SIU-202 Stimulus Isolation Unit

- · Constant current in 3 ranges up to 10mA
- 100 volt compliance with LED indicator

INSTRUMENTS

- Optical coupling isolates stimulator from pulse source
- Battery powered for low noise recording applications
- · Copatiable with electrophysiological applications
- Variable compliance voltage feature



Description

The SIU-202 is ideal for providing stimulation when stimulus artifacts must be kept to a minimum, such as in nerve or muscle research.

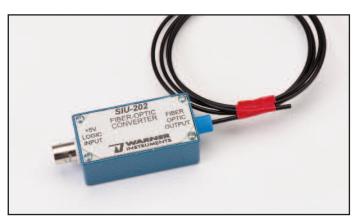
This instrument features optical isolation at the input, and a battery powered constant current delivery circuit. Timing pulses can be controlled by any device capable of generating a TTL level positive pulse (for example, a computer with data acquisition).

On the rear of the instrument are two TTL inputs; one comprising a standard BNC input, the other using an optional fiber-optic converter box. The fiber-optic eliminates all grounded connections to the SIU-202.

Output amplitude is set using a range-mode switch in conjunction with a ten-turn potentiometer to set a percentage of the selected range. The constant current output features 100 volt compliance with a LED over-voltage indicator. The compliance voltage may also be set to a lower voltage by simply reducing the number of 9 volt batteries installed.

A low battery light provides advanced notice of battery status and ultra low power electronics provide up to 250 hours of operation with a 2 mA output setting.

Output connection is via the panel-mounted 5-way binding posts, (banana jacks).



Specifications

Output Waveform	Current Pulse
Output Current Ranges	0.1, 1.0, and 10.0 mA
Output Compliance	100 V
Output Polarity	Selected by Mode Switch
Amplitude Control	Multi-turn dial
Input Pulse Requirements	TTL level, positive pulse 3 volt, 1 mA minimum
Input Pulse Timing	100 μ s minimum pulse width
Input Connector	BNC, optional fiber-optic
Input Isolation	5,300 volts rms
Isolation Resistance	10 ¹² Ω
Output Connector	5-way binding posts (Banana Jacks)
Power Requirements	16 - 9 volt alkaline batteries
Physical Size, H x W x D	4.5 x 15.9 x 27.9 cm
Shipping Weight	3 kg
Warranty	One year, parts and labor

Ordering Information

Cat. No.	Model	Product
64-1933	SIU-202	Stimulus Isolation Unit constant current
64-1934	SIU-202FOC	Fiber-Optic Converter