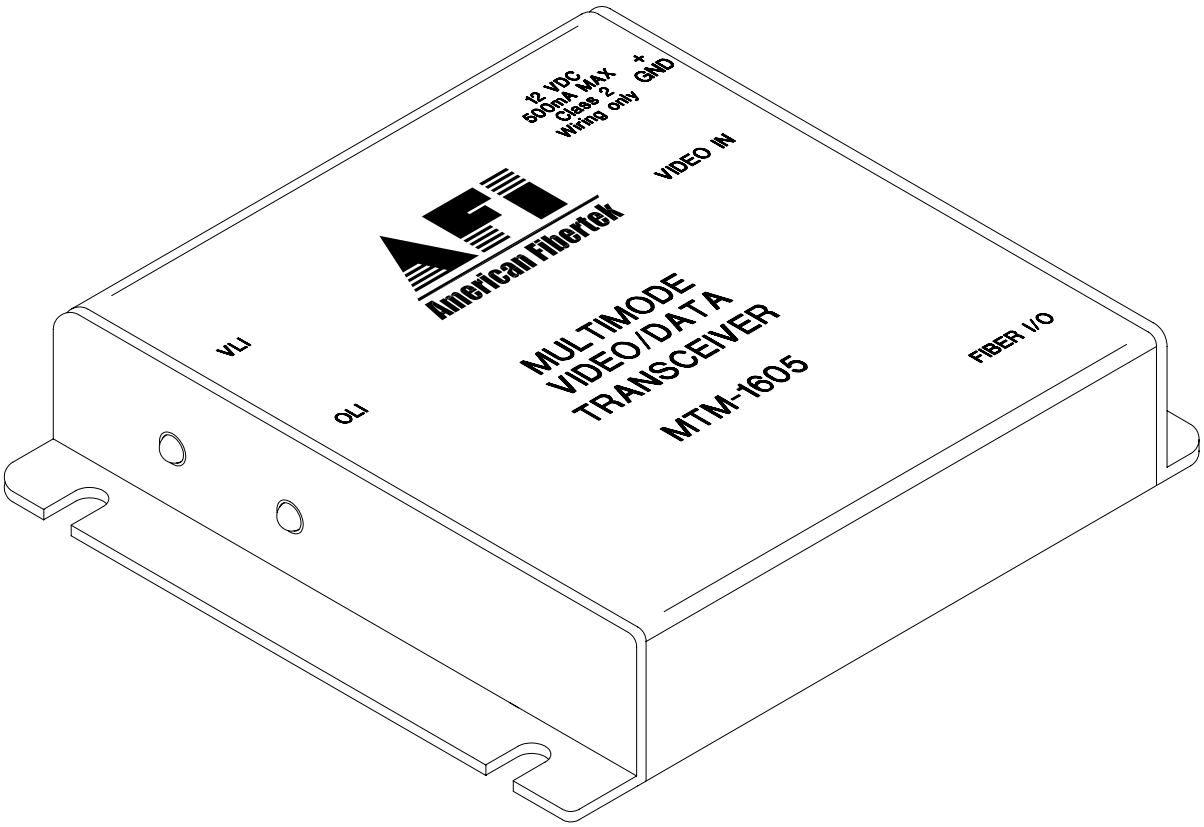
120 Belmont Drive
Somerset, NJ 08873-1204

American Fibertek

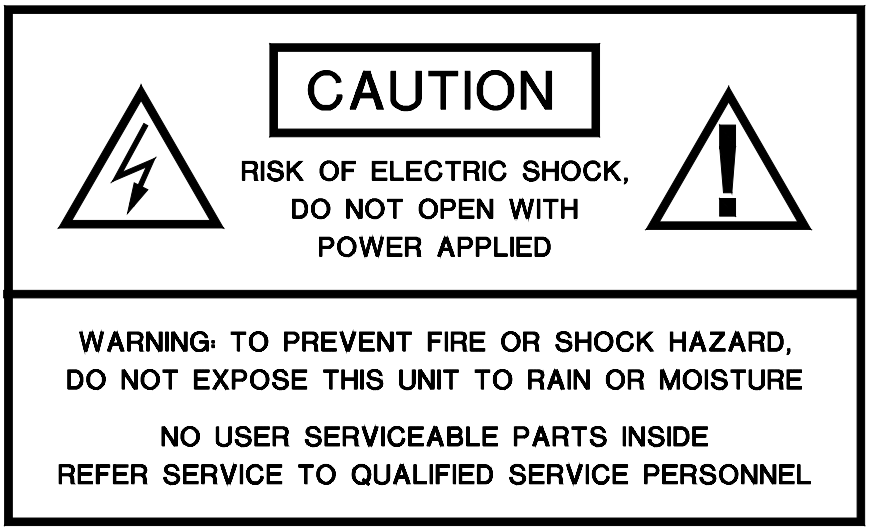
Phone: 732.302.0660 Fax: 732.302.0667



Instruction Manual

MTM-1605
Video Transmitter
With ‘Up-The-Coax’ Control

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INSTALLATION AND OPERATION INSTRUCTIONS

INTRODUCTION

Thank you for purchasing your American Fibertek MTM-1605 multimode mini video transmitter. Please take a few minutes to read these installation instructions in order to obtain the maximum performance from this product.

