



S415.250 / S415.100.250

BLOOD PRESSURE TRAINING SYSTEM WITH OMNI[®] 2

USER GUIDE



The Blood Pressure Training System 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.

TABLE OF CONTENTS

1. INTRODUCTION	6
1.1 SPECIFICATIONS	6
1.2 TERMINOLOGY	6
1.3 CARE AND MAINTENANCE	6
2. OVERVIEW	8
2.1 BLOOD PRESSURE ARM FEATURES	8
2.2 PROCEDURES	8
2.3 OMNI® 2 CONTROLLER	8
2.4 EXTERNAL SPEAKER SET FOR S415.100.250	9
3. INITIAL SETUP	10
3.1 CARE AND CAUTIONS WHEN UNBOXING	10
3.2 PACKAGE CONTENTS	10
3.3 CONTROL PANEL	11
3.4 CONNECTING THE POWER SUPPLY	11
3.5 CONNECTING OMNI 2	12
3.6 CONNECTING THE MODIFIED BLOOD PRESSURE CUFF	13
3.7 CALIBRATING THE BLOOD PRESSURE ARM	13
4. WORKING WITH THE BLOOD PRESSURE ARM	15
4.1 AUSCULTATION	15
4.2 PALPATION	15
4.3 EXTERNAL SPEAKERS	16
5. USING OMNI® 2	17
5.1 HEART RATE	17
5.2 BLOOD PRESSURE	18
5.3 AUSCULTATORY GAP	18
5.4 PALETTES	19

6. TROUBLESHOOTING	20
6.1 CONNECTIVITY TO THE BP ARM IS NOT ESTABLISHED	20
6.2 NO RADIAL PULSE IS FOUND	20
6.3 THE READINGS ON THE BP ARM DO NOT MATCH OMNI® 2	20
7. APPENDIX	21
7.1 PARTS LIST	21
7.2 EXCLUSIVE ONE-YEAR LIMITED WARRANTY	22
7.3 CONTACT GAUMARD	23
7.4 GENERAL INFORMATION	23

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® (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

Blood Pressure Training System

- » 19 lbs.
- » 35x15x19 inches

OMNI® 2

- » 5lbs
- » 14x12x6 inches

The Blood Pressure Training System with OMNI® 2 is a full-size adult left arm. The package includes the new OMNI® 2 control tablet for simple, tap-and-go operation.

1.2 TERMINOLOGY

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

Provider: A person participating in the simulation as a healthcare provider

Palette: A collection of vital sign details that demonstrates a patient's progress or decline during a session.

1.3 CARE AND MAINTENANCE

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

General

- 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 or from your distributor.
- Do not inject fluids into the intramuscular injection sites.

Cautions

- Use the blood pressure arm with the same precautions used with a real patient.
- Have providers wash their hands prior to use to prevent dirt and oils from clinging to the material.
- Do not palpate using fingernails as this may tear the skin: palpate using the pads of the fingers.

Operating Temperatures

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

Storage

- Store the blood pressure arm in a cool, dry place.
- Humidity: 40%-60% (non-condensing).
- Do not stack or store heavy materials on top of the box.
Please store and ship it in the clear bag provided.

Cleaning

- The blood pressure arm is “splash-proof” but not water proof. Do not submerge in water.
- The blood pressure arm should be cleaned with a cloth dampened with diluted liquid dishwashing soap.
- Do not clean with harsh abrasives.
- Dry thoroughly after every cleaning.
- After drying, application of talcum powder can return the arm to its lifelike feel.

2. OVERVIEW

2.1 BLOOD PRESSURE ARM FEATURES

- Assists health professionals teach the skills required to accurately auscultate and palpate blood pressure.
- Includes programmable, palpable radial pulse when cuff pressure is less than the selected systolic blood pressure.
- Attaches to select Gaumard® adult simulators.

2.2 PROCEDURES

Auscultation

- Korotkoff sounds K1 through K4 are audible between systolic and diastolic pressures.
- Programmable auscultatory gap automatically silences Korotkoff sounds
- Korotkoff sounds are responsive to the heart rate and the rate of cuff deflation
- Programmable blood pressure auscultation tutor

Palpation

- Programmable radial pulse synchronized with heart rate
- Automatic return of radial pulse when cuff pressure is less than the selected systolic blood pressure.

