Gaumard®
Simulators for Health Care Education

S300.100.250/.215.PK

CODE BLUE® III ADULT

USER GUIDE

The Code Blue® III Adult is an interactive educational system developed to assist a certified instructor. It is not a substitute for a comprehensive understanding of the subject matter and not intended for clinical decision making.

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1. INTRODUCTION

1.1 SPECIFICATIONS

Dimensions

Weight: 56 lbs with legs (25.4 kg)

Height: 70 in (177.8 cm)

1.2 CARE AND MAINTENANCE

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

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.

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

Operating Conditions

- The simulator will only power on when connected to the AC power supply.
- Operating temperature: 50°-95° F (10°-35° C)
- Humidity: 5%-95% (non-condensing)

Storage Conditions

- Store Simulator in a cool, dry place. Extended storage should be between 32°-8° F (0° -29° C). Other temperatures will cause the simulator to soften and slowly warp
- Humidity: 40%-60% (non-condensing)
- To avoid damage to the simulator, please store and ship it in the clear poly bag provided. Do not stack or store heavy materials on top of the carton.

CAUTION: Do not store the simulator with a discharged battery. It is good practice to recharge the battery at the end of each day of simulation. In addition, make sure the battery is recharged at least once every month even if the simulator is not being used.

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.
- 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.

IV Arm

- Only use Gaumard's simulated blood provided in the standard package. Any other simulated blood containing sugar or any additive may cause blockage and/or interruption of the veins in the IV arm.
- The use of needles larger than 22 or 23 gauge will reduce the lifetime of the arm skin and veins.
- Always purge with clean water, then drain the vein reservoirs at the end of each simulation session. Doing so will retard the formation of mold and prevent clogging of the system.
- We recommend flushing veins with a 70:30 mix of clean water to isopropyl alcohol (IPA) after each use to prolong the life of the vasculature.

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.

ECG and Electrical Therapy Checklist and Warnings

WARNING: Defibrillation is only allowed on the large sternum and apex sites. NEVER deliver a shock to ECG electrode targets on the shoulders or waist. Doing so will not create a fire hazard, nor is there a risk of shock to the provider, but internal damage in the simulator may result. This situation is considered improper use and is NOT covered by the simulator warranty. The system will require repair.

- Always treat the simulator with the same precautions used with a real patient.
- Only deliver electrical therapy when the simulator is fully assembled, dry, and undamaged.
- Make sure the defibrillation patches on the simulator are in good condition, including removing any and all gel residue on the defibrillation patches from previous use(s).
- It is good practice to remove gel residues after every use. Failure to do so will leave behind a film of electrode gel that hardens causing arcing and pitting.
- Do not re-use the gel-adhesive pads. Do not leave them on for next day use.
- Use hard paddles or wet-gel pads preferably.
- Avoid using solid-gel pads since they present higher risk of burning the simulator's skin.
- Gel pads have a shelf life. Make sure they are not expired to avoid arcing.
- Make sure the simulator is not in contact with any electrically conductive surfaces.
- Use the simulator only in a well-ventilated area, free of all flammable gases.
- NEVER attempt to service or modify any of the electrical connections, especially those between conductive skin sites and the internal electronics.
- Discontinue use if any wires are found exposed with damaged insulation.
- Real medical products, especially electrodes, sometimes use powerful adhesives that can be difficult to remove. A gentle, degreasing cleanser may be needed.
- Electrode gel on the skin between any two electrode targets can become a pathway for electrical current, just as in real life. If this occurs, Adult's skin can be burned.
- Do not allow defibrillation pads to overlap ECG sites. Doing so may damage the simulator and cause arcing.
- Should dark traces appear on the conductive patches due to gel residue or previous arcing, use a pencil eraser to remove the traces and then clean with alcohol.
- DO NOT SCRATCH the conductive patches with abrasive objects; doing so will cause irreversible damage to the conductive sites and subsequently cause arcing.

2. OVERVIEW

2.1 FEATURES

Airway

- Airway sounds and vocal responses
- Supports bag mask ventilation
- Visible vocal cords
- Head tilt-chin lift and jaw thrust
- Oral/Nasal intubation (ET)
- Intubation depth detection
- Preprogrammed speech responses
- Bilateral lung expansion with bag-valve ventilation
- Unilateral chest rise with right main-stem intubation
- Oral suctioning
- Gastric distension with excessive BVM

Breathing

- Bilateral lung sounds
- Programmable chest rise and fall
- Built-in air compressor for continuous breathing

Circulation

- Intraosseous access at right tibia
- IV training arm
- Oximeter sensor placement detection
- Multiple palpable pulses
- Blood pressure auscultation
- Korotkoff sounds
- Visible cyanosis

Cardiac

- CPR chest compression and ventilation performance sensors
- Chest compressions generate palpable pulses
- Defibrillate and pace using real medical devices
- Heart and lung sounds
- 4 lead ECG using real medical equipment

Options

- UNI Tablet (S300.100.215.PK)
- Bedside Virtual Monitor
- Modified Defibrillation Snaps

2.2 OMNI®2 WIRELESS CONTROL INTERFACE (.250.PK ONLY)

- Intuitive touchscreen interface with built-in wireless connectivity
- Make physiological changes on the fly or trend them over time
- Event Log records participant actions, vital signs changes, and input notes to support debriefing
- Monitor CPR quality metrics in real time
- Time to CPR
- Compression Depth/Rate
- Chest Recoil
- Compression Interruptions
- Ventilation Rate
- Excessive Ventilation
- Interactive checklist lets you easily track provider actions during the exercise
- Export CPR performance reports for debriefing

3. INITIAL SET-UP

3.1 UNBOXING CARE AND CAUTIONS

Code Blue III Adult is shipped partially assembled. Remove the simulator from the box with at least two people. Avoid lifting the simulator by the arms or legs as this may cause damage to the joints. Rest the simulator on a flat surface capable of supporting the weight of a real adult patient.

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

3.2 PACKAGE CONTENTS

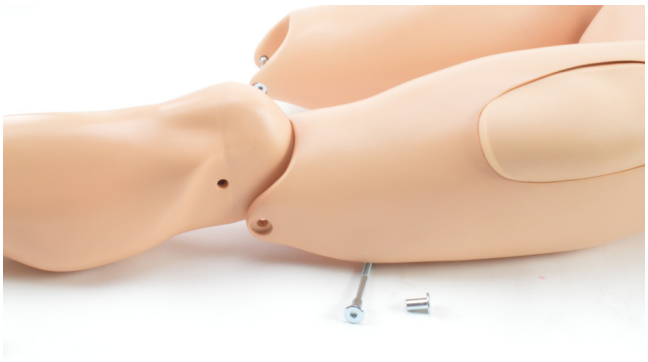
1. Lower left leg
2. Lower right I/O leg
3. Modified BP cuff
4. Replacement bones for I/O leg
5. Filling kit
6. Replacement vein kit
7. Allen-key set
8. Charger
9. Mineral oil lubricant
10. OMNI Link
11. OMNI®2 tablet (.250 PK)

3.3 EQUIPMENT SETUP

Leg Assembly

1. Remove the bolts from the knee joints using the hexagonal wrench included in your package.

2. Align the lower leg with the upper leg.



3. Insert the bolt and tighten the hardware with the hexagonal wrench

3.4 BATTERY CHARGER

Connecting the Battery

The simulator is shipped with the internal battery disconnected.

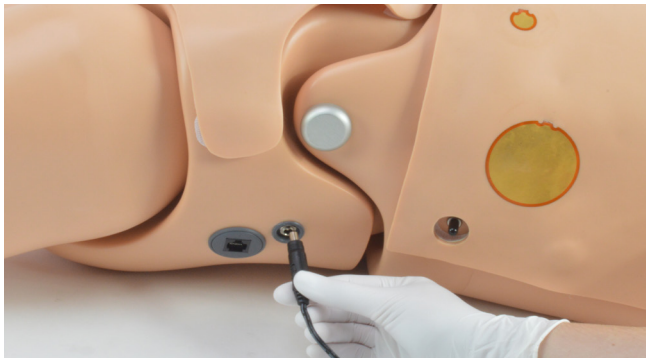
1. Remove the left leg intramuscular injection (IM) injection site.

2. Connect the battery leads and replace the IM injection site.

   NOTE: The Code Blue III Adult is equipped with a built- in rechargeable battery. The simulator has a battery life of up to 2.5 hours.

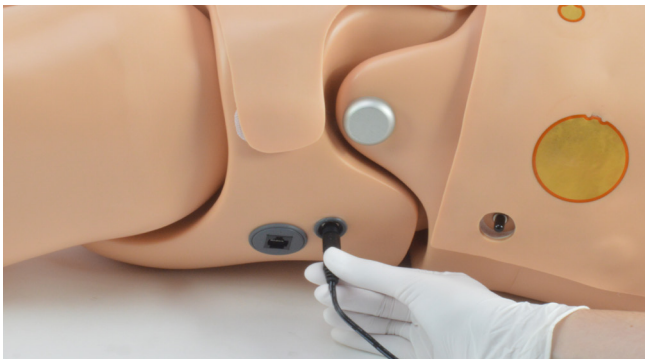
Charging the Battery

1. Plug the charger into a wall outlet and into the simulator.



2. Allow it to charge until the light turns green

3. Disconnect charger when the battery is fully charged.



CAUTION: Do not store the simulator with a discharged battery. It is good practice to recharge the battery at the end of each day of simulation. Make sure the battery is recharged at least once every month even if the simulator is not being used.

3.5 CONNECTING TO OMNI®2

If the Code Blue III Adult was purchased with the .215.PK UNI tablet/PC option please refer to "6.1 UNI™ Tablet" on page 46 for connection instructions.

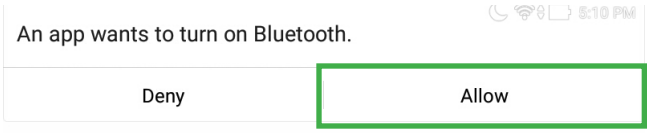
1. Turn on the OMNI 2 controller by pressing and holding the power button.

2. Connect the OMNI 2 Link to the wired connection port on the right side of the simulator.

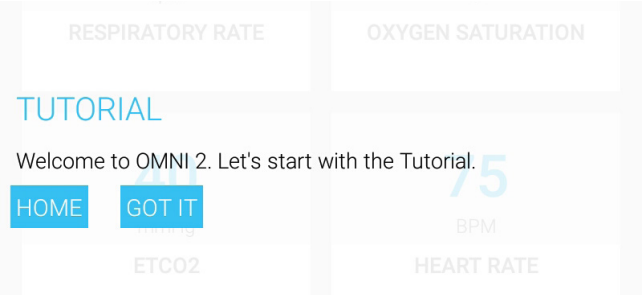
3. Enable the bluetooth connection on the simulator by pressing the POWER button on the OMNI 2 Link.

4. Select "Allow" for turning on the tablet's Bluetooth. The simulator will connect automatically to the tablet.

   NOTE: A startup screen is shown while OMNI 2 is detecting the simulator's features.

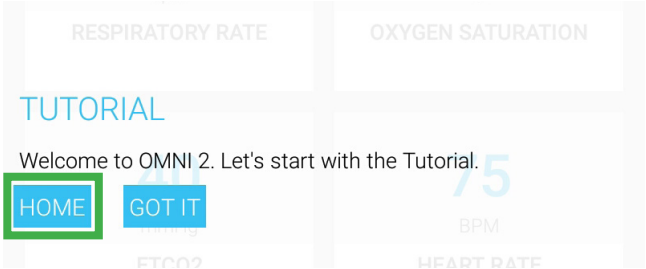


5. Follow the tutorial for a brief overview of the features of OMNI 2. Tap " GOT IT" to move on to the next step of the tutorial.

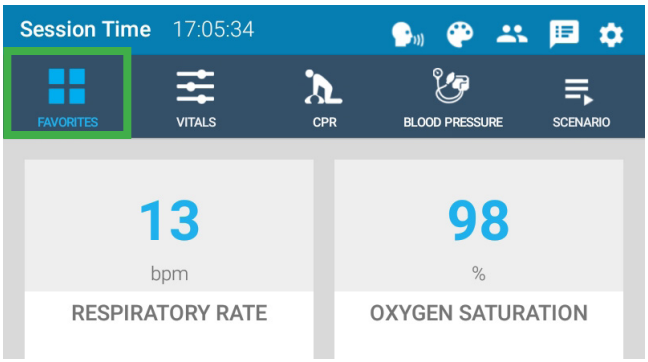


6. Exit the tutorial at any time by selecting "HOME."

NOTE: Completing the tutorial one time will avoid it from appearing at start-up in the future. To view the tutorial again, tap on the Menu icon and select "Show Tutorial".



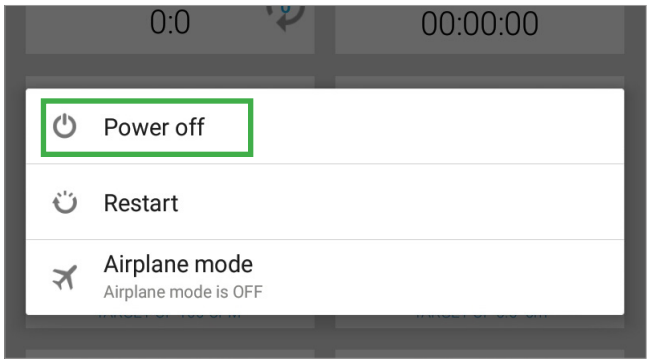
7. After the tutorial, OMNI 2 will proceed automatically to the "Favorites" page and establish a connection to the simulator.



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

3.6 POWERING OFF THE SIMULATOR

To turn off the simulator, power off the OMNI 2 tablet by pressing and holding the power button, then select "Power Off" in the pop-up window..



4. WORKING WITH THE SIMULATOR

4.1 RECOMMENDED DEVICE SIZES

Procedure	Recommended Device Size
Intubation (Blade size)	Miller 4 or MAC 3.5
LMA	Size 4 or 5
Nasal Intubation	8 mm outer diameter max
Oral Intubation	ETT 7.0 or 7.5 (no cuff)

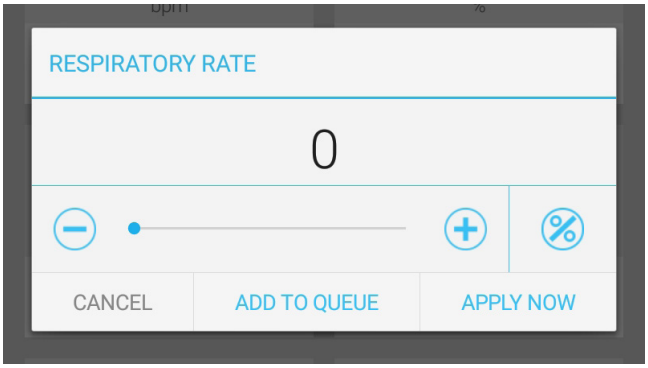
4.2 AIRWAY

Nasal and Oral Intubation

The simulator's airway has anatomical landmarks and can be intubated orally, nasally, and through the trachea using an endotracheal tube, nasopharyngeal tube, or LMA.

Intubation

1. Before intubating, turn the respiratory rate to zero

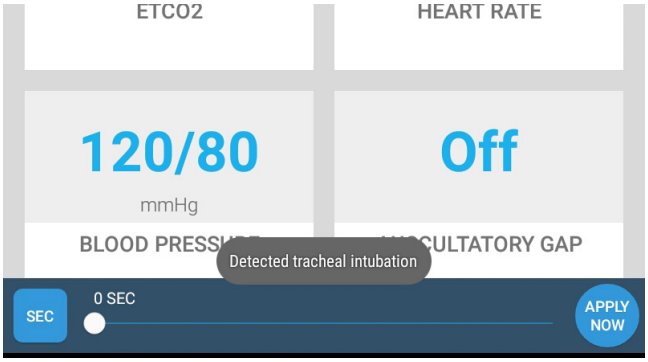


2. Lubricate the adjunct with mineral oil.

WARNING: Always lubricate tubing prior to performing any nasal or oral intubation. Failure to do so will make intubation very difficult and will result in damage to the airway. Do not apply silicone or mineral oil directly into the mouth and airway.

