



Gaumard®
Simulators for Health Care Education



HAL® S3201

Advanced Multipurpose Patient Simulator

- Programmable airway and lung compliance
- Myocardial infarction modeling
- Simulated drug recognition
- Supports real devices: mechanical ventilators, 12-lead ECG, AED, oximeters, capnometers, and auto-BP
- Wireless and tetherless mobility
- Includes HAL Simulation Learning Experiences™ scenario package

Maximize your training program with the versatile HAL® S3201

HAL S3201 is our most advanced adult multipurpose patient simulator specifically designed to simulate lifelike cases across a broad range of clinical areas including pre-hospital, ED, OR, ICU, PACU, med-surge, and more.



Versatile and capable

HAL's array of features can simulate a near-infinite number of clinical presentations and responses. HAL also supports the use of real patient monitors and sensors for in situ training.



Wireless and tetherless design

HAL is self-contained, quiet, and fully operational on battery power for up to 6 hours². HAL's tetherless and wireless design eliminates complicated setups and allows for realistic patient hand-off exercises and realistic in situ simulation.



Powerful and intuitive software

UNI® 3 lets you manage HAL's vitals, track participant actions, and export event data for debriefing from one interface. The UNI 3 interface is shared across all Gaumard PC-controlled patient simulators.



A complete solution

HAL S3201 is delivered fully equipped and ready for use. The package includes the powerful UNI 3 tablet PC, Gaumard Vitals™, the HAL Simulation Learning Experiences scenario package, and accessories.



Proven design history

Since 2004 our industry-leading HAL series design and wireless technology have been proven effective and reliable by our users. The HAL S3201 is the evolution of the HAL S3000, which underwent independent testing by the US Army Aeromedical Research Laboratory.



● ● ● Skin tone options available at no extra charge



Train using real patient monitors and sensors

HAL supports a broad range of real patient monitors and sensors. This unique capability allows participants to practice setting up and operating equipment just as they would in real situations.

- ECG/EKG monitors
- Oximeters
- Capnographs
- Defibrillators
- NIBP monitors

Patented, dynamic airway resistance and lung compliance respiratory system

Train participants on ventilator management and patient care using a real mechanical ventilator. HAL's respiratory controls let you adjust lung compliance, airway resistance, gasping, real EtCO₂, and OSAT to simulate an infinite number of respiratory conditions.



- Supports standard modes of pressure-controlled and volume-cycled mechanical ventilation
- Presents true-to-life waveforms and values on ventilator screen
- 10 programmable levels of lung compliance (from 15 to 50 cmH₂O)
- 10 programmable levels of airway resistance
- Holds PEEP from 5 to 20 cmH₂O
- Exhales real and measurable CO₂
- Supports on-the-fly changes to airway and lung parameters while connected to the ventilator
- Connect ventilator to HAL using standard patient circuits like a real patient. No calibration, proprietary adapters, or converter boxes required.



12-lead ECG editor with 3D myocardial infarction generator

Train ECG interpretation and MI management using real native 12-lead equipment. Select rhythms from the built-in library, design your own using the point-by-point PQRST wave editor, or create an occlusion on the 3D heart model to auto-generate injury, ischemia, and necrosis.



Recognition of 50+ virtual drugs

Train medication administration and management to improve patient safety. The drug recognition sensors integrated into the arm vasculature detect the virtual medication type, concentration, and dose administered.

Train general and specialized practitioners across the continuum of patient care



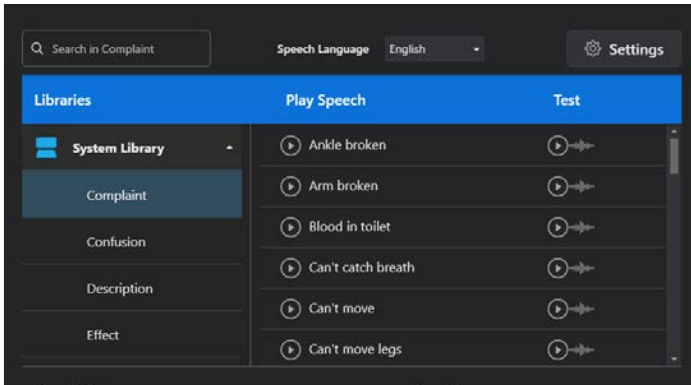
Reactive eyes, seizures

HAL has blinking eyes with photosensitive pupils. Control dilation, reactivity, and blink rate to simulate injury and state of consciousness.



Advanced airway management

Visible tongue edema, pharyngeal swelling, and laryngospasm. Perform an emergency cricothyrotomy or tracheotomy.



Wireless streaming voice

Be the voice of HAL and hear caregiver responses. Create and store vocal responses or select from 80+ pre-recorded phrases.



