



Implantable Wireless Stimulation System for Mice

For Central & Peripheral Nervous System Applications, Available in 1 and 3 Channels

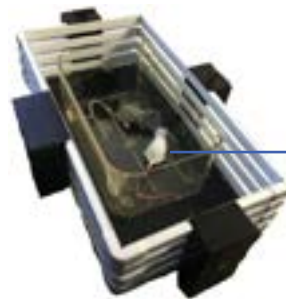
FEATURES

- Two external TTL stimulation triggers available on USB dongle
- Available with 1 or 3 channels, independently enabled and programmed
- 90-day package life
- Up to $\pm 1\text{mA}$ output
- Drives electrodes with up to $20\text{ k}\Omega$ resistance
- Headstage Weight: 2.3 grams
- Communicates data with StimWare® via USB dongle transceiver
- Up to 12 bits of current resolution
- Pulse width as short as $100\mu\text{s}$
- +5, -5 voltage range

IMPLANTABLE
STIM
FOR MICE



USB Dongle
Transceiver



Implanted Headstage

PRODUCT DETAILS

Triangle BioSystems International presents an implantable single or triple channel stimulation system that allows researchers to generate separately customizable stimulation waveform patterns via a USB dongle transceiver. Alternatively, the channels can be combined to achieve an even larger voltage differential. The complete system is comprised of an implantable stimulating headstage, inductive powering cage, a USB dongle transceiver, a silicone electrode connection kit, and StimWare® pattern generation software. The StimWare® software interface allows the user direct control over the details of the uploaded stimulation pattern, including three tiers of nested patterns, on/off function, and a manual pattern trigger option.

This implantable headstage unit can be implanted in a mouse's peritoneal cavity using a minimally invasive surgical procedure. It has a 90-day package life. Additionally, this headstage can be used concurrently with our recording, tethered, or multiplexed neural recording headstages.

PART NUMBERS

- 1 CHANNEL HEADSTAGE (ISM-1):
L50-41F9-G2
- 3 CHANNEL HEADSTAGE (ISM-3):
L50-41G9-G2
- INDUCTIVE POWER COIL/PAD FOR CAGE:
100-0011-13
- STIMULATOR ACCESSORY KIT:
KS-040

Stim Ware

Pattern Generation Software

IS-M Series

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SOFTWARE FEATURES

In using StimWare™ for the wireless stimulator system, you are provided precise control over every aspect of your experiments. Just set the details of your signal in our user-friendly interface, then upload the pattern. It's that easy.

System control options include:

- » Initial Delay
- » Single Pulse Current and Duration
- » Train Pattern (Multiple Pulses)
- » Stimulus Pattern (Multiple Trains)
- » Remote Headstage on/off Control
- » Manual Pattern Triggering



SYSTEM SPECIFICATIONS

	MAX	UNITS	NOTES
Input Impedance Specs			
8kΩ	±1	mA	Up to 50μs pulse width
80kΩ	±100	μA	Up to 50μs pulse width
1MΩ	±8	μA	Up to 50μs pulse width

	1 CH	3 CH	MAX	UNITS	NOTES
Headstage Mechanical Specs					
Length	15	13		mm	Edge to edge (including connectors)
Width	12	11		mm	Edge to edge
Height	6	8		mm	Edge to edge
Weight	2.3	2.3		grams	With connector & dipped package
Temperature Tolerance			1	Degree C	Change of package surface temp