

Specifications:

Case size dimensions:	3.5" x 1.75" x 0.8" (89 mm x 44 mm x 20 mm)
Fiber Connection:	ST type connectors (SMA type available upon request)
Fiber Optic Cable Maximum Distance:	2,000 meters (6,600 feet)
Fiber Optic Cable Recommended:	62.5 / 125 μ m multimode fiber
Optional:	100 / 140 μ m multimode fiber 85 / 125 μ m multimode fiber 50 / 125 μ m multimode fiber
Fiber Optic Transmitter Power:	Average power: -15.0 dBm Peak power: -12.0 dBm \pm 1dBm
Fiber Optic Receiver Power:	Average power: -32 dBm Bit error rate: $\leq 10^{-10}$
AUI Port:	DB-15 with locking posts.
AUI Maximum Distance:	50 meters (165 feet)
Mean Time Between Failure:	264,410 hours
Environment:	0–50 degrees C, 10–90% humidity, non-condensing, 0–10,000 foot altitude
Warranty:	Five years

FCC Regulations:

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own cost.

NOTE: This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out on the radio interference regulations of the Canadian Department of Communications.

NOTE: This equipment has been tested and found to comply with VDE Class B requirements.

For selling in the Federal Republic of Germany:

Hiermit wird bescheinigt, das der E-FRL-MC01 oder E-FRL-MC01(SMA) in Ubereinstimmung mit den Bestimmungen der Vfg. 243/1991 funk-entstoert ist. Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerates angezeigt und die Berechtigung zur Ueberpruefung der Serie auf Einhaltung der Bestimmungen eingeräumt. TRANSITION Networks, Inc.

Canadian Regulations:

Note: This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out on the radio interference regulations of the Canadian Department of Communications.

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ST is a trademark of AT&T.

TRANSITION Networks and Micro-Ceiver are trademarks of TRANSITION Networks, Inc.

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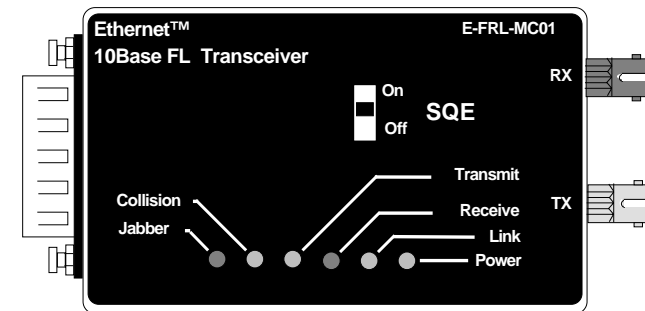
Minneapolis, MN 55344 USA

Fiber Optic 10BaseFL Ethernet Micro-ceiver™ (Transceiver)

E-FRL-MC01(C)

USER'S GUIDE

The TRANSITION Networks Fiber Optic Micro-ceiver (E-FRL-MC01(C)) is a compact unit used in an Ethernet IEEE 802.3 type of network. It can be connected directly to any Ethernet workstation, hub or AUI (Attachment Unit Interface) attachment cable.



The Micro-ceiver has an AUI (DB-15) port interface on one end and two ST type fiber connections on the other. NOTE: An SMA type fiber connection is also available on the Micro-ceiver E-FRL-MC01C(SMA).

Status LEDs provide the following information:

- Transmit:** Flashing or illuminated green LED indicates packet(s) are being transmitted.
- Receive:** Flashing or illuminated green LED indicates packet(s) are being received.
- Link:** Illuminated green LED indicates the unit is receiving link pulses from a compliant device.
- Power:** Illuminated green LED indicates power to the E-FRL-MC01(C).
- Collision:** Flashing or illuminated red LED indicates collisions are occurring.
- Jabber:** Illuminated red LED indicates Jabber on the line.

