

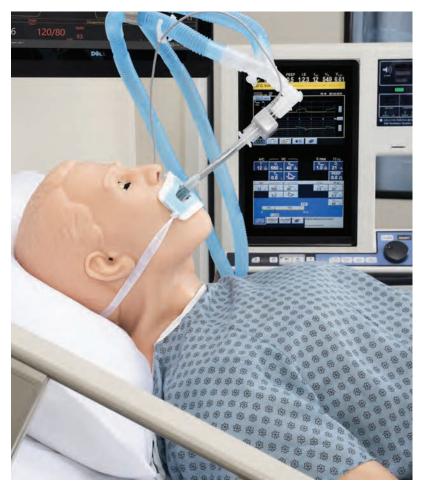
# **HAL® S1030**

## Airway and Mechanical Ventilation Management Skills Trainer

- Adult HAL full-size body
- Supports real mechanical ventilators and standard modes of ventilation
- Intubatable and programmable airway
- Programmable lung compliance
- Independently control right and left side airway resistances

# Meet HAL® S1030. Our most powerful airway and mechanical ventilation management skills trainer yet.

HAL S1030 is a computer-controlled, full-body patient simulator designed to aid students and professionals train airway and mechanical ventilation management skills through hands-on exercises using real equipment. HAL's patented respiratory system and powerful software work together to simulate true-to-life physiology unmatched by any other patient simulator in its class.



- Connect a ventilator to HAL using standard patient circuits like a real patient. No calibration, proprietary adapters, or converter boxes required.
- 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 cmH<sub>2</sub>O)
- 10 programmable levels of airway resistance
- Holds PEEP from 5 to 20 cmH<sub>2</sub>O
- Real CO<sub>2</sub> exhalation
- Supports on-the-fly changes to airway and lung parameters while connected to the ventilator
- Anatomically accurate oral cavity and airway
- Supports standard endotracheal tubes and supraglottic devices
- Programmable tongue edema, pharyngeal swelling, and laryngospasm

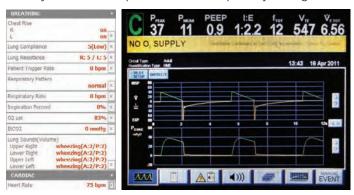
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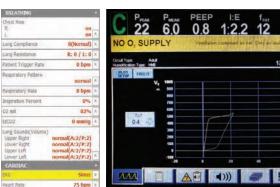
 Patented, dynamic airway and lung compliance respiratory system.

Side-by-side screen captures of HAL's respiratory settings and a real mechanical ventilator monitor screen.



#### Moderate asthma

HAL lung compliance 5, left/right lung resistance 5

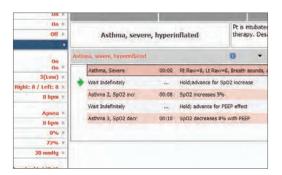


### Normal compliance loop

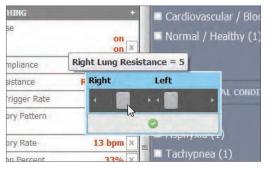
HAL lung compliance 7

### Powered by UNI®. Patient simulator control software that is powerful and easy to use.

UNI features easy-to-use physiological controls, task automation, real-time feedback, and data capture tools designed to help you facilitate training experiences that are immersive and effective.



UNI includes a library of preprogrammed pathologies, including asthma, chronic bronchitis, CHF, emphysema, pneumothorax, and more.

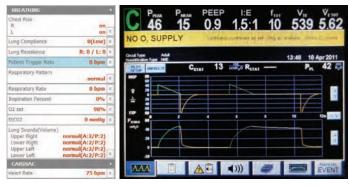


Change airway and lung function parameters on the fly and see feedback on a real mechanical ventilator in real-time.



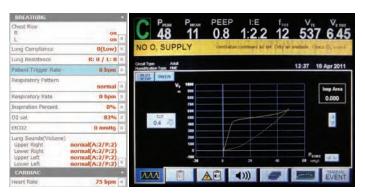


Add optional Gaumard Vitals™ virtual patient monitor for vital signs interpretation exercises.



#### Severe fibrosis

HAL lung compliance 0



#### Low compliance UNI controls

HAL lung compliance 0



#### **Features**

- · Articulating adult HAL full-size body
- · Normal, miosis (constricted), and mydriasis (blown) pupil states
- Independent left/right pupil states simulate consensual and nonconsensual response
- · Available in different skin tones
- Use our scenarios, modify them, or create your own
- Intubatable and programmable airway
- Programmable lung compliance
- Independently control right and left side airway resistance
- Supports assisted ventilation at variable respiratory rates
- Simulate life-threatening auto-PEEP and tension pneumothorax
- Exhales real and measurable CO2
- Assess CO2 output with end-tidal detector or capnography
- Vary lung mechanics throughout your entire simulation exercise
- Receive real-time feedback from real mechanical ventilator
- BVM, intubate, or mechanically ventilate
- Program tongue edema, pharyngeal swelling, and laryngospasm
- Practice intubation and difficult airway management
- Ten levels of static compliance, 15-50 ml/cmH<sub>2</sub>O

- Capable of holding therapeutic levels of PEEP
- Real CO2 exhalation
- Specify inspiratory time and rate, inspiratory/expiratory ratio
- Change lung resistance/compliance "on-the-fly" and see results on a real ventilator which are recorded on the laptop
- Preprogrammed airway and lung pathologies including:
  - » Asthma
  - » Chronic Bronchitis
  - » CHF
  - » Emphysema
  - » Pneumothorax
- Set inspiratory effort rate to trigger the ventilator
- Four anterior and four posterior lung sounds
- Use our preprogrammed pathologies or create your own
- · Create scenarios using our proven, easy to use HAL software
- Connect our simulator to a real ventilator, which can be set by volume or pressure

#### **HAL® S1030**

#### S1030.PK • •



HAL full-body patient simulator, UNI® laptop PC, UNI® software license, communication module, accessories, user guide, and One-Year Limited Warranty.

#### Gaumard Vitals™ **Bedside Virtual Monitor**

#### 30080154B

Gaumard Vitals bedside virtual monitor. One Gaumard Vitals patient simulator license.

#### Request a Quote

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