SUSIE® AND SIMON® NEWBORN

CPR and Trauma Care Simulator

S102

Gaumard®
Simulators for Health Care Education

Contents

End User License Agreement

This is a legal agreement between you, the end user, and Gaumard® Scientific Company, Inc. ("Gaumard"). This software is protected by copyright laws and remains the sole property of Gaumard. By installing the CPRLink (the "Software") media, you agree to be bound by the terms of this agreement. If you do not agree to the terms of this agreement, promptly return the uninstalled media and accompanying items to Gaumard at the address indicated below.

1. Grant of License. Gaumard hereby grants to you (an individual or institution) the right to install and activate the Software on one computer for use with one Interactive patient SUSIE and SIMON Newborn system. The software may also be installed on any number of other computers at the same institution so that students may access the learning resources. One copy of the software may be made for backup purposes. You may not network this Software, or allow multiple users unless you purchased a multi-user workstation license. Sharing this Software with other individuals or allowing other individuals to view the contents of this Software is in violation of this license.

2. Copyright. The Software is owned by Gaumard and protected by United States copyright laws and international treaty provisions. Therefore, you must treat this Software like any other copyrighted material. You may not make this Software or copies thereof available in any manner or form or use, copy or transfer the Software, in whole or in part, except as provided herein.

3. Other Restrictions. You may not rent or lease this Software to any other party. You may not alter, merge, modify, adapt, reverse engineer, decompile or disassemble the software, or disclose the contents of this Software to any other party.

4. Electronic Transmission of Software. If you received the Software by electronic transmission or by Internet delivery, by installation of the Software, you acknowledge that you have read and understand this license agreement and agree to be bound by its terms and conditions.

5. Term of Agreement. The term of this Agreement and the license granted to you pursuant hereto shall commence upon installation of this Software. This Agreement and the license granted herein may otherwise be terminated by Gaumard in the event that you are in breach of any provision of this Agreement. In the event of termination, you agree to immediately return this Software, accompanying items, and any copies thereof to Gaumard.

6. LIMITED WARRANTY

(A) THE CD-ROM MEDIA (THE "MEDIA") WHICH CONTAINS THIS SOFTWARE IS WARRANTED, FOR A PERIOD OF 30 DAYS FROM THE DATE OF PURCHASE, TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP. ELECTRONIC TRANSMISSION IS WARRANTED TO BE FREE FROM DEFECTS AT THE MOMENT OF TRANSMISSION. YOUR SOLE AND EXCLUSIVE REMEDY, AND GAUMARD'S SOLE LIABILITY, IS TO REPLACE THE DEFECTIVE MEDIA OR TO REPEAT THE ELECTRONIC TRANSMISSION PROVIDED THAT YOU NOTIFY GAUMARD IN WRITING OF SUCH DEFECT OR DEFECTIVE TRANSMISSION AND RETURN THE DEFECTIVE MEDIA, IF ANY, DURING THE 30-DAY WARRANTY PERIOD.

(B) EXCEPT AND TO THE EXTENT EXPRESSLY PROVIDED IN PARAGRAPH (A), THE SOFTWARE AND ACCOMPANYING WRITTEN MATERIALS ARE PROVIDED ON AN "AS IS" BASIS, WITHOUT ANY WARRANTIES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY GAUMARD, ITS DEALERS, DISTRIBUTORS, AGENTS OR EMPLOYEES SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY, AND YOU MAY NOT RELY ON ANY SUCH INFORMATION OR ADVICE. GAUMARD DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE OR THE RESULTS OF USE, OF THE SOFTWARE OR WRITTEN MATERIALS IN TERMS OF CORRECTNESS, ACCURACY, RELIABILITY, CURRENTNESS, OR OTHERWISE, AND THE ENTIRE RISK AS TO THE RESULTS AND PERFORMANCE OF THE SOFTWARE IS ASSUMED BY YOU. IF THE SOFTWARE OR WRITTEN MATERIALS ARE DEFECTIVE, YOU AND NOT GAUMARD OR ITS DEALERS, DISTRIBUTORS, AGENTS, OR EMPLOYEES, ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION OTHER THAN EXPRESSLY DESCRIBED ABOVE.

(C) NEITHER GAUMARD NOR ANYONE ELSE WHO HAS BEEN INVOLVED IN THE CREATION, PRODUCTION OR DELIVERY OF THIS PRODUCT SHALL BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, AND THE LIKE) ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT OR RELATED TO THIS AGREEMENT EVEN IF GAUMARD HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. GAUMARD SHALL NOT BE LIABLE TO YOU FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OR LOST PROFITS ARISING OUT OF OR RELATED TO THIS AGREEMENT OR YOUR USE OF THE SOFTWARE AND/OR THE RELATED DOCUMENTATION, EVEN IF GAUMARD HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL GAUMARD'S LIABILITY HERE UNDER, IF ANY, EXCEED THE PURCHASE PRICE PAID BY YOU FOR THE SOFTWARE.

ALL RIGHTS NOT EXPRESSLY GRANTED IN THIS LICENSE AGREEMENT ARE RESERVED BY GAUMARD.

ACKNOWLEDGMENT

BY INSTALLATION OF THIS SOFTWARE, YOU ACKNOWLEDGE THAT YOU HAVE READ AND UNDERSTAND THE FOREGOING AND THAT YOU AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS. YOU ALSO AGREE THAT THIS AGREEMENT IS THE COMPLETE AND EXCLUSIVE STATEMENT OF AGREEMENT BETWEEN THE PARTIES AND SUPERSEDES ALL PROPOSED OR PRIOR AGREEMENTS, ORAL OR WRITTEN, AND ANY OTHER COMMUNICATIONS BETWEEN THE PARTIES RELATING TO THE LICENSE DESCRIBED HEREIN.

Care and Cautions

Overall Warnings

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

GENERAL

Ball point pens, ink and markers permanently stain the skin.

Do not wrap this or any other Gaumard product in newsprint.

Indelible marks made with ballpoint pens, ink or marker cannot be removed.

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.

Vein tubing contains latex which may cause allergic reactions. Users allergic or sensitive to latex should avoid contact. Discontinue use of this product and seek medical attention if an allergic reaction occurs.

Replacement parts are available from Gaumard Scientific or from your Distributor.

PROCEDURES

Do not attempt to intubate without lubricating the airway adjunct with silicone lubricant (provided). Failure to do so will make intubation very difficult and is likely to result in damage.

Mouth to mouth resuscitation without a barrier device is not recommended, as it will contaminate the airway.

Treat SUSIE and SIMON Newborn with the same precautions that would be used with a real patient.

STORAGE

Store SUSIE and SIMON Newborn in a cool, dry place.

Extended storage above 85 degrees Fahrenheit (29 Celsius) will cause the SUSIE and SIMON Newborn to soften and slowly warp.

Do not stack or store heavy materials on top of the carton.

It is acceptable to operate SUSIE and SIMON Newborn at an ambient temperature of 95 degrees Fahrenheit (35 Celsius).

CLEANING

SUSIE and SIMON Newborn should be cleaned with a cloth dampened with diluted liquid dishwashing soap.

Remove all traces of any lubricant.

Do not clean with harsh abrasives.

Do not use povidone iodine on the simulator.

Dry thoroughly.

SUSIE and SIMON Newborn is "splash-proof" but not water-proof. Do not submerge or allow water to enter the interior of the simulator.

Getting Started

Overview

SUSIE and SIMON Newborn is a life support training simulator equipped with the following features:

CONTROLLER

- Powerful yet intuitive user controller and interface software
- CPR training

APPEARANCE

- Articulated head, neck, jaw, arms and legs

BREATHING

- Bilateral lung expansion with realistic chest rise
- Accommodates assisted ventilation
- Ventilation is measured and logged

CIRCULATION

- Chest compressions are measured and logged
- Optional radial pulse
- Simulated brachial, femoral and popliteal pulses

SIMULATOR

- Heart, lungs and ribs
- Medium skin tone is the standard SUSIE and SIMON Newborn color; light or dark skin is available at no extra cost.
- Optional Intraosseous access at tibia
- Optional IV training arm
- Optional femoral venous access
- Physical size is 50th percentile at 40 weeks gestational age
- Soft tongue

OTHER

- One year limited warranty

Terminology

Facilitator - the person conducting the simulation; an instructor or lab staff member.

Provider - a person participating in the simulation as a healthcare provider.

