

### INSTALLATION INSTRUCTIONS FOR FFO-MM4/FFO-MMP FAST RESPONSE CONTACT MONITORING **MODULE**

The information contained in this installation instruction is a quick reference guide. For detailed system information refer to the panel manufacturers installation manual. This instruction is generic and will not address specific programming procedures.

### GENERAL DESCRIPTION:

This instruction applies to the DCP EEPROM Fast Response Contact Monitoring Module which is to be connected to a DCP Signaling Line Circuit (SLC). Typical applications are manual pull stations, water flow devices or any dry contact alarm device, N/C contacts can be monitored.

### MOUNTING REQUIREMENTS:

The FFO-MM4/FFO-MMP Modules have two mounting options. The FFO-MM4/FFO-MMP are shown in Fig. 3, FFO-MM4 will follow Fig. 2 and FFO-MMP will follow Fig. 2A wiring connections .

NOTE: All wiring must conform to local codes, ordinances and regulations.

- 1) Install module wiring in accordance with the job drawings and appropriate wiring diagram (see Fig. 2 & 2A). 2) Secure the module to a U.L. listed electrical box (supplied by installer) as shown in Fig. 3.
- 3) The address must be set on the FFO-MM4 before the cover plate is attached (see Fig. 1A).

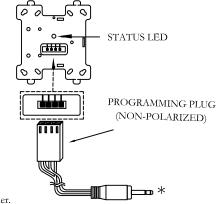
### **CAUTION !!!**

TO ENSURE PROPER OPERATION CONNECT THIS MODULE TO A COMPATIBLE FIRE CONTROL PANEL NLY. REFER TO PANEL INSTRUCTIONS FOR PROPER CONNECTION AND COMPATIBILITY

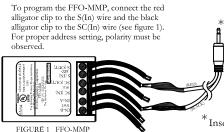
### CAUTION !!!

IF THIS MODULE WILL BE INSTALLED IN AN EXISTING OPERATIONAL SYSTEM, INFORM THE OPERATOR AND LOCAL AUTHORITY THAT THE SYSTEM WILL BE TEMPORARILY OUT OF SERVICE. DISCONNECT POWER TO THE CONTROL PANEL BEFORE INSTALLING THE MODULE.

### ADDRESS PROGRAMMING CONNECTIONS:



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Insert programming jack into TCH-B100 Address Programmer. See TCH-B100 instructions for programming detail.

### Note:

Radio Frequency Interference and Electro-Magnetic Interference are sources of noise that can adversely affect the fire alarm systems installation. Avoid running SLC circuits in the same conduit as power lines. Utilize twisted pair and shielded wire in environments where excessive noise is expected. When installing fire alarm system devices, avoid placing devices or wiring close to potential noise sources such

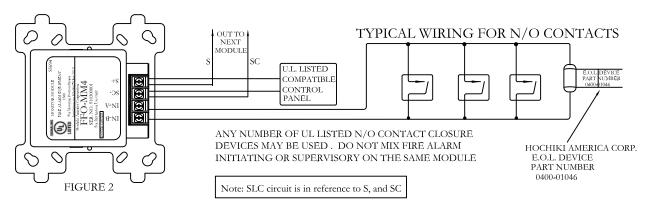
- Transmitters or antennas;
- Ballast lighting;
- Electrical motors;
- Large power transformers;
- Large machines.

NOTE: An average of 6.75mA (communication current) per loop of SLC devices, must be factored into the panel battery backup calculations.

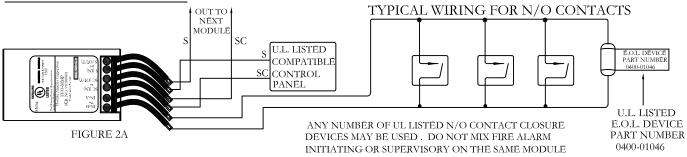
FIGURE 1A

SPECIFICATIONS	
SLC Applied Voltage	Rated Range 25.3 - 39 VDC
SLC Current Consumption	Maximum 660 µA Nominal 550 µA
IDC Circuit Rating	3.2VDC 100 µA
EOL Device for Input	HOCHIKI AMERICA CORP. Part NO. 0400-01046 10KΩ, 1/4w, 1/4inch
Visual Indicator (Status LED) (FFO-MM4 only)	bi-color LED - Green & Red Color & Mode - Selected and Programmed by Control Panel's software
Operating Temperature Range	0°C (32°F) ~ 49°C (120°F)
Storage Temperature Range	-30°C (-22°F) ~ 70°C (158°F)
Maximum Relative Humidity	Up to 90% RH non-condensing
Environment	Indoor dry use only
Dimensions FFO-MM4	4.2"W X 4.7"H X 1.4"D
FFO-MMP	3.0"W X 1.9"H X 0.5"D
Weight FFO-MM4	Approximately 8.0 ounces
FFO-MMP	Approximately 3.1 ounces

### WIRING DIAGRAM FF0-MM4:



### WIRING DIAGRAM FFO-MMP:



CIRCUIT IN-A,-B SHOWN IS SUPERVISED AND INHERENTLY POWER LIMITED.

INITIATING DEVICE CIRCUIT (IDC) - NFPA STYLE B (FOR WIRING LENGTH REFER TO TABLE 1)

NOTE: Only the same size wire from 12 to 22 AWG may be connected terminal block TB1 when more than one conductor is being connected under each terminal.

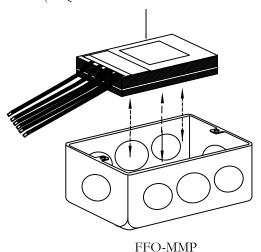
Maximum of 2 conductor per terminal.

TABLE 1: WIRING LIMITATIONS

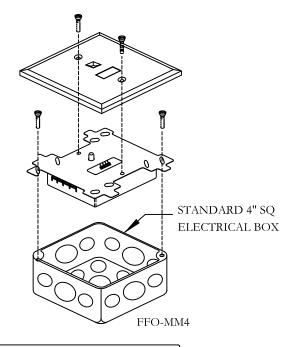
Maximum line impedance between input and initiating devices.  $3.50\Omega$ 

# **MOUNTING OPTION:**

PLACE THE FFO-MMP MODULE INTO ANY SINGLE GANG BACK BOX (REQUIRE AN OUTLET GANG BOX COVER)







## One Year Limited Warranty

Hochiki America (HA) warrants its digital communication modules to be in conformance with it's own plans and specifications and to be free from defects in materials and workmanship under normal use and service for a period of one (1) year from date of delivery. All warranties are void and HA is not obligated to repair or replace equipment which has been repaired by others, abused, improperly installed, altered or otherwise misused or damaged or exposed to conditions outside the products specifications in any way. HA will not be responsible for any dismantling, reassembling or re-installation charges. Please contact HA's Sales department for proper procedure for claims and return of merchandise. This warranty is in lieu of all other warranties expressed or implied.