comnet
Communication Networks



INSTALLATION AND OPERATION MANUAL

FVT/FVR200

20-CHANNEL DIGITALLY ENCODED VIDEO

The FVT/FVR200 is a twenty (20) channel ten (10) bit digitally encoded video transmission system. It combines twenty individual video signals into one high speed digital stream and transmits this over a one optical fiber. The FVT/FVR200 consists of a twenty channel video transmitter (FVT200) and a twenty channel video receiver (FVR200). Both the transmitter and receiver are made up from four modules:

- 2 × 8 Channel Video Modules labeled “A” and “B”
- 1 × 4 Channel Video Module labeled “A” and “B”
- 1 × Passive Optical Wavelength Division Multiplexor (WDM)
- 1 × Chassis with integral power supply

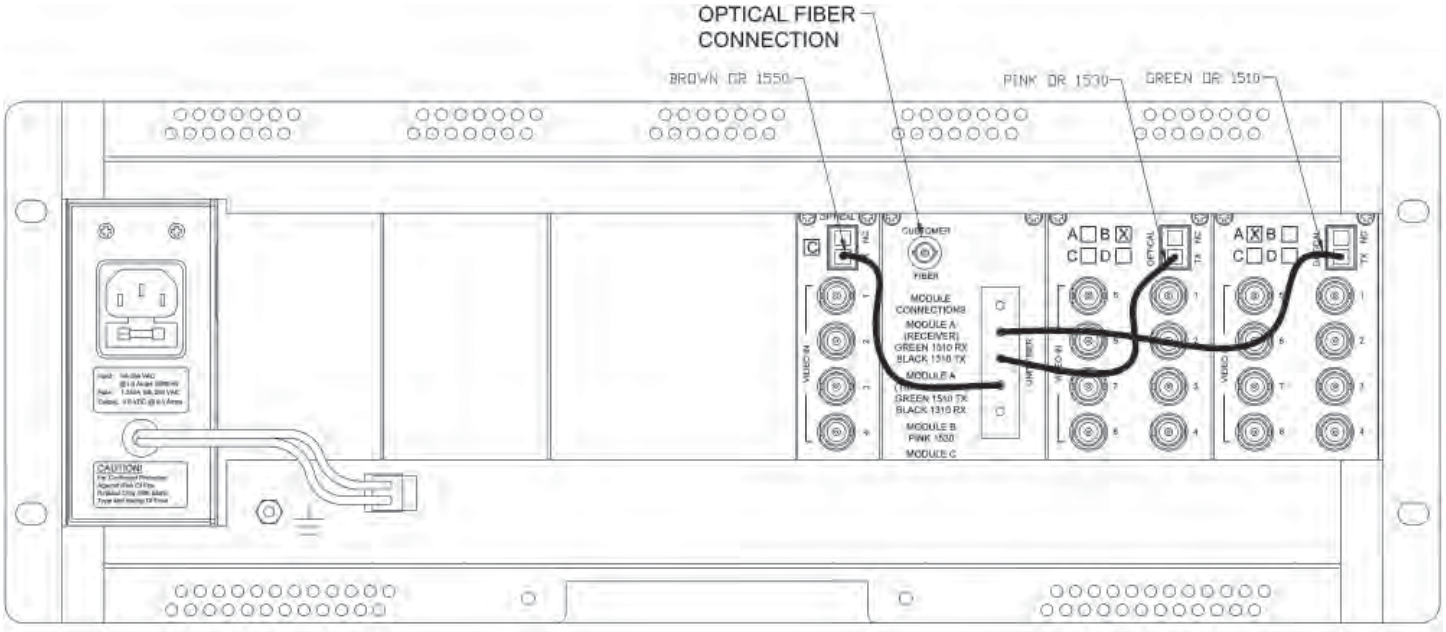
The outputs of the Video Modules are combined at the transmitter into a single optical signal by means of the WDM and separated out at the receiver with an identical WDM. While the WDM has provision for five (5) different wavelengths (colors), in this application only two wavelengths are used.

The video channels are referred to as A1, A2, etc. and B1, B2, etc. A video input to the A3 transmitter BNC connector will be received out of the A3 BNC on the corresponding video module.

The FVT200 and the FVR200 come completely assembled and tested from the factory. There are no optical or electrical adjustments required or permitted.

See **Figures 1** – **3** for complete installation instructions.

FIGURE 1 – FVT200 TRANSMITTER FRONT AND REAR



Power Sources - The product should only be operated from the ComNet C1-PS power supply.