Code Blue® –feature of Omni to monitor, train and evaluate CPR.

CPRLink™ - the application to monitor, train and evaluate CPR on a PC.

Equipment Set Up

Power Supply

Connect the power supply to the power input located on Simulator's left side, and then connect the power supply to the wall outlet.

Always operate SUSIE and SIMON Newborn with the power supply connected.

Omni™ Setup

Omni controls SUSIE and SIMON Newborn with the touch of a button.

1. Connect the communication cable to Simulator.

2. Connect the other end of the communication cable to Omni.

A startup screen is shown while Omni is detecting the SUSIE and SIMON Newborn features.

After the start up screen, Omni will automatically proceed to the main screen.

WARNING:

Do not connect SUSIE and SIMON Newborn or Omni to a computer, LAN network or unauthorized diagnostic equipment using the communication cable (Ethernet cable). Doing so will cause serious damage to the equipment.

Using Omni™

Main Screen

The Omni main screen is divided into three sections which are, Feedback Graphics, Current Settings and Navigation Menus. Pressing each button will display each menu item in detail.

FEEDBACK GRAPHICS

Monitor and evaluate depth and cadence of compressions and ventilations in real time.
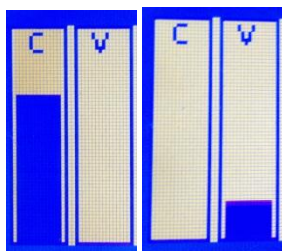

CURRENT SETTINGS

Current settings information is listed in the center of the screen.
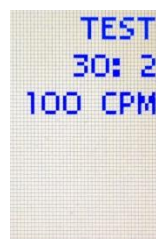
Navigation Menus

Edit SUSIE and SIMON Newborn settings using the navigation menus. Select a menu item by pressing the soft key buttons located on the right side of the controller. Each menu has additional submenus or toggle selection. Use the submenus to decrease, increase, accept, or cancel values. Use the toggle selection to switch between available options in the menu.
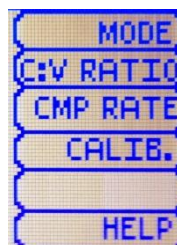
SUSIE and SIMON Newborn Features

Airway

SAFE CPR INDIVIDUAL DISPOSABLE AIRWAYS

<div style="border: 1px solid red">

WARNING:

Always use disposable airways provided by Gaumard Scientific Company. Products manufactured by other suppliers may have different compliance and/or volume, and are not compatible with the simulator or Omni.

</div>

INSTRUCTIONS FOR REMOVING AND REPLACING DISPOSABLE AIRWAY
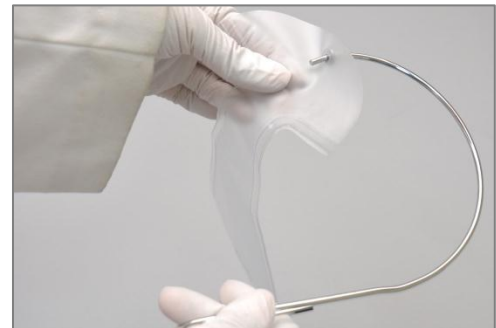
1. Release the Velcro strip and lift the chest skin away from the chest cavity.

2. Remove the ribcage.

3. Remove the disposable airway by grasping and pulling it away from simulator. Each student should have a disposable airway.

4. Thread the introducer through the hole at the end of the disposable airway.

5. With the head tilted back, ease the introducer up through the neck using an upward curving motion.

6. Ease the introducer through the mouth, and straighten the disposable airway within the chest cavity and airway.

7. Remove the introducer.

8. Accommodate the disposable airway.

9. Replace the ribs in the chest cavity, on top of the disposable airway. This will allow simulation of realistic chest rise.

10. Reattach the skin to the upper torso.

Breathing

PULMONARY VENTILATION

Practice BVM techniques using an infant sized mask having a thick seal. Bilateral lung expansion is perceived with realistic chest rise.

Train CPR with SUSIE and SIMON Newborn and obtain feedback information via the Omni controller on the cadence and depth of chest compressions and airway ventilations.

Circulation

PALPABLE PULSES

SUSIE and SIMON Newborn is equipped with manual right (brachial, femoral) and left (brachial, popliteal) pulses.

Optional radial and tibial pulses.

ACTIVATING THE PULSES

Generate palpable pulses using the squeeze bulb.

OPTIONAL IV ACCESS

The Pediatric Injection Training Arm simulates the arm of a newborn child. It is an effective training tool for intravenous and certain arterial exercises. It is only to be used as part of an approved program for patient care.

The training arm contains anatomically located venous and arterial grooves which are fitted with soft latex tubes closely simulating the consistency of the veins. A translucent, pliable latex skin, which is removable and washable, is stretched over the training arm.

The IV arm provides:

- A medial venous antecubital vein for IV exercises

- Radial and brachial pulse points

- Two veins in the dorsum of the hand for additional intravenous training techniques

Applying pressure via the syringe permits the veins to stand out, simulating a clenched fist or a tourniquet situation. Release of the pressure simulates collapsed veins. Use of the syringe permits the palpability of the veins to be varied as seen in routine hospital or emergency situation.

The instructor may ask the student to access the veins initially using a 23 gauge needle set without the use of fluids. Once the student is more skilled, water can be added to the syringe. Later one may elect to use the synthetic blood concentrate.

Flush the IV arm following each training session.

The IV training kit includes a blood dispensing syringe, synthetic blood concentrate and a spare arm skin.

Use a 23 to 25 gauge needle set.

FILLING IV SYSTEM

Fill the IV system with the tubing located on the right shoulder of the simulator.

Fill Tube 1   Drainage Tube 2
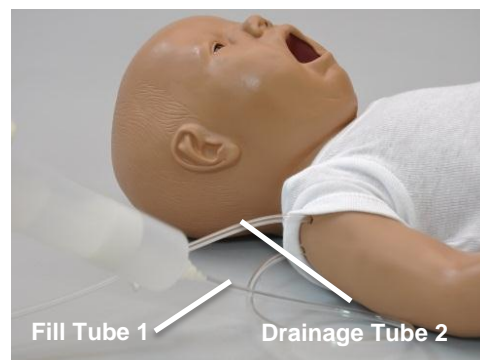
1. Place end of drainage tube **2** into a container and open the adjustable clamp.

2. Fill the dispensing syringe with fluid.

3. Connect the syringe to fill tube **1** and release the fluid. Allow fluid to flow through the system and into the drainage container.

4. Close the adjustable clamp of drainage tube **2**.

5. Remove the syringe from the filling tube.

DIRECTIONS FOR USE

For IV infusion simulations, place the end of drainage tube into a container and open the adjustable clamp. Leave clamp open until the IV infusion is stopped to prevent damage to simulator.

Setting up an IV line is an invasive procedure requiring an aseptic technique. The normal procedure for setting up an IV line using the SUSIE and SIMON Newborn is as follows:

1. Apply desired pressure to the veins.

2. Squeeze the appropriate vein site and clean the skin with alcohol. Avoid use of povidone-iodine, as this will cause the skin to become discolored and brittle.

3. Omit tourniquet use if possible. If required, apply the tourniquet a few inches above the selected site.

4. Simulate anesthetization of the skin if needed.

5. Select a 22 gauge cannula and 23 gauge needle. Large needles will damage the veins.

6. Apply finger pressure to the vein distal to the puncture site.

7. Puncture the skin and the underlying vein with the needle. The bevel of the needle should be up and the needle should be angled at a 20-30 degree angle.

8. Stabilize the entry site as desired.

9. Apply ointment and dressing and remove tourniquet, if used.

> **WARNING:**
>
> 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.
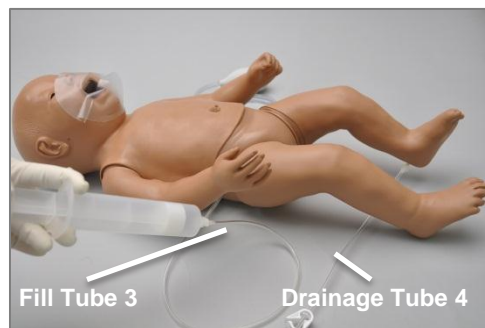
MAINTENANCE

1. Remove the skin starting with shoulder. Use talcum powder on the skin to ease movement. Remove the skin, exposing veins and arteries.

