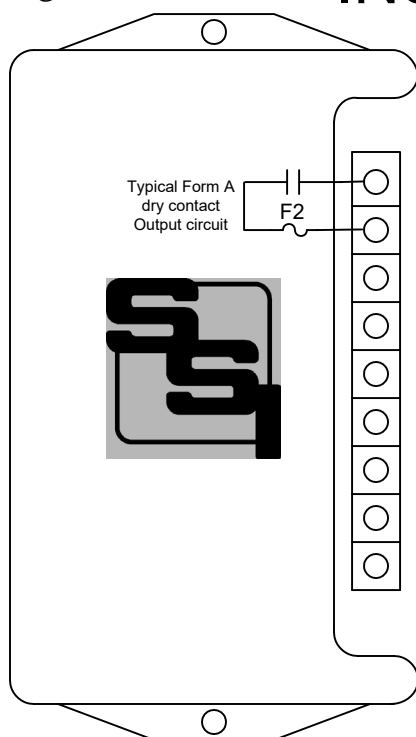


PTR-2C*Elite Solid State*

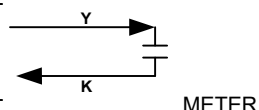
PULSE TRANSCIEIVING RELAY INSTRUCTION SHEET



Y2 → **OUTPUT #2**
K2 ←

Y1 → **OUTPUT #1**
K1 ←

Yin → +12VDC CURRENT LOOP SOURCE
INPUT FROM METER
Kin ← CURRENT LOOP RETURN



G ← GND

N ← NEU

L ← 120-277V
LINE

POWER SUPPLY INPUT

MOUNTING POSITION - The PTR-2C may be mounted in any position. It should be mounted at the destination end where the pulses are conveyed to the destination system.

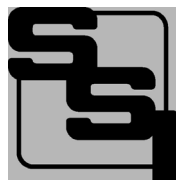
POWER INPUT - For 120 to 277VAC, connect the line ("hot") lead(phase voltage) to the **L** terminal. Connect the Neutral power supply lead to the **N** terminal. Connect the electrical system ground to the **GND** terminal. No power source is required at the meter, only a K-Y switch closure. GND must be connected.

PULSE INPUT - The PTR-2C contains a current loop input designed for reliably receiving pulses from a meter's pulse output that is located a long distance away. The PTR-2C's current loop circuitry will overcome the resistance of long runs of wire.

METER CONNECTIONS - The PTR-2C's **Kin** and **Yin** input terminals are connected to the meter's K & Y terminals: Kin to K and Yin to Y. The PTR-2C's **Yin** terminal provides a current loop sourced voltage of up to +12VDC to the meter's Y terminal. The **Kin** terminal is the current loop return. Up to 5000' of wire may be inserted into the meter input circuit: 2500 feet out and 2500 feet return. Distance is proportional to wire size.

OUTPUTS - Two Form A (2-Wire) outputs are provided. Arc suppression for the contacts of the solid state relay is provided internally. Outputs are rated at a maximum power of 100VA; maximum voltage of 250V and maximum current of 500mA.

FUSES - The fuses are solid state and may be up to 400mA in size. This solid state fuse is automatically resetting. Fuse rating is derated as temperature increases.



