Vimedix™ Cardiac, Vimedix™ Abdo
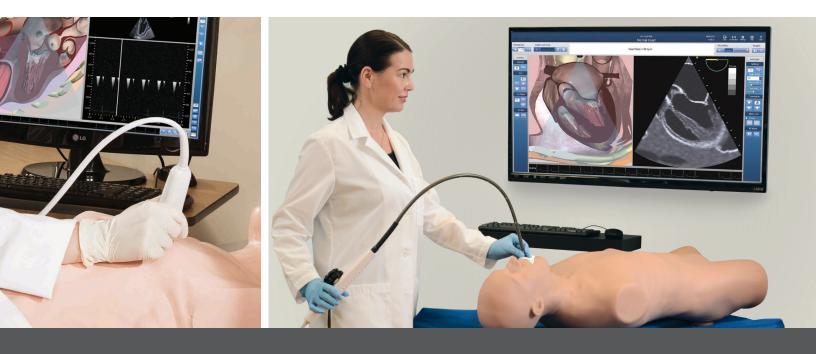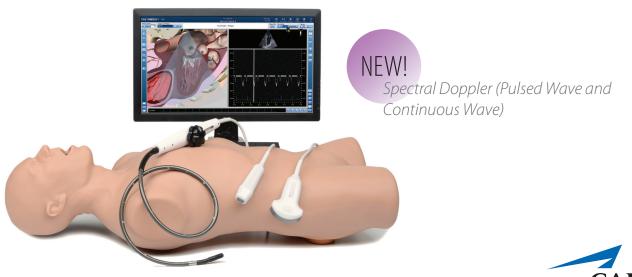
Learn cardiac and abdominal ultrasound faster and easier with the most comprehensive and easy-to-use simulator

Vimedix is an innovative ultrasound training platform that makes it easier and faster to learn cardiac, lung and abdominal ultrasound. Our manikin-based simulator allows healthcare professionals to learn the psychomotor and cognitive skills needed for ultrasound scans. With over 150 pathologies and self-directed instructional content, Vimedix allows trainees to gain exposure to cases they may not normally get to see and also practice their skills without any risk to real patients.
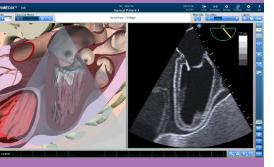

NEW!
Spectral Doppler (Pulsed Wave and Continuous Wave)

CAE Healthcare

Technical Specifications

Standard Equipment

Male multi-purpose manikin

Phased Array, Transesophageal and/or Curvilinear transducer(s)

Computer with wireless mouse and keyboard

22" HD Screen

Cables (Power, DVI, Ethernet)

Electronic user guide

Option to add Ob/Gyn capabilities to the simulator (including a female manikin, curvilinear and transvaginal transducer)

Optional Software

Additional cardiac and abdominal pathology packages available

Specifications, Dimensions

Bob 1.3 Male Multi-Purpose Manikin
31" x 17" (78 cm x 43 cm)
31.5 lbs (14.3 kg)

Optional Catherine Female Manikin
38" x 18.5" (96.5 cm x 47 cm)
30 lbs (13.6 kg)

Computer

18.3" x 6.75" x 17"
(46.5 cm x 17.1 cm x 43.2 cm)
22 lbs (10 kg)
CPU: INTEL, i7 4770 3.4GHz, 4 CORE, 8 THREAD
Hard drive: 1 TB
Memory: 4 GB RAM
Graphics Card: EVGA GTX 970
Screen: 24"

Electrical

Operates at 110/240V 50/60Hz

Ambient Temperature Range

41°F - 95°F (5°C - 35°C)

Humidity

40-80%

NEW!

Emergency Ultrasound Pathology Package for point-of-care assessment

Key Features

Simulator Capabilities

- Manikin-based system that replicates real-time visual, physical and ergonomic attributes of ultrasound scanning
  - Palpaple thoracic and pelvic bony landmarks that with motion tracking system that allows 6 degrees of freedom (DOF) to align physical manikin with virtual anatomy in Vimedix software
- Supports Transthoracic Echocardiography (TTE), Transesophageal Echocardiography (TEE), and abdominal/pelvic ultrasound scanning on a single platform
- Simulation of cardiac, lung and abdominal ultrasound images and functions
  - 2D, Bi-Plane and M-Mode Views
  - Adjustable image settings (depth, viewing angle, gain, contrast)
  - Color Doppler, Continuous Wave Doppler and Pulsed Wave Doppler of the Heart
  - Color Doppler of the Inferior Vena Cava for specific pathologies
  - Ability to complete measurements including length/diameter, circumference and area
  - Echo report function with automated calculations and drop-down menus consistent with typical echo scanning protocol and workflow
  - Zoom function for ultrasound images
  - Ability to freeze image and scroll through frames
  - Ability to add noise on ultrasound view to alter image quality and viewing level of difficulty
  - Over 150 available pathologies with the optional ability to hide pathology names (Stealth Mode)
- 3D Augmented Reality showing animated anatomy with labeled structures that can be moved and rotated in 3D to learn structure identification and spatial orientation
- Ability to enable/disable anatomical structures on 3D augmented reality display and bone, lung and abdominal artefact on the ultrasound display

- Ability to switch between split screen and single screen views of 3D augmented reality display and ultrasound display
- Included self-directed instructional content modules that allow learners to practice in the absence of a live instructor:
  - Basic probe movements
  - Optimization of image settings
  - Obtaining views using Target Cut Planes
  - Echocardiographic measurements
- Target Cut Plane exercises that provide reference guides and images to aid learners the correct probe positioning /orientation to obtain specific ultrasound views
- Quantifiable kinematic metrics that can be recorded during Target Cut Plane exercises to assess and monitor user performance
- Ability to capture and export images, videos, reports and metrics
- Ability to connect the simulator to a second display, with the option to either extend or mirror the Vimedix interface onto said display
- Access to CAE Healthcare's ICCU E-Learning curricula

Differentiating Features

- Simulator content and kinematic metrics validated through numerous scientific publications published in peer-reviewed journals
- Multiple ultrasound modules on a single common platform with a single manikin (cardiac, lung, abdominal)
- Self-directed instructional content that makes ultrasound learning more easily scalable
- Continuous development of new functionalities and content

CAE Healthcare