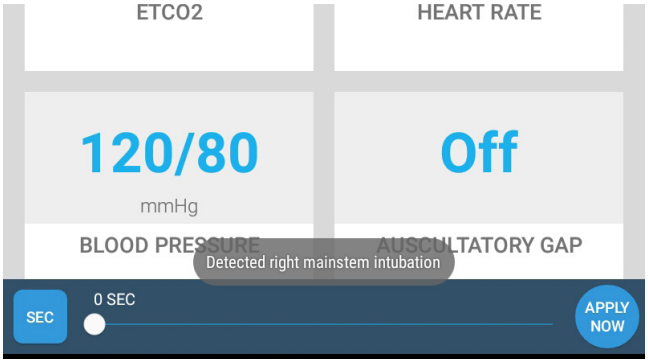
Intubation Sensor

- Sensors detect the depth of the intubation tube when the simulator is intubated.
- Right mainstem intubation is logged when tubing is inserted too deep.



- Right main stem intubation results in a disabled left lung automatically.
- Once tubing position is corrected, the left lung is enabled.

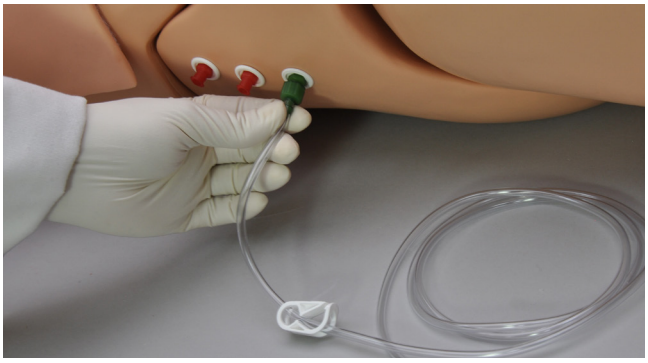
  NOTE: Endotracheal tubes with a black colored tip may interfere with intubation sensor detection. An endotracheal tube with a clear end is recommended.



Esophageal Intubation

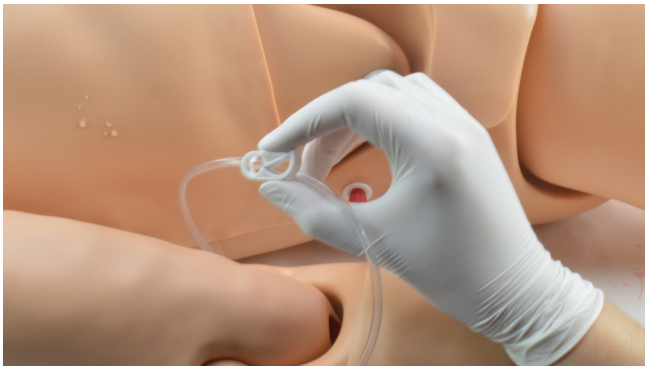
- Fluids can be inserted through nasogastric tubes.
- Always lubricate the device before inserting.

- Ensure that the drainage tube is connected to the right side of the simulator and that the clamp is open.



Draining the Gastric Bag

1. Open the drainage clamp and let all fluids drain into a receptacle.



2. Insert an NG tube and flush the tubing by ineJcting a mixture of 70:30 isopropyl alcohol to water. Allow the mixture to drain out of the open drainage tube.

Airway Sounds

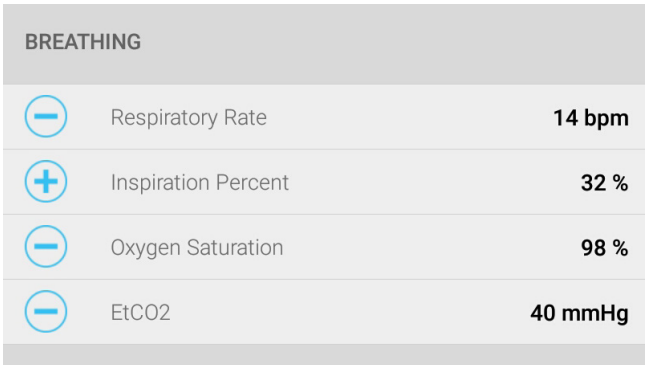
- The simulator can produce audible airway sounds synchronized with its breathing.
- Use the software controls to change the sound type and adjust the volume.
- Auscultate using a standard stethoscope.

AIRWAY		
⊕	Throat Sound	**Normal**
BREATHING		
⊕	Respiratory Pattern	**Normal**
⊖	Respiratory Rate	**13 bpm**

4.3 BREATHING

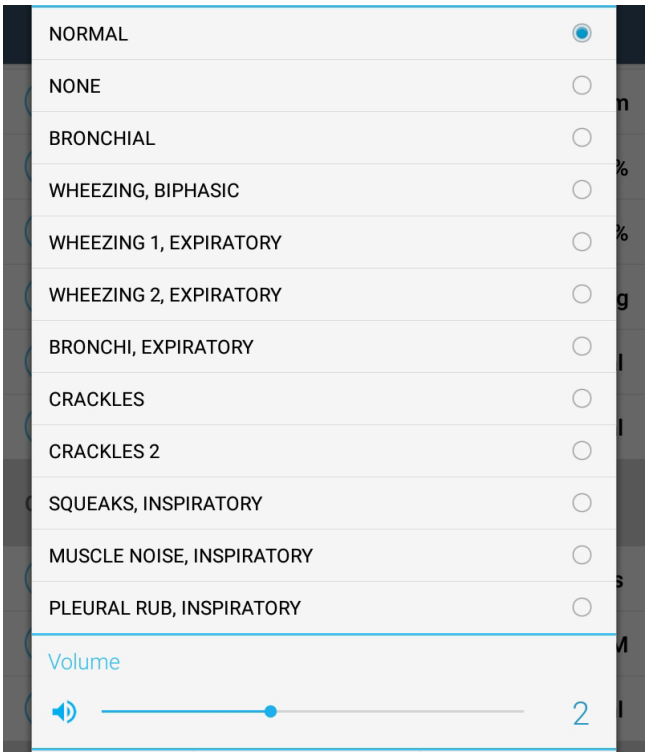
Chest Rise

The simulator exhibits automatic bilateral chest rise. Use the software controls to adjust the breathing rate and the inspiratory percentage.



Lung Sounds

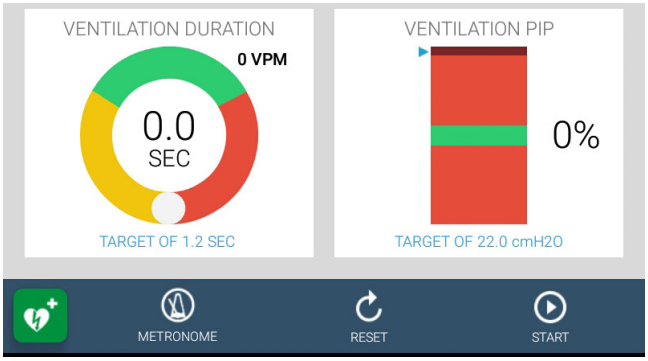
- Lung sounds are synchronized with the respiratory rate.
- Use the software to control both right and left lung sounds.
- Choose from the library of lung sounds, and move the slide bar under it to adjust the volume.



Ventilation

- Change respiratory rate to zero before ventilating.
- Bilateral chest rise can be observed with proper ventilations.

- Ventilations are measured and logged.
- Observe the provider's performance in real time using the CPR tab.

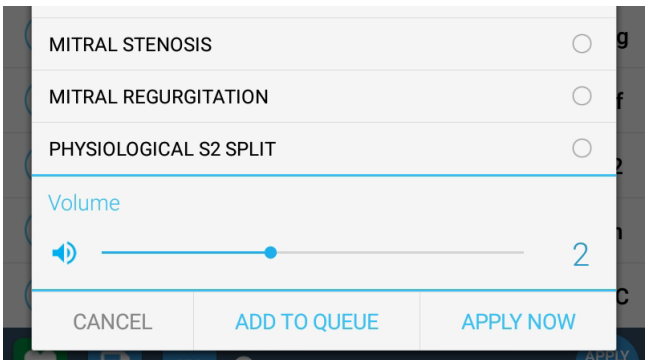


- Excessive BVM will result in gastric distension.
- Relieve the excess air by pressing on the lower torso.

4.4 CARDIAC

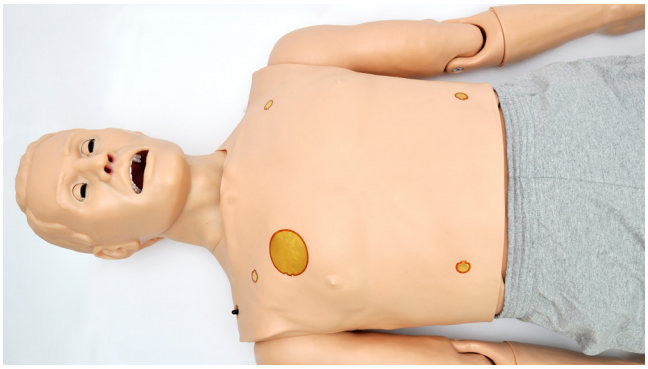
Heart Sounds

- Heart sounds are synchronized with the heart rate.
- Use the software to choose from the library of heart sounds, and move the slid bar to adjust the volume
- Use a stethoscope to auscultate.



ECG Monitoring and Electrical Therapy

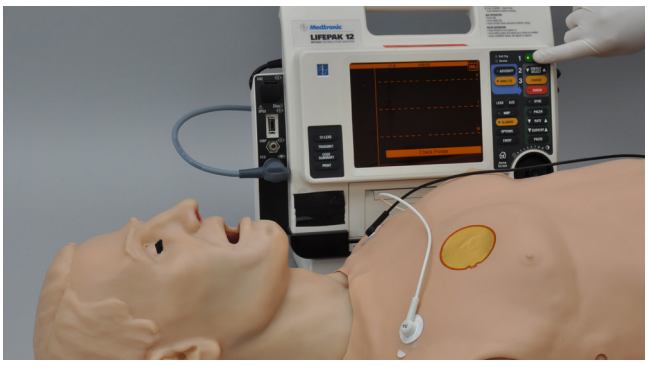
- Code Blue III accommodates real ECG monitoring.
- The 4 conductive skin sites allow for attachment of real electrodes.
- Track cardiac rhythms and events with real medical equipment just as you would with a real human patient.
- Only deliver a shock to the large gold sternum and apex sites.
- Review the Care and Maintenance Instructions in Section 1.2.



1. Power on simulator. Connect ECG gel electrodes to the ECG sites.

2. Attach the leads to the ECG gel electrodes.

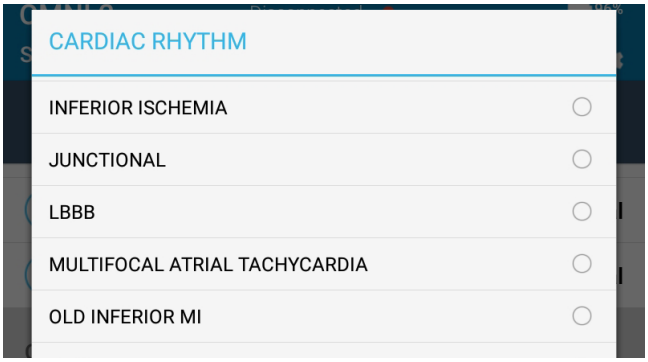
3. Turn on the monitor.



Electrical Therapy

Defibrillation, pacing and cardioversion is supported on the simulator.

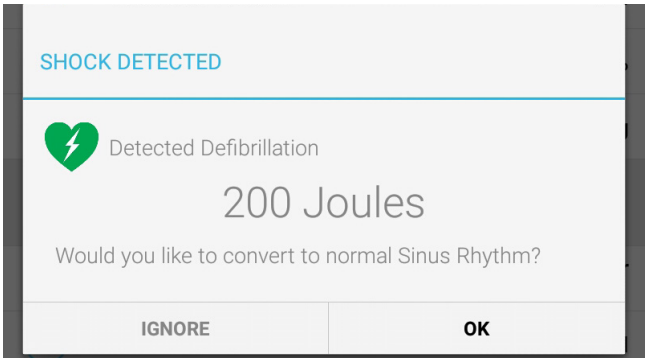
1. Power on the simulator and select an EKG rhythm in the OMNI 2 interface.



2. Connect the defibrillation pads to the large gold patches on the simulator's chest skin.

3. OMNI 2 will detect any electrical therapy done to the simulator. Tap "OK" to convert to a normal Sinus Rhythm. Tap "IGNORE" to continue with the scenario.

   NOTE: To auto convert to a normal sinus rhythm after a shock, the setting on the OMNI 2 may be changed. Refer to the OMNI 2 user guide for more details.

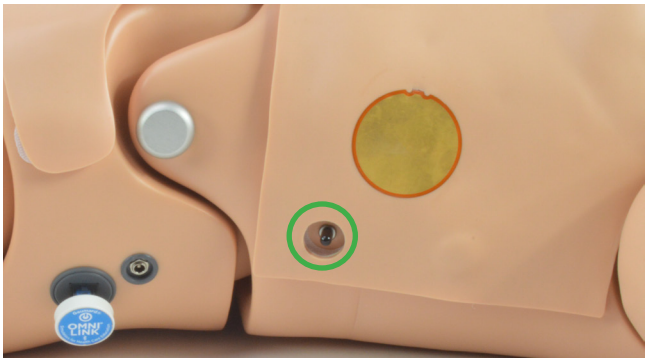


WARNING: Defibrillation is only supported on the large sternum and apex sites circled RED below. Do not deliver a shock to ECG electrode sites on the shoulders or waist marked GREEN. The warranty does not cover damage to the simulator caused by applying electrical therapy to the ECG sites

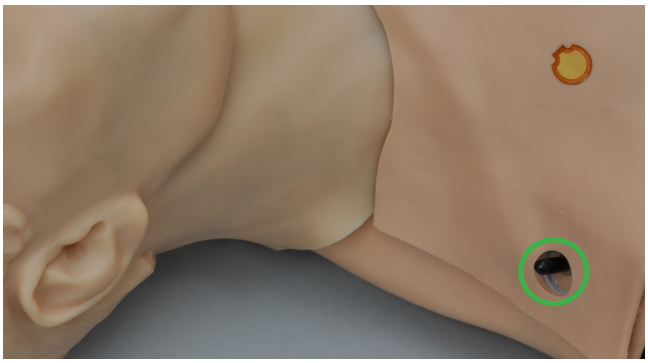
For exercises that incorporate real electrical therapy of any kind, always follow the safety guidelines and operating procedures outlined in the medical device manufacturer documentation.

Defibrillation Snap Connectors

- The chest skin snap connectors and Modified Defibrillation Cables allow providers to deliver electrical therapy at the sternum and apex sites without the use and frequent replacement of pads or patches.
- The snap connections are only functional when the internal defibrillation snaps are installed.
- The chest skin sternum and apex gold patches are disabled when the defibrillation snaps are enabled.



Apex Snap

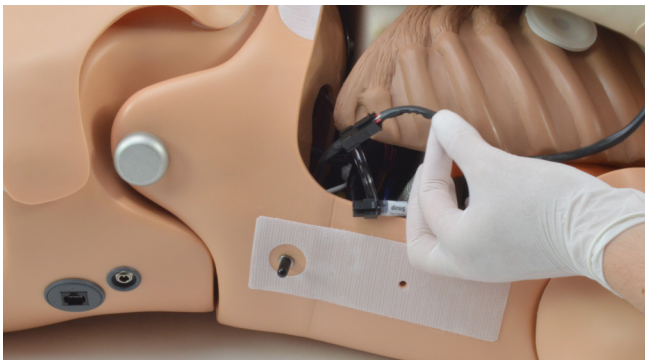


Sternum Snap

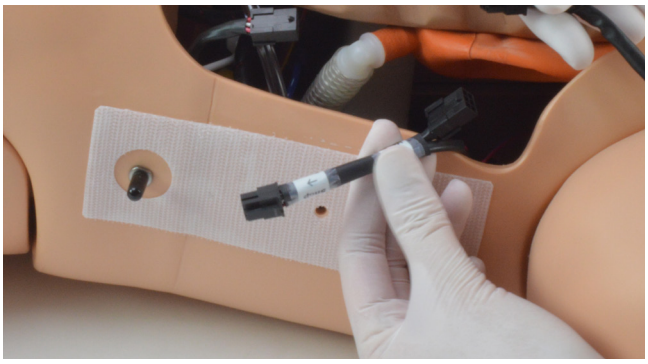
Enabling the Defibrillation Snaps

1. Turn the simulator off by closing the OMNI 2 software. Carefully lift the chest skin on the left side to reveal the internal connectors.

