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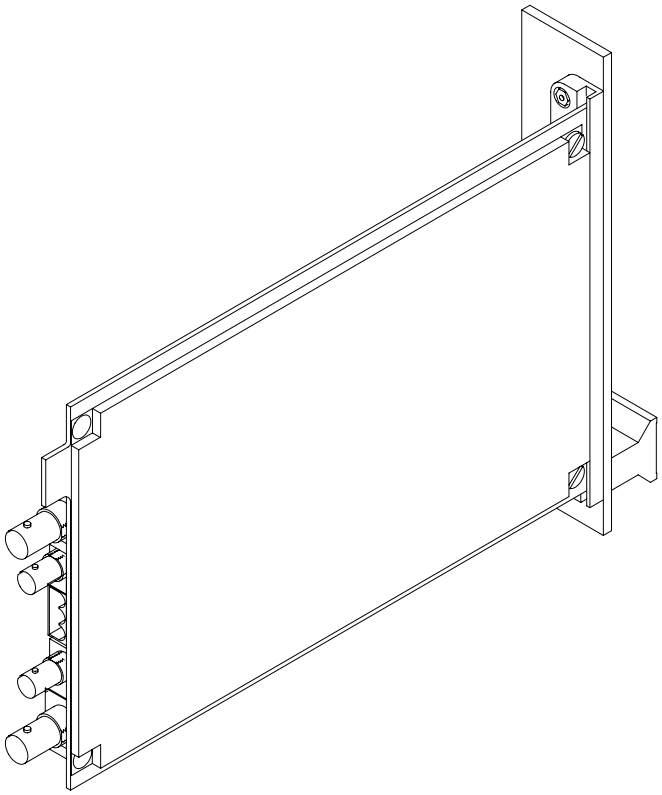


Instruction Manual

RRM-1420
Dual Fiber / Video Receiver
With RS422 Control Data

INSTALLATION AND OPERATION INSTRUCTIONS

INTRODUCTION

Thank you for purchasing your American Fibertek RRM-1420 multimode dual fiber / video receiver. Please take a few minutes to read these installation instructions in order to obtain the maximum performance from this product.

FUNCTIONAL DESCRIPTION

The RRM-1420 operates as half of a transmitter / receiver pair for the transmission of baseband NTSC, PAL, RS170, or RS343 video signals with return RS422 control data for Pelco Spectra III systems. It is designed to operate with two MTM-1410 video transmitter units over two independent multimode fiber optic cables.

The RRM-1420 converts two independent optical fiber inputs into two corresponding video outputs using 1300 nm wavelength detectors. The RRM-1420 also converts an electrical RS422 input signal into an optical RS422 output returning on each of the fibers using an 850 nm wavelength source. The 1410 and 1420 Series product are designed to operate over an optical loss budget range of 0 to 12 dB. The RRM-1420 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 LED indicators provide for easy installation and monitoring of video and power.

The RRM-1420 is designed for rack mounting only. For a modular stand alone version please see the MRM-1410.

INSTALLATION

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

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 RRM-1420 can be inserted into the subrack or removed from the subrack with power applied to the backplane.

