



**No 775  
Blood Pressure  
Simulator w/iPod®**



Thank you for purchasing Simulaids' Blood Pressure Simulator. Please read through these instructions to assist you in understanding the features.

### Assembly

Assemble the arm by placing the arm next to the upright portion of the stand and thread the bolt into the arm; secure it by hand tightening. Once the arm is attached to the stand, plug the black cord with the 4 pin connector into the multi-pin connecting port on the back of the control box. The power cord for the a/c inverter is also plugged in to the control box in the appropriate receptacle, labeled DC.

### Power Supply

The control box has batteries included for an easy portable mode. To prolong the life of the AA batteries you can plug the 110 volt a/c inverter included with the trainer into a standard a/c outlet and attach the inverter cord to the control box under the "DC" label. When the BP Simulator is plugged in, the "Plug" icon will display on the screen indicating that you are not operating on batteries. NOTE: When the unit is operating in "Plug", the AA batteries do not recharge. The "low battery" icon will appear when the batteries are low.

When the unit is powered up, the default settings of 120 systolic, 80 diastolic and a volume setting of 2 will be active.

**IMPORTANT:** if the low battery indicator is on you may experience a freezing up of the iPod®. Replace the batteries in the B/P Arm control box to eliminate the freeze ups. To replace the six AA batteries, unscrew the feet of the control box and remove the cover and access the battery pack, which lies within a foam receptacle.

When installing the battery pack be sure to securely position the pack within the foam receptacle in order to prevent damage during movement of the unit.

### B/P Cuff

Your trainer comes with a special fitted B/P cuff, but you may use any standard sphygmomanometer. To use a different cuff you must cut the tubing and insert the "T" connector to have the three way tubing assembly available for the replacement cuff. Once you have positioned the cuff on the upper arm, attach the loose end of the assembly to the barbed connector on the control box under the "B/P" label. This must be done so that the pressures exerted by the cuff are translated to the sensing devices inside the control box, otherwise you will not be able to determine variations in the B/P settings.

### Auxiliary Sound

An external speaker system can be used for amplification of the auscultated sounds associated with blood pressure taking by plugging the universal sound cables into the connection on the control box labeled “EXT SPKR.” Use this feature for broadcasting sounds to the entire classroom during initial training exercises.

### Auscultation

There is a speaker in the antecubital fosse of the arm that emits the sounds necessary for taking blood pressures. Placing any stethoscope over that speaker allows one to listen for the commencement of sounds, the Auscultatory Gap, if activated, the Korotkoff sound changes, and the cessation of sounds.

### Palpation

The radial pulse will activate when the iPod® is attached to the control box. You can teach systolic B/P via palpation using this feature. Note that when you begin to inflate the B/P cuff, the radial pulse will stop at about 8 mmHg until you are within the systolic/diastolic range of your settings. If you go above systolic, you will have no pulse – release the pressure and you’ll have a radial pulse once you reach systolic – the pulse stops just short of the diastolic pressure setting so that the auscultation of the sounds at the antecubital fosse are not hindered by the transmission of sound through the forearm skin.

This simulator is also used to teach taking pulse rates. If you elect to use the Pulseless Electrical Activity feature, you will not hear antecubital speaker sounds.

## The Program

- Open the iPod® box and follow set up instructions
- If you do not have an iTunes® account set one up
- Go to the App store
- Search for Simulaids
- Download and install the Simulaids BP App on the iPod®
- Go to the iPod® settings to verify the iPod® and BP Simulator are linked



- Connect the iPod® to the BP Simulator
- Turn the BP Simulator on, and
- Tap the BP star of life APP to initialize program



Opening screen display

It is likely that the B/P cuff will need to be calibrated to the control box settings. To do so tap settings, on the upper right corner, on the iPod® BP screen and a drop down list will display. Pump the B/P cuff until the gauge reads 150 and wait until it stabilizes at 150 mmHg. At that time, tap “Calibrate” and the calibration is complete. Release the air in the cuff and the trainer is ready for the next student. The calibration will set the gauge within 2 mm hg of the settings on the screen.



