

SimJunior™



## Laerdal Pediatric Simulation Solutions

American Academy of Pediatrics  
DEDICATED TO THE HEALTH OF ALL CHILDREN™



**Laerdal®**  
helping save lives

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

# SimJunior™

SimJunior is a realistic, full-body pediatric simulator. With its easy-to-use and versatile platform, SimJunior is available in Standard and Advanced versions to enable instructors to scale their training to meet program needs.

- *Interactive manikin gives **immediate feedback** to interventions allowing learners to think critically and adjust their care plan accordingly.*
- **Automatic debriefing** based on the event log synchronized with video pictures provides immediate, detailed feedback on performance and

*optimizes the simulation as an educational tool (Video with Advanced version only).*

- **Innovative user interface and scenario design** allows instructors to control the simulator's responses throughout a training session with the push of a button on a handheld remote control or a laptop PC.
- **Durable and dependable** for long-term use and **cost efficiency**.

## Breathing Features:

- Simulated spontaneous breathing
- Observable chest rise
- Variable respiratory rates
- Multiple upper airway sounds synchronized with breathing
- Detect and quantify the volume of mechanical ventilations (including no ventilations)
- Bag Valve Mask capable
- Normal and abnormal breath sounds
- Oxygen saturation and waveform (Advanced version)
- Breathing complication
  - Bilateral chest movement with spontaneous breathing
  - Unilateral chest rise with right mainstem intubation
  - Unilateral and bilateral breath sounds
- Left and right lungs can be either closed or open to allow ventilations

## Eye:

- Interchangeable pupils - normal, dilated, and constricted

## Convulsions

## Sounds:

- Heart
- Lung
- Bowel
- Patient voice
  - Pre-recorded sounds
  - Wireless microphone

## Airway Features:

The SimJunior airway is anatomically modeled as far as the trachea.

- Realistic airway with landmarks
- Oral and nasal intubation
- LMA or ET insertion
- Tongue edema
- NG tube
- Cricoid cartilage
- Head tilt and jaw thrust (no sensor)

## Circulation Features:

- Blood pressure measured manually by auscultation of Korotkoff sounds
- Bilateral carotid and unilateral brachial and radial (left side) pulses synchronized with ECG
- Pulse strength variable with BP
- Pulse palpation is detected and logged

## Cardiac Features:

- Defibrillation and cardioversion
- Pacing
- Extensive ECG library
- Multiple heart sounds synchronized with ECG
- ECG rhythm monitoring (3 leads)
- 12 lead ECG display (Advanced version)

## Chest Compressions:

- Compliant with 2010 Guidelines
- CPR compressions generate palpable pulses, blood pressure waveform, and ECG artifacts
- Detection and logging of a series of compressions in the data log

## Vascular Access:

- IV access (right arm and hand)
- Intraosseous access (right tibia)



## Advanced Version

### Software Features:

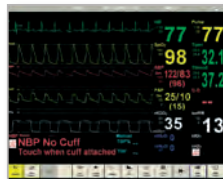
- Easy-to-operate software based on well-proven ALS Simulator software
- Manual control over all parameters
- Scenarios with Trends and Handlers can be pre-programmed by the user

### Debriefing Viewer:

- Web-camera recording
- Review event log together with synchronized recording of the patient monitor and in-room video
- Stand-alone debrief viewer for offsite review

### Patient Monitor:

- Highly configurable
- Touch screen operation
- Simulates several parameters including:
  - Heart rate, ECG, SPO2, NIBP, ETCO2
- X-Ray display
- 12 lead ECG display
- Custom video and image display



Patient Monitor



SimJunior Graphic User Interface

## 232-000XX SimJunior Standard\*

### SimJunior Standard Includes:

Manikin, VitalSim Control Unit with Remote Control, Blood Pressure Cuff, Set of Consumables, Operating Software, Directions for Use, and a Carry Case.

\* XX – denotes language version. SimJunior is available in ethnic skin tones.

## 233-000XX SimJunior Advanced\*

### SimJunior Advanced Includes:

Manikin, VitalSim Control Unit with Remote Control, Laptop PC, Touch Screen Monitor, USB Webcam, Blood Pressure Cuff, Set of Consumables, Operating Software, Directions for Use, and a Carry Case.



SimJunior Advanced includes your choice of courseware available on SimCenter. Visit [www.mysimcenter.com](http://www.mysimcenter.com) to learn how you can fully optimize your learning experience.

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