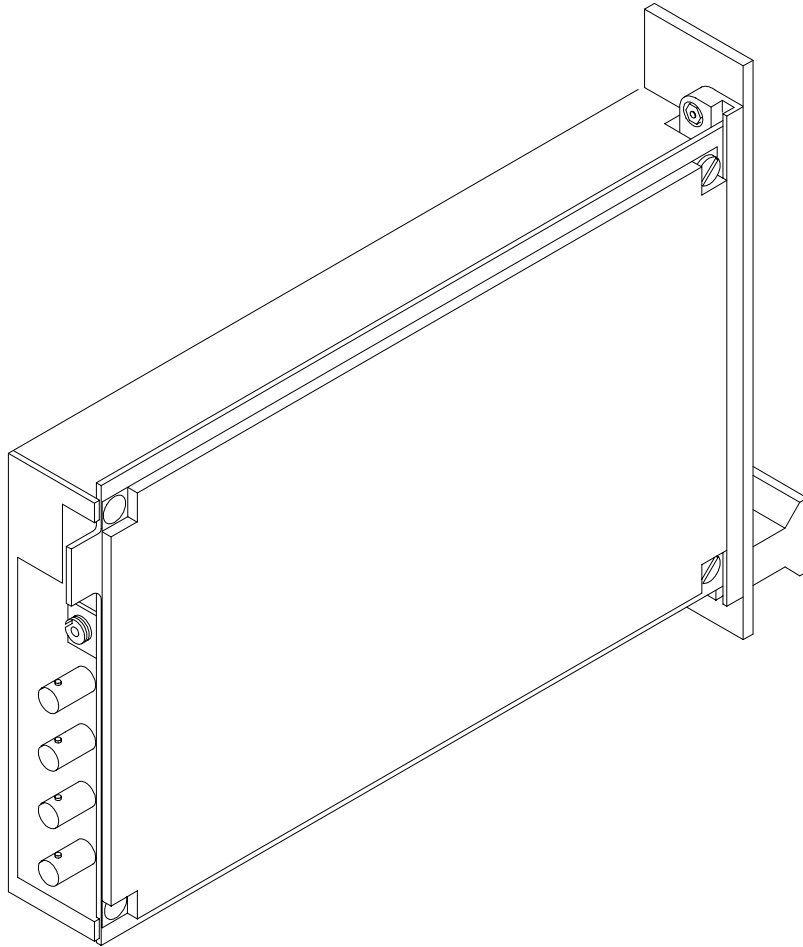




120 Belmont Drive  
Somerset, NJ 08873-1204

***American Fibertek***

Phone: 732.302.0660 Fax: 732.302.0667



## Instruction Manual

# RR-940SL Four Channel Video Receiver

# INSTALLATION AND OPERATION INSTRUCTIONS

## INTRODUCTION

Thank you for purchasing your American Fibertek RR-940SL singlemode four 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 RR-940SL operates as half of a transmitter / receiver pair for the transmission of four channels of high performance 10 bit digital NTSC, PAL, RS170, or RS343 video signals. The RR-940SL is designed to operate with the MT-940SL or RT-940SL video transmitter over one singlemode fiber optic cable.

The RR-940SL detects and demultiplexes an optical serial data stream containing four video signals at 1310 nm wavelength. The 940SL 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 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 RR-940SL is designed for rack mounting only. For a modular stand alone version please see the MR-940SL.

## INSTALLATION

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

A maximum of six 940SL units are recommended in one subrack. Forced air movement is required to dissipate heat in any installation containing six or more 940SL units in one subrack.

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 RR-940SL can be inserted into the subrack or removed from the subrack with power applied to the backplane.

