Gaumard®
Simulators for Health Care Education

Super Tory®

User Guide

Super Tory is an interactive educational system developed to assist a certified instructor. It is not a substitute for a comprehensive understanding of the subject matter and not intended for clinical decision making.

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1. Introduction

1.1 Specifications

Super Tory®

- Weight: 8 Lbs (3.6 kg)
- Length: 21 inches (53.34 cm)
- Battery charger:
  - Power input : 100-240 VAC, 50/60 Hz, 0.35 A
  - Power output: 9 VDC, 2 A

1.2 Care and Maintenance

WARNING: Damage caused by misuse is not covered by your warranty. It is critical to understand and comply with the following guidelines.

WARNING: The lubricants and other accessories provided are for use with the accompanying patient simulator only. The lubricants and other accessories are not suitable for human use or medical treatment/diagnosis and should never be used for such purposes.

General

- Avoid contact of rings, finger nails, and sharp objects to the simulator's skin.
- Ball point pens, ink, and markers permanently stain the skin.
- Do not wrap this or any other Gaumard product in newsprint.
- Marks made with ballpoint pens, ink or marker cannot be removed.
- Never disconnect the communications module while the UNI® software is running. The software will halt, and the module may be damaged.
- Super Tory is an interactive educational system developed to assist a certified instructor. It is not a substitute for a comprehensive understanding of the subject matter and not intended for clinical decision making.

Vascular Access

- Vein tubing material is latex free.
- Only use Gaumard's provided simulated blood. Any other simulated blood containing sugar or any additive may cause blockage and/or interruption of the vasculature system.

- The use of needles larger than 24 gauge will reduce the lifetime of the skin and veins.
- Always purge with clean water and then drain the vein reservoirs at the end of the simulation session. Doing so will retard the formation of mold and prevent clogging of the system.
- After each simulation or exercise, it is recommended to remove the arm, rinse it out, and let it dry for severeal hours.
- We recommend flushing veins with 70:30 solution of clean water to isopropyl alcohol (IPA) after each simulation to prolong the life of the vasculature.
- When the skin and/or veins require replacement, refer to the "Consumables" section of this guide. For more information regarding the replacement of veins and other consumable items please contact customer service.

Operating Conditions

- Operating the simulator outside these ranges may affect performance:
  - Temperature: 23°-113° F (-5°-45° C)
  - Humidity: 5%-95% (non-condensing)

WARNING: If the simulator were to be stored at freezing temperature and brought into room temperature suddenly where Relative Humidity (RH) is greater than 30%, user most wait one hour before turning it on. If the simulator is running at freezing temperature, it most be turned off if moved to room temperature where RH > 30%, and wait one hour before turning it on again. While running, the simulator might stop breathing when moved suddenly from freezing to room temperature with RH > 30%.

Storage Conditions

- Storage temperature: 32°-85° F (0°-30° C)
- Humidity: 40%-60% (non-condensing)
- Do not stack or store heavy materials on top of the simulator boxes
- If the simulator will not be used for an extended period, re-charge the battery at least once every **60** days. Doing so will prevent a reduction of the battery's total charge capacity.

WARNING: Do not store the simulator with a discharged battery. It is good practice to re-charge the battery at the end of every simulation session.

Procedures

- Do not attempt to intubate without lubricating the airway adjunct with **mineral oil** lubricant. Do not use silicone oil as lubricant. Failure to lubricate the device will make intubation very difficult and is likely to result in damage to the simulator.
- Mouth to mouth resuscitation without a barrier device is not recommended, as it will contaminate the airway.
- Treat the simulator with the same precautions that would be used with a **real** patient.

Cleaning

- The simulator should be cleaned with a cloth dampened with diluted liquid dish washing soap.
- Remove all traces of any lubricant.
- Do not clean with harsh abrasives.
- Do not use povidone iodine on the simulator.
- Dry thoroughly.
- The simulator is “splash-proof” but not water-proof. Do not submerge or allow water to enter the interior of the simulator.

Electrical Therapy

- Super Tory’s ECG snap connectors allow the attachment of real EKG electrodes. This feature permits the user to track cardiac rhythms with their own equipment just like with a human patient.
- NEVER deliver a shock to ECG snap connectors, marked green in figure

- Doing so will not create a fire hazard, nor is there risk of shock to the provider, but internal damage to the simulator will result. This situation is considered improper use and is NOT covered by the newborn warranty. The system will require repair at our facility.
- Only deliver electrical therapy when the simulator is fully assembled, dry, and undamaged.
- Make sure the defibrillation patches on the simulator are in good condition, including removing any and all gel residue on the defibrillation patches from previous use(s). It is a good practice to

remove gel residues after every use. Failure to do so will leave behind a film of electrode gel that hardens causing arcing and pitting.
- Do not re-use the gel-adhesive pads. Do not leave them on for next day use.
- Do not defibrillate the simulator with energy higher than 30 Joules. Doing so will damage the simulator and void the warranty.
- Gel pads have a shelf life. Make sure they are not expired to avoid arcing.
- Make sure the simulator is not in contact with any electrically conductive surfaces.
- Use the simulator only in a well-ventilated area, free of all flammable gases.
- NEVER attempt to service or modify any of the electrical connections, especially those between conductive skin sites and the internal electronics. Discontinue use if any wires are found exposed with damaged insulation.
- Real medical products, especially electrodes, sometimes use powerful adhesives that can be difficult to remove. A gentle, degreasing cleanser may be needed. Refer to Care and Cautions for more information.
- Electrode gel on the skin between any two electrode targets can become a pathway for electrical current, just as in real life. If this occurs, Super Tory's skin can be burned.
- Should dark traces appear on the conductive patches due to gel residue or previous arcing, use a pencil eraser to remove the traces and then clean with alcohol.
- DO NOT SCRATCH the conductive patches with abrasive objects; doing so will cause irreversible damage to the conductive sites and subsequently cause arcing

CO2 Exhalation

Review the safety and warning checklist information before using the CO2 feature. Failure to comply with the warnings listed below and those included with the original cartridge packaging may result in serious personal injury.
- Always follow the manufacturer's safety and warning information included with the CO2 cartridge package.
- Never point a CO2 cartridge at yourself or others
- Do not use damaged CO2 cartridges
- Do not puncture the cartridge CO2 seal manually
- Do not expose the CO2 cartridges to high temperatures as indicated on the product's packaging
- Install threaded cartridges only (3/8"-24UNF-1A). Do not attempt to install a cartridge that does not meet the specifications listed in this document.
- Do not over tighten the cartridge into the simulator's cartridge harness

2. Overview

2.1 Features

- Tetherless—remains fully functional even during transport
- Seamless, smooth and supple skin covers newborn from head to toe
- Wireless control at distances up to 100 ft.
- Internal rechargeable battery provides up to potential maximum of 8 hr. of tetherless operation
- Programmable movement: blinking, mouth open and close, arm and leg flexion and extension
- Realistic joint articulation: neck, shoulder, elbow, hip, knee, hands and feet
- Forearm pronation and supination
- Lifelike umbilicus and post cord detachment navel
- Palpable bony landmarks
- Near-silent operation
- Tablet PC preloaded with UNI included

2.2 Newborn Super Tory®

Neurologic

- Programmable muscle tone: active, reduced, and limp
- Crying/grunting with visible movement
- Blinking eyes
- Seizures/convulsions

Airway

- Anatomically accurate oral cavity and airway
- Nasotracheal/orotracheal intubation (ETT, laryngeal airway)
- Head tilt, chin lift, jaw thrust
- Supports esophageal intubation
- NG/OG tube placement
- Bag-valve-mask ventilation support
- Neck hyperflexion airway obstruction with event capture and logging
- Intubation depth detection and software event log

Breathing

- Mechanical ventilation support
  - A/C, SIMV,CPAP, PCV, PSV, NIPPV
  - Supports P.E.E.P (up to 20 cmH2O)
- Dynamic airway and lung controls
  - Variable lung compliance
  - Bilateral bronchi resistance
  - Programmable respiratory efforts for weaning/liberation
- Spontaneous breathing
- Variable respiratory rates and inspiratory/ expiratory ratios
- Programmable unilateral chest rise and fall
- Unilateral lung sounds synchronized with respiratory rate
- Programmable retractions, see-saw breathing
- Unilateral chest rise with right main stem intubation (Automatic detection and logging)
- Real-time ventilation feedback
- Bilateral, midaxillary pneumothorax sites support needle decompression and chest tube insertion
- Pneumothorax sites feature palpable bony landmarks, realistic skin for cutting and suturing, bleeding, tactile pleural pop, and fluid drain
- Visible chest rise during bag valve mask ventilation
- Supports ETCO2 monitoring using real sensors and monitoring devices

Cardiac

- Includes comprehensive library of ECG rhythms with customizable beat variations
- Supports ECG monitoring using real devices
- Supports ECG-Derived Respiration monitoring (EDR)
- eCPR™ Real-time CPR quality feedback and reporting
- Chest compression depth sensor
- Defibrillate, cardiovert and pace using real devices and energy
- Effective chest compressions generate palpable femoral pulse pulses and ECG activity
- Healthy and abnormal heart sounds
- Supports virtual pacing and defibrillation

Circulation

- Visible cyanosis, jaundice, paleness, and redness with variable intensities
- Supports manual capillary refill time assessment on the left foot (Automatic detection and logging)
- Programmable fontanel: depressed, normal, and bulging
- Palpable pulses: brachial, femoral, and umbilical
- Supports blood pressure monitoring using real NIBP cuff
- Audible Korotkoff sounds
- Supports pre-ductal (right hand) and post-ductal (right foot) O2 saturation monitoring using real devices

Vascular Access

- IV cannulation: bolus, infusion, and sampling
  - › Hand
  - › Scalp
  - › Umbilicus
- Umbilical catheterization (UVC): cutting, continuous infusion, and sampling
- Bilateral IO tibial infusion

Gastrointestinal

- Programmable abdominal distension
- Urinary catheterization with return
- Normal and abnormal bowel sounds

2.3 Other

Vital Signs Monitor (Optional)

- Controlled via wireless touchscreen tablet PC
- Newborn vital signs
- Use selected configuration or create your own configuration to mimic the monitors used in your facility
- Customize alarms

User Interface

- Powerful and intuitive UNI software
- Includes a library of preprogrammed scenarios which can be modified by the instructor even during the scenario
- Create your own scenarios and edit the preprogrammed scenarios
- Change simulator's condition during the scenario
- Assess APGAR score of the newborn
- Changes in condition and care are time stamped and logged
- View the actions of up to 20 care providers using a responsive menu or write narrative
- Generate and share diagnostic lab results
- File sharing
- Links with optional recording and debriefing system integrate the event log with cameras and patient monitor
- Supplied with wireless tablet PC

2.4 Package Contents

- Super Tory:
  - Post detachment navel (installed)
  - 2 Pneumothorax inserts (installed)
  - 1 scalp insert (installed)
  - 2 I/O inserts (installed)
- Power Supply
- Mineral oil
- Artificial blood concentrate
- CO2 External System Box
- A/P Defibrillation Adapter
- Diaper
- 2 Baby head caps
- Receiving blanket
- Super Tory Accessories Box

3. Super Tory® Setup

3.1 Initial Setup

Super Tory is shipped in a hard transport case.
Lift the top foam to remove Super Tory.

Prepare the simulation area prior to unboxing the simulator. Remove the simulator from the box.

3.2 Charging the Battery

Super Tory has an average battery runtime of approximately 4-6 hours, with a maximum potential of 8 hours. Total battery runtime is dependent upon changes in breathing rate, volumes, and seizures of the simulator. The battery charge will be displayed on the software panel after the connection with the simulator is established.

Please review the "Care and Maintenance" section for proper storage conditions and how to cycle the battery for Super Tory when the simulator is not in use for extended periods of time.

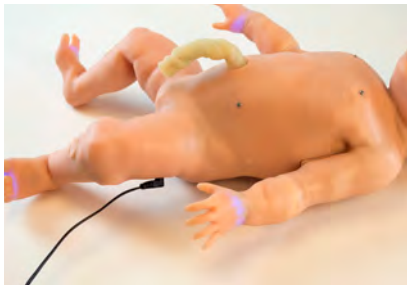
The simulator's battery can ONLY be recharged using the battery charger when the simulator is turned off. Please do not attempt to charge the battery while the simulator is in "Stand-By". Stand-By is intended for only short pauses to conserve battery charge. If there will be extended breaks between simulation sessions and the battery requires a recharge, turn off the simulator and charge the battery.