VIDEO OUTPUT CONNECTIONS

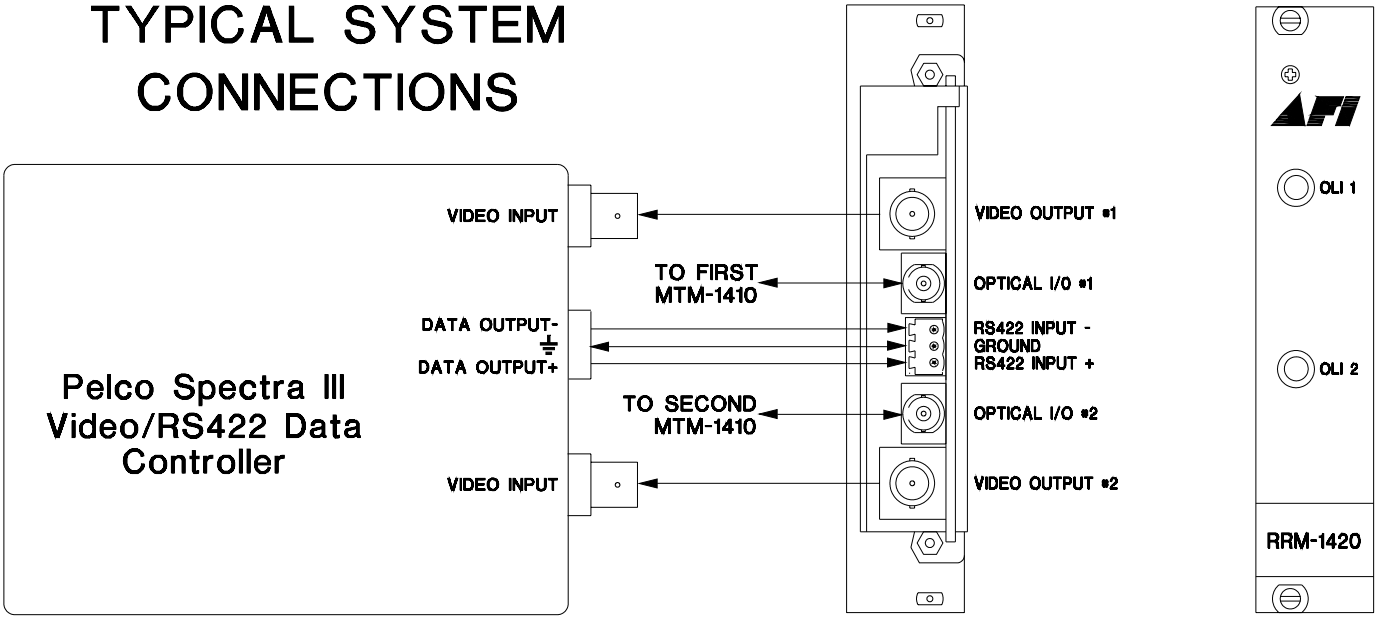
The video output connections are made via BNC connectors on the back of the unit. The 75Ω video outputs can be looped through typical baseband video inputs of switchers, recorders and other equipment as required. For proper operation, the outputs must be terminated with 75Ω. For optimum performance the video cables should be the shortest length of coax practical.

FIBER CONNECTION

The fiber optic connections are made via ST connectors located on the back of the unit. Be sure to allow sufficient room for the required minimum bend radius of the fiber cable used.

DATA INPUT CONNECTIONS

Data input connections are made via a terminal block on the back of the unit. Follow the drawing below for proper orientation of data input wires.



RRM-1420 STATUS INDICATORS

The RRM-1420 provides the following LED status indicators to aid in installation and troubleshooting:

OLI 1

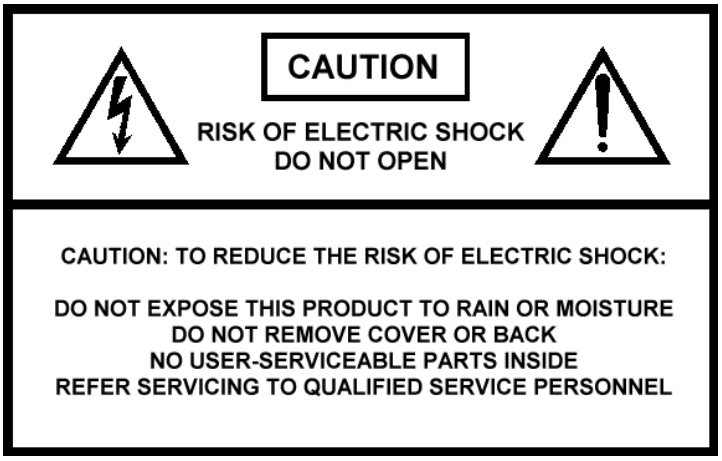
A bi-color LED indicator monitors the power of the optical input signal that is being received at the RRM-1420 from the first MTM-1410. DC power and optical input status associated with this LED are summarized below.

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

OLI 2

A bi-color LED indicator monitors the power of the optical input signal that is being received at the RRM-1420 from the second MTM-1410. 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
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Phone: (877) 234-7200
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