Intramuscular (IM) injection Site

- Practice intramuscular injections with the IM injection site located on the deltoid.

CAUTION: Do not inject fluids into the IM site. There is no drainage system and fluids trapped in the IM pad may cause mold.

2.3 OMNI® 2 CONTROLLER

Features

- Program and adjust systolic/diastolic blood pressure, heart rate, and auscultation gap.
- Track cuff pressure in real time.
- Connect wirelessly with the blood pressure arm from up to 12 meters away.

Favorites Page

- The “Favorites” page can be customized to show the most commonly used vital signs.
- Reference the OMNI 2 user guide provided to edit the vitals shown on this page.

Vitals Page

- The “Vitals” page includes heart rate, blood pressure, auscultatory gap and Korotkoff sounds volume.
- Each change in vitals can be applied instantly or added to a queue.

Blood Pressure Page

- The “Blood Pressure” Page has a virtual manometer gauge that shows the blood pressure in real time.
- The blood pressure is shown on the gauge in green

Palette Items

- Use a palette item to update a set of vital signs quickly.
- The default palette consists of healthy vitals. Additional palettes can be created to change a group of vital signs at once.

2.4 EXTERNAL SPEAKER SET FOR S415.100.250

- Play Korotkoff sounds through volume controlled speakers while auscultating with the stethoscope
- Incorporate collaborative learning by playing the Korotkoff sounds for many providers simultaneously
- Available in 110 and 220 volt variety

3. INITIAL SETUP

3.1 CARE AND CAUTIONS WHEN UNBOXING

- Lift the arm from the box and remove the bag it is shipped in.
- Rest the arm on a bed or clean, flat surface near an electrical outlet.

3.2 PACKAGE CONTENTS

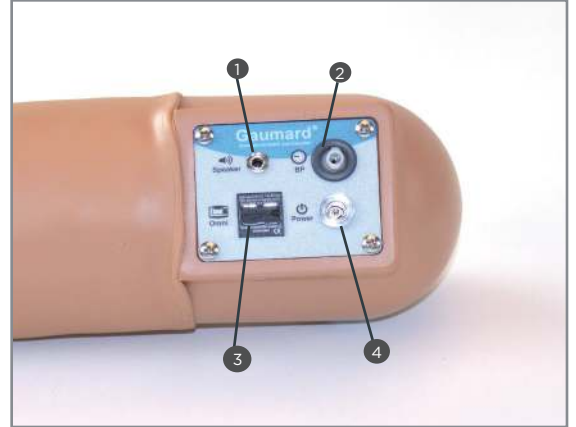


1. Blood Pressure Training Arm
2. Modified Blood Pressure Cuff and Stethoscope
3. Power Supply
4. OMNI® Controller
5. Soft Carrying Bag
6. External Speaker Set (for S415.100.250)

3.3 CONTROL PANEL

The control panel on the shoulder region of the arm consists of the following ports:

1. Speaker
2. BP
3. OMNI
4. Power



NOTE: No assembly is required for the Blood Pressure Training Arm

3.4 CONNECTING THE POWER SUPPLY

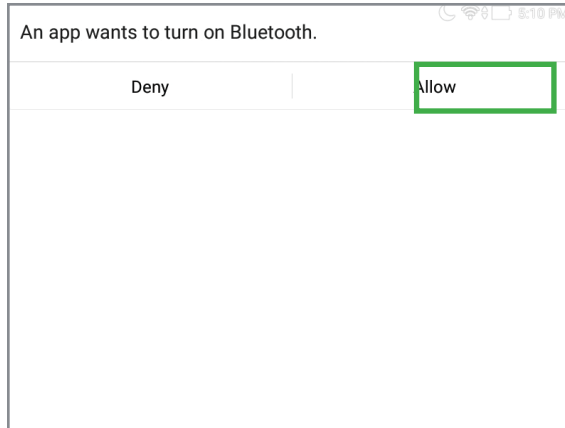
- A control panel in the shoulder of the arm consists of all the blood pressure arm adapters. Each adapter is labeled.
- Connect the power supply to a wall outlet and then connect the cable to the power input in the arm's control panel



