PREMIE® Blue S108 User Guide

Neonate Simulator with SmartSkin™ Technology

PREMIE Blue 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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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.
- 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 Premie Blue with the same precautions that would be used with a real patient.

**Storage**

- Store Premie Blue in a cool, dry place. Extended storage above 85 degrees Fahrenheit (29 Celsius) will cause the simulator to soften and slowly warp.
- Do not stack or store heavy materials on top of the carton.
- It is acceptable to operate Premie Blue at an ambient temperature of 95 degrees Fahrenheit (35 Celsius).

**Cleaning**

- Premie Blue 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.
- Premie Blue is "splash-proof" but not water-proof. Do not submerge or allow water to enter the interior of the simulator.

**Set Up**

- Premie Blue will only power on when connected to the AC power supply.
Getting Started

Overview
Your Premie Blue premature infant is a life support training simulator equipped with the following features.

Controller
- Powerful yet intuitive Omni controller and user interface software
- Resuscitation modeling

Airway
- Oral and nasal intubation
- Use an ET tube or LMA
- Oral intubation plus suctioning
- Perform Sellick’s maneuver

Appearance
- Color responds to hypoxic events and interventions (healthy, mild cyanosis, severe cyanosis)
- 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
- Umbilical pulse

Simulator
- Physical size is 50th percentile at 28-30 weeks gestational age
- Realistic airway with tongue, vocal cords, trachea and esophagus
- Heart, lungs and ribs

Venous access
- Patent umbilicus
- Intraosseous access at tibia
- IV training arm

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 Premie Blue’s left side, and then connect the power supply to a wall outlet.

Information

Always operate Premie Blue with the power supply connected.

Omni Setup

Omni controls Premie Blue with the touch of a button. Connect Premie Blue to Omni using its extended communication cable and adaptor.

1. Connect the communication cable to Premie Blue’s adaptor.

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

A startup screen is shown while Omni is detecting the simulator features.

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

Warning

Do not connect Premie Blue or Omni to a computer, LAN network or unauthorized diagnostic equipment. Doing so will cause serious damage to the equipment.

Alternative Configuration

1. Remove the white adaptor from Premie Blue’s communication cable.

2. Connect Omni directly to the cable.
Using Omni™

Main Screen
The Omni main screen is divided in 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 Premie Blue 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.
Airway

Intubation

Premie Blue airway can be intubated orally and nasally using a 2.5 mm ID Endotracheal tube. An LMA can be used to ventilate Premie Blue orally. A laryngoscope may also be used with a Miller Blade # 0 or equivalent.

⚠️ Warning
Always lubricate tubing and nasal opening prior to performing nasal or oral exercises.

⚠️ Warning
Nasogastric intubation is only for teaching placement technique. Fluids cannot be inserted through nasogastric tubes as internal damage will result.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Recommended Device Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laryngoscope</td>
<td>Miller 0</td>
</tr>
<tr>
<td>LMA</td>
<td>Size 1</td>
</tr>
<tr>
<td>Nasal Intubation</td>
<td>8 Fr catheter</td>
</tr>
<tr>
<td>Oral Intubation</td>
<td>ETT 2.5 no cuff, 6 Fr suction catheter</td>
</tr>
</tbody>
</table>

Do not attempt to intubate without lubricating the intubation device with silicone oil. Failure to do so will make intubation very difficult and is likely to result in damage. It is not recommended that you spray silicone oil directly into the mouth and airway.

Suction

Premie Blue can be used to simulate suction procedures.

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 Premie Blue and obtain feedback information via the Omni controller on the cadence and depth of chest compressions and airway ventilations.

Circulation

Palpable Pulse

The umbilical cord remains patent for several hours after birth and may be used to infuse medications in a critically ill neonate.

Generate palpable umbilical pulses using the squeeze bulb.
IV Access

Premie Blue has IV access in the lower right arm that can be used for bolus or intravenous infusion as well as for draining fluids. It is only to be used as part of an approved program for Premie care.

