

**NOTIFIER<sup>®</sup>**

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## SMF-Kit

for the Single-mode/Multi-mode Converter  
for **NOTI•FIRE•NET™**

Product Installation Document  
P/N 52122 Rev A 4/08/04 ECN 04-197

### General Description

The SMF-Kit provides the hardware to mount one or two Single-mode/Multi-mode Converter assemblies that can be used as interfaces between multi- and single-mode fiber optic devices. The chassis that comes with the kit can be mounted in any CAB Series Cabinet enclosure. All screws, nuts and washers necessary for mounting are included, as well as a power terminal block.

Minimum requirements for an installation that complies with UL 864 are as follows:

- Two single-mode/Multi-mode Fiber Optic Converters (ordered separately as P/N 14507714-001), which include converter and DC adapter for 24VDC operation
- A UL listed power supply monitored by a Fire Alarm Control Panel
- A Notifier CAB-3/4 Series Cabinet enclosure
- Installation and wiring as described in this document.

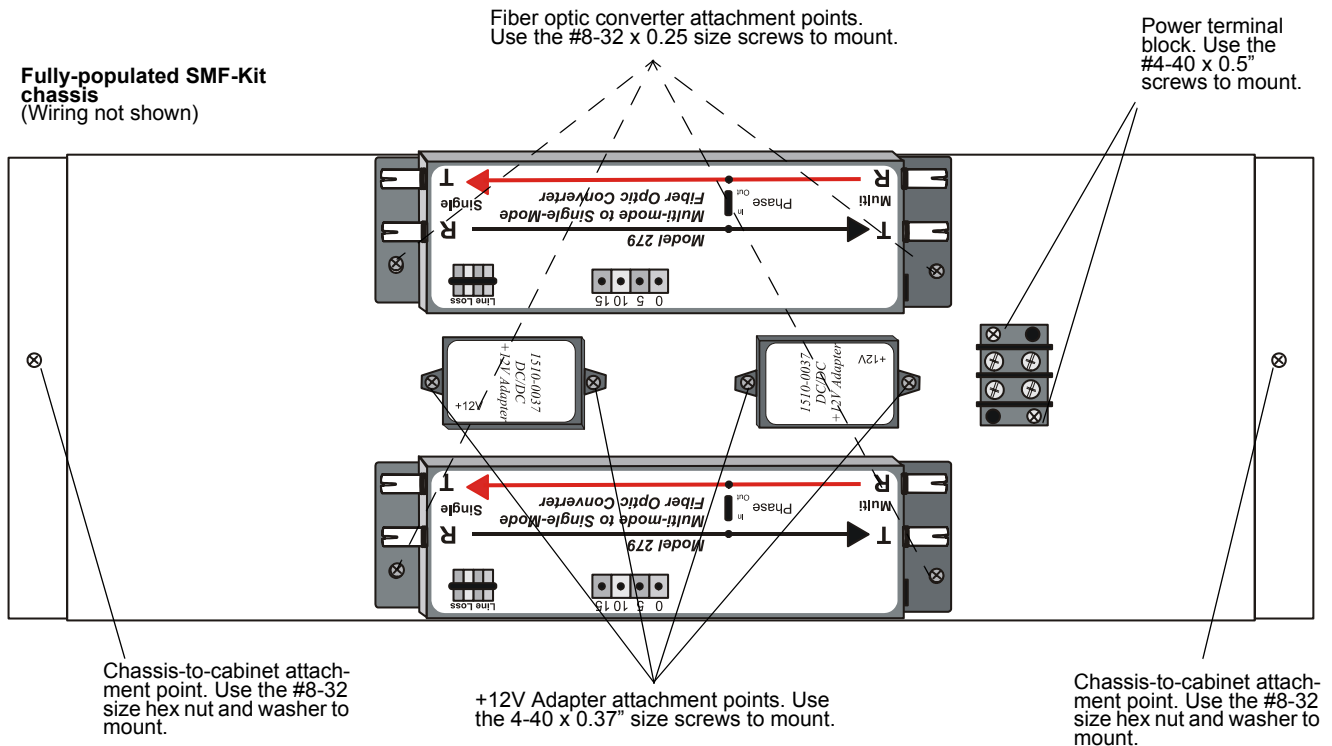
#### Specifications:

