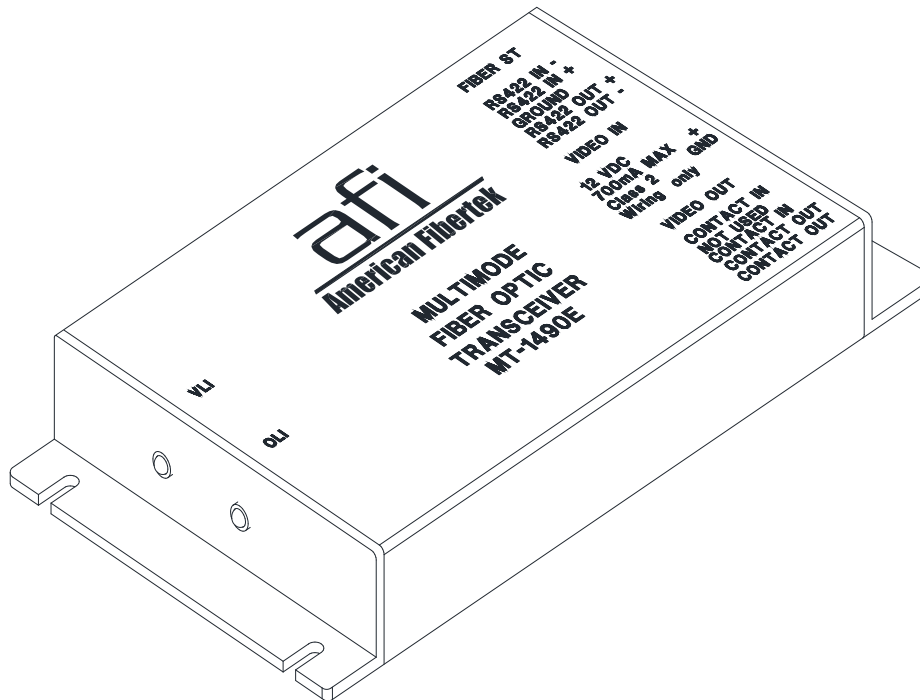


afi

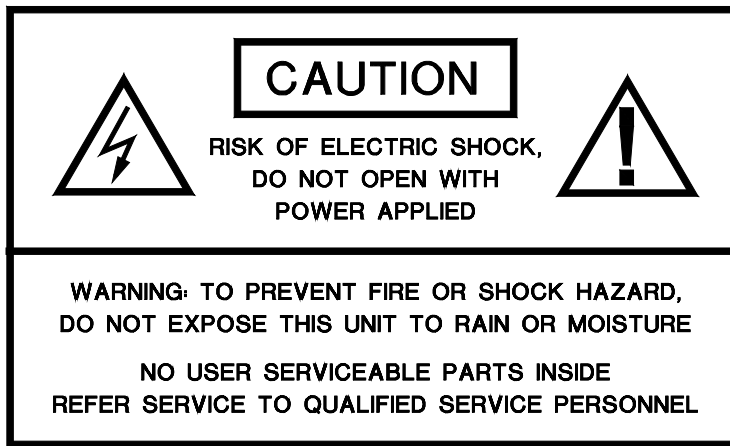
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Somerset, NJ 08873-1204

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Instruction Manual

MT-1490E Video Transmitter with Bi-directional RS422 and Bi-directional Contact Closure



INSTALLATION AND OPERATION INSTRUCTIONS

INTRODUCTION

Thank you for purchasing your American Fibertek MT-1490E multimode video transmitter with bi-directional RS422 and bi-directional contact closure. Please take a few minutes to read these installation instructions in order to obtain the maximum performance from this product.

FUNCTIONAL DESCRIPTION

The MT-1490E operates as half of a transmitter / receiver pair for the transmission of a baseband NTSC, PAL, RS170, or RS343 video signal with bi-directional RS422 data and bi-directional contact closure. It is designed to operate with the RR-1490E or MR-1490E video receiver over one multimode fiber optic cable.

The MT-1490E converts a CCTV video signal, an RS422 data signal and a contact closure input into an optical output using a 1310 nm wavelength source. The MT-1490E also converts an optical input signal returning on the same fiber into an RS422 data output, and contact closure output using a 1550 nm wavelength detector. The 1490E Series product is designed to operate over an optical loss budget range of 0 to 18 dB. The MT-1490E operates on 50 or 62.5u multimode fiber. Refer to the data sheets for detailed specifications.

This unit is contained in a compact and rugged aluminum housing with internal dc voltage regulation. The detachable terminal blocks and LED indicator provide for easy installation and monitoring of video, data, contact closure, and ac power.