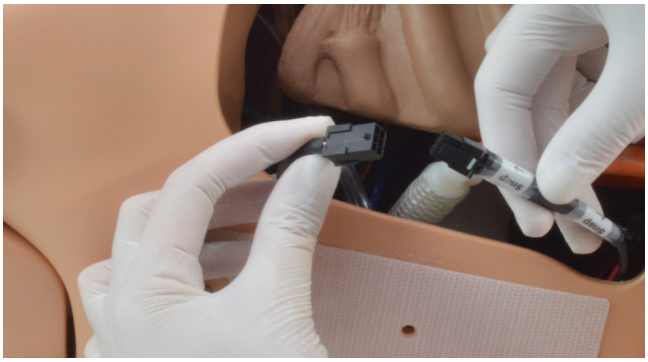
2. Gently squeeze the black clip to disconnect the defibrillation connector from the pacer module.



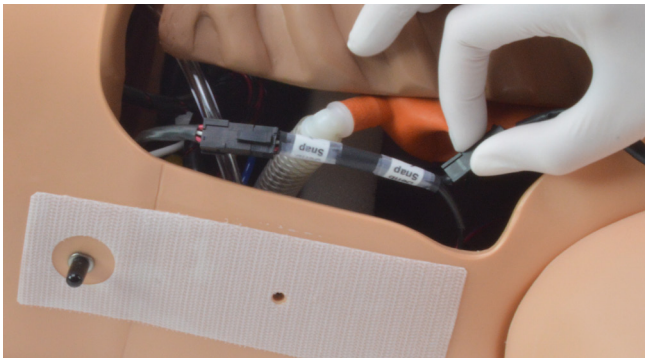
3. Gently untuck the cable labeled Defib Snap Harness.



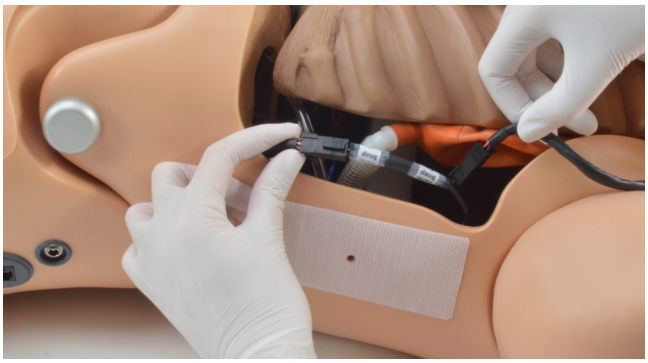
4. Connect the pacer cable to the Defib Snap Harness.



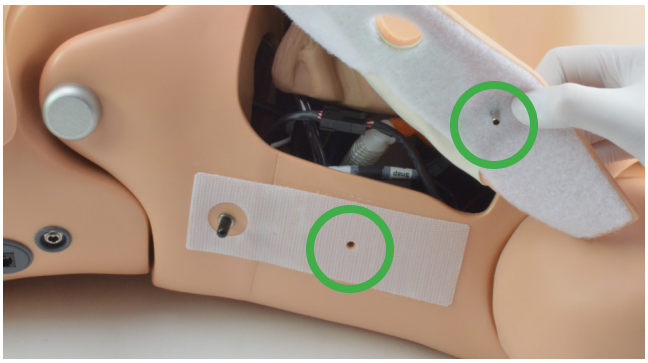
5. Connect the lcable labeled Vest to the other side of the Defib Snap Harness.



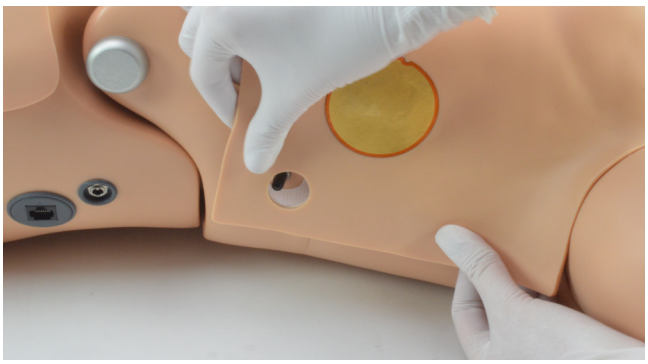
6. Tuck the cables into the chest cavity.



7. Insert the chest skin placement pin into the guiding hole located on the Velcro to align the chest skin.



8. Gently press the chest skin back in place.



Chest Compressions

- Perform chest compressions on the simulator as you would a real patient.
- Proper chest compressions result in palpable carotid pulses.
- Chest compressions are measured and logged in the OMNI 2 software for debriefing purposes.

4.5 CIRCULATION

Palpable Pulses

- Automatic bilateral carotid and femoral, and left brachial and radial pulses can be palpated.
- The simulator's pulses are dependent on blood pressure, heart rate, and rhythm.

Bilateral Carotid

Bilateral Femoral

Left Radial

Left Brachial

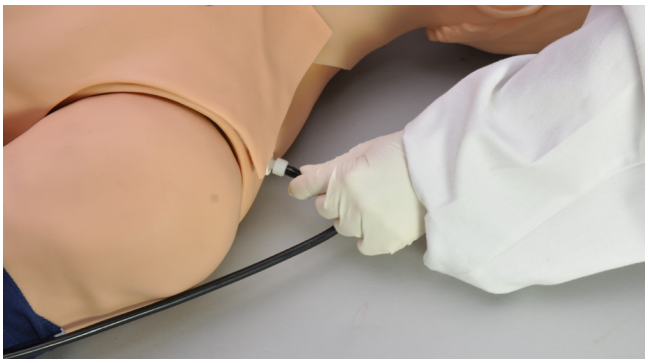
Programmable Blood Pressure Setup

Programmable blood pressure can be read on the left arm using a modified sphygmomanometer. In addition, users can auscultate the Korotkoff sounds programmed by the software.

1. Locate the Luer-Lock port on simulator's left posterior shoulder and remove the cap enclosing the Luer-Lock port.

2. Wrap the modified BP cuff around the upper left arm.

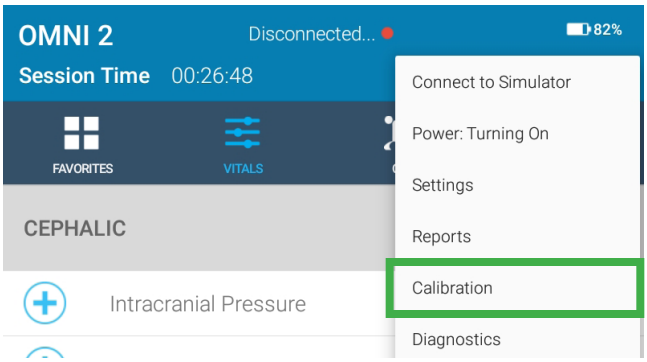
3. Connect the modified BP cuff to the left shoulder.



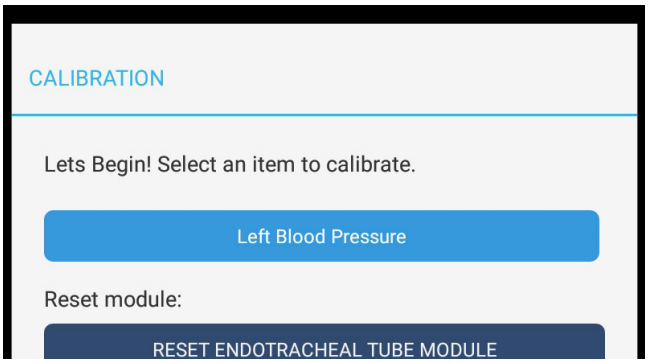
BP Cuff Calibration

Before starting the calibration process, place the blood pressure cuff on the simulator.

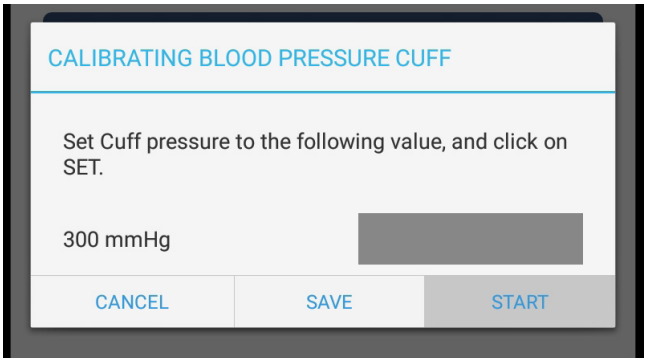
1. Tap the menu icon in the upper right corner of the screen and select "Calibration"



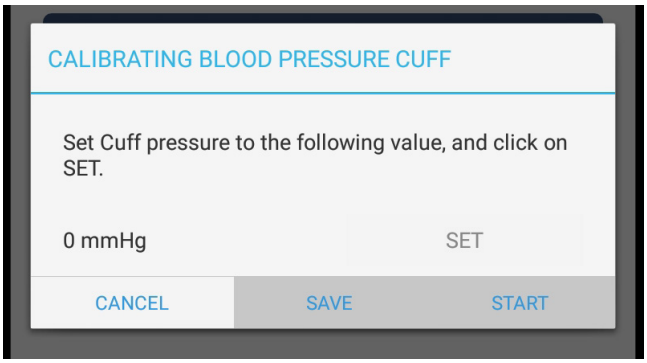
2. Select Left Blood Pressure.



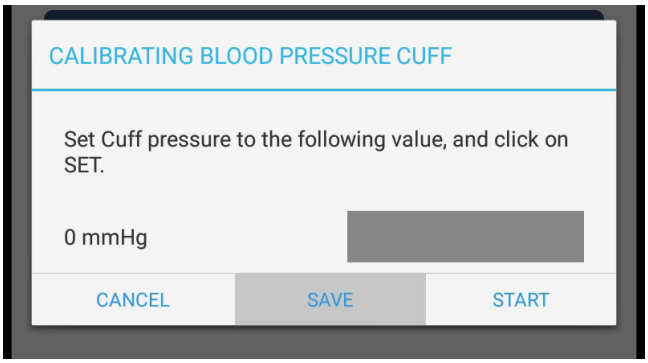
3. Ensure that the gauge reads zero on the BP cuff and tap "START.



4. Follow the prompts to continue the calibration and select "SET" after every pressure.



5. Tap "SAVE" when you reach 300 mmHg and finish the calibration.



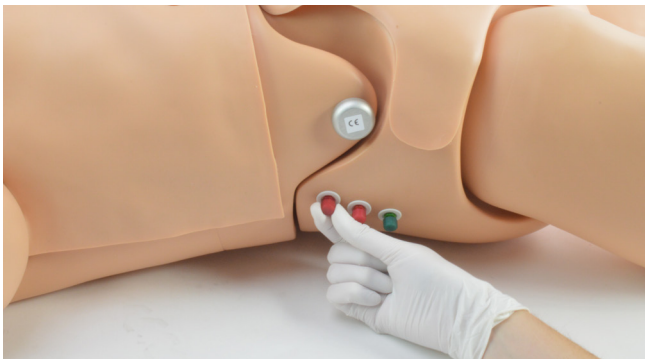
Intravenous Access

The right arm may be used for bolus or intravenous infusions as well as drawing fluids.

NOTE: It is recommended to use size 22 or 23 gauge needles or smaller.

Filling the Vasculature

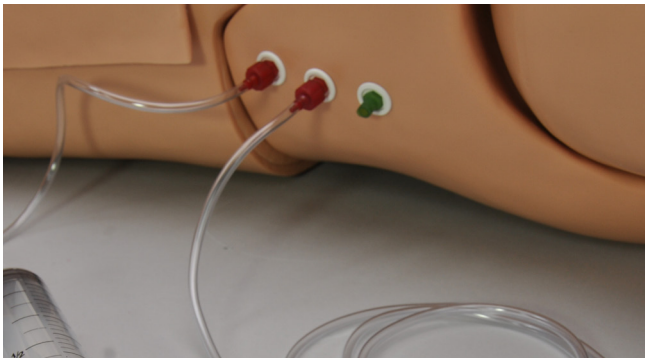
1. Remove the red caps from the ports on the right side of the simulator.



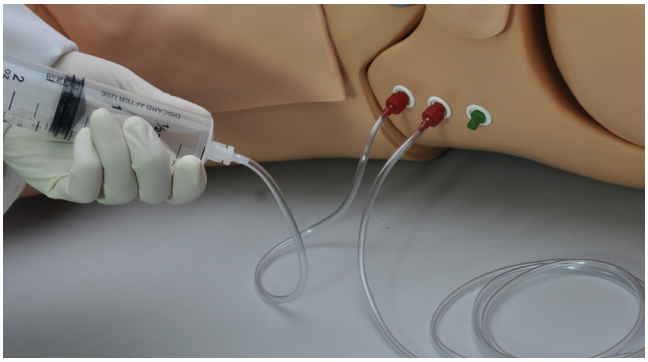
WARNING: Do not attempt to fill IV system without the drain hose in place. Use only Gaumard's provided simulated blood. Any other simulated blood brand containing sugar or any additive may cause blockage and/or interruption of the vasculature system.

2. Fill the syringe with fluid.

3. Connect the fill syringe to one red port and connect the drain hose to the other red port and leave the clamp open.



4. Push the fluid through the vasculature until there are no air bubbles draining through the drain tube.



5. Clamp the drainage hose for blood collection exercises and unclamp for infusion exercises.

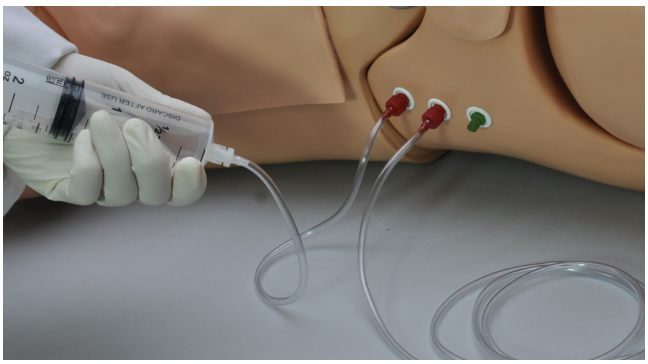
Draining the Vasculature

It is recommended to drain the vasculature at the end of each day of simulation.

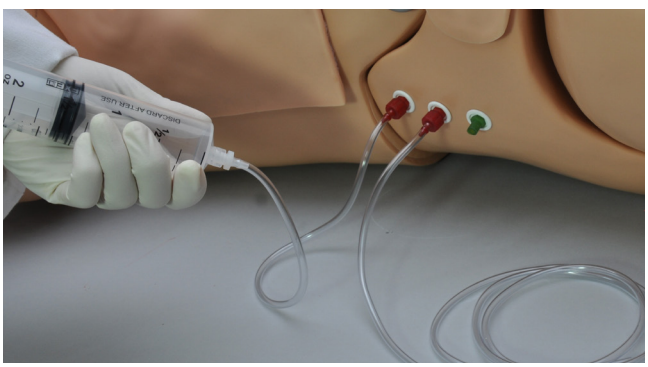
1. Unclamp the drainage hose.

2. If simulated blood was used, fill the syringe with a 30:70 mix of isopropyl alcohol to water and connect it to the full port.

3. Push the mixture in until the fluid is clear.

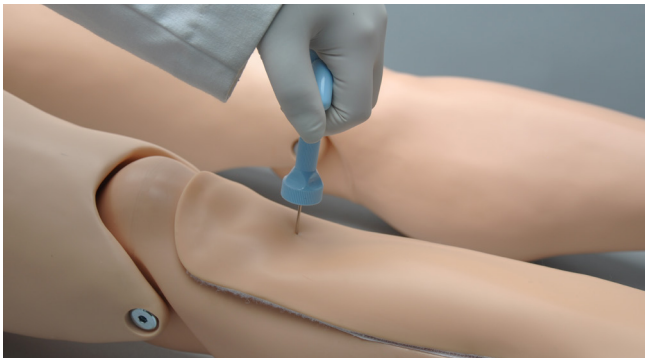


4. Once fluid runs clear, push air through the vasculature.



Intraosseous Access

The right leg tibia has the capacity to simulate an intraosseous access line.



