

Multiplexing Pulse Booster

Cat. No. 3165

General

The 3165 Multiplexing Pulse Booster is a useful complement to any stimulator, delivering up to 800mA 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, as our **17304 DataCapsule-Evo!**



**Four in-vitro preparations
can be driven by a single
one-channel stimulator**

Main Features

- High Power constant current: up to 800 mA
- 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

Instrument Description

The 3165 features:

- High Power, digitally adjustable constant current: up to 800 mA
- 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 0-799mA in 1mA steps.

These current levels are independent of 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!

Connection to Digital Recorder

A one-channel stimulator can be conveniently replaced by a data acquisition system, as - for example - our **DataCapsule-Evo!**

Ordering Information

3165 **MULTIPLEXING PULSE BOOSTER,**
complete

3165-302 Instruction Manual

E-PE 015 Connection Cable

E-WP 008 Power Cord

Optional

3175 Timer for 3165

PHYSICAL

Power Requirement 115/230 V, 50/60 Hz, 30W

Dimensions 26(w)x30(d)x12(h)

Weight 4.4Kg

Shipping Weight 6.5Kg approx.

Packing 46x38x27cm

Bibliography

- D. Currò: "**Voltage-gated calcium channels involved in the inhibitory motor responses and vasoactive intestinal polypeptide release in the rat gastric fundus**" *Eur. J. Pharmacol.* 628: 207-213, 2010
- F. Guagnini et alia: "**Tolerance to cannabinoid response on the myenteric plexus of guinea-pig ileum and human small intestinal strips**" *Br. J. Pharmacol.* 148, 1165-1173, 2006
- F. Borrelli et alia: "**Effect of Boswellia serrata on intestinal motility in rodents: inhibition of diarrhoea without constipation**" *B. J. Pharmacol.* 148, 553-560, 2006
- M.G. Matera et alia: "**Immune Sensitization of Equine Bronchus: Glutathione, IL-1 β Expression and Tissue Responsiveness**" *Respir. Res.* 6 (1): 104, 2005
- S. Tambaro et alia: "**Evaluation of Tamsulosin and Alfuzosin Activity in the Rat Vas Deferens: Relevance to Ejaculation Delays**" *J. Pharmacol. Exper. Therap.* 312: 710-717, 2005
- S. Ruiu et alia: "**Synthesis and Characterization of NESS 0327: a Novel Putative Antagonist of the CB1 Cannabinoid Receptor**" *J. Pharmacol. Exper. Therap.*, 2003
- D. Licheri et alia: "**Long-Term Voluntary Ethanol Consumption Induces Impairment of the Mechanical Performance in the Papillary Muscle of Sardinian Alcohol-Preferring Rats**" *Alcohol and Alcoholism* 36 (1): 44-47, 2001