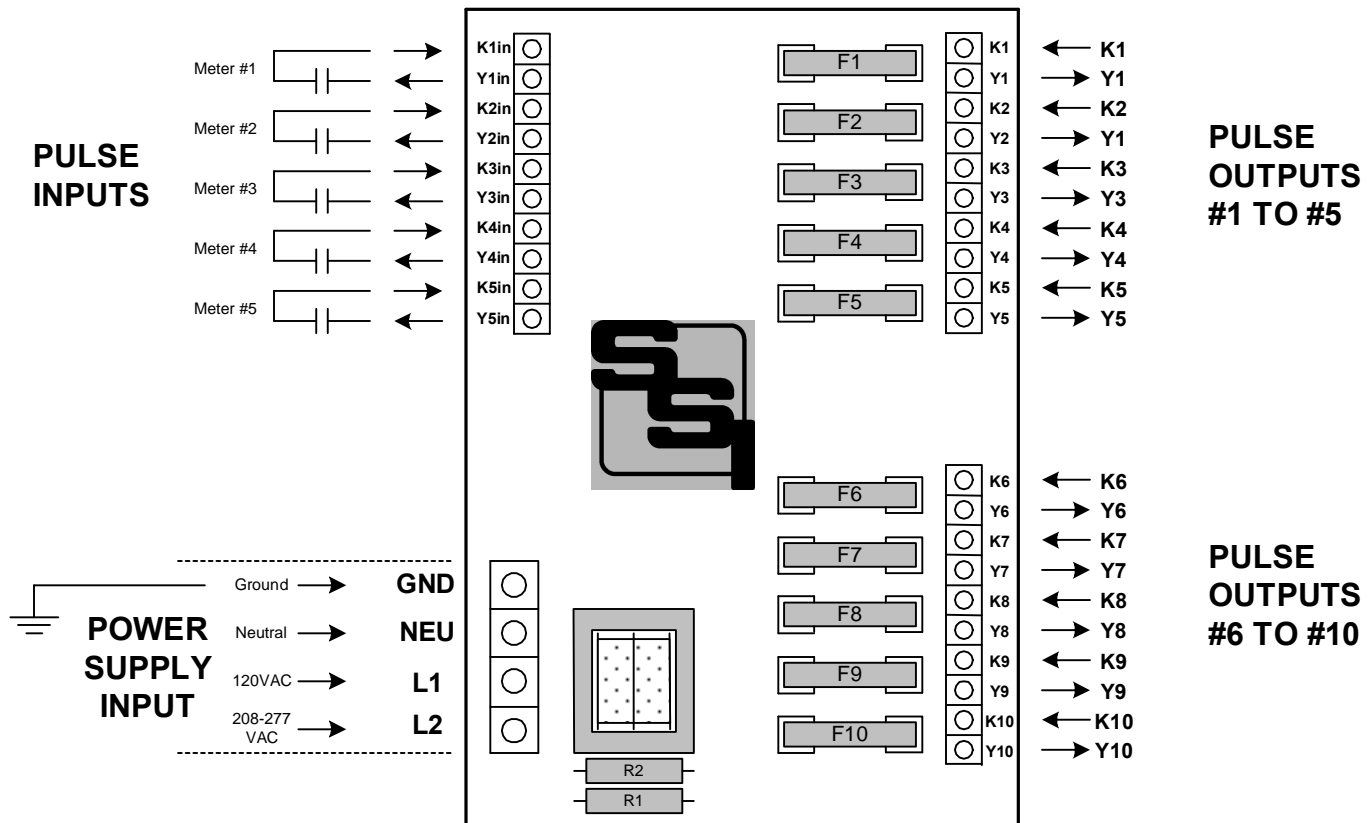


# INSTRUCTION SHEET

## SPR-510 Repeating Pulse Relay Unit

### SPR-510 Isolation Relay

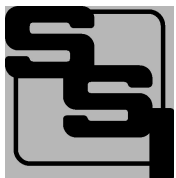


**MOUNTING POSITION** - The SPR-510 may be mounted in any position.

**POWER INPUT** - The SPR-510 can be powered by 120VAC or 208 to 277VAC. 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.** If a true Neutral does not exist at the location where this board is located and powered, then connect both NEU and GND to Ground.

**GROUND** - Connect the **GND** terminal on the left side of the board (Terminal #4) to the electrical system (earth) ground. This terminal must be connected to properly protect against transient voltages and electrical noise.

**K-Y INPUTS TO SPR-510** - The SPR-510 is equipped with five 2-Wire (Form A) pulse inputs. The SPR-510 supplies a +13VDC wetting voltage from the Y terminals to "wet" the meter's output contact. As the pulse output of the meter alternately closes and opens, the Y input is alternately switched to the K terminal, thus activating the SPR-510's respective isolated outputs. When the Y input receives a pulse from the meter, the Red LED will light. Each input's pulses from the meter are "echoed" or repeated on two outputs of the SPR-510 in tandem. Input #1 outputs pulses on Outputs #1 and #2; Input #2 outputs pulses on Outputs #3 and #4 and so on.