Real-time CPR Feedback and real EtCO₂

Built-in ventilation and chest compression sensors capture CPR quality metrics. Measure EtCO₂ using a real capnometer to monitor effectiveness.



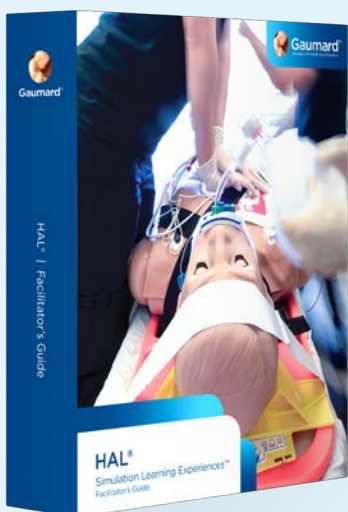
Defibrillate, cardiovert, & pace

Monitor, capture, pace, and cardiovert using a real defibrillator, electrodes, and real energy. Alternatively, save money on replacement pads by connecting the defibrillator directly to HAL using our optional hands-free training cables.



Auscultation

Present normal and abnormal airway sounds, heart sounds, anterior and posterior lung sounds, and bowel sounds.



Includes the HAL® Simulation Learning Experiences™ scenario package

The HAL Simulation Learning Experiences (SLEs) provide you with a library of ready-to-use, evidence-based scenarios designed to help you maximize participants learning through outcome-focused simulated clinical patient encounters. The package includes 10 SLEs complete with a facilitator's guidebook for planning, setting up, and facilitating each learning experience:

- Acute Anterolateral Myocardial Infarction
- Acute Sepsis Related To Diabetic Ulcer
- Atrial Fibrillation
- COPD Exacerbation
- Diabetic Ketoacidosis
- Opioid Overdose
- Pulmonary Embolism
- Sepsis Related To Pneumonia
- Severe Sepsis
- Supraventricular Tachycardia



Elevate your training with the all-new UNI® 3

UNI 3 is our most capable patient simulator control software ever. Manage vitals, track performance, and debrief with faster and easier-to-use tools designed to help you facilitate even complex scenarios with ease.

Unified control platform

UNI 3 powers all PC-controlled Gaumard simulators, making it simpler to operate different Gaumard models and manage scenarios.

Powerful physiological controls

Easily adjust vital signs on-the-fly or automate physiological changes and responses using the included premade Simulation Learning Experiences scenarios.

Scenario designer

Create your own custom scenarios tailored to your learning objectives and offer participants a wide range of standardized, repeatable learning events.

Provider evaluation

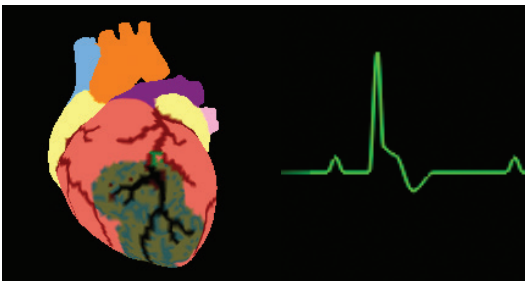
Evaluate providers directly from UNI 3. Create interactive forms to assess participant performance and aid debriefing.

Time-stamped event log

Automated event tracking ensures important events are always captured so you can focus on the action.

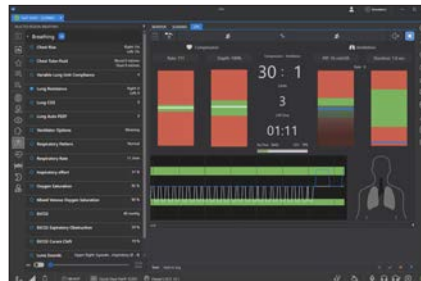
Complimentary webinar training

Sign up for live, instructor-led monthly webinar sessions and become a UNI 3 expert at your own pace.



Real-Time CPR Feedback

Monitor and assess CPR performance in real-time, simulate perfusion dependent on effectiveness, and export performance reports for debriefing.



3D Myocardial infarction

Train to improve MI diagnosis, management, and prognosis. Simply point-and-click on the 3D heart to create an occlusion to auto-generate MI's visible on a real 12-lead ECG reading.



Includes Gaumard Vitals™ patient monitor

- Includes Gaumard Vitals bedside patient monitor
- Customize each trace independently.
- Users can set alarms and time scales.
- Display up to 12 numeric values, including HR, ABP, CVP, PAWP, NIBP, CCO, SpO₂, SvO₂, RR, EtCO₂, temperature, and time.
- Select up to 12 dynamic waveforms, including ECG Lead I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6, AVP, CVP, PAWP, pulse, CCO, SvO₂, respiration, capnography.
- Share images such as x-rays, CT scans, lab results, or even multimedia presentations as the scenario progresses.