It is recommended that the simulator primarily rely on the charge of its battery for operation. In the instances of running a simulation that may run longer than the expected charge of the simulator, it is possible to plug the battery charger into the simulator while it is turned ON so that it may act as a power supply to extend the life of the battery. Once the simulation is over please proceed to turn off the simulator and properly charge it.

To charge the battery:

1. Ensure that the simulator is turned off or in Stand By.
2. Plug the charger adapter into a wall outlet.
3. Remove the charger port cover.
4. Connect the charger to Super Tory.

5. Super Tory's peripheral cyanosis will slowly flash while he charges.



> **WARNING: Super Tory will not charge if the battery temperature rises above 50°C (122°F) or if room temperature goes below 0°C (32°F).**

6. Allow the simulator to charge for 4-5 hours.

7. When his peripheral cyanosis is solid, Tory is fully charged.

3.4 Initializing The Simulator (RF Module)

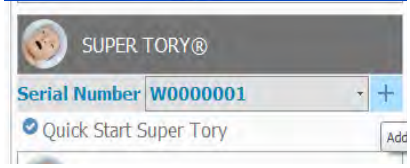
Communicate wirelessly with Super Tory using an RF signal.
To start Super Tory with the RF module, follow the steps below:

1. Plug the RF module into the tablet PC

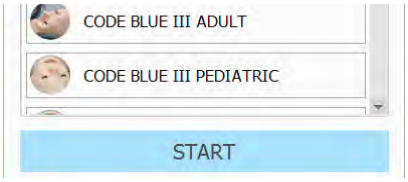
2. Turn on the tablet PC

3. Double-click the UNI software

4. Verify Super Tory®'s serial number



5. Select “Start”



Super Tory® will establish a connection in less than a minute.

WARNING: Do not touch Super Tory® while she flashes red and autocalibrates. Allow 30 seconds to finish the auto calibrations.

3.5 Initializing The Simulator (Bluetooth)

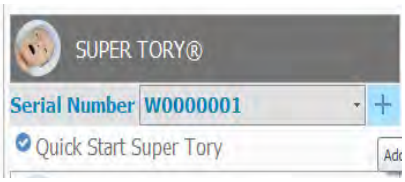
Super Tory can connect via RF or Bluetooth. If there is interference with RF communication, connect via Bluetooth or vice versa.
To start Super Tory with bluetooth, follow the steps below:

1. Turn on the tablet PC

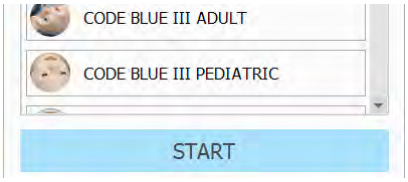
2. Unplug the RF Module (if applicable)

3. Double-click the UNI software

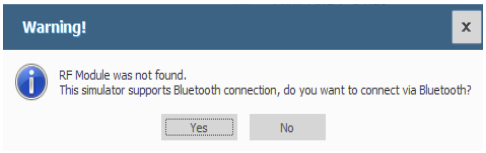
4. Verify Super Tory®’s serial number



5. Select “Start”



6. Verify that you wish to connect via bluetooth



7. Press on Super Tory®’s left foot until it turns white

8. Solid blue peripheral cyanosis will appear on the feet to signal that the bluetooth is activated

Super Tory® will establish a connection in less than a minute.

WARNING: Do not touch Super Tory® while she flashes red and autocalibrates. Allow 30 seconds to finish the auto calibrations.

If UNI isn't started within 4 minutes, the cyanosis will turn off. If that occurs, repeat steps 7-8.

4. Working with Super Tory®

4.1 Airway

Dynamic Lung

Super Tory's lungs simulate the elasticity of a newborn's lungs. The lungs can simulate healthy or impaired pulmonary function. The respiratory system is housed inside the simulator. The simulator can be connected directly to the mechanical ventilator and does not need any calibrations in order to function.

Super Tory® properly supports standard ventilators, patient circuits, and the following modes:

- A/C
- SIMV
- CPAP
- PCV
- PSV
- NIPPV

Super Tory breathes by moving air in and out of the lungs through the airway, thus can trigger a ventilator, simulate weaning, and hold therapeutic levels of PEEP (up to 20 cmH_2O).

> **WARNING: Do not exceed PIP levels greater than 60 cmH_2O, doing so may result in damage to the simulator.**

Lung Compliance

Super Tory® has 3 levels of compliance (0 to 2), where 0 is less compliant (stiff lung) and 2 is normal.

Reducing the lung compliance will result in an increase in Peak Pressure while maintaining a volume controlled mechanical ventilation rate.

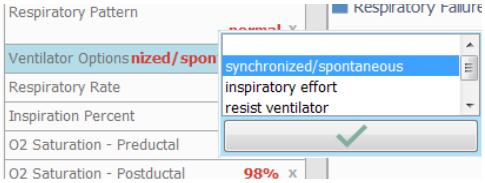
Resistance

Activate bilateral or unilateral resistance in the Chest Rise control and measure the resistance on the mechanical ventilator.

For example, during mechanical ventilation using volume control, an increase in the Peak Pressure can be observed. Alternatively, in pressure control mode, a decrease in Tidal Volume can be observed.

Ventilatory Options

There are three main ventilator options in the UNI software:



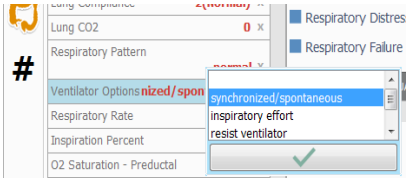
- **Synchronized/Spontaneous Breathing:** This is the default setting for Super Tory. While set to this option, Super Tory will allow the provider to assist or control the breathing rate using a manual device or a mechanical ventilator.
- **Inspiratory Effort:** When set to this option, Super Tory will trigger the mechanical ventilator at the respiratory rate specified in the UNI software. Super Tory will just gasp instead of taking a full breath.
- **Resist Ventilator:** When set to this option, Super Tory will take full breaths for every respiration. The simulator's breathing will not synchronize with the ventilator

Synchronized/Spontaneous Breathing

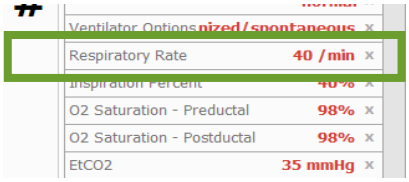
Super Tory will allow the mechanical ventilator to take full control when the ventilator's respiratory rate is **above** 15 breaths per minute. At this point, Super Tory will only trigger the ventilator at the specified respiratory rate. When the ventilator's respiratory rate is **below** 15 breaths per minute, Super Tory will begin to take full breaths, indicating that the simulator is breathing on its own.

> **Use the settings for an 8 lbs (3.6 kg) newborn.**

1. Set the "Ventilator Options" to "synchronized/ spontaneous" in the UNI controls



2. Adjust the respiratory rate to zero



3. Intubate the simulator. Reference section "Nasal and Oral Intubation".

4. Turn on and connect the ventilator.

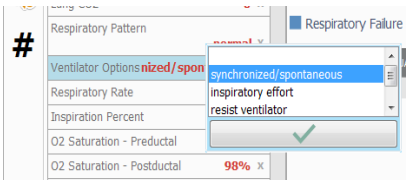
The ventilator will have full control of Super Tory's respirations if the mechanical ventilation rate is **above** 15 bpm

To simulate part of the weaning process, lower the mechanical ventilation's rate to **below** 15 bpms and eliminate pressure support. Super Tory's end title volume will indicate to the provider that the simulator is ready to be taken off the ventilator.

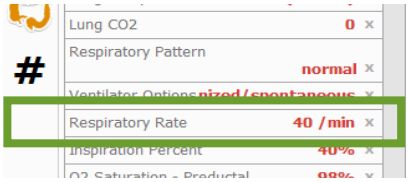
Inspiratory Effort

Super Tory® has the ability to trigger the ventilator when attempting to take a breath. Super Tory will take short breaths, just enough to trigger the ventilator. Use this option when the simulator is starting to breathe on its own, but not ready to be taken off the ventilator. Follow the steps below to use this feature:

1. Set the "Ventilator Options" to "inspiratory effort" in the UNI controls



2. Adjust the respiratory rate to specify how many times the simulator will attempt a breath



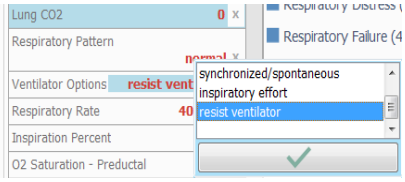
3. Set the mechanical ventilator Trigger Sensitivity to 0.3 lpm or lower

4. Set the pressure support to the desired value

Resist Ventilator

The "resist ventilator" control simulates the act of Super Tory fighting against the mechanical ventilator. The simulator's breathing will not synchronize with the ventilator as the patient fights the ventilator.

Set the "Ventilator Options" to "resist ventilator" in the UNI controls.



As an example, see the increase of PIP with Super Tory's exhalation, set the ventilator to A/C mode with volume control. Ensure that the mechanical ventilation rate is lower than Super Tory's respiratory rate.

4.2 Neurologic

Crying

Activate crying using the UNI controls. Super Tory® will cry in sync with visible mouth and chest movement. Super Tory®'s eyes will open and close.

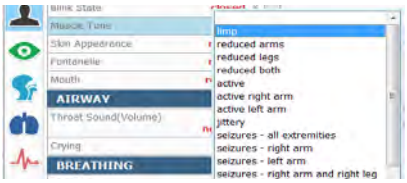
Seizures

Super Tory® will also exhibit seizures and jittery movement on all extremities or only on selected limbs.

Muscle Tone

Control the movement of the simulator's arms by enabling any of the available muscle tone settings. Super Tory can move all limbs at once or selective limbs.

Select "Muscle Tone" in the UNI software and specify the kind of movement. The movement could be active or reduced to simulate a failing condition.

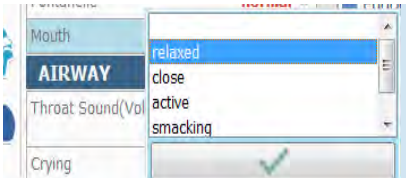


Hold Super Tory's arms or legs while extended or flexed. The limb will cease movement while holding the limb.

WARNING: Do not extend Tory®'s limbs when they are flexed.

Mouth

Set the mouth to move, close, or relax. Activate "smacking" to make Super Tory's mouth open and close in a smaking motion.



4.3 Intubation

Nasal And Oral Intubation

Super Tory® supports BVM, nasal/ oral intubation, and suctioning. Endotracheal tubes, NG tubes and LMAs can be used.

Bilateral chest rise can be observed with proper ventilations.

Super Tory® will exhibit gastric distension with excessive BVM.

Esophageal intubation is supported, but is for placement only.

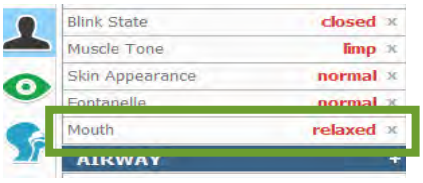
Procedure	Recommended Device Size
Intubation (Blade size)	Miller 0
LMA	Size 1
Nasal Intubation	8 Fr catheter
Oral Intubation	ETT 3.0 or 3.5 no cuff, 6 Fr suction catheter

Do not introduce liquids when performing nasal and oral intubation. Doing so can permanently damage the system.

Always lubricate the tubing using mineral oil prior to performing any nasal or oral intubation.

Instructions for Use

1. Put Super Tory® mouth to relax



Super Tory® supports head tilt, chin lift, and jaw thrust

2. Lubricate the device with **mineral** oil

3. Perform the intubation

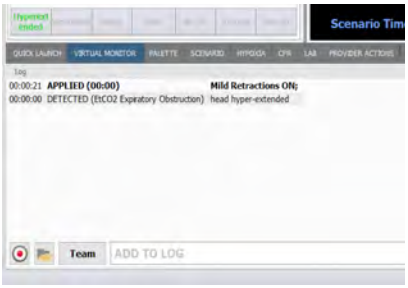
4. Proper intubation is detected in the Log Panel.

5. If improper intubation is detected, it is logged and Super Tory® will exhibit right mainstem intubation.

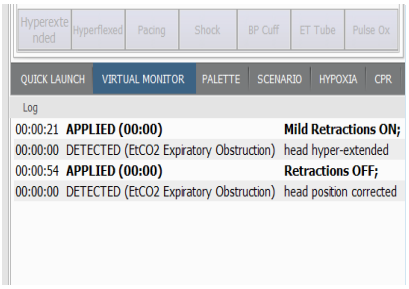
The left lung will be disabled until the intubation is corrected.

