



## INSTALLATION AND OPERATION MANUAL

### FVT/FVR40A4(M,S)1

4-CHANNEL 10-BIT DIGITALLY ENCODED VIDEO +  
4-CHANNEL 24-BIT DIGITALLY ENCODED AUDIO MULTIPLEXER

The ComNet™ FVT/FVR40A4 series video/audio multiplexer utilizes 10-bit video encoding for true EIA/TIA RS-250C Short-Haul broadcast quality transmission, and 24-bit encoding at a 96 KHz sampling rate for the highest possible audio fidelity. Digitally encoded transmission ensures that the video and audio performance remain completely unaffected up to the maximum usable optical transmission distance or optical path loss. These environmentally hardened units provide the transmission of four independent simplex video and four independent simplex line-level audio channels over one multimode or single mode optical fiber. The FVT/FVR40A4 series is completely transparent to and universally compatible with any NTSC, PAL, or SECAM camera system. Plug-and-play design ensures ease of installation, and no electrical or optical adjustments are ever required. Bi-color (Red/Green) LED indicators confirm power and link operating status. See **Figure 6** on **Page 3** for LED indicator explanations.

Packaged in the exclusive ComNet ComFit housing, these units may be directly plugged into the ComNet Rack (Part C1) or operated as a standalone module powered by the 9 Volt DC Plug-in Power Supply also provided with the module, or may be DIN-rail mounted by the addition of the ComNet model DINBKT1 adaptor plate. See **Figure A** on **Page 4** for mounting instructions.

See **Figures 1 – 6** for complete installation details.