Features

General

- Tetherless and wireless; fully responsive during transport¹
- Fully operational on internal battery power for up to 6 hours²
- Supports common patient positions including Fowler's, supine, and sitting

Airway

- Programmable airway: tongue edema, laryngospasm, and pharyngeal swelling
- Multiple upper airway sounds synchronized with breathing
- Right mainstem intubation
- Sensors detect depth of intubation
- Placement of conventional airway adjuncts
- Endotracheal intubation
- Retrograde intubation
- View vocal cords with Sellick maneuver
- Realistic surgical trachea allows tracheostomy or needle cricothyrotomy

Breathing

- Control rate and depth of respiration and observe chest rise
- Select independent lung sounds: upper right, front and back; upper left, front and back; lower right, front and back; lower left, front and back
- Chest rise and lung sounds are synchronized with selectable breathing patterns
- CO₂ on exhalation (4 levels) using replaceable cartridge mounted inside the simulator
- Supports mechanical ventilation using real devices and adjuncts
- Bilateral chest rise and fall
- Unilateral chest rise simulates pneumothorax
- Anterior and posterior auscultation sites
- Bilateral needle decompression at second intercostal
- Dynamic airway resistance and lung compliance/resistance
 - » Ten levels of static compliance, 15-50 ml/cm H₂O
 - » Ten levels of airway resistance
 - » Holds PEEP from 5 to 20cm H₂O
 - » Exhales real and measurable CO₂
 - » Change airway and lung settings on the fly
 - » Receive real-time feedback from a real mechanical ventilator
 - » Capable of triggering the ventilator's assist modes for a breath
 - » Compliance and resistance can be varied while connected to the ventilator

Cardiac

- ECGs are generated in real-time with physiologic variations never repeating textbook patterns
- Heart sounds may be auscultated and are synchronized with ECG
- Real-time CPR feedback; chest compressions are measured and logged
- 12-lead ECG with integrated MI model

Circulation

- Measure blood pressure by palpation or auscultation
- Use real BP cuff rather than a "virtual" cuff to measure blood pressure
- Korotkoff sounds audible between systolic and diastolic pressures
- Oxygen saturation detected using real monitors
- Pulse sites synchronized with BP and heart rate
- Bilateral IV arms with fill/drain sites
- SubQ and IM injection sites
- Intraosseous access at tibia
- ECG monitoring using real devices
- Defibrillate, cardiovert, and pace using real devices
- Multiple heart sounds, rates, and intensities
- ECG rhythms are generated in real-time
- Bilateral carotid, radial, brachial, femoral, popliteal, and pedal pulses synchronized with ECG
- Pulses vary with blood pressure and are continuous and synchronized with the ECG even during a paced rhythm

Drug recognition system

- Virtual drug recognition system detects simulated medication type and dose injected into the lower right arm
- Includes a preprogrammed library of virtual medications
- Includes 20 syringes with wireless tags
- Add new medications using the UNI 3 software editor

Neurological

- Normal, miosis (constricted), and mydriasis (blown) pupil states
- Independent left/right pupil states simulate consensual and nonconsensual response
- Select pupillary response to light

Speech

- Wireless streaming audio
- Create and store vocal responses in any language

Other

- Central cyanosis
- Fill bladder and perform Foley catheterization
- Insert feeding tubes
- Auscultate bowel sounds

Articulation and movement

- Realistic joint articulation
- Supports supine, prone, recumbent, and sitting positions
- Seizure/convulsions

HAL® S3201

S3201.PK

HAL S3201, Tablet PC, UNI® 3 License, Gaumard Vitals Bedside patient monitor, SLE scenario package, RF communications module, Bluetooth communications module, battery charger, accessories, carrying case, user manual. One-Year Limited Warranty. Extended service plans available. Skin tones available at no extra charge. Patented; other patents pending.

Trauma limbs

Amputated leg - **S3201.004**

Amputated arm - **S3201.005**

Wound kits

Emergency - **WK100**

Burn - **WK105**

Trauma - **WK110**

Casualty - **WK120**

Modified defib cables

Philips® - **30080373B**

Physio LIFEPAK® - **30080375B**

Zoll® - **30080374B**



Care in Motion™ Mobile Video Debriefing System

CIM.PK

Care in Motion Tablet PC, 3 Battery-powered HD wireless cameras, 3 adjustable camera grips, transport case. One-Year Limited Warranty. Extended service plans available.

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Monday - Friday

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About Gaumard

Gaumard is family owned and operated, and is the direct source for your health care education needs.

Place your order

By telephone or online at

www.gaumard.com

Warranty

Gaumard products are covered by a one-year limited warranty. Terms and conditions apply. Please visit www.gaumard.com for details.

Technical support

Available 8:00 a.m. to 6:00 p.m. ET

weekdays, or email us at

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