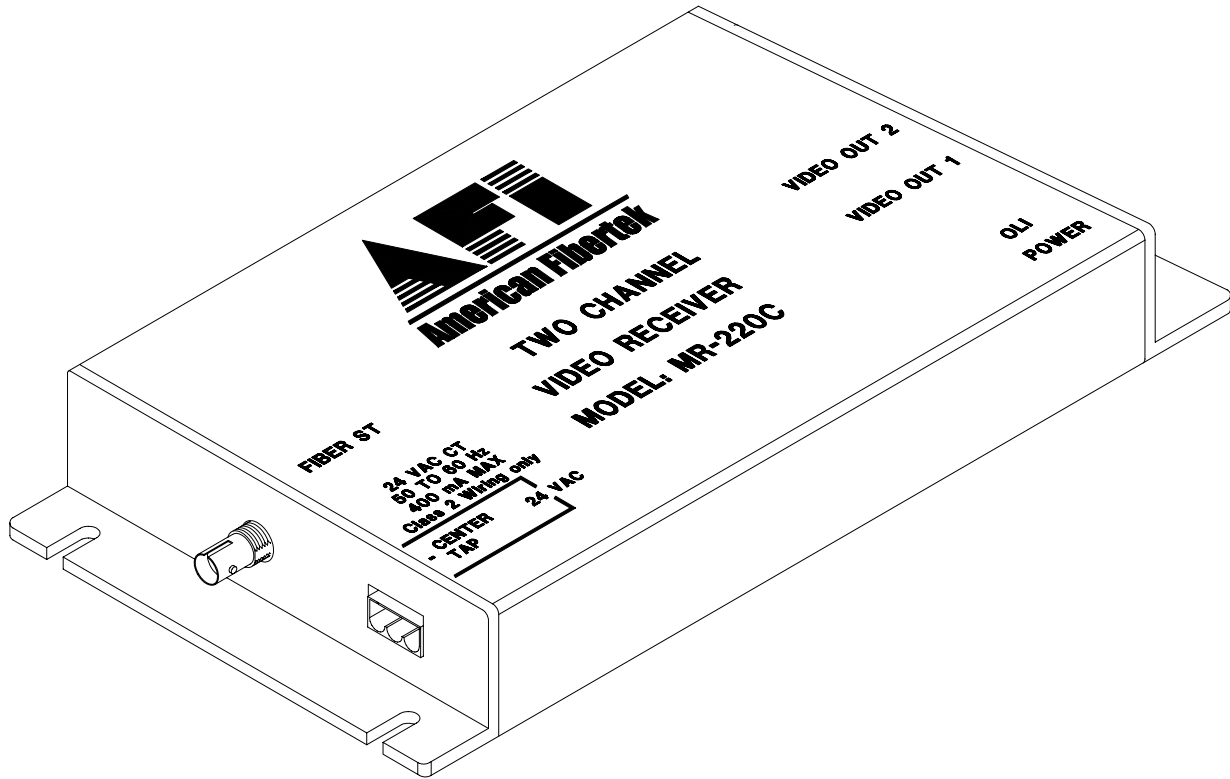




120 Belmont Drive
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American Fibertek

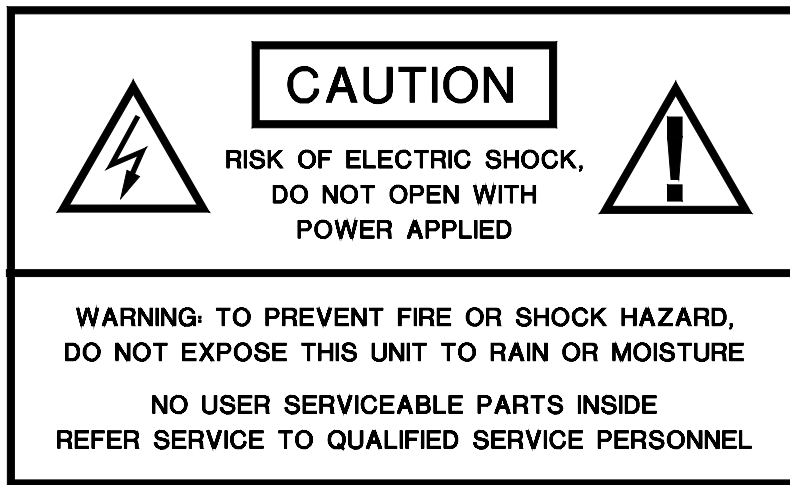
Phone: 732.302.0660 Fax: 732.302.0667



Instruction Manual

MR-220C

Two Channel Video Receiver



INSTALLATION AND OPERATION INSTRUCTIONS

INTRODUCTION

Thank you for purchasing your American Fibertek MR-220C multimode two 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-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 MR-220C is designed to operate with the MT-220C or RT-220C video transmitter over one multimode fiber optic cable.

The MR-220C receiver converts a single optical input into a maximum of two video outputs. 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 MR-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 contained in a compact and rugged extruded aluminum housing with internal dc voltage regulation. The detachable terminal block and LED indicators provide for easy installation and monitoring of video and power.

