



Gaumard[®]
Simulators for Health Care Education

S200.250 & S201.250 Susie Simon[®] with OMNI[®] 2 User Guide



Simple Simon 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.

User Guide 17.6.1
©2017 Gaumard Scientific
All Rights Reserved
www.gaumard.com

Contents

End User License Agreement	v
1. Introduction	1
1.1 Specifications	1
1.2 Care and Maintenance	1
General	1
IV Arm (Optional)	1
Operating Conditions	2
Storage Conditions	2
Procedures	2
Cleaning	2
Stoma Care	3
2. Getting Started	4
2.1 Overview	4
Airway	4
Appearance	4
General Patient Care	4
Options	4
2.2 Terminology	5
Facilitator	5
Provider	5
3. Equipment Setup	7
3.1 Overview	7
Leg Assembly	7
4. Working with Susie Simon	9
4.1 Airway	9
Tracheostomy Care	9
4.2 Appearance	9
Eyes/Ophthalmologic Exercises	9
Teeth	9
Bandaging	10
4.3 General Patient Care	10

Ear Canal	10
Range of Simulated Movement	11
Injection Site	11
Ostomy Care	11
Urinary Catheterization	14
Cleaning the Reservoirs	15
5. Options	16
5.1 Decubitus Ulcers	16
5.2 Ulcerated Foot	16
5.3 Patient Training Arm Features	16 16
6. BP Arm Features	17
6.1 OMNI® 2 Connection Setup	17
6.2 Overview	19
6.3 Features	19
Palpable Pulses	19
Korotkoff Sounds	19
Auscultation	19
Setup	19
Instructions for Use	21
6.4 OMNI® 2 and BP Arm Blood Pressure	23 23
7. Heart and Lung Sounds Feature (Optional)	26
7.1 Overview	26
7.2 Setup	26
8. Virtual Monitor Setup (Optional)	30

9. OMNI® Link Setup	33
10. Appendix	35
10.1 Spare Parts List	35
10.2 Troubleshooting	35
Communication/Power Issues	35
11. Warranty	36
11.1 Exclusive One-Year Limited Warranty	36
12. Contact Gaumard	37
12.1 Contacting Technical Support	37
12.2 General Information	37

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 OMNI 2 (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 simulator 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.

1. Introduction

1.1 Specifications

- Weight: 40 lbs (18.1 kg)

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

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

IV Arm (Optional)

- 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 22 gauge will reduce the lifetime of the lower arms' 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.
- We recommend flushing veins with 70:30 solution of clean water to isopropyl alcohol (IPA) at least once per month to prolong the life of the vasculature.
- When the arm 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.

WARNING: 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.

Operating Conditions

- Operating temperature: 50°-95° F (10°-35° C)
- Humidity: 5%-95% (non-condensing)

Storage Conditions

- Keep simulator stored in the bag and box provided:
 - › Storage temperature: 32°-113° F (0°-45° C)
 - › Humidity: 40%-60% (non-condensing)
 - › Do not stack or store heavy materials on top of the carton box

WARNING: To avoid damage to the simulator, please store and ship it in the clear poly bag provided.

Procedures

- Do not attempt to intubate without lubricating the airway adjunct with **mineral oil** lubricant. Failure to lubricate the device will make intubation very difficult and is likely to result in damage to the simulator.
- When simulating drug administration via endotracheal tube, providers must use an empty syringe. Passing liquids into the trachea or esophagus may cause internal damage.
- 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.

Stoma Care

- Always handle the stomas with clean hands.
- Do not palpate with fingernails.
- Do not clean with alcohol or aggressive solvents.
- Do not pack any sharp objects with the stomas.
- Do not press the stomas against soiled surfaces, ink, or newsprint. The stoma material is absorbent.
- Prevent items from resting or pressing against the stomas as indentations will form on the pressure points. The stomas may return to the normal shape after the pressure is relieved.
- Place baby powder on the stoma surface to reduce tackiness. This can be reapplied as needed.
- Clean the stomas using a mild solution of soap and water.
- Apply baby powder to return the surface to a skin-like feel and appearance.

2. Getting Started

2.1 Overview

Disclaimer: The section below describes all possible features in the Simple Simon simulator. The content of this information is subject to change without prior notice. Please contact Gaumard® Scientific for the most current information.

Simple Simon is an advanced multipurpose simulator equipped with the following features:

Airway

- Tracheostomy Care
- Nasal and oral tube feeding and gastric suctioning

Appearance

- Realistic eyes for ophthalmic exercises
- Realistic face skin, hands, feet, fingers, and toes
- Removable dentures
- Male genitalia

General Patient Care

- Bathing and bandaging activity
- Eyes open and close
- Simulated ear canal
- Articulating head, jaw, elbows, wrists, ankles, and knees
- Blood pressure arm

Options

- Colostomy, ileostomy, and suprapubic stomas for irrigation
- Intravenous training arm
- Heart and lung sounds with virtual stethoscope
- Decubitus ulcers
- Ulcerated foot

2.2 Terminology

Facilitator

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

Provider

A person participating in the simulation as a healthcare provider.

