



**Laerdal**<sup>®</sup>

helping save lives



## Rugged Trauma Training



### SimMan<sup>®</sup> 3G Trauma

SimMan<sup>®</sup> 3G Trauma's durable and rugged configuration provides you with the flexibility to perform simulation-based education in the environment of your choice; in the classroom or in the field.

Manage SimMan 3G Trauma and all other Laerdal PC operated simulators with the LLEAP unified software platform. This means you will find scenarios, conduct simulation training, and develop new scenarios to help meet your learning objectives with greater ease.



# SimMan® 3G Trauma

## MULTIPLE AIRWAY SKILLS/FEATURES

- Controllable open/closed airway; automatically or manually controlled
- Head tilt/Chin lift
- Jaw thrust w/articulated jaw
- Suctioning (Oral and Nasopharyngeal)
- Bag-mask ventilation
- Orotracheal intubation
- Nasotracheal intubation
- Right main stem intubation
- Combitube, LMA, and other airway placement
- Retrograde intubation
- Fiberoptic intubation
- Transtracheal jet ventilation
- Needle cricothyrotomy
- Surgical cricothyrotomy
- Variable lung compliance – 4 settings
- Variable airway resistance – 4 settings
- Stomach distention

## AIRWAY COMPLICATIONS

- Detection of proper head position
- Can't intubate/Can't ventilate
- Can ventilate/Can't intubate
- Tongue edema
- Pharyngeal swelling
- Laryngospasm
- Decreased cervical range of motion
- Trismus

## BREATHING FEATURES

- Spontaneous breathing
- Bilateral and unilateral chest rise and fall
- CO2 exhalation
- EtCO2 and waveform display
- Normal and abnormal breath sounds
  - 5 anterior auscultation sites
  - 6 posterior auscultation sites
- Oxygen saturation and waveform display

## BREATHING COMPLICATIONS

- Cyanosis
- Needle thoracentesis – bilateral
- Unilateral and bilateral chest movement
- Unilateral, bilateral and lobar breath sounds
- Chest tube insertion – bilateral

## CARDIAC FEATURES

- Extensive ECG library
- Heart sounds – 4 anterior locations
- Simulated ECG rhythm monitoring (4 lead)
- 12 lead ECG display
- Defibrillation and cardioversion
- Pacing

## CIRCULATION FEATURES

- BP measured manually by auscultation of Korotkoff sounds
- Carotid, femoral, brachial, radial, dorsalis pedis, popliteal and posterior tibialis pulses synchronized with ECG
- Pulse strength variable with BP
- Pulse palpation is detected and logged

## VASCULAR ACCESS

- IV access (right arm)
- Intraosseous access (tibia and sternum)
- Bilateral thigh and deltoid IM sites

## CPR

- Compliant with 2010 Guidelines
- CPR compressions generate palpable pulses, blood pressure waveform, and ECG artifacts
- Realistic compression depth and resistance
- Detection of depth and frequency of compressions
- Detection of leaning
- Real-time feedback on quality of CPR

## EYES

- Blinking – slow, normal, fast and winks
- Open, closed and partially open
- Pupillary accommodation:
  - Synchrony/asynchrony
  - Normal and sluggish speed of response

## OTHER FEATURES

- Bleeding
  - Simulation of bleeding at multiple sites
  - Arterial and venous
  - Vital signs automatically respond to blood loss and therapy
  - Works with various wound modules and moulage kits
- Urine output (variable)
- Foley catheterization
- Secretions
  - Eyes, Ears, Nose, Mouth
  - Blood, Mucous, CSF, etc.
- Diaphoresis
- Bowel sounds – four quadrants
- Patient voice
  - Pre-recorded sounds
  - Custom sounds
  - Instructor can simulate patient's voice wirelessly
- Instructor communication
  - Multiple instructors communicate using integrated Voice Over Internet Protocol (VOIP)

## AMPUTATIONS

- Amputated left arm
- Amputated left leg
- Amputated right arm
- Amputated right calf skin

## SYSTEM FEATURES

- Wireless instructor computer with LLEAP software

- Control multiple manikins from 1 interface
- Control simulation from anywhere on your network
- Use Manual Mode to run "on-the-fly" for total control over all parameters
- Utilize Automatic Mode with pre-programmed scenario for a simple and standardized way to run a simulation
  - Patient cases utilizing physiological and pharmacological models
  - Pre-programmed scenarios
  - Self-authored content
- Simulation controls; fast forward, pause, rewind, save/restore
- Profile editor
- Future prediction and patient outcome display
- Integrated video debriefing
- Time stamped activities, vital signs, and instructor comments are captured in the event log

## PATIENT MONITOR

- Touch-screen simulated patient monitor provides concise clinical feedback for physiological parameters
- The monitor's color screen is configurable and provides multiple simulated parameters, each presenting multi-level alarms
- Simulated parameters include ECG (2 traces), SpO2, CO2, ABP, CVP, PAP, PCWP, NIBP, TOF, Cardiac output, Temperature (core and peripheral), additional and programmable parameters e.g. ICP
- X-Ray Display
- 12 Lead ECG
- Custom Image Display
- Custom Video Display
- Oxygen saturation and waveform

## ORDERING INFORMATION

### 219-02001 SimMan 3G Trauma

Includes: SimMan 3G Trauma Manikin, LLEAP Software and License, USB Headset/Microphone, Simulated Patient Cables, Soft-sided Carry Cases, Amputations, 1 Year Manufacturer's Warranty

### 400-10201 Laptop Instructor/Patient Monitor

### 400-09201 Tablet-PC Instructor/Patient Monitor

### 400-09501 Rugged Tablet Instructor/Patient Monitor

### 400-29301 All In One Panel PC Instructor/Patient Monitor

### Optional Accessories

### 400-96050 Webcam

### 212-07150 Rugged Carry Case

### 216-00441 SimView™ System

### 210-01750 Compressor

## Operation

Customize your SimMan® 3G Trauma operation with 4 LLEAP instructor computer and simulated patient monitor options.



## SimCenter

Visit [www.laerdal.com/simcenter](http://www.laerdal.com/simcenter) to learn how to optimize your simulation training using SimCenter™ and SimMan 3G Trauma



### SimStore™

Access to validated, standardized content from industry experts

### SimManager™

A suite of online tools that allows you to fully optimize your entire simulation center operation

### SimView™

An integrated debriefing solution giving you the ability to study simulation events more closely

## Services

Laerdal offers comprehensive Educational Services to support your curriculum, and Technical Services to meet your product servicing needs. Whether you are setting up a one-room simulation site or a multi-bed simulation center, Laerdal can help.

Visit [Laerdal.com](http://Laerdal.com) for a complete listing of parts, accessories, and consumables



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