

Installation Instructions for 8730 Test Switch Module

INTRODUCTION

The FARADAY 8730 Test Switch Module is a key activated momentary switch for use with intelligent duct detectors. It is used in conjunction with an 8704 monitoring module with relay, whose usage is set to TEST. When the monitor module senses the 8730 switch closure, it will cause its associated intelligent duct detector to go into alarm. This alarm condition will cause all logic associated with the duct detector to activate. The 8730 is mounted on a switch plate and can be installed in a single gang box.

Remove all power from the system until the installation is complete and ready for testing.

All work of any kind shall be performed to meet the requirements of all local and national codes and/or standards required by the authority having jurisdiction.

WIRING INSTRUCTIONS

Refer to the wiring diagram in Figure 2 to wire the addressable interface module.

Note: The recommended wire size is as follows:
18 AWG minimum
14 AWG maximum

POWER LIMITED WIRING FOR THE 8730 TEST SWITCH MODULE

In compliance with NFPA 70—National Electrical Code, all power limited fire protective signaling conductors must be separated by a minimum of ¼ inch from all of the following items located within an outlet box:

- Electric light
- Power
- Class 1 or non-power limited fire protective signaling conductors

INSTALLATION

1. Remove the module from its protective bag. Mount the 8730 in a user-supplied standard single gang mounting box (1½ in deep is recommended). Refer to Figure 1.
2. Terminate all field wires to the 8730 as required for your application. Refer to the connection diagram shown in Figure 2.
3. Attach the switch frame to the box.
4. Check that jumper JP1 is NOT installed. (JP1 is not used in this application.)
5. Attach the keyswitch connector to its mating plug on the bottom of the circuit board.
6. Insert the face plate and attach the cover plate with the two screws provided.

Note: A yellow and green LED are included in the kit. Do not use them in this application.

PROGRAMMING

1. Use the FARADAY 8720 Programmer to program the 8730 to the desired address.
2. **To operate the 8730 LED by the 8704 module relay contacts:**
In the CIS-4, configure the 8704 module by setting its usage to TEST and assign the detector's address to the 8704. Add a logic function with the intelligent detector that will be tested as the input, and assign the output as the 8704. Refer to Figure 2.

OPERATION

Reset the MPC-6000 or MPC-7000 System until the message set in CIS-4 for SYSTEM NORMAL is displayed on the panel. Insert the key into the manual keyswitch input point on the 8730. Activate the momentary switch by turning the key to the right.



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When the 8730 keyswitch is activated, the supervised switch input of the 8704 is closed. The 8704 activation is received by the fire alarm control panel. The panel then sends a reduced alarm threshold to the detector through the TEST usage of the 8704. This causes the detector to alarm.

When the detector goes into alarm and sends alarm data back to the panel, the panel sends command data to the 8704 to close the relay, which activates the fan controller through the logic function. The panel sends a signal to the intelligent detector, turning on the red LED in both the detector and the 8730, indicating the detector is in alarm.

Reset the system. The MPC-6000 or MPC-7000 System will restore the detector's alarm threshold and the panel will display the message set in CIS-4 for SYSTEM NORMAL.

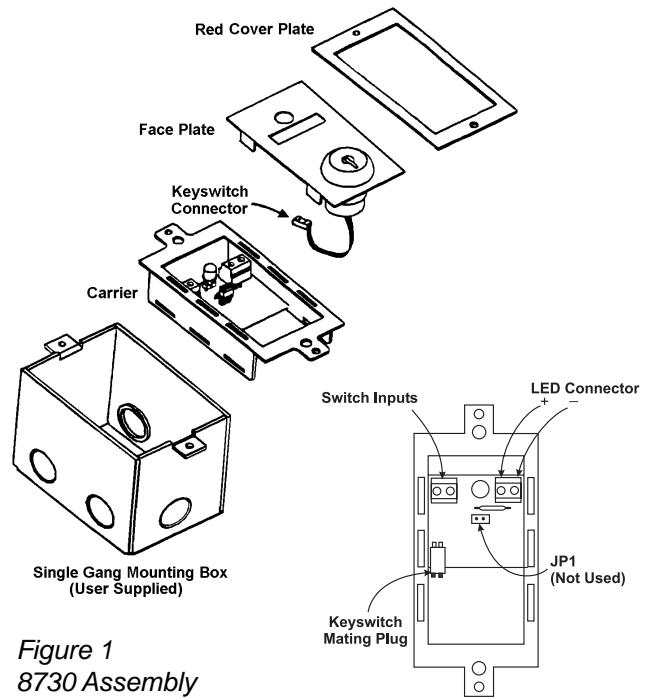
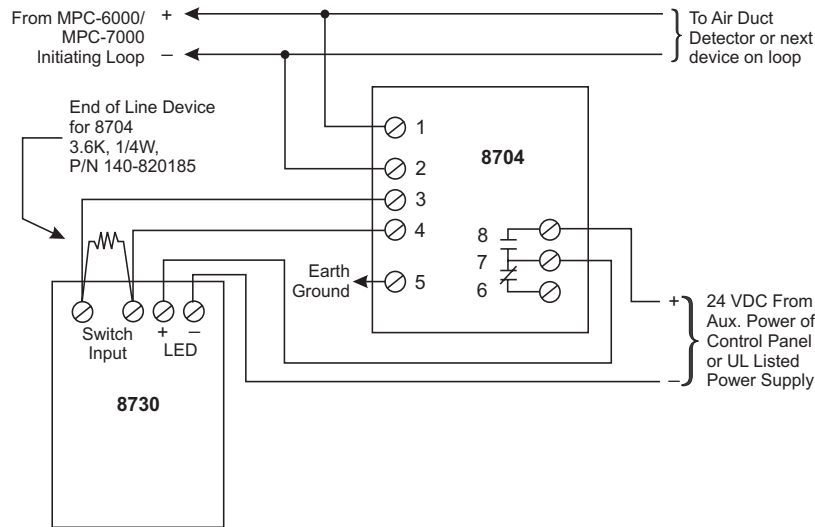


Figure 1
8730 Assembly



CAUTION:

The 8730 switch does not perform all of the required smoke detector tests as specified in NFPA Standard 72. Please refer to the instructions that accompany the smoke detector for the complete test requirements.



NOTES:

1. For use only with Air Ducts **with** an incorporated relay.
2. Refer to the *8704 Installation Instructions*, P/N 315-033300FA, for specific interface module wiring requirements.
3. Refer to the *8840 Installation Instructions*, P/N 315-095659FA, or the *8717 Installation Instructions*, P/N 315-033280FA, for specific duct detector wiring requirements, as applicable.

Figure 2
8730 Interface to MPC-6000/MPC-7000 System
8730 LED operated by the 8704 relay contacts