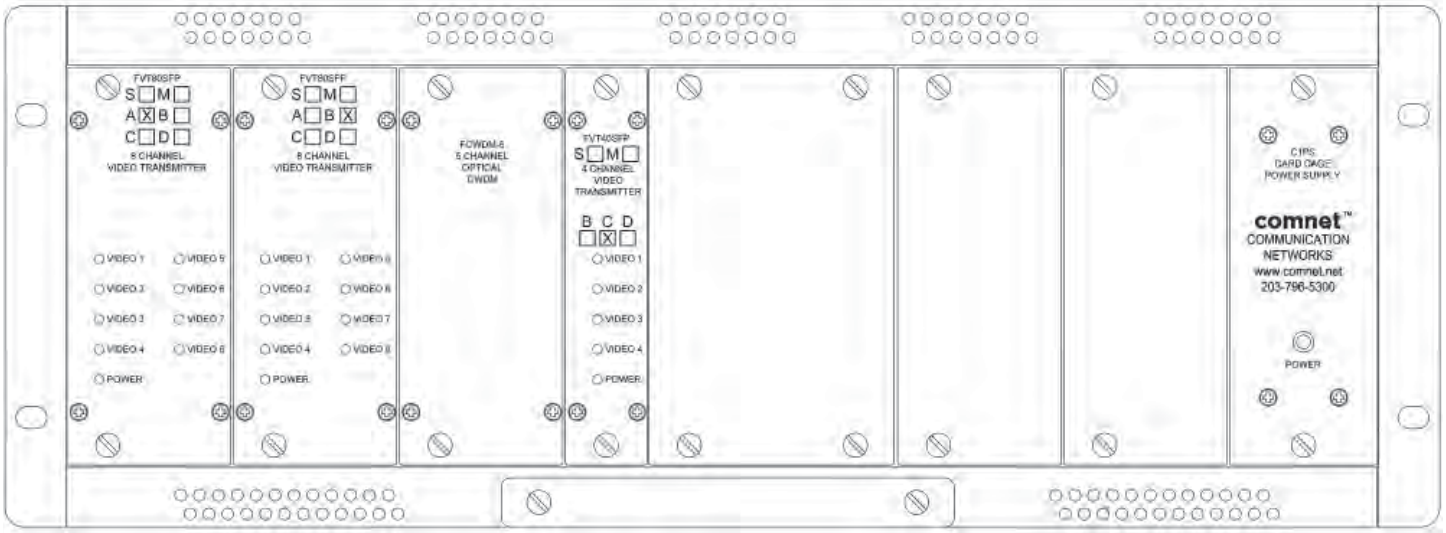
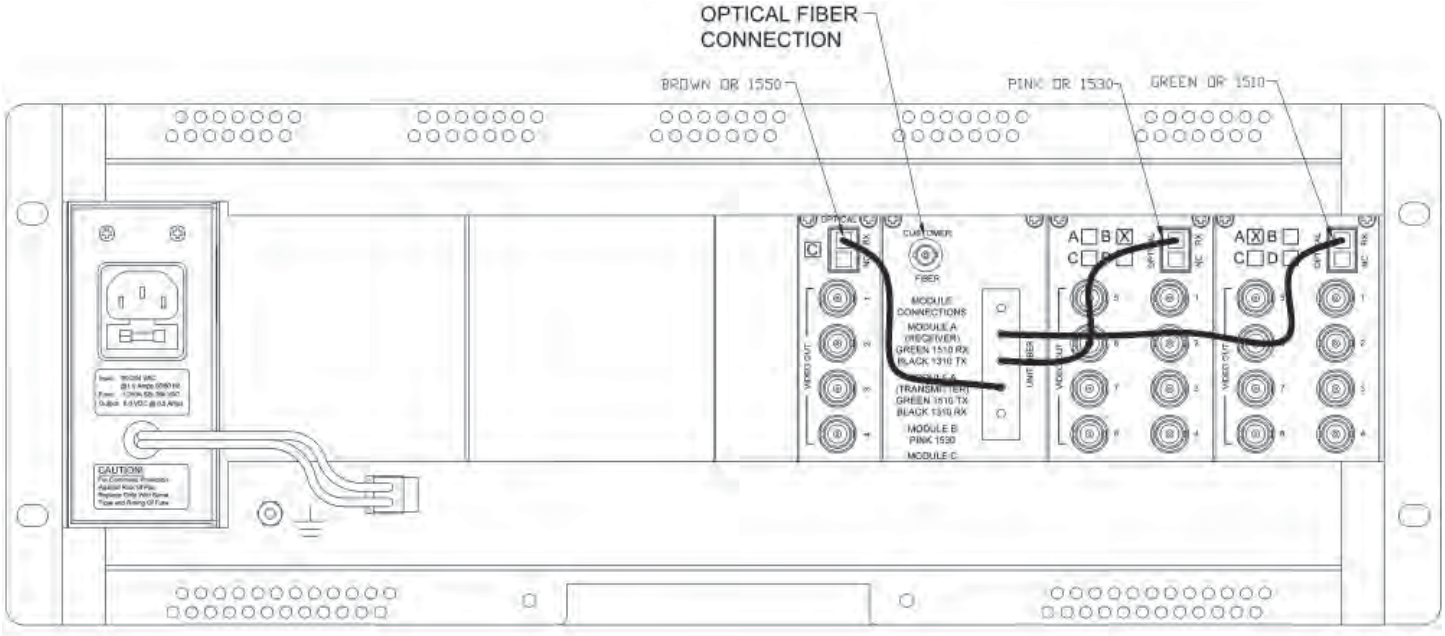