## SOLID STATE INSTRUMENTS

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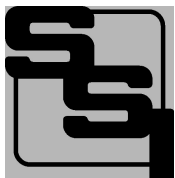
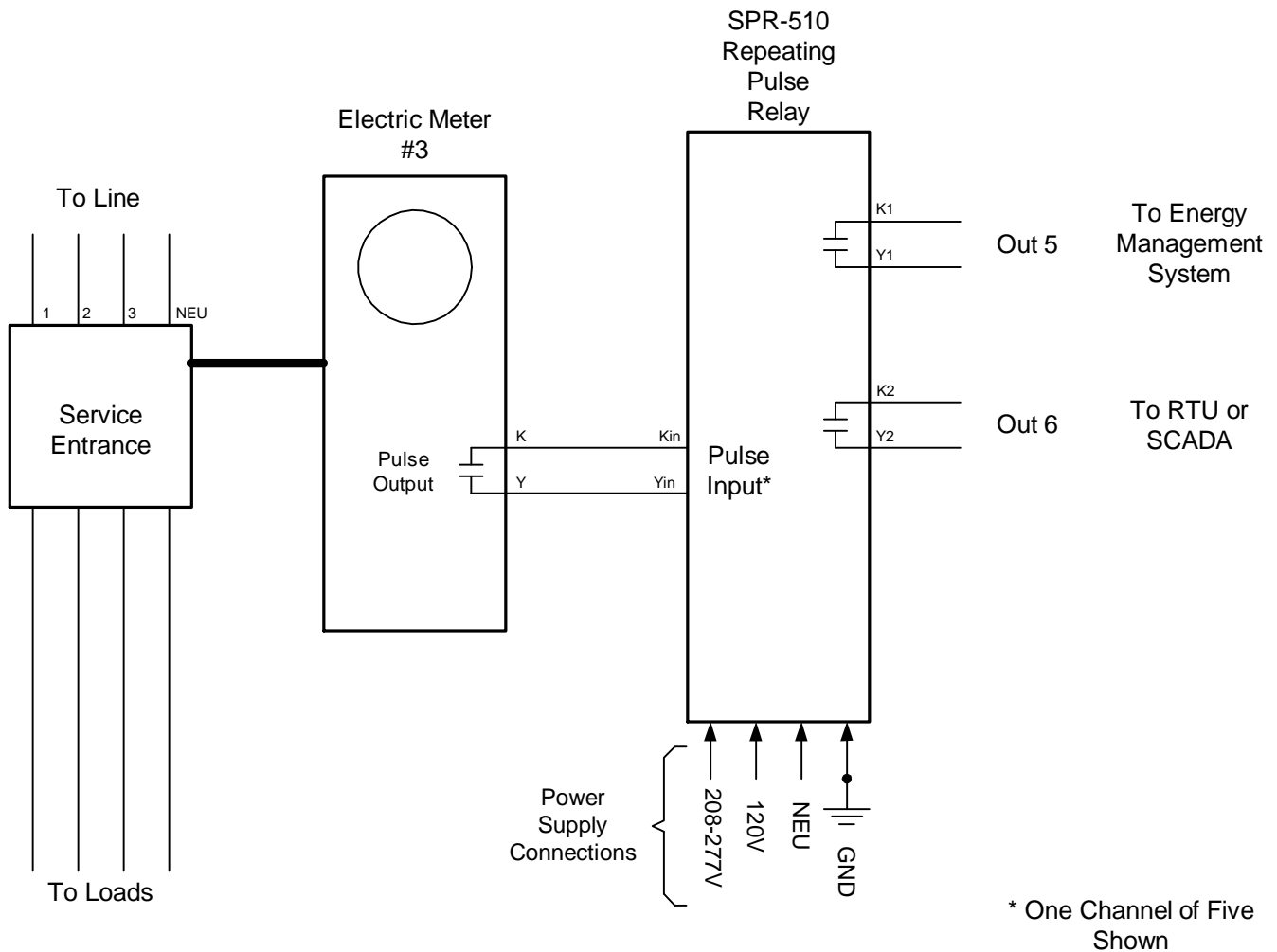
Phone: (970)461-9600

E-mail: support@brayden.com

**RELAY OUTPUTS** - The SPR-510 has ten 2-wire (Form A) isolated, dry-contact solid state outputs for repeating the pulses from the inputs. Outputs #1 and #2 are assigned to Input #1; Outputs #3 and #4 are assigned to Input #2; Outputs #5 and #6 are assigned to Input #3; Outputs #7 and #8 are assigned to Input #4; Outputs #9 and #10 are assigned to Input #5. These are hardwired and cannot be reassigned. The output relay contacts are "dry" (no voltage present). A wetting voltage must be supplied from the destination (receiving) device to each output's "K" terminal. Transient suppression for each contact is provided internally by a metal oxide varistor (MOV) surge suppression device. Outputs are rated at 250VAC/VDC @ .1 Amp. Maximum on-state power dissipation is 800mW.

**FUSES** - The fuses are type 3AG or AGC and may be up to 1/10th Amp in size. Ten 1/10 Amp fuses (F1-F10) are supplied standard with the unit. Care should be taken to insure that the input burden of the destination device will not exceed the rating of the fuse.

### SPR-510 Wiring Diagram



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