FIGURE 1 – FVT/FVR40A4(M,S)1 TRANSMITTER AND RECEIVER

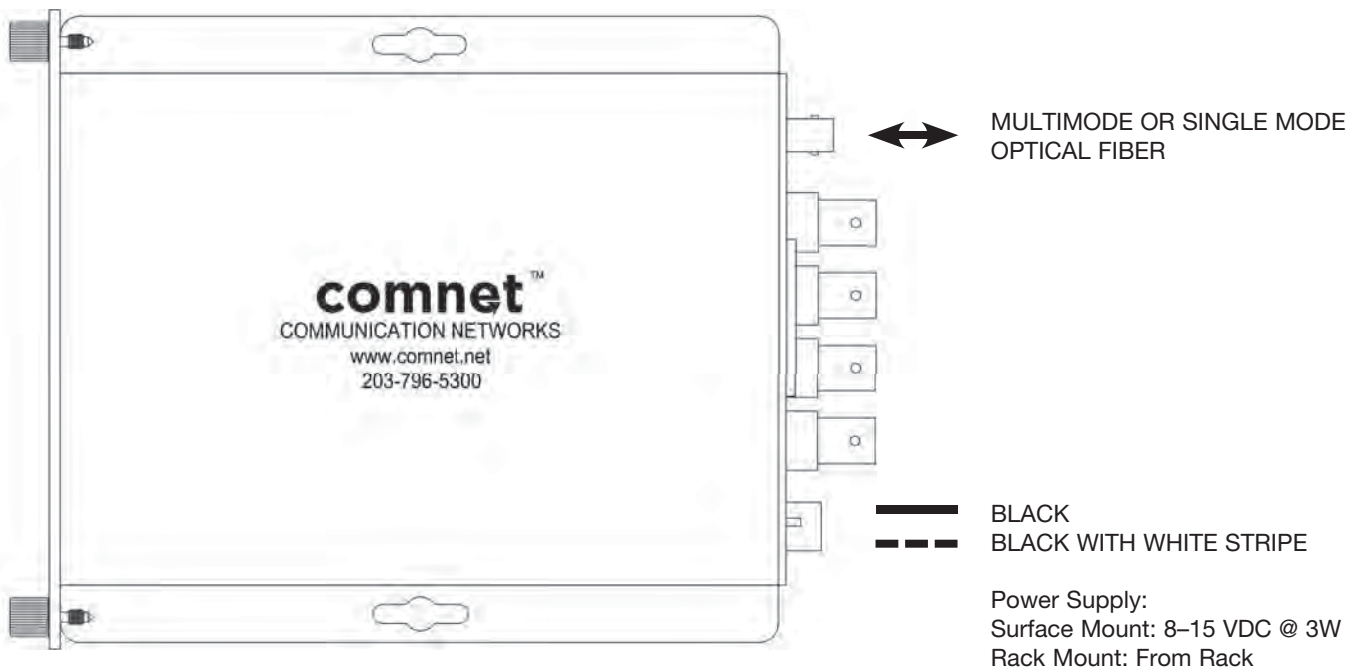


FIGURE 2 – FVT40A4C1 TRANSMITTER

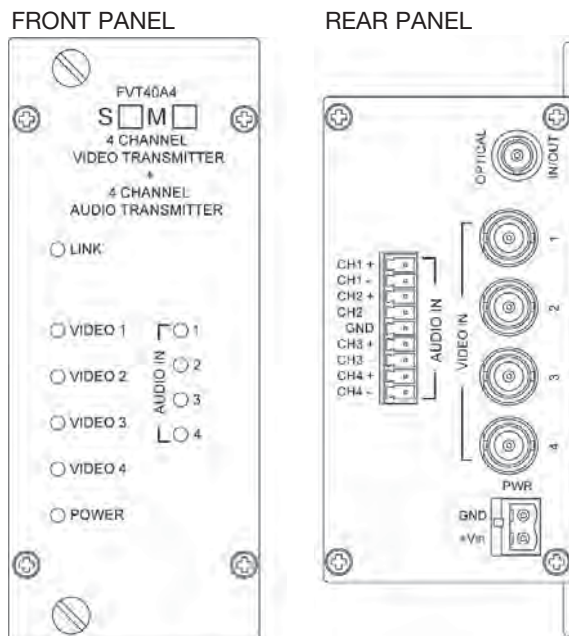
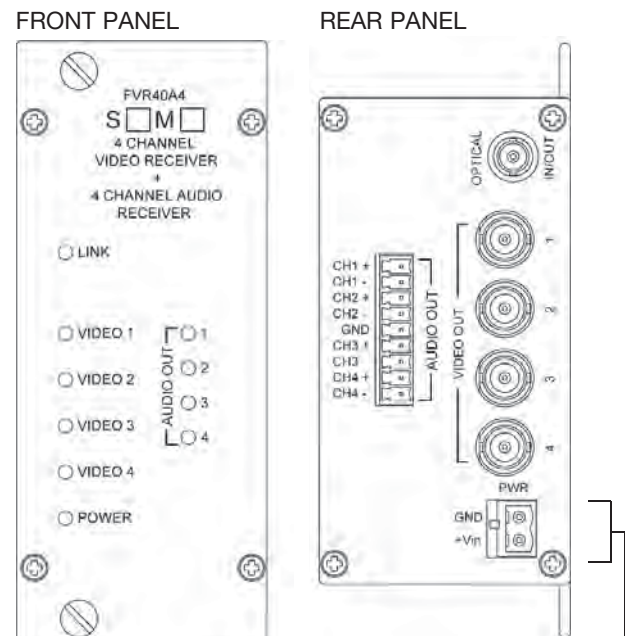