The lower arm contains a vein groove which is fitted with a soft tube closely simulating the consistency of the veins.

A translucent, pliable skin, which is removable and washable, is stretched over the lower arm.

Applying pressure via the syringe permits the vein to stand out, simulating a clenched fist or a tourniquet situation. Release of the pressure simulates collapsed veins.

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

Information

Use a 25 to 27 gauge needle set.

Filling IV system

1. Place the end of tube 4 into a drainage container and open the adjustable clamp.
2. Fill the dispensing syringe with fluid.
3. Connect the syringe to tube 3 and release the fluid. Allow fluid to flow through the system and into the drainage container.
5. Remove the syringe from the filling tube.

Directions for use

For IV simulations, place the end of tube 4 into a drainage container and open the adjustable clamp.

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

Replacing the arm skin

1. Gently pull the IV arm skin until it is all the way off.
2. Add a small amount of lubricant to the arm.
3. Slide the replacement skin onto the arm.

Replacing IV arm (Consumable Item)

Replace the lower arm (sold separately) in the event of damage or excessive fluid leakage.

The lower arm is connected to the upper arm at the elbow joint with a screw and its recessive socket.

1. Undo the screw at the elbow joint using a screwdriver or pry apart with needle nose pliers.
2. Remove the screw and its socket from the joint.
3. Gently pull out the lower arm until the black electrical connector is visible.
4. Unfasten the connector by pressing on frontal clip.

The male electrical connector resides in the upper arm.

5. Locate the replacement item.

6. Take the female connector of the replacement lower arm and attach to the male connector of the upper arm.

7. Push in the black electrical connector into the upper arm of the simulator.

8. Align the arm parts at the elbow joint.

9. Insert the screw socket into the elbow joint closest to the median plane of the simulator.
10. Place the screw into the other side of the elbow joint and fasten until the connection is secure.

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. It is a quick way to find venous access when alternate peripheral veins are not visible or palpable. Setting up an intraosseous access line is an invasive procedure that can be simulated with the Premie Blue’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.

Directions for use

1. Place the end of tube 6 into a drainage container and open the adjustable clamp.
2. Fill the fluid dispensing syringe with water.
3. Connect the syringe to tube 5 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 tube 6 adjustable clamp.

Information

Use 17 to 20 gauge bone aspiration needle to perform IO exercises.

5. Perform IO exercises.
6. After 10-20 sticks follow steps 2 – 4 to dispense more water into the system.
7. Continue your IO exercises.
8. When the training session is completed, open the tube 6 adjustable clamp and drain the fluid. If needed, use the dispensing syringe filled with air to push remaining fluid out the system.

Maintenance

Replacing the tibia bones

Items needed:

- Replacement tibia bone
- Tibia bone skin cover
- Drainage container

1. To replace the tibia bone, place the end of tube 6 into a drainage container and open the adjustable clamp.
2. Drain all the fluids from the system.
3. Remove the syringe connector from the filling tube and the clamp from the drainage tube.
4. Remove the tibia cover.
5. Pull the tibia bone and the tubes.
6. Insert new tibia. The filling and drainage tubes are first, followed by the bone.

7. Re-attach tibia cover.

8. Connect the syringe connector to the filling tube and the clamp to the drainage tube.

Appearance

Cyanosis

Premie Blue has devices in its forearms, lower legs and face to cause the skin to turn from a normal healthy color to a blue color indicative of peripheral and central cyanosis. These devices which we call SmartSkin are controlled by the Omni Controller.

Perform CPR, and Omni will automatically detect the compressions and ventilations to determine whether they meet or exceed conventional neonatal CPR standards. If acceptable, the Omni controller causes the skin to turn to a more healthy color, if inadequate or non-existent, Omni causes the skin to turn toward an ominous blue color.

Systemic

Umbilical Catheterization

At birth and for only a few hours thereafter, the umbilicus can be used for intravenous access, and for measuring arterial blood pressure.