Hyperextension/Hyperflexion

Hyperextending or hyperflexing the neck will obstruct the airway, activate mild retractions, and logging in UNI.

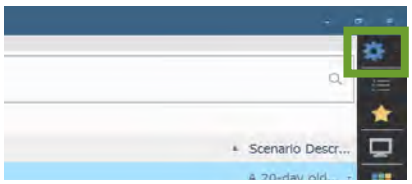


Correcting the position of the head will turn retractions off and log the correction in UNI.

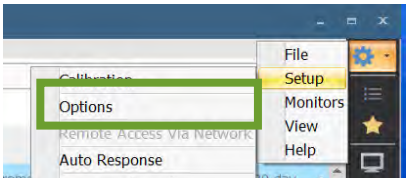


To activate this feature, follow the steps below:

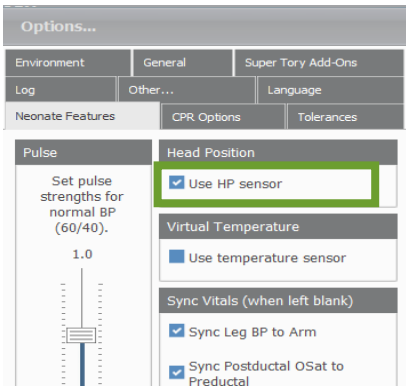
1. Click the gear in the upper-right of the screen



2. Select "Setup" then "Options"

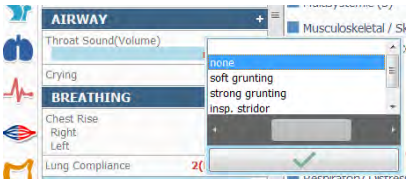


3. In the "Neonate Features" check the "Use HP sensor" feature and click "OK"



Sounds

Super Tory has various throat sounds that are in sync with the breathing.



4.4 Breathing

Chest Rise

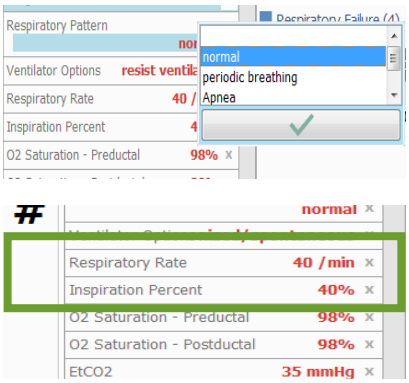
Super Tory displays natural, bilateral spontaneous breathing to visualize chest rise and auscultate lung sounds.

Program unilateral chest rise and fall using the UNI controls.

Respiratory Patterns

Control rate and depth of respiration and choose independent right and left lung sounds, which are synchronized with selectable breathing patterns.

Adjust the respiratory rate and inspiratory percentage.

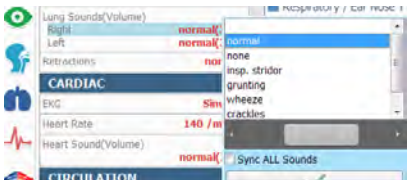


> **Inspiratory percentage is limited from 20-50% and is also dependant on the respiratory rate.**

Lung Sounds

Multiple independent right and left lung sounds are available on Super Tory: normal, none, inspiratory stridor, grunting, wheeze, and crackles.

To auscultate the lung sounds:



1. Select the lung sound in UNI and click apply now

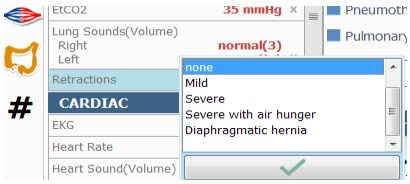
2. Apply some pressure with the stethoscope

3. The lung sounds and heart sounds will be heard as long as the provider is auscultating. Once the stethoscope is removed, the sounds will stop after one minute.

> **Note, for better sound quality turn up the volume of the lung or heart sound and set the muscle tone to "limp".**

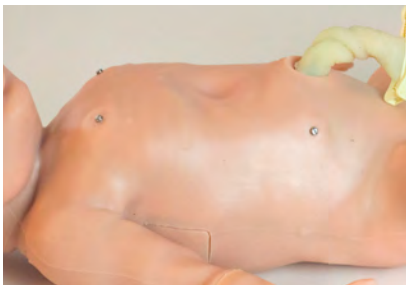
Retractions

Super Tory has programmable retractions. They vary in severity.



Hyperflexing or hyperextending the neck will obstruct the airway and cause mild retractions to be activated.

> **For more information about the head position please refer to the "Hyperextension/hyperflexion" section above.**



> **Retractions with air hunger makes a noise in sync with the respiratory rate.**

Pneumothorax

Super Tory supports bilateral, midaxillary needle decompression and chest tube insertion. The inserts contain palpable bony landmark, realistic skin for cutting and suturing, bleeding, tactile pleural pop, and fluid drain.

The package includes (2) chest tube insert replacements. One right and one left.

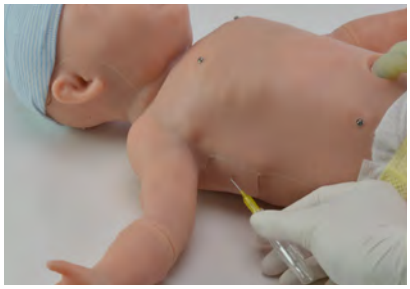
Filling the Inserts

If you would like superficial bleeding while cutting the insert, follow the steps below to pre-fill the insert.

Procedure	Capacity
Pneumothorax Pre-Filling	1 cc

1. Fill a syringe of artificial blood

2. Insert a 22 g needle superficially into the insert to allow air out



3. Connect the syringe and inject some blood below the skin

4. Remove the needle

Replacing the Inserts

1. Remove the punctured insert

2. Locate the replacement insert

Note the "R" or "L" on the sides of the insert.

3. Slide in the insert. Use some alcohol if there is difficulty.

Real CO2 Exhalation

Super Tory can exhale real CO2 via a CO2 cartridge. Once a CO2 cartridge is installed, use the software controls to adjust volume of CO2 exhaled.

Due to shipping regulations, CO2 cartridges are not included with the system. The required 16g threaded CO2 3/8"-24UNF-1A cartridges can be purchased at most bicycle or hardware stores.

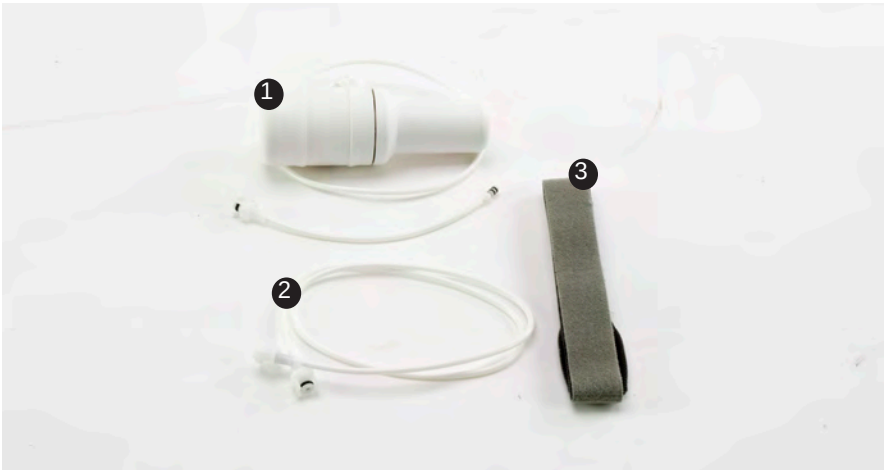
> **Review the safety and warning checklist information in the "Care and Cautions".**

CO2 Exhalation External System Box

A CO2 Exhalation External System box is provided with all the accessories needed to set Super Tory up with CO2.

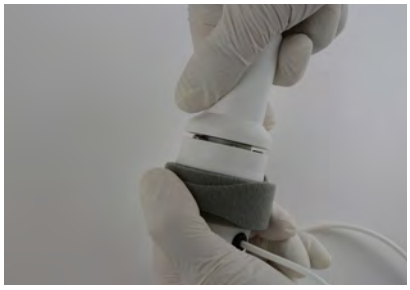
It contains:

1. CO2 Cartridge protective case and hose
2. CO2 External System Extension
1. CO2 External System Holder



Installing the Cartridge

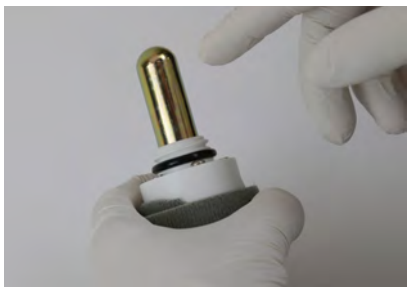
1. Securely hold the bottom of the CO2 Cartridge protective case with one hand and open it by twisting its top.



2. If there is a cartridge inside already, please refer to the “Removing the Cartridge” section below.

3. Insert the CO2 cartridge into the bottom half of the protective case, ensuring that the threads are aligned.

4. Screw the CO2 cartridge into the case until it stops and it’s tightly secured. The cartridge will feel cool to the touch as the case pierces the cartridge seal.



Note: Once you have started screwing in the cartridge, do not stop or attempt to unscrew the cartridge. The casing will puncture the cartridge seal during the tightening process

Hand tighten only. Do not over tighten.

Do not unscrew the cartridge once the seal is broken.

5. When the cartridge is completely and firmly in its slot, place the top of the cartridge's protective case back into position and twist it back on firmly.

Connecting The Cartridge to Super Tory:

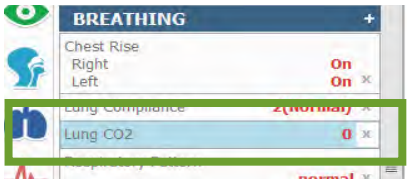
1. Connect the hose to the end of the cartridge

2. Bring the CO2 connecting tube to the left upper back of Super Tory's shoulder and secure it into the port.

3. Strap the cartridge to Super Tory's leg using the CO2 External System Holder

4. Or use the CO2 External System Extension to tuck the cartidge away

5. Adjust the "Lung CO2" in UNI



Removing the Cartridge

1. Before replacing the cartridge, please ensure that you have exhausted the contents of the cartridge. To exhaust contents of CO2 cartridge please turn the feature on and allow to run until no CO2 can be measured

2. Securely hold the bottom of the CO2 Cartridge protective case with one hand and open it by twisting the top.

3. When the top comes off of the protective casing, you will see the cartridge.

4. With the cartridge completely spent, twist the cartridge counter-clockwise to unfasten it for removal.

5. Remove cartridge

Do not point the CO2 Cartridge at yourself or others.

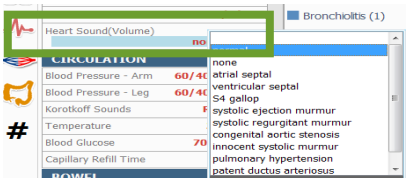
4.5 Cardiac

Heart Sounds

Newborn is equipped with several realistic heart sounds which are synchronized with the user-defined heart rate and cardiac rhythm.

To auscultate the heart sounds:

1. Select the heart sound in UNI and click apply now



2. Apply some pressure with the stethoscope

3. The lung sounds and heart sounds will be heard as long as the provider is auscultating. Once the stethoscope is removed, the sounds will stop after one minute.

> **Note: for better sound quality turn up the volume of the lung or heart sound and set the muscle tone to "limp".**

ECG Monitoring and Electrical Therapy

Super Tory® is equipped with ECG snap connectors that allow the attachment of real ECG lead wires.

The simulator also supports ECG-Derived Respiration monitoring.

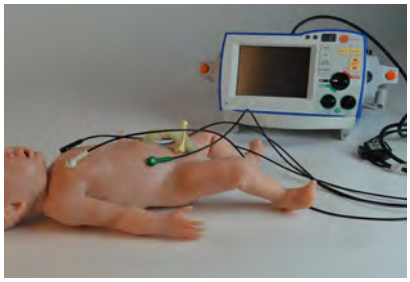
Instructions for Use

1. Turn on the simulator. Refer to the Equipment Set-Up section.

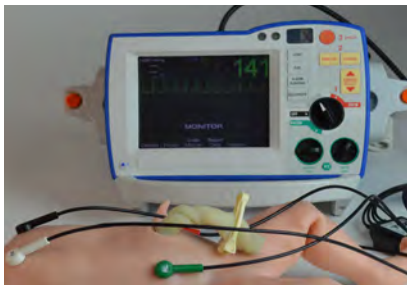
2. Connect the ECG lead wires to Tory's ECG snap connectors.

