



**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.



[laerdal.com](http://laerdal.com)

For more information, visit us at [www.laerdal.com](http://www.laerdal.com) and learn more about the SimMan 3G Trauma patient simulator.





# 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 thoracostomy – 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 tablet PC controls simulator remotely
- Control multiple manikins from one interface
- Control simulations from anywhere on your network
- Multiple interfaces can control/observe a single simulation
- Instructor Mode
  - Precise control "on the fly"
  - Design and program custom scenarios
  - Create custom events
  - Run pre-programmed scenarios
- Auto Mode
  - Physiological models run pre-programmed simulations
  - Unique, simple controls increase/decrease difficulty and pace

## Simulation controls:

- Fast forward
- Pause
- Rewind
- Save/Restore
- Profile Editor
- Future prediction and patient outcome display
- Integrated video debriefing
- Data logging
- Instructor comments

## PATIENT MONITOR:

- Wireless
- Rugged
- Highly configurable
- Includes:
  - ECG (2 traces)
  - SpO2
  - CO2
  - ABP
  - CVP
  - PAP
  - PCWP
  - NIBP
  - TOF
  - Anesthetic agent
  - pH
  - PTC
  - ICP
  - Cardiac output
  - Temperature (core and peripheral)
  - Additional and programmable parameters
- X-Ray display
- 12 Lead ECG display
- Custom image display
- Custom video display

## CERTIFICATIONS:

- UL, CE, FCC, CSA, HMR

## ORDERING INFORMATION:

212-08801 SimMan 3G Trauma  
Includes: SimMan 3G Trauma Manikin, SimMan 3G Software and License, Rugged Instructor Tablet, Rugged Patient Monitor and Software, Simulated Patient Cables, Webcam, Soft-sided Carry Case, Amputations, 1 Year Manufacturer's Warranty



## Operation

Easy-to-use PC software generates a real-time event log synchronized with the patient monitor and video.



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## 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 simulator servicing needs.



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