3.5 CONNECTING OMNI 2

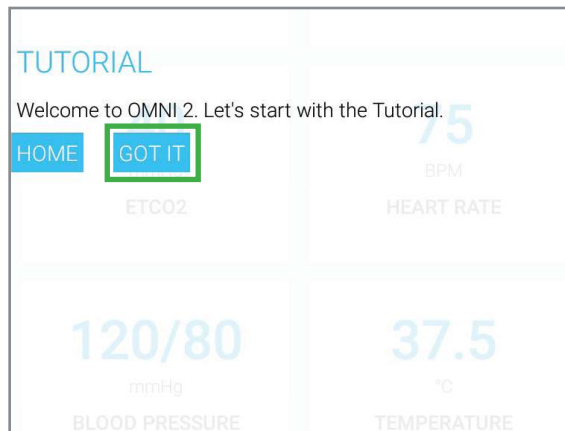
1. Turn on the OMNI 2 controller by pressing and holding the ON button on the right side of the tablet until the screen turns on.
2. Select “Allow” for turning on Bluetooth on the tablet.

NOTE: A startup screen is shown while OMNI 2 is detecting the skill trainer’s features. Bluetooth will connect automatically after powering on in the future.

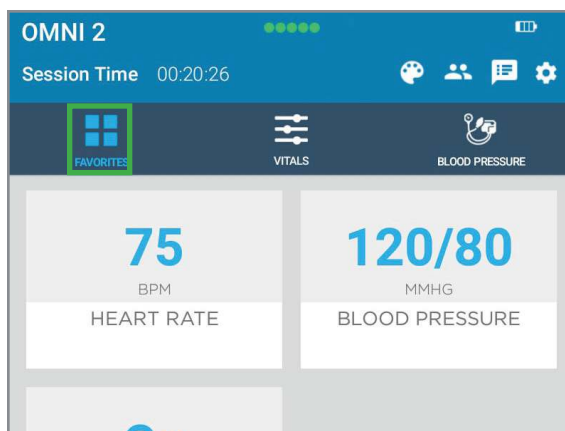


3. Follow the tutorial for a brief overview of the features of OMNI 2. Tap “GOT IT” to move on to the next steps of the tutorial. Exit the tutorial at any time by selecting “HOME.”

NOTE: Completing the tutorial one time will avoid it from appearing at start-up in the future. To see the tutorial again, tap the Menu Icon and select “Show Tutorial.”



4. After the tutorial, OMNI 2 will automatically proceed to the “Favorites” page and establish a connection to the simulator.

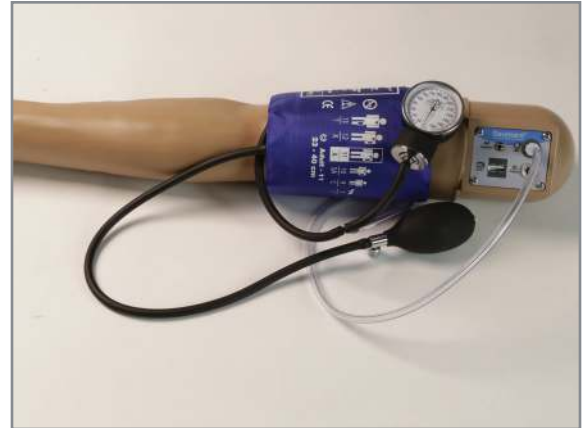


WARNING: Do not connect the simulator or OMNI 2 to a computer, LAN network, or unauthorized diagnostic equipment. Doing so will cause serious damage to the equipment.

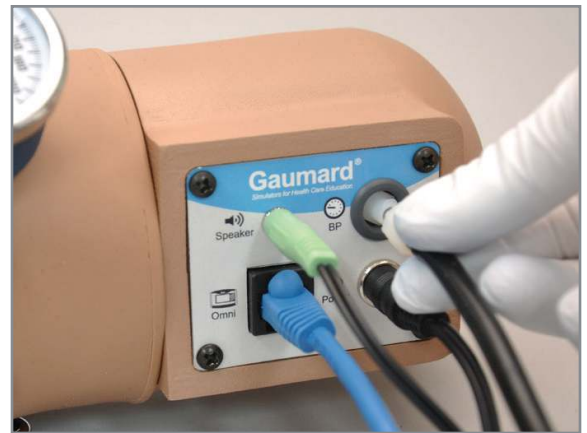
3.6 CONNECTING THE MODIFIED BLOOD PRESSURE CUFF

1. Wrap the blood pressure cuff around the arm above the elbow.

NOTE: Make sure to orient the cuff where the arrow on the cuff points toward the elbow.