> **Gentle heating of the vinyl (with a hair dryer or heat gun) will make removal easier.**

2. Assemble in reverse order, being certain to apply powder to the inside of the skin before rolling it on.

FEMORAL VENOUS ACCESS

During CPR, the preferred access site is the largest and most accessible site that does not interrupt resuscitation of the victim. Venous access can be obtained through the intraosseous route, or the femoral, internal jugular, external jugular, or subclavian veins. Of the latter four sites, the femoral is preferred because like the intraosseous site, it provides less interference with the resuscitation efforts.
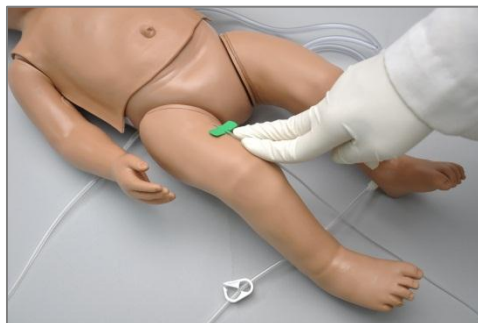
FILLING THE FEMORAL VENOUS AND INTRAOSSEOUS ACCESS

Fill the femoral venous and intraosseous access system with the tubing located on the right side of the SUSIE and SIMON Newborn (**tube 3**).

Fill Tube 3   **Drainage Tube 4**
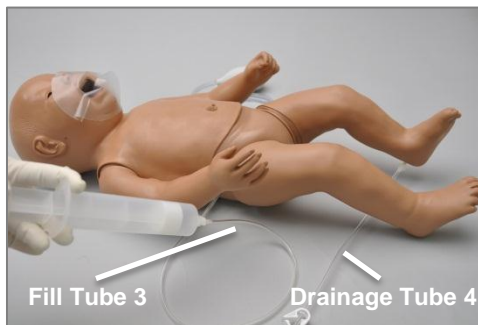
To fill the femoral vein with fluid, follow the instructions listed below.

1. Place the end of **tube 4** into a drainage container and open the adjustable clamp.

2. Fill the fluid dispensing syringe with water or simulated blood.

3. Connect the syringe to **tube 3** and release the water. Allow water to flow through the system and into the drainage container.

4. Once the water is seen draining, close the adjustable clamp.

<div style="border: 1px solid red;">

WARNING:

Always drain and flush the reservoirs after simulation.

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.

</div>

Systemic

OPTIONAL INTRAOSSEOUS ACCESS

Intraosseous access is used for the infusion of fluids, blood and/or drugs directly into the bone marrow of the tibia or other large bone. Setting up an intraosseous access line is an invasive procedure that can be simulated with the Simulator's lower right leg.

The intraosseous access kit includes: modified tibia bones with filling and drainage tubing, a fluid dispensing syringe and synthetic blood concentrate.

FILLING THE FEMORAL VENOUS AND INTRAOSSEOUS ACCESS

Fill the femoral venous and intraosseous access system with the tubing located on the right side of the SUSIE and SIMON Newborn (**tube 3**).

Fill Tube 3   Drainage Tube 4

To fill the femoral vein with fluid, follow the instructions listed below.

5. Place the end of **tube 4** into a drainage container and open the adjustable clamp.

6. Fill the fluid dispensing syringe with water or simulated blood.

7. Connect the syringe to **tube 3** and release the water. Allow water to flow through the system and into the drainage container.

8. Once the water is seen draining, close the adjustable clamp.

INSTRUCTIONS FOR USE

The following procedure describes how to use the I/O access feature:

1. Palpate tibial tuberosity.

2. Clean the area with alcohol. Avoid the use of povidone-iodine, as this will discolor the simulator.

3. Simulate anesthetization of the area if needed.

<div style="background: #e0e0e0;">

The needle recommended for this procedure is a 16 gauge disposable bone marrow aspiration needle.

</div>

4. Insert bone aspiration needle below tibial tuberosity. Note the sharp decrease in needle resistance as it passes into the bone marrow cavity

5.

REPLACING THE TIBIA

1. To replace the tibia bone, place the end of **tube 4** into a drainage container and open the adjustable clamp.

2. Drain all the fluids from the system.

6. Remove the tibia cover.

7. Gently remove the tibia bone insert.

8. Replace tibia with a new insert or rotate to use the other end of the bone.

9. Re-attach tibia cover.

<div style="border: 1px solid red;">

WARNING:

Always drain and flush the reservoirs after simulation.

</div>

Patient Care

BANDAGING

The fingers and toes of this SUSIE and SIMON Newborn are separated to permit bandaging exercises. The surface of the manikin is smooth and resistant to water, oil, and liniments.

EYES/OPHTHALMOLOGIC EXERCISES

The head has separately inset eyes, permitting the following exercises:

- Administration of orbital medicines, including instillation of drops or ointment into the conjunctival sac

- Removal of foreign bodies

- Eye irrigation

TONGUE

The SUSIE and SIMON Newborn is supplied with a soft tongue.

RANGE OF MOVEMENT

The arms and legs are soft and rotate within the torso body. The head, neck, and jaw articulate.

CPR Tools

CODE Blue®

Code Blue is a CPR training tool incorporated in the Omni controller. It was designed to help teach CPR by monitoring cadence and depth of cardiac compressions and airway ventilations in real time.

> **WARNING:**
>
> Only perform mouth to mouth ventilation with the individual disposable airway in place.

CODE BLUE COMPONENTS

Code Blue consists of the Feedback Graphics and specialized control menus. The menus are:

- CPR operational mode - TEST or COACH mode

- C:V Ratio - customize the compression to ventilation ratio to match correct guidelines

- Compression/Ventilation Rate - adjust the number of compressions and ventilations per minute

Furthermore, Code Blue can be calibrated to a specific standard to assess compressions and ventilations.

CODE BLUE MENUS

MODE MENU

Toggle between **COACH** and **TEST** modes. The **COACH** mode generates audible tones to coach CPR ratio. A high-pitched beep signals the care provider to perform a compression and a low pitched-beep signals a ventilation. Toggle to the **TEST** mode to perform CPR without the audible cues.

C : V RATIO Menu (COMPRESSION TO VENTILATION RATIO)

Adjust the compression to ventilation ratio using the **+** and **-** buttons. Press **OK** to save the changes and return to previous screen. The default value for the C:V Ratio is 30 compressions to 2 ventilations.

CMP/VNT RATE Menu (COMPRESSION OR VENTILATION RATE)

The default value for the compression rate is 100 compressions per minute. Adjust rate using the '+' and '-' buttons. Press OK to save the changes and return to previous screen.

CALIBRATION MENU

Press CALIB. to access additional menu selections.

CALIBRATING CHEST COMPRESSIONS (C CAL.)

SUSIE and SIMON Newborn comes pre-calibrated to current CPR guidelines at time of manufacture. If the CPR guidelines change, calibrate the sensors inside the SUSIE and SIMON Newborn using this option.

Set the standard against which compression will be evaluated during the exercise.

Calibrating chest compressions:

1. Select **C CAL.**

2. Press **START** to begin the calibration procedure.

   Omni will ask you to perform several correct chest compressions. The facilitator should follow the text cue on the screen to perform just one compression at a time until finished.
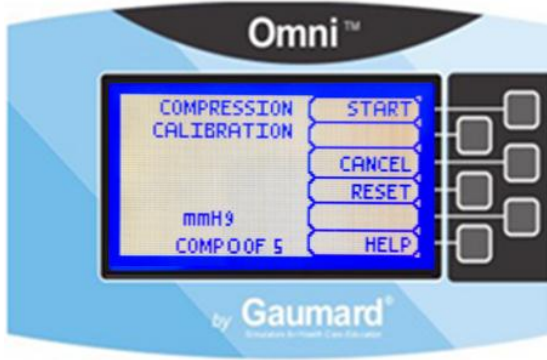
When Omni is ready to calibrate it will display **COMPRESS**.

3. Perform a correct compression.

   Follow the text cue on the screen to perform the remaining four compressions. When the calibration is complete Omni will display **DONE**.

4. Press **SAVE**.

CALIBRATING AIRWAY VENTILATIONS (V CAL.)

Calibrate the sensors inside the SUSIE and SIMON Newborn using this option. Set the standard against which ventilation will be evaluated during the exercise.