FIGURE 3 – FVR40A4C1 RECEIVER



NOTE: Remove Electrical Connector for Rack Mount Units

FIGURE 4 – AUDIO WIRING

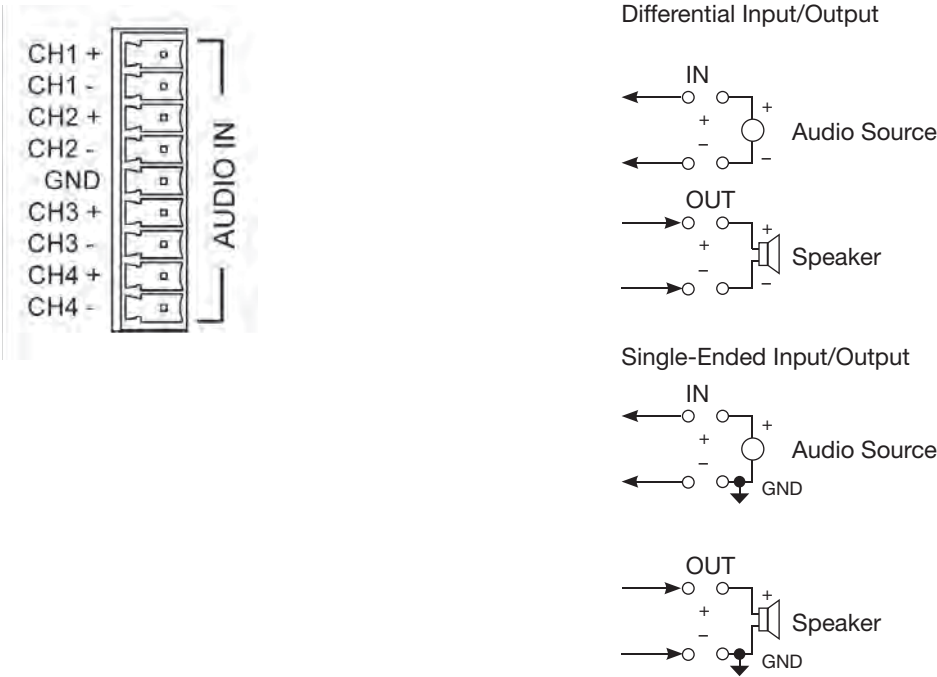


FIGURE 6 – LED INDICATORS

	VIDEO 1–4	AUDIO 1–4	LINK	POWER
GREEN	An active video signal is present on the BNC connector.	(Solid or Blinking) An active audio signal is present.	Communication link has been established over optical fiber	Unit powered up
RED	No video signal	N/A	N/A	N/A
OFF	–	No audio signal	Unit not powered up correctly	Unit powered down

# MECHANICAL INSTALLATION INSTRUCTIONS

## INSTALLATION CONSIDERATIONS

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

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

**CAUTION:** Although the 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 connector 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 two thumb screws on the card until the front panel of the card is seated against the front of the rack.

**WARNING:** Unit is to be used with a Listed Class 2 or LPS power supply rated 9-12 VDC @ 1A.

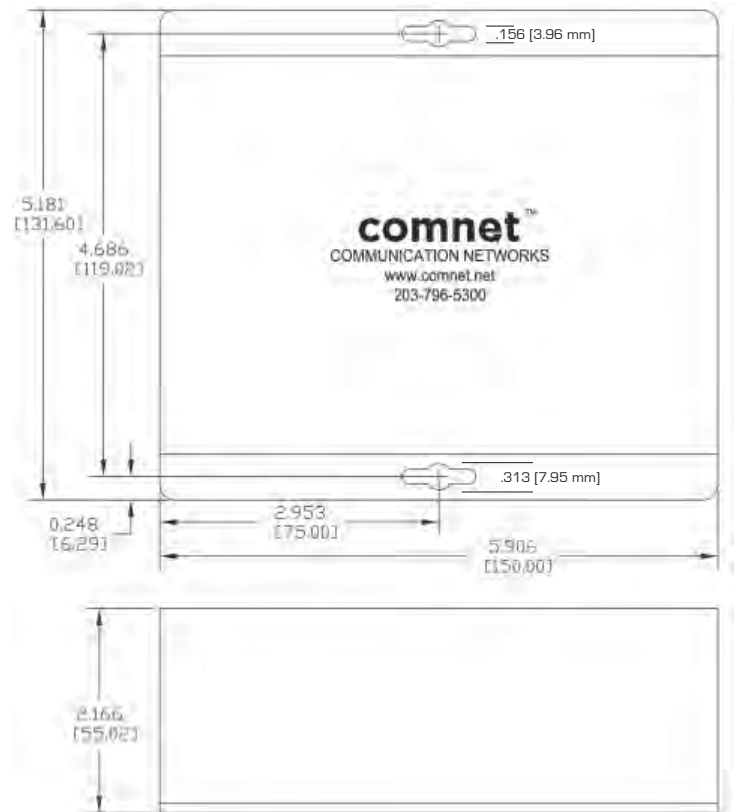
### IMPORTANT SAFEGUARDS:

**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 (T<sub>ma</sub>) specified by the manufacturer.

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

**FIGURE A**

*Dimensions are for a standard ComNet™ two slot module*



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