FIGURE 2 – FVR200 RECEIVER FRONT AND REAR



Power Sources - The product should only be operated from the ComNet C1-PS power supply.

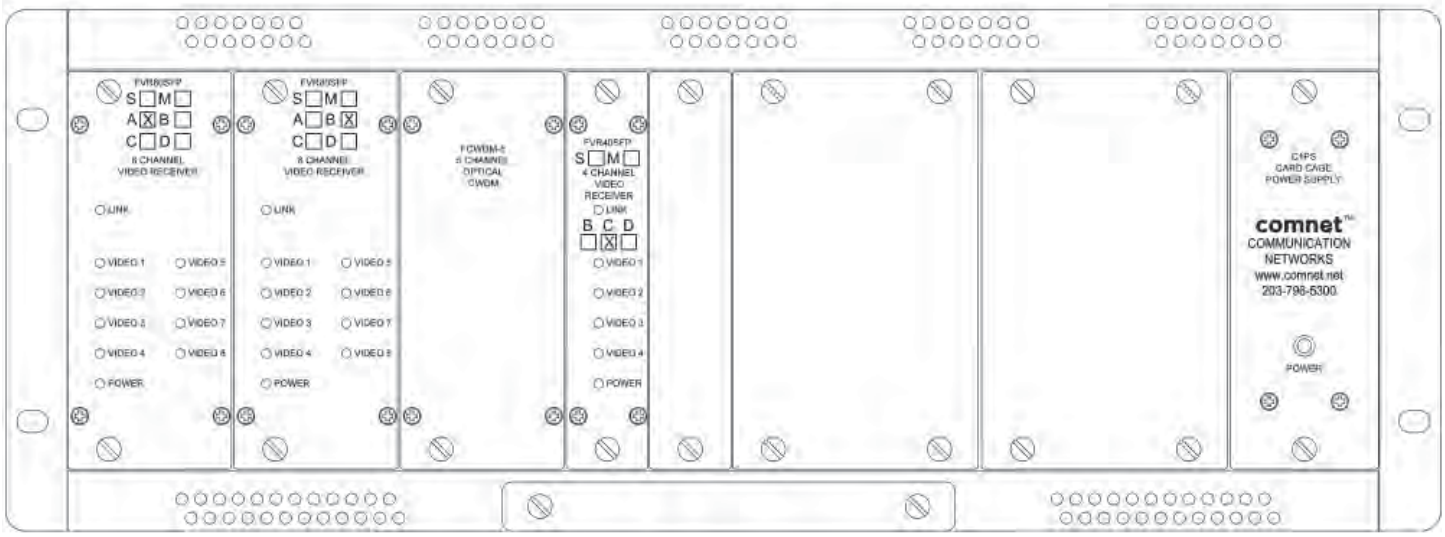


FIGURE 3 – LED INDICATORS

	LINK	VIDEO	POWER
GREEN	Communication link has been established over optical fiber	An active video signal is present on the BNC connector.	Unit powered up
RED	Communication link has not been established.	No Video Signal	–
OFF	Not powered up correctly	–	Unit powered down

MECHANICAL INSTALLATION INSTRUCTIONS

INSTALLATION CONSIDERATIONS

This fiber-optic link is supplied as a Rack. Units should be installed in dry locations protected from extremes of temperature and humidity.

IMPORTANT SAFEGUARDS:

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

B) Reduced Air Flow - Installation of equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

MADE IN THE USA

C1-US, C1-EU, C1-AU OR C1-CH CARD CAGE RACKS

CAUTION: Although ComNet units are hot-swappable and may be installed without turning power off to the rack, ComNet recommends that the power supply be turned off and that the rack power supply is disconnected from any power source. **Note:** Remove electrical connectors on ComNet units before installing in card cage rack.

1. Make sure that the card is oriented right side up, and slide it into the card guides in the rack until the edge connector at the back of the card seats in the corresponding slot in the rack's connector panel. Seating may require thumb pressure on the top and bottom of the card's front panel.