SOLID STATE INSTRUMENTS

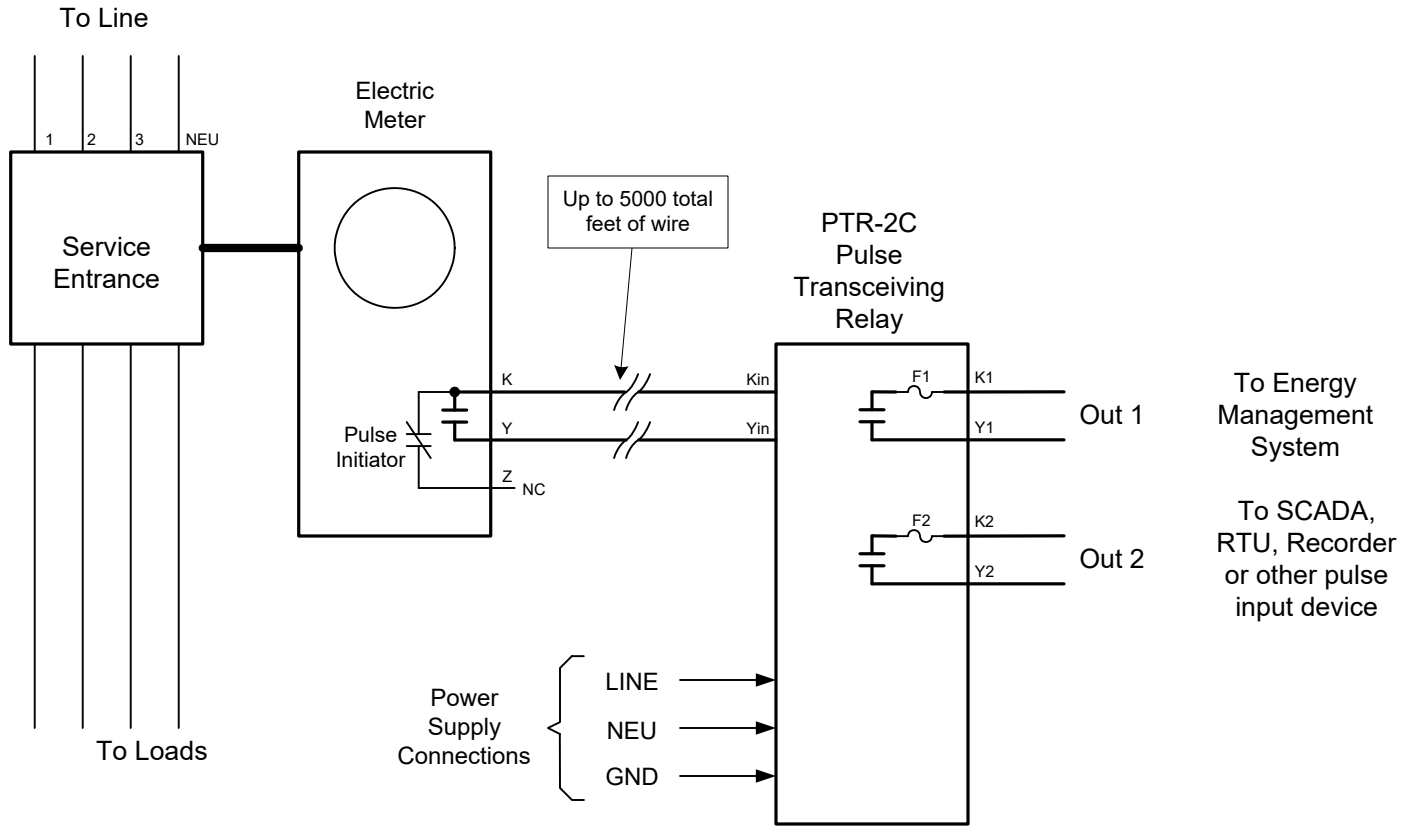
by Radian Research, Inc

3852 Fortune Dr, Lafayette, IN 47905

Phone: (765) 449-5576

Mail: technicalsupport@radianresearch.com

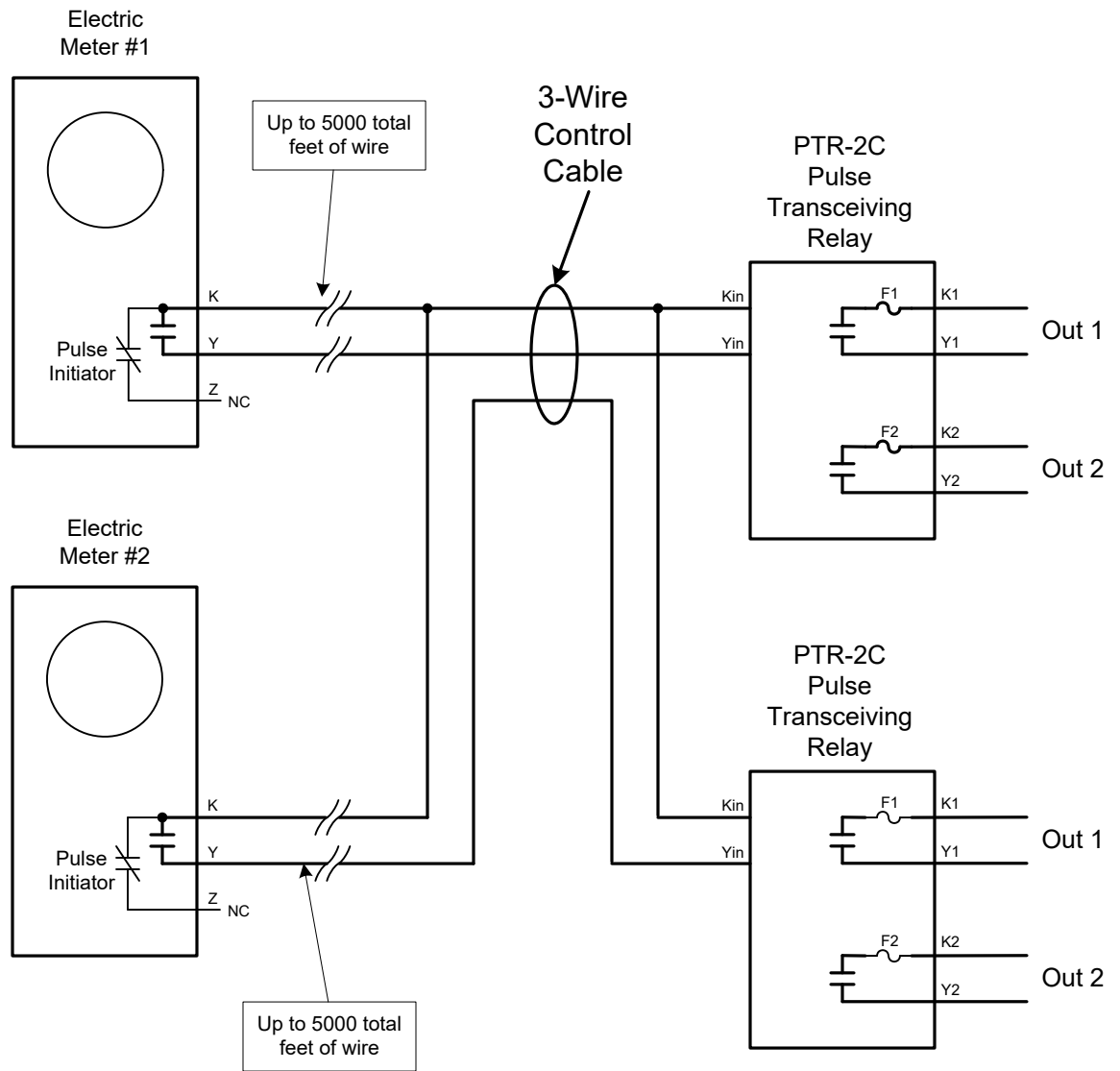
PTR-2C Wiring Diagram



PTR-2C Pulse Transceiving Relay Wiring Diagram		REVISIONS		
		NO.	DATE	DESCRIPTION
DATE ORIGINAL				
01/01/2026				
SCALE				
N/A				
LATEST REVISION				
JOB NO.				
CHECKED				
DRAWN				
				WHB

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Multiple PTR-2C Unit Applications



In the event that there are not two wires per unit available in multiple PTR-2C unit applications, the K wire of each PTR-2C may be commoned together. Therefore the minimum number of wires is equal to the number of PTR-2C units plus one wire as the common.

PTR-2C Pulse Transceiving Relay Wiring Diagram		REVISIONS	
		NO.	DATE
DATE ORIGINAL		DESCRIPTION	
01/01/2026			
SCALE			
N/A			
LATEST REVISION			
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