

## SimMan® 3G

*The next generation of Laerdal Simulation*

# 3G

## MAKING SIMULATION EASIER

Our main goal when building the latest generation of simulators was to develop systems so advanced that they're actually easier to operate. Our simulation solutions are created with you in mind—balancing the most cutting-edge technology with simple set-up and easy-to-run scenario programs.

# SimMan®

## BUILT TO LAST

With 50 years of experience in medical educational products, Laerdal is a company you can trust. We pride ourselves on developing and building the highest-quality products—and offering top-notch services that are tailored to the needs of our customers. Whether you're looking for an advanced or simple simulator, scenarios developed specifically for turn-key implementation, or educational and technical services, Laerdal can provide exactly what you need.

## HELPING YOU SUCCEED

Laerdal is dedicated to helping you meet—and exceed—your educational goals. From simulators and scenarios to installation and training, our products and services are designed to help you achieve the optimal training environment with the most realistic outcome possible.



# LAERDAL COMMITMENT

*At Laerdal, we are committed to the idea that simulation helps save lives. That is why simulation has so rapidly become a crucial component of healthcare education.*

*More and more, simulators are found in educational institutions, hospitals, the military and other areas of healthcare education at every level. There is a growing need to train staff without risk to patients, to prevent medical errors and, when errors do occur, to find out why.*

*As the need for simulation grows, the need for easy to use, sustainable, high quality solutions grows with it. As technology offers more possibilities, educators' demand for simple, flexible solutions becomes even more profound. As patient simulation proliferates, so does the need to train in new environments. The result is a pressing need for the next generation of patient simulation.*

*That's where Laerdal comes in...*

*SimMan 3G is the next-generation of Laerdal Simulation, easy to use, built to last, with a complete range of products and services surrounding it. SimMan 3G is a wireless, state-of-the-art solution that will help your simulation programs succeed and grow no matter where you need to train...*



HEALTHCARE



EMS



MILITARY

## MAKING SIMULATION EASIER

The new SimMan 3G patient simulator is so advanced, it's actually easy to operate. Whether you're programming a scenario, using a pre-programmed scenario, or using SimMan 3G on the fly, we've made a successful simulation experience as simple as possible.

### Easy to Use

SimMan 3G's intuitive software interface, with three flexible operating modes, allows novice and expert instructors to create effective simulations more quickly than ever before.

### Easy to Operate

A revolutionary new way to manage a Laerdal patient simulator, **Auto Mode** is designed to be the most automatic way of operating SimMan 3G, making it even easier for users to run simulations.

The SimMan 3G Auto Mode combines physiological models, pre-programmed patient cases, and an innovative method for managing model-based simulation. Instructors can take advantage of preprogrammed pharmacological responses for over 108 drugs, BUT without the complexity that often comes with physiological model based simulations. Repeatedly run the most complex cases with ease—and tailor the difficulty to match the skills of every student.

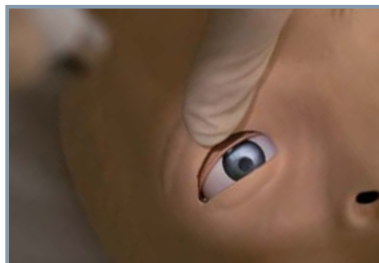
### Easy to Teach

Operating SimMan 3G "on the fly" using the new **Instructor Mode**, instructors who like to combine their knowledge, skills and direct control of the scenario to help students learn can now run the simulator much more easily as the simulation progresses. Exciting features of the Instructor Mode include easy access to the most important vital signs; an easy-to-learn and easy to use interface; and precise control of the scenario.

### Easy to Program

SimMan 3G's powerful scenario-editing capability, an integrated part of Instructor Mode, is built on the tried, tested, and proven SimMan software, so you can be certain it's the best. It includes the same flow diagrams, trends, handlers, and events that have made it easy to write, run, and debrief a SimMan simulation.

With SimMan 3G scenario writing and validation is easy to learn. And once a custom simulation is prepared, it behaves exactly as the instructor needs time after time—so every student can be taught in the same standardized way. The software can even include images, sounds, and multimedia graphics to further enhance the students' learning experiences.



