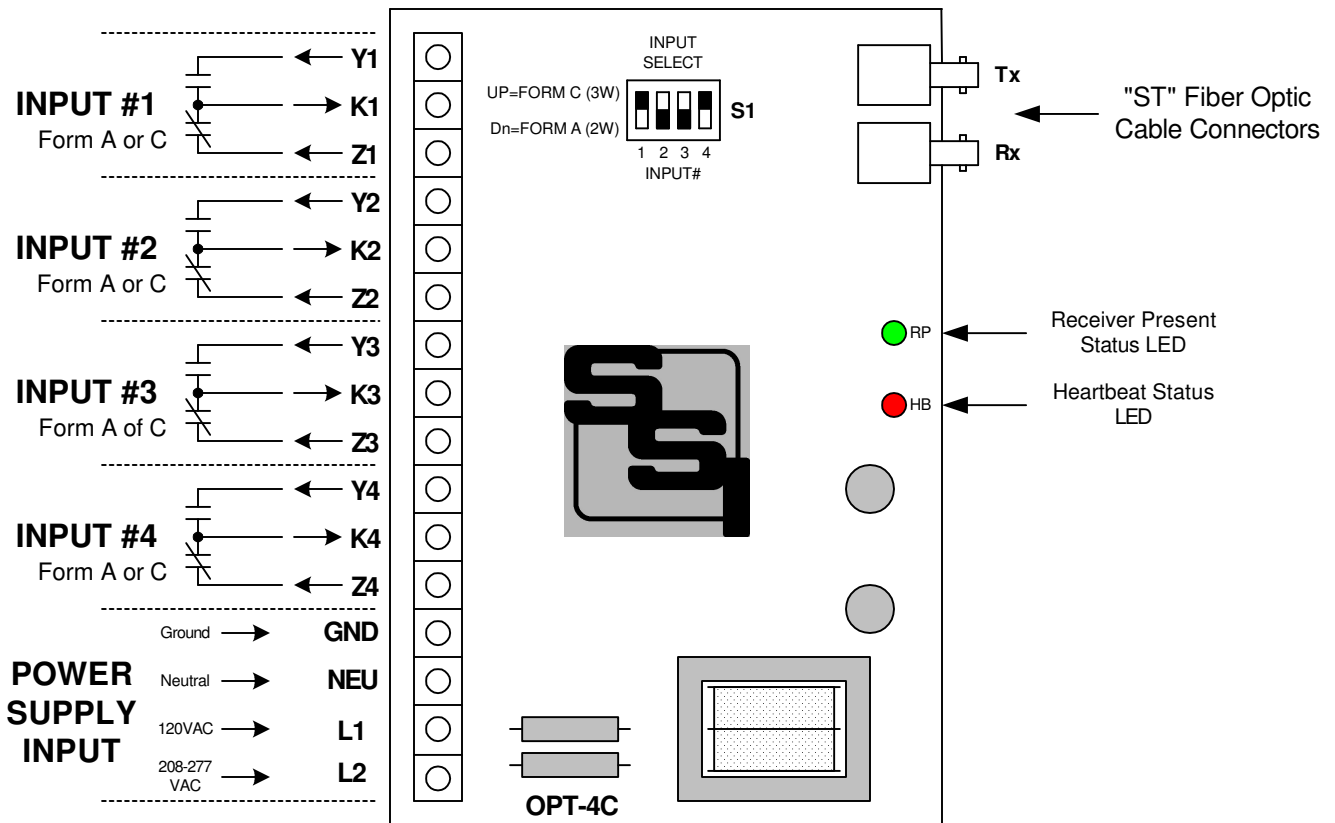


# INSTRUCTION SHEET - OPT-4C

## OPTICAL FIBER PULSE TRANSMITTER



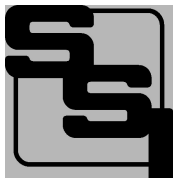
**MOUNTING POSITION** - The OPT-4C may be mounted in any position.

**POWER INPUT** - The OPT-4C 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.**

**METER INPUTS** - The OPT-4C has four pulse inputs which can be configured as either 2-Wire (Form A) or 3-Wire (Form C) inputs. They are K1,Y1, & Z1 for meter #1; K2,Y2, & Z2 for meter #2; K3,Y3, & Z3 for meter #3; and K4,Y4, & Z4 for meter #4. For 2-Wire mode, use the K and Y terminals. For 3 Wire mode, all three wires must be used. The meter's pulse outputs must be dry-contact type with NO sourced voltage. The OPT-4C supplies its own +13VDC wetting voltage to the KYZ pulse output contacts of the meter.

