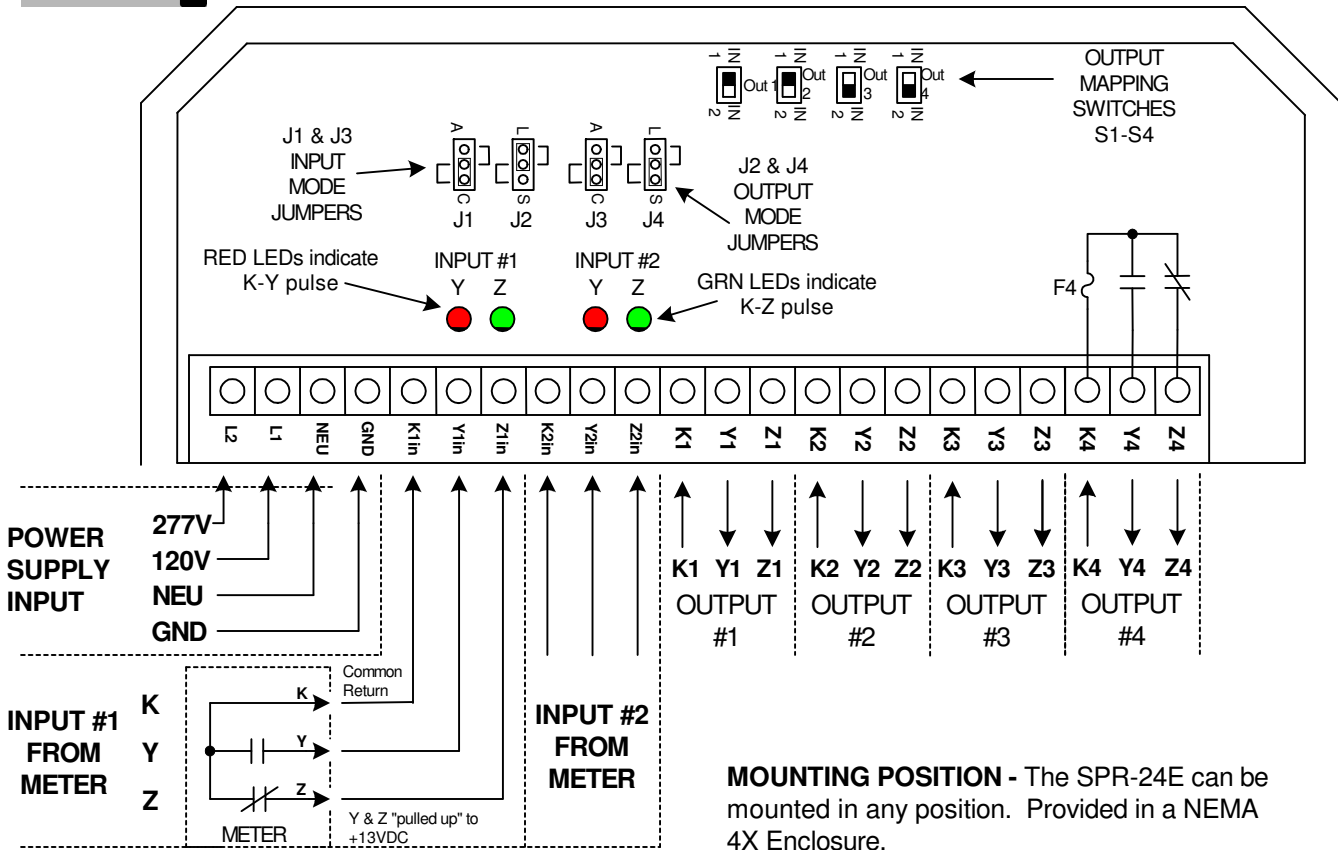


INSTRUCTION SHEET

SPR-24E PULSE ISOLATION RELAY



POWER INPUT - The SPR-24E is powered by an AC voltage of between 90 and 300 volts. For 208 to 277VAC, connect the AC line's "hot" wire to the **L2** terminal. For 120VAC, connect the AC line's "hot" wire to the **L1** terminal. The AC line's "neutral" wire should be connected to the **NEU** terminal. Connect **GND** to the electric system Ground.