FUNCTIONAL DESCRIPTION

The MTM-1605 operates as half of a transmitter / receiver pair for the transmission of baseband NTSC, PAL, RS170, or RS343 video signals and return control for 'up-the-coax' systems. It is designed to operate with the MRM-1605 or RRM-1605 video receiver over a single multimode fiber optic cable.

The MTM-1605 converts a single video input into a FM modulated optical output using a 1300 nm wavelength source. The MTM-1605 also converts an optical control signal returning on the same fiber into an electronic camera control signal using an 850 nm wavelength detector. This electronic camera control signal is sent back to the camera on the same coax cable that the video originated on. The M1605 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 MTM-1605 will also operate on 50 um multimode fiber at a reduced loss budget range. Refer to the product specification sheet for additional performance data.

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 video and dc power.

The MTM-1605 is designed for mounting as a modular stand alone unit. For a rack mounted version please see the RTM-1605.

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 at the bottom of this 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.

The 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-12 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.

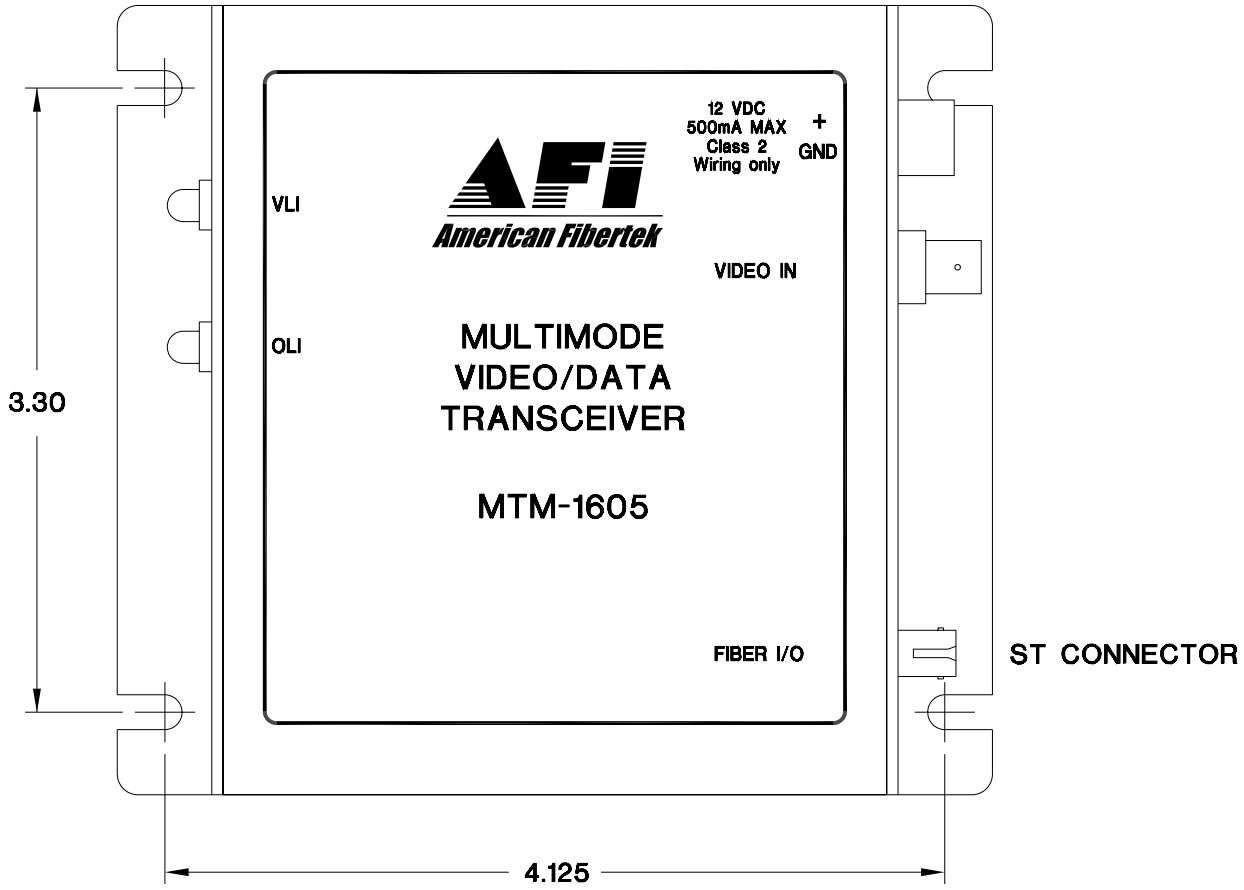
POWER CONNECTION

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.

INPUT / OUTPUT CONNECTIONS

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

The video input connection is made via a BNC connector on the right side of the unit. The video input should be connected to an appropriate 75Ω baseband 'up-the-coax' video source. For optimum performance the video cable should be the shortest length of coax practical.



MTM-1605 STATUS INDICATORS

The MTM-1605 transmitter provides the following LED status indicators to aid in installation and troubleshooting:

VLI

A bi-color LED indicator is provided for the video input to the MTM-1605. DC power and video status associated with this LED is summarized below.

Video Presence LED	DC Power Status	Video Status
Green	On	Proper Input Video Present
Red	On	Input Video Not Detected
Off	Off	Check Power Supply

OLI

A bi-color LED indicator monitors the optical input power of the data signal that is being received at the MTM-1605 from the MRM-1605 or the RRM-1605. 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

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
FAX (732) 302-0667

E-mail: techinfo@americanfibertek.com