**INPUT SELECT** - To configure each input as either a 2-Wire (Form A) or a 3-Wire (Form C) input, select the correct input switch number on Dip Switch S1 and place each switch in the "Dn" position for a Form A input configuration OR in the "Up" position for a Form C input configuration.

**GROUND** - The GND terminal on the OPT-4C is a common ground with the chassis and is connected to the Chassis by means of the lower left-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-4C OPTICAL FIBER PULSE TRANSMITTER (con't)

**Fiber Optic Cable Connections** - Locate the two "ST" fiber optic ports in the OPT-4C's upper right-hand corner. Connect the fiber optic cable to these ports using the twist lock connections. The cables should be "crossed" such that each cable is connected to the "T" fiber optic port on one end and the "R" fiber optic port on the other end.

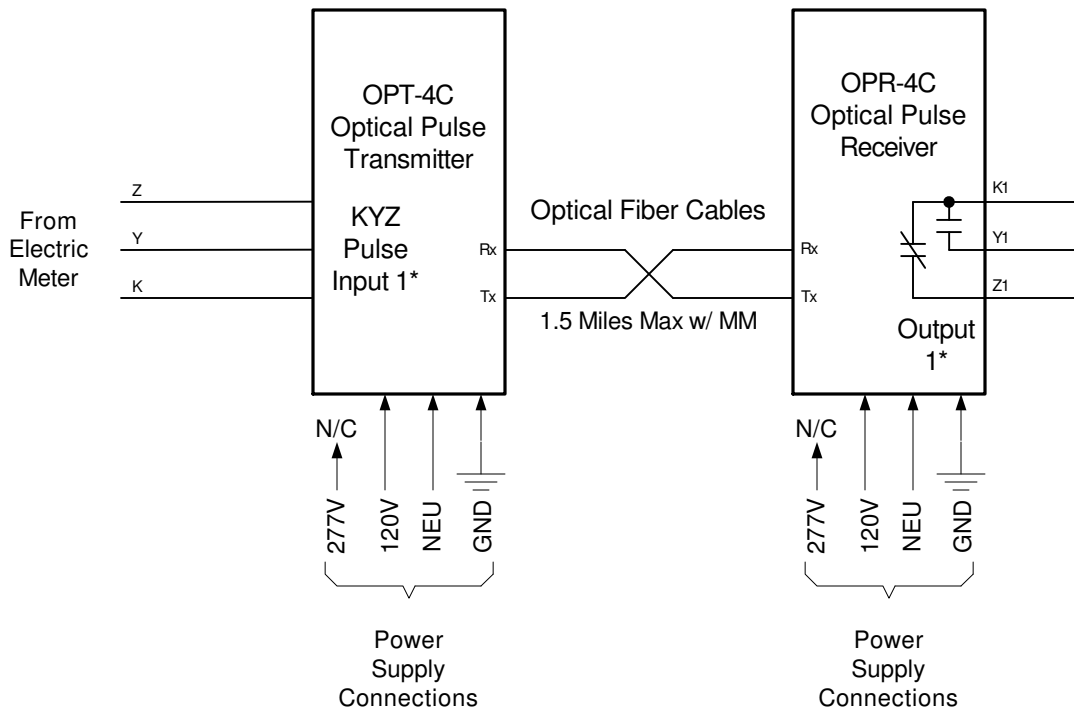
The OPT-4C will transmit pulse information to the OPR-4C Optical Fiber Pulse Receiver up to approximately 2500 meters or about 1.5 miles using multimode fiber. Care should be taken to follow all proper fiber optical cable implementation standards. Maximum distance will vary with the quality of the multimode fiber.

**Troubleshooting - LED Status Lights** - The OPT-4C has two status lights to help the installer determine system status.

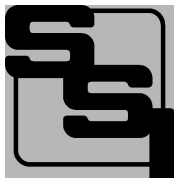
**Red "Heartbeat" LED (HB)** - This LED blinks on and off once per second indicating the system is operating and the microcontroller is going through its program loop. There is no other meaning to this except that the system is alive and running, and appears to be operating normally.

**Green "Receiver Present" LED (RP)** - This LED will remain on all the time as long as the transmitter is connected to and communicating with the OPR-4C Receiver.

### OPL-4C SYSTEM BLOCK DIAGRAM



\* Only 1 input/Output Circuit Shown



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