

## 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.

## Trademarks

TRANSITION Networks and the Micro-ceiver are trademarks of TRANSITION Networks, Inc.

Ethernet is a registered trademark of the Xerox Corporation, Inc.

ST is a registered trademark of AT&T.

Apple is a registered trademark of Apple Computer, Inc.

## Technical Support

For more information about this product or other TRANSITION Networks products call your local TRANSITION Networks distributor. Or contact us directly:

Phone: (612) 941-7600

Fax: (612) 941-2322

Toll Free Tech Support Line: (800) 260-1312

P/N 7319.A

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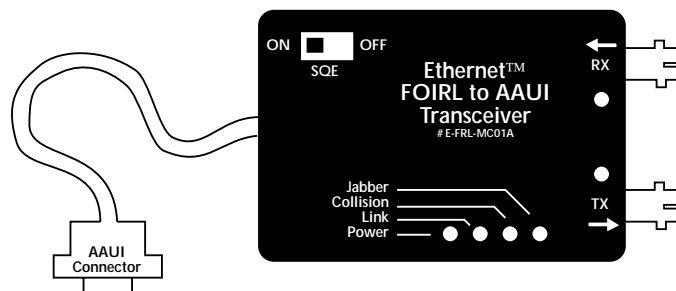
# AAUI to Fiber Optic FOIRL Ethernet Micro-ceiver™ (Transceiver) Installation Guide

## About the Fiber Optic Micro-ceiver™

The TRANSITION Networks AAUI to fiber optic Micro-ceiver™ P/N E-FRL-MC01A is a compact unit used in an Ethernet IEEE 802.3 type of network. It can be connected directly to any AAUI (Apple Attachment Unit Interface) port on a workstation or printer.

The Micro-ceiver™ complies with the Ethernet IEEE 802.3 specifications for a fiber optic inter-repeater link (FOIRL).

The Micro-ceiver has an AAUI (14 - Pin) port interface on one end and two ST type fiber connections on the other. (An SMA type fiber connection is also available: Transition P/N E-FRL-MC01A(SMA).



Dimensions: Case size: 2.45" (6.2cm) x 1.75" (4.4cm) x 0.875" (2.2cm)  
The AAUI cable length is 0.5 meters or 1.65 feet.



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## Features of the Fiber Optic Micro-ceiver™

- External SQE enable or disable switch
- Compliant with Ethernet IEEE 802.3 specifications for fiber optic inter-repeater link (FOIRL)
- Easy to read LED indicators: Transmit (TX), Receive (RX), Jabber, Collision, Link and Power
- Two year warranty
- Made in the USA
- No external power required
- UL listed; FCC class A compliant

### SQE Enable / Disable

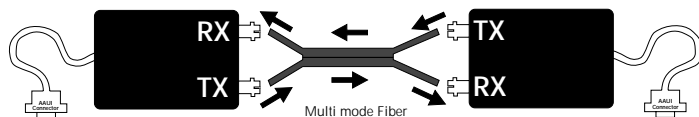
The SQE (Signal Quality Error) selection switch can be turned ON to enable the SQE or it can be turned OFF to disable the SQE. The SQE switch is located and marked on the front of the Micro-ceiver. (Pictured on the front page of the installation guide). (A small regular screw driver is ideal for switching the SQE switch ON and OFF).

- SQE Enable Position (ON): The Micro-ceiver needs to be enabled (turned ON) when it is connected to a workstation or DTE.
- SQE Disable Position (OFF): The Micro-ceiver needs to be disabled (turned OFF) when it is connected to a hub.

## Using the Fiber Optic Micro-ceiver™

The fiber Micro-ceiver™ is attached to the AAUI port of the workstation or printer. The fiber connection is shown below.

The illustration shows how to inter connect two AAUI to fiber optic Micro-ceivers™. In the diagram, the left transceivers transmit port is connected by fiber to the receive port on the right transceiver. The right transceivers transmit port is connected by fiber to the left transceivers receive port. (Use the same configuration, transmit to receive, if you are connecting a fiber optic transceiver to a fiber optic hub with ST connections).



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## Using the AAUI to Fiber Optic Micro-ceiver™ (Continued)

The AAUI to fiber Micro-ceiver™ was tested and designed for use with 62.5 / 125  $\mu$ m multimode fiber optic cable. The fiber segment can be up to 2000 meters (6600 feet) long which meets the FOIRL standards.

If fiber optic cable is already in place, other fiber optic multimode cable types that can be used include: 50/125  $\mu$ m, 85/125  $\mu$ m, 100/125  $\mu$ m. After determining which fiber cable is going to be utilized, do not exceed the maximum distance ratings for that type of fiber cable. (Check with your local distributor for distance limitations or call TRANSITION Networks Technical Support Department. The phone number is on the back of this installation guide).

### The Fiber Optic Micro-ceiver™ Specifications

Case Dimensions:	2.45" (6.2cm) x 1.75" (4.4cm) x 0.875" (2.2cm)
AAUI port:	14 - Pin Connector
Fiber Connection:	ST type connectors, (SMA type available upon request)
Fiber Optic Maximum Distance:	2000m (6600 ft.)
Fiber Optic Cable Required:	62.5 / 125 $\mu$ m multimode fiber 100 / 140 $\mu$ m multimode fiber 85 / 125 $\mu$ m multimode fiber 50 / 125 $\mu$ m multimode fiber
Environment:	0-70° C, 5%-90% humidity non-condensing, 0-10,000 foot altitude
Warranty:	Two Years

### Monitoring the AAUI to Fiber Optic Micro-ceivers™ LEDs

Receive (RX):	Flashing or lit green LED indicates a packet has been received
Transmit (TX):	Flashing or lit green LED indicates a packet has been transmitted
Jabber:	Flashing red LED indicates Jabber on the line
Collision:	Occasional or on red LED indicates line collisions
Link:	Lit green LED indicates the transceiver is receiving link pulses from a 10Base FOIRL compliant device (enable/disable via external switch).
Power:	Lit green LED indicates normal operation

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