Install the media converter

1. Turn off the networking equipment that will be connected to the media converter.
2. Remove the dust cover and insert a Gigabit MSA-compliant SFP module into media converter’s SFP slot. The SFP transceiver used should depend on your fiber network infrastructure.
   **Note:** The media converter can only be used with Gigabit SFP modules and will not support 10/100Mbps modules.
3. Connect a duplex fiber-optic cable from the media converter’s SFP module to your fiber network device. The TX and RX connectors must be paired at both ends of the connection. For example TX to RX, and RX to TX.
4. Connect an RJ45 Cat 5e/6 Ethernet cable from the media converter’s RJ45 port to your 10/100/1000Mbps network device.
5. Select the appropriate regional clip for your region and connect the power adapter to an AC electrical outlet.
6. Connect the power adapter to the media converter’s DC input. The PWR LED (power) should light up solid.
7. Turn the networking equipment from step #1 back on. The Fiber and TP LNK/ACT LEDs should light up solid when all cables and devices are properly connected.
   **Note:** Check the link budget of your SFP modules, as well as the module’s intended wiring distance. SFP modules are designed to transmit signals over large distances. If the physical wiring distance is too short, the transmitting optical signal (laser) may be too strong and damage the receiving SFP module. An in-line optical attenuator may be required to protect them from damage.

### LED indicators

<table>
<thead>
<tr>
<th>LED</th>
<th>Status</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>PWR (Green)</td>
<td>Solid</td>
<td>The media converter is powered on</td>
</tr>
<tr>
<td>Fiber LNK/ACT</td>
<td>Solid</td>
<td>A fiber link between the media converter and fiber network equipment is established</td>
</tr>
<tr>
<td>(Green)</td>
<td>Flashing</td>
<td>The fiber port is actively sending or receiving data (activity)</td>
</tr>
<tr>
<td>TP LNK/ACT (Green)</td>
<td>Solid</td>
<td>An RJ45 Ethernet link between the media converter and RJ45 network equipment is established</td>
</tr>
<tr>
<td></td>
<td>Flashing</td>
<td>The RJ45 port is actively sending or receiving data (activity)</td>
</tr>
<tr>
<td>TP 1000 (Green)</td>
<td>Solid</td>
<td>A Gigabit (1000Mbps) link on the RJ45 port is established</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>The RJ45 port is running at 10/100Mbps speeds</td>
</tr>
</tbody>
</table>

---

For the latest information, technical specifications, and support for this product, please visit www.startech.com/MCM1110SFP.
Link fault pass-through (LFP)

Link fault pass-through can notify you of link problems and provides an efficient solution to monitor your network. The LFP DIP switch is set to ON by default, and you can use the DIP switch to enable (ON) or disable (OFF) the LFP function.

Enable LFP

When the DIP switch is set to ON then LFP is enabled. When a device is connected to the media converter, and the TP (twisted pair) copper line or Fiber line drops the link, then the media converter will disconnect the transmission link on the opposite interface.
- Slide the LFP DIP switch to the ON position to enable LFP.

Disable LFP

When the DIP switch is set to OFF then LFP is disabled. If you are familiar with your network infrastructure and proper diagnostic procedures then you can disable LFP, otherwise it is recommended to leave the DIP switch in the default ON position.
- Slide the LFP DIP switch to the OFF position to disable LFP. Once set to OFF, reset the media converter by disconnecting and reconnecting the power.

Duplex mode support

The media converter’s RJ45 port supports 10/100/1000Mbps networks and will automatically negotiate the connection type. By default, it will automatically detect the link speed and the duplex mode of your connected equipment.

The media converter’s fiber port (1000Base-SX/LX) allows 1000Mbps full duplex auto-negotiation. Check to ensure the duplex setting of the connected fiber equipment matches the duplex setting of the media converter.

Fiber cable types

The distance capabilities of the media converter are variable and depend on the SFP module and the fiber optic cable used.

<table>
<thead>
<tr>
<th>Standard (wavelength)</th>
<th>Fiber cable type</th>
<th>Diameter (micron - μm)</th>
<th>Bandwidth (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000Base-SX (850nm)</td>
<td>MM</td>
<td>62.5/125μm</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50/125μm</td>
<td>500</td>
</tr>
<tr>
<td>1000Base-LX (1310nm)</td>
<td>MM</td>
<td>62.5/125μm</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>SM</td>
<td>50/125μm</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9/125μm</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Surface or wall mounting

The media converter features two mounting holes on the bottom of the unit which let you mount it on a surface or a wall.
- Fasten and secure the media converter to a wall or surface using the integrated mounting holes.

Note: Screws are required to mount the media converter.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by StarTech.com could void the user’s authority to operate the equipment.

Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (B)/NMB-3(B)

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Warranty Information

This product is backed by a two-year warranty.

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