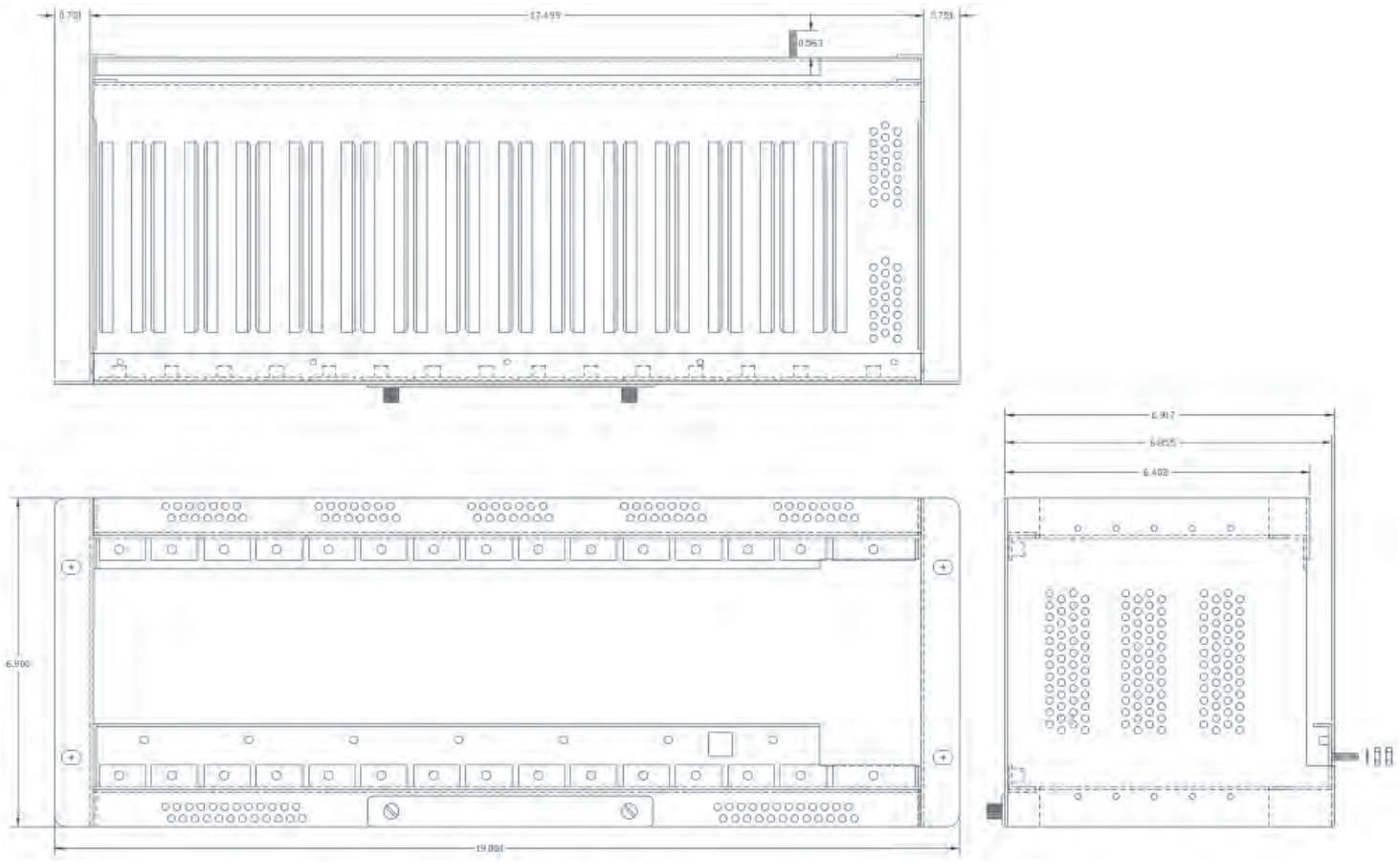
CAUTION: Take care not to press on any of the LEDs.

2. Tighten the thumb screws on the card until the front panel of the card is seated against the front of the rack.

WARNING: Unit is to only be used with included C1-PS power supply.

FIGURE A

Dimensions are for a standard ComNet™ C1 card cage



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3 CORPORATE DRIVE | DANBURY, CT 06810 | USA
T: 203.796.5300 | F: 203.796.5303 | TECH SUPPORT: 1.888.678.9427 | INFO@COMNET.NET

8 TURNBERRY PARK ROAD | GILDERSOME | MORLEY | LEEDS, UK LS27 7LE
T: +44 (0)113 307 6400 | F: +44 (0)113 253 7462 | INFO-EUROPE@COMNET.NET

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