



## INSTALLATION AND OPERATION MANUAL

# FDC8NLR(M,S)1

## 8-CHANNEL CONTACT CLOSURE NON-LATCHING RECEIVER

The FDC8NLR contact closure receiver provides transmission of up to eight independent contact closures over one optical fiber. Microprocessor-based logic sends the contact information in packets that are ordered and encoded, ensuring extremely robust transmission. Packets that are garbled, packets out of sequence, and transmission bit errors will not cause random changes of state on the contact relays.

The solid-state non-latching relays default to a normally open state in the event of power loss or loss of optical signal. See **Figure 3** on **Page 3** for contact settings.

Each module incorporates power and individual status indicating LED's for monitoring confirmation of contact closure of each of the eight channels. See **Figure 5** on **Page 3** for an explanation of the LED indicators.

These units are interchangeable between stand-alone or card mount configurations. See **Figure A** on **Page 4** for mounting instructions.

See **Figures 1 – 5** for complete installation information.

FIGURE 1 – FDC8NLR RECEIVER

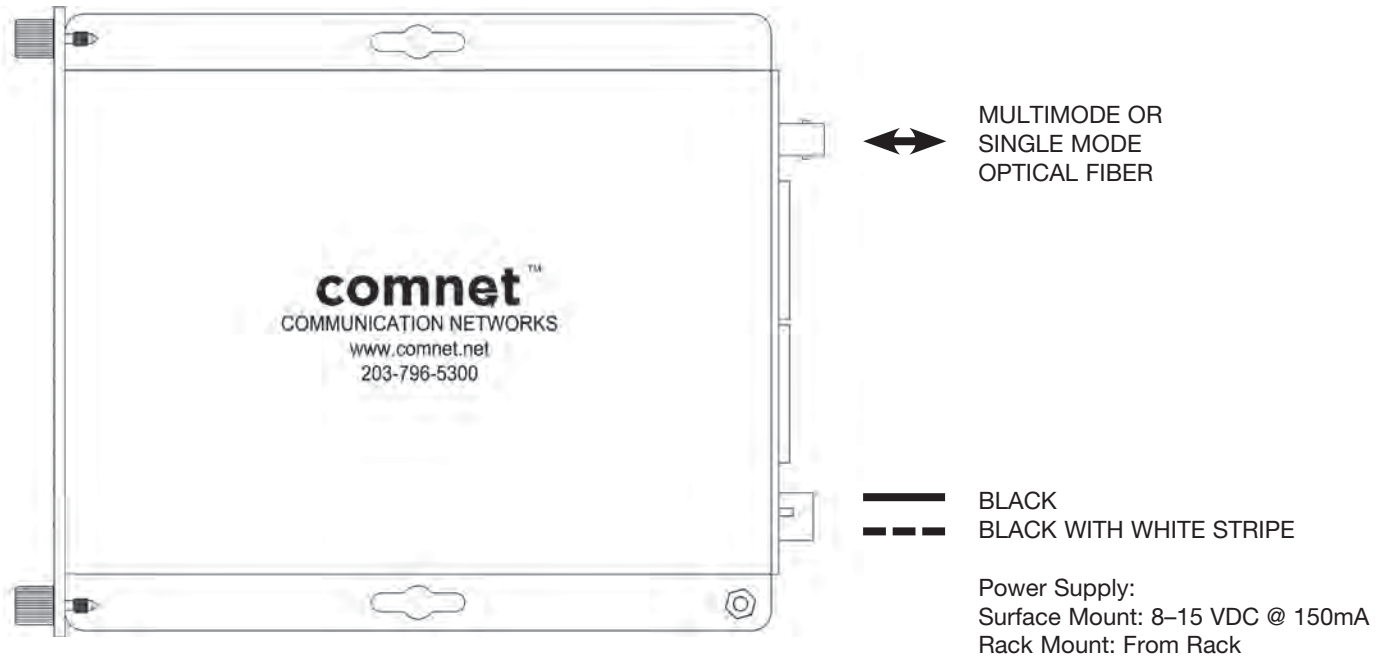


FIGURE 2 – FDC8NLR RECEIVER

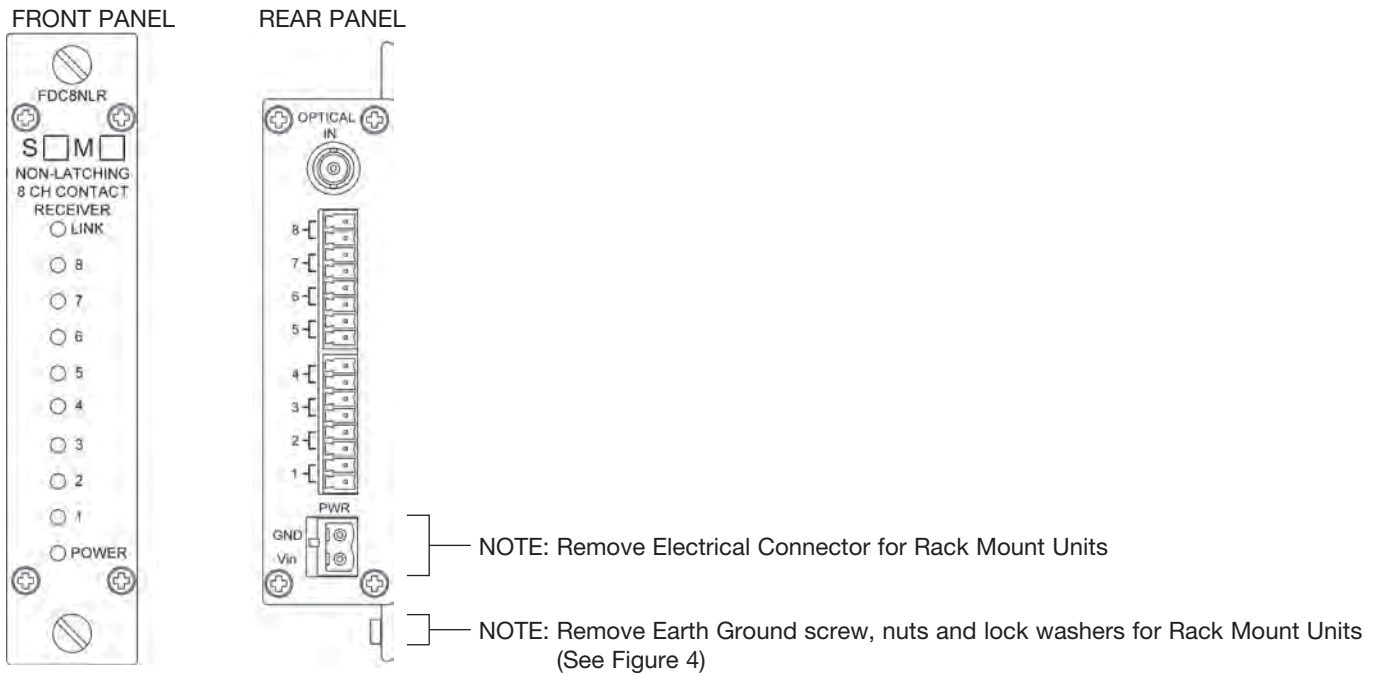


FIGURE 3 – TYPICAL RELAY SETTINGS

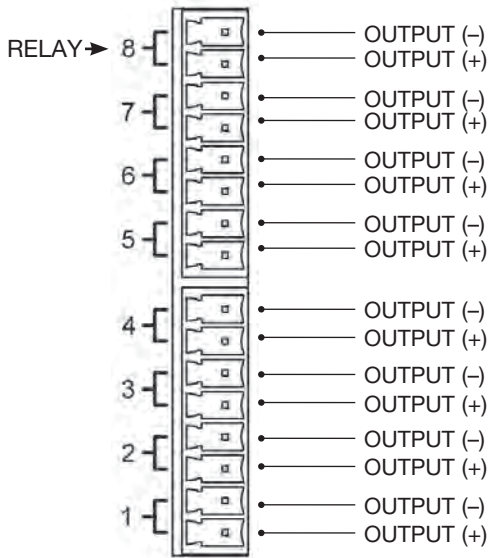


FIGURE 4 – EARTH GROUND CONNECTION

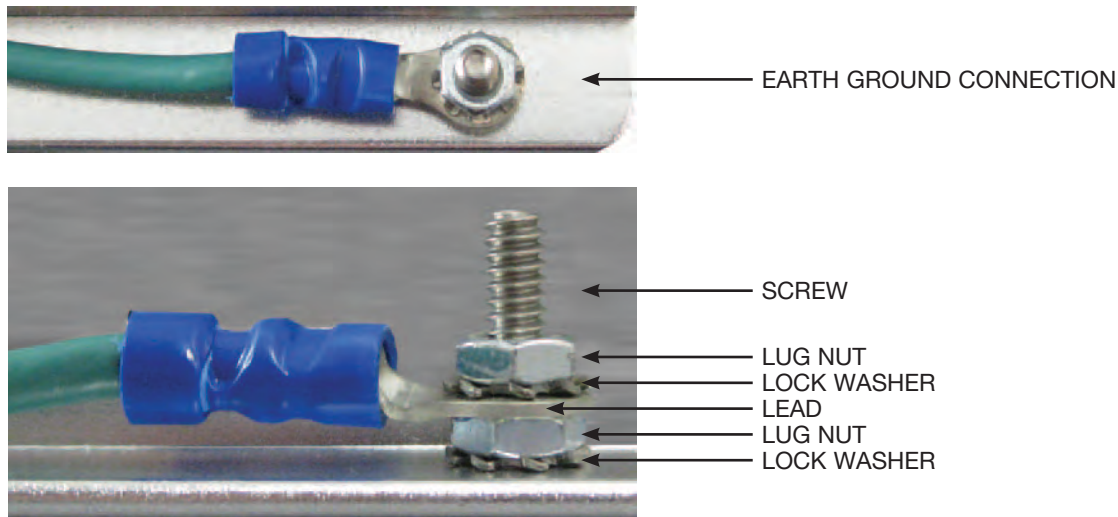


FIGURE 5 – LED INDICATORS

	LINK	CONTACT (1 – 8)	POWER
<b>GREEN</b>	Communication link has been established over optical fiber	An active signal is present.	Unit powered up
<b>RED</b>	Communication link has not been established.	No activity	–
<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.

**STANDALONE:** Connect Earth Ground Lead to a nearby Earth Ground.

## 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 and Earth Ground screw, nuts and lock washers 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.

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## FIGURE A

Dimensions are for a standard ComNet™ one slot module

