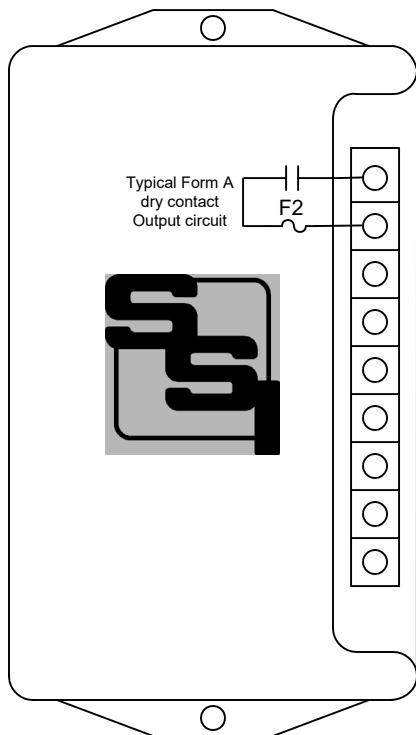


PTR-2C

Elite Solid State

# PULSE TRANSCEIVING RELAY INSTRUCTION SHEET



Y2 → **OUTPUT #2**

K2 ←

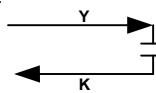
Y1 → **OUTPUT #1**

K1 ←

Yin → +12VDC CURRENT LOOP SOURCE

**INPUT FROM METER**

Kin ← CURRENT LOOP RETURN



METER

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

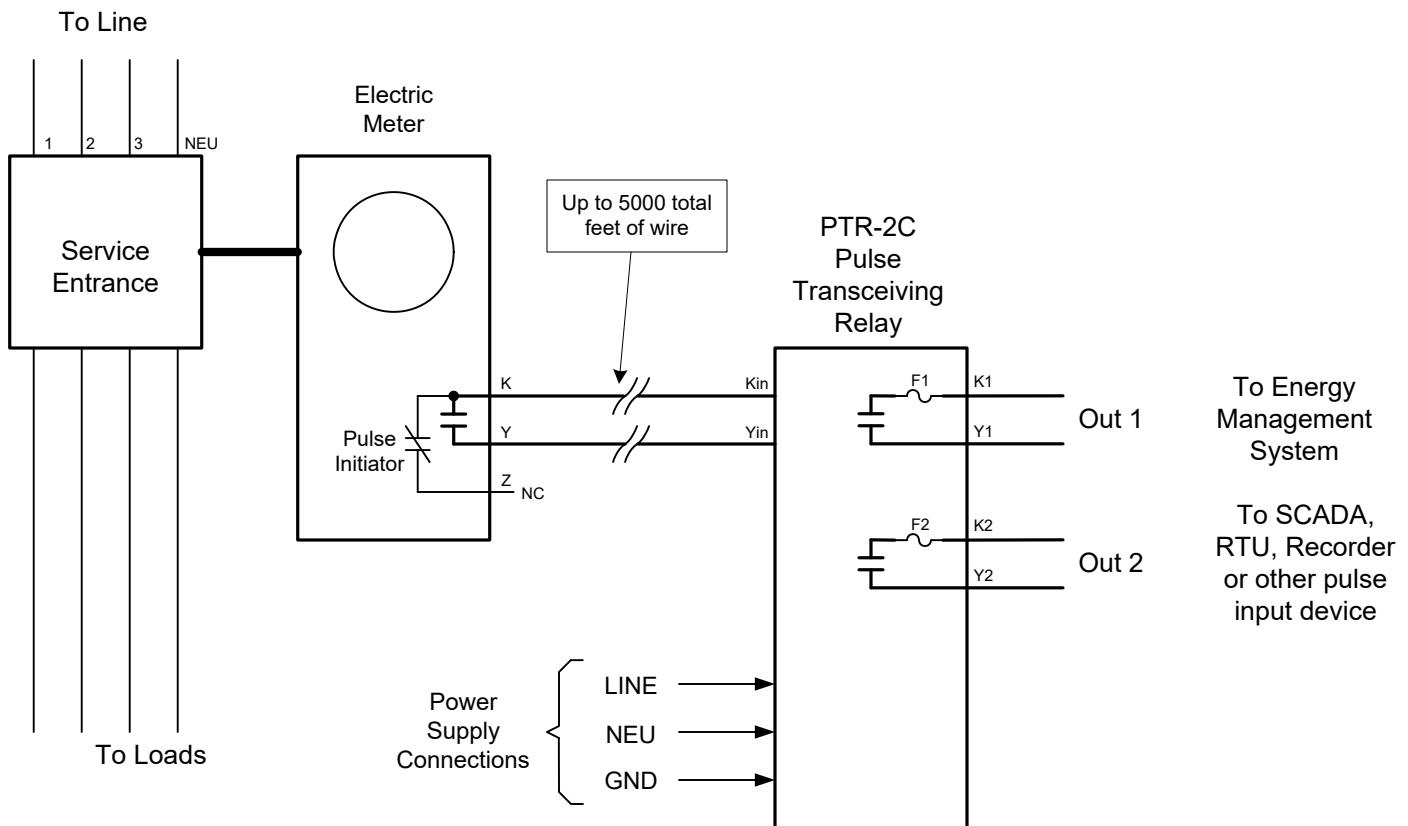
by Radian Research, Inc

3852 Fortune Dr, Lafayette, IN 47905

Phone: (765) 449-5576

Mail: [technicalsupport@radianresearch.com](mailto: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