FEATURES	S200.250	S201.250
GENERAL PATIENT CARE		
Bathing and bandaging activity	●	●
Full body	●	●
Interchangeable genitalia	●	●
Eyes open and close	●	●
Realistic eyes for ophthalmic exercises	●	●
Realistic urethral passage and bladder for catheterization exercises	●	●
Soft, realistic face skin, hands, feet, fingers, and toes	●	●
Upper and lower dentures for oral hygiene	●	●
Simulated ear canal for otic drops and irrigation	●	●
Colostomy, ileostomy, and suprapubic stomas for irrigation	○	●
Gastrointestinal procedures and enema administration	●	●
Stylish wig for haircare exercises and surgical draping	●	●
Amputation stump	○	○
Two decubitus ulcers	○	○
Ulcerated foot	○	○
Articulating head, jaw, elbows, wrists, ankles, and knees	●	●
INJECTION TRAINING		
IM injection sites in deltoids, quadriceps, and upper gluteal region	●	●
Advanced multipurpose intravenous training arm	○	○
Advanced intravenous training arm	○	○
Arterial and venous training arm	○	○
HEART AND LUNG SOUNDS		
Site specific heart and lung sounds with virtual stethoscope	○	○
AIRWAY		
Tracheotomy placement	●	●
Nasal and oral tube feeding and gastric suction	●	●
GYN TRAINING		
Realistic vagina and cervix supports douching and pap smear	●	●
OTHER		
Blood pressure training arm with OMNI 2 interface	●	●

3. Equipment Setup

3.1 Overview

The simulator is shipped partially assembled. Perform the following steps to install the legs.

Leg Assembly

1. Place simulator on a flat surface.

On each leg, a washer, spring, and wing nut is in place.



2. Remove the wing nuts, washer, and springs from the bolts on the hips.



3. Remove the IM pad from each leg



4. Slide the bolt through the orifice in the leg.



5. Reach through the IM site and assemble the fasteners onto the hip bolt



Assemble in this order: washer, spring, and wing nut.



6. Tighten the wing nut until the spring is compressed slightly.

7. Place the IM pad in the leg.

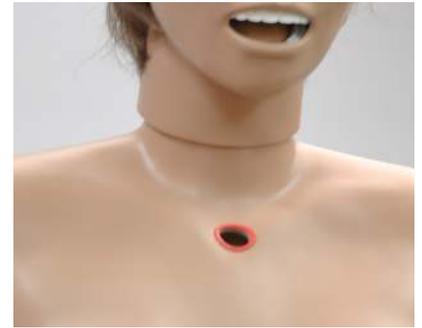


4. Working with Susie Simon

4.1 Airway

Tracheostomy Care

Place a lubricated tracheostomy tube at the trachea opening. Insert the tracheostomy tube and perform the necessary care procedures.



4.2 Appearance

Eyes/Ophthalmologic Exercises

The head has eyes that open and close, permitting the following exercises:

- Administration of orbital medicines into the conjunctival sac
- Removal of foreign bodies
- Eye irrigation



Teeth

The simulator is supplied with normal size teeth and tongue. The upper and lower dentures are removable.

The dentures are attached with Velcro and no force is required for their removal.

1. To remove the teeth, gently insert one finger into the upper or lower jaw and tap lightly. Dentures will immediately snap out.



2. To reinsert, gently hold lower or upper lip and replace dentures.

Bandaging

The fingers and toes of the simulator are separated to permit bandaging exercises. The surface of the simulator is smooth and resistant to water, oil, and liniments.



4.3 General Patient Care

Ear Canal

- Left ear: the interior of the ear contains a simulated ear canal with a capacity of 10 ml, to practice syringing exercises.



WARNING: Always use lubricant prior to introducing an invasive device.

Range of Simulated Movement

The joints are strong and their movements are lifelike and realistic. The simulator bends at the neck, elbows, waist, knees and ankles and the jaw articulates.



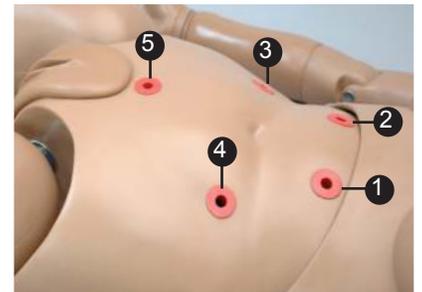
Injection Site

Simulate intramuscular injection sites are located on the deltoids, quadriceps, and buttocks.



Ostomy Care

1. Gastrostomy
2. Ostomy 1
3. Ostomy 2
4. Rectum
5. Suprapubic



Ostomies are optional for Susie Simon S200.250.

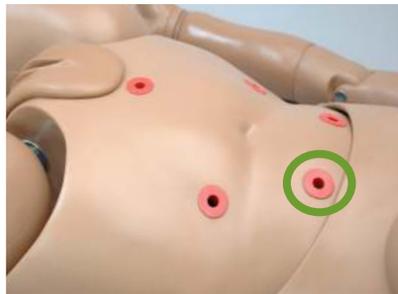
Stoppers

Use the stoppers provided to seal the reservoir bags.



Gastrostomy

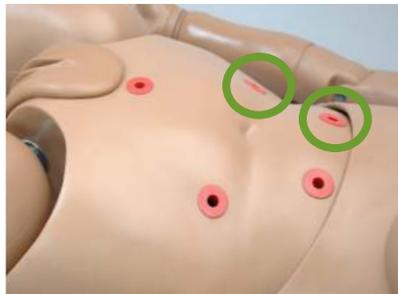
A gastrostomy left port, located near the waist, connects directly to the stomach tank.



Tank	Capacity
Stomach	500 ml

Ostomy Care

Practice skin preparation, stoma hygiene, treat conditions around the site, and apply disposable or permanent ostomy bags to the openings.



Susie Simon have anatomically sculptured stomas of a transverse colostomy, ileostomy, and supra-pubic cystostomy



Tank	Capacity
Ostomies	500 ml

Enema Administration

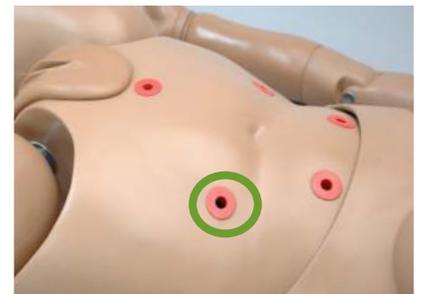
The legs articulate to permit enema exercises with the simulator on its back. The enema should be introduced with an anal nozzle of small diameter.