> **If LL and RL are difficult to snap into place, carefully support the skin from underneath. Avoid using fingernails.**

3. Connect the ECG lead wires to the ECG monitor.



4. Turn on the ECG monitor.



Or utilize Super Tory's ECG snap adapters.

1. Locate the 4 adapters for non-snap ECG electrodes

2. Place the adapters on the ECG sites

3. Press the ECG patches onto the adapters

4. Connect the ECG lead cables

Defibrillation and Pacing

Defibrillate, cardiovert and pace using real energy and real devices on Super Tory.

Super Tory has two options to deliver the energy: snaps and patches.

> **Do not defibrillate over 30 Joule of energy. Doing so will cause serious internal damage to the simulator.**

Electrical Therapy Snap Connectors

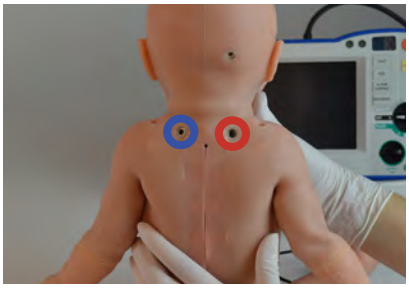
Defibrillation snap connectors are purchased separately to deliver real energy.

Physio

Zoll

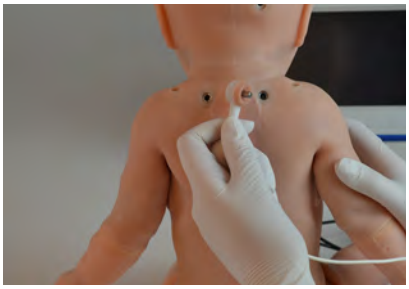
Philips

Super Tory has snap sites on her upper back.

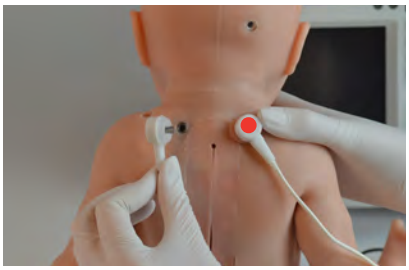


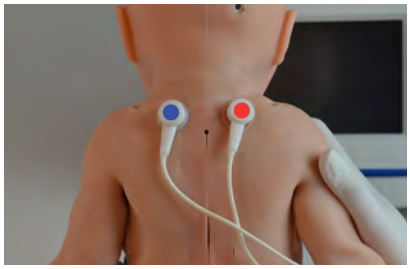
Follow the instructions below to connect the snaps:

1. Connect the red snap connector to the site on the right



2. Connect the blue snap connector to the site on the left





3. Attach the snap connector cables to your defibrillator

4. Turn on the monitor

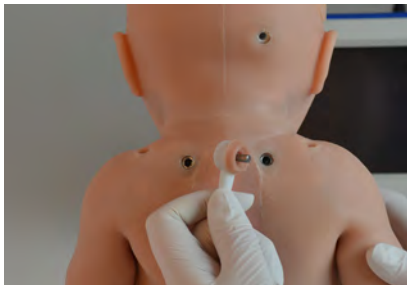
> **Do not defibrillate over 30 Joule of energy. Doing so will cause serious internal damage to the simulator.**

Electrical Therapy Patches

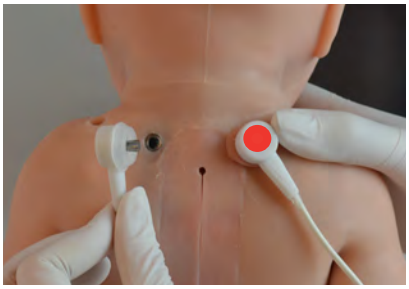
Defibrillation AP patches can be also attached. Follow the instructions below to prepare Super Tory® for electrical therapy with patches:

1. Wrap the AP patches around the simulator

2. Connect the red connector to the right snap



3. Connect the blue connector to the left snap



4. Place the defibrillation patches on the gold sites

5. Connect the defibrillation patches to the monitor

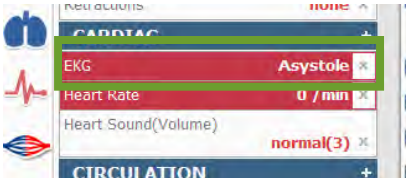
6. Turn on the monitor

Compressions

Chest compressions are measured and logged. Perform and evaluate the compressions done on Super Tory.

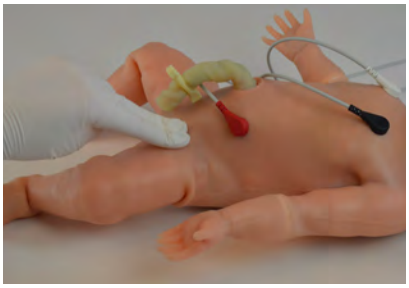
Instructions for Use

1. Put the simulator in a rhythm that requires compressions



2. Perform chest compressions

3. Effective chest compressions result in palpable femoral pulses

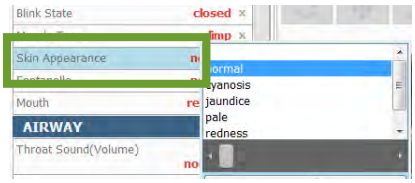


4. Monitor the effectiveness of the compressions in the CPR tab in UNI

4.6 Circulation

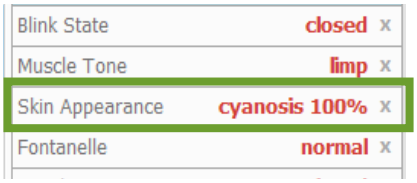
Appearance

Super Tory can demonstrate variable intensities of cyanosis, jaundice, paleness, and redness.

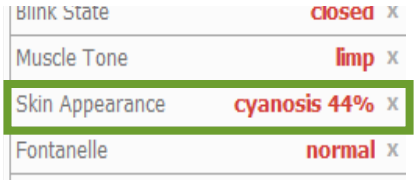


Paleness, redness, and jaundice will only appear centrally.

Peripheral cyanosis will appear when the intensity is above 50.

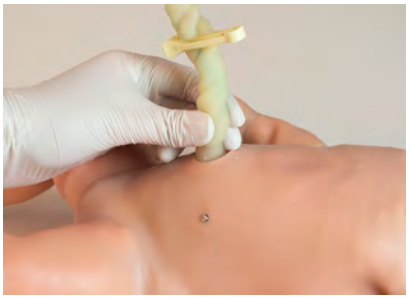
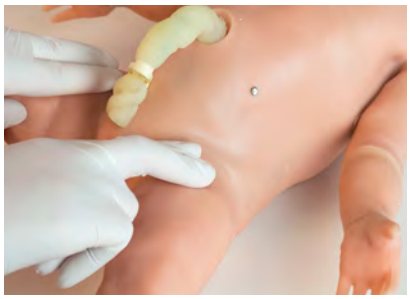
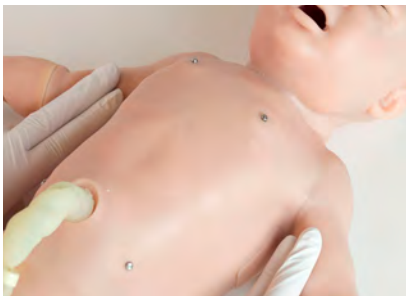


Central cyanosis will appear throughout the ranges.



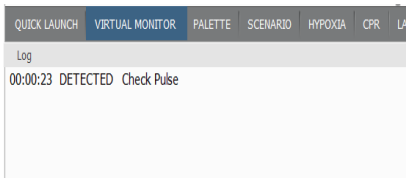
Palpable Pulses

Super Tory®'s palpable pulses (fontanel, bilateral femoral, bilateral brachial, and umbilical) are dependent on heart rate.

When palpating the pulses, apply some pressure to the pulse site.

All the pulses will be activated and stay activated until the provider removes the pressure. Once no pressure is detected, the pulses will deactivate for 20 seconds.

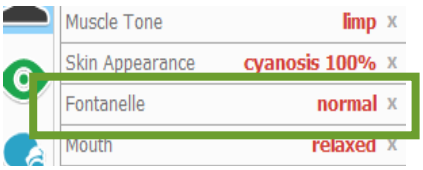


UNI will log that the pulses have been checked.

Fontanelle

Super Tory®'s fontanelle can be programmed to 3 states:

- Sunken
- Normal
- Bulging



Pulses can still be palpated in all 3 states.

Sunken

Normal

Bulging

> **Bulging and sunken can be applied only when the simulator is breathing spontaneously.**

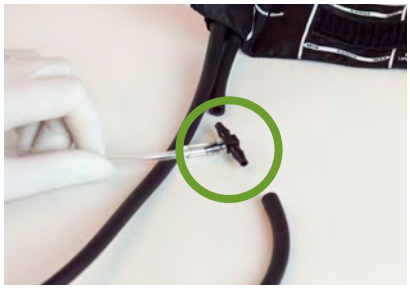
Manual Blood Pressure

Use a modified sphygmomanometer to measure blood pressure readings which are controlled by UNI. In addition, auscultate the Korotkoff sounds using a stethoscope.

Modification Procedure

1. Cut the hose of the cuff

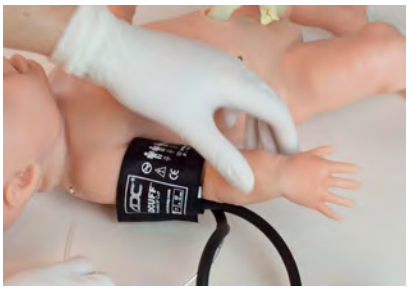
2. Locate the T connector



3. Connect the T connector to the hose

Instructions for Use

1. Place the modifued cuff around the simulator's upper right arm.

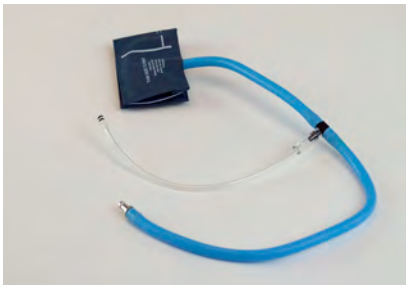


2. Connect the hose fitting on the end of the extra branch to the port on the simulator's right shoulder.

3. Inflate the BP cuff, and auscultate Korotkoff sounds as you would a normal patient.

Automatic Blood Pressure

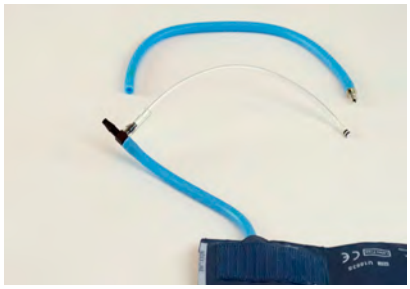
Monitor Super Tory®'s blood pressure with a non-invasive blood pressure cuff. A modification must be done before using this feature. The package includes a NIBP kit to perform the modification.



NIBP Modification Procedure

1. Cut the hose of the NIBP cuff

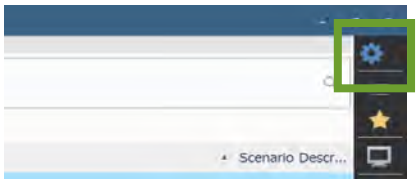
2. Connect the white T connector to one end of the hose



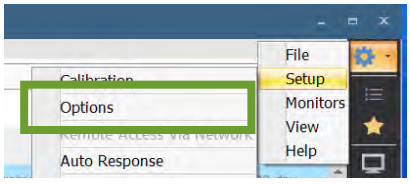
3. Connect the other end of the hose to the T connector

Instructions for Use

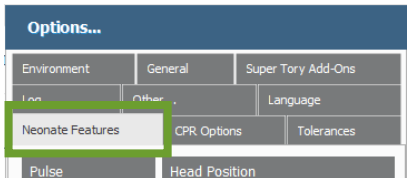
1. Activate the feature by clicking the Gear in the upper right corner



2. Select "Setup" then "Options"

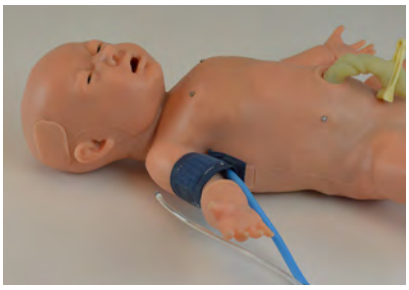


3. Navigate to the "Neonate Features" tab

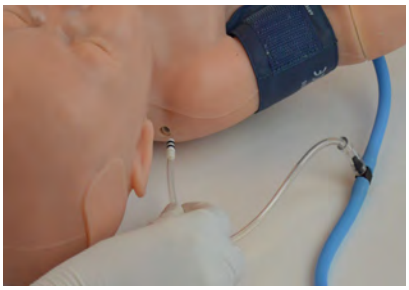


4. Verify that the NIBP feature is selected

5. Place the modified cuff around the simulator's upper right arm.



6. Push in the clear hose to the Blood Pressure port on the upper-right on the back of the simulator



7. Connect the cuff to the monitor

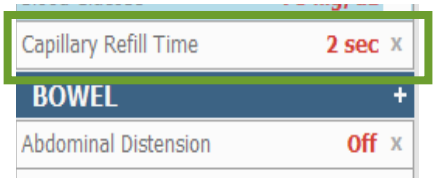
A systolic blood pressure below 45 mmHg will not be read correctly when using an automatic NIBP monitor.

