



## INSTALLATION AND OPERATION MANUAL

# FVT/FVR1021(M)(S)1

### 10-BIT DIGITAL VIDEO WITH RETURN DATA

The FVT/FVR1021 series video transmitter/receiver and data transceiver supports the simultaneous transmission of short-haul quality 10-bit digital video and return data over one multimode or single mode optical fiber. This module is universally compatible with major CCTV camera manufacturers and supports RS232 and RS422 data interfaces as well as up-the-coax data.

Bi-color (Red/Green) LED indicators are provided for rapidly ascertaining equipment operating status. These units are interchangeable between stand-alone or card mount configurations. See **Figure A** on **Page 5** for mounting instructions.

**Figures 4 through 6** on **Page 3** illustrates the specific data connections for RS232, RS422, Manchester and Bi-Phase data transmission.

**Figure 7** on **Page 4** describes the LED indicators for each light on the unit.

FIGURE 1 – FVT/FVR1021 TRANSMITTER AND RECEIVER

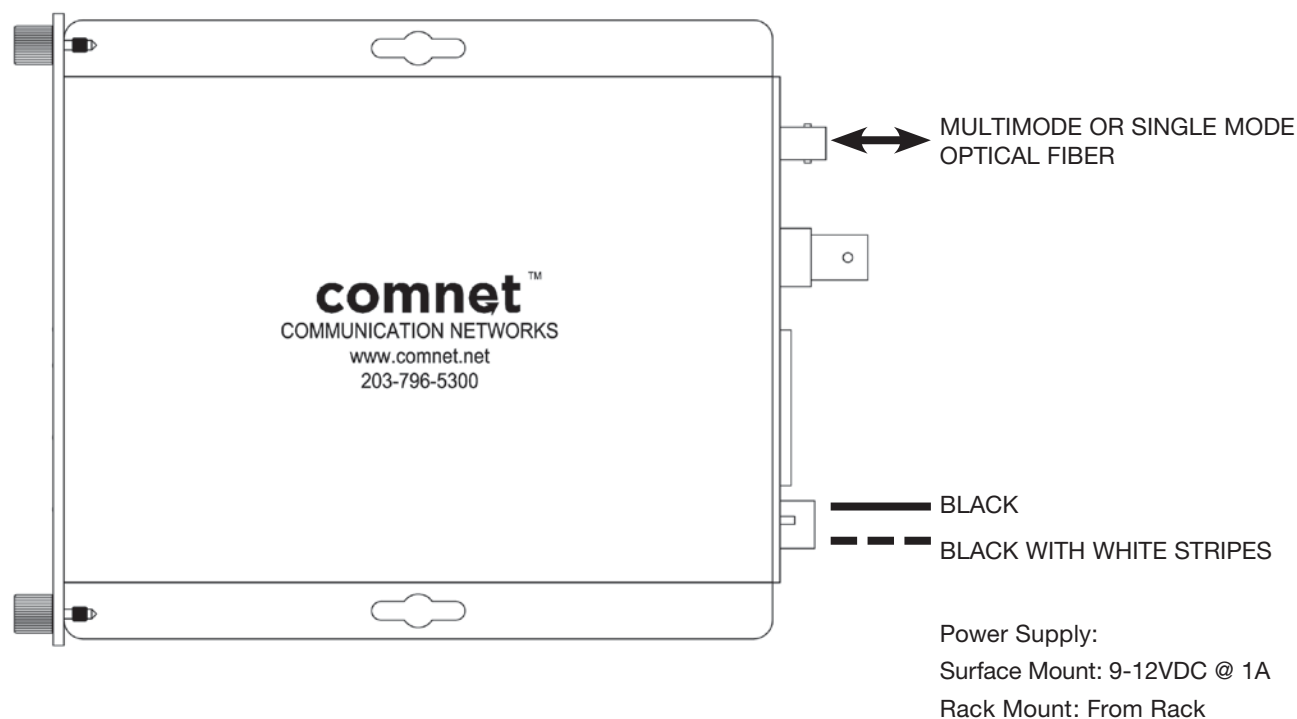


FIGURE 2 – FVT1021 TRANSMITTER

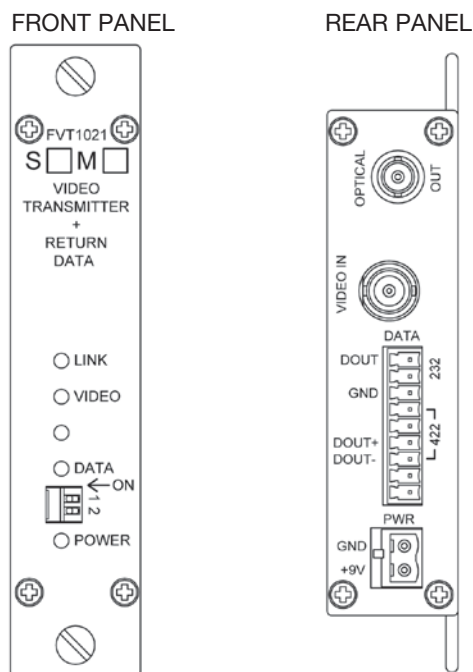
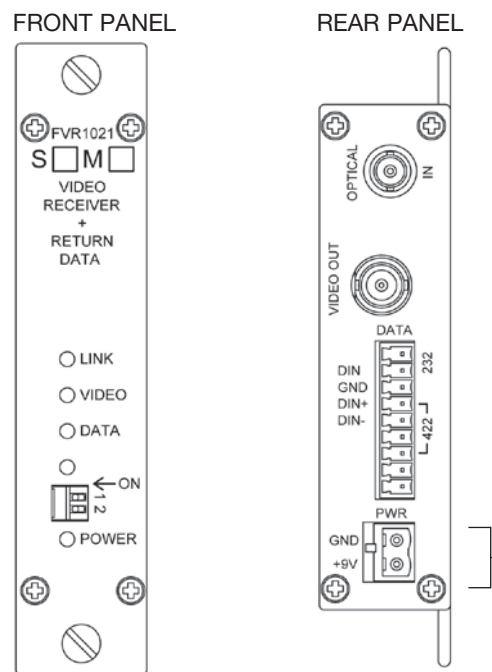


FIGURE 3 – FVR1021 RECEIVER



NOTE: Remove Electrical Connector for Rack Mount Units

FIGURE 4 – DATA CHANNEL CONNECTIONS

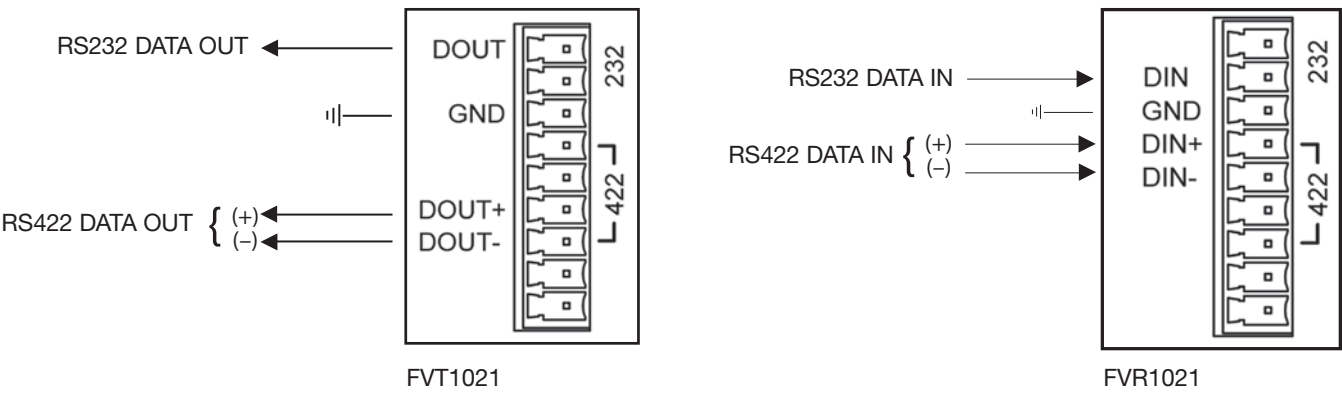


FIGURE 5 – SWITCH POSITIONS

The mode for each data channel is configured using a pair of switches on the front panel of the unit.