A non-return valve is built into the anal canal to prevent fluid spilling during instillation.

Tank	Capacity
Rectum	1800 ml

Drain or fill the reservoir through the rectum port with a syringe.

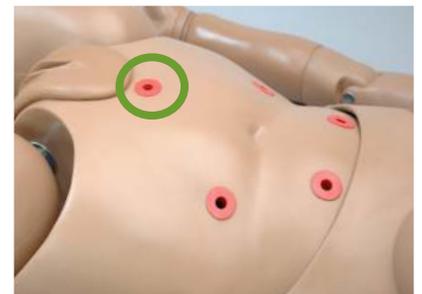
To clean the reservoir, inject a solution of water and alcohol (70:30) and drain the reservoir.



Suprapubic

Use the suprapubic port to fill the bladder for catheterization exercises.

Catheterization is standard for the S200.250 and S201.250.



Tank	Capacity
Bladder	1800 ml

Urinary Catheterization

The simulator includes a fitted female genitalia and a male genitalia attachment. The attachment is a reproduction of a male external genitalia with scrotum.

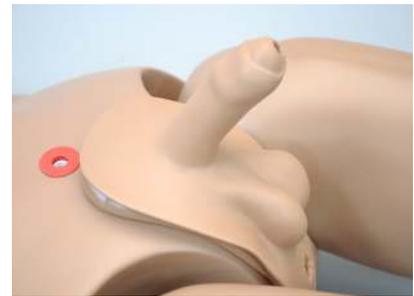
Assembly Instructions

1. To attach the male genitalia, remove the red adaptor and set it aside.



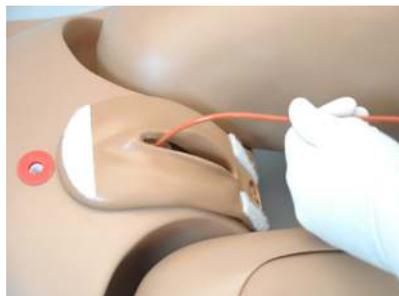
Do not throw the red adaptor away, as it is necessary to perform female catheterization exercises.

2. Slide the tube attached to the male genitalia, into the opening of the urethra on the simulator and fasten the Velcro.



Catheterization Procedure

1. Lubricate the size 18 Fr catheter
2. Insert the catheter



3. To increase the pressure and the urine flow, use the squeeze bulb on the right side of the simulator



Procedure	Device Size
Urinary Catheterization	18 Fr

Emptying the Bladder

To remove all the fluid from the bladder, insert the catheter and set the simulator over a bedpan.

Clean the reservoir by inserting a solution of water and alcohol (70:30) and draining the reservoir.

Cleaning the Reservoirs

In order to clean out the reservoirs, follow the steps below:

1. Unscrew the waist knobs

2. Remove the waist rod



3. Detach the connectors of a reservoir



4. Squeeze out the remaining fluid

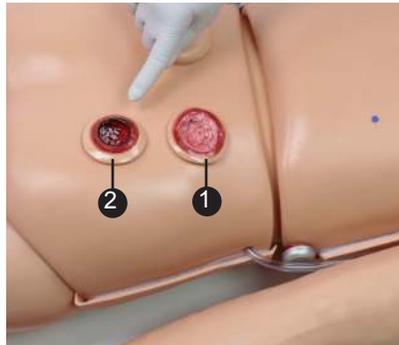
5. Fill the reservoir bag with a solution of water and alcohol (70:30) and squeeze out the fluid

5. Options

5.1 Decubitus Ulcers

The simulator is supplied with two anatomically accurate ulcers.

1. Initial stage of ulceration
2. Suppuration or pus/deeply infected stage.



5.2 Ulcerated Foot

Diagnose and treat ulcers on the left foot of the simulator.



5.3 Patient Training Arm

WARNING: 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.

Please refer to the attached guide for operating the IV arm.

Features

OPTION	Functionality				
	IV	IM	SubQ	Intradermal	Arterial
S205.803R.IV	●	-	-	-	-
S205.803R.MIV	●	●	●	●	-
S205.803R.AIV.R2	●	●	●	●	●

6. BP Arm Features

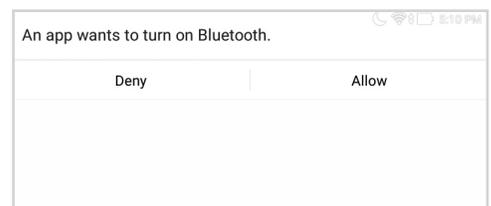
6.1 OMNI® 2 Connection Setup

OMNI® 2 controls Susie Simon's responses with the touch of a button. The tablet operates Simon's blood pressure arm wirelessly.

The blood pressure arm can be operated using a wired connection. Please refer to the OMNI® 2 user guide to set up a wired connection.

