

# ADAM-X Xtreme



**MEDICAL·X**  
ADVANCING SIMULATION

## The ADAM-X Xtreme

**ADAM-X Xtreme** is the most advanced and modern full-body adult patient simulator!

Faithful reproduction of a man's anatomy and physiology, **ADAM-X Xtreme** has distinctive and unique human characteristics, offering a fully immersive simulation experience.

Carefully designed to prepare learners for real-world events, **ADAM-X Xtreme** is ideal for medical training, advanced life support scenarios, and simulation of countless clinical cases.





## General

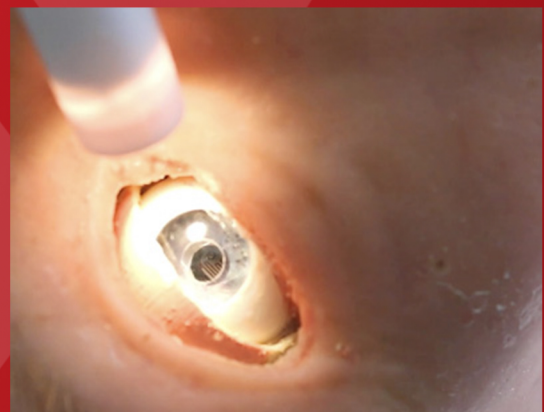
**ADAM-X** has **flexible joints** and a **human-like soft skin** made with our unique special silicone blend.



Visual clinical conditions coloring  
ADAM's face and fingers

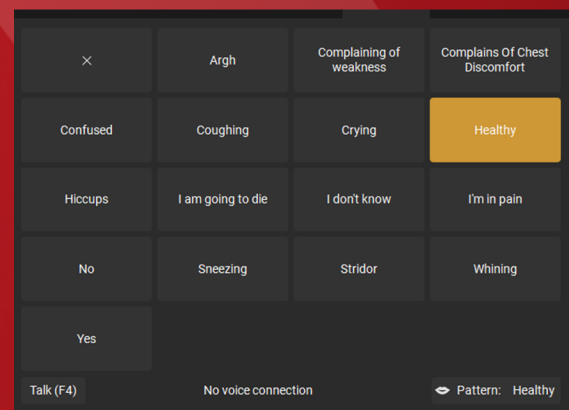


Blinking eyes and pupillary light  
reflex



Tears, drooling, sweating, and ear  
secretion

Vocal sounds: pre-recorded and voice  
reproduction



### Tetherless and Wireless

With internal electrical power and air compressor, **ADAM-X** is fully operational on battery power

## Airway



- **Basic and Advanced Airway Training**
- Airway maneuvers: head tilt, chin lift, jaw thrust
- Airway management with multiple devices
- Airway complications: tongue edema and laryngeal edema
- **Needle and surgical cricothyrotomy** with realistic bleeding



## Breathing

With an accurate **pulmonary system**, **ADAM-X** can breathe spontaneously with variable rate and depth, be ventilated with bag-valve-mask, or be attached to real mechanical ventilators.



### Pneumothorax and bilateral **needle decompression**



#### Other pulmonary features:

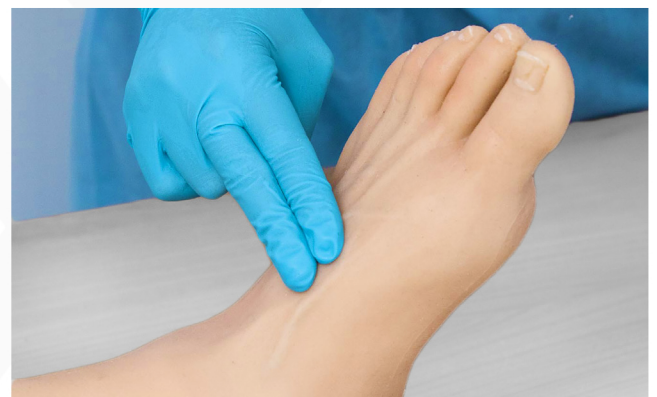
- Thoracic, diaphragmatic, and paradoxical breathing
- Lung sounds synchronized with respiratory rate
- Chest tube placement

## Cardiovascular

**Bluetooth stethoscope** for auscultation of heart, lungs, and abdominal sounds



- 14 sites do palpate **central and peripheral pulses**
- Pulse strength varies with blood pressure
- Pulse palpation **detected by sensors** and recorded by the software



Blood pressure measurement with a real cuff and **audible Korotkoff sounds**





## Resuscitation

With anatomical landmarks and realistic compression resistance, **ADAM-X Xtreme** is an ideal solution for **CPR training**.

