

## Model 4100

# Isolated High Power Stimulator



The Model 4100 Isolated High Power Programmable Stimulator is our most powerful, most flexible, and most convenient single channel stimulator. It is designed for a wide variety of applications, including field stimulation. The Model 4100 is designed to be your lab's workhorse stimulator, delivering maximum performance at a fair price.

The Model 4100 is highly flexible, being capable of delivering stimulus trains comprised of monophasic, biphasic, ramps, and/or user generated custom waveforms. In addition, the Model 4100 can deliver traditional protocols such as LTP/LTD stimulation studies, Paired Pulses protocols, and Stepped Pulses.

The Model 4100 offers complete computer connectivity: Included software is compatible with Windows, OSX, iOS, LabView, Matlab, and Android.

The output of the Model 4100 may be switched between constant current and constant voltage modes. The high power output signal is isolated thereby eliminating the need to purchase expensive external stimulus isolation units.

Complete triggering, gate, and sync outputs are standard.

Common applications for the Model 4100 Isolated High Power Stimulator include, but are not limited to:

- long-term potentiation (LTP)
- long-term depression (LTD)
- classical conditioning
- field stimulation
- nerve conduction
- evoked potentials
- lesions
- kindling / seizure models

The Model 4100 Isolated High Power Stimulator is a flexible stimulator suitable for the most exacting laboratory requirements.

- Long timing range: 1 microsecond to over 25 hours
- Complete computer control, including Windows, OSX, iOS, LabView, Matlab, and Android.
- Monophasic, Biphasic, Ramp, or User-generated custom waveforms
- Isolated output current up to 100 mA; Isolated output voltage up to  $\pm 200$  V
- 1 MHz Bandwidth
- Easy-to-use front panel interface
- Free-run, Manual, or External triggering
- Status lights indicate operational state and setup/control errors
- Sync outputs for multiple critical timing parameters
- No battery or expensive external SIUs required
- Includes rack mount hardware
- Includes instruction manual
- 3-year warranty

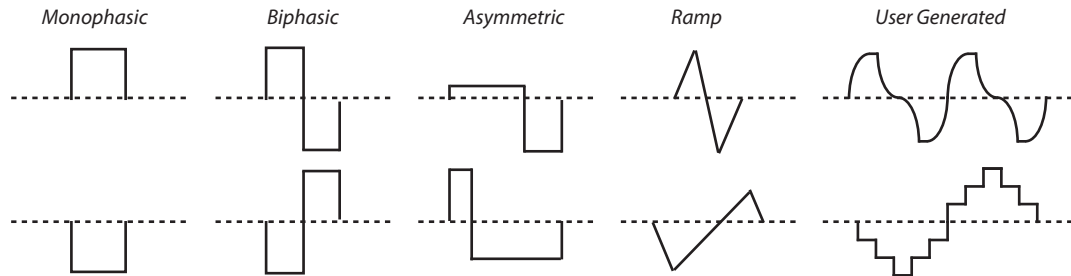
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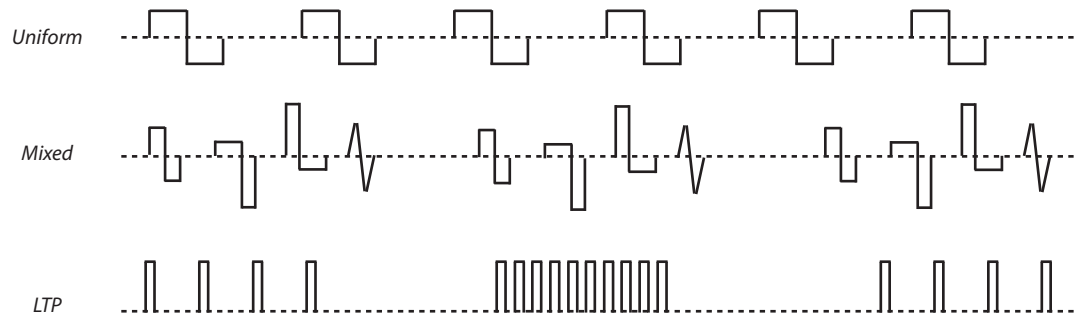
### Waveform Flexibility

The Model 4100 Isolated High Power Stimulator can generate a variety of waveforms. In addition, users that can generate their own waveform shapes can use the Model 4100 Signal In to generate isolated constant current or constant voltage stimuli:



### Train Flexibility

Up to 20 different events can be defined in the Model 4100s library, and they can be linked in any order to deliver complex stimulus trains. This feature can be used to generate common stimulus protocols like those used in LTP/LTD studies, paired pulse studies, or stepped pulse studies.



### Specifications

Amplitude	-200 V to 200 V @ 100 mA
Minimum Event Width	1 microsecond
Maximum Event Width	25 hours
Minimum Event Interval	2 microseconds
Bandwidth	1MHz
Trigger Options	Manual, External, or Free-Run
Software	Windows, OSX, Matlab, LabView, iOS, Android

### Ordering Information

For use on 220 V / 50 Hz power systems	Product #930005
For use on 110 V / 60 Hz power systems	Product #930000

All units include a product manual, software and rack mounts.

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