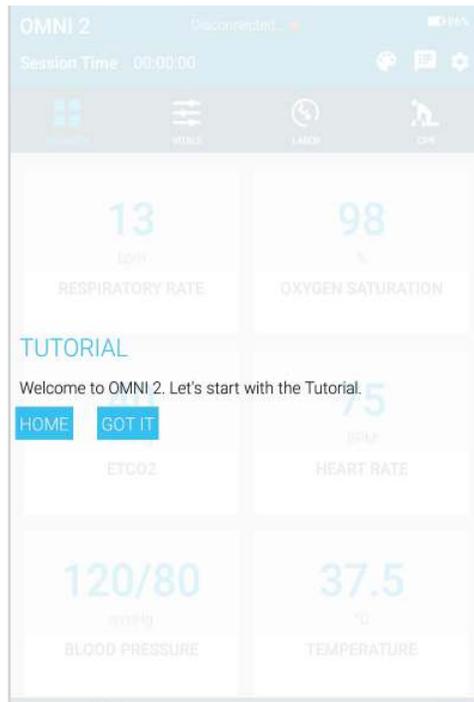
Follow the steps below to connect wirelessly to OMNI® 2:

1. Plug the power supply into the shoulder panel
2. Turn on OMNI® 2 by pressing and holding the ON button on the right side of the tablet.
3. Select "Allow" to turn on Bluetooth for the tablet.
4. A startup screen is shown while OMNI® 2 is detecting the simulator features.



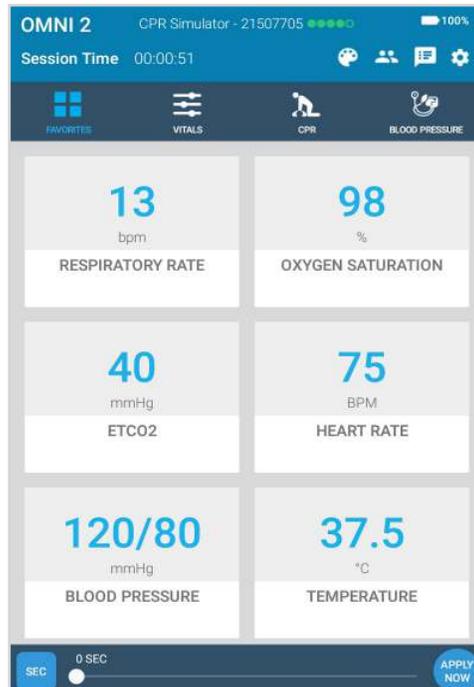
5. Follow the on-screen tutorial for a brief overview of the features of OMNI® 2.
6. Move onto the next steps in the Tutorial by selecting “GOT IT”.
7. Exit the Tutorial at any time by selecting “HOME”.

Please complete the tutorial once or it will continue to appear at start-up.



After the tutorial, OMNI® 2 will automatically proceed to the Favorites page and establish a connection to Simple Simon.

WARNING: Do not connect Simple Simon or OMNI® 2 to a computer. LAN network or unauthorized diagnostic equipment. Doing so will cause serious damage to the equipment.



6.2 Overview

The Blood Pressure Training System consists of a full-size adult left arm. This is a versatile training tool developed to assist health professionals teach the processes and skills required to perform blood pressure auscultation procedures and techniques.

6.3 Features

Palpable Pulses

Programmable, palpable radial pulse is present when the cuff pressure is less than the selected systolic blood pressure.

Korotkoff Sounds

Korotkoff sounds, K1 through K4 (K5 is silence) are audible between systolic and diastolic pressures. Depending on the selected heart rate and the rate of cuff deflation, the Korotkoff sounds will adjust automatically. The sounds are silenced automatically if the auscultatory gap is enabled.

Auscultation

The simulator operates with a modified blood pressure cuff. Connect the BP cuff extension to the arm's control panel before use. Use a conventional stethoscope to auscultate Korotkoff sounds in the antecubital area.

Setup

1. Follow the instructions listed in OMNI® 2 Connection to turn on the blood pressure arm.
2. Wrap the cuff around the left arm.



3. Connect the modified blood pressure line to the panel on the left shoulder.



Blood Pressure Calibration

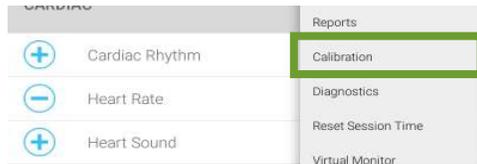
Before starting the calibration process, place the blood pressure cuff on the simulator as it would be placed as instructed above.

To calibrate the blood pressure feature using OMNI tablet:

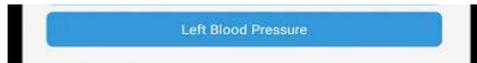
1. Tap the gear icon on the upper-right corner of the screen.



2. Select "Calibration"



3. Press "Left Blood Pressure".

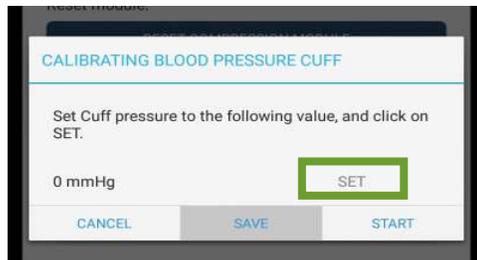


4. Select "Start" in the calibration window to begin

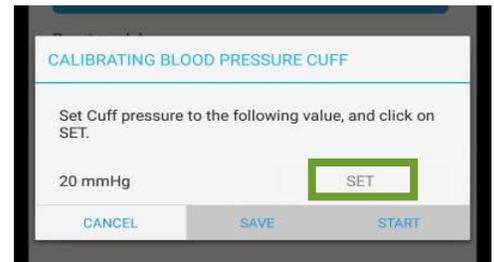


5. Set the pressure on the BP cuff to 0 (i.e. cuff valve open) as prompted by the calibration wizard.

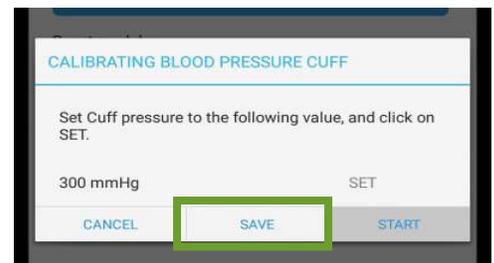
6. Tap "SET" when the gage reads 0 mmHg.



