



INSTALLATION INSTRUCTIONS FOR FFO-ZM CONVENTIONAL ZONE MODULE

The information contained in this installation instruction is to be used as quick reference guide. For detailed system information, refer to the panel's installation manual.

GENERAL DESCRIPTION

This instruction applies to the Conventional Zone Module (FFO-ZM), which is to be connected to a Signal Line Circuit (SLC). The module allows the analog panel to interface and monitor dry contacts such as pull stations and two-wire conventional smoke detectors. The "FFO-ZM" is addressed through the communication line of the system and transmits the status of one zone of devices to the panel. Status conditions are reported as normal, open or alarm. It supervises the external power supply as well as the entire zone of devices.

NOTE: Please reference the 2 wire detector compatibility matrix on the preceding page for a complete list of devices approved for use with the "FFO-ZM"

MOUNTING REQUIREMENTS

The (FFO-ZM) Conventional Zone module is mounted as shown in Figure 2 on page 1 of this instruction.

WIRING

- 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.3).
  - 2) Secure the module to a U.L. listed electrical box (supplied by installer), as shown in Figure 2.

CAUTION !

Install the modules in this instruction in accordance with applicable NFPA standards, local codes, and the authorities having jurisdiction. Failure to follow these instructions may result in failure of the system to operate as intended. Hochiki America is not responsible for modules that have been improperly installed, tested, or maintained.

CAUTION !

To ensure proper operation connect this module to a compatible Fire Control Panel only. Refer to panel instructions for proper connection and compatibility.

CAUTION !

If this module will be installed in an existing operation 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

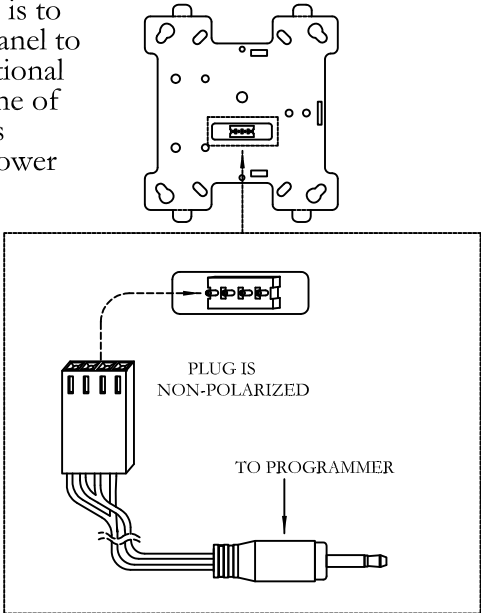


FIGURE 1.  
EXPLODED VIEW OF ADDRESS  
PROGRAMMING PLUG AND CONNECTOR

SPECIFICATIONS

SLC Applied Voltage	Rated Range 25.3 – 39 VDC		
SLC Current Consumption	Maximum	720µA	
	Nominal	670µA	
Auxiliary Applied Voltage	Maximum	27.2VDC	
	Nominal	18.8VDC	
2-Wire Detector Loop Current (Auxiliary Supply)	Standby Detector Load – 1mA Max Alarm (Short across detector line) – 60mA Max		
Maximum Ouput Current (OUT+ /OUT–, IN+ /IN–)	2A @ 30VDC		
EOL Device for OUT+ & OUT–	HOCHIKI AMERICA CORP. EOL Part No. 0400–01820 4.7KΩ, 1/4watt, 1/4inch		
Alarm threshold level	<1.5KΩ		
Wiring OK threshold level	>2.5KΩ & <6KΩ		
Open Circuit threshold level	>10KΩ		
Max. 2-wire Conventional Detector Loop Resistance	50Ω (for both legs)		
Visual Indicator (Status LED)	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) ~ 60°C (140°F) (80% RH @ 60°C)		
Maximum Relative Humidity	10% – 85% RH non-condensing		
Environment	Indoor dry use only		
Dimensions	4.2"W X 4.7"H X .85"D		
Weight	Approximately 3.0 ounces		

