

# OPR-1B

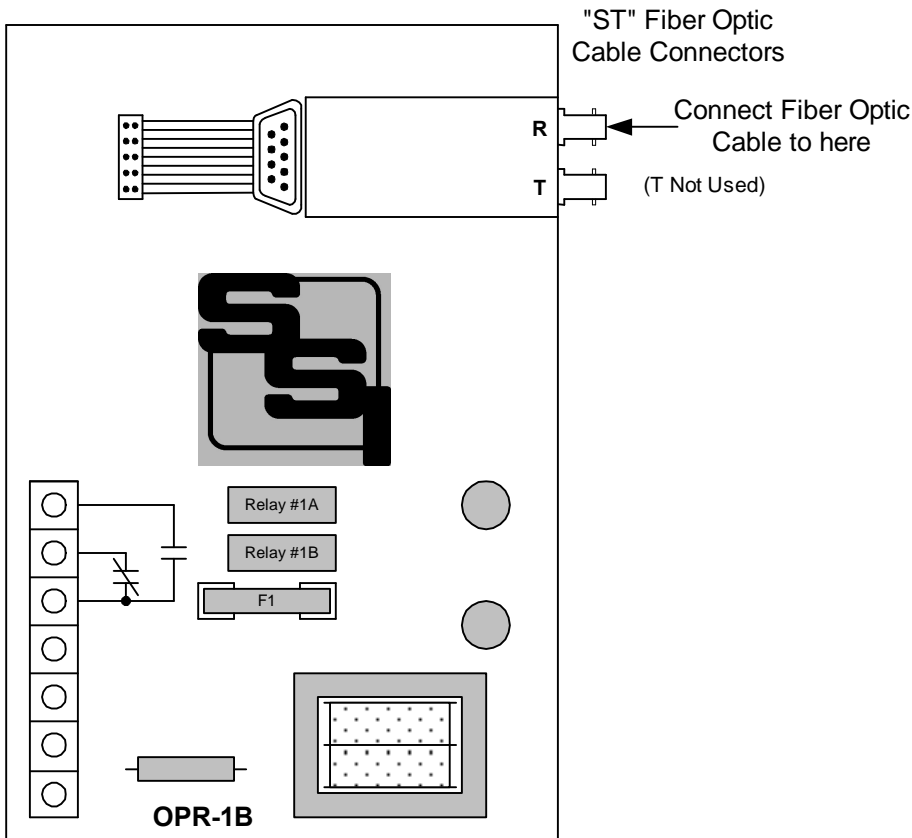
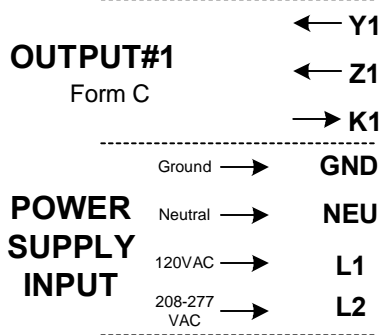
*Elite Solid State*

# OPTICAL FIBER PULSE RECEIVER INSTRUCTION SHEET

**Table 1**

Model #	Fiber Mode	Distance (miles)*
OPT-1B-1	MM	0-2.5
OPT-1B-2	MM	1-9
OPT-1B-3	SM	0-14
OPT-1B-4	SM	10-50
OPT-1B-5	SM	10-68

\* With matching B-Series OPR receiver



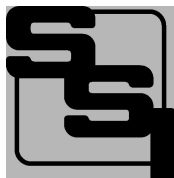
**MOUNTING POSITION** - The OPR-1B may be mounted in any position.

**POWER INPUT** - The OPR-1B can be powered by 120VAC or 208 to 277VAC. Connect the GND terminal to the electrical system ground. Connect the Neutral lead to the **NEU** terminal. If Neutral does not exist, connect the NEU terminal to the GND terminal and connect both to electrical system ground. Connect the **L1** terminal to the 120VAC "Hot" lead for 120VAC operation. Connect the **L2** terminal to the 208, 240, or 277 "Hot" lead. **Do not use both L1 and L2. Exercise caution when board is energized. There is line voltage present at L1 and L2 when powered, as well as R1, D2, and T1.**

**RELAY OUTPUT** - The OPR-1B has one KYZ pulse output that can be used as either 2-Wire (Form A) or 3-Wire (Form C). Connections are terminals K1, Y1, & Z1. For 2-Wire mode, either the K & Y or K & Z terminals may be used. For 3-Wire mode, all three wires must be used. The relay output is electrically isolated, solid state, dry-contact type with NO sourced voltage. The destination equipment (pulse receiving equipment) or the user must supply the wetting voltage to the output's K1 terminal. The wetting voltage may be up to 250VAC/VDC up to 500mA, not exceeding the 100VA rating.

