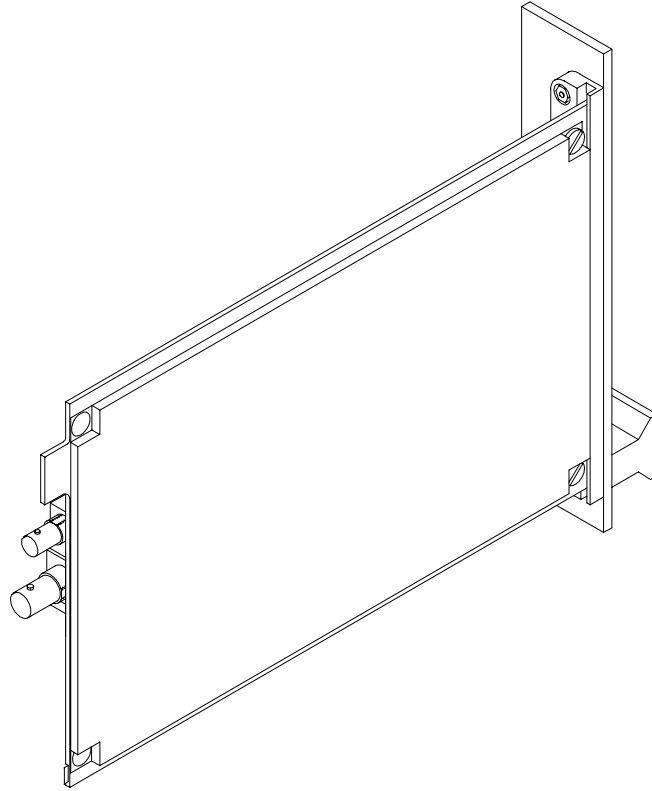




120 Belmont Drive  
Somerset, NJ 08873-1204

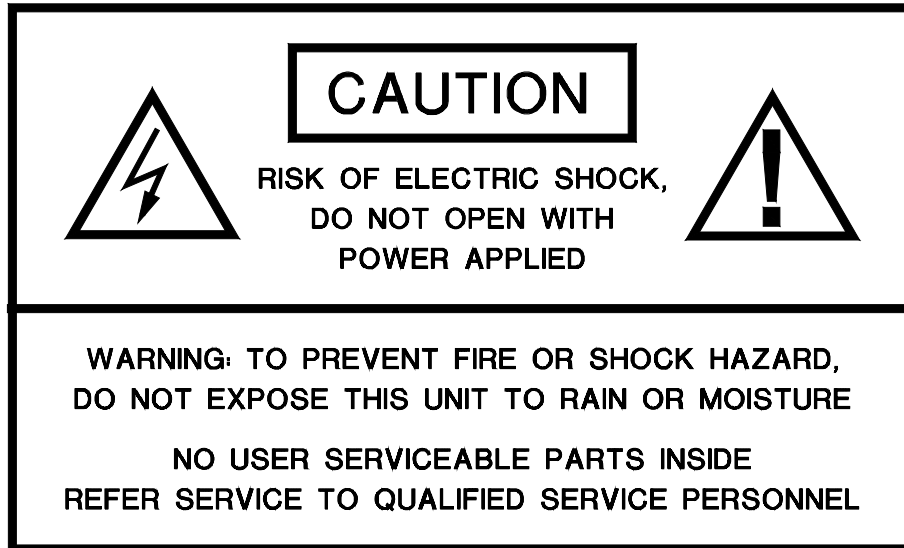
***American Fibertek***

Phone: 732.302.0660 Fax: 732.302.0667



Instruction Manual

RTM-100  
Video Transmitter



## INSTALLATION AND OPERATION INSTRUCTIONS

### INTRODUCTION

Thank you for purchasing your American Fibertek RTM-100 multimode 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 RTM-100 operates as half of a transmitter / receiver pair for the transmission of baseband NTSC, PAL, RS170, or RS343 video signals over a single multimode fiber optic cable. It is designed to operate with the MRM-100, RRM-100, or RRM-30 video receiver. The RRM-30 contains the electronics and optics of three RRM-100 units mounted on one printed circuit board to save space and reduce cost.