7. Set the pressure on the BP cuff to 20 mmHg as prompted by the wizard and then Click “SET” to record.

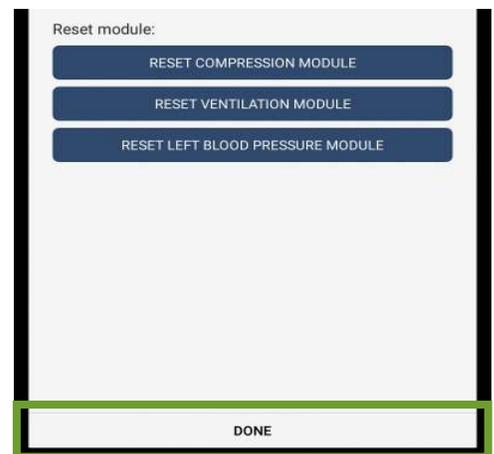


8. Continue increasing the BP cuff pressure as indicated by the prompt and recording the pressure intervals.



9. At the end of the calibration, click “SAVE” to accept and close the calibration wizard.

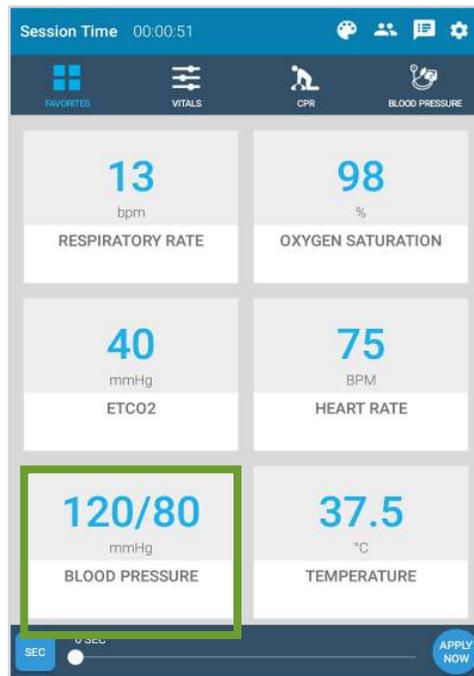
10. Tap “DONE” in the Calibration window to apply the settings.



Instructions for Use

1. Follow the instructions above to setup and calibrate the blood pressure arm

- Set the blood pressure in OMNI[®] 2



- Place the bell of the stethoscope on the antecubital region of the arm.



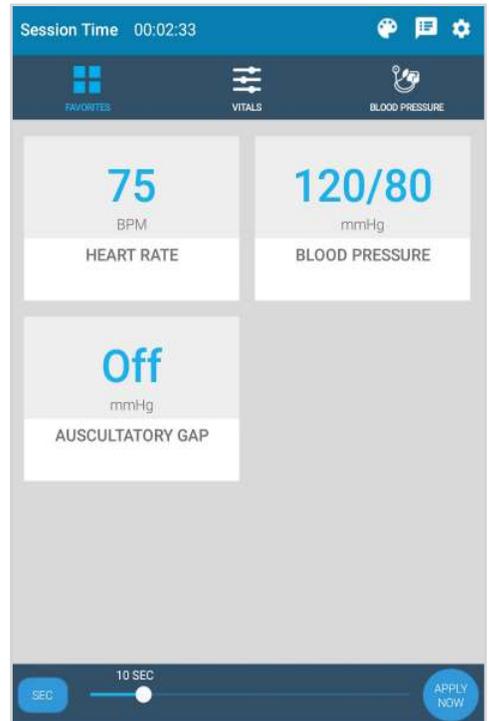
- Pump up the cuff

- Slowly release the cuff and listen for Korotkoff sounds.



6.4 OMNI® 2 and BP Arm

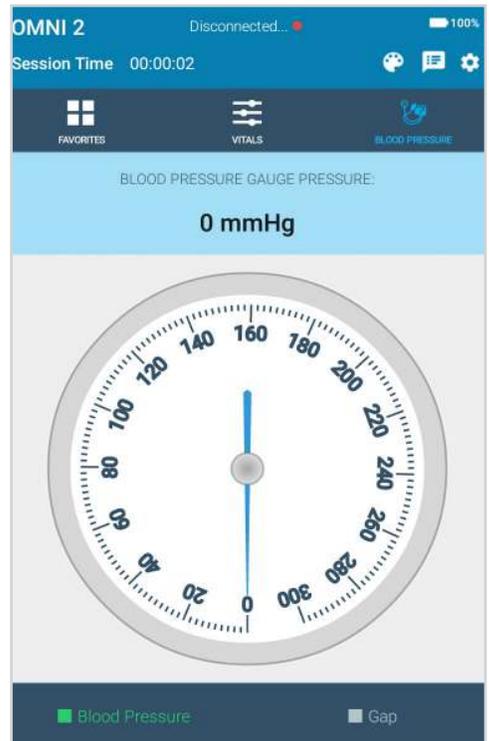
In the Favorites and Vitals page, adjust the systolic or diastolic values, heart rate, and enable the auscultatory gap.