- Interface:  
Multi-mode - 850nm, full duplex  
Single-mode - 1310nm, full duplex.
- Connectors:  
Multi-mode-ST  
Single-mode - ST.
- Data Rate: 0 to 2.5 MBPS.
- Loss Budget:  
Multi-mode - 8dB max @ 850nm on 62.5/125 cable  
Single-mode - 12dB max @ 1310nm on 9/125um cable.
- Switches:  
Line Loss - Adjusts to best performance of single mode fiber for losses of 2, 5, 10 or 12 dB (12dB = 15dB setting on the converter)  
Phase - Allows reversal of phase between signals of multi-mode and single-mode systems.
- Indicators: TD and RD LEDs and Line Loss selection LEDs.
- Power:  
Maximum DC power consumption of 0.5A @ 24VDC.
- Size: 7"W x 3"H x 1"D (177.8mm x 76.2mm x 25.4mm).
- Environment  
Operating temperature - 0°C to 49°C  
Storage temperature - -5°C to +75°C  
Relative humidity - 5% to 93%, no condensation.

For information on specifications and operation of the converter and its adapter, refer to the manual that accompanies these products ("Reference Manual", Document No. 0315-0259). For information on network card, repeater, and **NOTI•FIRE•NET™** connections, refer to the appropriate document: NCM Installation manual, P/N 51533; NAM-232 manual, P/N 50038; MIB manual, P/N 50255; Repeater manual, P/N 50256; or the **NOTI•FIRE•NET™** manual, P/N 51584 or 50257.

## Installation

The kit includes a chassis with the power terminal attached, and enough hardware to mount two Fiber Optic Converters and two DC/DC +12V Adapters. The chassis will fit in any Notifier CAB series cabinets. Notifier recommends the converter assembly be installed in the same cabinet as the FACP, for ease in connecting it to a monitored power supply.

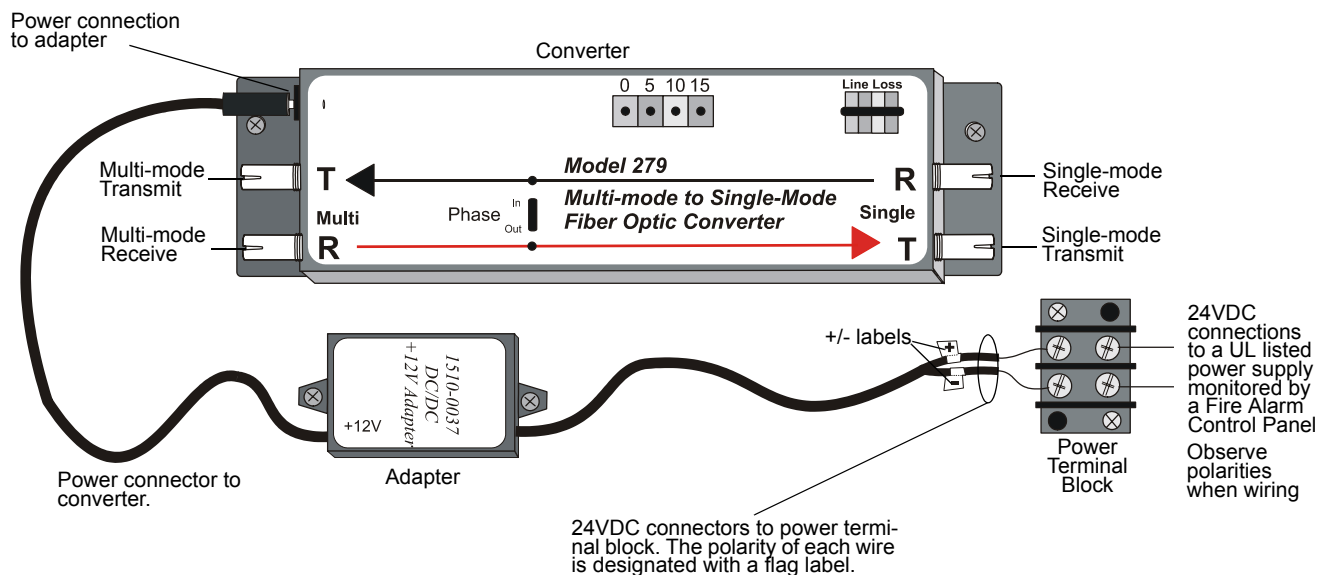


Note: Upside-down installation orientation is recommended for the converter for fiber routing purposes.