2. Connect the blood pressure cuff extension to the adapter labeled BP on the control panel.

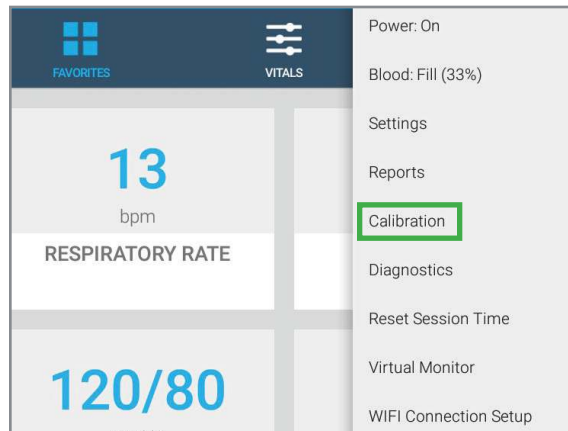


3.7 CALIBRATING THE BLOOD PRESSURE ARM

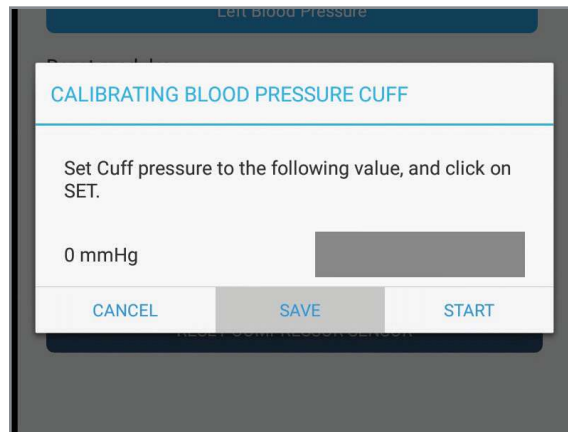
1. Place the BP cuff on the arm.
Do not inflate it until prompted.



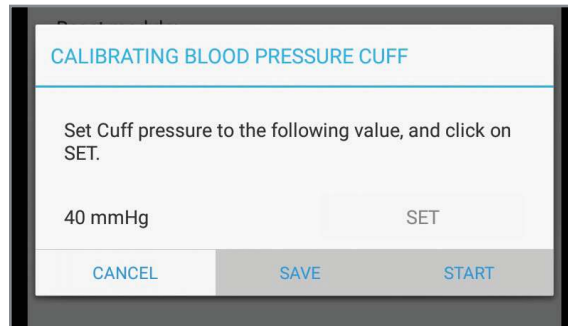
2. Tap the Menu icon and then tap “Calibration”



3. Tap on START to begin Calibrating. Set the BP cuff pressure to the values on the screen starting with 0 mmHg.

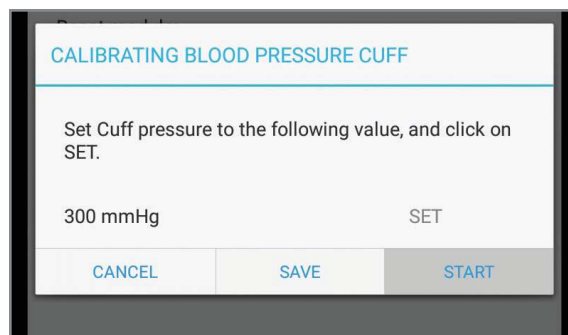


4. Increase the BP cuff pressure when the display prompts you to inflate the cuff one value at a time. Continue to tap “SET” after setting each increment. The OMNI 2 will prompt you to increase the BP cuff pressure from 0 to 300 mmHG.