The MT-1490E is designed for mounting as a modular stand alone unit. For a rack mounted version please see the RT-1490E.

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 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 an isolated 12 volt DC power source for proper operation. ANSI/NFPA 70 Class 2 wiring is recommended.

POWER CONNECTION

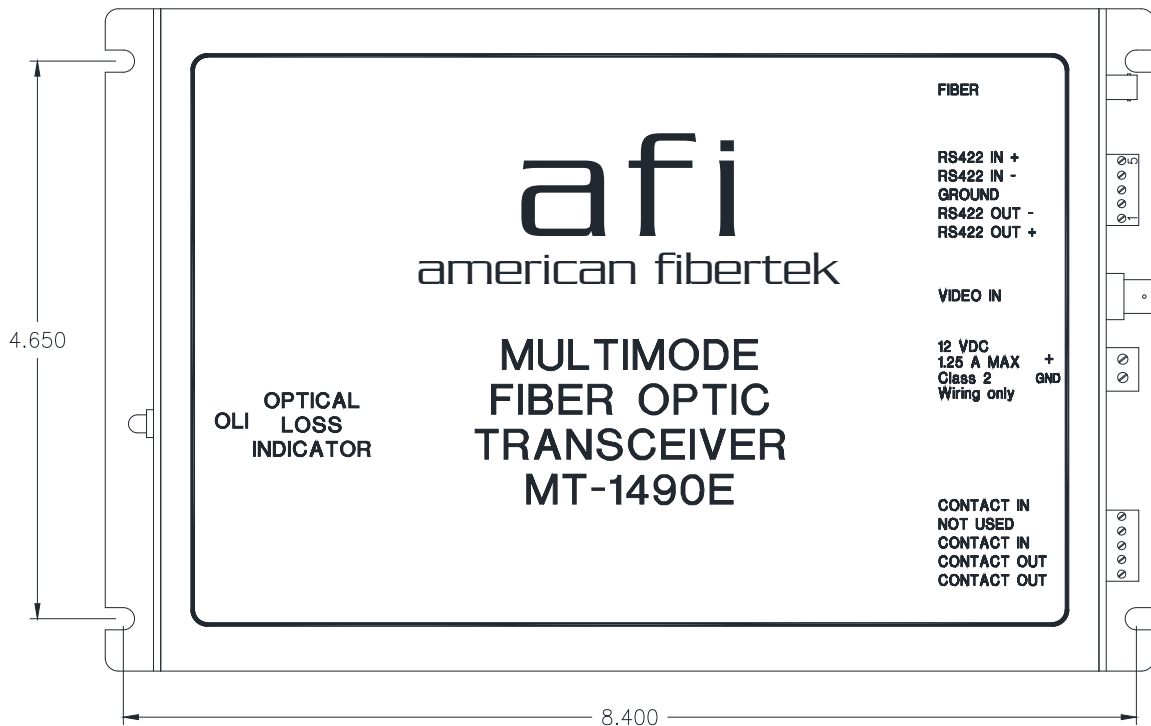
Power is supplied to the unit via a two pin terminal connector on the side of the unit. See label on unit for proper orientation of input power.

FIBER CONNECTION

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

VIDEO INPUT CONNECTION

The video input connection is made via a BNC connector on the right side of the unit. The input is terminated with 75Ω. For optimum performance the video cables should be the shortest length of coax practical.



DATA INPUT / OUTPUT CONNECTIONS

Data input and output connections are made via a terminal block on the right side of the unit. See the label on the unit for proper orientation of input and output connections.

CONTACT CLOSURE INPUT / OUTPUT CONNECTIONS

Contact closure input and output connections are made via a terminal block on the right side of the unit. See label on unit for proper orientation of contact closure input and output connections. Please note 'CONTACT CLOSURE IN' on the MT-1490E becomes 'CONTACT CLOSURE OUT' on the MR-1490E or RR-1490E after going across the fiber. The reverse flow follows the same orientation. For optimum performance the contact closure cables should be the shortest length of wire practical.

MT-1490E STATUS INDICATORS

The MT-1490E 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/contact closure signal that is being received at the MR-3490-12VDC from the MT-3490-12VDC or the RT-3490. Internal 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

VLI

A bi-color LED indicator monitors the video input signal being applied to the Video input of the MT-1490E. Internal DC power and optical input status associated with this LED are summarized below.

Video Level Indicator	DC Power Status	Optical Status
Green	On	Video Signal Present
Red	On	Video Signal Not Detected
Off	Off	Check Power Supply

**This unit complies with 21 CFR
1040.10 and 1040.11**

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

Phone: (877) 234-7200
Phone: (732) 302-0660
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