**Figure 1 Chassis Attachment Points**

## Connections

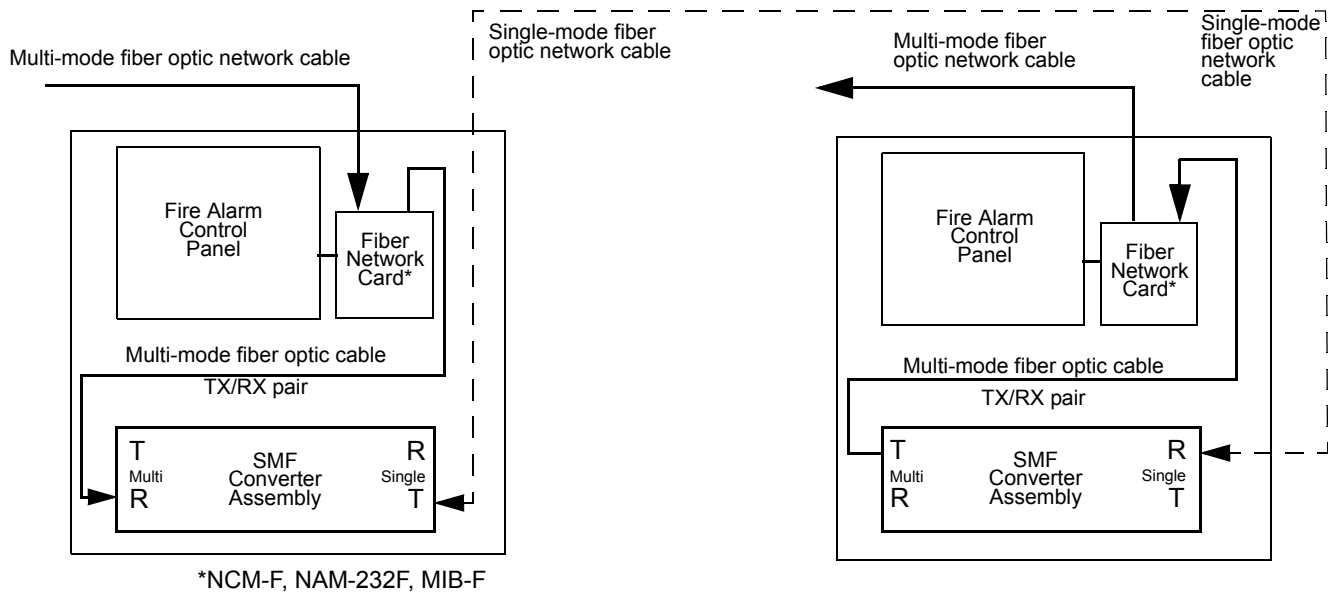
Figure 2 shows basic converter/adapter/power terminal connections.



**Figure 2 Converter and Adapter Connections**

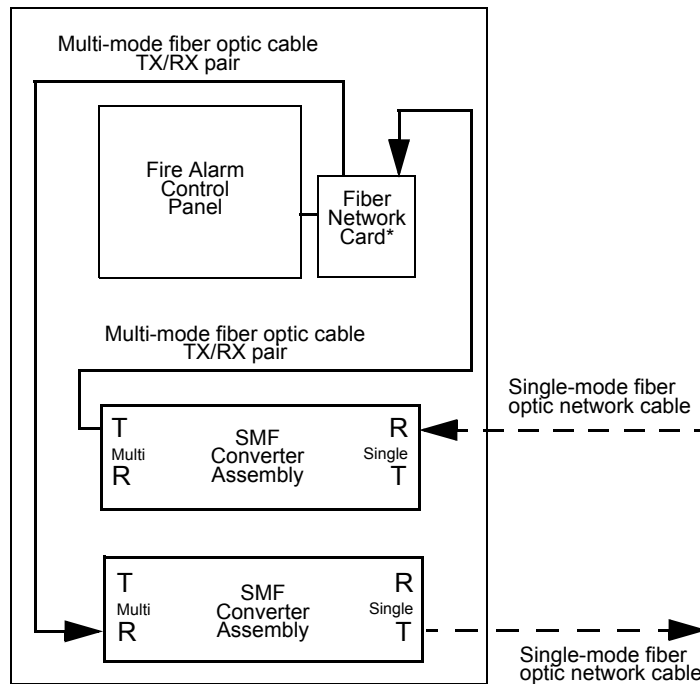
## Wiring Applications

The SMF converter assembly can be used as a liaison between multi-mode devices and single-mode network cable. (See Figure 3 below). It is compatible for use with the NCM-F, NAM-232F, or MIB-F network cards, as well as the RPT-F and RPT-WF repeaters.



**Figure 3 Multi- to Single-mode/Single- to Multi-mode**

The SMF converter assembly can also be used to link multi-mode devices into a single-mode network. (See Figure 4 below).



\*NCM-F, NAM-232F, MIB-F

**Figure 4 Linking Multi-mode Fiber Optic Devices to a Single-mode Network**

Repeaters may be used as described in the repeater manual on the multi-mode fiber interface.