Calibrating airway ventilations:

1. Select **V CAL.**

2. Press **START** to begin the calibration procedure.

   Omni will ask you to perform a number of correct airway ventilations. The facilitator should follow the text cue on the screen to perform just one ventilation at a time, until finished.

3. When Omni is ready to calibrate it will display **VENTILATE**.

4. Perform a ventilation.

   Follow the text cue on the screen to perform the remaining four ventilations. When the calibration is complete Omni will display **DONE**.

5. Press **SAVE**.

RESETTING OMNI'S PRESSURE SENSOR

It is recommended that the Omni's pressure sensor is reset at altitudes greater than 1000 ft. to avoid inaccurate compressions and ventilations readings. **Perform the sensor reset procedure only as part of the initial calibration process.**

1. Select **RESET** within the compression / ventilation calibration menu.
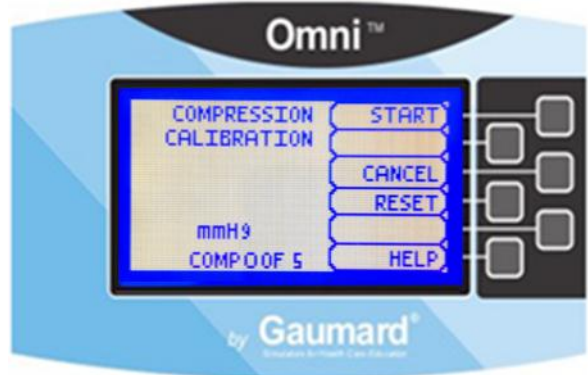
After resetting the sensor, Omni will display **DONE**.

2. Select **SAVE** to finish.

BACK

Return to previous screen.

HELP

The help window provides access to global settings such as backlight time and Omni/SUSIE and SIMON Newborn serial number.

Backlight

The default value for Omni's backlight timer is 10 minutes. After 10 minutes the backlight will turn off.

To increase the backlight duration, adjust the backlight timer with the plus or minus sign. Press **OK** to accept the changes.

Serial Number

View Omni and SUSIE and SIMON Newborn serial number. Press OK to return to the HELP menu.

CPRLink™

CRPLink is an application that enables monitoring and logging of compressions and ventilations performed in real time by the user on a PC.
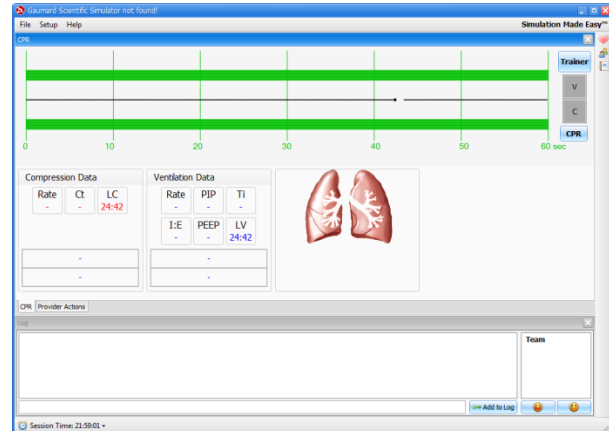
This software aims to provide additional testing and teaching tools for CPR using an interface to display a waveform graph of the compressions and ventilations.

CPRLINK MINIMUM SYSTEM REQUIREMENTS

- Operating System: Windows XP or Windows 7

- Computer and processor: 1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor

- Memory: 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)

- Hard disk: 4 gigabyte (GB) available disk space

- Install media: CD/DVD Drive

- I/O Ports: USB port

SETUP
CPRLINK SOFTWARE INSTALLATION

If installing the CPRLink software for the first time, follow the instructions listed below:

1. Insert the CPRLink installation CD in your PC.

2. Double click the installation file on the enclosed media.

   In case the auto run is disabled, open My Computer. In the My Computer window, open the drive that contains the CPRLink CD. Double-click on CPRLink and locate setup. Double-click on setup to start the installation.

3. Follow the instructions on your screen.

EQUIPMENT SET UP

1. Connect the power supply to the power input on the simulator, and then connect the power supply to the wall outlet.

2. Connect the communication cable to the SUSIE and SIMON Newborn and to Omni.

3. Connect the USB cable to Omni and to the USB port of your PC.

Omni will display a heart icon on the lower left side of the screen, when a connection with the PC has been established.
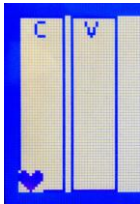
> **WARNING:**
>
> Do not start the CPRLink application until Omni is connected to the PC.

STARTING CPRLINK

Double click on the CPRLink icon on the desktop of your PC.
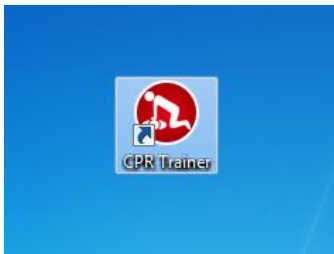
CPR SCREEN

The CPRLink main screen contains the drop down menus used to save and clear session logs, change the application options, and access the program's help.

The main screen also contains the controls used to evaluate compressions and ventilations.
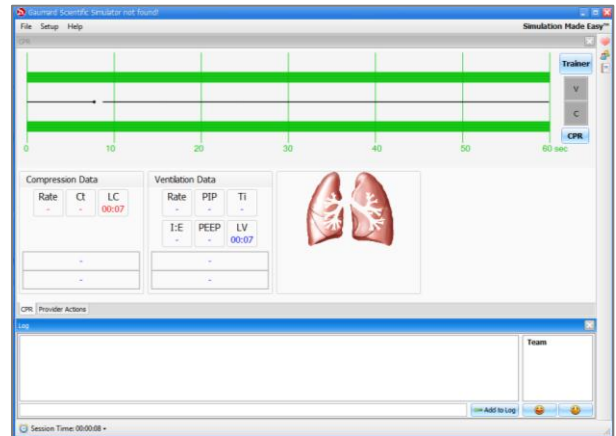
Open the CPR evaluator by clicking on the shortcut icon located on the upper right side of the application.
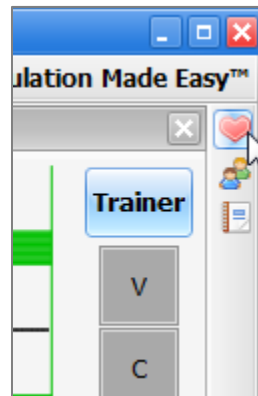
The provider performance indicator boxes are located on the right. The V (ventilation) and C (compression) box fill color changes between the following states:
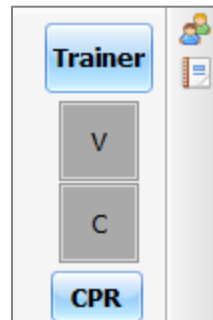
- **Grey** - No intervention was detected.
- **Yellow** - Compression was too shallow. Ventilation was too weak.
- **Green** - Compression/ventilation was performed correctly.
- **Red** - Compression was too deep. Ventilation was too strong.

Compression and ventilation data is displayed at the bottom of the window as CPR is performed by the provider.

COMPRESSION DATA

- **Rate** - Rate of compressions in real time.
- **Ct** (Compression time) - Average length of each compression in seconds.
- **LC** (Last Compression) - Time elapsed since the last compression performed.

VENTILATION DATA

- **Rate** - Ventilation rate in real time.
- **PIP** - (approx.) Peak Inspiratory Pressure
- **Ti** - Time inspiration
- **I:E** - Inspiratory: Expiratory ratio
- **PEEP** - (approx.) Positive End Expiratory Pressure.
- **LV** (Last Ventilation) - Time elapsed since the last ventilation performed.