Premie Blue’s umbilical cord can be filled with 1-2 cc of water using the syringe provided. Students can insert a lubricated umbilical catheter.

Directions for use

1. Place the end of tube 2 into a drainage container and open the adjustable clamp.
2. Fill the dispensing syringe with fluid.
3. Connect the syringe to tube 1 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.
5. Perform umbilical catheterization exercises.

Information

For catheterization, use an appropriately-sized umbilical catheter.

Warning

Lubricate the distal tip of the catheter before inserting in umbilical cord.

Heelstick

The right heel is molded of a soft material suitable for use with conventional Heelstick devices. Simulate Heelstick maneuver for capillary blood sample.
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

Do not perform mouth to mouth ventilation since the simulator airway can be difficult to clean afterwards.

Code Blue Components

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

- CPR operational mode - TEST or COACH mode
- Cyanosis - control the blue discoloration of the skin of the simulator
- C:V Ratio - customize the compression to ventilation ratio to match correct guidelines
- Compression/Ventilation Rate - adjust the number of compressions per minute
- Status – change the condition of the simulator to improve, worsen or pause.

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.

CYANOSIS Menu

Adjust the cyanosis intensity to control the blue discoloration of the skin of the simulator. The range of cyanosis is 0% to 100%.

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.

**STATUS Menu**

Toggle between PAUSE, WORSEN and IMPROVE.

Improve: simulator will trend to a healthy state until the cyanosis percentage is at zero.

Worsen: simulator will trend to a severely cyanotic state. If CPR given to the neonate is of correct depth, rate, and number of cycles, cyanosis level will decrease. Otherwise, it will continue to increase.

Pause: simulator will pause at current cyanotic state.

**MORE Menu**

Press MORE to access additional menu selections.

---

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 simulator 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.

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4. Perform a ventilation.

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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.
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.

Tolerances (%TOL)

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

CPR tolerance sets the permissible deviation from the selected compression or ventilation RATES. 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.

LEVEL

Set the number of CPR cycles to define when the simulator will respond to treatment and fully recuperate from a cyanotic state.

For example, if the user sets the level to 5 and cyanosis to 100%, after every CPR cycle the cyanosis level will decrease by 20% until reaching 0% when the last CPR cycle is completed.

Unless the status of the simulator is set to pause or improve, cyanosis level will continue to increase.

BACK

Return to previous screen.
HELP
The help window provides access to global settings such as backlight time and Omni/Simulator 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 simulator serial number. Press OK to return to the HELP menu.

CPRLink™
CPRLink 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 simulator 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 **Train**er 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 add 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.

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 simulator detects a provider action, it is automatically logged as a 'Detected' entry. These actions include intubation, BP cuff placement, artificial 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**

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 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

Scientific - OMNITm

Help

Instruction Manual

About

Real Time Data

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.

<table>
<thead>
<tr>
<th>Item ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S108.011</td>
<td>AC power supply</td>
</tr>
<tr>
<td>S108.023R.L</td>
<td>Lower right arm, light color</td>
</tr>
<tr>
<td>S108.029R.L</td>
<td>I/O leg skin cover, light color</td>
</tr>
<tr>
<td>S108.031</td>
<td>I/O tibia bones with tubing</td>
</tr>
<tr>
<td>S108.048</td>
<td>Neonatal filling kit</td>
</tr>
<tr>
<td>S108.080</td>
<td>Simulated blood concentrate</td>
</tr>
<tr>
<td>S108.081</td>
<td>Lubricant</td>
</tr>
<tr>
<td>S108.180</td>
<td>Omni controller</td>
</tr>
<tr>
<td>S108.180.1</td>
<td>Communication cable</td>
</tr>
<tr>
<td>S108.180.2</td>
<td>USB cable</td>
</tr>
</tbody>
</table>
Contact Us

E-mail Technical Support:  
support@gaumard.com

Before contacting Tech Support you must:
1. Have Omni/simulator’s Serial Number
2. Be next to Omni/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

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

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