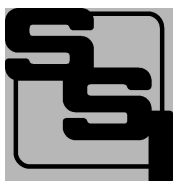
INPUT CONNECTIONS - Connect the K terminal of each meter which is supplying pulses to the SPR-24E to the SPR-24E's **K1in** and **K2in** terminals. Connect each meter's Y and Z terminals to the respective meter's **Yin** and **Zin** input terminals of the SPR-24E.

INPUT TYPE SELECTION - The SPR-24E's inputs may be configured as either 2-Wire (Form A) or 3-Wire (Form C). Selector Jumper **J1** selects the configuration for INPUT #1. Selector Jumper **J3** sets the configuration for INPUT #2. Put the Jumper Plugs in the correct position for the input type desired.

FUSES - The fuses are type 3AG and may be up to 1/10th Amp in size. Four 1/10 Amp fuses (F1-F4) are supplied standard with the unit unless otherwise specified.

OUTPUTS - Four 3-wire isolated outputs are provided, with output terminals K1, Y1 & Z1; K2, Y2, & Z2; K3, Y3 & Z3; and K4, Y4 & Z4. Arc suppression for the contacts of the solid state relays are provided internally. Each relay must be assigned to one of the two input channels. Using the Switches S1 through S4 at the top of the board, select "**IN1**" for input number 1 or "**IN2**" for input number 2. Each relay's output will follow the input selected. The SPR-24E's outputs may be configured for either **Long** or **Short** output pulses. Selector Jumper **J2** selects the long or short output configuration for all outputs set to INPUT #1. Selector Jumper **J4** sets the long or short output configuration for all outputs set to INPUT #2. Put the Jumper Plug in the correct position for the output type desired.

MOUNTING POSITION - The SPR-24E can be mounted in any position. Provided in a NEMA 4X Enclosure.

