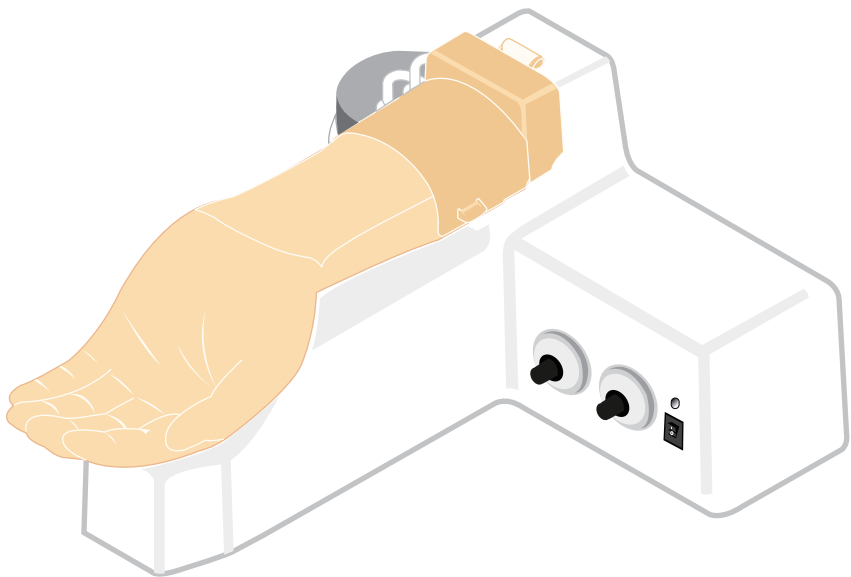


BT-CSPA

# Arterial Puncture Training Model

## USER'S GUIDE



## Product Information

Product Name	Arterial Puncture Training Model
Model Name	BT-CSPA
Manufacturer	BT Inc.
Address	A-313, Samsung Techno-valley, 140, Tongil-ro, Deogyang-GU, Goyang-Si, Gyeonggi-do, 10594, Republic of Korea
Certification	   RoHS

## Product Specifications

Dimensions	307 X 367 X 169mm
Weight	2.8kg
Power Converter	Input AC100-240~, 50/60Hz, 0.4A, Output DC 12V, 1.5A
Battery	LR6 – 8EA(AA Type, 1.5V)

## Customer Service

Website	<a href="http://www.btinc.co.kr">www.btinc.co.kr</a>
Address	A-313, Samsung Techno-valley, 140, Tongil-ro, Deogyang-GU, Goyang-Si, Gyeonggi-do, 10594, Republic of Korea
Telephone	+82-2-2038-2903
E-mail	<a href="mailto:btinc@btinc.co.kr">btinc@btinc.co.kr</a>



## Cautions for battery disposal

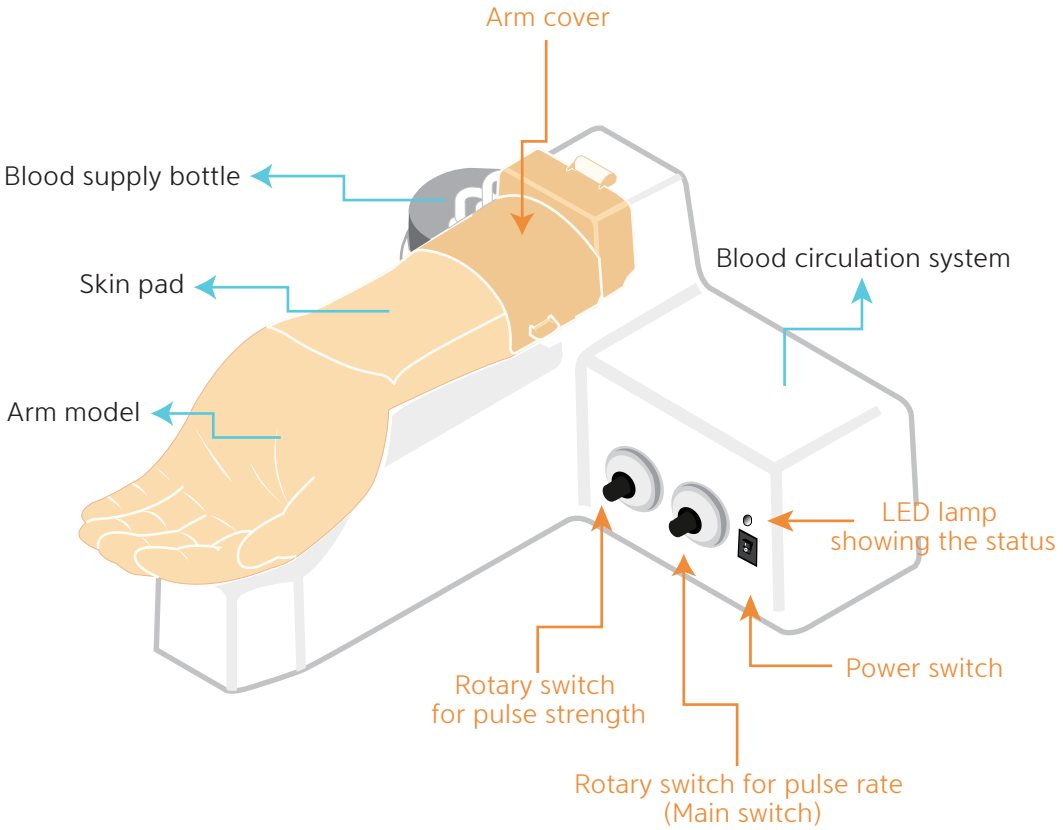
- ※ Please follow the regulations of corresponding area for the disposal of used batteries.

