

# INTEGRATED CARDIAC PACING AND RECORDING CAPABILITIES

The flexibility to use a cardiac stimulator as a standalone touch-screen unit or from the WorkMate<sup>™</sup> Claris<sup>™</sup> Recording System keyboard improves workflow and efficiency in the electrophysiology (EP) lab. The EP-4<sup>™</sup> Stimulator is the only cardiac stimulator to operate in a standalone capacity or as a fully integrated component of the WorkMate Claris System. It features customizable protocol options that can offer maximum procedural flexibility. Additionally, the EP-4 Stimulator combines an intuitive user interface with a variety of automated functions to increase lab staff productivity and reduce procedure time.

### **Improved Workflow and Efficiency**

- Coordinate the entire EP study with a single operator who can set up, initiate and control pacing and stimulation protocols directly from the integrated EP-4 Stimulator or WorkMate Claris System.
- Enhance procedural efficiency by selecting from nine pre-programmed pacing protocols and/or creating up to 10 user-defined protocols for as many as six separate operators.
- Access stimulation protocols via the EP-4 Stimulator touchscreen and keyboard, or use the WorkMate Claris System keyboard and mouse when the EP-4 Stimulator is combined with it—the only system of its kind to offer this capability.
- Enhance control with customizable settings for four independent, simultaneous or sequential pacing channels.



#### **Technical Specifications**

Independent Isolated Stimulus Channels: 4

Pulse Amplitude (constant current source):

Range: 0.1-20 mA Increment: 0.1 mA

Pulse Duration:

- Range: 0.1-10.0 msec
- Increment: 0.1 msec

#### Interstimulus Interval (ISI):

- S1: 100 msec-30 sec
- S2-S7: 50 msec-10 sec
- Burst: 10 msec-1 sec
- Sequential (AV) Delay: 10-1000 msec
- Increment: 1 msec

#### Pre-programmed Protocols: 9

- Threshold determination
- Sinus node recovery
- Wenckebach block
- Refractory study
- Arrhythmia induction
- Standard pacing
- Overdrive pacing
- Decremental pacing
- Burst pacing

Programmable Protocol Keys: 10

Programmable Users: 6

Number of Extra Stimuli: 6 (S2-S7)

#### **Emergency Pacing Function:**

- 1000 msec cycle length
- 10 mA pulse amplitude
- 2 msec pulse duration
- Simultaneous output of all channels (1-4)

#### Sensing (ECG Synchronization):

- Automatic or manual trigger setting
  - Input range (sensitivity):
  - Catheter: 0.1-10 mV
  - External: 1-500 mV
- Trigger lockout (refractory time): 50-1000 msec

#### Additional Outputs:

- Stimulus markers
- Programmable auxiliary/paper advance
- ECG sensed trigger marker

#### Power Source:

- Line power: 100-240 VAC
- Line frequency: 50-60 Hz
- Rated power: 55 VA (100-240 VAC, 50-60 Hz)
- AC power cord: 10 A rated

#### Fusing:

- Current rating: 1.6 A
- Voltage rating: 250 V
- Speed: fast acting
- Dimension: 5 mm x 20 mm
- Breaking capacity: 100 A @ 250 VAC,
- 10000 A @ 125 VAC
- Quantity: 2

#### Stimulation Module:

- Dimensions: 16.9"L x 14.4"W x 3.8"H
- Weight: 15 lbs

#### **Description**

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## Model EP-4I-4-110

EP-4™ Cardiac Stimulator (4 output channels)

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Brief Summary: Please review the Instructions for Use prior to using these devices for a complete listing of indications, contraindications, warnings, precautions, potential adverse events and directions for use.

Indication for Use: The EP-4 Cardiac Stimulator is indicated for use during clinical cardiac electrophysiology procedures.

Intended Use: The EP-4 Cardiac Stimulator is intended to be used for diagnostic electrical stimulation of the heart for the purpose of refractory measurements, initiation and termination of tachyarrhythmias, and measurements of electrical conduction.

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