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

NOTE: Maximum Ripple Voltage 2VDC P-P

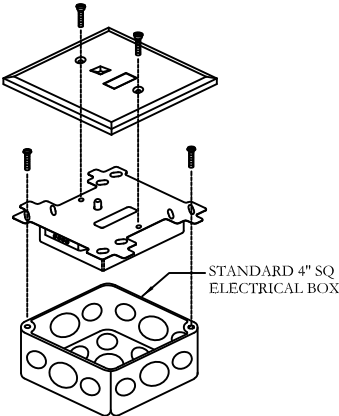
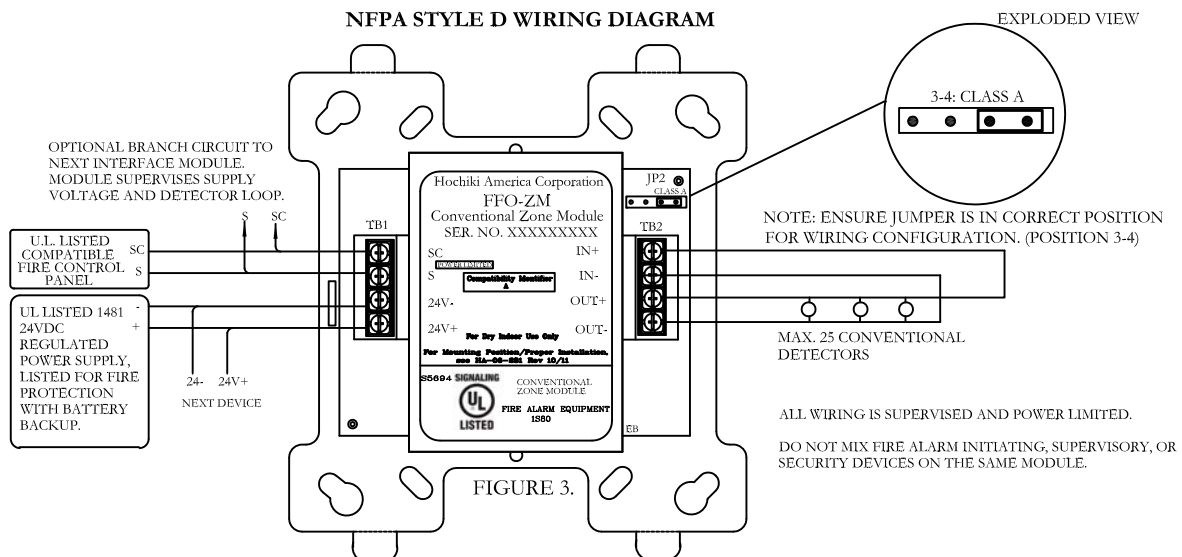


