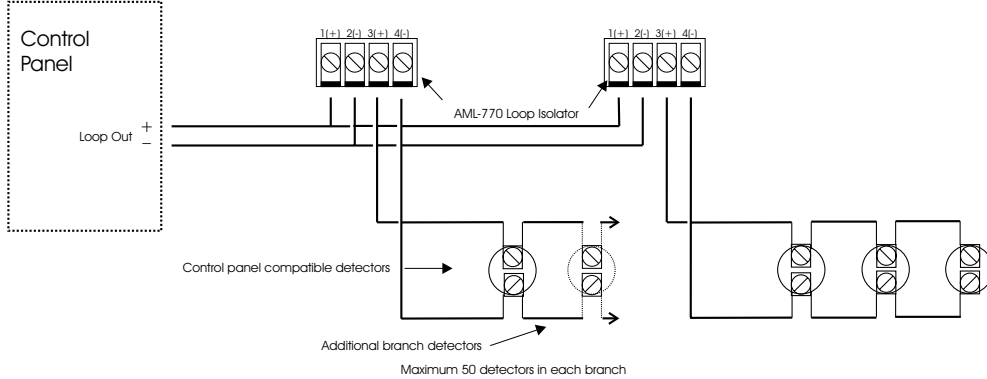
Typical Class A/Style 7 wiring



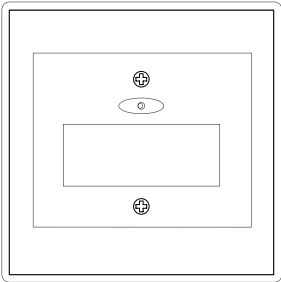
Typical Class A/Style 6 wiring



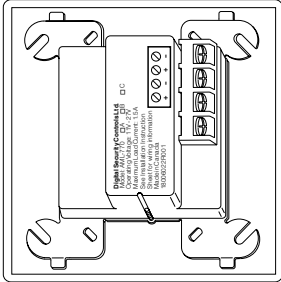
Typical Class B/Style 4 wiring



AML-770 Front View



AML-770 Rear View



AML-900 Box

Support Post

Cable access

Ceiling/Wall-mount holes

Mounting Post

