

7 | Troubleshooting Tips

- Make sure the right type of fiber cabling is chosen for the product you have purchased; single mode and multi mode fiber operate in entirely different ways
- CAT5 or higher is recommended for the copper port cabling
- Power must be removed before the media converter is disconnected in hazardous environments for safety reasons
- Link Fault Pass Through is disabled by default. When troubleshooting, set LFPT back to OFF.
- If only one power supply is connected, the Fault LED will remain ON. If connecting a second power supply for redundancy, or connecting Power supply 1 to Power supply 2, the Fault LED will extinguish.

+ Recommended Accessories

Power Supply –
24 VDC, 1.7 A Output Power,
DIN Rail Mount
MDR-40-24



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+ QUICK START GUIDE



(EIR-S-SC shown)

Model EIR-M-SC, EIR-M-ST or EIR-S-SC

10/100 to 100 Mbps Ethernet Media Converter

Before you begin, be
sure you have the following:

- + Ethernet Media Converter
- + Panel Mount Bracket

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1 | Hardware Installation

1. Select a mounting location and install the switch onto a piece of DIN rail or use the included panel mount brackets for wall or panel mounting.



2. Connect power to the switch 10 to 48 VDC.

| Terminal Block Assignment | |
|--|---|
| PWR1 | Power Input 1 (10 to 48VDC) |
| GND | Power Ground |
| PWR2 | Power Input 2 (10 to 48VDC) |
| GND | Power Ground |
|  | Earth Ground |
|  | 1. The relay opens if PWR1 or PWR2 fails 2. The relay opens if the Port Link is Down (When the Link Down Alarm is Enabled) |

- If redundancy is desired, be sure to connect two separate power supplies by using the two DC inputs on the terminal blocks.
- NOTE: If only one power supply is connected, the Fault LED will remain ON. If connecting a second power supply for redundancy, or connecting Power Supply 1 to Power Supply 2, the Fault LED will extinguish.

2 | LED Chart

| LED | State | Indication |
|----------------------------|----------|--|
| FAULT | Steady | Power or ports function abnormally |
| | Off | Power and ports function normally |
| PWR1 PWR2 | Steady | Power On (<i>PWR stands for POWER</i>) |
| | Off | Power Off |
| 10/100 | Steady | 100 Mbps network connection |
| | Off | 10 Mbps network connection |
| LFP | Steady | LFPT function enabled |
| | Off | LFPT function disabled |
| LNK/ACT | Steady | Network connection established (<i>LNK stands for LINK</i>) |
| | Flashing | Transmitting or receiving data (<i>ACT stands for ACTIVITY</i>) |
| | Off | Neither a network connection established nor transmitting/receiving data |
| FDX/COL | Steady | Connection in full duplex mode (<i>FDX stands for FULL-DUPLEX</i>) |
| | Flashing | Collision occurred (<i>COL stands for COLLISION</i>) |
| | Off | Connection in half-duplex mode |

3 | Link Fault Pass Through (LFPT)

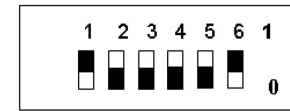
| Link Fault of the FX Port | | | | | | |
|--|------------|---------|---------|---------|---------|---------|
| | | TX Port | | | FX Port | |
| LEDs | PWR | 100 | LNK/ACT | FDX/COL | LNK/ACT | FDX/COL |
| Media Converter A | ON | OFF | OFF | OFF | OFF | OFF |
| Media Converter B | ON | OFF | OFF | OFF | OFF | OFF |
| Link Fault of the TX Port of Media Converter A | | | | | | |
| | | TX Port | | | FX Port | |
| LEDs | PWR | 100 | LNK/ACT | FDX/COL | LNK/ACT | FDX/COL |
| Media Converter A | ON | OFF | OFF | OFF | ON | ON |
| Media Converter B | ON | OFF | OFF | OFF | OFF | OFF |

4 | Ports

RJ-45 Ports: The RJ-45 ports auto-sense for 10 or 100 Mbps devices connections. The auto MDI/MDIX feature allows connections to switches, workstations and other equipment without changing straight through or crossover cabling.

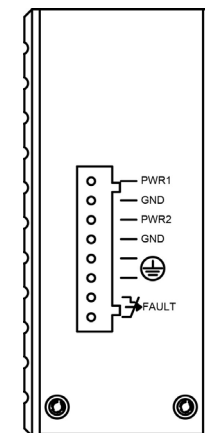
Fiber Ports: Duplex fiber ports, 100 Mbps, available in Multi-mode SC connection, Multi-mode ST connection and Single-mode SC connections.

5 | DIP Switches



| Link Fault of the FX Port | | |
|---------------------------|---------------------------------|--------------------------------|
| Position | Down (0) | Up (1) |
| 1 | Disable Link-Fault-Pass-Through | Enable Link-Fault-Pass-Through |
| 2 | RJ45 Auto Negotiation Enabled | RJ45 Forced Mode |
| 3 | RJ45 Forced to 100Mbps | RJ45 Forced to 10Mbps |
| 4 | RJ45 Forced to Full Duplex | RJ45 Forced to Half Duplex |
| 5 | Fiber Forced to Full Duplex | Fiber Forced to Half Duplex |
| 6 | Disable Link Down Alarm | Enable Link Down Alarm |

6 | Power, Dry Contact



The terminals labeled Fault are connected to a dry contact. The dry contact is normally closed when either power source is connected and active. When no power is applied, the dry contact is normally open.

While only one power source is required to power up the media converter, two power sources offer redundancy for mission-critical applications. (PWR1 and PWR2)