

# SJE Rhombus<sup>®</sup> 4-20mA Simulator

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The SJE Rhombus<sup>®</sup> 4-20mA Simulator is an easy-to-use, hand-held test instrument designed to generate an adjustable 4-20mA signal from loop power. The output of the Simulator is adjusted across the full range by turning the adjustment knob. The 4-20mA Simulator can be used on a wide range of applications, provided the excitation voltage is within 12-24 VDC.

## ⚠ WARNING! ELECTRICAL SHOCK HAZARD



This product is intended for use by a qualified service person. Always follow applicable electrical codes. Disconnect all power to the equipment to be tested prior to connecting or disconnecting this device. This device is intended for low voltage instrumentation testing. Do not connect to voltages higher than 24 VDC. Do not use in wet locations.

## ⚠ WARNING! EXPLOSION OR FIRE HAZARD

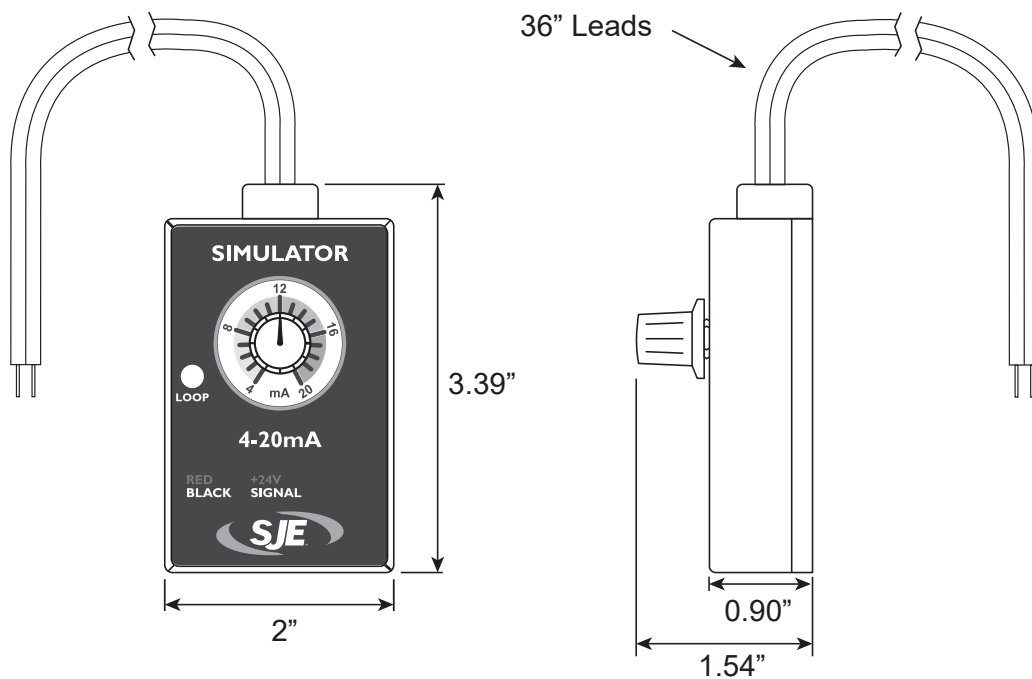


This product is NOT intended for use in hazardous locations as defined by the National Electrical Code, ANSI/NFPA 70.

## SPECIFICATIONS

EXCITATION VOLTAGE	12-24 VDC ±5%
SUPPLY CURRENT	30mA MAX.
OUTPUT SIGNAL	4-20mA
ACCURACY	± .5mA
OPERATING TEMPERATURE	+32° TO +122° F
ENCLOSURE MATERIAL	ABS PLASTIC
WEIGHT	5 oz.
CABLE	SPEC: 20 AWG, 2 COND. LENGTH: 36 IN TERMINATION: FERRULE
FUSE	500mA 5x20MM FAST BLOW

## DIMENSIONS



## USING THE SIMULATOR

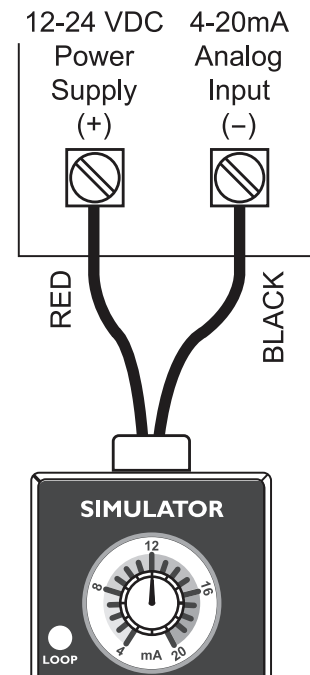
1. Connect the 4-20mA simulator according to Figure A.
2. The red lead must always be connected to the excitation voltage source and the black lead to the 4-20mA input terminal on the device to be tested.
3. When connected correctly and power applied, the green loop power indicator turns on and will increase in brightness as the current approaches 20mA.

### WARNING:

- a. Using the Simulator will cause your control system to respond accordingly. Machine may start or stop unexpectedly.
- b. This is a test equipment designed for troubleshooting only. Do not leave connected permanently or unsupervised.

## CONNECTION

Figure A



## TROUBLESHOOTING

If the 4-20mA Simulator loop power indicator fails to light when connected:

1. Check all wiring connections and verify the excitation voltage is within the usable range.
2. Check the 4-20mA simulator fuse by removing the four screws on the back cover and removing the fuser cover.
3. Contact the factory if the problem persists.

## SJE RHOMBUS® ONE-YEAR LIMITED WARRANTY

One-Year Limited Warranty.

For complete terms and conditions, please visit [www.sjrhombus.com](http://www.sjrhombus.com).

### NOTICE!

Products returned must be cleaned, sanitized, or decontaminated as necessary prior to shipment to ensure that employees will not be exposed to health hazards in handling said material. All applicable laws and regulations shall apply.



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