# Cautions

Please read carefully to ensure correct usage and user's safety through understanding of the product.

- ① Use only components provided or approved by BT Inc.
- ② Do not use the product for purposes other than described in the manual.
- ③ If you disassemble or modify the product without any permission by BT Inc, the warranty will be voided. Also, making imitated or altered products for commercial purposes are prohibited by law.
- ④ If the product is overheating or emits a burning odor during usage, turn off the power switch, unplug the power adaptor and call the customer service center.
- ⑤ Keep the product away from water and moisture area.
- ⑥ Do not use the product near strong magnetic fields or high voltage power lines.
- ⑦ Do not use the product and unplug the power adapter during lightning storms. It can cause malfunction of the product and increase the risk of an electric shock.
- ⑧ The product may malfunction under extreme weather conditions.  
(Operation temperature : 0°C~40°C (32°F~104°F), Storage temperature : -10°C~50°C (14°F~122°F))
- ⑨ Do not keep the product near hot or cold environments as possible. Deterioration of product or internal damage may occur from extreme weather conditions.
- ⑩ Never clean the product with chemicals such as solvent, benzene or thinner as these may cause fire ignition or surface deterioration.
- ⑪ Do not install other programs or software to the provided tablet.  
It may cause software malfunction.
- ⑫ BT Inc. can change or adjust the product specification without any notice in order to improve the product.

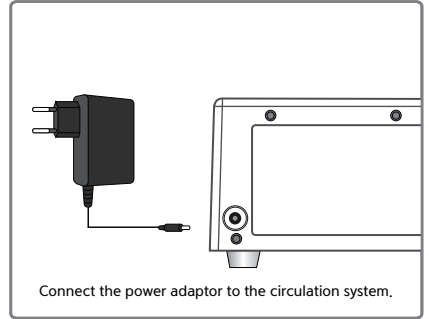
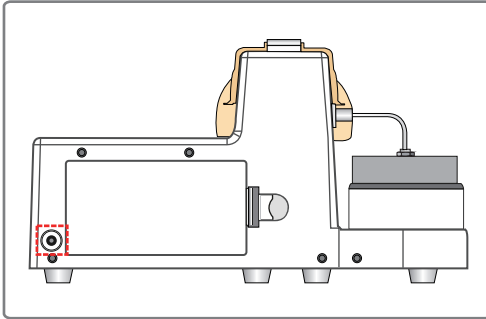
# Components



● Etc. : Power adaptor, Simulated blood, Storage case, User manual

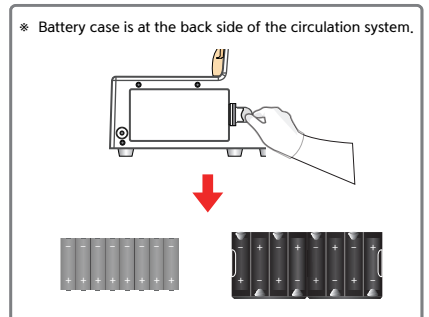
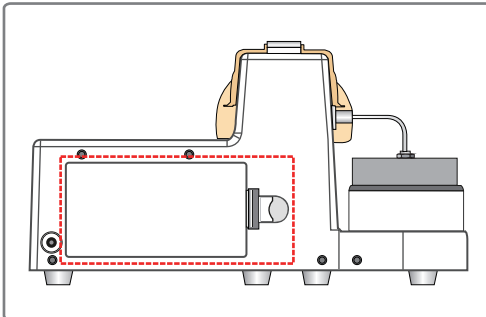
# Connecting the power supply

< How to connect the power adaptor >



※ Please use the included power adaptor.

< How to Insert batteries >

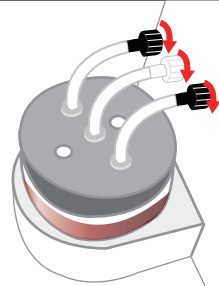


- ① Open the battery cover at the back side of the circulation system.
- ② Insert 8 batteries into the battery holder with (+) and (-) electrodes aligned.
- ③ Use the LR(AA type, 1.5V) batteries.