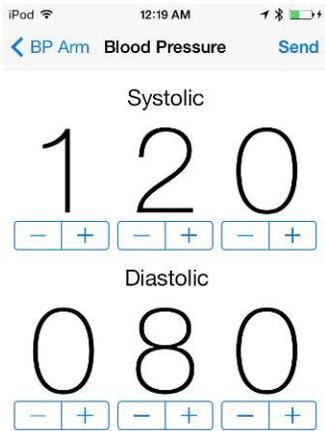
It may be necessary to reset the BP Simulator by turning it off and then on again after the Auto Shut-Down. It also may be necessary to exit the BP Program on your iPod® and then reenter the program after the Auto Shut-Down.

The Auto Off feature will allow you to set the unit to turn off to prolong the battery life of the unit..

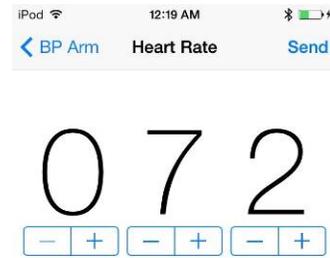
Notice the other drop down selections in this menu. The Ausculatory Gap simply toggles from off to on. During the “ON” sequence, the gap occurs. Tap the choice again, and the gap is off.

The other icon on the screen is the “Send” button. After changing the digit selections for the B/P and the pulse rate, you must tap the send button in order for the change to take place in the arm. You may use this feature to pre-load the trainer while the student is working on the previous skill set. When you are ready to change, simply tap the button.

After the BP is calibrated, the Blood Pressure, Heart Rate and Volume can be changed.



**Blood pressure:** On the main screen click on the blue arrow on the right side of the screen set between the systolic and diastolic pressures, this will open up the Blood Pressure Screen. The values can be changed by tapping on the + and/or – symbols.



**Heart Rate:** On the main screen click on the blue arrow on the right side of the screen next to the Heart Rate, this will open up the Heart Rate Screen. Change the values by tapping on the + and/or – symbols.



**Arm Volume:** On the main screen click on the blue arrow on the right side of the screen next to the Arm Volume, this will open up the Arm Volume Screen. Change the values by tapping on the + and/or – symbols.

**WARRANTY:** Simulaids warrants their products to be free from defects in materials and/or workmanship for a period of one year from the date of purchase, as evidenced by the date on the invoice of the product shipment to the end user. This warranty expressly does not cover abuse, accidental or purposeful damage, or any form of modification to the product. This warranty does not cover moulage products. Only products manufactured at the Simulaids plant in Saugerties, NY receive this limited warranty status. All other products sold through Simulaids, but manufactured elsewhere, are subject to the warranties supplied by the product manufacturer. These warranties may differ from the Simulaids' warranty.

Simulaids reserves the right to either repair or replace affected parts or the entire unit, at their sole discretion, after investigating and reviewing the actual product and the damage. In most instances, a digital photo of the product in question showing the damage will help qualify a product for return to the factory.

**RETURN POLICY:** At no time will any product be accepted without proper return authorization issued by Simulaids. Please contact our Customer Service Department to arrange a return and obtain a RGA number. Freight and Shipping charges are the sole responsibility of the end user. No product will be received with shipping charges due. Serial number and invoice number from the agency through whom the product was purchased must be provided for warranty repairs. No return authorization number will be provided without this information.

An **EXTENDED 2 YEAR WARRANTY** is available for your Blood Pressure Simulator. The extended warranty must be purchased within 2 months of the original purchase date established by the invoice date. Contact your Simulaids representative and ask to purchase the extended warranty and they will quote you the cost. The Extended Warranty simply extends the factory warranty (1 year) coverage to a total of three (3) years. This is not available on products not manufactured by Simulaids, such as the iPod®.



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