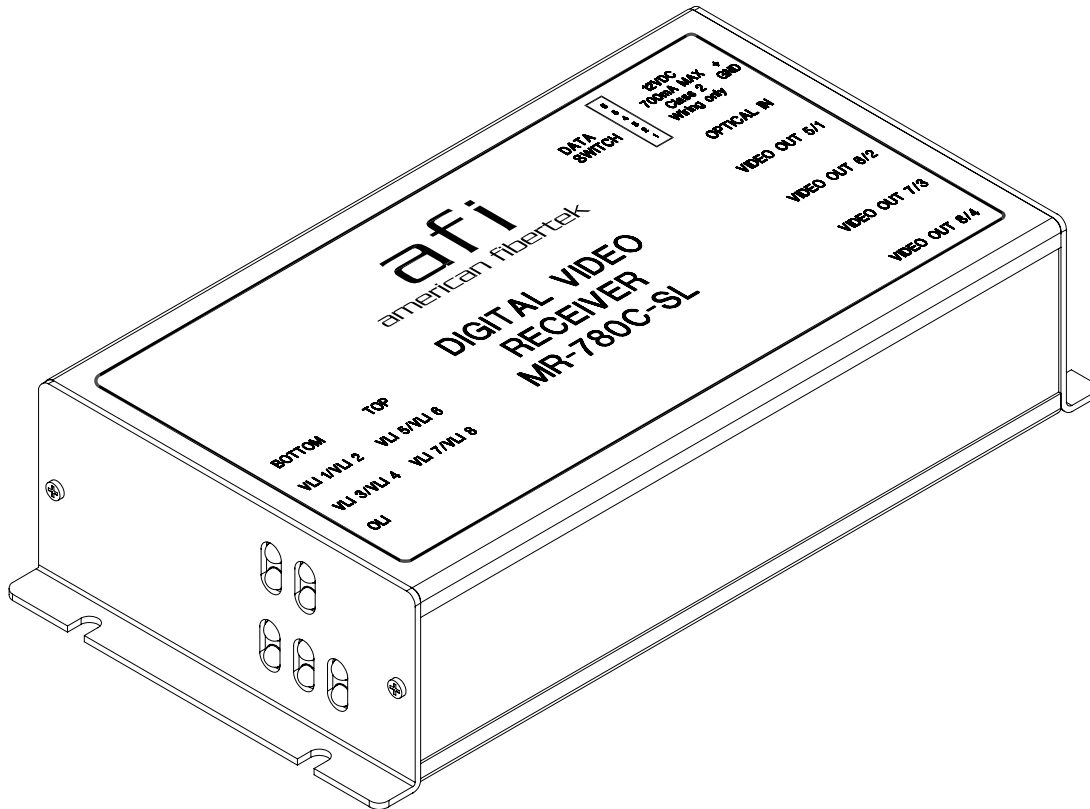


# afi

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## Instruction Manual

### MR-780C-SL Eight Channel Video Receiver

# INSTALLATION AND OPERATION INSTRUCTIONS

## INTRODUCTION

Thank you for purchasing your American Fibertek MR-780C-SL singlemode eight channel 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 MR-780C-SL operates as half of a transmitter / receiver pair for the transmission of eight channels of high performance digital NTSC, PAL, RS170, or RS343 video signals. The MR-780C-SL is designed to operate with the MT-780C-SL or RT-780C-SL video transmitter over one singlemode fiber optic cable.

The MR-780C-SL detects and demultiplexes an optical serial data stream containing eight video signals at 1310 nm wavelength. The 780C-SL Series product is designed to operate over an optical loss budget range of 0 to 21 dB. Refer to the data sheets for detailed performance specifications.

This unit is contained in a rugged aluminum housing with internal dc voltage regulation. The detachable terminal blocks and LED indicators provide for easy installation and monitoring of video, sync, and optical power.

The MR-780C-SL is designed for mounting as a modular stand alone unit. For a rack mounted version please see the RR-780C-SL.

## 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

This 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-12D 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 on the right side of the unit. Follow the label on unit for proper orientation of +12 volt dc and ground.