TRAINER

The CPRLink application generates visual and audible cues of the compression to ventilation ratio programmed in the CPR Options menu. When the **Trainer** button is clicked, the V (ventilations) and C (compressions) box borders blink to indicate the correct reference CPR rate. A high-pitched beep signals the care provider to perform a compression and a low pitched-beep signals a ventilation.
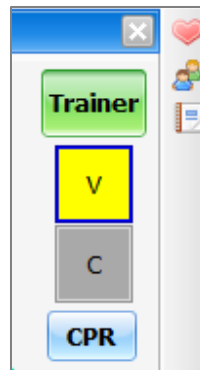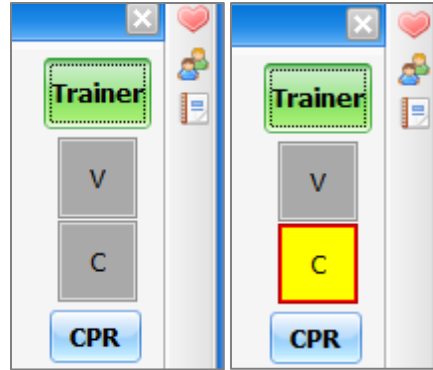
PERFORMANCE EXAMPLES

Compressions are too shallow. Most waveform peaks do not reach the green zone. Compression indicator is yellow.
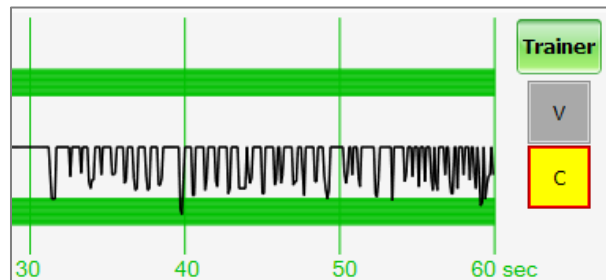
Compressions are too deep. Waveforms peaks mostly exceed the green zone. Compression indicator is red.
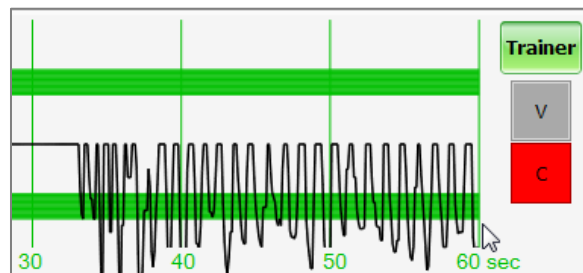
Compressions are performed correctly. Waveform peaks are mostly inside the green zone.
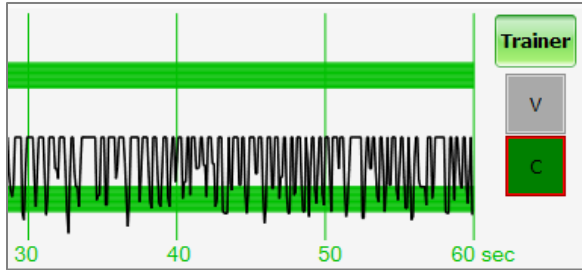
Ventilations are too shallow. Waveform peaks do not reach the green zone.
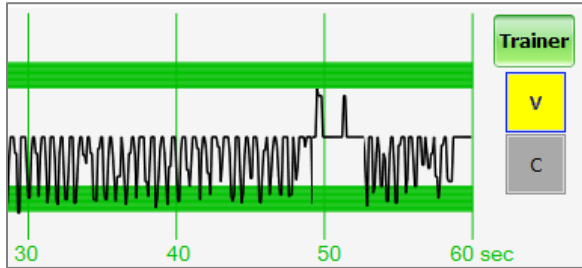
Ventilations are too strong. Waveform peaks exceed the green zone.
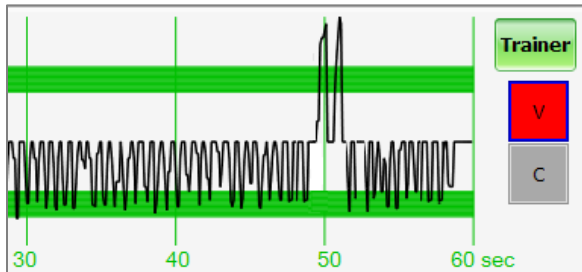
Ventilation was performed correctly. Waveform peak is inside the green zone.
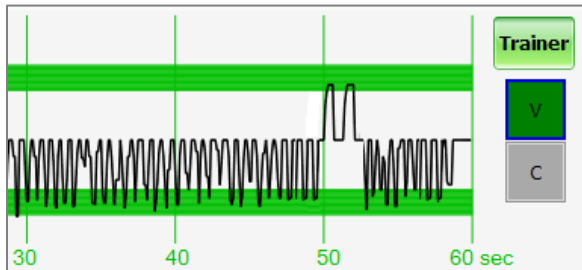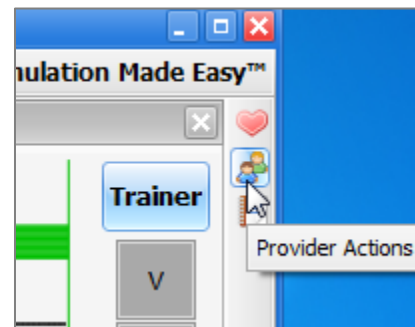

PROVIDER ACTIONS SCREEN

The provider actions screen allows the facilitator to keep track of every event during a session. It automatically creates an entry whenever a detected event occurs. Also, the facilitator can log provider actions with a simple click.
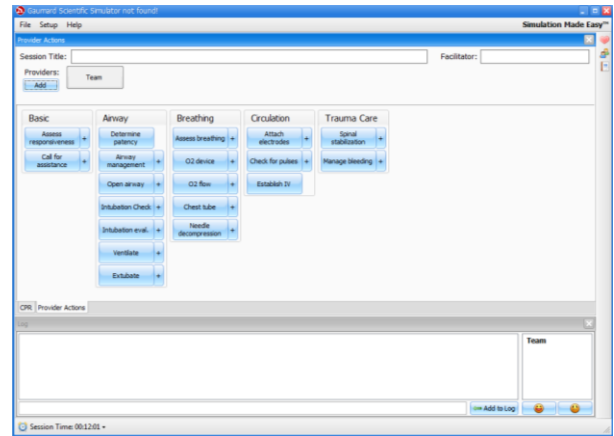
Open the provider actions screen by clicking on the shortcut icon located on the upper right side of the application.

The Provider Actions screen consists of four different areas (from top to bottom): session info, team logging buttons, provider action buttons, and text log.

SESSION INFO

The header section consists of the 'Session Title' and 'Facilitator' fields at the top of the Team Logging section. Type the session title and facilitator name directly into the note field. It serves as assisting with record keeping purposes when a report is saved or printed.

TEAM LOGGING

The Team Logging feature allows the facilitator to designate which member of the team performed a particular action. The Team Logging section is right above the Provider Actions section.

First, the facilitator should add all providers in the team, one by one, by clicking the Add button and filling out the Add Provider dialog box.
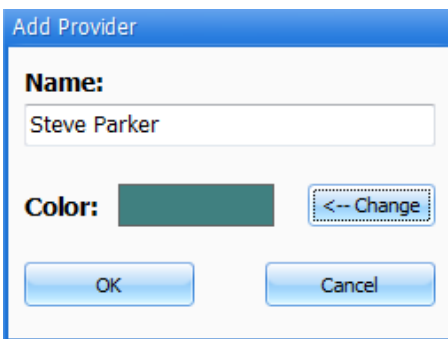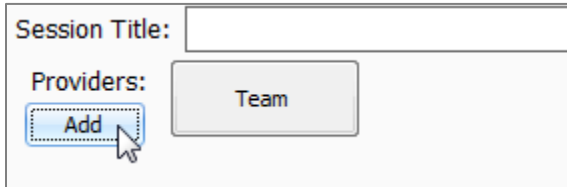

A colored button is inserted on the Team Logging region for the provider just added. There can be up to six different providers, each with a corresponding button. Every time one of the provider buttons is clicked, that person becomes the active provider. To indicate the active provider, the vertical bars on each side of the Log page will match the color chosen for that person.
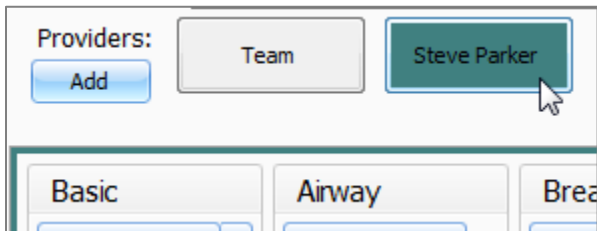
On the Log Page image, for example, the provider "Steve" is the active provider, so the vertical bars are teal colored. While there is an active provider, every time a Provider Action or Evaluation log entry is created it will have the name of the provider as follows:

"00:07:41 [Steve Parker] Action (Ventilate): BVM"