5. Tap “SAVE” at the end of the calibration process.

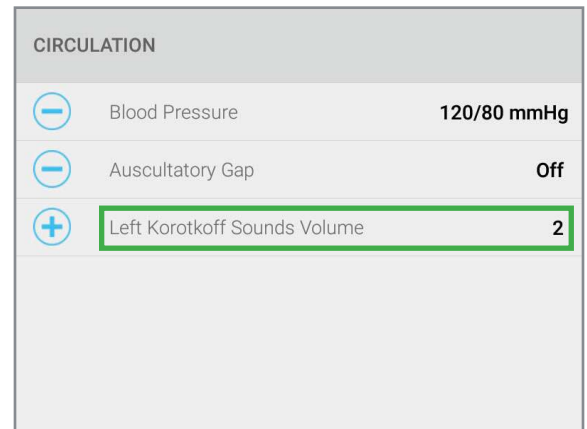
NOTE: It is not necessary to recalibrate the BP Arm for each training session. The OMNI 2 controller will remember the calibration settings.



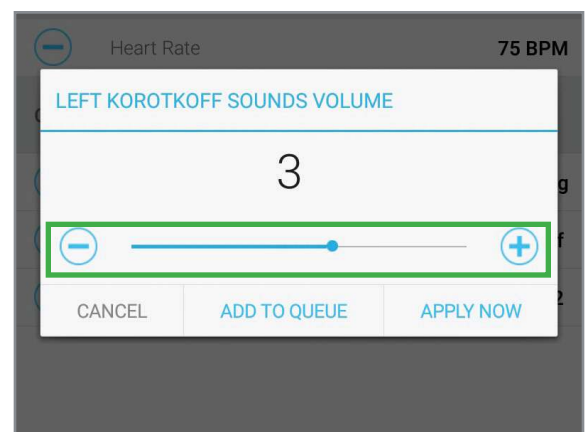
4. WORKING WITH THE BLOOD PRESSURE ARM

4.1 AUSCULTATION

1. To access and adjust the Korotkoff sounds volume, tap the Vitals Page icon and select "Left Korotkoff Sounds Volume."

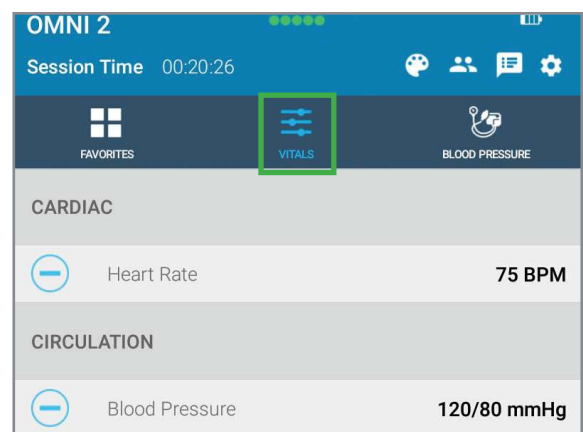


2. Use the slide bar or the + and - buttons to increase or decrease to the desired volume.

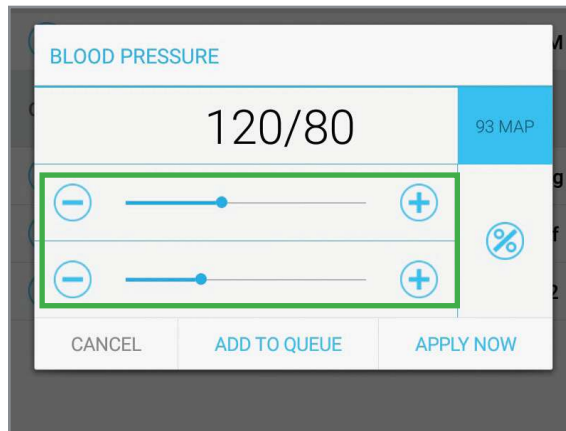


4.2 PALPATION

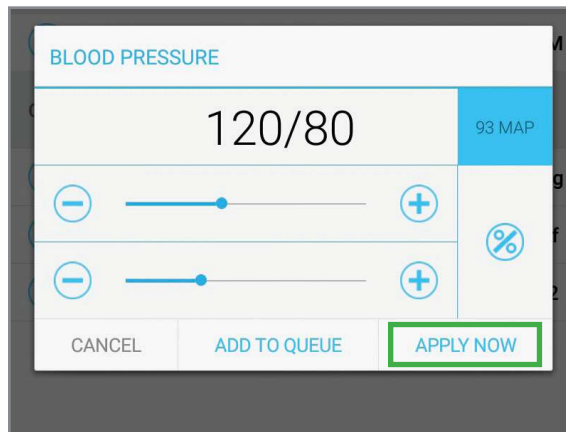
1. To adjust the BP, tap the Vitals page



1. Tap on “Blood Pressure” and use the top slide bar or the + or - sign to increase or decrease the systolic value. Use the bottom slide bar to increase or decrease the diastolic value.