1. Gently remove the tibia skin cover.

2. Remove the bones

3. Attach the IO adapter to the syringe.

4. Fill the syringe with fluid.

5. Fill the lower bone with fluid.

6. Connect the bones together.

7. Replace the tibia.

8. Reattach the skin cover.

Draining the IO Bone

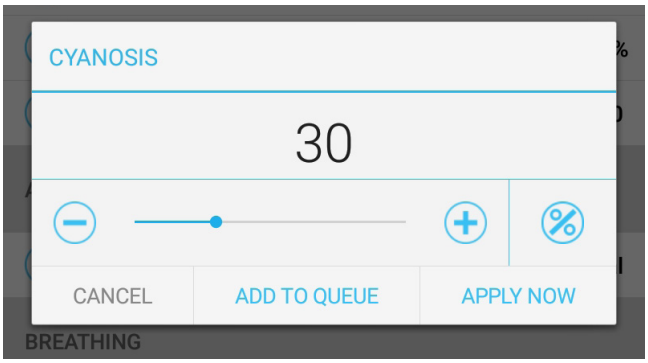
It is recommended to drain the reservoir at the end of each day of simulation.

1. Lift the skin cover and remove the IO bone.

2. Insert the filling kit and suction the fluid out.

Central Cyanosis

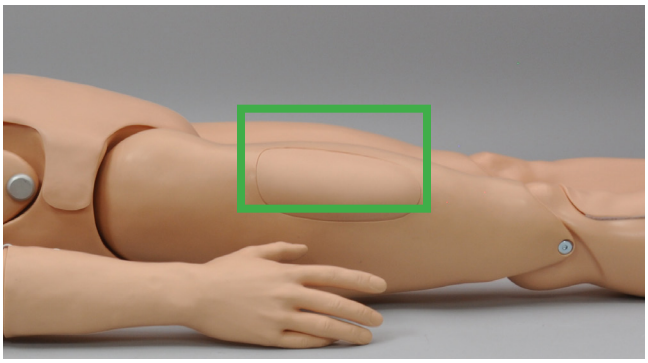
- Code Blue III Adult displays central cyanosis. Activate this feature using OMNI 2.
- Use the slider or the + and - buttons to adjust the intensity.

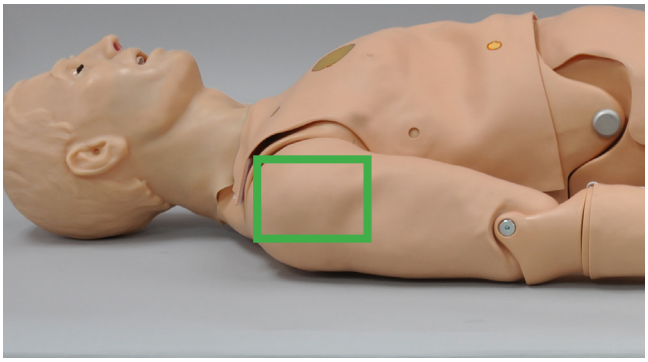


Intramuscular (IM) Injection Sites

- IM sites are located on both deltoids and quadriceps for placement exercises.

WARNING: Do not inject fluids into the intramuscular sites.





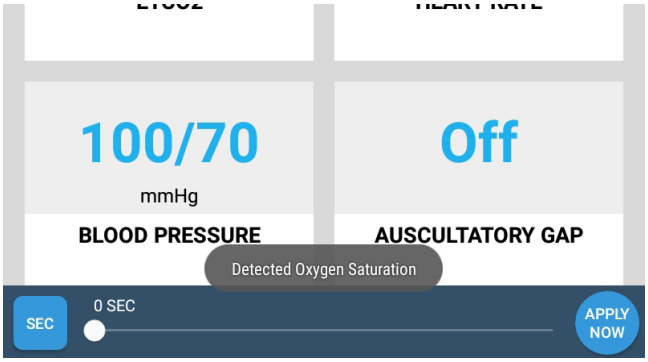
- The injection sites are consumable items. Lift the IM pad from the leg and gently press a new one in place.
- To replace the deltoid IM site, roll down the arm skin and remove the IM pad. The pad is attached with Velcro.

OSAT Monitor Placement Setup

The Code Blue III Adult can detect the placement of an OSAT monitor on the left index finger.

1. Power on the simulator and the oximeter monitor, and place the device on the left index finger.

2. The OMNI 2 device will detect that the OSAT monitor was placed on the simulator.



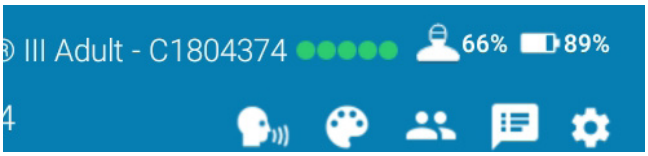
5. WORKING WITH OMNI®2

5.1 MAIN SCREEN

OMNI® 2 opens at the Favorites Page upon startup.

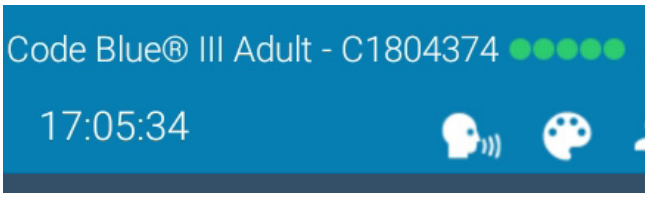
Battery Indicator

There are two battery indicators on the upper right corner of the screen. One is for the OMNI® 2 tablet and he other is for the simulator.

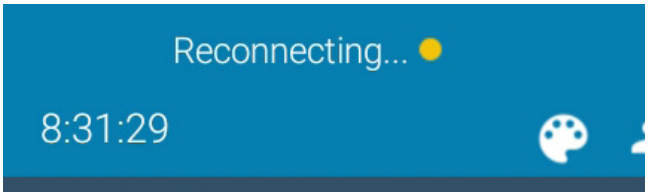


Connection Status

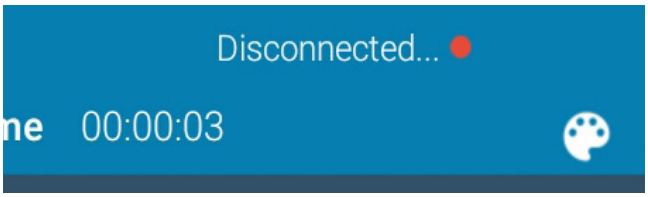
The communication indicator displays the status of the OMNI Link between the simulator and the tablet.



Connected



Attempting Connection

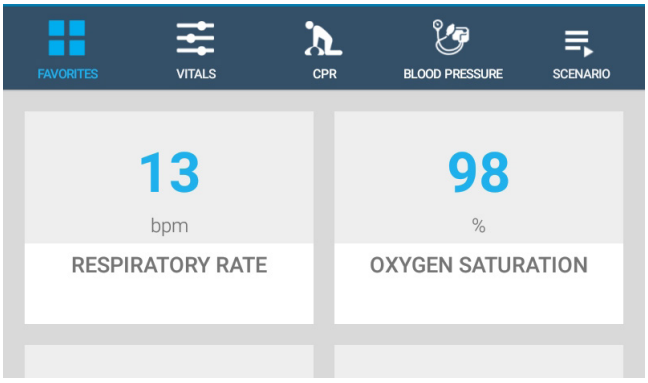


No Connection

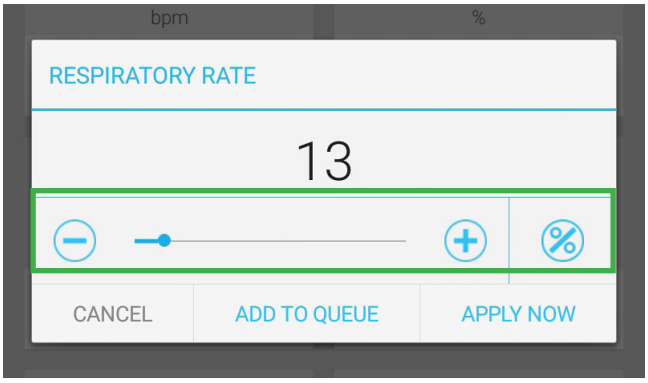
5.2 CHANGING A VITAL SIGN

Vital signs can be quickly changed from the Favorites Page or from the "Vitals" page. Follow the steps below to change any of the parameters:

1. Tap on a vital sign.

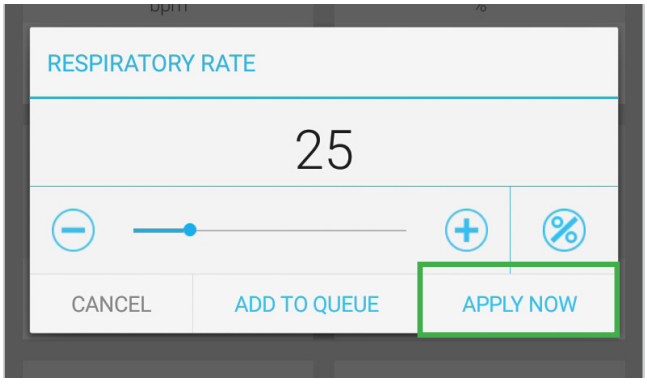


2. Adjust the vital sign by using the slider or the +/- buttons.



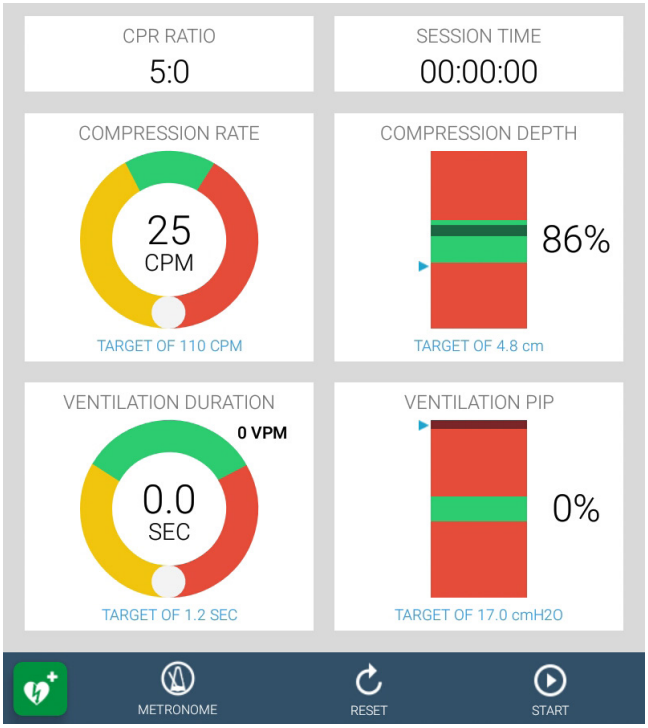
3. Select "Apply Now."

NOTE: Refer to the OMNI® 2 User Guide for more information on changing vital signs.



5.3 CPR

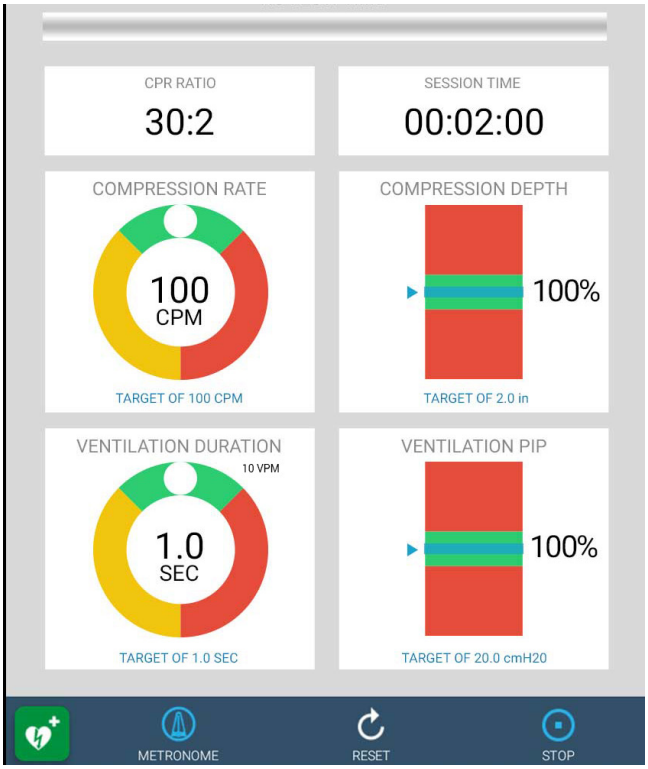
The CPR Page in the OMNI® 2 tablet was designed to help teach CPR by monitoring cadence, depth of cardiac compressions, and airway ventilations in real time.



WARNING: Do not perform mouth to mouth ventilation on the simulator as this will contaminate the airway. The airway can be difficult to clean afterwards, and this may cause mold to form.

CPR Feedback

Monitor the CPR session in real time. The CPR objectives are AHA compliant, and can be adjusted as guidelines change.

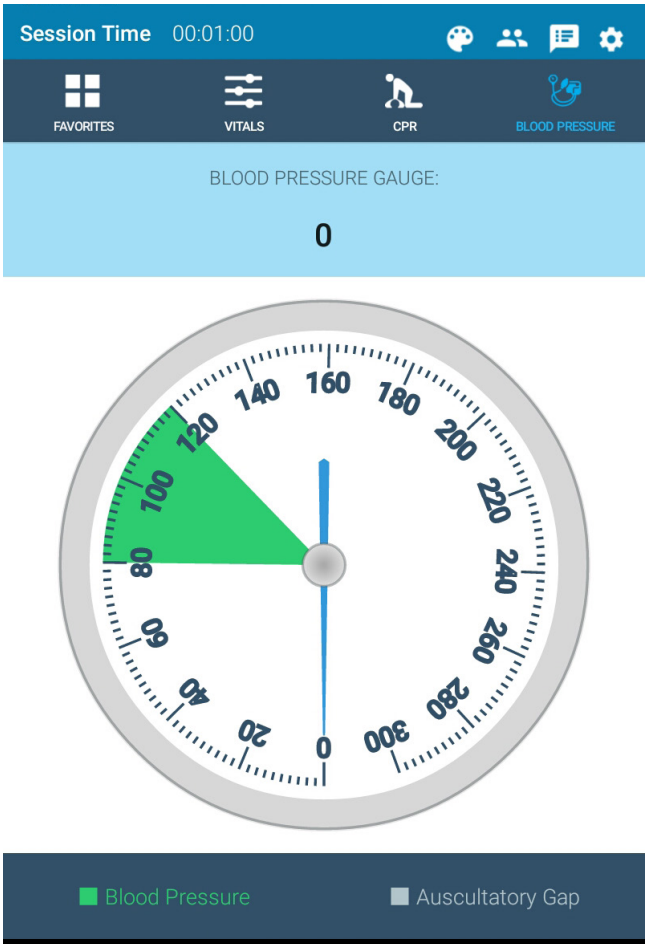


CPR Feedback (Cont.)

Graphics	Function
START STOP	Begin and end a CPR session
RESET	Reset a CPR session
METRONOME	Activate an audible tone for training
	Virtually defibrillate the simulator

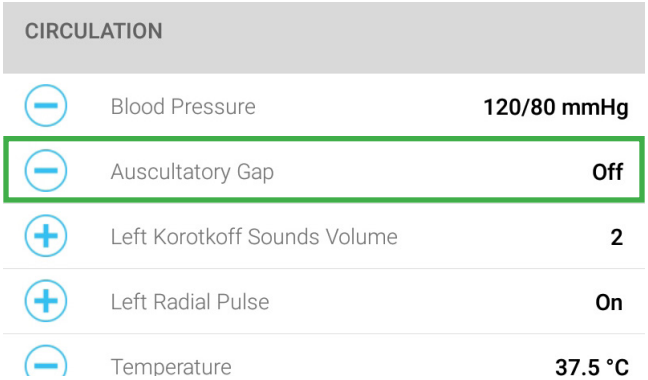
5.4 BLOOD PRESSURE

- The Blood Pressure page has a virtual manometer gauge that shows the simulator's blood pressure in real time.
- The current blood pressure is shown on the gauge in green.