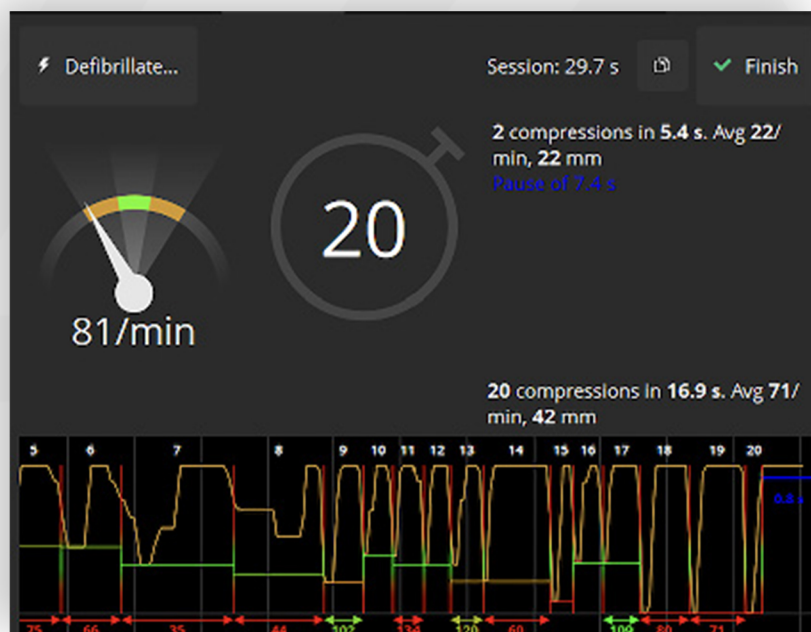


**Defibrillation** can be performed with real devices and energy.



## Resuscitation

The software detects hands position, displays compression and ventilation counters, and gives **real-time feedback on CPR quality**: frequency, depth, and release between compressions.





## And much more...

**IV injections** administration and automatic drug recognition. Supplied with more than 50 syringes



**Urethral catheterization** with fluid return



**Intraosseous Access** on the tibia



## User interface

**COMMAND-X**, our user-friendly touchscreen interface, offers manual and automatic modes. The instructor can control scenarios and parameters by wireless operation and remote control.

### Scenario Editor

14 pre-programmed evidence-based scenarios that can be easily edited + Scenario Editor to create your own completely customizable scenarios.

### Debriefing

All states, actions, activities, and added comments during a scenario or CPR training are

### Multi-parameter patient monitor

From basic vital signs to advanced monitoring parameters, the wireless bedside monitor displays all the patient's information.





## Trauma

Our **optional trauma accessories** increase the realism of the scenario, transforming the simulated training into an immersive and memorable learning experience.



- Trauma module set
- Amputated limbs
- Wound care
- Hemorrhage control
- Simulated blood

Shrapnel wound chest



Amputated arm



Gunshot chest



Fractured leg



Trauma arm laceration



Gunshot leg



Amputated leg



Burnt arm



All the wounds can be personalized. Contact us to learn about all the possibilities and customized solutions offered.

## Specifications

### General

- Full-body adult male patient simulator: 1.95m - 80kg
- Faithful reproduction of a man's anatomy and physiology
- Life-like looking with silicone skin
- Three options for skin tone
- Realistic movements of the limbs and joints
- Supports supine, lateral, and sitting positions
- Internal electrical power and air compressor
- Tetherless and wireless
- Simulator can work both on battery and tethered power supply
- Operational on internal battery power for up to 4 hours<sup>1</sup>
- Bluetooth stethoscope simulator
- Easy to clean and disinfect

### Airway

- Airway maneuvers: head tilt, chin lift, and jaw thrust
- Placement of multiple oxygen delivery systems: nasal cannula, face masks, etc.
- Realistic anatomy: tongue, epiglottis, vocal cords, trachea, and esophagus
- Magnetic front teeth can be broken with the laryngoscope and put back
- Oropharyngeal and nasopharyngeal airways
- Oro- and nasotracheal intubation
- Airway management with multiple devices
- Oral and nasal fiberoptic intubation
- Sensors detect correct tracheal intubation and esophageal intubation
- Needle and surgical cricothyrotomy
- Transtracheal jet ventilation and retrograde intubation
- Airway complications: tongue edema and laryngeal edema
- Can't intubate/Can ventilate & Can't intubate/Can't ventilate scenarios

<sup>1</sup>Battery life of approximately 2 hours, optionally 2 batteries with runtime of up to 4 hours.  
Battery life may vary depending on active settings.