Capillary Refill Time

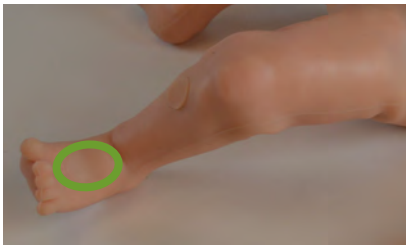
The left foot has the capability to test the capillary refill time. UNI™ wil automatically detect and log when the test is performed.

To use the CRT feature, follow the steps below:

1. Set the time in UNI

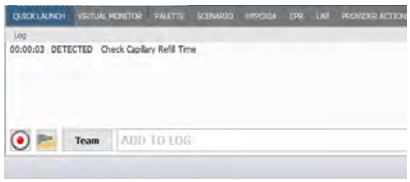


2. With your thumb on the top of the foot and your index finger on the bottom, hold the left foot for about 4 seconds



Super Tory®'s foot will turn white.

UNI will detect and log the CRT check.



Pre-Ductal and Post-Ductal O_2 Saturation

Monitor Super Tory®'s saturation with real equipment. The right hand and right foot provides oxygen saturation feedback.

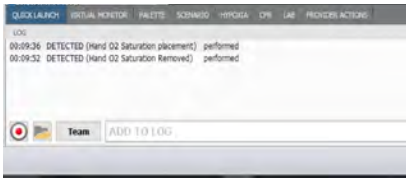
Instructions for Use

1. Place the Osat device on the right hand or foot

Ensure that the light source is set on the top part of the hand and foot.

2. Turn on the Osat device

3. UNI will detect and log that the O2 Saturation was placed

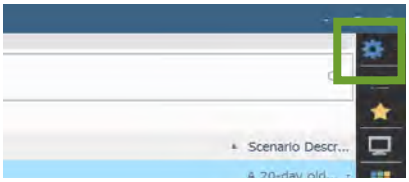


Oxygen Saturation Calibration

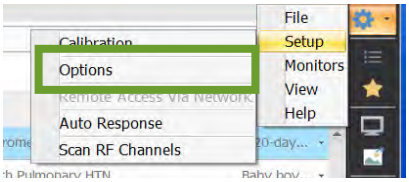
The calibration settings are saved for one device at a time. If a different monitor is used, the calibration must be done again.

Follow the steps below to perform the calibration:

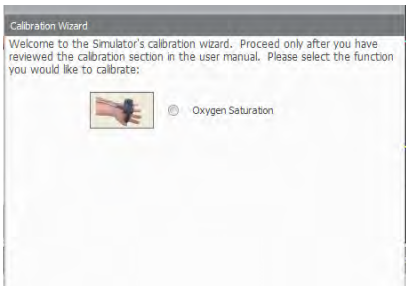
1. Click the Gear on the upper-right



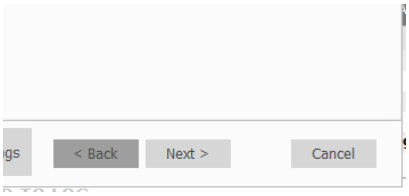
2. Select "Setup" > "Calibrations"



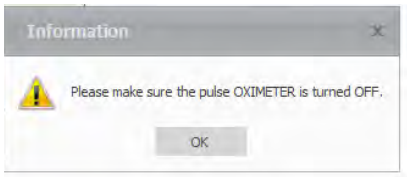
3. Select "Oxygen Saturation"



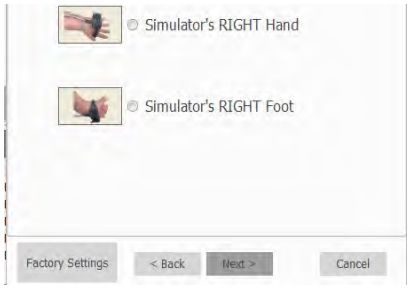
4. Click "Next"



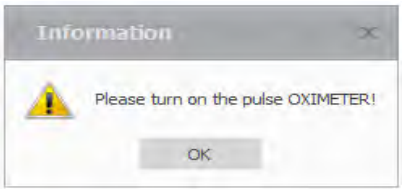
5. Ensure that the pulse oximeter is turned off and press OK.



6. Choose either Right foot calibration or Right hand calibration and click "Next"

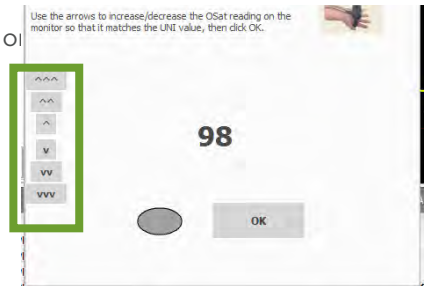


7. Turn on the oximeter and press OK



8. Use the arrows to adjust the value o close to the given value in UNI

9. Select OK and repeat step 8 for the next value



10. Then, click "Finish"

4.7 Vascular Access

IV Hand

Bilateral IV training hands allow simulator's intravenous infusions as well as drawing fluids.

Two replaceable arms are supplied with Super Tory. One right and one left.

Use only Gaumard's provided simulated blood. Any other simulated blood brand containing sugar or any additive may cause blockage and/or interruption of the vasculature system.

Procedure	Recommended Device Size
IV Access	24 gauge needle

Prefilling the Vascular System

The IV hand can be prefilled with simulated blood. Follow the steps below:

1. Locate the drain port in the IV hand

2. Insert the drainage hose into the drainage port of the arm

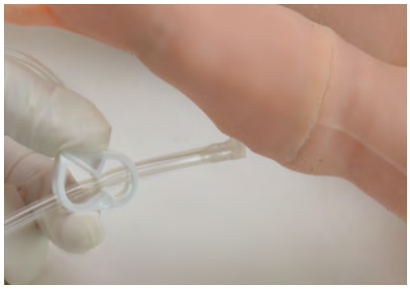
3. Palpate to locate the veins.

4. Insert a size 24 gauge needle

5. Connect a fluid filled syringe

6. Inject fluid

7. When fluid begins to enter the drainage hose, clamp it closed



8. Use a 24 gauge needle to perform the IV exercises

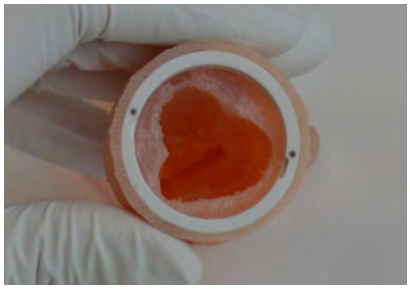
Replacing the IV Hand

After each simulation or exercise, it is recommended to remove the arm, rinse it out, and let it dry for severeal hours.

1. Twist the left hand clockwise or the right hand counterclockwise until you reach the stopper or the palm is facing up

2. Pull the hand from the arm carefully

3. Align the new IV hand with the markers



4. Insert the IV hand with the palm facing up

5. Twist the left hand counterclockwise or the right hand clockwise until you pass the stopper

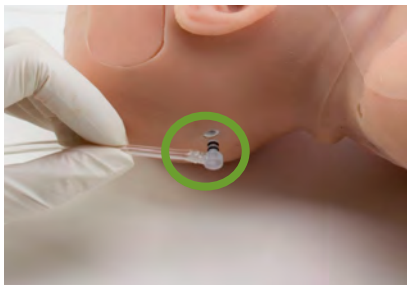
Scalp Vein

Access the scalp vein on the right side of Super Tory®'s head.

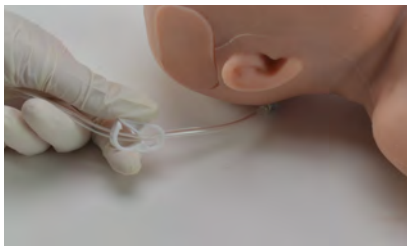
Procedure	Recommended Device Size
Scalp Vein Access	23 gauge needle

Instructions for Use

1. For continuous infusions, connect the drainage hose to the drain port



2. Open the clamp



3. Palpate the area to locate the vein and insert a 23 gauge needle

Replacing the Insert

1. Remove the insert

2. Align the drainage connector to the drainage port

3. Install the replacement scalp insert

> **Use some alcohol on the sides of the insert to make this easier.**

Intraosseous Access

The intraosseous access allows for infusing fluids, blood and/or drugs directly into the bone marrow of the tibia. This system allows for continuous intraosseous infusion.

Super Tory® has bilateral IO sites.

Procedure	Recommended Device Size
IO Access	15 gauge needle

Instructions for Use

1. Push the drainage hose in the drain port located on the bottom of the leg

2. Perform the IO exercise

Replacing Tibia Insert

Super Tory has 2 replaceable IO inserts.

To replace the tibia insert, follow the instructions below:

1. With two hands, push up from bottom

2. Remove the tibia bone

3. Insert the drainage port and fit the rest of the bone in place

Umbilical Catheterization

Use the vein in Super Tory®'s umbilical cord to catheterize or inject. Clamp, cut, sample, and/or use the umbilical cord for continuous infusion.

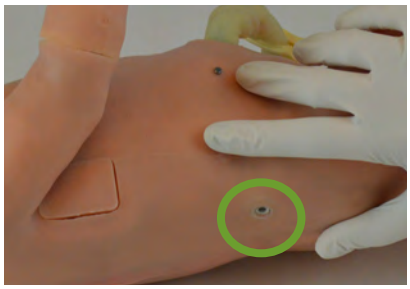
The umbilical arteries can be used for placement catheterization only.

Procedure	Recommended Device Size
Umbilical Catheterization	6 Fr

Lubricate the device before inserting in the simulator.

Prefilling the Vasculature

1. Connect the drain hose to the port located on the simulator's right side



2. Fill a syringe with fluid and connect the Umbilical Cord Filling Tip to the syringe

3. Insert the filling tip into the umbilical vein

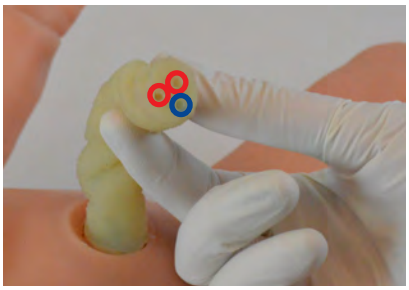
4. Push in fluid

5. When fluid begins to enter the drainage hose, clamp it closed

Instructions for Use

1. Lubricate the catheter

2. Catheterize the vein in the umbilical cord



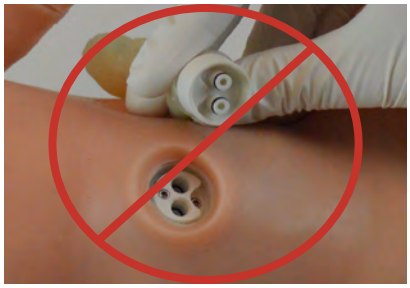
Replacing the Umbilical Cord

1. Pull from the top of the cord

2. The cord will pop out

Super Tory®'s package contains replacement umbilical cords and post detachment navel (insalled)

3. Align up the ports of the replacement with the port in the baby



4. Place the umbilical cord or the post detachment navel into the baby

To remove the post detachment navel,

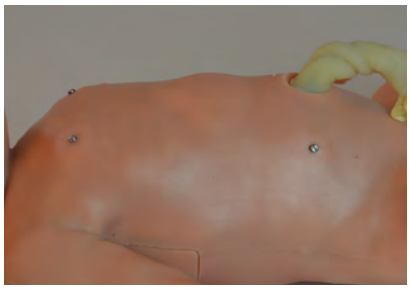
1. Pull slightly on the string

> **Avoid removing the post detachment navel with your fingernails.**

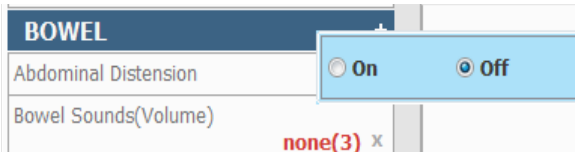
4.8 Bowel

Abdominal Distension

Abdominal distension can be activated and present in the simulator to simulate an intestinal obstruction.



