Multiplexing Pulse Booster

Cat. No. 3165

General

The 3165 Multiplexing Pulse Booster is a useful complement to any stimulator, delivering up to 800 mA of constant current to up to four in-vitro preparations (e.g. smooth muscles) at the same time.

The Multiplexing Pulse Booster has been designed to obviate the inconveniences connected to the use of single-channel stimulators, that lack the independent output connections and the individual adjustment capability to deliver pulses of preset intensity to more than one preparation.

It is especially useful when “field electrodes” and other low impedance stimulation arrangements are used.

Bear in mind that the one-channel stimulator can be conveniently replaced by a data acquisition system.

Main Features

- High Power (up to 800 mA) constant current
- Independent Isolated Circuits to eliminate interference
- Unipolar or Bipolar Mode
- Adequate Voltage (45V) enabling stimulation by field electrodes of most in-vitro preparations
- Continuous Monitoring of the preset current flowing through each preparation

Four in-vitro preparations (e.g. smooth muscles) can be driven by a single one-channel stimulator

Ugo Basile: more than 10,000 citations
Instrument Description

The 3165 features:

- High Power (up to 800 mA) digitally adjustable constant current
- Adequate Voltage (45V) which enables stimulation by field electrodes of most in-vitro preparations described in the literature
- Unipolar or Bipolar Mode
- Independent Isolated Circuits to eliminate interference
- Continuous Monitoring of the preset current flowing through each preparation

The current level of each channel is set via its individual 3-digit thumb-wheel switch.

The current output is adjustable in each channel to equal or different levels in the range 0-799 mA in 1 mA steps.

These current levels are independent on the Stimulator output voltage.

The pulse mode, either unipolar or bipolar, can be selected on one or more channels.

Optional Timer

An optional Timer (Cat. 3175) can be supplied, housed in its individual mini-box, to enable the Pulse Booster to deliver pulse trains, when the Stimulator lacks this feature.

This timer is provided with both train and pause-between-trains duration adjustments. Both adjustment time-scales span the interval 0-999 seconds in 1 second steps.

A standard field electrode pair (Cat. 3160) can be supplied. Special electrodes can be designed and manufactured on request.

Please ask for details!

Ordering Information

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Optional

| 3175       | Timer for 3165                      |

PHYSICAL

| Power Requirement | 115/230 V, 50/60 Hz, 30W |
| Dimensions        | 26 (w) x 30 (d) x 12 (h) cm |
| Weight            | Kg. 4.4                         |
| Shipping Weight   | Kg. 6.5 approx.                 |

Bibliography

- M.G. Materia et alia: “Immune Sensitization of Equine Bronchus: Glutathione, IL-1β Expression and Tissue Responsiveness” Respir Res. 6(1): 104, 2005