Eye Signs



Sternal and Tibial IO



Bleeding and Wounds

# Sim





Needle Decompression and Chest Tube

# Man® 3G



Quality CPR Feedback



Convulsions

## BUILT TO LAST

Laerdal is dedicated to improving patient survival rates through quality training and education—and products that meet user needs. That's why Laerdal is renowned around the world for products that actually go beyond user needs and, in fact, continue to work well beyond normal expected life. Laerdal products are truly built to last!

### Fifty Years of Experience

For more than 50 years, Laerdal Medical has created innovative products dedicated to helping save lives in the field of acute medicine. From the very first Resusci Anne® to the latest breakthrough simulation training products, Laerdal's lifelike manikins have prepared generations of medical professionals and lay responders around the world to save lives and improve patient outcomes. This experience means that SimMan 3G is the most durable and easy to use patient simulator on the market.

### Our Users Are Our Best Reference

An estimated 300 million people have been trained on Laerdal products and hundreds of thousands of instructors continually turn to Laerdal to meet their educational needs. These instructors and users are the best advertising we could have—evidence that Laerdal products will be there—and working—wherever and whenever you need them.

### A Leader In Patient Simulation

Five decades of experience and accumulated knowledge are the legacy and inheritance of Laerdal patient simulators. Laerdal has more than 9,000 patient simulators in use worldwide, including over 5,000 SimMan, making it by far the most widely used patient simulator in the world. Now SimMan 3G, our next generation of patient simulation, continues that legacy and our dedication to developing products that are built with you in mind - and are built to last.

### Real Environments, Real Results

SimMan 3G's durable and rugged construction provides you with the flexibility to perform simulation-based education in the environment of your choice. Built with the quality you've come to expect from Laerdal, SimMan 3G was developed to be the most reliable patient simulator in the world—giving you the peace of mind to know that you can train where you practice medicine - in real environments with real results.



X-Ray, 12 Lead and Multimedia Display



Secretions



Drug Recognition

## HELPING YOU SUCCEED

Delivering high quality simulation training requires much more than a simulator—no matter how good it is. Training should take place at the right time and place and requires the most appropriate equipment—including the right instructor training and technical support.

### The “All Terrain” Solution

With SimMan 3G you can train in the actual environments in which your students will be working—such as in a hospital or ambulance or even in a military combat environment. Completely wireless, self-contained, rugged, and reliable, SimMan 3G boasts the proven quality and durability you've come to expect from Laerdal.

### More than a Patient Simulator

SimMan 3G is much more than a patient simulator; it integrates fully with the complete learning circle of Laerdal products. With its video debriefing, patient monitoring, pre-packaged patient cases and scenarios, available Advanced Video System, and other accessories, SimMan 3G is a complete simulation offering to help provide a turn-key learning solution.

### Education To Help Maximize Your Return

High quality instructors that know how to design, develop, and deliver quality educational experiences are the key to effective simulations. That's why SimMan 3G includes a fully paid instructor-training program at a Laerdal training center, which can be converted to a program for multiple personnel at your own site if you prefer. Additional Laerdal professional services include advanced programming courses, customized refresher training courses, and scenario development services to help you succeed in all your simulation programs.

### “Peace of Mind” – Protecting Your Investment

Laerdal is proud to deliver the most reliable and easily maintained simulators in the world. We're also happy to offer additional peace of mind. That's why for 2008 we're offering a free installation service at your facility (a \$1200 value) with your purchase of a SimMan 3G. We also offer additional technical support services that make it easier for you to own, operate, and maintain your programs, including a telephone help desk, preventative maintenance programs, extended warranties, and a cost-effective ValuePlus complete service plan. With Laerdal Technical Services, you'll never “miss a beat” in your training program.