2. Tap on APPLY NOW.



4.3 EXTERNAL SPEAKERS

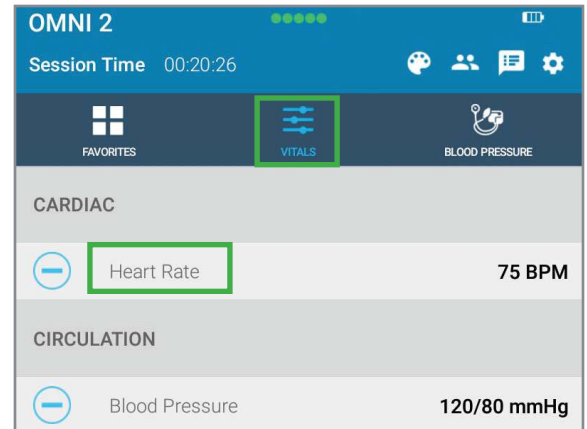
Connect the speakers' audio jack to the Speaker adapter on the control panel to listen to the Korotkoff sounds aloud while measuring the blood pressure.



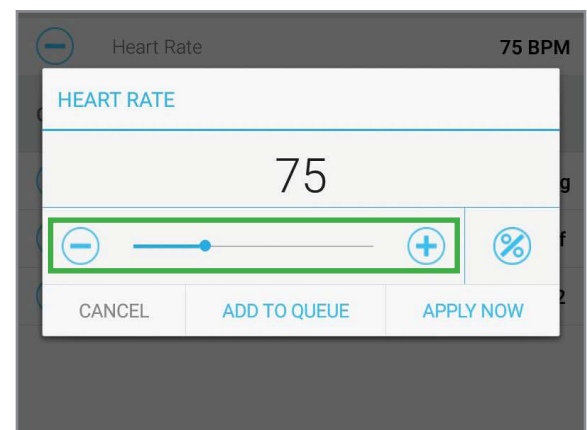
5. USING OMNI® 2

5.1 HEART RATE

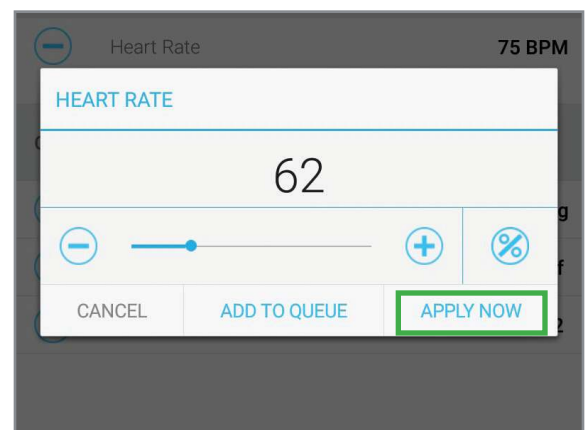
1. Heart rate can be found in the Vitals page.