The RTM-100 converts a single video input into a single FM modulated optical output using an 850 nm wavelength source. The M100 Series product is designed to operate over an optical loss budget range of 0 to 12 dB with a maximum distance of up to 2.5 km. The RTM-100 operates on 50 um or 62.5 um multimode fiber. Refer to the data sheets for detailed performance specifications.

This unit is designed for rack mounting in any of the three American Fibertek subracks available. The subrack model numbers are SR-20/1, SR-20R/1, and SR-20/2. Slide in rack mounting and a LED indicator provide for easy installation and monitoring of video and power.

The RTM-100 is designed for rack mounting only. For a modular stand alone version please see the MTM-100.

## 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.

The unit slides into any open slot in the SR-20 subrack. Use a small screwdriver to push and lock the two ¼ turn fasteners into place. Please note that when installing this card in the position directly next to the power supply in the SR-20 subrack, it may be necessary to make the signal connections at the rear of the card before fully seating the card into its slot.

## POWER SOURCE

Power to the unit is supplied by the subrack. Please refer to the SR-20 and PSR instructions for further details.

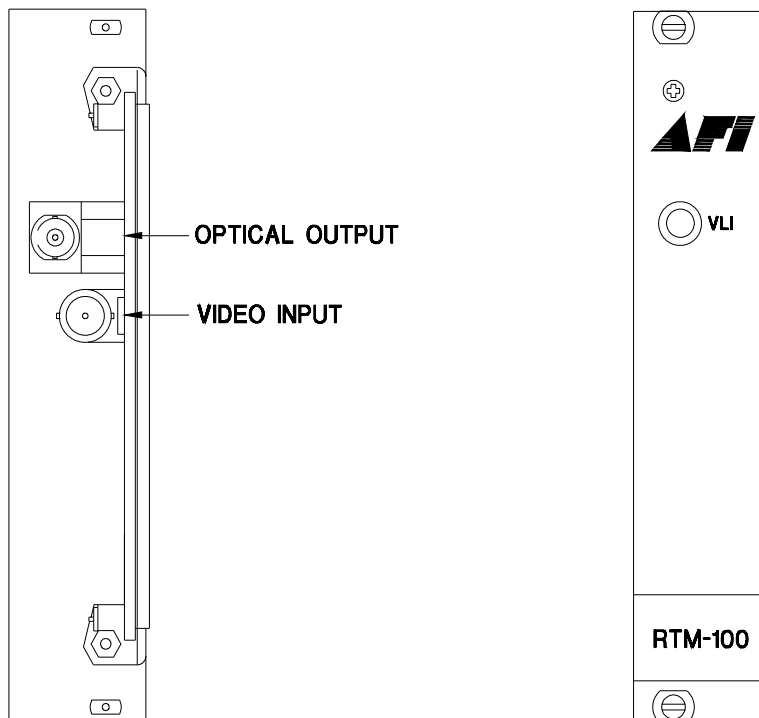
## POWER CONNECTION

Power is supplied to the unit via a four finger backplane connector. The RTM-100 can be inserted into the subrack or removed from the subrack with power applied to the backplane.

## INPUT / OUTPUT CONNECTIONS

The fiber optic connection is made via a ST connector located on the back of the unit. Be sure to allow sufficient room for the required minimum bend radius of the fiber cable used.

The video input connection is made via a BNC connector on the back of the unit. The video input should be connected to an appropriate 75Ω 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.



### RTM-100 STATUS INDICATOR

The RTM-100 transmitter provides the following LED status indicator to aid in installation and troubleshooting:

#### VLI

A bi-color LED indicator is provided for the video input to the RTM-100. 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

### 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  
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