

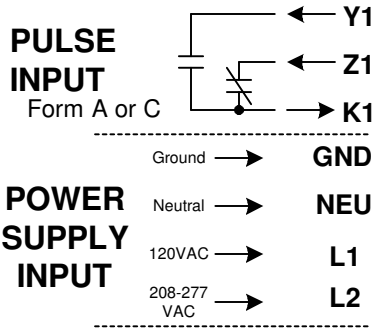
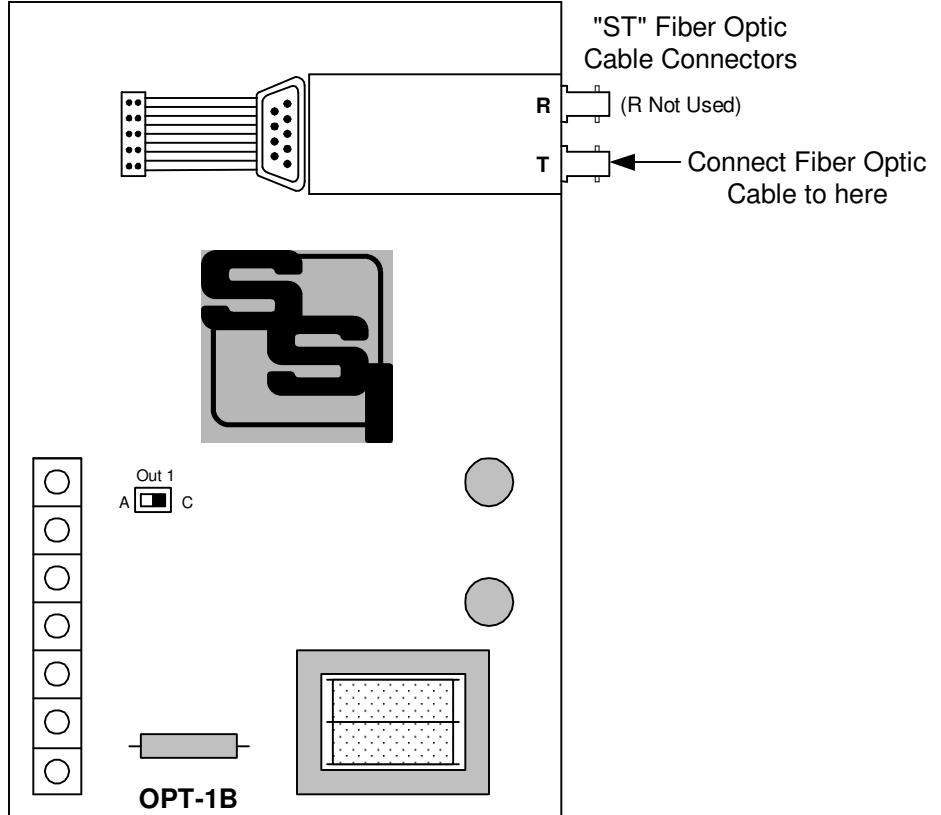
# OPT-1B

# INSTRUCTION SHEET OPTICAL FIBER PULSE TRANSMITTER

**Table 1**

Model #	Fiber Mode	Distance (miles)*
OPT-1B-1	MM	0-9
OPT-1B-2	SM	0-13
OPT-1B-3	SM	10-50
OPT-1B-4	SM	10-68

\* With matching B-Series OPR receiver

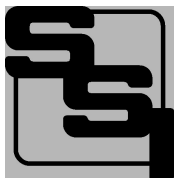


**MOUNTING POSITION** - The OPT-1B may be mounted in any position.

**POWER INPUT** - The OPT-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. 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 voltage present at L1 and L2 when powered, as well as R1, D2, and T1.**

**METER INPUTS** - The OPT-1B has one pulse input which can be configured as either 2-Wire (Form A) or 3-Wire (Form C). Connections are K1, Y1, & Z1 and connect to the meter's K, Y, & Z output terminals. For 2-Wire mode, use the K and Y terminals. For 3-Wire mode, all three wires must be used. The meter's pulse output must be a dry-contact type with NO sourced voltage. The OPT-1B supplies its own wetting voltage to the KYZ pulse output contact of the meter.

**GROUND** - The GND terminal on the OPT-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.



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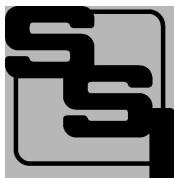
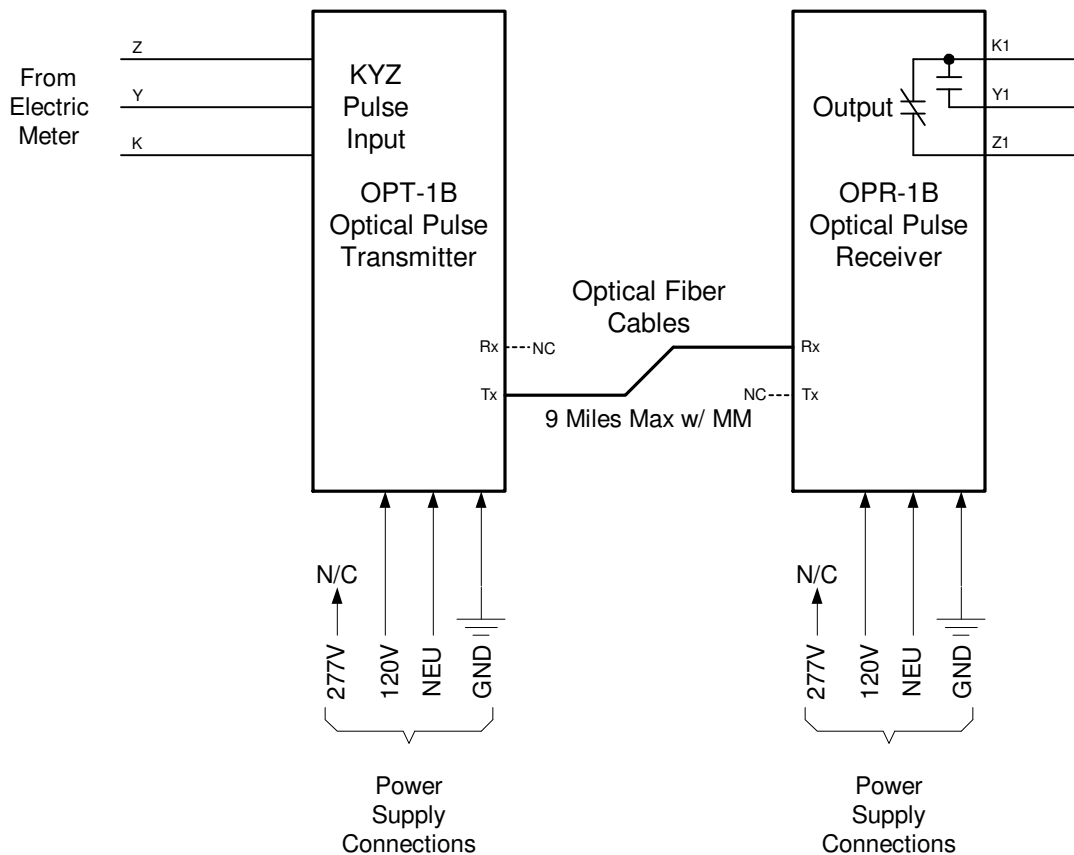
# INSTRUCTION SHEET

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

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

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.

### OPL SYSTEM BLOCK DIAGRAM



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