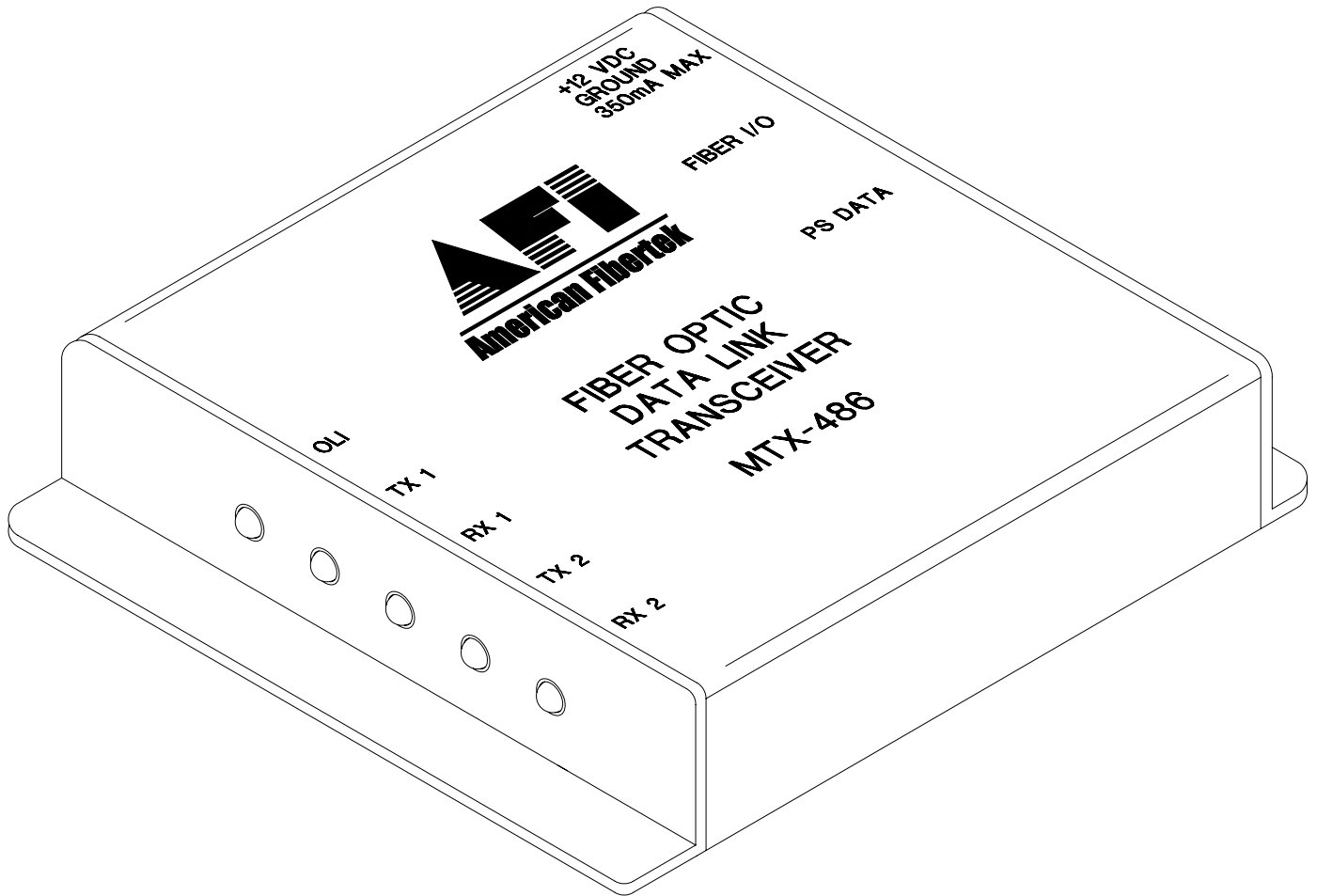




120 Belmont Drive
Somerset, NJ 08873-1204

American Fibertek

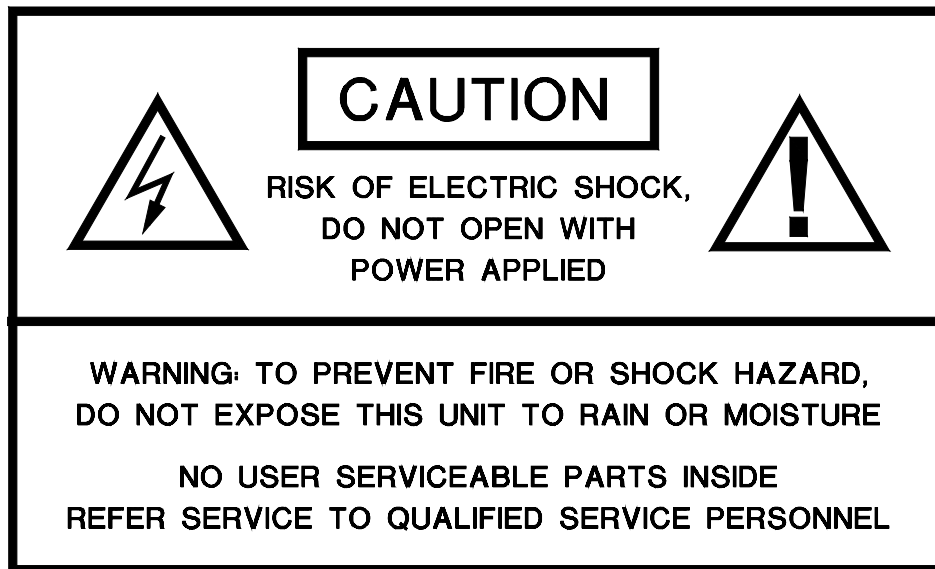
Phone: 732.302.0660 Fax: 732.302.0667



Instruction Manual

MTX-486

Bi-directional Panasonic
PSD Data Transceiver



INSTALLATION AND OPERATION INSTRUCTIONS

INTRODUCTION

Thank you for purchasing your American Fibertek MTX-486 multimode Panasonic PSD data transceiver. Please take a few minutes to read these installation instructions in order to obtain the maximum performance from this product.

FUNCTIONAL DESCRIPTION

The MTX-486 operates as half of a transceiver pair for the transmission of bi-directional Panasonic PSD data. It is designed to operate with a MRX-486 or a RRX-486 data transceiver over a single multimode fiber optic cable.

The MTX-486 converts a single Panasonic PSD data input into an optical fiber output using a 1300 nm wavelength source. The MTX-486 also converts an optical Panasonic PSD data signal returning on the same fiber into an electronic Panasonic PSD data output using an 850 nm wavelength detector. The 486 Series product is designed to operate over an optical loss budget range of 0 to 12 dB when used on 62.5 um multimode fiber. The MTX-486 will also operate on 50 um multimode fiber at a reduced loss budget range. Refer to the data sheets for detailed performance specifications.

This unit is contained in a compact and rugged aluminum housing with internal dc voltage regulation. The detachable terminal block and LED indicators provide for easy installation and monitoring of data and dc power.

The MTX-486 is designed for mounting as a modular stand alone unit. For a rack mounted version please see the RTX-486.

INSTALLATION

THIS INSTALLATION SHOULD BE MADE BY A QUALIFIED SERVICE PERSON AND SHOULD CONFORM TO THE NATIONAL ELECTRICAL CODE, ANSI/NFPA 70 AND LOCAL CODES.

Mount the unit to a secure surface using #8 (3mm) hardware in four places. See the drawing on the next page for mounting dimensions. Be sure to allow sufficient room for the required minimum bend radius of the fiber cable used.

POWER SOURCE

THIS PRODUCT SHALL BE POWERED BY A LISTED CLASS 2 POWER SUPPLY ONLY.

This unit requires a +12VDC power source for proper operation. The DC input is diode protected. In the USA and in Canada an American Fibertek PS-12D is supplied with this unit. The negative side of the power input is directly connected to ground. ANSI/NFPA 70 Class 2 wiring is recommended.