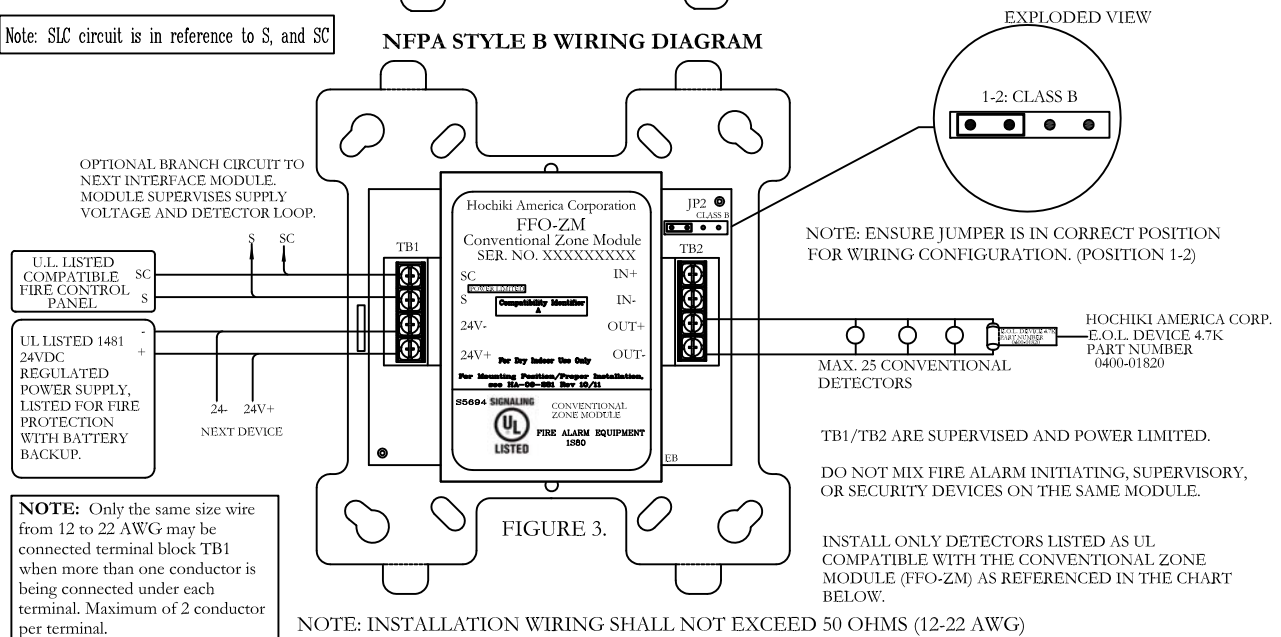
FIGURE 2  
TYPICAL MOUNTING ARRANGEMENT

## NFPA STYLE D WIRING DIAGRAM



Note: SLC circuit is in reference to S, and SC

## NFPA STYLE B WIRING DIAGRAM



### Compatible Two Wire Detectors for use with the FFO-ZM with zone identifier A:

Detector Model	Detector Identifier	Detector Type	Base Model	Base Identifier	Max Detectors
SLK-24F	HD-3	Photoelectric	HSB-224	HB-53	25
SLK-24F	HD-3	Photoelectric	HSB-220	HB-56	25
SIH-24F	HD-3	Ionization	HSB-224	HB-53	25
SIH-24F	HD-3	Ionization	HSB-220	HB-56	25
SLR-24H	HD-3	Photoelectric w/heat	NS4-224, NS6-224	HB-5	25
SLR-24H	HD-3	Photoelectric w/heat	NS4-220, NS6-220	HB-3	25
SLR-24V	HD-3	Photoelectric	NS4-224, NS6-224	HB-5	25
SLR-24V	HD-3	Photoelectric	NS4-220, NS6-220	HB-3	25
SLR-835/-835W	HD-3	Photoelectric (8-35V)	NS4-224, NS6-224 NS4-224W, NS6-224W	HB-5	18
SLR-835/-835W	HD-3	Photoelectric (8-35V)	NS4-220, NS6-220 NS4-220W, NS6-220W	HB-3	18
SLR-835H/-835HW	HD-5	Photoelectric (8-35V) w/thermal	NS4-224, NS6-224 NS4-224W, NS6-224W	HB-5	18
SLR-835H/-835HW	HD-5	Photoelectric (8-35V) w/thermal	NS4-220, NS6-220 NS4-220W, NS6-220W	HB-3	18
SLR-835B-2/-2W	HD-6	Photoelectric (8-35V) (baseless)	N/A	N/A	18
SLR-835BH-2/-2W	HD-6	Photoelectric (8-35V) w/thermal (baseless)	N/A	N/A	18
SIJ-24	HD-3	Ionization	NS4-224, NS6-224	HB-5	25
SIJ-24	HD-3	Ionization	NS4-220, NS6-220	HB-3	25
DCD-135/-190	HD-3	Heat Fixed Temp/Rate of Rise	NS4-224, NS6-224	HB-5	25
DCD-135/-190	HD-3	Heat Fixed Temp/Rate of Rise	NS4-220, NS6-220	HB-3	25
DFE-135/-190	N/A	Heat Fixed Temp	HSC-224L	HB-62	25
DFE-135/-190	N/A	Heat Fixed Temp	HSC-220L	HB-64	25
SLV-24/-24N/-24V	HD-3	Photoelectric	NS4-224, NS6-224 NS4-224W, NS6-224W	HB-5	25
SLV-24/-24N/-24V	HD-3	Photoelectric	NS4-220, NS6-220 NS4-220W, NS6-220W	HB-3	25

## One Year Limited Warranty

Hochiki America (HA) warrants its digital communication modules to be in conformance with its 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.