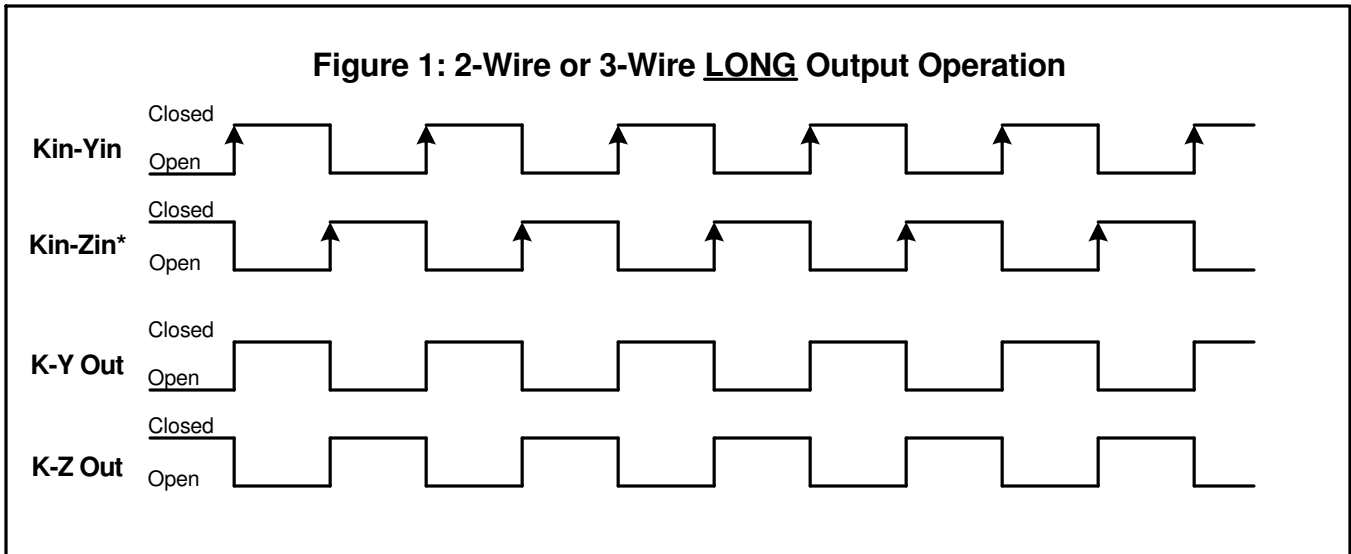


SOLID STATE INSTRUMENTS

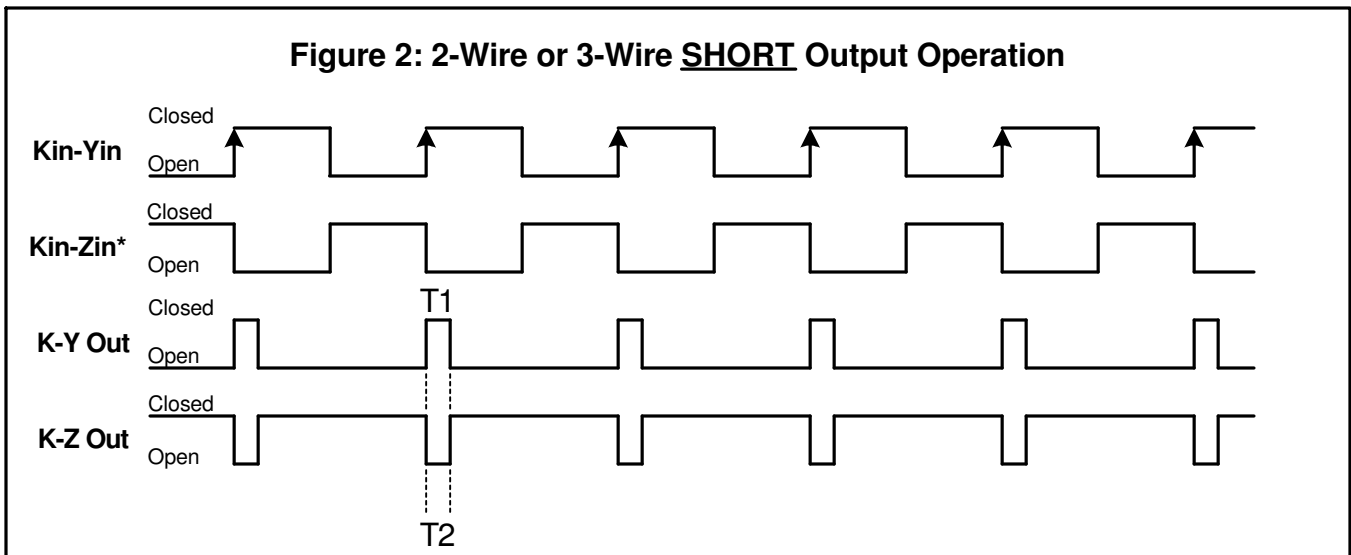
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 E-mail: support@solidstateinstruments.com

WORKING WITH THE SPR-24E RELAY

OPERATING MODES: The SPR-24E Repeating Pulse Relay allows the outputs to be configured for either the "Long" or "Short" pulse output mode. In the Long mode, the outputs simply follow the input. Output pulse widths are equal to input pulse widths. With the "long" output configuration selected, pulse speeds of up to 72,000 pulses per hour (20/sec) are possible. Figure 1 below shows the timing diagram for the "long" output mode.