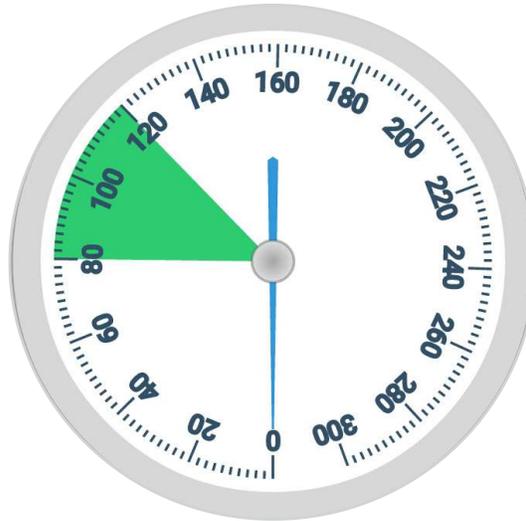
Blood Pressure

Access the blood pressure page to receive real time feedback of a blood pressure measurement.

Receive a real time numerical value of the cuff pressure in this page.



The current blood pressure is shown in green.

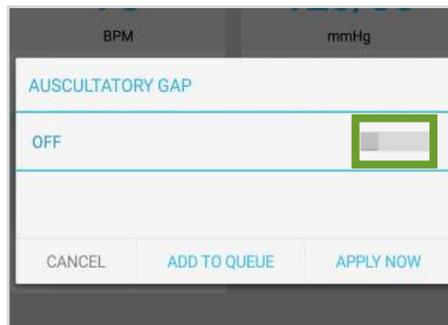


If an auscultatory gap is applied, it will show in grey and the korotkoff sounds will be disabled in the simulator.

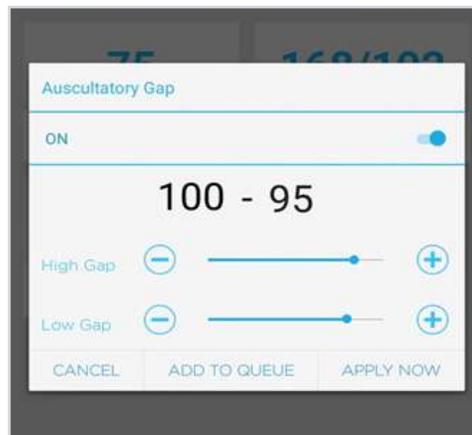
To enable the auscultatory gap,

1. Press “Auscultatory Gap” in either Favorites or Vitals Page.

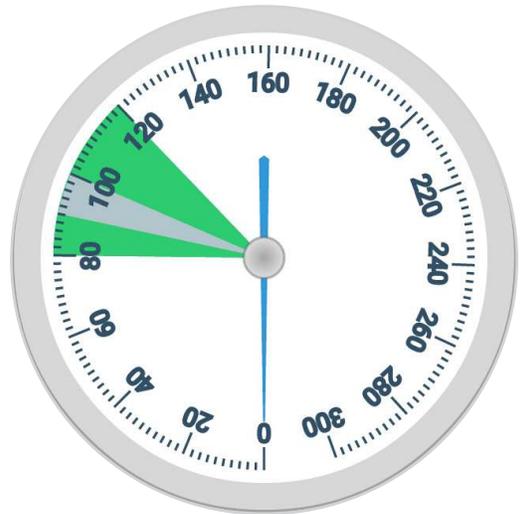
2. Slide the Auscultatory Gap ON



3. Adjust the gap values and select “APPLY NOW”



The gap can be visualized in the Blood Pressure Page.
The area will be greyed out.



7. Heart and Lung Sounds Feature (Optional)

7.1 Overview

The Heart and Lung Sounds teaching system is a tool used for auscultation training. The system is composed of a Virtual Stethoscope™ and RFID sensors located beneath the skin of the simulator.

The Virtual Stethoscope has incorporated:

- Power button
- Sound menu button



The torso of the simulator has numerous removable identification dots located where each of the heart and lung sounds are normally heard. These colored dots can be removed at any time to find the auscultation sites on the front and the back of the simulator. Each auscultation location relates to the physiology of the torso.

7.2 Setup

1. The Virtual Stethoscope comes with two batteries installed.
2. Unscrew the top cover of the stethoscope bell. Remove and discard the plastic insert separating the two batteries prior to first use.
3. Locate the small stereo jack on the bell and attach the speakers provided. Plug the speakers into a conventional 120V/60 Hz wall outlet and turn the speakers on.



The speakers provide external feedback of the auscultation sounds. If the speakers are disconnected, only the student will hear the heart and lung sounds through the ear pieces on the virtual stethoscope.

Refer to the Virtual Stethoscope User Guide to use the system.

7.3 Menus

Location	Heart Sound	Comment
Base Right	Base Sound	Patient has a normal heart with mild anemia. The heart is hyperdynamic and has elevated cardiac output. S2 is accentuated at the base.
	Fixed Split S2	Patient has an atrial septal defect which increases flow through the right heart, prolongs RV systole and also produces a mid-systolic murmur (MSM) because of increased flow through the RV outflow tract.
Base Left	Physiological Split S2	The splitting of S2 is easily heard during inspiration and the second sound is single during expiration. The second component of the split sound (P2) is accentuated.
	Split S2	S2 is variably split during mid-inspiration, as three beats are repeated.
Left Side Sternal Border	Paradoxical Split S2	The splitting of S2 is heard during expiration, but the sound becomes single during inspiration.(The background noise is increased during inspiration.)
	Opening Snap	Patient has mitral stenosis, responsible for an early crisp diastolic sound heard at the base 0.08 seconds after S2. S1 is usually loud at the base, which reflects mitral stenosis.
	Friction Rub	Patient has uremic pericarditis, which leads to rubbing of roughened visceral and parietal pericardial surfaces against one another. The 3 component rub exists during deep inspiration.
Apex	Apex Sound	Patient has a normal heart with mild anemia. The heart is hyperdynamic and has elevated cardiac output.
	Mid-Systolic Click	Patient has mitral prolapse, which produces a mid-systolic click heard during inspiration.
	S3 Sound	Patient has a readily heard third heart sound. S3 occurs later in diastole than the opening snap.
	Intermittent S4	Patient has left ventricular hypertrophy, and has a fourth sound (S4) which is not heard on every cycle. The sound is presystolic, about 0.1 second before S1.
	Starr-Edwards Valve	This ball-in-cage mitral prosthesis has a mechanical closing sound (S1) and one or more diastolic sounds caused by the ball bouncing within the cage.