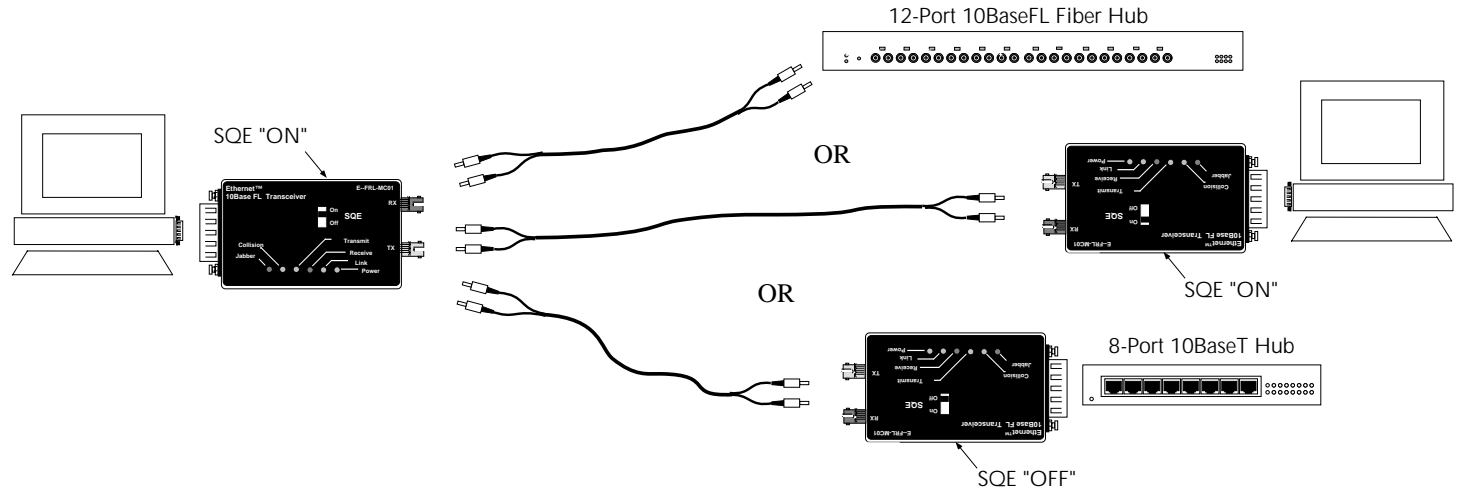
Using the Fiber Optic Micro-Receiver

The fiber Micro-ceiver can be attached directly to a fiber hub or, through another fiber Micro-ceiver, to a terminal device or 10BaseT hub.

SQE Enable / Disable: The SQE (Signal Quality Error) switch, located and marked at the Micro-ceiver front, is set to **ON** to **enable** the SQE or set to **OFF** to **disable** the SQE. (A small screwdriver is ideal for setting the SQE switch.)

SQE ON: Set the SQE switch to enabled (ON) when the Micro-ceiver is connected to a terminal device.

SQE OFF: Set the SQE switch to disabled (OFF) when the Micro-ceiver is connected to a hub.



Installation Notes

- Verify that both the fiber products to be connected are 10BaseFL or FOIRL compliant. (The fiber port on the TRANSITION Networks E-FRL-MC01 conforms to 10BaseFL or FOIRL but NOT to 10BaseFB or FDDI.)
- 62.5/125 micron duplex fiber cable is recommended.
- The maximum dBm loss for the fiber cable should not exceed 13 dBm.
- Ensure that cable installed at transmit (TX) connector of E-FRL-MC01 is installed at receive (RX) connector of E-FRL-MC01 or hub at other end of fiber cable; ensure that cable installed at receive (RX) connector of E-FRL-MC01 is installed at transmit (TX) connector of E-FRL-MC01 or hub at other end of fiber cable.
- Optional AUI cable assembly cannot exceed 50 meters (165 feet)..
- Connecting more than two media converters in series is not recommended.

Troubleshooting the Media Converter

If the E-FRL-MC01 fails, determine the answers to the following questions:

1. Is the power LED on the E-FRL-MC01 illuminated?

NO

- Contact Technical Support at (800) 260-1312 or at (800) LAN-WANS.

YES

- Proceed to step 2.

2. Is the Link LED illuminated?

NO

- Check fiber cables for proper connection.
- Verify that TX and RX cables on media converter are connected to RX and TX ports, respectively, on the other 10BaseFL device.
- Contact Technical Support at (800) 260-1312 or at (800) LAN-WANS.

YES

- Contact Technical Support at (800) 260-1312 or at (800) LAN-WANS.