To activate it, select "Abdominal Distension" and click "ON".



> **Abdominal distension cannot be activated while the simulator displays retractions.**

Bowel Sounds

To auscultate the abdomen for normal and hyperactive bowel sounds, follow the steps below:

1. Select "Bowel Sounds" and change the sound to normal or hyperactive

2. Auscultate the bowel sounds with a stethoscope

Urinary Catheterization

Perform catheterization exercises with fluid return.

Procedure	Recommended Device Size
Urinary Catheterization	5 to 8 Fr
Maximum Capacity	4-6 cc

Male Genitalia

Super Tory is supplied with male genitalia that can be catheterized. To install the male genitalia, follow the steps below.

1. Align the urethra port of the female genitalia with the connector

2. Push the male genitalia in place

Remove the male genitalia by carefully pulling on the base of the insert.

Filling the Bladder

To fill the bladder reservior,

1. Lubricate the catheter with mineral oil

2. Insert the catheter

3. Connect the Urethral Filling Adapter to the catheter

4. Connect syringe with fluid to the adapter

5. Inject up to 6 cc's of fluid

Instructions for Use

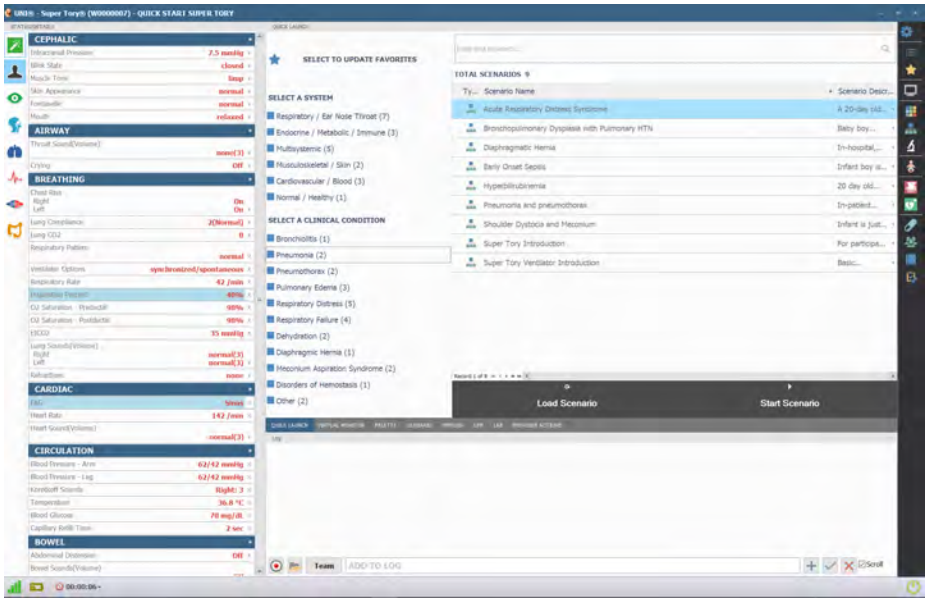
1. Lubricate the catheter with mineral oil

2. Insert the catheter

5. Working with UNI®

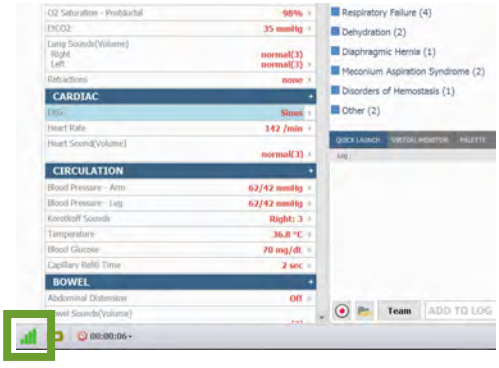
5.1 Getting Started

When UNI® is initialized, the interface defaults to the screen below:



Connection Status

The Connection Status bars are located on the lower-left of the page.

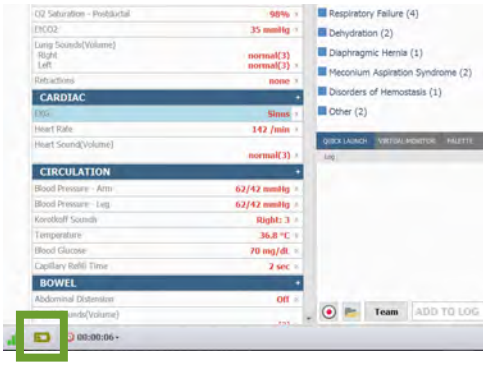


This indicator displays the strength of the communication between the PC tablet and the simulator.

Full bars indicate excellent communication.

Battery Indicator

The Battery Indicator is located on the lower-left of the page.



This indicator displays the charge status of Super Tory®'s internal battery.

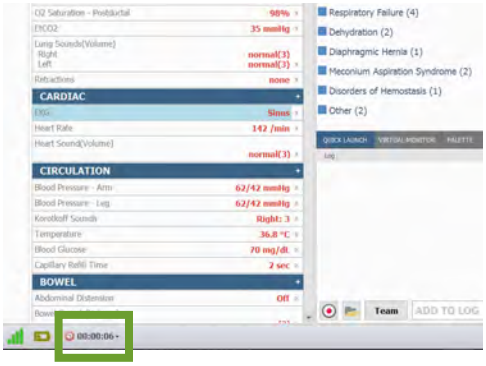
When the battery icon is depleted, the simulator is set to STAND-BY mode to protect some of the simulator's internal components.

> **Refer to section 3.3 Charging The Battery to connect to Super Tory.**

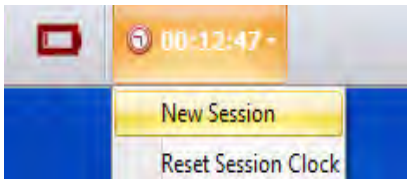
Session Clock

The Session Clock allows the facilitator to time the scenarios and maintain a record of each session.

The timer is located next to the Battery Indicator.



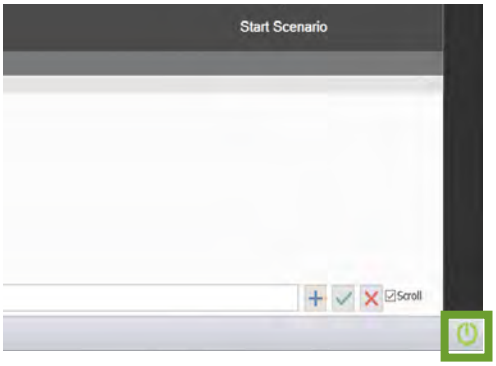
Reset the timer by clicking the icon and choosing "Reset Session Clock".



Stand-By Button

The Stand-By Button is located on the lower-right of the page.

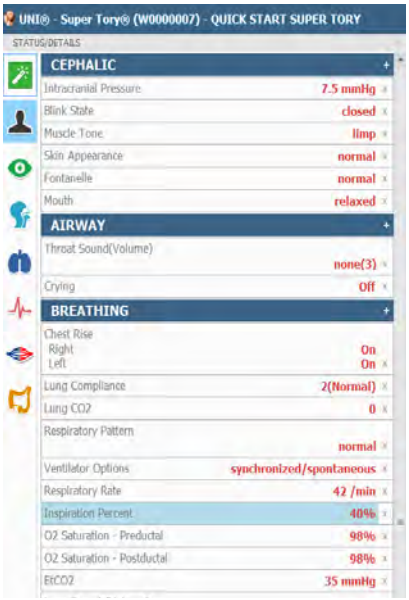
Use this button to conserve battery power between scenarios.



5.2 Changing Vital Signs

Status/Details Controls

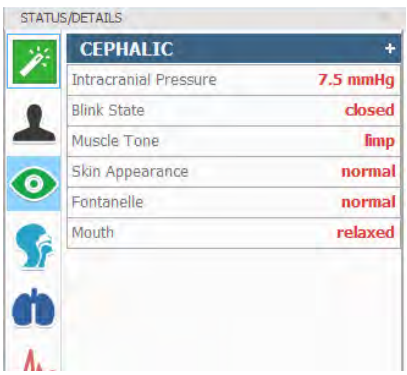
The Status/Details panel is used to monitor and control the simulator's vital signs, sounds, and features.



Categories

The vital signs controls are divided into separate categories.

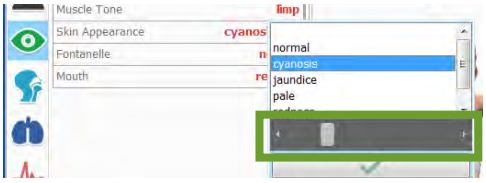
Click through the categories to view the controls available for the current simulator configuration.



Changing a Vital Sign

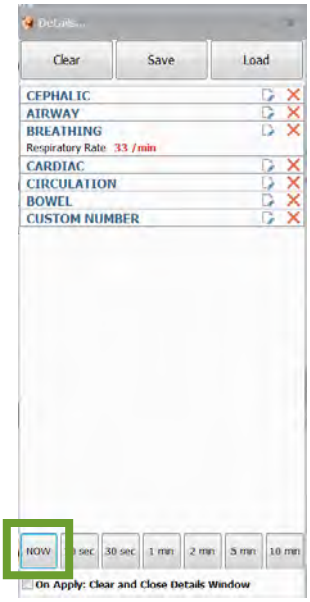
To adjust values,

1. Click and drag the slider control.



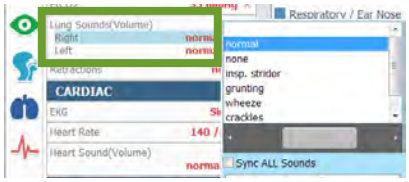
Or use the keyboard for manual entry.

2. Apply one change or multiple changes at once by selecting "NOW" on the bottom of the Details... page

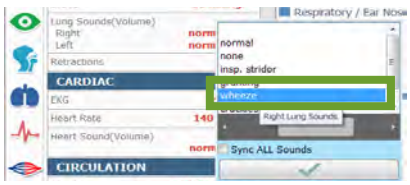


Changing a Sound

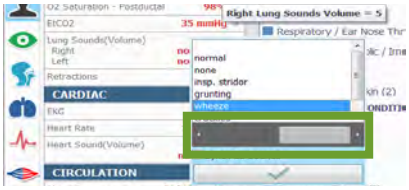
1. Select a sound control



2. Switch to a different sound



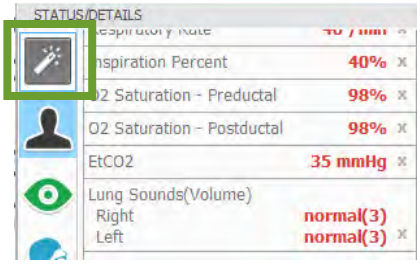
3. Adjust the volume using the slider



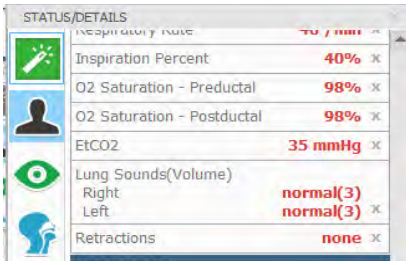
4. Apply one change or multiple changes at once by selecting "NOW" on the bottom of the Details... page

Instant Apply

To make changes on the fly, select the "Instant Apply" button located on the upper-left of the screen.