Trachea	Tracheal Sounds	Expiration sounds are louder, have a higher pitch, and are of longer duration than during inspiration. The silent period or pause following expiration is longer than the one between expiration and inspiration.
Trachea	Stridor Sounds	Patient has marked respiratory distress, and a narrow aperture between the vocal cords that produces a high pitched tone during both inspiration and expiration. During the end of expiration, there is an abrupt drop in pitch.
Upper Anterior (Two Sites)	Bronchial Sounds	Breath sounds are similar to tracheal sounds in that the expiratory phase is louder and lasts longer than the inspiratory phase. The major distinguishing characteristic is the high pitched, harsh quality of the expiratory phase.
	Wheezing Sounds	These wheezing sounds are often heard in asthma patients. During inspiration, the wheeze is slightly higher in pitch than during expiration. Wheezing in asthmatics is often present in either one or both phases of respiration.
Lower Anterior (Two Sites)	Bronchial Sounds	Breath sounds are similar to tracheal sounds in that the expiratory phase is louder and lasts longer than the inspiratory phase. The major distinguishing characteristic is the high pitched, harsh quality of the expiratory phase.
	Wheezing Sounds	These wheezing sounds are often heard in asthma patients. During inspiration, the wheeze is slightly higher in pitch than during expiration. Wheezing in asthmatics is often present in either one or both phases of respiration.
Posterior (Four Sites)	Pleural Friction	This sound originates from the friction of inflamed pleural surfaces moving against one another. The sound is repetitive as long as the breathing pattern and position remain constant. Similar to but lower in pitch than crackles.

Posterior (Four Sites)	Medium-Fine Crackles	These noises begin about mid-inspiration and progressively increase in intensity up to the end of expiration. Coarse crackles are also audible in the early expiratory phase of some of the breaths.
	Ronchi, Crackles	Coarse crackles are present during both inspiration and expiration. There are also some very low pitched repetitive sounds that are ronchi. High pitched squeaks are also audible against a background of bronchial breath sounds.
	Coarse Crackles	Coarse crackles begin at the onset of inspiration and diminish in intensity and prevalence toward the end of inspiration. Expiration is not audible.
	Pulmonary Edema	Coarse and medium crackles appear toward the end of inspiration and continue into expiration. The respiratory rate is rapid and expiratory phase is “bronchial” in character. These features exist during respiratory distress and congestion.

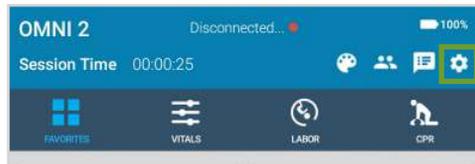
8. Virtual Monitor Setup (Optional)

A patient virtual monitor is an optional purchase with OMNI® 2. Follow the steps below in order to activate this feature:

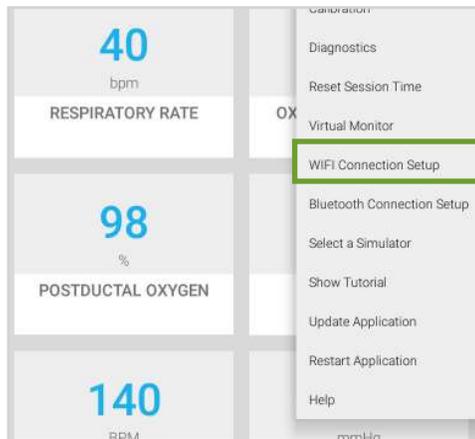
The simulator must be connected to the OMNI® 2 tablet in order to establish a connection to the Virtual Monitor.

1. Connect the provided router to the wall.

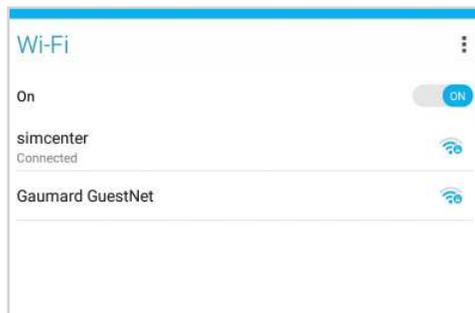
2. Tap the gear on the top right of the screen.



3. Select “WIFI Connection Setup”.



4. Connect to a wireless network.



The network name will be “GaumardSimulatorSerialNumber”

5. Exit the page by tapping the back button.



- Tap the gear on the top right of the screen.



- Select "Virtual Monitor".



- Follow steps 9-10 if the activation code was not inputted.
- Verify that the serial number corresponds to the manikin.

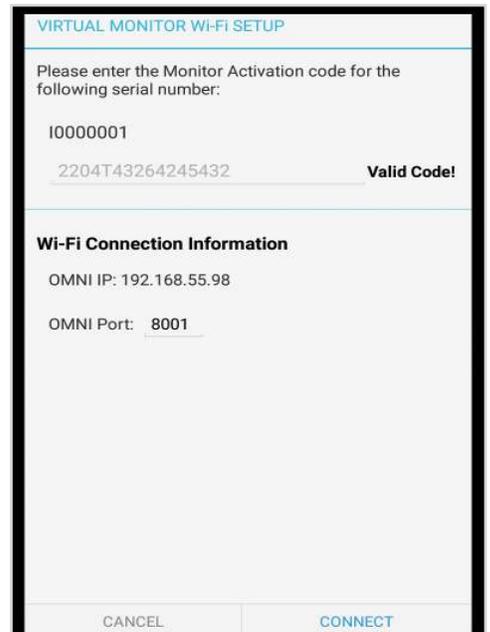


- Input a valid activation code.

