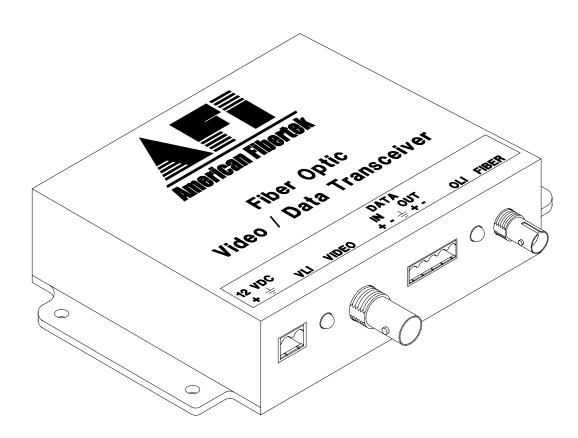


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**Instruction Manual** 

MTM-1200B Video Transmitter With Manchester / Bi-phase Data

## INSTALLATION AND OPERATION INSTRUCTIONS

#### INTRODUCTION

Thank you for purchasing your American Fibertek MTM-1200B 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-1200B operates as half of a transmitter / receiver pair for the transmission of baseband NTSC, PAL, RS170, or RS343 video signals with Manchester / Bi-phase return code for American Dynamics / Bosch systems. It is designed to operate with the MRM-1200B or RRM-1200B video receiver over a single multimode fiber optic cable.

The MTM-1200B converts a single video input into an optical output using a 1300 nm wavelength source. The MTM-1200B also converts an optical control signal returning on the same fiber into an electronic camera control signal using an 850 nm wavelength detector. The M1200B Series product is designed to operate over an optical loss budget range of 0 to 12 dB. The MTM-1200B operates on 50 um or 62.5 um multimode fiber. 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 video and dc power.

The MTM-1200B is designed for mounting as a modular stand alone unit. For a rack mounted version please see the RTM-1200B.

#### **INSTALLATION**

THE INSTALLATION OF THIS UNIT SHOULD BE MADE BY A QUALIFIED SERVICE PERSON(S) AND MUST CONFORM TO ALL 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

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 the label on the unit for proper orientation of +12 volt dc and ground.

#### VIDEO INPUT CONNECTION

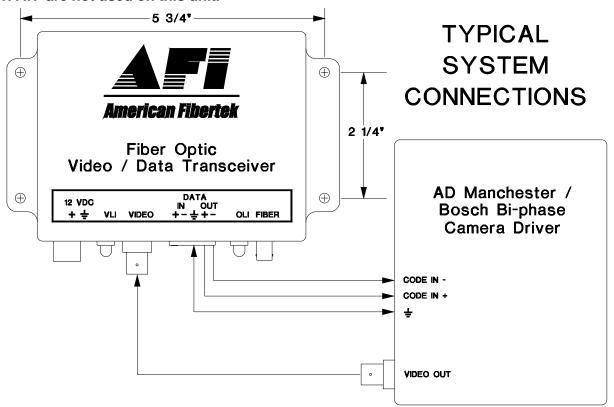
The video input connection is made via a BNC connector on the side of the unit. The video input should be connected to an appropriate  $75\Omega$  baseband video source such as a camera or a video recorder output. For optimum performance the video cables should be the shortest length of coax practical.

#### FIBER CONNECTION

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

#### DATA OUTPUT CONNECTIONS

Data output connections are made via a terminal block located on the side of the unit. Follow the label on the MTM-1200B for proper orientation of data code out wires. **Please note the terminals labeled 'DATA IN'** are not used on this unit.



Please note that Data Out on the MTM-1200B originated as Data in on the MRM-1200B or RRM-1200B before going across the fiber.

#### MTM-1200B STATUS INDICATORS

The MTM-1200B 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-1200B. 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 Input

#### OLI

A bi-color LED indicator monitors the power of the optical input signal that is being received at the MTM-1200B from the MRM-1200B or the RRM-1200B. 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



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK:

DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE DO NOT REMOVE COVER OR BACK NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

#### 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.
 Phone: (877) 234-7200

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 Phone: (732) 302-0660

 Somerset, NJ 08873
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