The MR-220C is designed for mounting as a modular stand alone unit. For a rack mounted version please see the RR-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.

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 PRODUCT SHALL BE POWERED BY A LISTED CLASS 2 POWER SUPPLY ONLY.

Power to the unit must be within the specifications listed. A 24VAC center tap transformer rated at 400mA is required. In the USA and in Canada an American Fibertek PS-24CT-T is supplied with this unit.

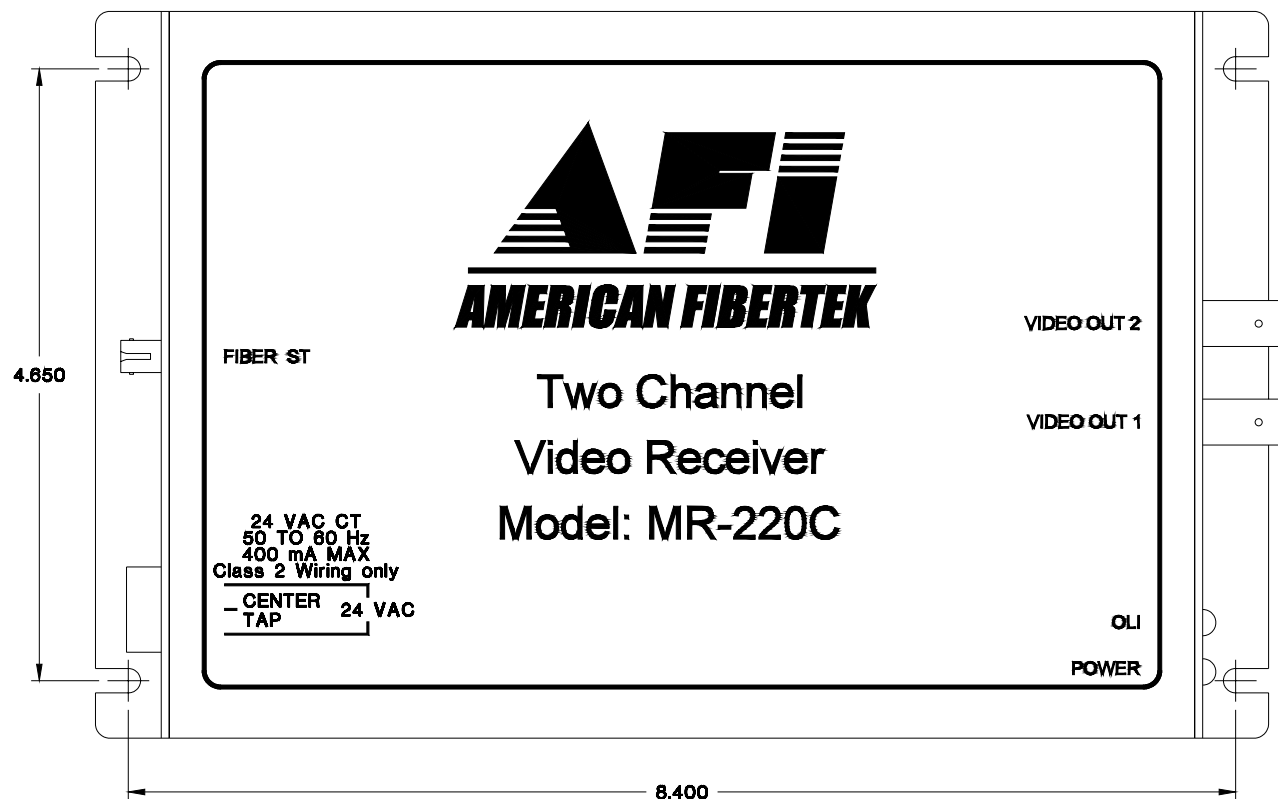
POWER CONNECTION

Power is supplied to the unit via a three pin Phoenix connector. The ground wire from the center tap supply must be connected to the center pin of the Phoenix connector. When installed properly, the nominal voltage measured from the center pin to either of the outside pins will be 12 volts AC and the nominal voltage measured from one outside pin to the other outside pin will be 24 volts AC.

INPUT / OUTPUT CONNECTIONS

The fiber optic connection is made via a ST connector located on the left side of the unit.

Video output connections are located on the right side of the unit. A BNC connector is provided for each channel. 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-220C STATUS INDICATORS

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

OLI

A green LED indicator monitors the power of the optical signal that is being received at the MR-220C from the MT-220C or RT-220C. Optical input status associated with this LED is summarized below.

Optical Level Indicator	Optical Status
Green	Proper Optical Input Power Present
Off	Optical Input Not Detected

POWER

A green LED indicator monitors the internal voltages created within the MR-220C. Power status associated with this LED is summarized below.

Power Indicator	Power Status
Green	Voltage Present
Off	Voltage Not Present

**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.
120 Belmont Drive
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Phone: (732) 302-0660
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