To deselect the active provider and return to general logging, click the *Team* button and the vertical bars will return to neutral color.
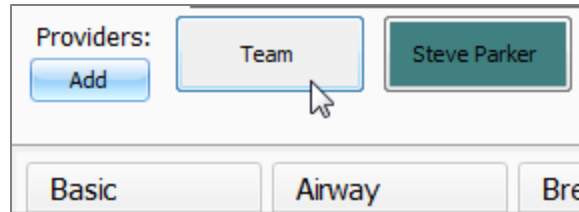

All provider buttons can be edited or deleted by right-clicking them and selecting an option from the menu.
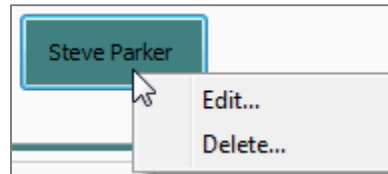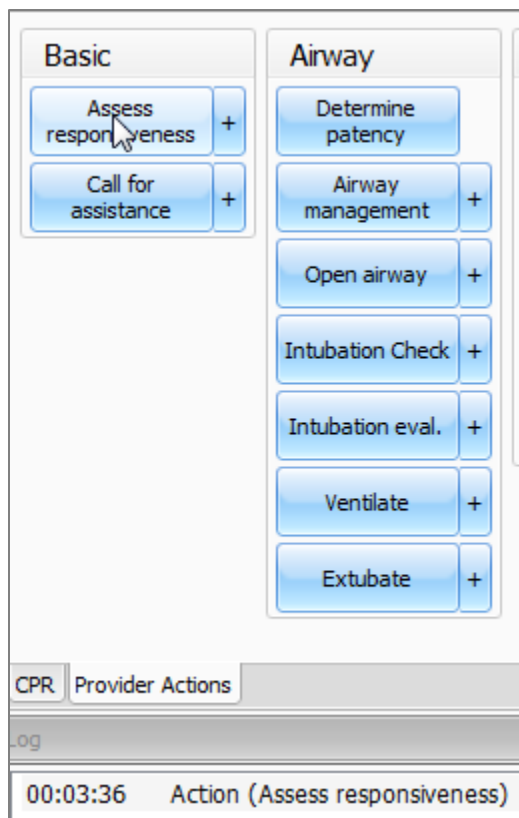

PROVIDER ACTIONS

This section refers to the collection of buttons in the middle of the page. It allows the facilitator to accurately keep track of provider actions. The buttons are grouped into 6 groups: Basic, Airway, Breathing, Circulation, and Trauma Care. Anytime the facilitator clicks one of the buttons, a time-stamped log entry is generated with that particular action.
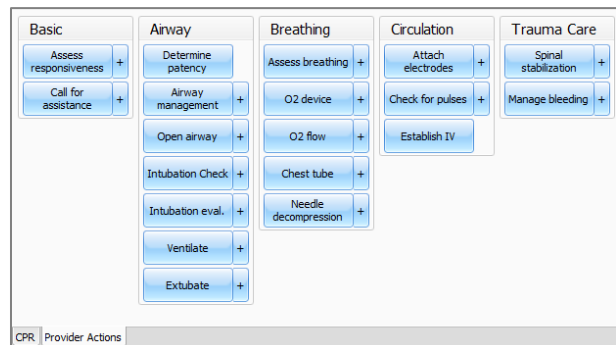
For example, if the 'Assess responsiveness' button is clicked when the session clock reads 00:03:36, the following entry is automatically generated:

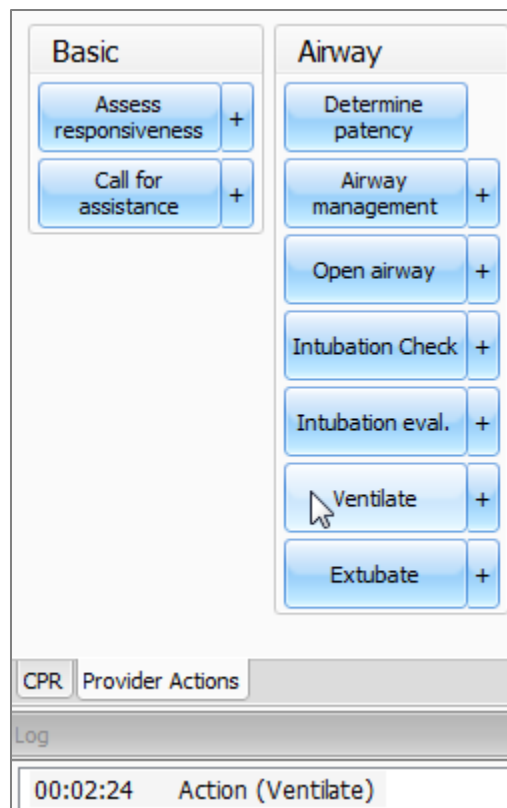"00:03:36 Action (Assess Responsiveness)"

SPECIAL BUTTON

The special button adds additional functionality to the provider actions section.

The button, ' + ', allows the facilitator to be more specific on the provider action he/she wishes to log. For example, if the button 'Ventilate' is clicked, the following entry is created:
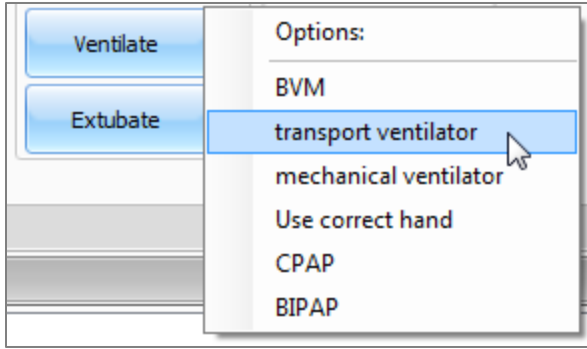
"00:02:24 Action (Ventilate)"

On the other hand, if the ' + ' button next to 'Ventilate' is clicked, a list of additional options appears.
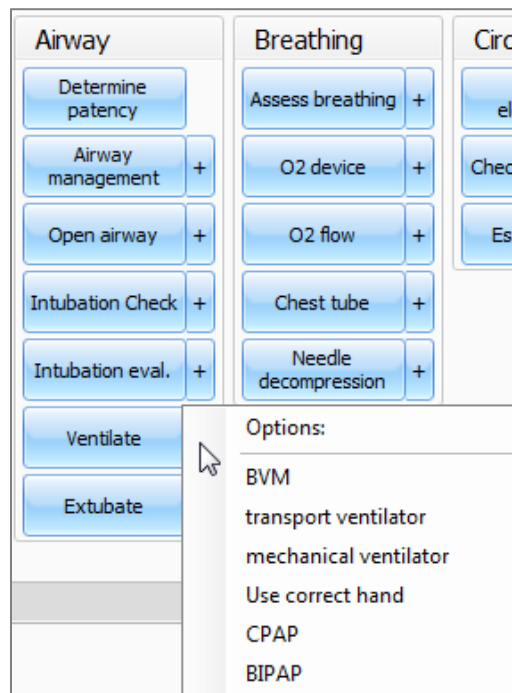
The facilitator can be more specific and choose, for example, 'transport ventilator'... and the following entry is added:

"00:01:28 Action (Ventilate): transport ventilator"

TEXT LOG

This is the large panel at the bottom of the Log Page, containing all the time-stamped text entries. Every event on a session is reflected as an entry in the Text Log.
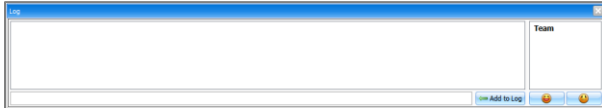
Open the Text Log by clicking on the shortcut icon located on the upper right side of the application.

The different types of entries are classified as Actions, Detected Events, Evaluations, and Notes.

Text Log is subdivided in four different functions:

ACTIONS

Actions refer to those performed by one of the providers in the session. The facilitator can quickly log actions from the Provider Actions section and make the entry more specific using the Team Logging feature. The following is an example of an Action entry:

"00:07:24 Action (Assess responsiveness)"

DETECTED EVENTS

Each time one of the various sensors in the SUSIE and SIMON Newborn detects a provider action, it is automatically logged as a 'Detected' entry. These actions include ventilations and chest compressions. The following example shows an entry after a provider administrates a chest compression:

"00:05:36 Detected (chest compression): too weak"

EVALUATIONS

The facilitator adds evaluations by clicking on the 'Satisfactory' or 'Unsatisfactory' buttons next to Text Log.

