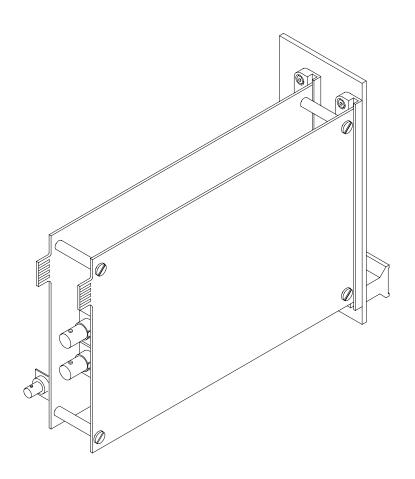


# 120 Belmont Drive Somerset, NJ 08873-1204

**American Fiberiek** Phone: 732.302.0660 Fax: 732.302.0667



**Instruction Manual** 

RT-220C Two Channel Video Transmitter



DO NOT OPEN WITH

POWER APPLIED



WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE

NO USER SERVICEABLE PARTS INSIDE
REFER SERVICE TO QUALIFIED SERVICE PERSONNEL

# INSTALLATION AND OPERATION INSTRUCTIONS

# **INTRODUCTION**

Thank you for purchasing your American Fibertek RT-220C multimode two channel 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 RT-220C operates as half of a transmitter / receiver pair for the transmission of two simultaneous, real time, baseband NTSC, PAL, RS170, or RS343 video signals. The RT-220C is designed to operate with the MR-220C or RR-220C two channel video receiver over one multimode fiber optic cable.

The RT-220C transmitter accepts up to two video inputs. Each video input modulates a separate FM carrier frequency to allow the total of two video signals to be combined onto one fiber. The 220C Series product is designed to operate over an optical loss budget range of 0 to 12 dB when used on 62.5 um multimode fiber. A maximum distance of 5km can be achieved as long as the overall fiber bandwidth maintains a minimum of 150 MHz at 1300 nm. As an example, if the system fiber has a 600 MHz-km modal bandwidth specification, the 220C will operate over a distance up to 4 km. The RT-220C will also operate on 50 um multimode fiber at a reduced loss budget range. Refer to the product specification sheet for additional performance data.

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

The RT-220C is designed for rack mounting only. For a modular stand alone version please see the MT-220C.

#### 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 two adjacent open slots in the SR-20 subrack. Use a small screwdriver to push and lock the four 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.

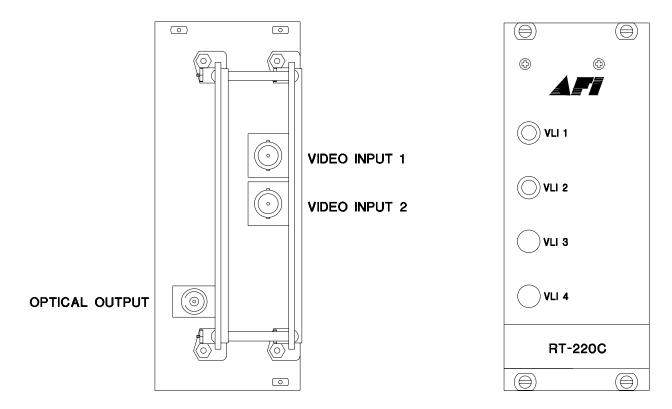
### POWER CONNECTION

Power is supplied to the unit via a four finger backplane connector. The RT-220C 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.

Video input connections are also located on the back of the unit. A BNC connector is provided for each channel. The video inputs are 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.



#### RT-220C STATUS INDICATORS

The RT-220C transmitter provides the following LED status indicators to aid in installation and troubleshooting:

### VLI 1 AND VLI 2

A bi-color LED indicator is provided for each of the two video channel inputs. Video status associated with each of these LEDs is summarized below.

Video Level Indicator	Video Status
Green	Proper Input Video Present
Red	Input Video Not Detected
Off	Check Power Supply

This unit complies with 21 CFR 1040.10 and 1040.11

#### 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

 120 Belmont Drive
 Phone: (732) 302-0660

 Somerset, NJ 08873
 FAX (732) 302-0667

E-mail: techinfo@americanfibertek.com