## FIBER CONNECTION

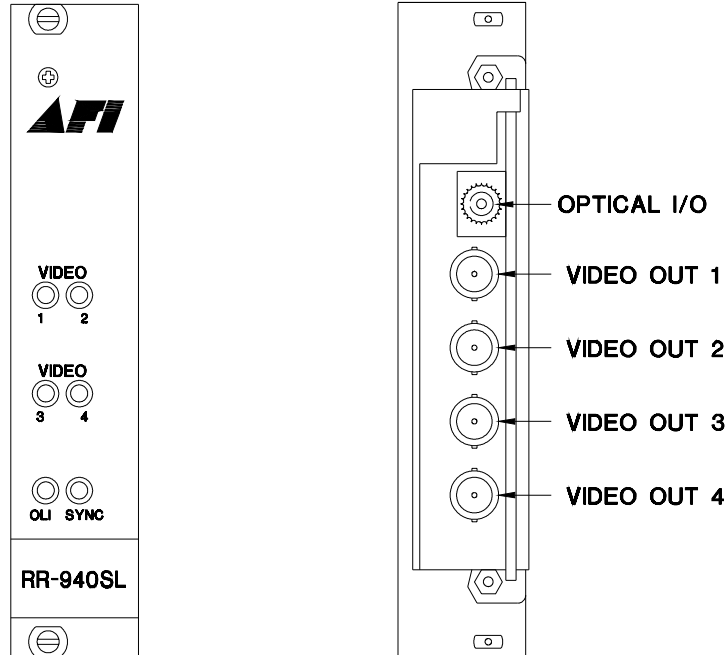
The fiber optic connection is made via a FC/PC connector located on the back of the unit. Be sure to allow sufficient room for the required minimum bend radius of the fiber cable used.

## 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.

## RR-940SL STATUS INDICATORS

The RR-940SL receiver provides the following LED status indicators described below to aid in installation and troubleshooting:



### VLI 1 THROUGH VLI 4

A bi-color LED indicator is provided for each of the four video outputs of the RR-940SL. 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

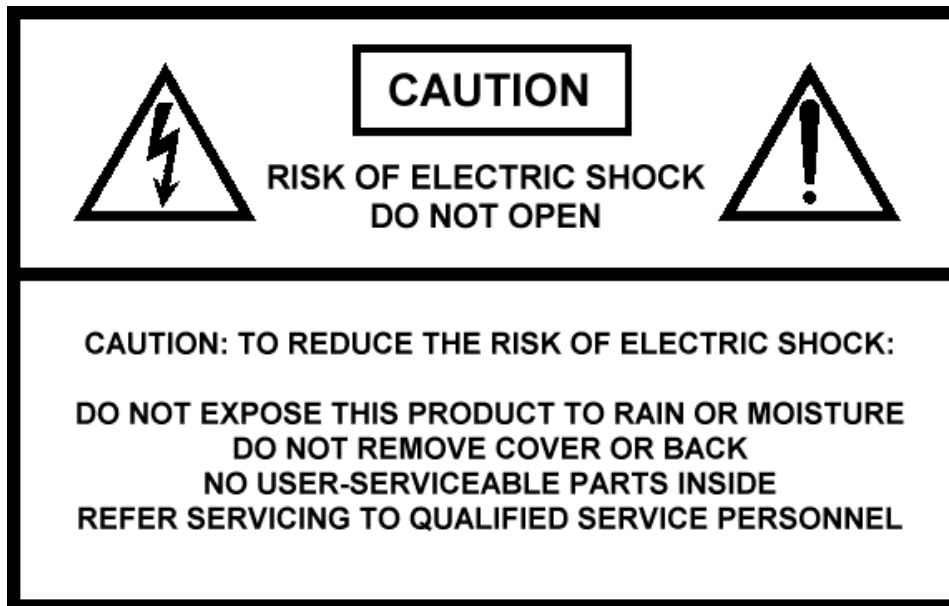
A bi-color LED indicator monitors the optical input power of the data signal that is being received at the RR-940SL from the MT-940SL or the RT-940SL. DC power and optical input status associated with this LED are summarized below.

| 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 RR-940SL 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:

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](mailto:techinfo@americanfibertek.com)