The facilitator can evaluate individual providers with a single click.

For example, if provider Steve Parker did a correct procedure, the Evaluation entry would be:

"00:36:01 [Steve Parker] Evaluation (Care Provided): Satisfactory
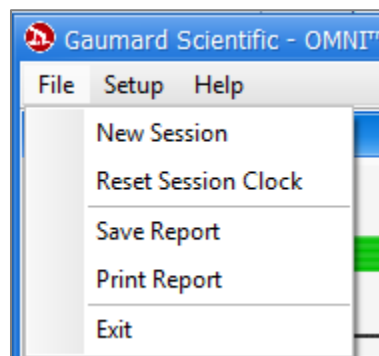

NOTES

Notes can be entered directly in the Text Log. The following is an example of a Note entry:

"00:51:09 [Steve Parker] Note: provider took too long to assess patient."
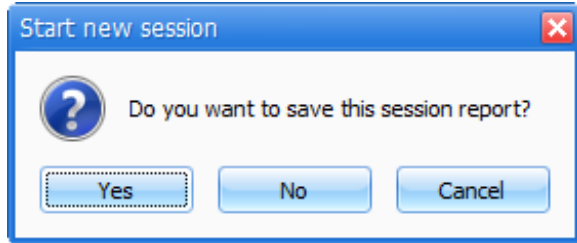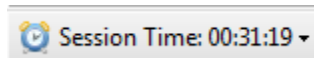

CPRLINK MENUS

FILE

NEW SESSION

Clicking New Session in the file menu will:

- Start a new simulation session
- Clear out log page
- Restart the session clock

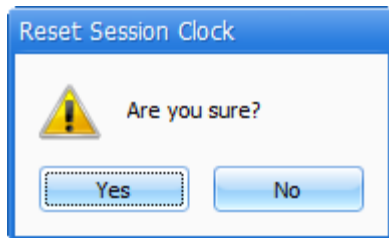The session clock is located at the bottom of the Log box.

You can also start a new session by clicking on the session clock drop down menu, located at the bottom of the Log box, and selecting **New Session**.
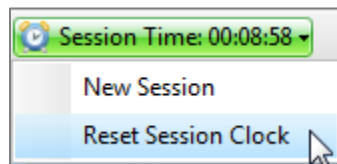

RESET SESSION CLOCK

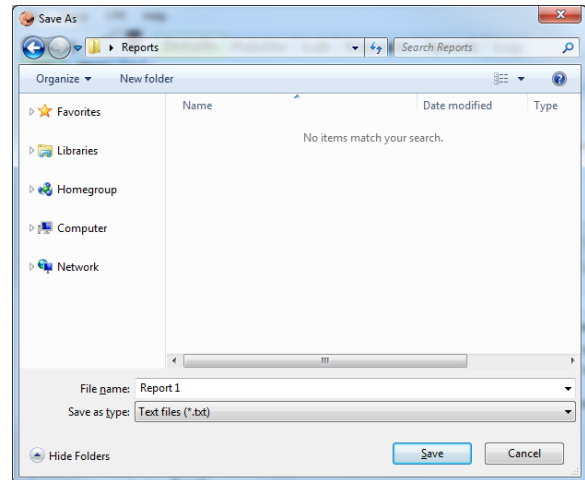Clicking on Reset Session Clock resets the clock back to zero.

Reset the session Clock by clicking on the session clock drop down menu, located at the bottom of the Log box, and selecting **Reset Session Clock**.
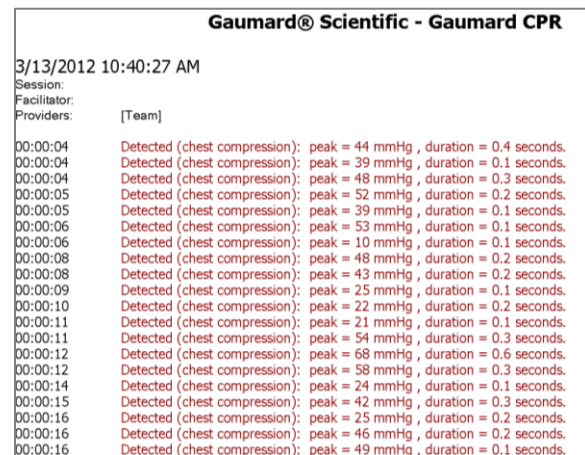

SAVE REPORT

This option allows you to save all the information recorded in the log page as a text file. Clicking on it brings up the Save As dialog box:

Select the desired name and path, and click "Save".
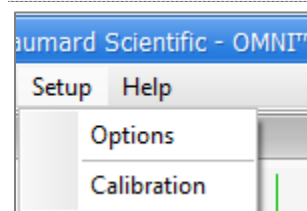
A sample report is below:

PRINT REPORT

This option allows you to print a text file containing all the information in the log for the latest session. Clicking on Print Report brings up the Print dialog box.

EXIT

You can exit the application at any time by going to File, Exit or by clicking on the red "x" button at the top right corner of the CPRLink.

SET-UP

OPTIONS

The Options window contains the parameters accessible to the user for configuration.

CPR Options

- Select the number of desired compressions per minute.
- Specify the compression/ventilation ratio
- Select number of ventilations per minute (if the 'Only Ventilations' option is selected).

CPRLink will retain the options, tolerances and calibration data last entered.
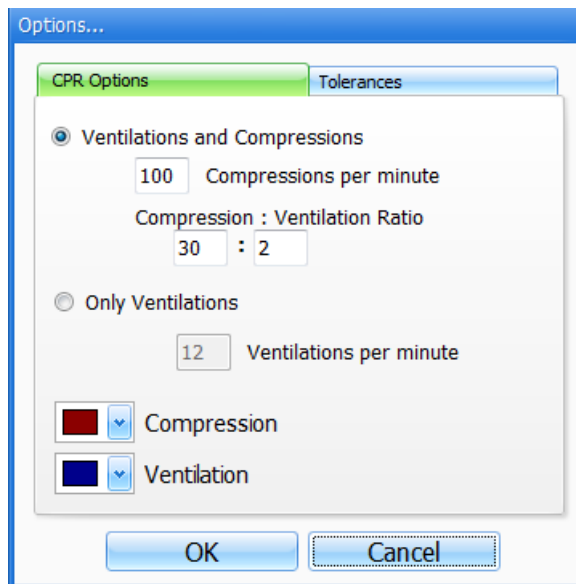

Tolerances

Select the tolerance and intensity of both chest compressions and ventilations. These parameters change the percentage deviation permitted while evaluating a compression or ventilation.

Intensity Tolerances: if the user has calibrated the software, these tolerances represent permissible deviation from the compressions or ventilations entered during the calibration procedure, otherwise the program uses default sensor values.

Rate Tolerances: the rate tolerance parameter sets the permissible deviation from the selected compression set. For example, if the user sets the Compression Rate at 100 compressions / minute and the Compression Rate Tolerance at 10 %, any compression frequency between 90 and 110 compressions per minute will be considered correct.
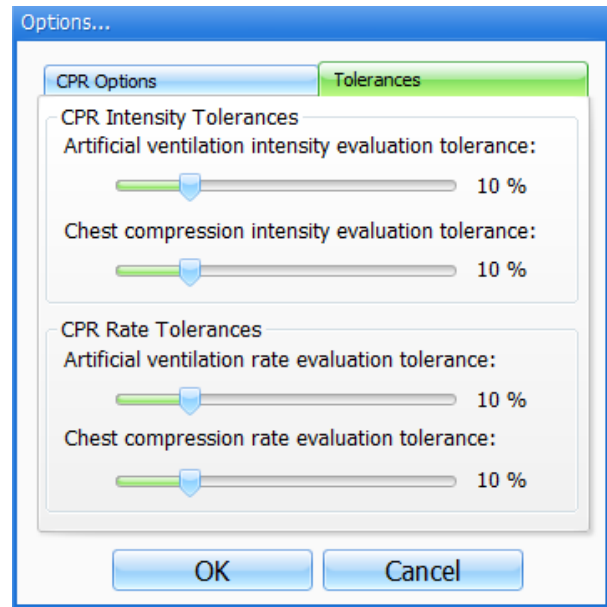
CALIBRATION

This tool allows you to easily calibrate the sensors inside the simulator. First choose which function you would like to calibrate: chest compressions or artificial ventilations.
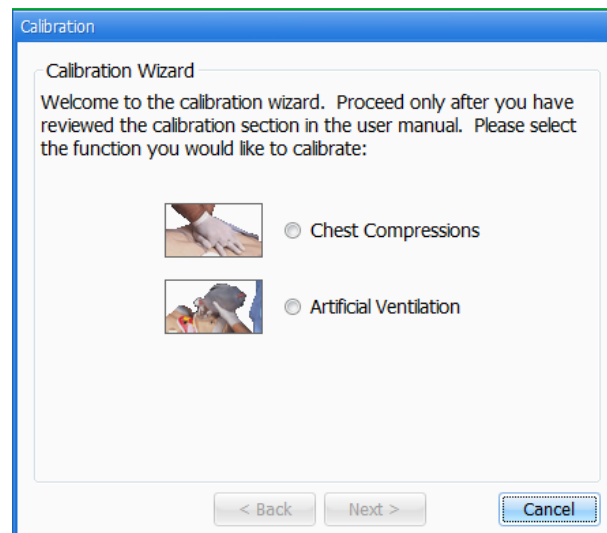

The procedures for each specific calibration are described in the sections below.

