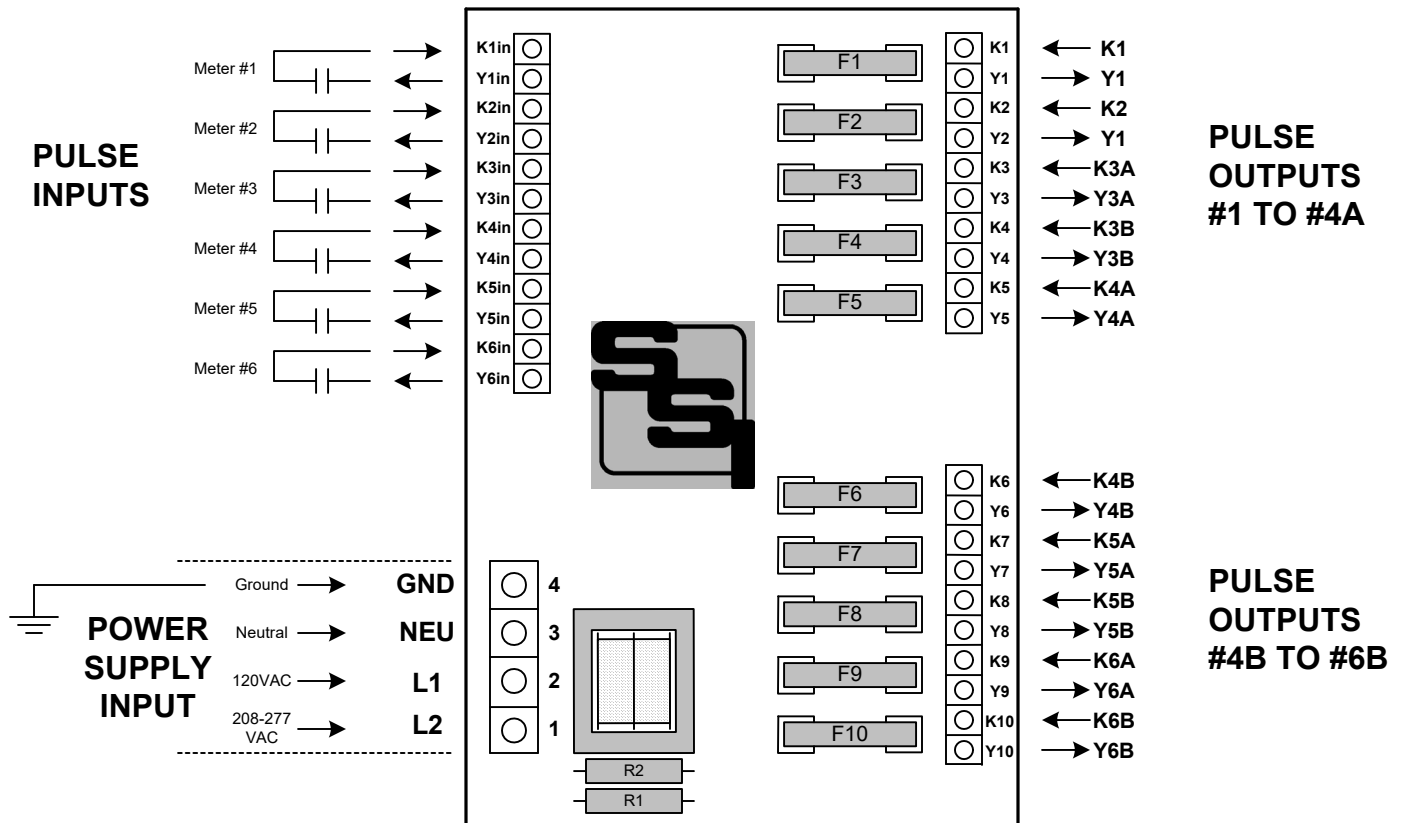


INSTRUCTION SHEET

SPR-610 Repeating Pulse Relay Unit

SPR-610 Isolation Relay

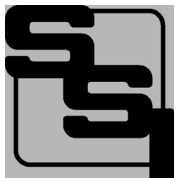


MOUNTING POSITION - The SPR-610 may be mounted in any position.

POWER INPUT - The SPR-610 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-610 - The SPR-610 is equipped with six(6) 2-Wire (Form A) pulse inputs. The SPR-610 supplies a "pulled up" +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, the common return, thus activating the SPR-610's respective isolated outputs. When the Y input receives a pulse from the meter, the Red input LED will light. Each input's pulses from the meter are "echoed" or repeated on one output of the SPR-610 on for inputs 1 and 2. For inputs 3 through 6 there are two outputs each that operate in tandem. Input #1 outputs pulses on Output #1; Input #3 outputs pulses on Outputs #3A and #3B and so on. Outputs #1 and #2 will generally be used where no duplication is required, i.e. End-Of-Interval pulses or pulse isolation only. Outputs 3 through 6 will be used where duplication is desired and two isolated outputs provide pulses from one input.