## FIBER CONNECTION

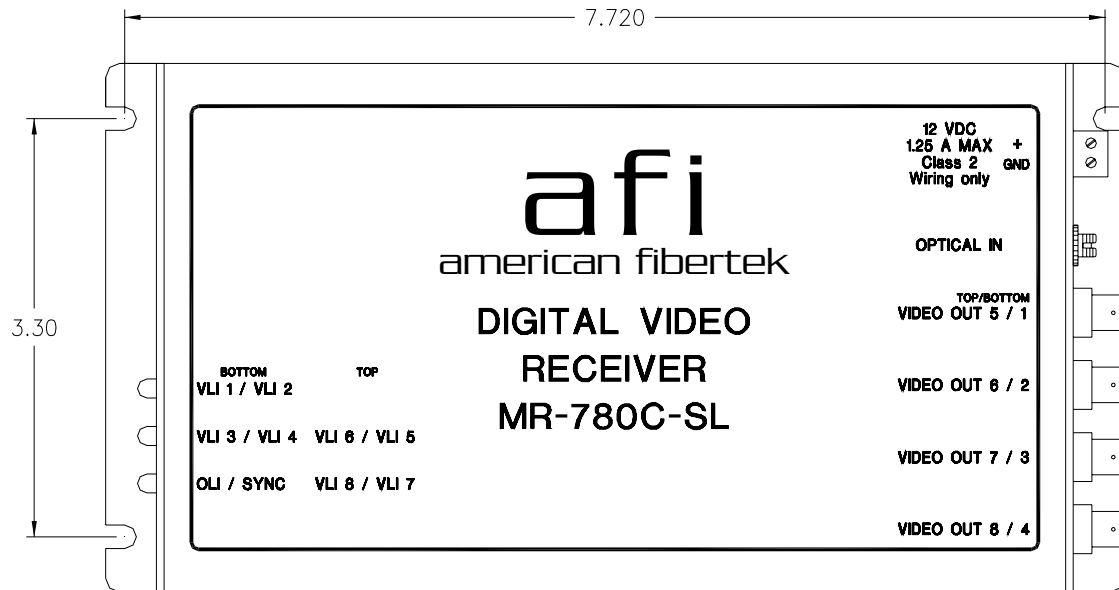
The fiber optic connection is made via a FC/PC connector located on the right side of the unit.

## VIDEO OUTPUT CONNECTIONS

The video output connections are made via BNC connectors on the right side 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.

## MR-780C-SL STATUS INDICATORS

The MR-780C-SL receiver provides the following LED status indicators described below to aid in installation and troubleshooting:



### VLI 1 THROUGH VLI 8

A bi-color LED indicator is provided for each of the eight video outputs of the MR-780C-SL. DC power and video status associated with each of these LED's are summarized below.

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

### OLI

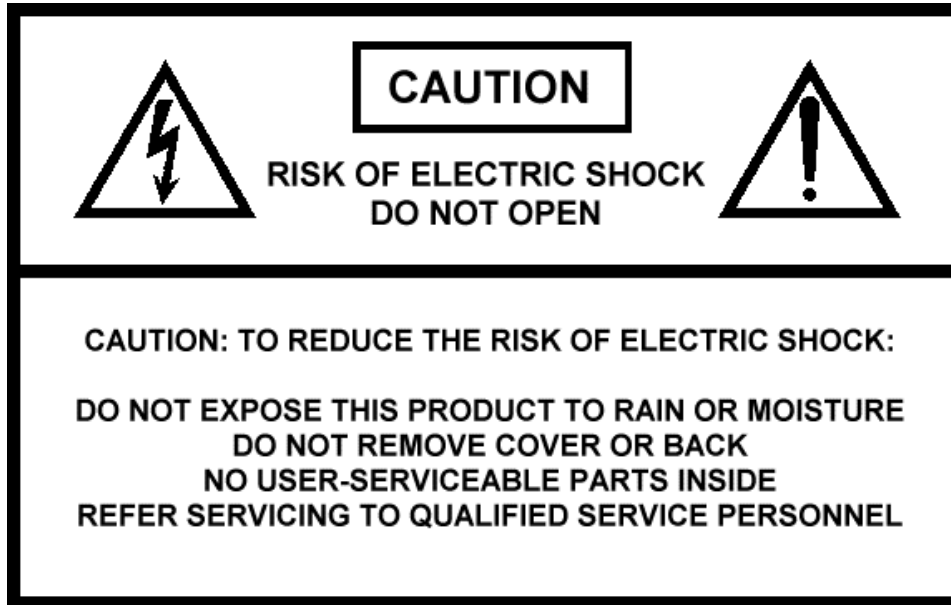
A bi-color LED indicator monitors the optical input power of the data signal that is being received at the MR-780C-SL from the MT-780C-SL or the RT-780C-SL. DC power and optical input status associated with this LED are summarized below.

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

### SYNC

A bi-color LED indicator is provided to monitor the proper serialization of the electrical data stream through the MR-780C-SL and out onto the fiber. DC power and sync status associated with this LED is summarized below.

Sync LED	DC Power Status	Sync Status
Green	On	Proper Data Stream Serialization Present
Red	On	Data Stream Serialization 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:

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