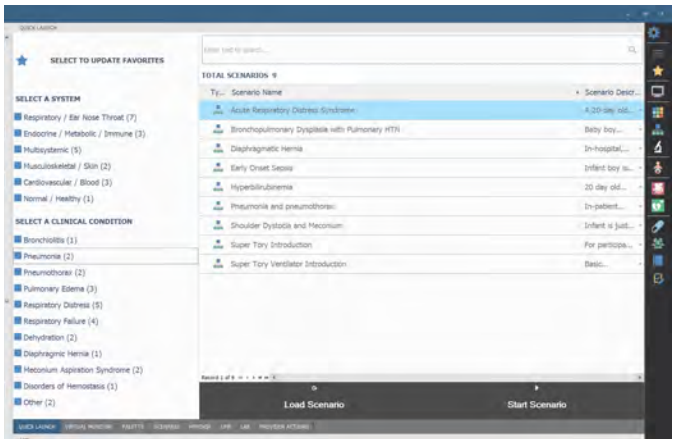
Enable it by clicking the gray button. The Instant Apply will be activated when the button turns green.



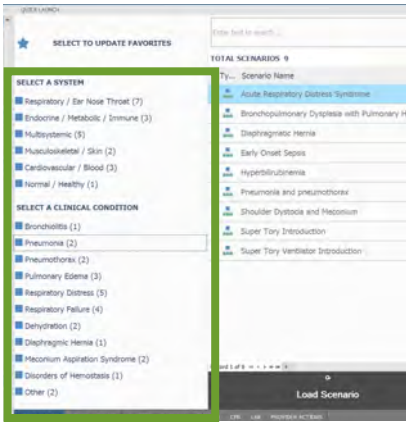
5.3 Scenario Overview

Quick Launch

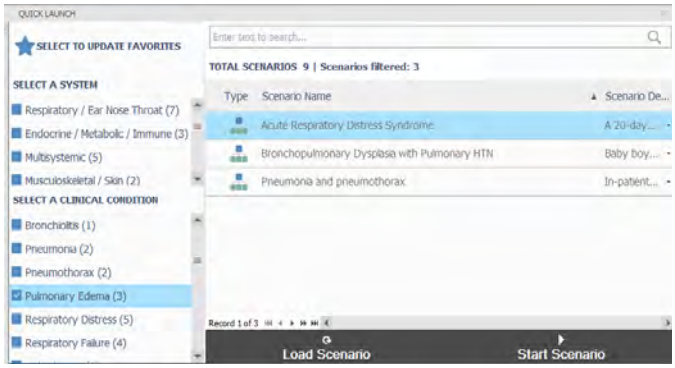
The UNI interface opens up showing the quick launch page for the scenarios. This page is used to quickly access the preprogrammed scenarios saved on each profile.



Filter the scenarios by system and clinical condition.

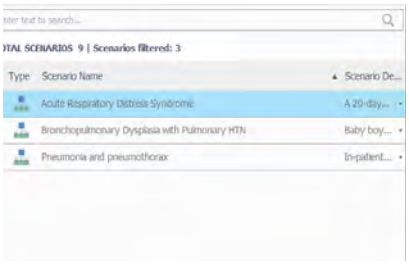


Select the scenario type and the list of scenarios will display on the right.

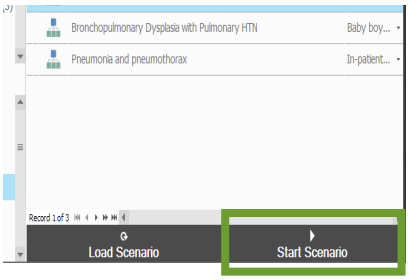


Starting a Scenario

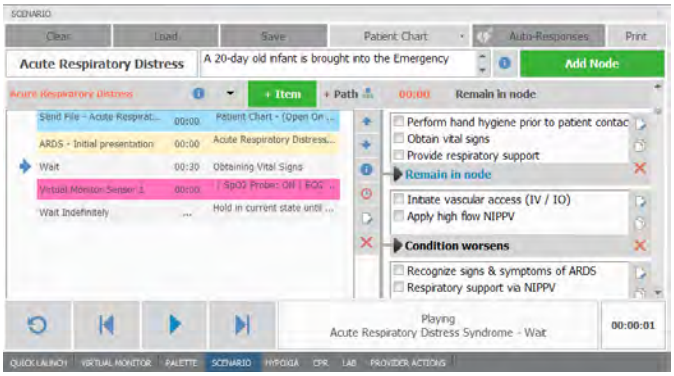
1. Select a Scenario from the "Quick Launch" page



2. Click "Start Scenario"



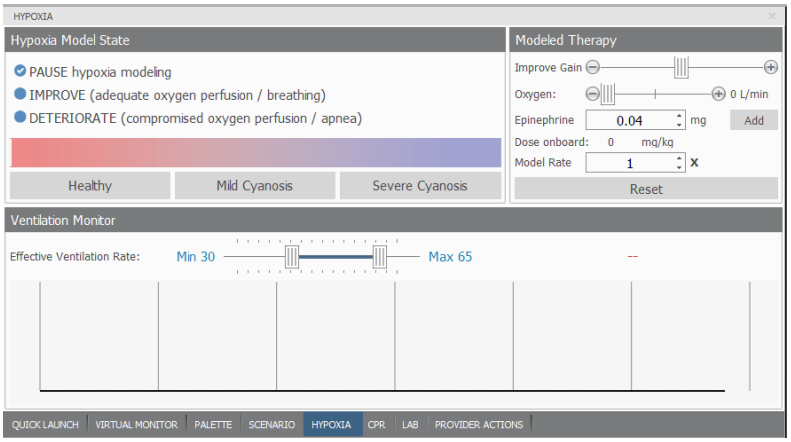
You will automatically be taken to the "Scenario" page to monitor the progress of the scenario.



For more information on scenarios and creating scenarios, refer to the UNI User Guide.

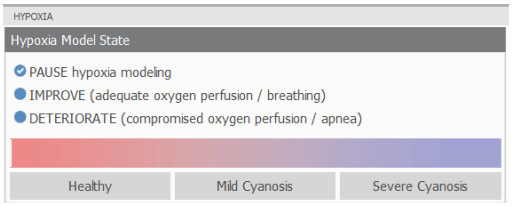
5.4 Hypoxia Model

Use the Hypoxia tab to evaluate the effectiveness of provider intervention on an apneic patient. The model adjusts the cardiac, oxygen saturation, and cyanosis settings dynamically in response to effective ventilations. The model also responds to the administration of epinephrine and oxygen.



Hypoxia Model State

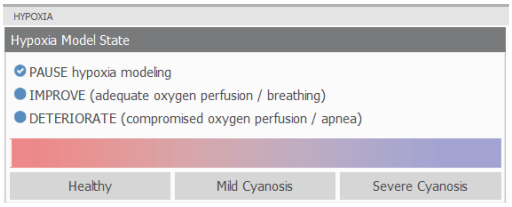
The hypoxia model options improve or deteriorate the cardiac and respiratory vital signs gradually.



Pause - Model will pause at the current state.
Improve - Trend the vital signs to a healthy state.
Deteriorate - Trend the vital signs to a severe cyanotic state.

Cyanosis Levels

Healthy - newborn has healthy oxygenation
Mild Cyanosis - newborn has mild peripheral and central cyanosis. The vital signs are beginning to deteriorate.



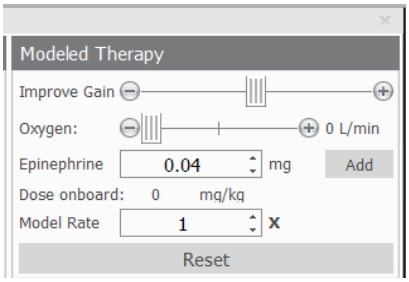
Severe Cyanosis - newborn has sever central and peripheral cyanosis. Newborn is apneic and the vital signs are worsening.

Healthy

Mild Cyanosis

Severe Cyanosis

Modeled Therapy



Improve Gain - Move the slider to adjust the cyanotic response to ventilations.

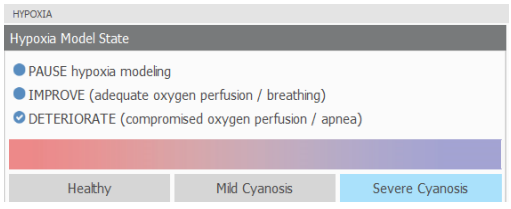
Oxygen - Adjust the slider to administer oxygen to the fetus in liters per minute.

Epinephrine - Administer epinephrine to the model. Set the epinephrine dose and then click “add”. Administering epinephrine automatically increases the heart rate.

Reset - Click “Reset” to clear the oxygen flow and the epinephrine dose onboard.

Instructions for Use

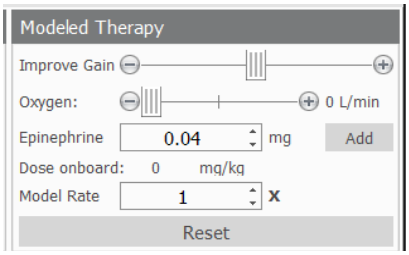
1. Select a beginning Cyanosis Level



The Hypoxia Model State will default to Deteriorate.

2. Monitor the ventilation feedback

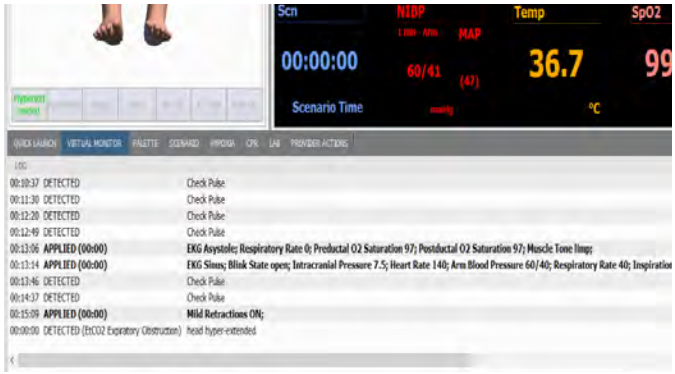
3. Provide virtual interventions with the Modeled Therapy controls



With adequate ventilations, Super Tory® will begin to improve its cyanotic state.

5.5 Event Log

UNI's event log tracks the actions done on Super Tory.



Super Tory will log the following events:

- Airway Obstruction
- Blood pressure
- Pulse Palpation (except while the limbs are moving)
- Placement of oximeter
- Intubation depth
- CPR
- CRT check
- Electrical therapy (pacing and defibrillation)

6. Scenarios

6.1 More About Scenarios

Thinking In Terms of Palette Items

As described previously, palette items represent complete or partial groups of settings that have been stored as a single item. Applying partial states will hold constant all settings that are left unspecified.

Not only does it take time to customize the palette, but a very large palette becomes difficult to navigate. So, it is desirable to minimize the number of Palette Items in each Profile. To accomplish this, an experienced facilitator should try to create items that are as generally applicable as possible and can be applied to a wide range of scenarios. The key is to only include in your palette items the settings that are directly related to the physiological event represented by that palette item.

Smart Scenarios

After reading the Details, Palette, and Scenarios sections of this guide, it should be clear how to build a scenario. You may have already tried building your own or modifying some of the factory presets. The following four guidelines will refine your ability to build the best possible scenarios.

1. How will the scenario begin?

The first thing to consider is the initial condition of the patient. Create a Palette Item to describe this condition. Make sure that this first step in the scenario is a complete state. That is, indicate a selection for each available setting on the Status/Details panel. Remember that only the settings you specify will cause a change in the simulator, and all other settings will remain constant. Therefore, by starting with a complete state, simulator's condition will always be the same when the scenario starts, regardless of how he was doing previously.

Likewise, the "transition duration" of the first step in the scenario should be zero, indicating that changes are applied immediately.

There is one point that can cause confusion and warrants further explanation. It is an extension of the above discussion of partial states. The issue is best illustrated through the following example:

Suppose that you are creating a Palette Item to start your scenario. In this case, you have decided that the patient will be apneic. The question is, "How should the lung sounds be set?"

Most people's first inclination is to set the lung sounds to "none." This is incorrect, despite apnea. Obviously, no lung sounds should be heard during apnea, but since you have already set respiratory rate to zero, none will be. (Sounds are synchronized to the breathing cycle.)

What you are really setting here when you choose a lung sound is the condition of the lungs, given respiratory drive. That is, if the patient's respiratory rate was changed from zero, what sound would be heard? Assuming that the lungs themselves are normal in this scenario, you would choose "normal" for the lung sound setting.

Then, as the scenario progresses, if the patient starts breathing, there will be no need to set the lung sound again. It will already be set. The same principle applies to the heart sound and other settings.

2. Include notes to guide the facilitator during the simulation.

It is common for scenario designers, especially those who act as facilitators, to neglect the importance of notes in the scenario. The facilitator may think that they will remember the learning objectives, patient history, and other details at the time they are ready to conduct the simulation. They usually do not, especially when revisiting a scenario months after creating it.