## Specifications

### Breathing

- Spontaneous breathing with variable rate and depth
- Ventilation detection with sensor
- Thoracic, diaphragmatic, and paradoxical breathing
- Ventilation with bag-valve-mask
- Can be attached to real mechanical ventilators
- Variable airway resistance
- Auscultation of the lungs: normal and adventitious sounds
- Anterior, lateral, and posterior auscultation sites
- Pneumothorax
- Bilateral thoracic needle decompression and chest tube placement
- Cyanosis: face and fingers

### Cardiovascular

- Blood pressure measurement with an actual cuff and audible Korotkoff sounds
- Adjustable heart rate, blood pressure levels, and ECG rhythm
- Bilateral carotid, brachial, radial, femoral, popliteal, posterior tibial, and pedal pulses synchronized with ECG
- Pulse strength varies with blood pressure
- Pulse palpation detected by sensors
- ECG monitoring using real devices
- Auscultation of the heart – normal and abnormal sounds
- Extensive ECG library and 12-lead ECG display
- Cardioversion & Pacing

## Specifications

### Resuscitation

- Anatomical landmarks with realistic compression resistance
- Compressions generate ECG waves and palpable pulses
- Compression & ventilation counter
- Feedback on CPR quality: frequency, depth, and release between compressions
- Defibrillation using real devices and real energy
- Sensors detect the position of the hands and defibrillator's pads
- Detailed CPR evaluation and debriefing

### Head, Torso & Limbs

- Blinking eyes and pupillary light reflex
- Adjustable eyelid movement and degree of pupil dilation
- Tears, drooling, sweating, and ear secretion
- Swelling face
- Pre-recorded vocal sounds
- Create and store other vocal sounds in any language
- Reproduce patient voice wirelessly
- Simulation of cyanosis, jaundice, fever, bruises, and paleness coloring the face and fingers
- Trembling/convulsion movements
- Esophageal edema and stomach distension
- Nasogastric tube insertion
- Auscultation of bowel sounds - normal/abnormal
- Urethral catheterization with fluid return (water or blood)
- IV access on the right arm
- Includes 55 syringes with wireless tags
- Intraosseous insertion on the left tibia

### Bluetooth Stethoscope Simulator

- Listen to isolated sounds without background noise
- Software feedback on the placement of the stethoscope simulator



## Specifications

### User Interface

- Manual and automatic modes
- Wireless operation and remote control
- Separate views of tutor interface and patient monitor
- User-friendly scenario set-up functions
- 14 pre-programmed evidence-based scenarios that can be easily edited
- Scenario Editor Software: create new customizable scenarios
- ECG Editor Software: create new 12-lead ECGs
- Sound Editor Software: create and upload custom sounds
- Automatic drug recognition
- Sensors detect and record student's actions
- All states, actions, activities, and added comments are logged in for posterior debriefing
- Built-in AVI solution: connect up to three webcams
- Wireless bedside monitor with a configurable display
- All parameters can be set by the instructor in real-time
- View custom files: laboratory results, patient history, images of X-ray, CT, ultrasound, etc.

\* Specifications may be subject to change during development.

Please contact **MEDICAL-X** for the latest specifications.

## Contact us

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## Warranty

While we're confident in the user-friendliness of MEDICAL-X's products, we recognize their advanced nature necessitates robust support and service. That's why we offer comprehensive application training and a two-year product guarantee. Additionally, service packages are available to meet specific needs.





MEDICAL-X  
ING SIMULATION



## About MEDICAL-X

MEDICAL-X is a Dutch company specialized in the design, development, manufacturing, marketing and distribution of simulation products for medical teaching and training.

Our mission is to provide healthcare professionals with simulation-based training solutions and cutting-edge technological simulators that are cost-effective and time-efficient to teach and train clinical skills without risk to actual human patients.

## Design philosophy

Realism is the key to our design philosophy! Simulator training gives medical teams the experience, competence, and confidence they desire. Realism adds to the quality and efficacy of training.

Our products are developed through extensive feedback programs to produce an engaging experience for healthcare professionals. Form and function come together in a realistic and interactive simulator, ready to be used in training for all levels of care.





# MEDICAL-X

Contact us



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