SOLID STATE INSTRUMENTS

by Radian Research, Inc

3852 Fortune Dr, Lafayette, IN 47905

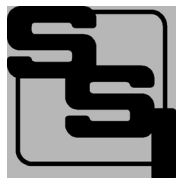
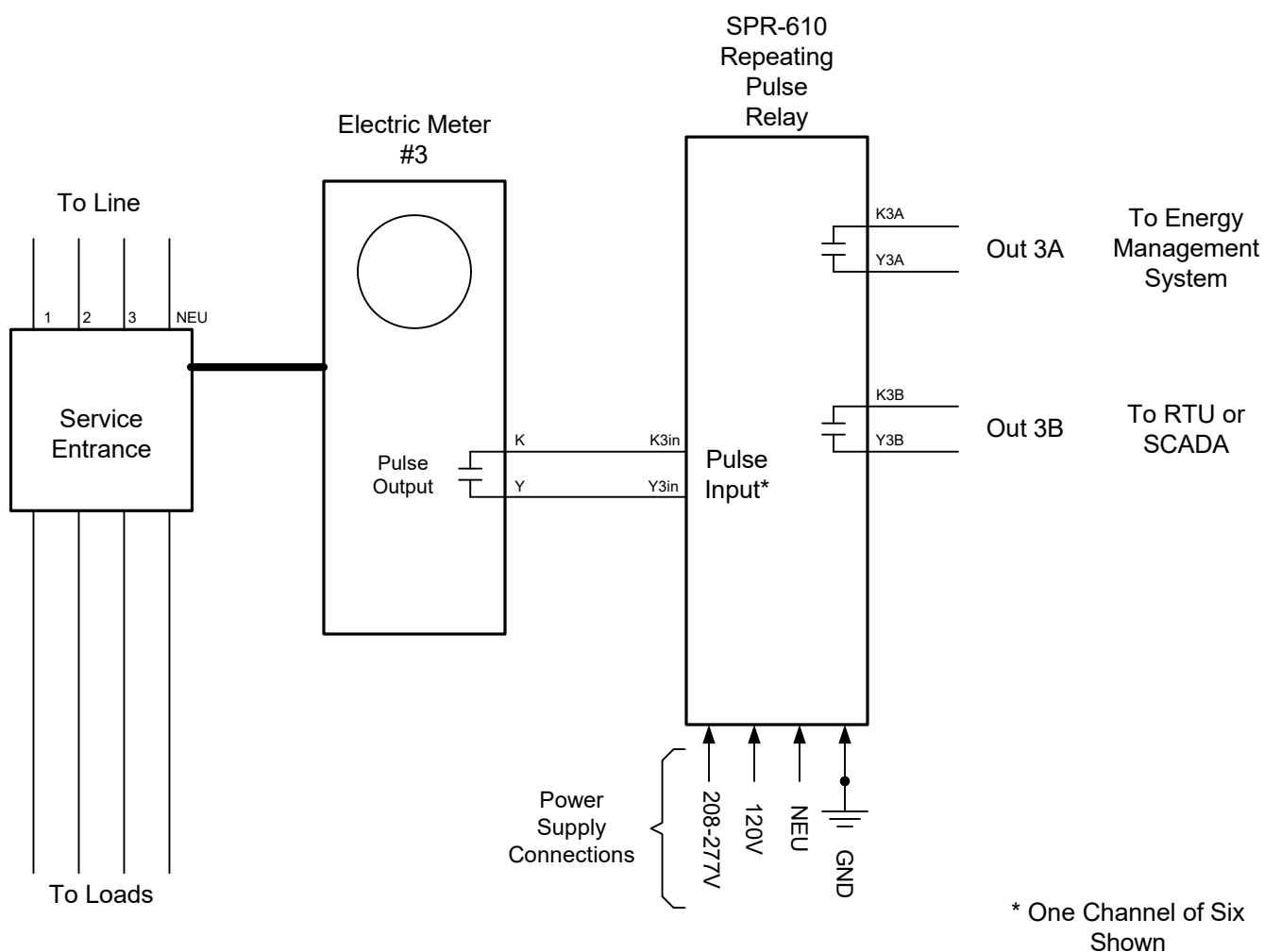
Phone: (765) 449-5576

Mail: technicalsupport@radianresearch.com

RELAY OUTPUTS - The SPR-610 has ten 2-wire (Form A) isolated, dry-contact solid-state outputs for repeating the pulses from the inputs. Outputs #1 is assigned to Input #1; Output #2 is assigned to Input #2. Outputs #3A and #3B are assigned to Input #3; Outputs #4A and #4B are assigned to Input #4; Outputs #5A and #5B are assigned to Input #5; Outputs #6A and #6B are assigned to Input #6. 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. It will alternately return to the receiving device on each output's "Y" 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-610 Wiring Diagram



SOLID STATE INSTRUMENTS

by Radian Research, Inc
 3852 Fortune Dr, Lafayette, IN 47905
 Phone: (765) 449-5576
 Mail: technicalsupport@radianresearch.com