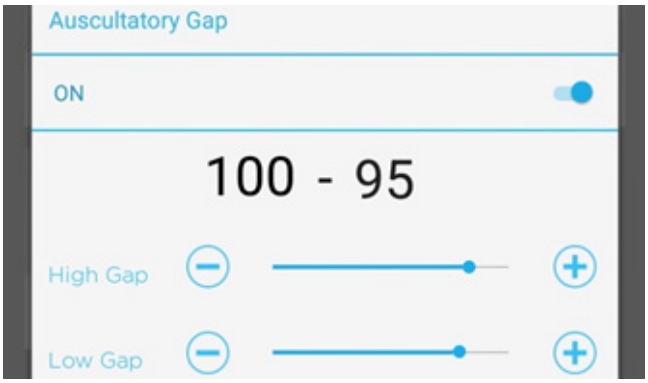


Auscultatory Gap

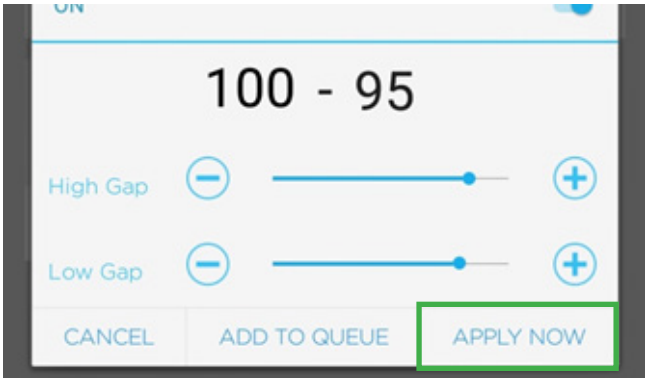
1. To enable auscultatory gap, tap on the "Vitals" page then select "Auscultatory Gap" and slide the ON/OFF button to ON.



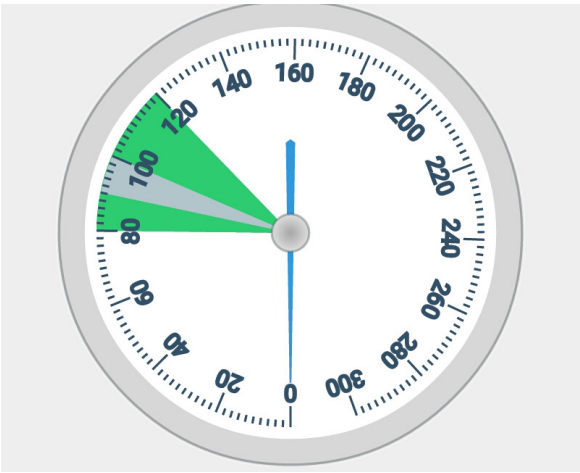
2. To increase or decrease the High Gap and Low Gap, slide the top and bottom bars left or right, or tap the + or – buttons.



3. Tap APPLY NOW to apply it instantly.



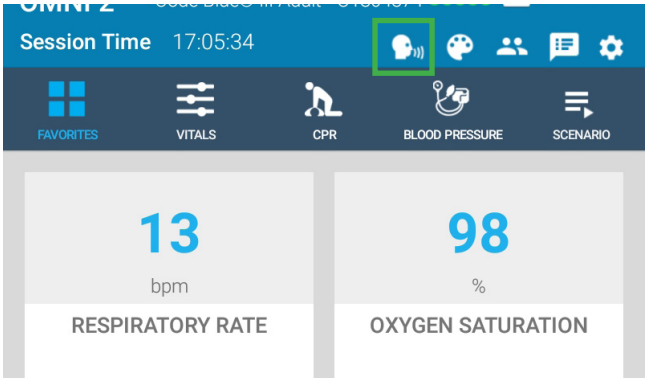
4. The auscultatory gap will appear in gray on the manometer in the "Blood Pressure" page.



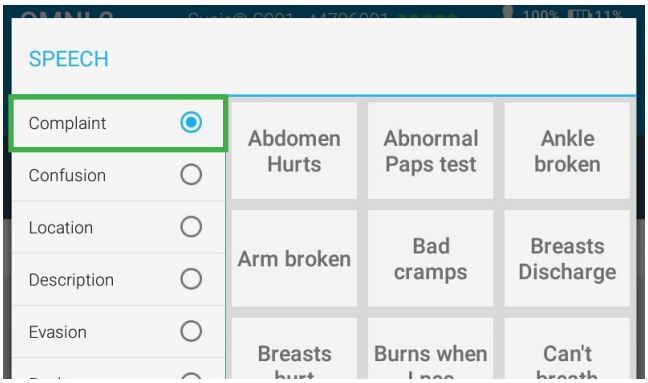
5.5 SPEECH

The simulator contains over 80 pre-recorded expressions. Use the OMNI® 2 tablet to activate the speeches.

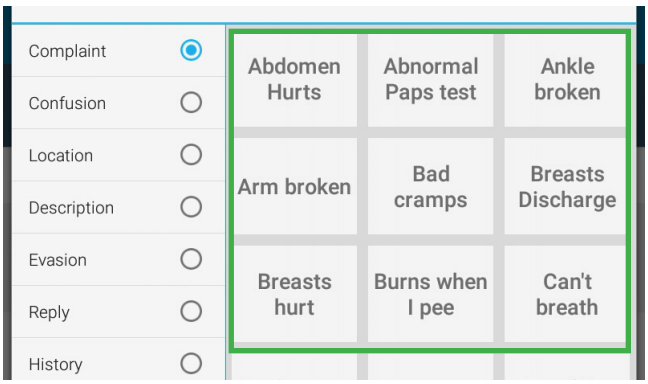
1. Select the Speech Icon on the upper right corner of the screen.



2. Tap a speech category.

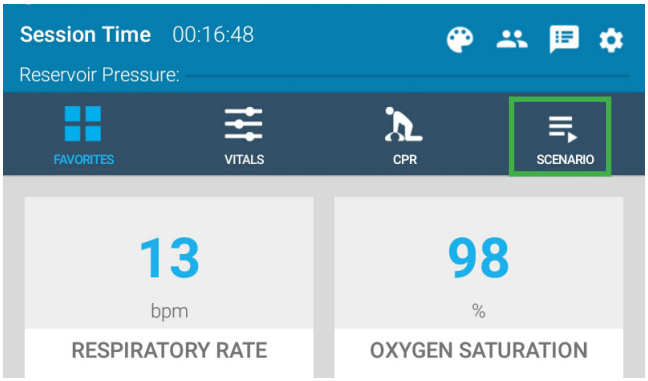


3. Press a speech item to prompt the simulator to speak.

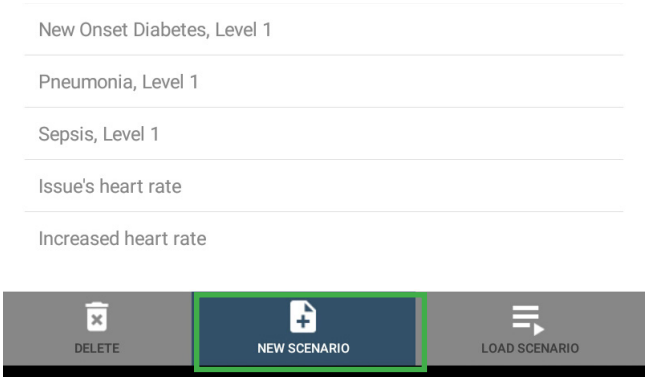


5.6 SCENARIOS

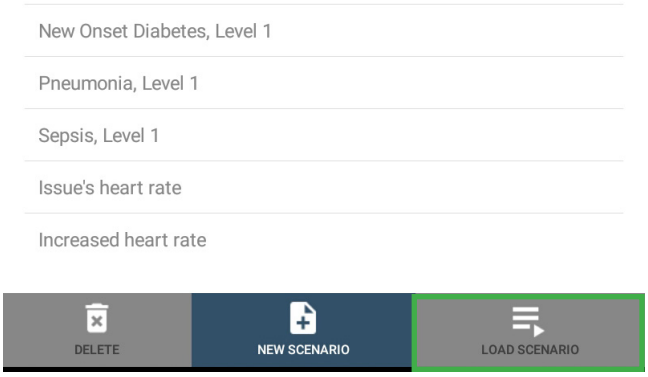
1. Tap the Scenario icon to access the Scenario Page. Use this page to create, load, and run scenarios.



2. Press "New Scenario" to create a custom scenario.

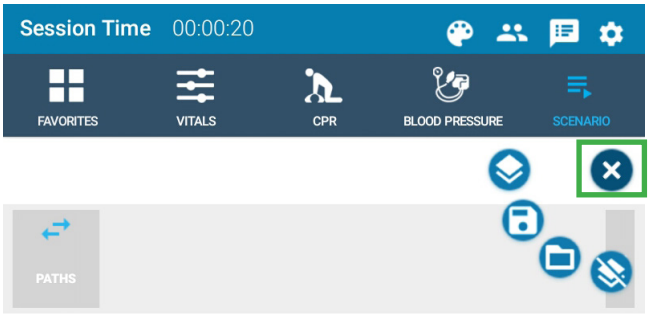


3. Select "Load Scenario" if there are already programmed scenarios.



4. Press the Menu icon to open the options.

NOTE: For more details refer to the OMNI® 2 user guide.



Graphics	Function
	Add a node
	Save a scenario
	Load a scenario
	Clear a scenario

6. OPTIONS

6.1 UNI™ TABLET

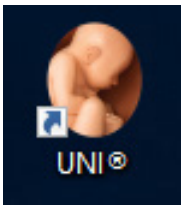
For the S300.100.215.PK perform the following to connect to the UNI tablet and utilize the UNI interface.

Connecting to UNI tablet/PC

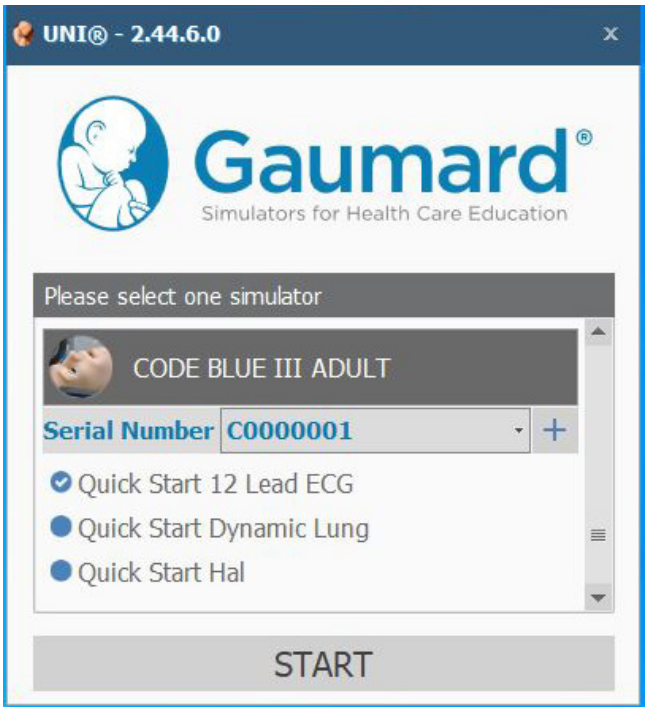
1. Plug the RF module into the USB port of the tablet.

2. Turn on the tablet.

3. Double click the UNI icon to initiate the program.



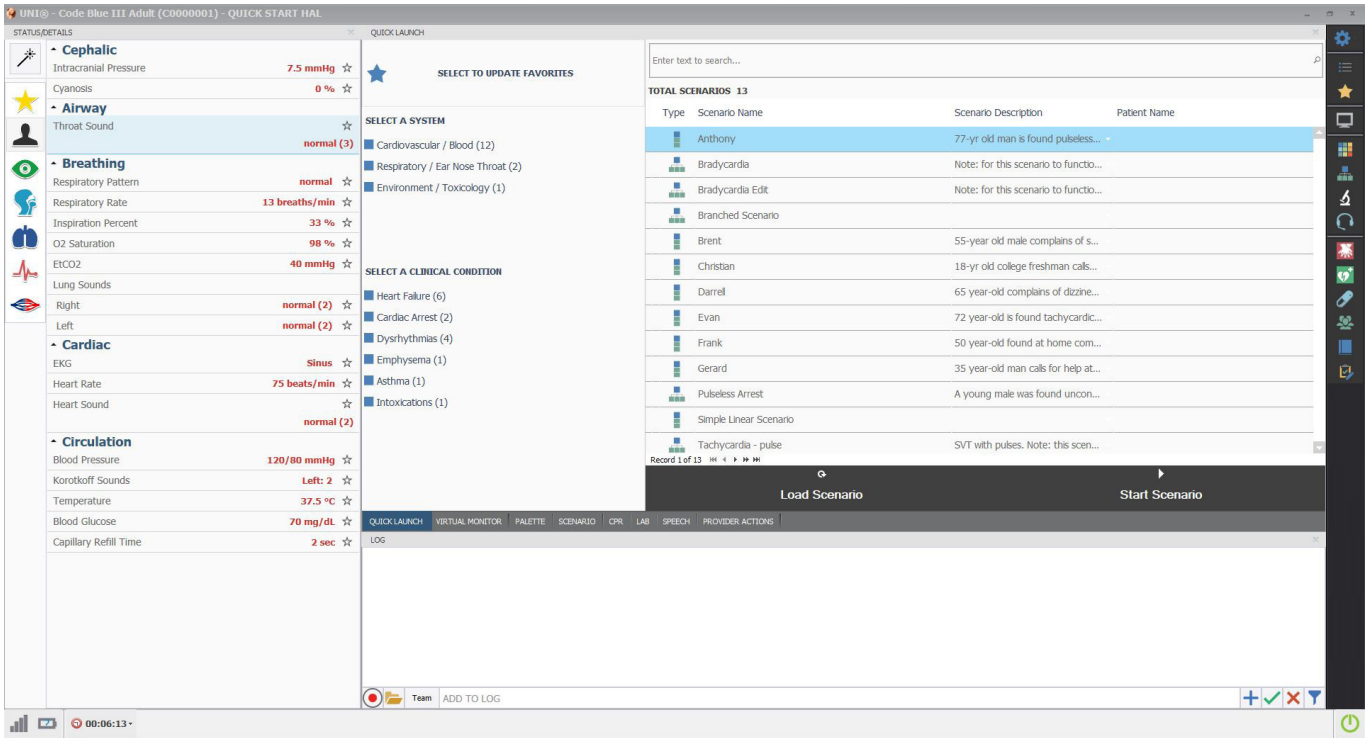
4. Select the Code Blue III Adult and click start.



5. Wait for the simulator establish communication.

UNI Main Screen

The UNI interface opens upon loading to the main screen as shown below:



UNI Battery Indicator

The battery status indicator is located in the bottom left of the UNI interface. The battery icon will progress as the battery in the simulator is used.

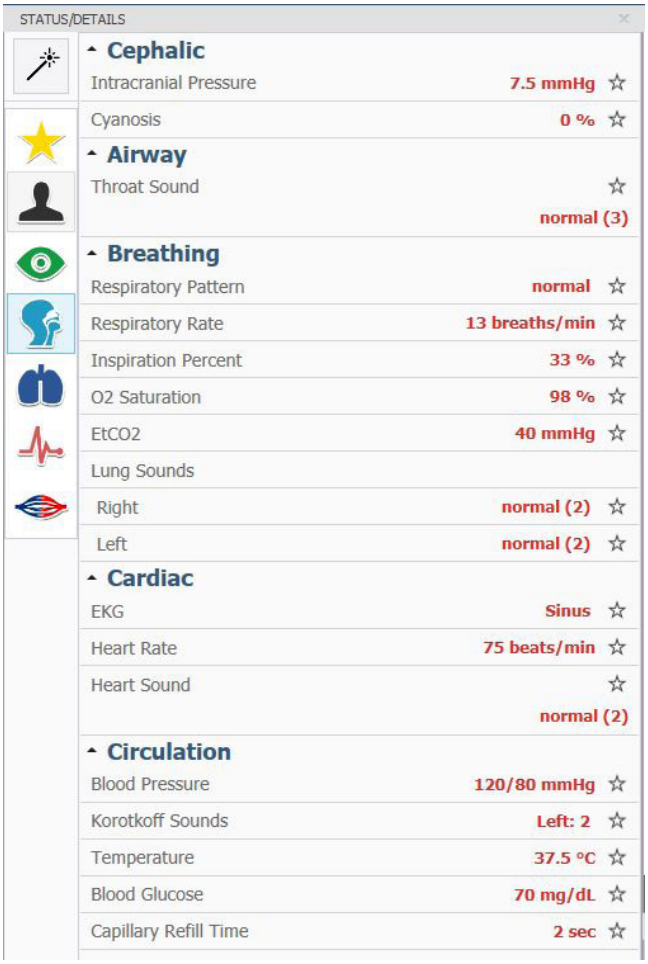
The question mark indicator is shown when there is no communication and the battery information cannot be retrieved.

UNI Connnection Status

The connection status is displayed in the bottom left of the UNI interface. Full bars indicate excellent communication between the computer and the simulaotr (i.e., normal operation).