**FUSE** - Fuse (F1) supplied on the OPR-1B is a 1/2Amp type 3AG. This fuse protects the output switching devices on Output #1.

**GROUND** - The GND terminal on the OPR-1B is a common ground with the chassis and is connected to the Chassis by means of the middle right-hand mounting screw. Therefore, if necessary, the electrical system ground can be connected to the OPT's chassis. Do not tie the Ground and Neutral terminals together unless Neutral does not exist.



## SOLID STATE INSTRUMENTS

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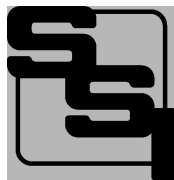
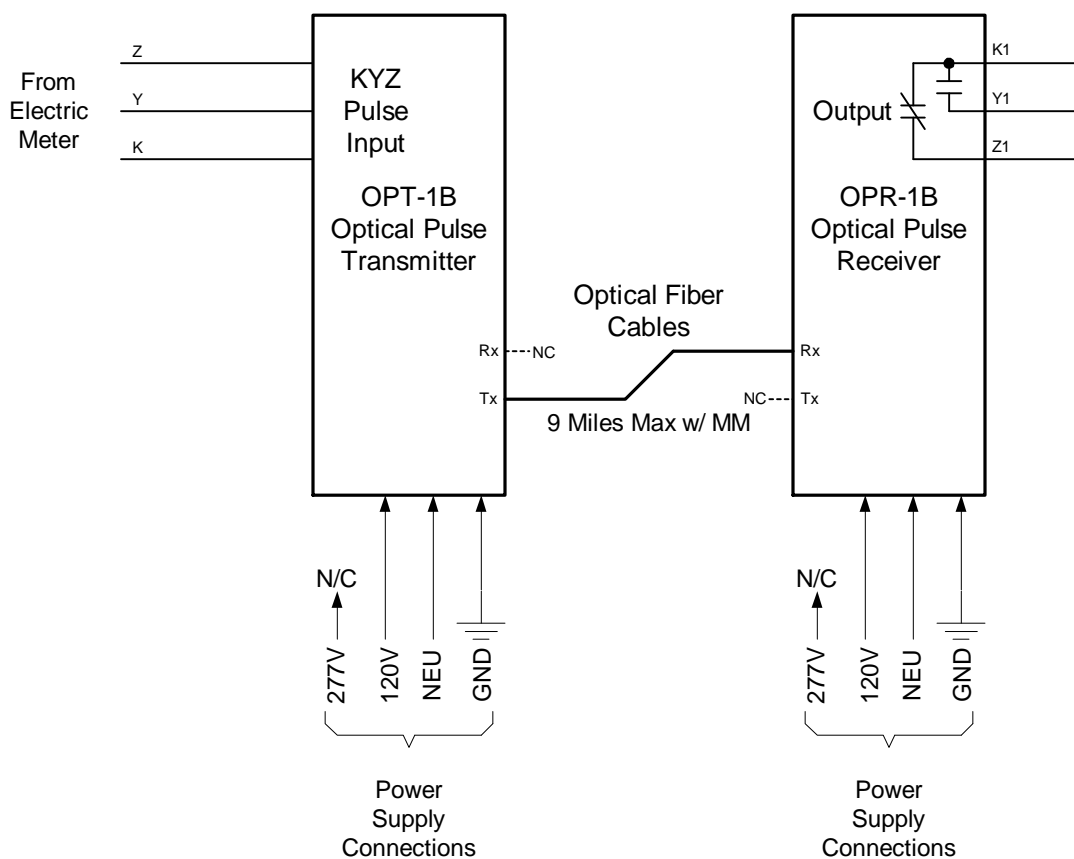
# INSTRUCTION SHEET

## OPR-1B OPTICAL FIBER PULSE TRANSMITTER (con't)

**Fiber Optic (FO) Cable Connections** - Locate the "ST" fiber optic port labeled "R" on the OPR-1B's media converter module in the upper right-hand corner of the OPR-1B. Connect the fiber optic cable to this port using the twist lock "ST" connector. Only the receive FO cable is required. Install the cable from the "T" fiber optic port on the OPT-1B transmitter to the "R" fiber optic port on the OPR-1B Optical Fiber Pulse Receiver as shown in the diagram below.

The OPT-1B-x will transmit pulse information using singlemode or multimode fiber to the OPR-1B-x Optical Fiber Pulse Receiver up to the approximate distance specified in Table 1. Care should be taken to follow all proper fiber optical cable implementation standards. An optical attenuator washer is provided. Slip over the fiber that plugs into the ST connector ON THE OPT-1B TRANSMITTER ONLY prior to connecting to the "T" output. Use this if total fiber link length is less than the minimum listed in Table 1.

### OPL SYSTEM BLOCK DIAGRAM



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