2. Tap on Heart Rate and use the slide bar or the + or - sign to increase or decrease the heart rate.

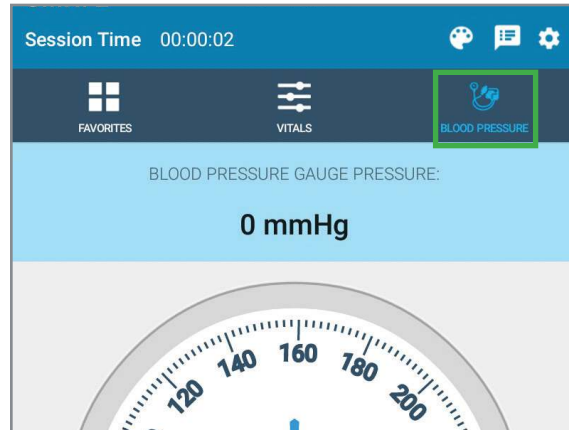


3. Tap APPLY NOW.



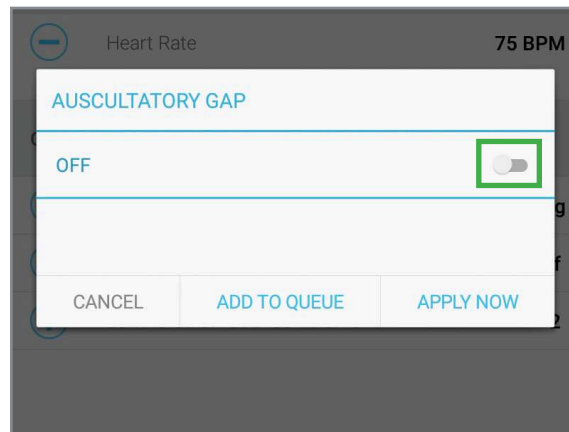
5.2 BLOOD PRESSURE

- To access the BP page and begin a session, tap on the BP icon
- The BP gauge reading on this page changes according to the current blood pressure and is shown in green.
- Reference the OMNI 2 user guide provided for more details.

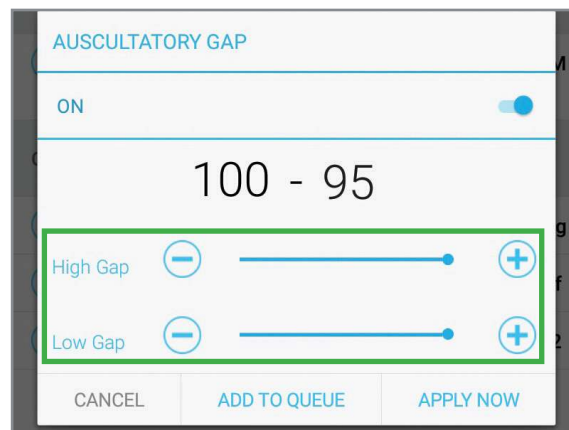


5.3 AUSCULTATORY GAP

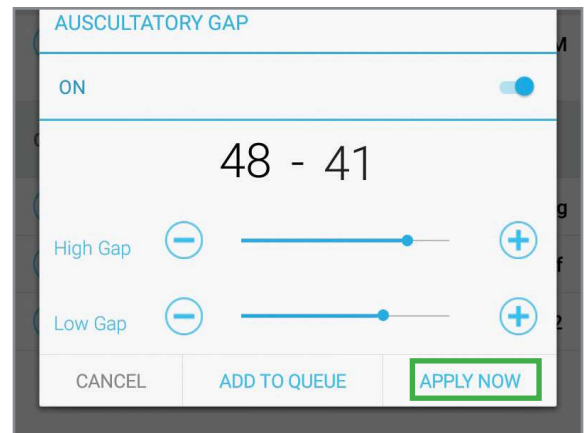
1. To turn on auscultatory gap, tap on the “Vitals” page and then tap “Auscultatory Gap” and slide the ON/OFF button to ON.



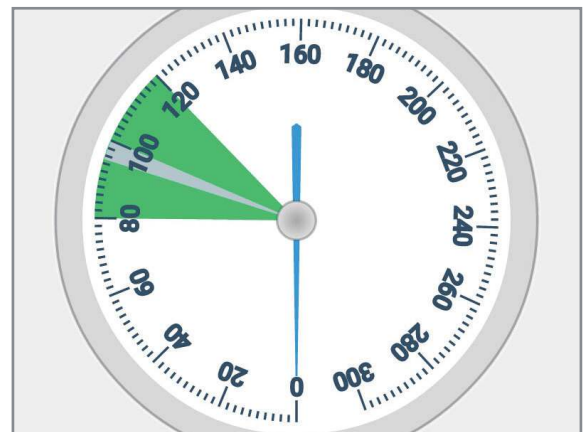
1. To increase or decrease the High Gap and Low Gap, slide the top and bottom bars left or right, or tap the + or - buttons.