Status/Details in UNI

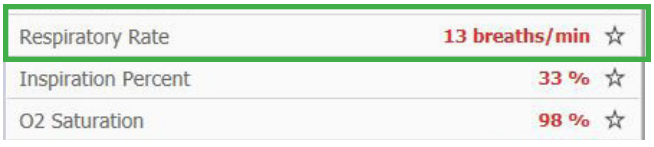
The status panel is located on the left-hand side of the UNI interface.



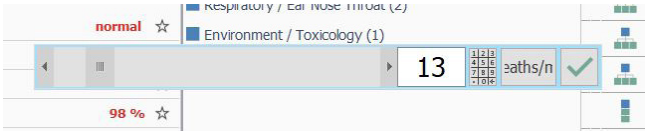
Changing a Status/Details in UNI

To change a status/deatil in UNI:

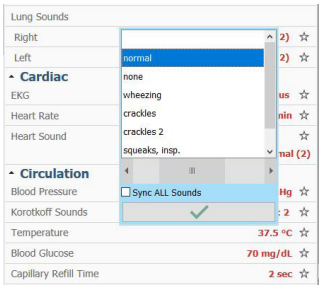
1. Click on a status/detail.



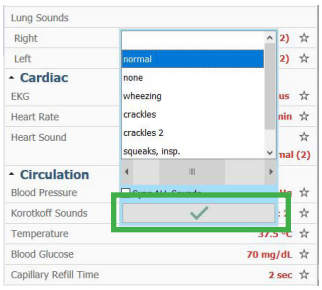
2. For numerical status/details adjust the slider bar.



3. For auditory status/details select from the available menu.

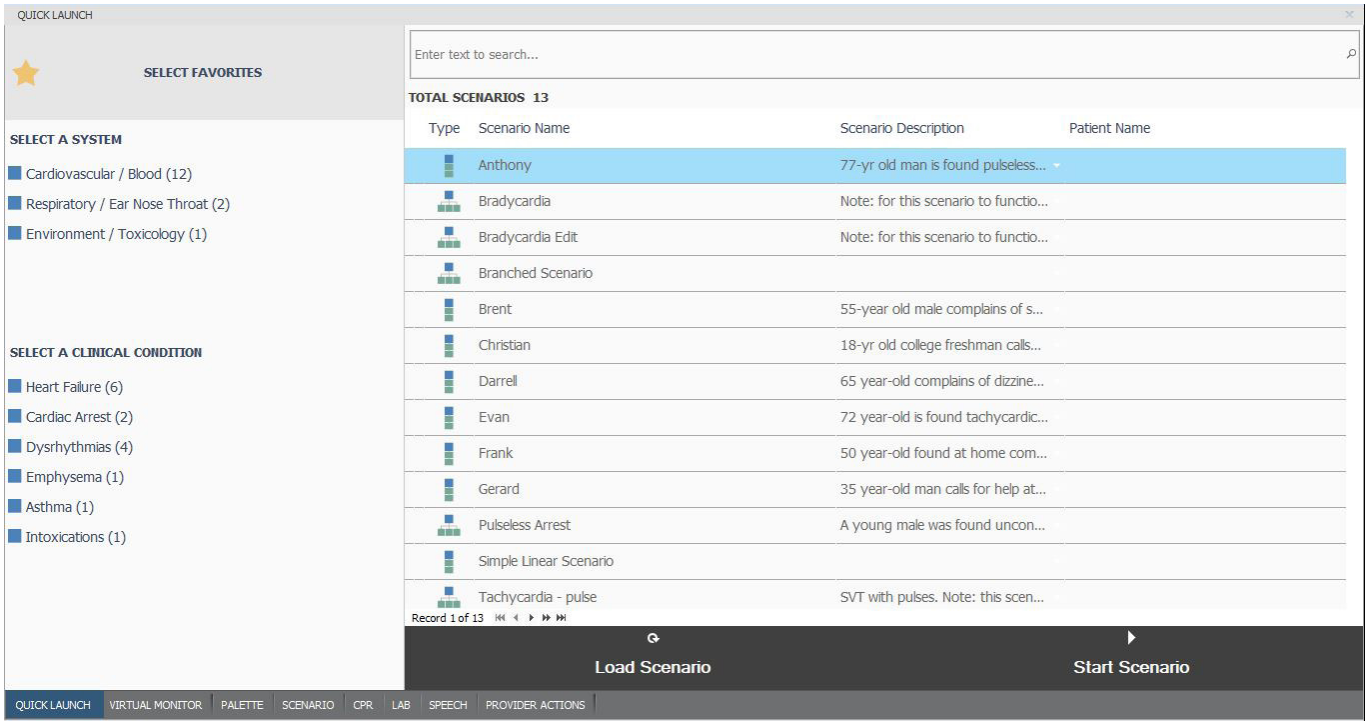


4. Click the green check mark.



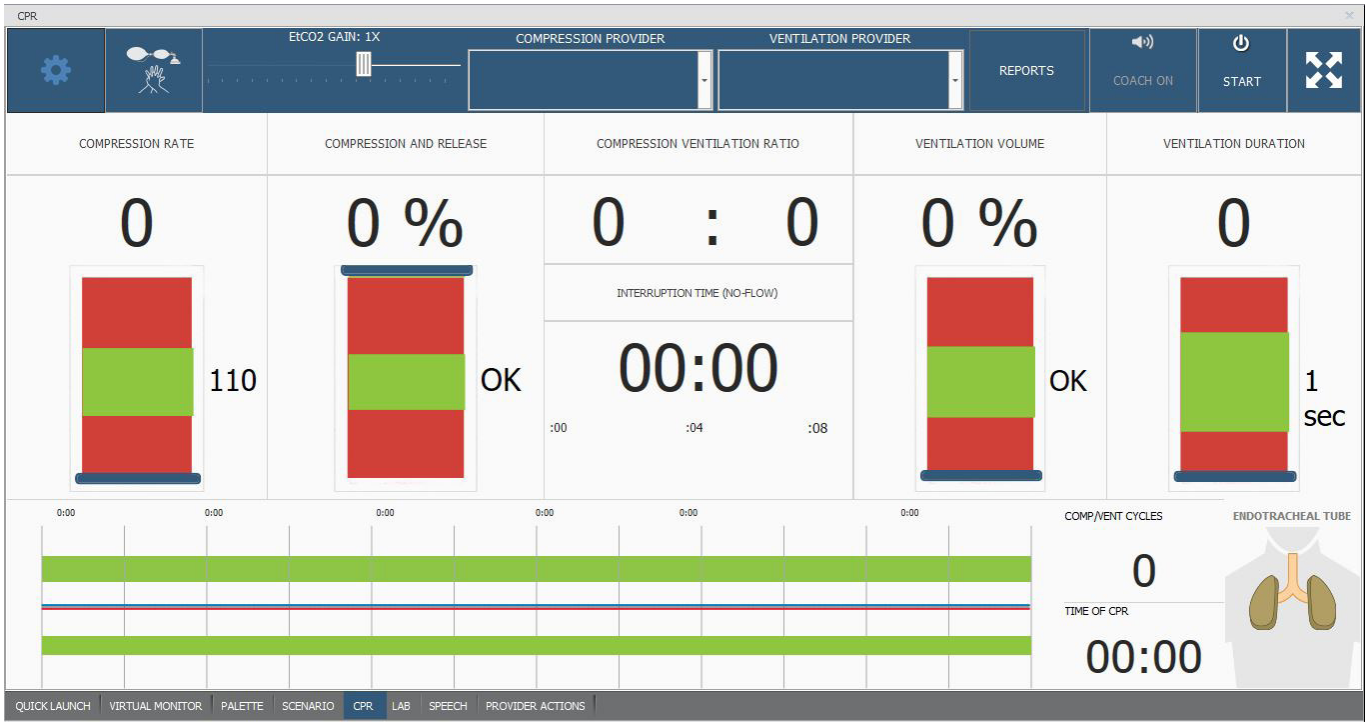
Quick Launch in UNI

The remainder of the UNI screen holds the Quick Launch section where you can explore the multiple tabs that include Virtual Monitor, Palette, Scenario, CPR, Lab, Speech, and Provider Actions as shown below.



CPR in UNI

From the Quick Launch section click on the grey "CPR" tab. This pulls up the built in CPR evaluator that allows you to record, set parameters of CPR, and record CPR sessions.

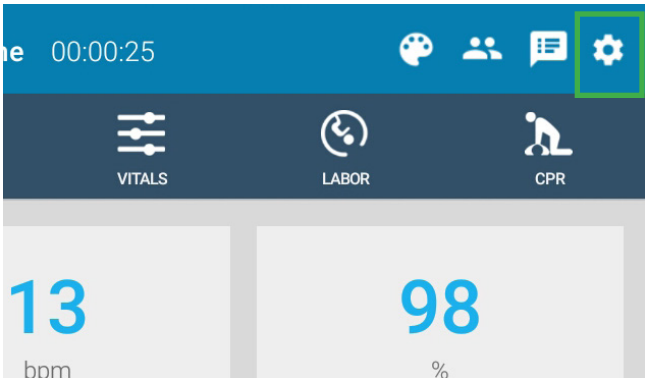


6.2 BEDSIDE VIRTUAL MONITOR

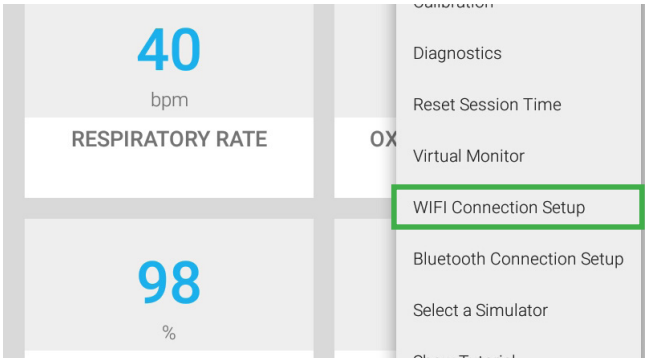
The simulator must be connected to the OMNI® 2 tablet in order to establish a connection to the Virtual Monitor.

Connecting the OMNI®2 Tablet to the Network

1. Connect the provided router to the wall. Tap the menu icon on the top right corner of the OMNI 2 screen.



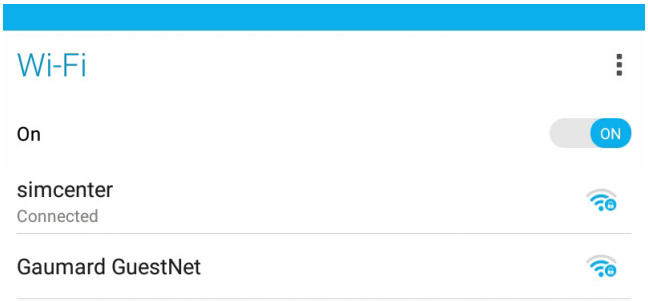
2. Select "Wi-Fi Connection Setup."



3. Connect to the desired wireless network.

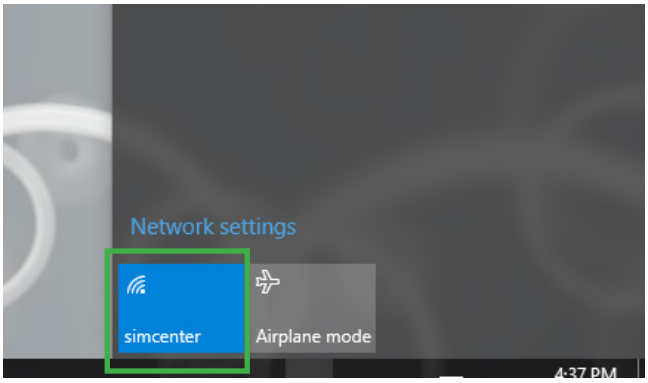
   NOTE: The virtual monitor must be connected to the same Wi-Fi network that the OMNI 2 tablet is connected to.

   See section 8.2 if connection is not established automatically.

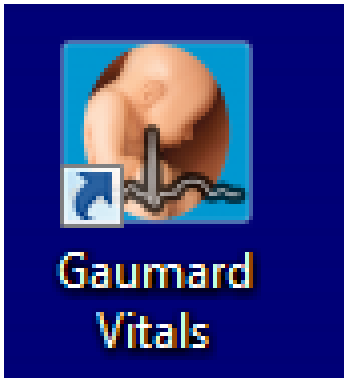


Connecting the Virtual Monitor to the Network

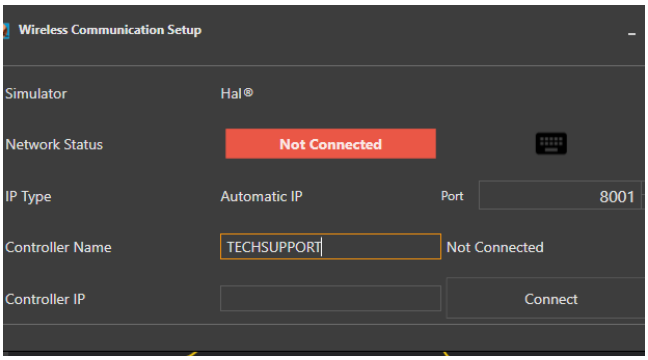
1. To connect the monitor to the same network as OMNI 2 tablet, turn on the Virtual Monitor and tap the "Network Connectivity" icon on the bottom right corner of the screen.



2. Once its connected to the Wi-Fi, open the Gaumard Vitals software.

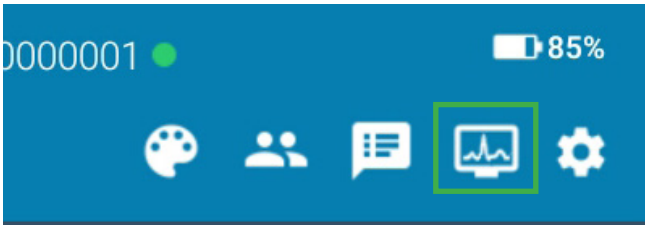


3. Tap the Wi-Fi icon on the top left. Verify the IP address in the "Communication Setup" window matches the OMNI IP and OMNI Port and click "Connect."



4. The vital signs monitor icon will appear on the top right of the OMNI®2 screen when it is connected.

   NOTE: See section 8.2 if connection is not established automatically.



Connecting the Beside Virtual Monitor to UNI

The Gaumard Vitals Bedside Virtual Monitor is an All-In-One computer that can display virtual vitals for your simulator. The Gaumard Vitals software is preloaded on to the All-In-One computer. Gaumard Vitals communicates with UNI to allow the facilitator to make changes through UNI while updating on the bedside monitor.

If the option for the bedside virtual monitor is purchased, there are some steps to take to ensure a connection with the UNI software. The two important steps to consider for this set-up are:

1. Select the same WI-FI network for both the UNI control tablet and the bedside virtual monitor.
2. Match the bedside virtual monitor and UNI software IP and port numbers.

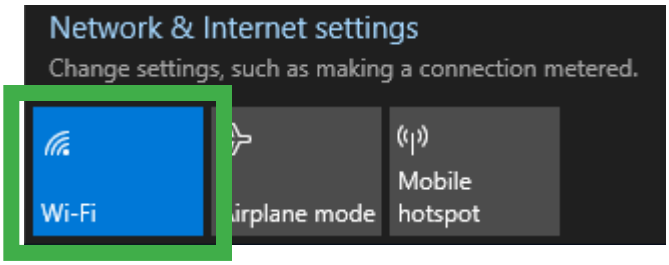
Selecting WI-FI network

It is important to make sure that the WI-FI network the UNI control tablet and the bedside virtual monitor is connected to are the same network. When turning on these devices, it is a good idea to check what WIFI network the device is connected to. If they appear to be connected to different ones, please change them so that they are on the same WI-FI network. If the devices are NOT on the same WI-FI network, they will not be able to communicate.

