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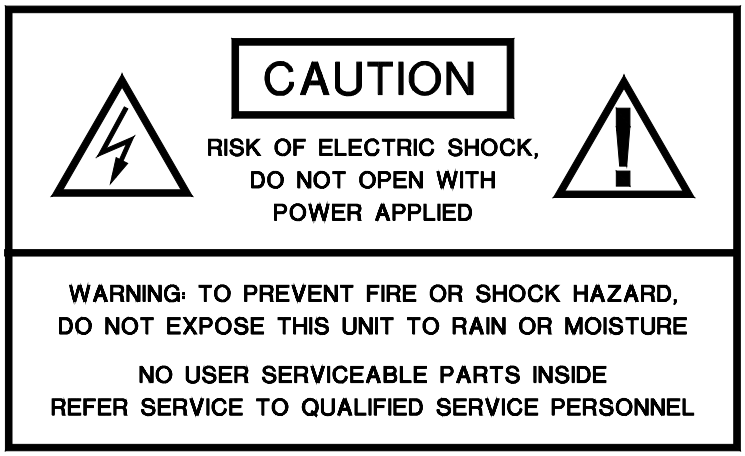
Instruction Manual

MTX-8406C
MRX-8406C
Four Channel Video Multiplexer
&
Four Return “Up the Coax”
Channels



This unit complies with 21 CFR 1040.10 and 1040.11

INSTALLATION AND OPERATION INSTRUCTIONS

INTRODUCTION

Thank you for purchasing your American Fibertek Series 8406C multimode four channel video multiplexer and four channel “Up the Coax” control data multiplexer in the return direction. Please take a few minutes to read these installation instructions in order to obtain the maximum performance from this product.

FUNCTIONAL DESCRIPTION

The 8406C Series units operate as a transmitter / receiver pair for the transmission of four simultaneous, real time baseband NTSC/PAL video signals and four simultaneous “Up the Coax” control data signals over one multimode fiber optic cable.

The MTX-8406C transmitter accepts up to four video inputs and multiplexes these signals onto a single optical output port for connection to the fiber transmission system. Correspondingly, the MRX-8406C receiver converts the optical signal to four independent video output signals.

The MRX-8406C receiver accepts up to four “Up the Coax” control data inputs and multiplexes these signals onto a single optical output port for connection to the fiber transmission system. Correspondingly, the MTX-8406C transmitter converts the optical signal to four independent “Up the Coax” control data output signals.

The 8406C Series units operate on 50 um or 62.5 um multimode fiber. Refer to the data sheets for detailed performance specifications.

The individual units may be configured for rack mounting or wall mounting depending upon the position of the included mounting hardware.

INSTALLATION

THIS INSTALLATION SHOULD BE MADE BY A QUALIFIED SERVICE PERSON AND SHOULD CONFORM TO THE NATIONAL ELECTRICAL CODE, ANSI/NFPA AND LOCAL CODES.

To install the MTX-8406C or MRX-8406C it is first necessary to mount the rack flanges to the unit.

For rack mounting the ears are installed on the sides of the unit with the surfaces that have oval holes flush with the front of the unit as in Figure 1. Mount the ears with the #10 flathead screws provided. To mount in the rack cabinet, use mounting screws that are appropriate for the rack cabinet being used.

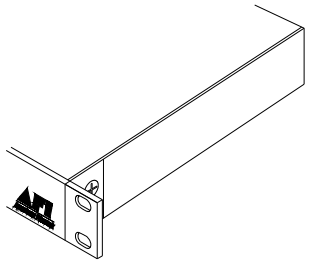


Figure 1. Rack Mount Configuration

For mounting the unit flush to a wall or other rigid surface, the ears may be installed on the sides with the oval holes flush with the bottom of the unit as in Figure 2. Mount the ears with the #10 flathead screws provided. Mount the unit to a rigid surface using #10 (5mm) screws.

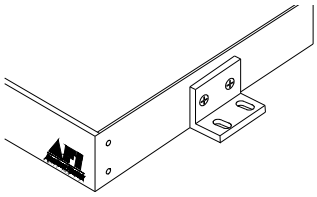


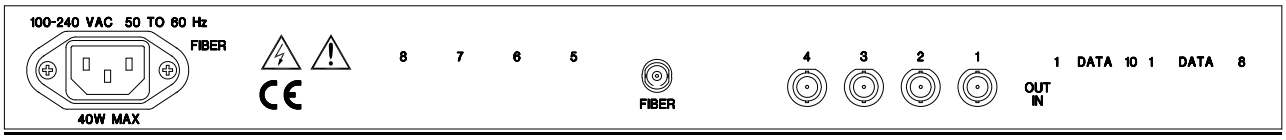
Figure 2. Wall Mount Configuration

POWER SOURCE

The internal power supply accepts universal line voltage. Any mains supply from 100 to 240 VAC, 50 to 60 Hz, may be used without modification or adjustment. A universal power connector is provided on the rear of the unit to facilitate connection to the power mains.

POWER CONNECTION

The unit is supplied (in the US , UK, and Euro only) with a three conductor power cord. The “ground” conductor is directly connected to the chassis.



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 / Control Data input and output connections are located on the rear of the unit. A BNC connector is provided for each channel. The video inputs / control data outputs are connected to an appropriate 75Ω 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.

The video outputs / control data inputs are connected to an appropriate controller. For proper operation, these signals must be terminated with 75Ω.

MTX-8406C STATUS INDICATORS

The MTX-8406C transmitter provides the following front panel LED status indicators to aid in installation and troubleshooting:

VIDEO

A bi-color LED indicator is provided for each of the four video channel inputs. AC power and video status associated with each of these LEDs are summarized below.

Video Presence LED	AC Power Status	Video Status
Green	On	Proper Input Video Present
Red	On	Input Video Not Detected
Off	Off	Check Power Supply Input

OLI

A bi-color LED indicator monitors the power of the optical input signal that is being received at the MTX-8406C from the control data channels one through four of the MRX-8406C. AC power and optical input status associated with this LED are summarized below.

Optical Level Indicator	AC Power Status	Optical Status
Green	On	Proper Optical Input Power Present
Red	On	Optical Input Not Detected
Off	Off	Check Power Supply Input

MRX-8406C STATUS INDICATORS

The MRX-8406C receiver provides the following front panel LED status indicators to aid in installation and troubleshooting:

CONTROL

A bi-color LED indicator is provided for each of the four control data channel inputs. Control data status associated with each of these LEDs are summarized below.

Control Presence LED		Control Data Status
Green		Proper Input Control Data Present
Off		Control Data Input Not Detected

OLI

A bi-color LED indicator monitors the power of the optical input signal that is being received at the MRX-8406C from the video channels of the MTX-8406C. AC power and optical input status associated with this LED are summarized below.

Optical Level Indicator	AC Power Status	Optical Status
Green	On	Proper Optical Input Power Present
Red	On	Optical Input Not Detected
Off	Off	Check Power Supply Input

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.
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