# SimMan® 3G

- Completely wireless and self contained
- Internal electrical and pneumatic power
- Supplemental wired connectivity and power
- Wirelessly integrates with existing computer networks
- Swappable, rechargeable batteries
- Approximately 4 hours continuous operation in wireless mode
- Rugged and reliable for use in multiple environments

## Multiple Airway Skills/Features:

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

## Airway Complications:

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

## Breathing Features:

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

## Breathing Complications:

- Cyanosis
- Needle thoracostomy – bi-lateral
- Unilateral & Bilateral chest movement
- Unilateral, Bilateral & lobar breath sounds
- Chest tube insertion - bilateral

## Cardiac Features:

- Extensive ECG library
- Heart sounds – four anterior locations
- ECG rhythm monitoring (4 wire)
- 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 & logged

## Vascular Access:

- IV access (right arm)
- Intraosseous access (tibia and sternum)
- Automatic Drug Recognition System

## CPR:

- Compliant with 2005 Guidelines
- CPR compressions generate palpable pulses, blood pressure wave form, and ECG artifacts
- Realistic compression depth and resistance
- Detection of depth, release and frequency of compressions
- 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:

- Seizure/Fasciculation
- Bleeding
  - Simulation of bleeding at multiple sites
  - Arterial and venous
  - Vital signs automatically respond to blood loss & therapy
  - Works with various wound modules & 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 IP

## Pharmacology:

- Automatic Drug Recognition System identifies drug & dose
- Extensive drug formulary
- Automatic or programmable physiological responses

## 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 & program custom scenarios
  - Create custom events
  - Run pre-packaged scenarios
- Auto Mode
  - Physiological & pharmacological models run pre-packaged simulations
  - Unique, simple controls increase/decrease difficulty & pace
- Simulation controls:
  - Fast forward
  - Pause
  - Rewind
  - Save/Restore
- Profile Editor
- Future prediction & patient outcome display
- Integrated video debriefing
- Data logging
- Instructor comments
- Works with existing SimMan Scenarios

## Patient Monitor:

- Wireless
- Highly configurable
- Includes:
  - ECG (2 traces)
  - SpO2
  - CO2
  - ABP
  - CVP
  - PAP
  - PCWP
  - NIBP
  - TOF
  - Cardiac Output
  - Temperature (core & peripheral)
  - Additional and programmable parameters
- X-Ray Display
- 12 Lead ECG Display
- Custom Image Display
- Custom Video Display

## Certifications:

- UL, CE, FCC, CSA, HMR

## SimMan 3G includes:

- SimMan 3G Manikin
- SimMan 3G Software & License
- Operator's Tablet PC
- Simulated Patient Monitor and Software
- Simulated Patient Cables
- Webcam
- Drug Recognition Kit
- Soft Sided Transportation Cases
- Specially Designed Clothing
- 10 SimMan 3G Patient Cases for AutoMode
- 1 Year Manufacturer's Warranty
- Two Day Introductory Training Course at a Laerdal Training Center (US and Canada only)
- 30 Licenses for MicroSim (US and Canada only)
- Membership to the Society for Simulation in Healthcare (US and Canada only)
- On Site Installation (Introductory offer for 2008)
- On Site In-service Training (Introductory offer for 2008)

## Accessories:

- Simulated Patient Monitor & Software (Large screen, Panel PC w/power cord)
- Hard Sided Transportation Case - Rugged and weatherproof
- Operator's Remote Control (Ultra Slim Tablet PC)
- Advanced Video System
- Wound Modules and Moulage Kits
- Tablet PC Accessory Kit
  - Monitor, Keyboard, Mouse & Docking Station
- Portability Kit
- Compressor

## Scenario Packages:

- SimMan3G Patient Cases: Volume II – for Automatic Mode
- SimMan National League for Nursing Scenarios:
  - Volume I – for Instructor Mode
- SimMan AHA ACLS Scenarios – for Instructor Mode
- SimMan MicroSim Scenario Package – for Instructor Mode
- SimMan Disaster Preparedness Scenarios:
  - Volume I - for Instructor Mode

## Service Packages:

- Introductory Course On Site Upgrade
- Advanced Scenario Programming Course
- Custom One Day Training Package
- Custom Scenario Development Package
- Value Plus Technical Support Programs
- Extended Warranties
- Installation
- Annual Preventative Maintenance
- Loaner Program

Contact your local Laerdal Representative for optimal SimMan 3G configuration or additional information



**Laerdal®**  
helping save lives

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