To check the WIFI network on your device:

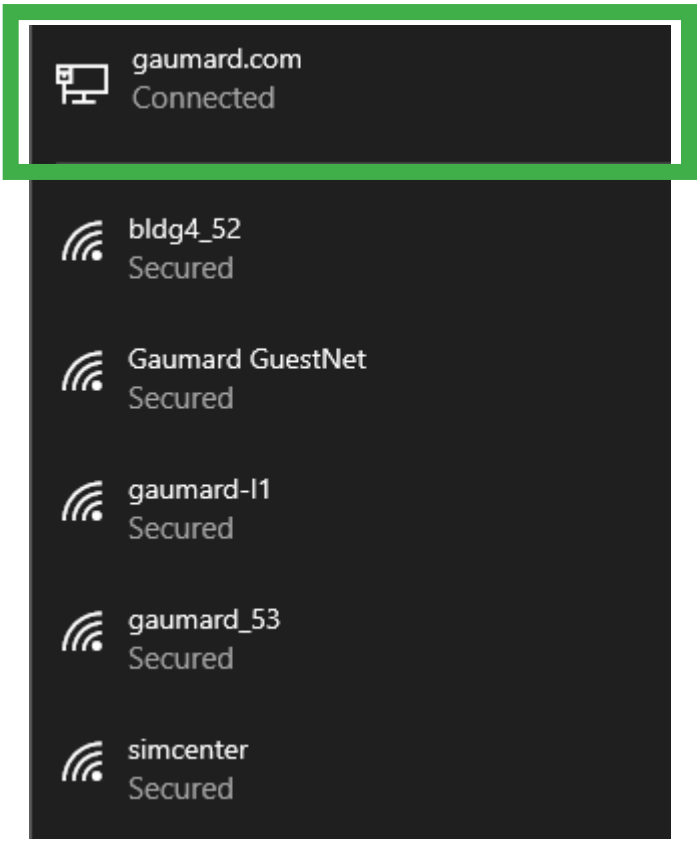
1. Once the device is turned on, click the WI-FI signal located in the bottom righ-hand corner of the desktop.

   NOTE: Do this for both devices, the UNI control tablet and the bedside virtual monitor.

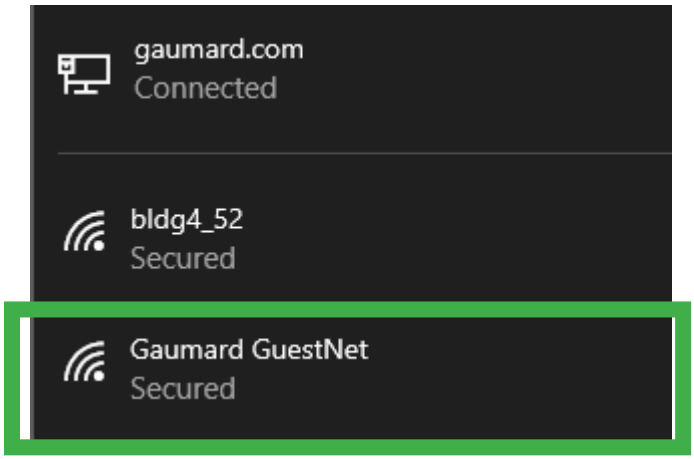


2. Check the WIFI network name and make sure they are the same network on both devices, the UNI control tablet, and bedside virtual monitor. The device will be on the WI-FI network that says 'Connected'.

   NOTE: If they are both the same network name for both devices, leave the WI-FI network alone. Proceed to the next section.

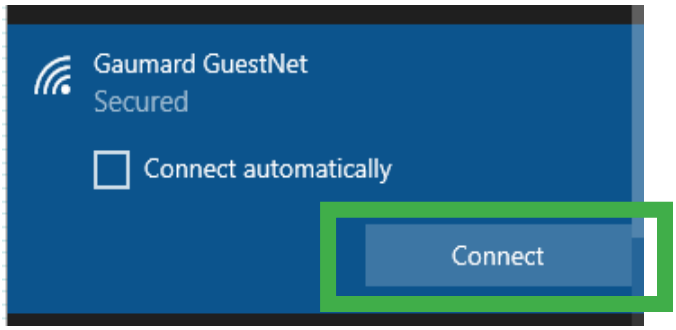


3. If the network WIFI connections are not the same for both devices, please click on the preferred network name to switch the device to that network.



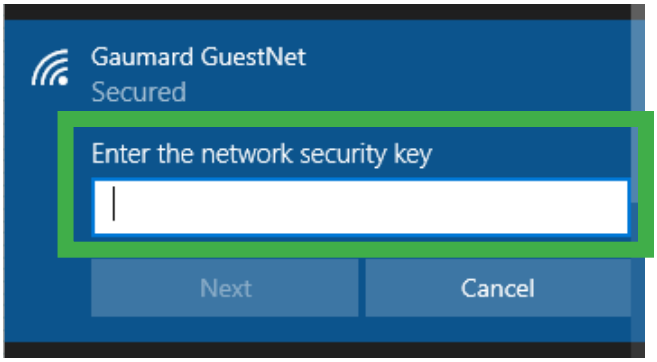
4. For the preferred network, click the 'Connect' button.

NOTE: If the devices are connected already, the indicator will read 'Connected'..

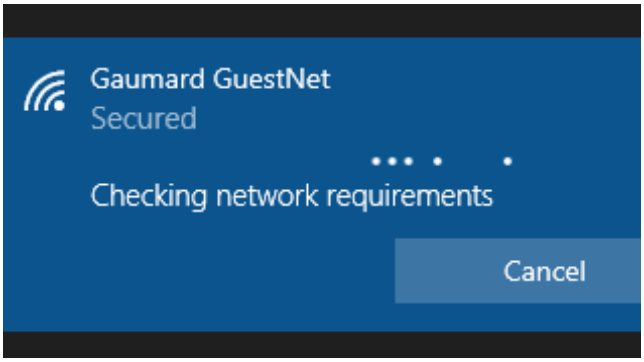


5. The network may ask for a network security key/password. Type in this security key/password and click 'Next'.

NOTE: If using a router network, please look at the router. Most routers have this network security key/password on a sticker that is physically on the router.



6. The network will process the security key/ password and connect to the selected network.



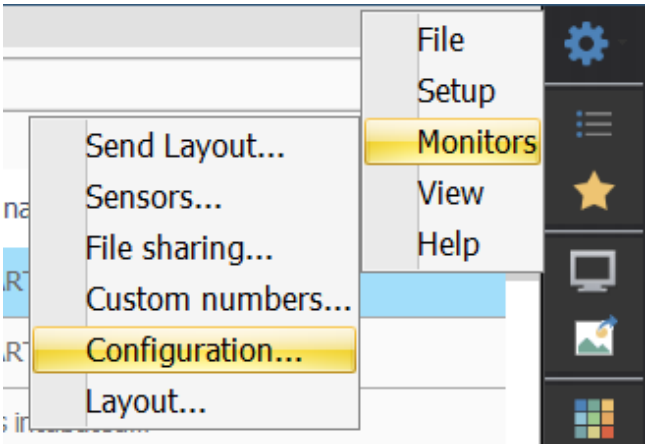
Matching IP Addresses and Port Numbers

The second important thing to ensure communication between the UNI control tablet and the bedside virtual monitor is to be sure that the IP addresses and port numbers in the software match!

To check the information about IP addresses and port numbers, this will require both devices, the UNI control tablet, and the bedside virtual monitor.

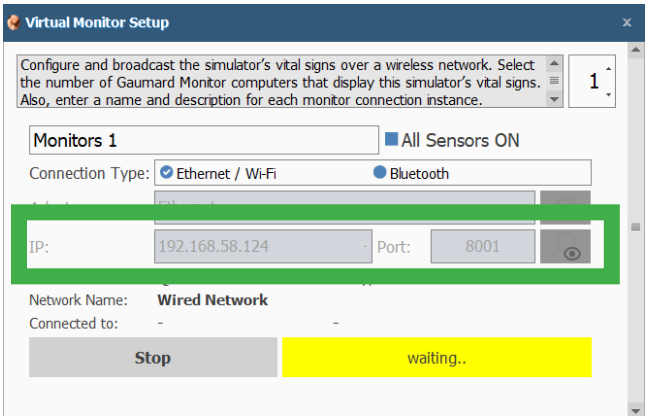
Begin with the UNI control tablet. Turn that device on and do the following:

1. Launch the UNI software, and once loaded, click the blue gear icon in the upper right-hand corner, then click on 'Monitors' and then 'Configuration'.



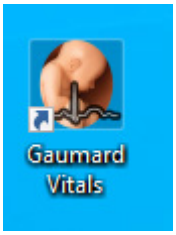
2. Take a look at the information on the 'Virtual Monitor Setup' pop up box. The information needed is the IP address and the port number. UNI's IP address and port number will dictate the bedside virtual monitor's IP address and port number.

   NOTE: Do not attempt to change the automatic IP Address on the UNI device. You may be able to change the port number should you have to set up multiple bedside virtual monitors. The IP address and port number from UNI is the information that needs to be inputted to the bedside virtual monitor software to ensure communication.

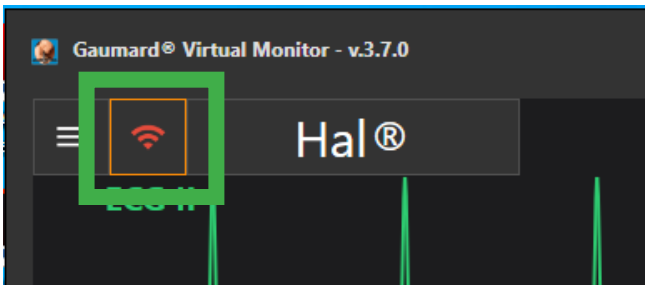


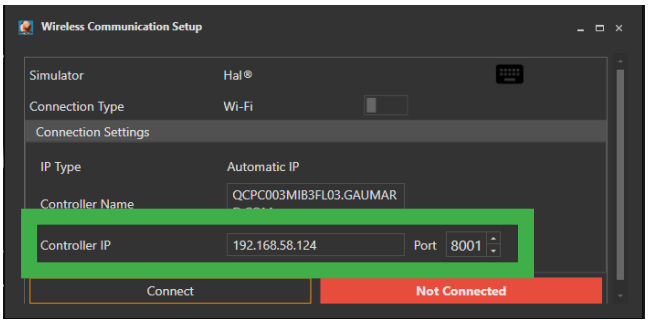
3. At this point, go to the bedside virtual monitor and launch the Gaumard Vitals software by clicking the icon.

   NOTE: The Gaumard Vitals software has been preloaded on to the bedside virtual monitor.



4. Once the Gaumard Vitals software opens, if the software does not automatically connect to the UNI software, click the signal icon in the upper left corner of the software.

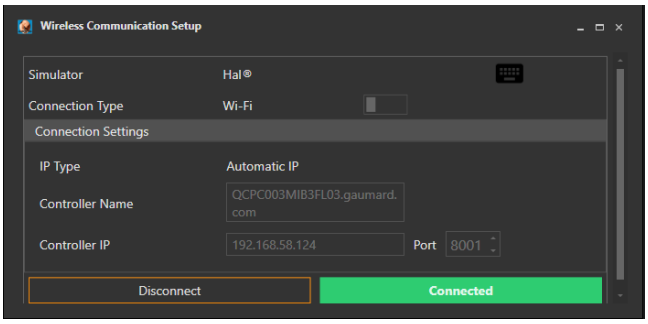




5. On this 'Wireless Communication Setup' pop up box, click the 'Disconnect' button at the bottom and verify that the IP address and port numbers are the same as was seen from the UNI software.

   NOTE: If the IP address and port numbers are not the same, they may be changed by clicking into its box and typing in the correct numbers.

6. Once the correct IP address and port numbers are filled into the appropriate boxes, click the 'Connect' button at the bottom of the pop up box. The connection signal will turn green with the word 'Connected'.



NOTE: Once the connection is achieved, exit out of the 'Wireless Communication Setup' box to view the virtual vitals. These vitals may be controlled by changing the parameters directly through the Gaumard Vitals software or by the UNI software.

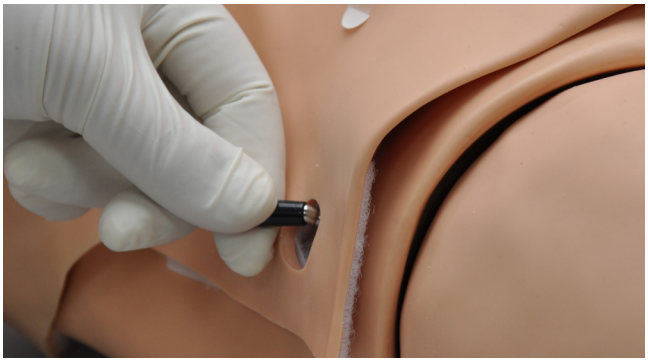
6.3 MODIFIED DEFIBRILLATION SNAPS

- The Modified Defibrillation Snap cables available for purchase and are compatible with the defibrillation snap sites.
- The snap cable adapter connects to a real defibrillator and carries electrical therapy energy to the snap sites. They are compatible with most electrical therapy devices including Zoll, Physio (Lifepak), and Philips defibrillators.
- For more information about snap cables for a particular defibrillator, please contact Gaumard.

Snap Cable Adapter	Location
Red Adapter	Apex Snap
Black Adapter	Sternum Snap

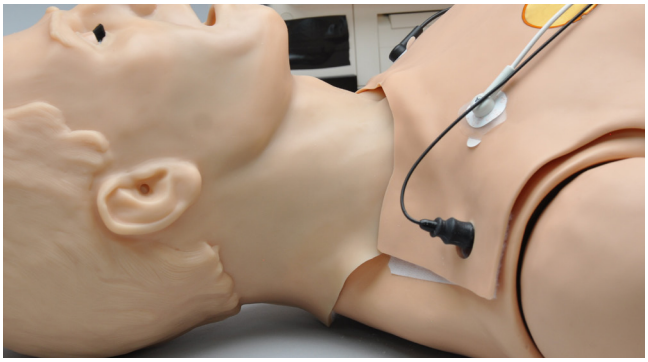
Using the Modified Defibrillation Snaps

1. Remove the snap connector covers at the apex and sternum sites.



2. Connect the red snap adapter to the apex snap site.

3. Connect the black snap adapter to the sternum snap site.



WARNING: The snap adapter cables carry real energy. Use the same cautions as with a real patient. Follow the safety guidelines and operating procedures outlined in the defibrillator's manual.

Do not apply electrical therapy or deliver a shock while holding the snap connectors or while the snap connectors are disconnected from the simulator. Only deliver electrical therapy when the simulator is fully assembled, dry, and undamaged.

Do not use damaged snap adapter cables, connectors, or medical equipment.

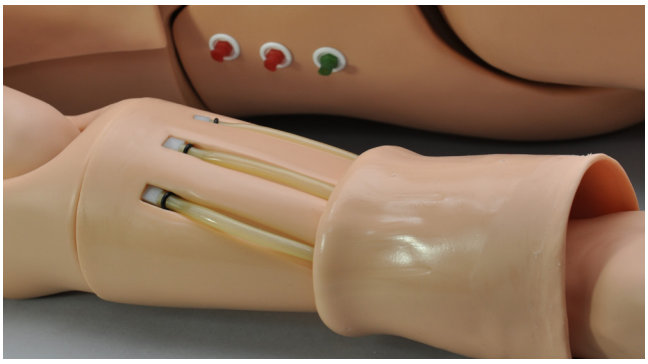
7. ROUTINE MAINTENANCE

7.1 REPLACING THE VEINS

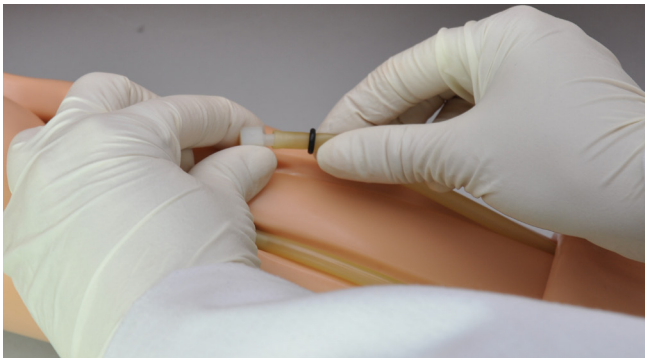
WARNING: Vein tubing contains latex which may cause allergic reactions. Users allergic or sensitive to latex should avoid contact. Discontinue use of this product and seek medical attention if an allergic reaction occurs.

1. Remove the arm skin.

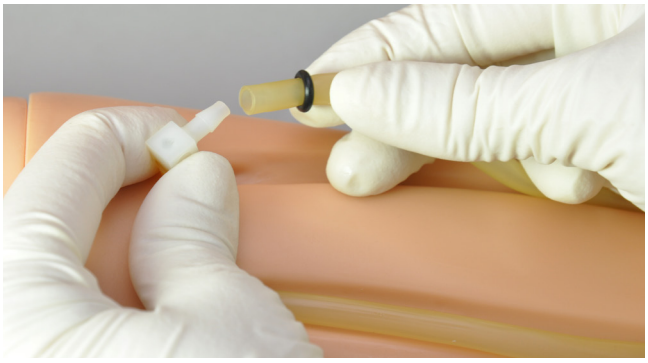
   NOTE: Apply heat to the arm skin using a low-intensity heating source like a hair dryer to make the material more pliable.