The activation code is case-sensitive.

Note that the activation code above is just an example. It is not a valid code.

- Take note of the OMNI IP and OMNI port.
- Select "CONNECT".



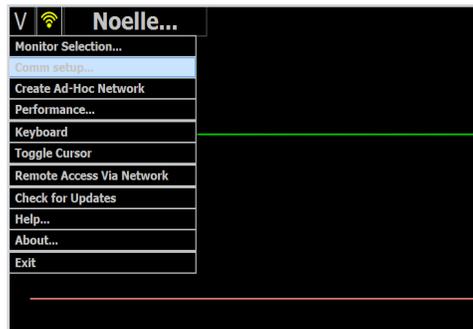
- On the monitor, connect to the same network as OMNI® 2.



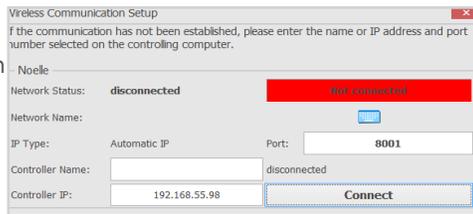
- Once connected to the WIFI, open the Gaumard Monitors software.



- Tap the V on the top left and then select “Comm Setup”.



- Verify that the IP address in the “Wireless Communication Setup” matches the Omni IP and Omni Port noted before.



- Select “Connect”.



The Vital Signs Monitor icon will appear on the top right when it is connected.

For more information on how to use the Virtual Monitor, please refer to the Omni 2 User Guide.

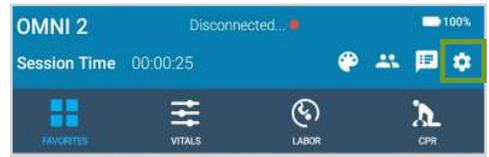
9. OMNI® Link Setup

Follow steps 1-5 if the notification below appeared:

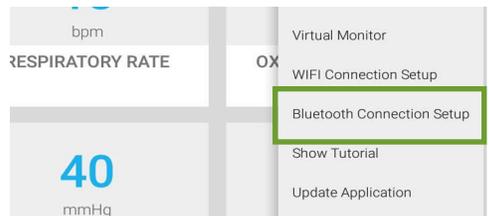


OMNI® 2 has to be paired to a simulator to establish a connection with the simulator.

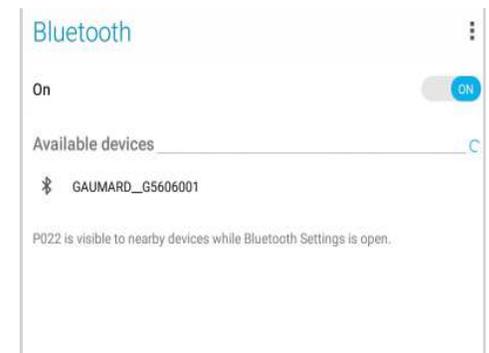
1. Tap the Gear on the upper-right corner of the screen.



2. Tap "Bluetooth Connection Setup".



3. Select the simulator's serial number under "Available Devices".



The device name will be Gaumard_SimulatorSerial-Number

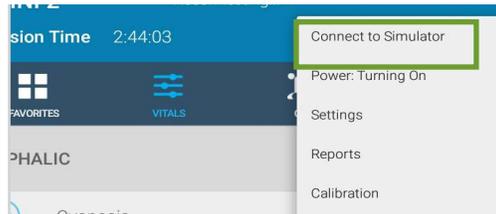
4. Wait for the device to pair with the OMNI® 2. This can take up to 30 seconds.



5. Once paired, tap the back arrow to return to the main screen.



6. Tap the gear on the upper-right and select "Connect to Simulator"



7. Select the simulator you wish to connect to and tap "Connect and Save as Default"



The name of the simulator and the serial number appear at the top of the screen. The green dots indicate the strength of connection.



OMNI® 2 can be operated up to 10 meters from the simulator.

10. Appendix

10.1 Spare Parts List

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

Item	Type	Code
Arm Injection Sites	Consumable	S200.857.1.L/M/D
Buttock Injection Sites	Consumable	S200.857.3.L/M/D
Power Supply	Replacement	S200.968
Waist Knobs	Replacement	S200.845

10.2 Troubleshooting

Communication/Power Issues

Communication with the simulator cannot be established

Controlling tablet is too far away from simulator	Minimize the distance between simulator and the tablet. Should not be over 10 meters away
More than one device is paired	Open Bluetooth Connection Setup. Select the Gear to the right and click "Forget"
Manikin is not paired	Disconnect the simulator from the power supply, disconnect OMNI Link (if applicable), turn off bluetooth on OMNI 2 tablet. Plug the simulator and OMNI Link back in and turn on bluetooth.
Power supply is not connected to simulator	Ensure that the power supply is connected to the simulator

11. Warranty

11.1 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 properly 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.

12. Contact Gaumard

12.1 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 as needed

Technical Support:

Email: support@gaumard.com

USA: 800-882-6655

INT: 01-305-971-3790

12.2 General Information

Sales and Customer Service:

E-mail: sales@gaumard.com

USA: 800-882-6655

INT: 01-305-971-3790

Fax: 305-667-6085

Post:

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

Office Hours:

Monday-Friday, 8:00am - 7:30pm EST



Gaumard[®]
Simulators for Health Care Education

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

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