Chest Compressions/Artificial Ventilations

This tool allows you to calibrate the chest compressions and the artificial ventilations to your specific criteria. That is, you will be telling the system what a correct chest compression is and/or what a correct artificial ventilation is. Providers will be evaluated by the system based on this criteria.

The chest compressions and ventilations are calibrated in the same way. After making a selection, this dialog box is displayed:
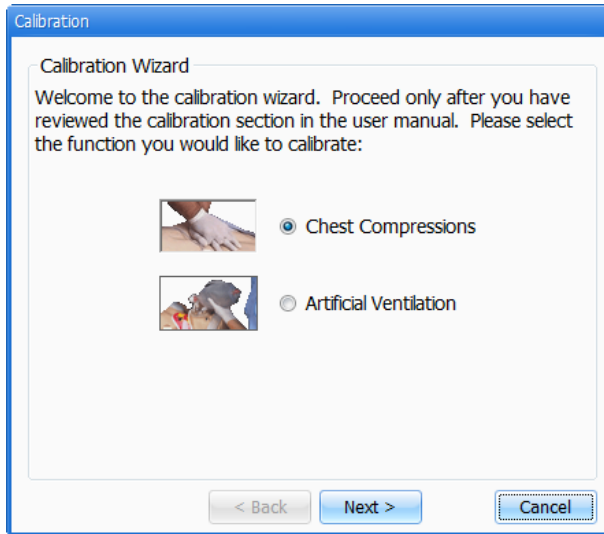
Click next to proceed with the calibration.

The application will now ask you to perform a number of "correct" chest compressions or artificial ventilations, depending on which was selected.
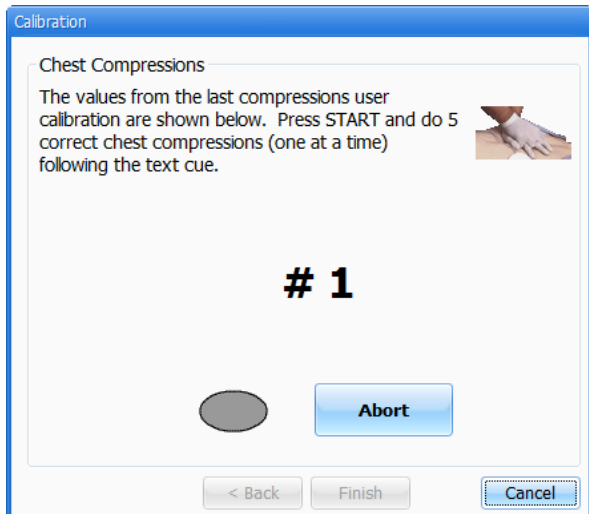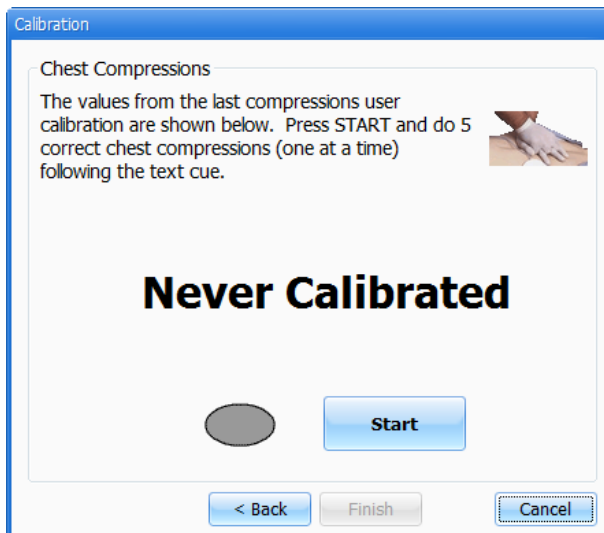
The facilitator should follow the text cue on the screen to perform just ONE compression or ventilation at a time, until prompted for successive compressions/ventilations.

For example, if calibrating chest compressions:

The wizard prompts you with a "#1".

1. Perform one correct chest compression.

A green filled oval indicates that the chest compression was successfully recorded.

The wizard prompts you with "#2".

2. Perform a second correct chest compression.

A green filled oval indicates that the chest compression was successfully recorded.

3. Continue the process.

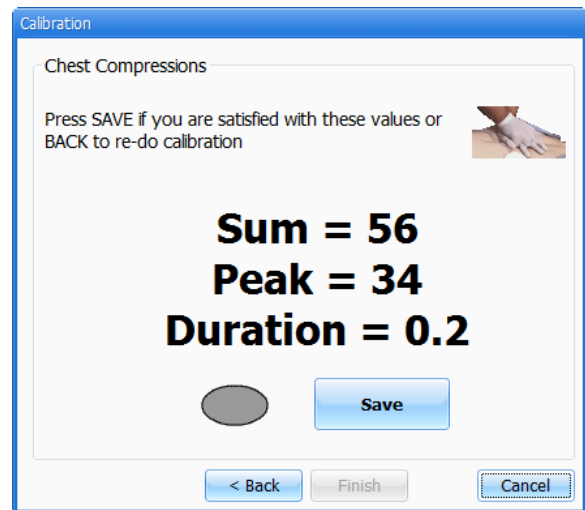At the end of the calibrating session, the wizard shows the average peak, depth, and duration values for the procedure.

HELP
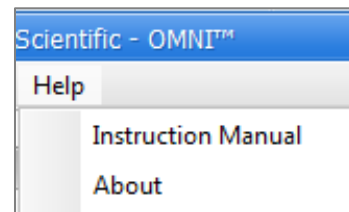
INSTRUCTIONAL MANUAL

Open the instructional manual.

ABOUT

Click to view the version of the software.

Consumables and Replacements

Selected Parts List

Contact Gaumard Scientific for a **complete list** of consumables and replacement parts and their prices.

Item ID	Description
S102.080	Simulated Blood Concentrate
S102.081	Lubricant
S102.180	Omni Controller
S102.180.1	Communication Cable
S102.180.2	USB Cable

Warranty

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:

1. Damage resulting from accident, misuse, abuse, neglect, or unintended use of the Gaumard product;

2. 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

3. 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:

1. Contact Gaumard and request authorization to return the Gaumard product. Do NOT return the Gaumard product to Gaumard without prior authorization.

2. 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.

3. 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.

Extended Warranty

In addition to the standard one year of coverage, the following support plans are available:

- Two-Year Extension (covers second and third years)
- Call for pricing (USA only)

Contact Us

E-mail Technical Support: support@gaumard.com

Before contacting Tech Support you must:

1. Have the simulator's Serial Number

2. Be next to the simulator if troubleshooting is needed.

E-mail Sales and Customer Service: sales@gaumard.com

Phone: Toll-free in the USA: (800) 882-6655

Worldwide: 01 (305) 971-3790

Fax: (305) 667-6085

Post: Gaumard Scientific

14700 SW 136 Street

Miami, FL 33196-5691

USA

Office hours: Monday-Friday, 8:30am - 4:30pm EST (GMT-5, -4 Summer Time)

General Information

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®, CPRLink™, Zack™, RITA™, Chloe™, Seatbelt Susie™, Krash Kids™, Premie™, GIGA®, Omni™, SmartSkin™ are Trademarks of