2. Lift the white connector on one side of the vein and roll down the black o-ring.



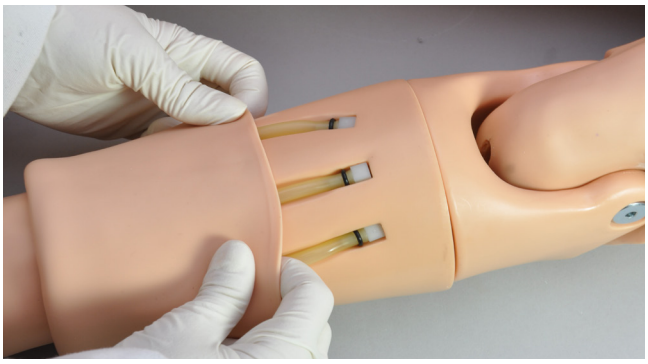
3. Gently pull the vein from the white connector.



4. Perform steps 2 and 3 on the other end of the vein.

5. Replace the vein and pull up the arm skin.

NOTE: Apply lubricant to ease the arm skin back in place.



8. TROUBLESHOOTING

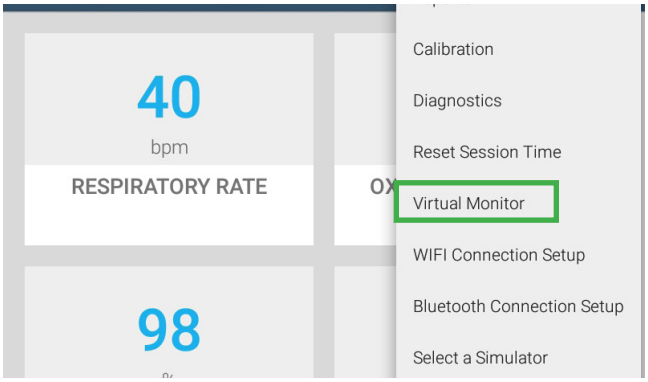
8.1 COMMUNICATION IS NOT ESTABLISHED

Probable Cause	Solution
Control tablet is too far away from the simulator	Minimize the distance between the tablet and the simulator. The distance should not be more than 10 meters (30 ft.) away.
Manikin is not paired	Follow steps from Section # -- to ensure the manikin is paired.
Battery needs charging	Connect the charger to the simulator and allow it to charge.
Connection is lost between tablet and simulator	1. Tap the menu icon on the main screen and select "Connect to Simulator." 2. Select the simulator you wish to connect to and tap "Connect". 3. The name of the simulator and the serial number appear at the top of the screen. NOTE: OMNI® 2 can be operated up to 30 ft. from the simulator.

8.2 OMNI®2 IS NOT CONNECTING TO THE VIRTUAL MONITOR

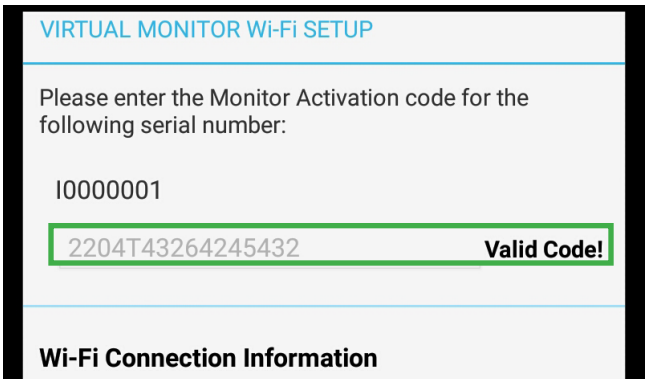
1. Exit the page and tap the menu icon on the main screen to open the "Virtual Monitor" screen.

   NOTE: Verify the serial number corresponds to your simulator.

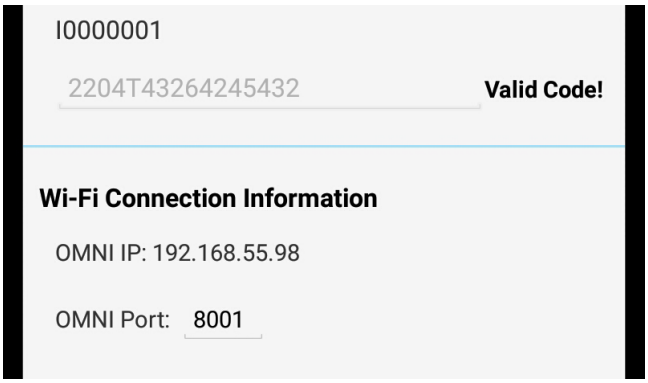


2. The Virtual Monitor Wi-Fi setup window will prompt you to input a valid activation code. The activation code is found in the purchase order document attached to your shipment.

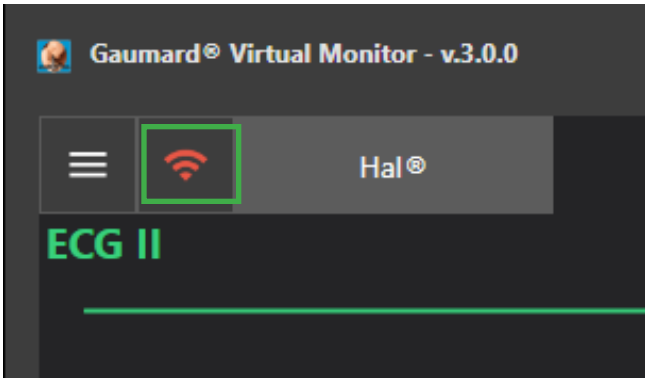
   NOTE: The activation code is case sensitive. The code seen here is not a valid code.



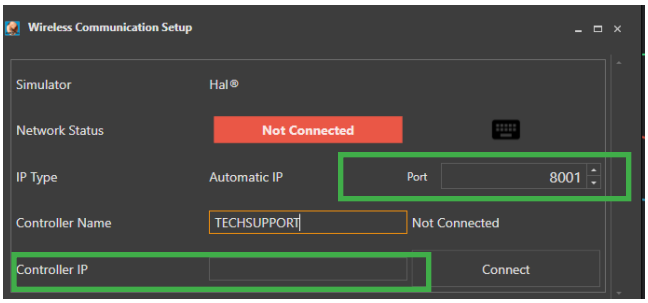
3. Take note of the OMNI IP and OMNI Port numbers, and select "Connect."



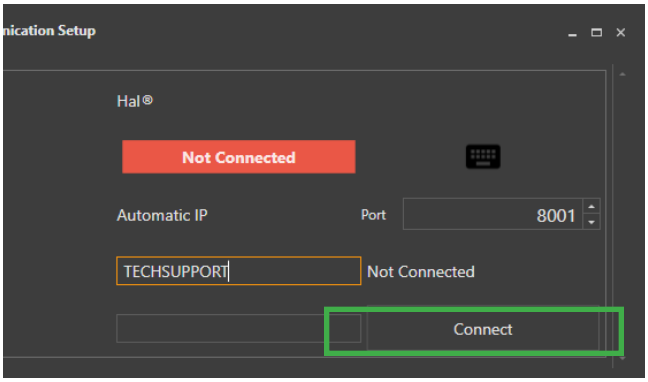
4. On the Virtual Monitor, tap the Wi-Fi icon on the top left.



5. Verify the IP address in the "Communication Setup" window matches the OMNI IP and OMNI Port on the UNI Tablet.



6. Select "Connect." Connection is establish automatically.

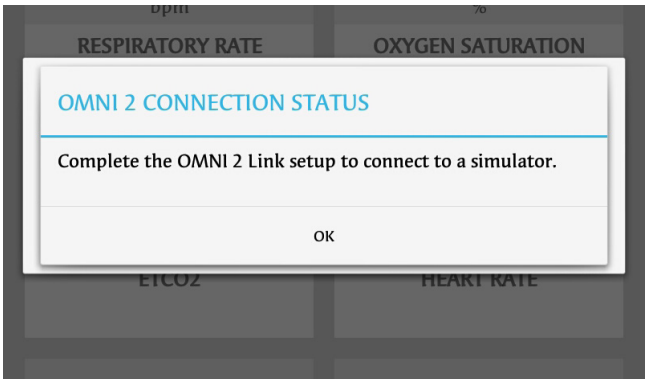


8.3 CPR IS NOT DETECTED

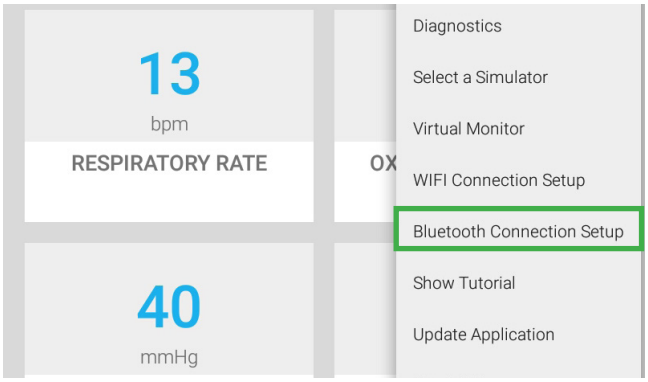
Probable Cause	Solution
Compression are not detected	Reset the Compressions sensor in the Calibration Menu.
Ventilations are not detected	Reset the Ventilations sensor in the Calibration Menu..

8.4 OMNI LINK SETUP NOTIFICATION APPEARS

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



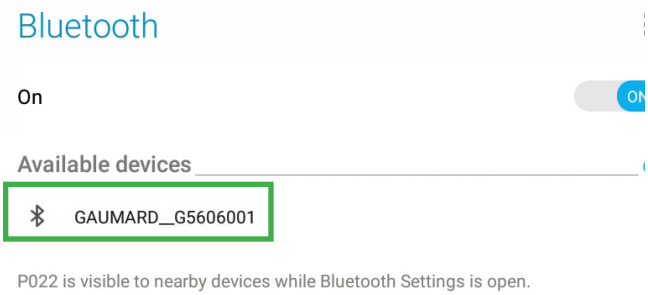
1. Tap the Menu icon. Tap "Bluetooth Connection Setup."



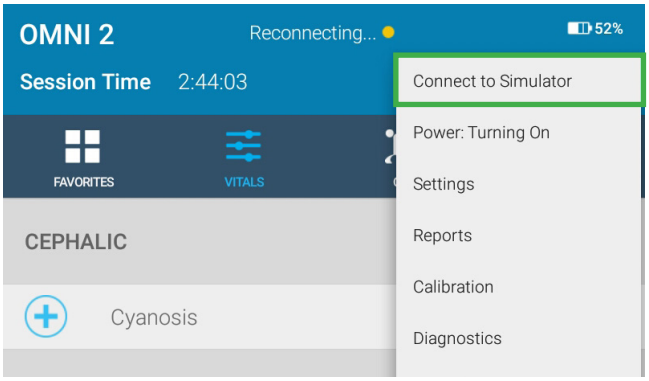
2. Select the simulator's serial number under "Available Devices."

   NOTE: The device name will be Gaumard_ SimulatorSerialNumber where the Serial Number is the numerical value assigned to your simulator.

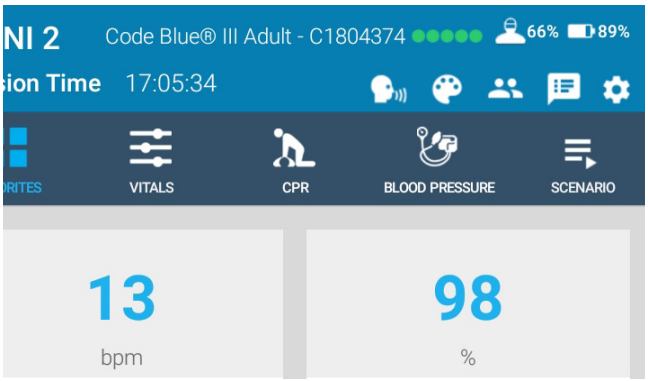
   Wait for the device to pair with the OMNI®2. This can take up to 30 seconds.



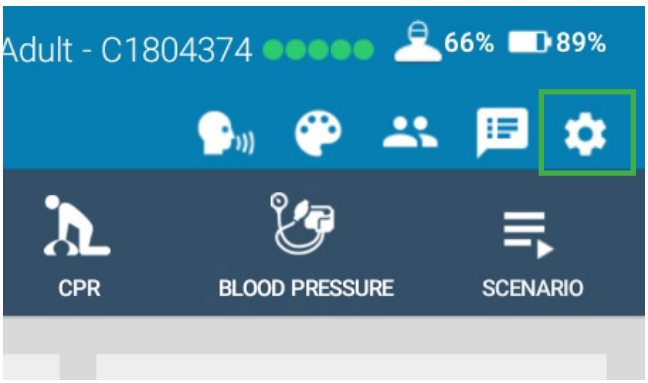
3. Return to the main screen and tap the menu icon in the upper right corner. Select "Connect to Simulator."



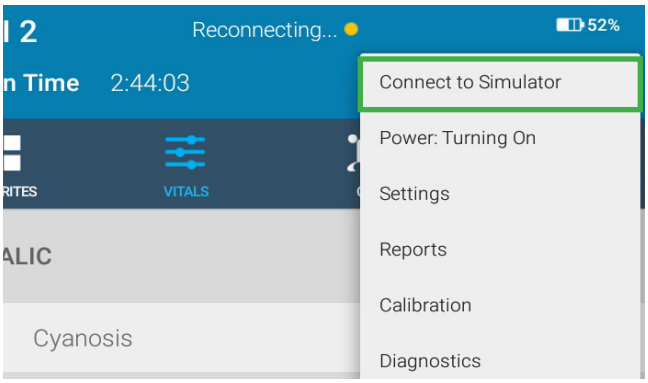
4. Select the simulator that was just paired and tap "Connect and Save as Default."



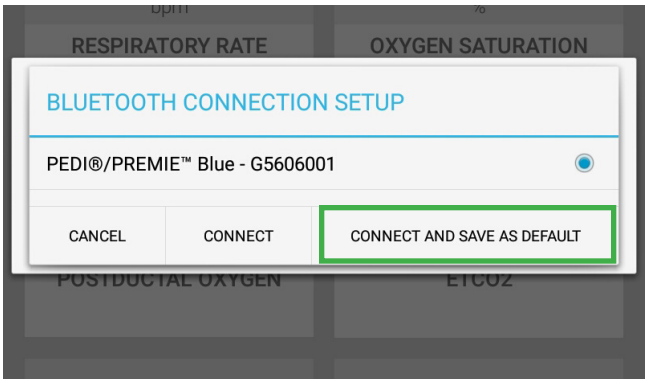
5. Return to the main screen and tap the menu icon in the upper right corner.



6. Select "Connect to Simulator."



7. Select the simulator that was just paired and tap "Connect and Save as Default."



9. APPENDIX

9.1 PARTS LIST

Product	Item Number
Lower Right Arm	S300.100.023R.L/M/D
Intraosseous Leg Skin Cover	S300.100.029R.L/M/D
I/O Bones	S300.100.031
Intramuscular Thigh Injection Site	S300.100.043.L/M/D
Antecubital Veins	S300.100.411
Modified Philips Defibrillation Snaps	S300.100.126
Modified Physio (Lifepack) Defibrillation Snaps	S300.100.127
Modified Zoll Defibrillation Snaps	S300.100.128

9.2 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;
- 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. However, third-party products are covered by the warranties provided by the respective third-party manufacturers and such warranties are transferred from Gaumard to purchaser upon purchase of the Gaumard product. Defects in third-party products are covered exclusively by the warranties provided by the third-parties. Gaumard does not provide any warranty, express or implied, with respect to any third-party products. Please contact the third-party manufacturer for information regarding the availability of extended warranties for third-party products.

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.

9.3 EXTENDED WARRANTY

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

9.4 CONTACT TECHNICAL SUPPORT

Before contacting Technical Support, please make sure to have the following:

1. Your simulator's serial number
2. Access to the simulator for possible troubleshooting as needed

Technical Support

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

9.5 GENERAL INFORMATION

Sales and Customer Service

E-mail: sales@gaumard.com
USA: 800-882-6655
INT: 01-305-971-3790
Fax: 305-252-0755

Post

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USA

Office Hours

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