POWER CONNECTION

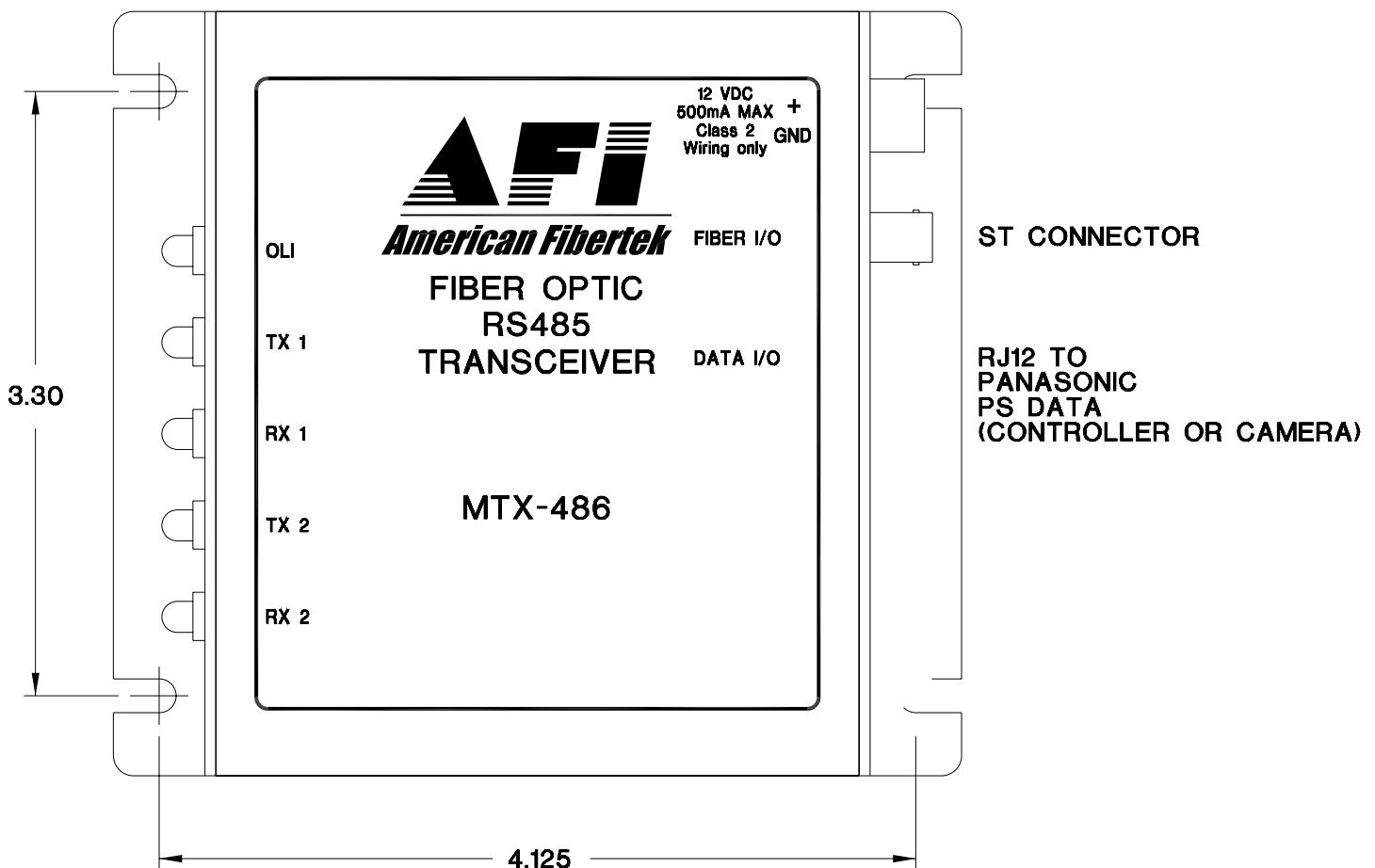
Power is supplied to the unit via a two pin terminal connector. Follow label on unit for proper orientation of +12 volt dc and ground.

FIBER INPUT / OUTPUT CONNECTION

The fiber optic connection is made via a ST connector located on the right side of the unit.

DATA INPUT / OUTPUT CONNECTION

The data input / output connection is made via a RJ12 connector on the right side of the unit.



DATA CONFIGURATION

The MTX-486 is shipped from the factory in the Panasonic PSD data configuration. This unit is designed for use with Panasonic PSD data only. All internal switches should remain in the configuration set at the factory.

MTX-486 STATUS INDICATORS

The MTX-486 transmitter provides the following LED status indicators to aid in installation and troubleshooting:

OLI

A bi-color LED indicator monitors the optical input power of the data signal that is being received at the MTX-486 from the MRX-486 or the RRX-486. DC power and optical input status associated with this LED are summarized below.

Optical Level Indicator	DC Power Status	Optical Status
Green	On	Proper Optical Input Power Present
Red	On	Optical Input Not Detected
Off	Off	Check Power Supply

TX DATA

A red LED indicator is provided to monitor the PSD input data from the electrical interface, through the MTX-486, and out onto the fiber. The intensity of this indicator will vary with input data patterns, however in typical applications it will cycle on and off as data is transmitted. PSD data status associated with this LED is summarized below.

DATA TX LED	PSD Data Status
Red	Data Flow Present
Off	Data Flow Not Detected

DATA RX

A red LED indicator is provided to monitor the RS485 data coming in from the fiber, through the MTX-486, and out onto the electrical interface. The intensity of this indicator will vary with input data patterns, however in typical applications it will cycle on and off as data is received. PSD data status associated with this LED is summarized below.

DATA RX LED	PSD Data Status
Red	Data Flow Present
Off	Data Flow Not Detected

LIFETIME WARRANTY INFORMATION

American Fibertek, Inc warrants that at the time of delivery the products delivered will be free of defects in materials and workmanship. Defective products will be repaired or replaced at the exclusive option of American Fibertek. A Return Material Authorization (RMA) number is required to send the products back in case of return. All returns must be shipped prepaid. This warranty is void if the products have been tampered with. This warranty shall be construed in accordance with New Jersey law and the courts of New Jersey shall have exclusive jurisdiction over this contract. **EXCEPT FOR THE FOREGOING WARRANTY, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, EXPRESSED OR IMPLIED, WHICH EXTENDS BEYOND THE WARRANTY SET FORTH IN THIS AGREEMENT.** In any event, American Fibertek will not be responsible or liable for contingent, consequential, or incidental damages. No agreement or understanding, expressed or implied, except as set forth in this warranty, will be binding upon American Fibertek unless in writing, signed by a duly authorized officer of American Fibertek.

SERVICE INFORMATION

There are no user serviceable parts inside the unit.

In the event that service is required to this unit, please direct all inquiries to:

American Fibertek, Inc.
120 Belmont Drive
Somerset, NJ 08873

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Phone: (732) 302-0660
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