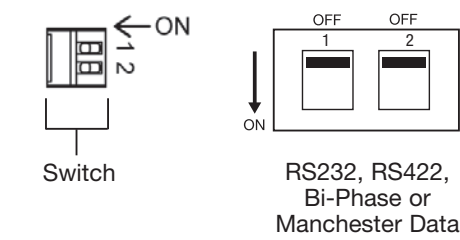


FIGURE 6 – DATA CONNECTIONS

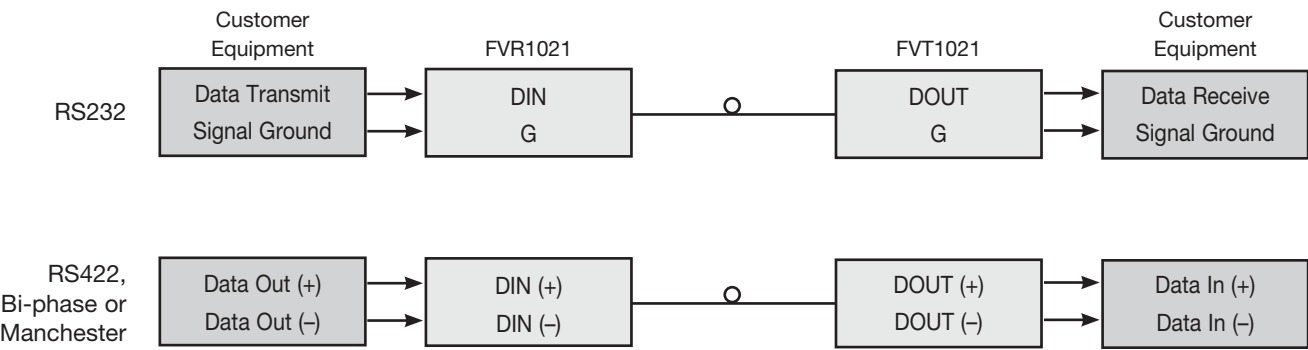


FIGURE 7 – LED INDICATORS

	LINK	VIDEO	DATA IN (FVR1021)	DATA OUT (FVT1021)	POWER
<b>GREEN</b>	Communication link has been established over optical fiber	An active video signal is present on the BNC connector.	An active data signal is present on the input pins of the data connector.	An active data signal is present on the output pins of the data connector.	Unit powered up
<b>RED</b>	Communication link has not been established.	–	–	–	–
<b>OFF</b>	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.

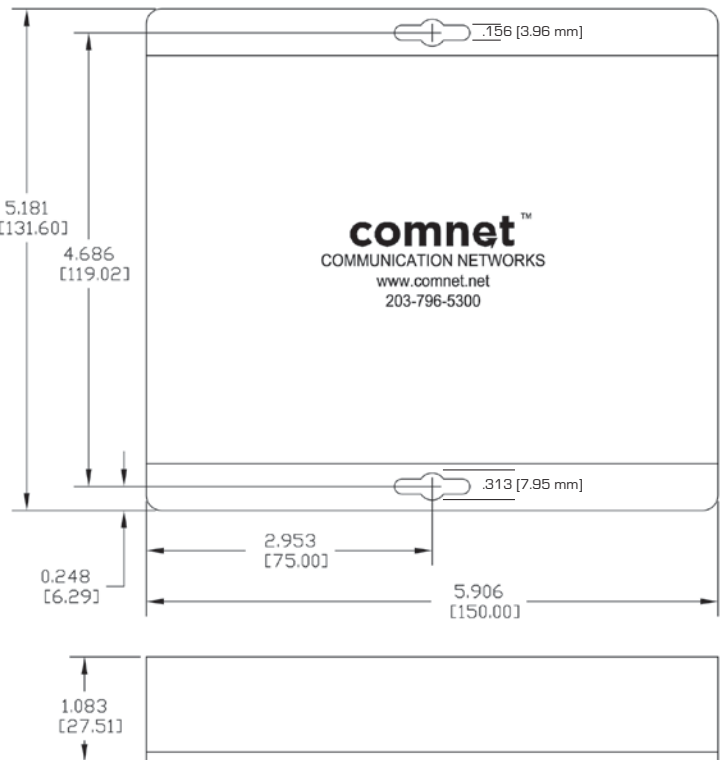
#### IMPORTANT SAFEGUARDS:

**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™ one slot module*



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