2. TAP APPLY NOW

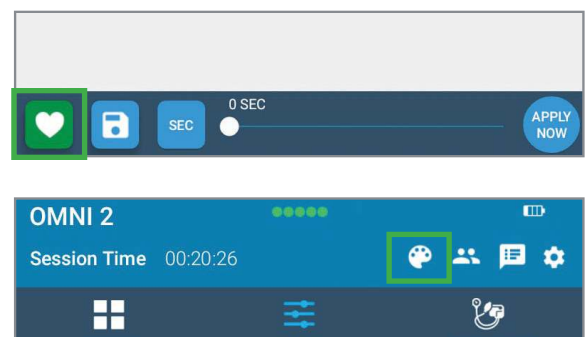


3. The auscultatory gap will appear in gray on the manometer in the “Blood Pressure” page.



5.4 PALETTES

- Apply a healthy Palette instantly by tapping on the heart icon on the bottom of the screen
- To access palette items, tap on the palette icon.



6. TROUBLESHOOTING

Review the OMNI® 2 user guide for the most common troubleshooting topics regarding the OMNI® 2 tablet.

6.1 CONNECTIVITY TO THE BP ARM IS NOT ESTABLISHED

Probable Cause	Solution
Control tablet is too far away	Minimize the distance between the tablet and the simulator.
More than one device is paired	Open the Bluetooth connection setup. Select the menu icon and tap "Forget for the unwanted connection.
BP Arm is not paired	Tap the Menu icon and select "Bluetooth Connection Setup and tap the serial number. It will appear under "Paired devices." Or tap the Menu icon and "Connect to Simulator" then choose a simulator and tap "Connect" or "Connect and Save as Default."

6.2 NO RADIAL PULSE IS FOUND

Probable Cause	Solution
Pulse rate was set to 0 BPM	Increase the pulse rate
BP arm is not connected	Tap the Menu icon and select "Bluetooth Connection Setup and tap the serial number. It will appear under "Paired devices."

6.3 THE READINGS ON THE BP ARM DO NOT MATCH OMNI® 2

Probable Cause	Solution
Calibration may be off	Calibrate simulator following the calibration instructions listed in Section 3.7 Calibrating the Blood Pressure Arm.

7. APPENDIX

7.1 PARTS LIST

Product	Item Number	Contents
Blood Pressure Training System with OMNI® 2	S415/S415.100	Blood Pressure Training System Arm Modified Blood Pressure Cuff Power Supply OMNI® Controller Soft Carrying Bag External Speakers (S415.100 only)
OMNI® 2 Tablet	S415.204/ S415.100.250.204	Touchscreen tablet replacement preloaded with OMNI 2 software
Modified Blood Pressure Cuff	S415.982/ S415.100.928	Modified BP Cuff
Power Supply	S415.968/ S415.100.968	Power supply with cord. 120V/240V AC, 6V DC, 3A
Soft Carrying Bag	S415.807/ S415.100.807	Carrying bag replacement
External Speakers	S415.100.900	External speakers replacement. Set of two

7.2 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; 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. 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:

1. Contact Gaumard and request authorization to return the Gaumard product. Do NOT return the
2. Gaumard product to Gaumard without prior authorization.
3. 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.

7.3 CONTACT GAUMARD

Before contacting technical support, please make sure to have your simulator and user guide readily available.

Email: support@gaumard.com

USA: 800-882-6655

INT: 01-305-971-3790

7.4 GENERAL INFORMATION

E-mail: sales@gaumard.com

USA: 800-882-6655

INT: 01-305-971-3790

Fax: 305-252-0755

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

Office Hours

Monday-Friday, 8:30am - 7:30pm EST (GMT-5)



Gaumard[®]
Simulators for Health Care Education

Gaumard[®], Victoria[®], Tory[®], ZOE[®], Michelle[®], Mike[®], PEDI[®], Susie Simon[®], Susie[®], Simon[®] Code Blue[®], SIMA Models[®], SIMA GYN/AID[®], Virtual Instruments[®], Codemaker[®], Code Blue[®], NOELLE[®], MOES[™], Simulation Made Easy[™], HAL[®], CPRLink[™], Zack[™], RITA[™], Chloe[™], Seatbelt Susie[™], Krash Kids[™], Premie[™], UNI[®], OMNI[®], SmartSkin[™] are Trademarks of Gaumard[®] Scientific Company, Inc.

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

www.gaumard.com | 800-882-6655 | 305-971-3790 | Fax: 305-252-0755 | sales@gaumard.com

© 2017 Gaumard Scientific Company. All rights reserved. Patented; other patents pending.

MADE IN THE U.S.A.

User Guide 17.8.1 UG.S415.250/S415.100.250