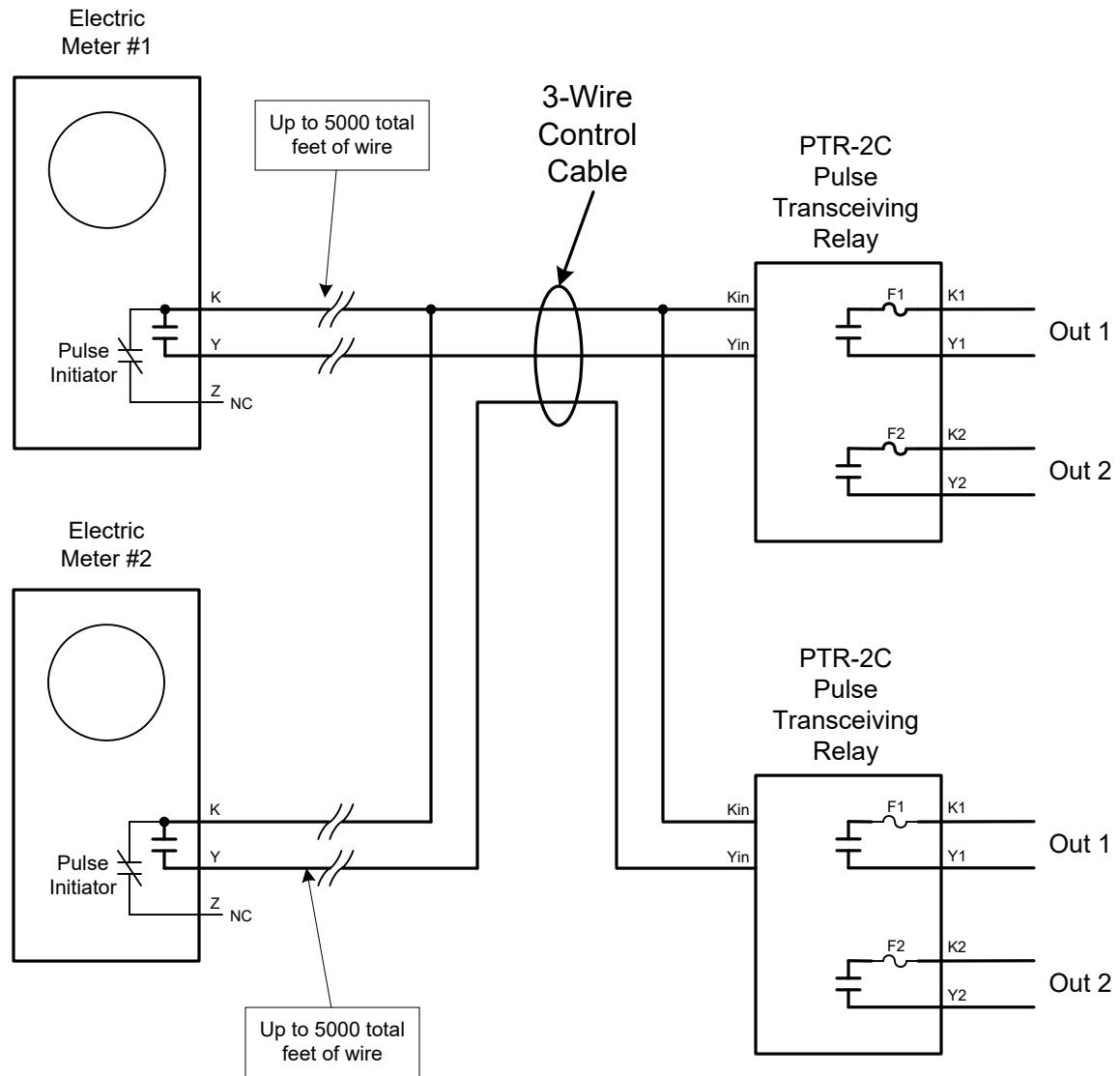
CHECKED

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	DESCRIPTION
DATE ORIGINAL	SCALE			
01/01/2026	N/A			
LATEST REVISION	JOB NO.	CHECKED	DRAWN	WHB

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