When you add "Wait" and "Wait Indefinitely" steps to a scenario, you have an opportunity to edit the item description. Use this description field to hold notes to the facilitator. Typically, scenario designers write notes in that space to indicate what the provider(s) or facilitator should be doing at that point.

Further, when saving the scenario, you may edit the scenario description. This is the best place to put patient history and any other longer notes and instructions.

3. Assume that providers will do the right thing.

Usually a scenario should be created with the assumption that the providers will perform correctly. As long as they do, the scenario can be allowed to continue.

Naturally, preparation must be made for what might happen to the simulator when providers deviate from expectations. The consequences of such deviations can sometimes be included in the scenario, punctuated by “Wait Indefinitely” items. In other cases, the simulation will require more direct control by the facilitator via either the Palette or Status/Details panel.

4. Choose auto-response settings based on the scenario content and the objectives.

As seen, auto-responses can be used to free the facilitators’ attention. They also enhance realism by presenting instant reactions to the care providers. On the other hand, sometimes it is not possible or desirable to determine the responses before the simulation begins. Different environments and applications call for different settings.

Some teaching practices are best done with the auto-response settings in Prompt mode. Responses must be triggered by a vigilant facilitator. Though it is slower and requires more attention, the benefit of Prompt over other modes is that the simulation can be allowed to go in any direction, and it will be possible to choose the response on a case-by-case basis.

Other learning exercises require a higher degree of automation. For such applications, most facilitators choose Auto mode for the auto-response settings. The key issue is standardized timing of symptom presentation. A consistent, repeatable simulation is essential for fair assessment of that care provider in relation to others and for the broader interpretation of results in the context of training validation studies.

When in doubt, it is best to choose Prompt mode, in which the facilitator will be given direct control of the responses as events are detected.

7. Appendix

7.1 Troubleshooting

Communication/Power Issues

Communication with the simulator cannot be established	
Battery is discharged	Plug the charger in
RF module is not connected	Connect the RF module
Trying to communicate via bluetooth	Make sure the simulator is ready for Bluetooth link. The feet turn blue as confirmation. Read Section 3.5
Trying to communicate with a different simulator	On the menu icon go to Setup> Options> Environment. Then, enter the simulator's serial number in the text box. Remove the left hand skin cover and verify the serial number on the left arm.
Simulator needs a reset	Press on the oval CRT sensor in the right foot until it turns white. If it turns off, then try to reestablish communication with UNI. If the feet turn blue, then press again on the CRT sensor until the feet turn off. You can also plug the charger for at least 20 seconds, and then unplug it to get the simulator to reset
Simulator doesn't respond	Verify the serial number

No Pulses

Pulses are activated by palpation	Make sure to press on top of the pulse and apply pressure for as long as the user wants to feel the pulse. Pulses stop 20 seconds after user release pressure
Umbilical cord is off	Plug the umbilical cord or stump in

Oximeter

Wrong placement of probe	Make sure the light is placed on the top of the hand or foot
Value is not accurate	Re-calibrate the oximeter

NIBP Not Reading Correctly

Systolic pressure too low	Minimum systolic pressure is 45 mmHg
Value is not accurate	Re-calibrate the oximeter

Intubation is not being recorded properly

ET tube may be in the esoph-agus	Extubate and intubate again
Not using a clear tube	Cut the black tip of the ET tube for a better reading

7.2 Virtual Monitor (Optional)

The Gaumard Monitors software displays newborn 's simulated vital signs in real time. The monitoring software is already installed on the virtual monitor PC.

Setup

Refer to the manufacturer's documentation included with the virtual monitor system components for important safety, installation, and start-up information before turning on the computer for the first time. To setup the virtual monitor PC:

1. Place the all-in-one PC within line of sight of the controlling computer
2. Connect the power supply
3. Connect the USB keyboard and mouse receiver
4. Turn on the computer
5. Verify the wireless link between the two computers, click the wireless icon located on the task tray.

Wireless Network Instructions with USB Router

USB Router Setup

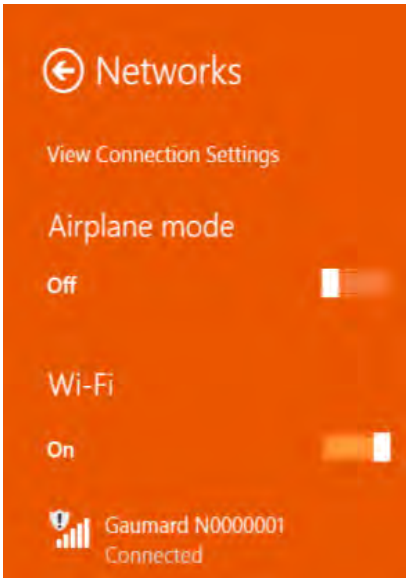
If you received the Gaumard Monitor computer with the router already attached, please proceed to step number 4:

1. Add Velcro® to TPLink router and VM.

2. Connect Router to USB power supply (Computer can be packaged with router connected).

3. Or connect the TPLink to the wall outlet.

4. Open the Wireless Network Connection on the Monitor Computer and connect to the default network, which name will be (GaumardSimulatorSerialNumber).



5. (Example) GaumardW0000001

6. Open the Wireless Network Connection on the simulator control computer and connect to the same network name (GaumardW0000001)

Configure the Vital Signs Broadcast

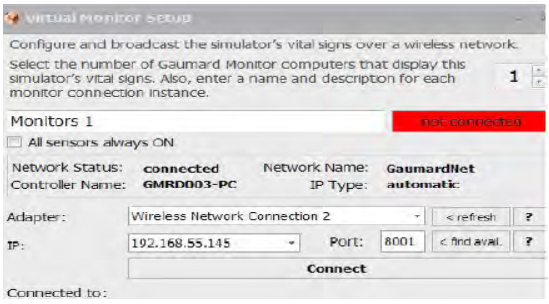
Complete next steps to configure the transmission of the vital signs information, after the wireless connection is established between both computers.

1. Verify that both computers are connected to the GaumardW0000001 network using Windows® wireless connection menu. If the computers are not connected, select the network name and click “Connect” manually.

2. Start the UNI control software on the control computer.

3. On the UNI menu bar, click the Gear> Monitors>Configuration.

4. The simulator “Virtual Monitor Setup” window is displayed now.



5. Set the adapter to “Wireless network connection” or “WIFI”.

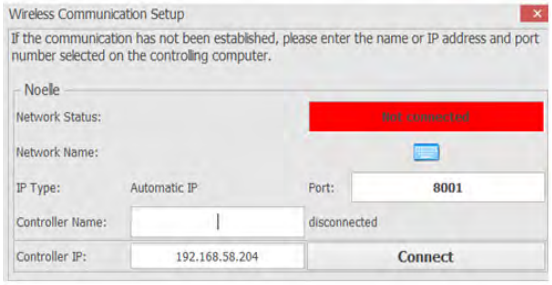
6. Verify that the IP Type is set to automatic.

7. Write down the “IP Address” and “Port number”.

8. Click “Connect” to broadcast an outgoing connection.

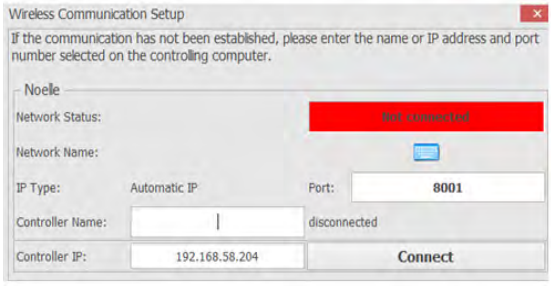
9. Start the Gaumard Monitors software on the virtual monitor PC.

10. Click the “V” menu near the top left corner, and then select “Comm Setup”.



11. Enter the IP Address from the UNI software and verify the port number.

12. Click “Connect” to accept the incoming connection.



7.3 Consumables List

Please contact Gaumard for more information regarding consumables.

Item	Color
Pneumothorax Inserts	Light
	Medium
	Dark
Scalp Inserts	Light
	Medium
	Dark
I/O Bone Inserts	Light
	Medium
	Dark
Lower Left Arm	Light
	Medium
	Dark
Lower Right Arm	Light
	Medium
	Dark

* Pricing and availability are subject to change.

8. Warranty

8.1 Exclusive One-Year Limited Warranty

Gaumard warrants that if the accompanying Gaumard product proves to be defective in material or workmanship within one year from the date on which the product is shipped from Gaumard to the customer, Gaumard will, at Gaumard's option, repair or replace the Gaumard product.

- This limited warranty covers all defects in material and workmanship in the Gaumard product, except:
  - Damage resulting from accident, misuse, abuse, neglect, or unintended use of the Gaumard product;
  - Damage resulting from failure to properly maintain the Gaumard product in accordance with Gaumard product instructions, including failure to property clean the Gaumard product; and
  - Damage resulting from a repair or attempted repair of the Gaumard product by anyone other than Gaumard or a Gaumard representative.

This one-year limited warranty is the sole and exclusive warranty provided by Gaumard for the accompanying Gaumard product, and Gaumard hereby explicitly disclaims the implied warranties of merchantability, satisfactory quality, and fitness for a particular purpose. Except for the limited obligations specifically set forth in this one-year limited warranty, Gaumard will not be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory regardless of whether Gaumard has been advised of the possibilities of such damages. Some jurisdictions do not allow disclaimers of implied warranties or the exclusion or limitation of consequential damages, so the above disclaimers and exclusions may not apply and the first purchaser may have other legal rights.

This limited warranty applies only to the first purchaser of the product and is not transferable. Any subsequent purchasers or users of the product acquire the product "as is" and this limited warranty does not apply.

This limited warranty applies only to the products manufactured and produced by Gaumard. This limited warranty does not apply to any products provided along with the Gaumard product that are manufactured by third parties. For example, third-party products such as computers (desktop, laptop, tablet, or handheld) and monitors (standard or touch-screen) are not covered by this limited warranty. Gaumard does not provide any warranty, express or implied, with respect to any third-party products. Defects in third-party products are covered exclusively by the warranty, if any, provided by the third-party.

- Any waiver or amendment of this warranty must be in writing and signed by an officer of Gaumard.
  - In the event of a perceived defect in material or workmanship of the Gaumard product, the first purchaser must:
  - Contact Gaumard and request authorization to return the Gaumard product. Do NOT return the Gaumard product to Gaumard without prior authorization.
  - Upon receiving authorization from Gaumard, send the Gaumard product along with copies of (1) the original bill of sale or receipt and (2) this limited warranty document to Gaumard at 14700 SW 136 Street, Miami, FL, 33196-5691 USA.

If the necessary repairs to the Gaumard product are covered by this limited warranty, then the first purchaser will pay only the incidental expenses associated with the repair, including any shipping, handling, and related costs for sending the product to Gaumard and for sending the product back to the first purchaser. However, if the repairs are not covered by this limited warranty, then the first purchaser will be liable for all repair costs in addition to costs of shipping and handling.

8.2 Gaumard Cares Service Plans

In addition to the standard one year of coverage we offer a range of service plans through our Gaumard Cares program. For more information about Gaumard Cares Service Plans please contact customer service.

9. Contact Gaumard

9.1 Contacting Technical Support

Before contacting Technical Support you must:

1. Have the simulator's serial number
2. Have access to the simulator for possible troubleshooting

Technical Support:

Email: support@gaumard.com
USA: 800-882-6655
INT: 01-305-971-3790

9.2 General Information

Sales and Customer Service:

E-mail: sales@gaumard.com
USA: 800-882-6655
INT: 01-305-971-3790
Fax: 305-971-3790

Post:

Gaumard Scientific
14700 SW 136 Street
Miami, FL 33196-5691
USA

Office Hours:

Monday-Friday, 8:30am - 7:30pm EST

Gaumard®, ZOE®, Michelle®, Mike®, PEDI®, Susie Simon®, Susie®, Simon® Code Blue®, SIMA Models®, SIMA GYN/AID®, Virtual Instruments®, Codemaker®, Code Blue®, NOELLE®, Simulation Made Easy™, HAL®, eCPR™, Zack™, RITA™, Chloe™, Seatbelt Susie™, Krash Kids™, Premie™, UNI™, Omni®, Omni® 2, Super Tory®, SmartSkin™ are trademarks of Gaumard Scientific Company.

Always dispose of this product and its components in compliance with local laws and regulations.

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