



# SimMan® Essential

A realistic, full-body adult, wireless patient simulator, SimMan® Essential offers comprehensive clinical functionality to teach the core skills of airway, breathing, cardiac, and circulation management.

Manage SimMan Essential 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® Essential

## Multiple Airway Skills/Features

- Controllable open/closed airway; automatically or manually controlled
- · Head tilt/Chin lift
- Jaw thrust with articulated jaw
- Suctioning (Oral and Nasopharyngeal)
- Bag-mask ventilation
- Orotracheal/Nasotracheal intubation
- Combitube, LMA, and other airway placement
- Endotracheal tube intubation
- · Retrograde intubation
- Fiberoptic intubation
- Transtracheal jet ventilation
- Needle/Surgical cricothyrotomy
- Variable airway resistance on/off
- Right mainstem intubation
- Stomach distention

### **Airway Complications**

- · Can't intubate/Can ventilate
- · Can't intubate/Can't ventilate
- Detection of proper head position
- Tongue edema
- Pharyngeal swelling
- Laryngospasm
- 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

## **Breathing Complications**

• Needle thoracentesis – bilateral

• Chest tube insertion - bilateral

- Unilateral and bilateral chest movement
- · Unilateral, bilateral and Lobar breath sounds

#### 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, radial, dorsalis pedis, posterior tibialis pulses and brachialis(only left side) synchronized with ECG
- Pulse strength variable with BP
- Pulse palpation is detected and logged

#### Vascular Access

- IV arm (right arm) establish IV
- Intraosseous access (tibia and sternum)

## CPR

- Compliant with 2015 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
- Hand position sensor

#### Eyes

- Blinking eyes, eyes open, closed and partially open
- · Eye inserts, manually change pupils

#### Other Features

- · Foley catheterization
- Bowel Sounds four quadrants
- Patient Voice
- Pre-recorded and custom sounds
- Instructor can simulate patient's voice wirelessly
- Instructor Communication
- Multiple instructors communicate using integrated VOI protocol
- Fully articulating pelvis
- · Leg rotation in all natural directions

#### Pharmacology

- Manual drug recognition
- Extensive formulary

### 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 preprogrammed scenario for a simple and standardized way to run a simulation
  - Patient cases utilizing physiological and pharmacological models
  - Pre-programmed scenariosSelf-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

### **Optional 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), Sp02, 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

## **Optional Bleeding System**

- Internal Bleeding system to simulate traumatic injuries
- Simulation of bleeding at multiple sites
- · Arterial and venous
- Vital signs automatically respond to blood loss & therapy
- Works with various wound modules & moulage kits

# ORDERING INFORMATION

213-02150 SimMan Essential Medium 213-02250 SimMan Essential Dark 213-02350 SimMan Essential Light

Includes: SimMan Essential Manikin with Fully Articulating Pelvis, LLEAP Software and License, Simulated Patient Cables, USB Headset/ Microphone, Storage Bag, I 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/

**OPTIONAL ACCESSORIES** 

400-96050 Webcam 212-07150 Rugged Carry Case

210-01750 Compressor 216-00441 SimView System

# Operation

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



# SimCenter

Visit <u>www.laerdal.com/simcenter</u> to learn how to optimize your simulation training using SimCenter™ and SimMan Essential



# 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 oneroom simulation site or a multi-bed
simulation center; Laerdal can help.

Visit Laerdal.com/SimManEssential for a complete list of specifications, parts, accessories and services.