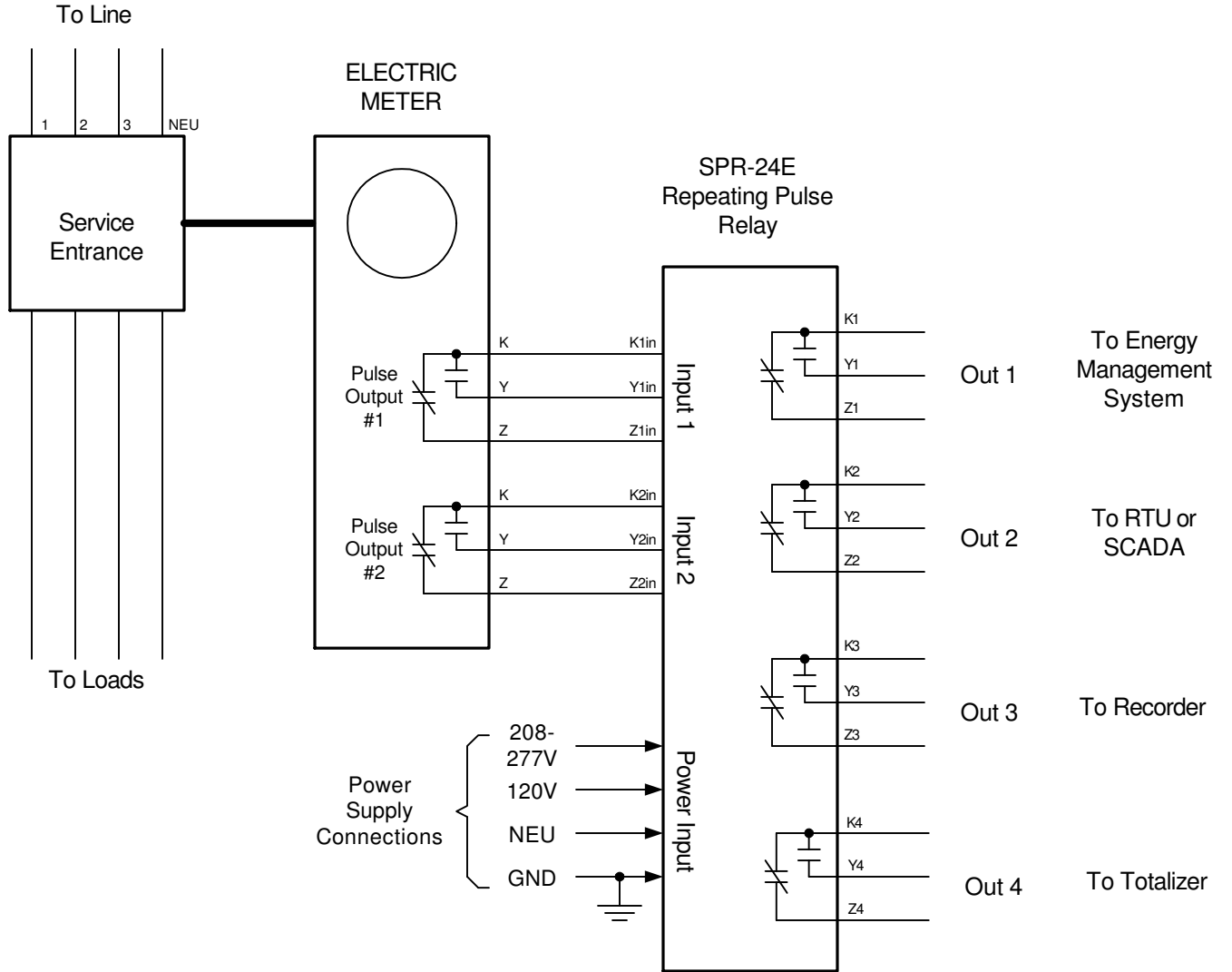


In the Short output mode, shown in Figure 2 below, an output pulse (K-Y closure) with a fixed width (T_1) of 100mS occurs each time the input is triggered. Correspondingly, the K-Z output opens for 100mS (T_2) each time the input is triggered. In the "short" mode, the output pulse rate is limited to 9 pulses per second, or about 32,400 pulses per hour.



If the input pulse rate is greater than 9 pulses per second, it is recommended that the LONG pulse output mode be used. Contact the factory for technical support at (888)272-9336.

SPR-24E Wiring Diagram



SPR-24EWiringDiagram.vsd

SPR-24E Repeating Pulse Relay Wiring Diagram		REVISIONS	
		NO.	DATE
DATE ORIGINAL	SCALE		
12/19/12	N/A		
LATEST REVISION	JOB NO.	CHECKED	DRAWN
			WHB

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