

# TCIPI-4

## INTERSECTOR Power Injector

## INSTALLATION INSTRUCTIONS

### Section 1

#### General Description

The TCIPI-4 INTERSECTOR Power Injector is a robust power supply designed specifically to power one to four TC-CK1-SBE INTERSECTOR sensors. The TCIPI-4 receives the data from each TCIB card and injects 24V DC on the Ethernet cable powering each INTERSECTOR sensor. Additionally, there is a 1 amp slow blow fuse in series with each INTERSECTOR sensor that protects against short circuits that could cause a unit to stop functioning.

### Section 2

#### Installation

1. Attach the TCIPI-4 at the desired location in the cabinet utilizing the predrilled hole locations in the mounting plate.

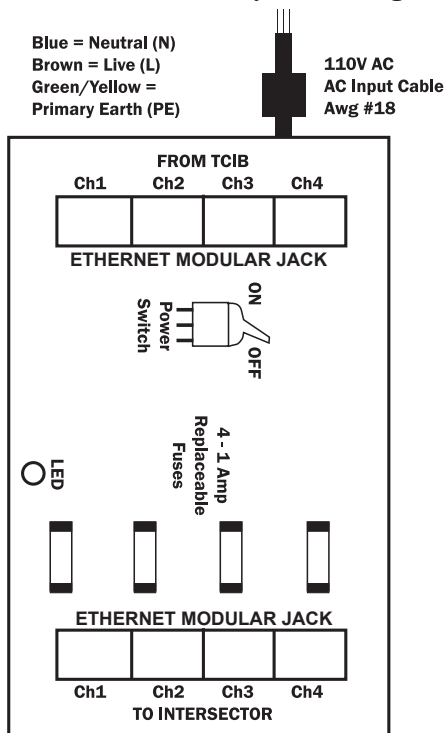


**WARNING:** Ensure incoming power source to the TCIPI-4 is off prior to connecting any wires to the device and that the power switch located on the printed circuit board (PCB) is in the off position.

2. Connect 110V AC power source to the TCIPI-4 wire harness (Fig. 1).

**FIGURE 1**

TCIPI-4 Printed Circuit Board Layout & Wiring Diagram



3. Plug each Ethernet cable into the Operational Plug on each TCIB Card and then into the 4 Port Ethernet Modular Jack located on the TCIPI-4 PCB marked "FROM TCIB".



**NOTE:** For convenience, four 36" long Ethernet cables in four different colors are provided to ease identifying each TCIB-To-TCIPI-4 connection in the cabinet.

4. Plug each of the Ethernet cables from each INTERSECTOR Sensor into the 4 Port Ethernet Modular Jack located on the TCIPI-4 PCB marked "TO INTERSECTOR" ensuring they are paired properly with each TCIB Card (Fig. 2).

**FIGURE 2**

| FROM TCIB |    | TO INTERSECTOR |  |
|-----------|----|----------------|--|
| Ch1       | To | Ch1            |  |
| Ch2       | To | Ch2            |  |
| Ch3       | To | Ch3            |  |
| Ch4       | To | Ch4            |  |

5. Turn on incoming power source to the TCIPI-4, wait 10 seconds and then flip the power switch on the PCB to the ON position (Fig. 1). The Red LED will illuminate indicating the device is functioning properly.

### Section 3

#### Technical Data

|                                    |                                       |
|------------------------------------|---------------------------------------|
| Model.....                         | TCIPI-4                               |
| Input Power Rating.....            | 90 - 130V AC                          |
| Operating Frequency.....           | 47-63 Hz                              |
| Input Fusing.....                  | Internal on both L & N lines          |
| Internal Power Supply              |                                       |
| Power Rating.....                  | 24V @ 10.4 Amps                       |
| Internal Power Supply              |                                       |
| Constant Output Voltage.....       | 24V ± 1 volt                          |
| Outputs to Intersector Sensor..... | typical 200mA each                    |
| Fuses.....                         | Slow Burn 1 Amp each                  |
| Temperature Range.....             | -40 °F to 185 °F<br>(-40 °C to 85 °C) |

## Section 4

### Warranty

MS SEDCO guarantees this product to be free from manufacturing defects for 18 months from date of installation. Unless MS SEDCO is notified of the date of installation, the warranty will be in effect for 18 months from the date of shipment from our factory. If, during the first 18 months, this unit fails to operate and has not been tampered with or abused, the unit can be returned prepaid to the factory and it will be repaired free of charge. After 18 months, the unit will be repaired for a nominal service charge. **This limited warranty is in lieu of all other warranties, expressed or implied, including any implied warrantability of merchantability, and no representative or person is authorized to assume for MS SEDCO any other liability in connection with the sale of our products. All warranties are limited to the duration of this written limited warranty. In no event shall MS SEDCO be liable for any special, incidental, consequential or other damages arising from any claimed breach of warranty as to its products or service.**