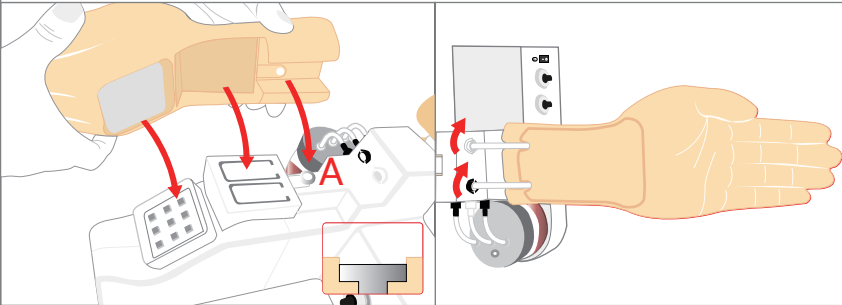
※ The LED lamp will flicker when the battery is low.

※ Please turn the power off before changing batteries to prevent any malfunctions.

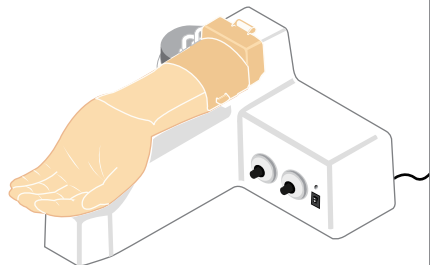
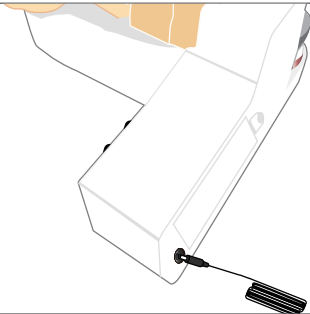
# Installation



- ① Fill the blood supply bottle half with water and add some drops of coloring to it.
- ② Place the blood supply bottle on the circulation system.
- ③ Connect all connectors as shown. ( Rotate the tips until you hear a click. )

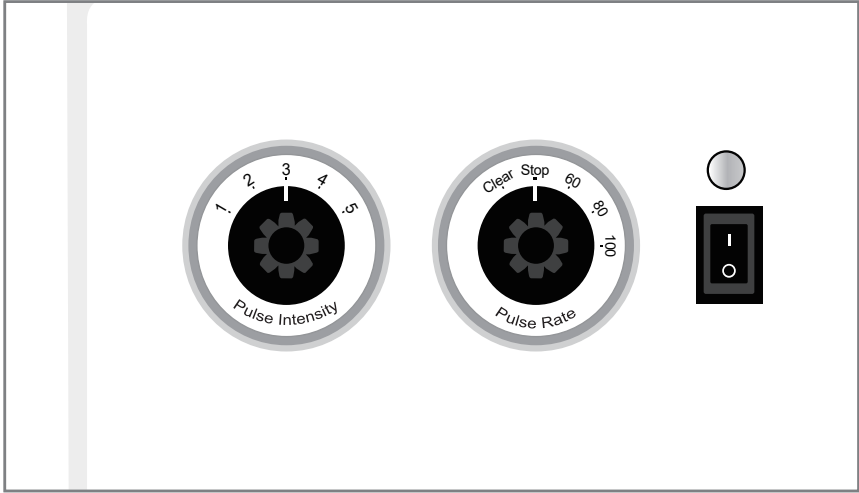


- ④ Place the arm on the circulation system and assemble them. ( Insert the arm fully into the round hole of the A part. )
- ⑤ Insert the skin pad into the arm and connect the tube connectors. ( Rotate the tips until you hear a click. )
- ⑥ Place the arm cover on the arm.  
※ When product is released from BT factory, the skin pad is already connected to the arm.



- ⑦ Connect the power adapter. (Please refer to "How to connect the power supply" page.)
- ⑧ The model is ready to be used.

# Operation



- ① Make sure the power is being supplied.
- ② Turn the power on.
- ③ Set the pulse rate switch(Main switch) to the value that you want to practice.
  - ※ 3 stages : 60, 80, 100 BPM
  - ※ Circulate the blood about 3 seconds so that the blood can be filled to the vein.
- ④ Set the pulse strength switch for the trainer.
  - ※ 5 stages : 1 (Min.) ~ 5(Max.)
- ⑤ Proceed the training.
- ⑥ After training, set the pulse rate switch to STOP.
  - ※ The circulation system will work about 5 seconds to collect the blood inside of vein.
- ⑦ Clear function : Operated manually, please refer to the "Maintenance" page.

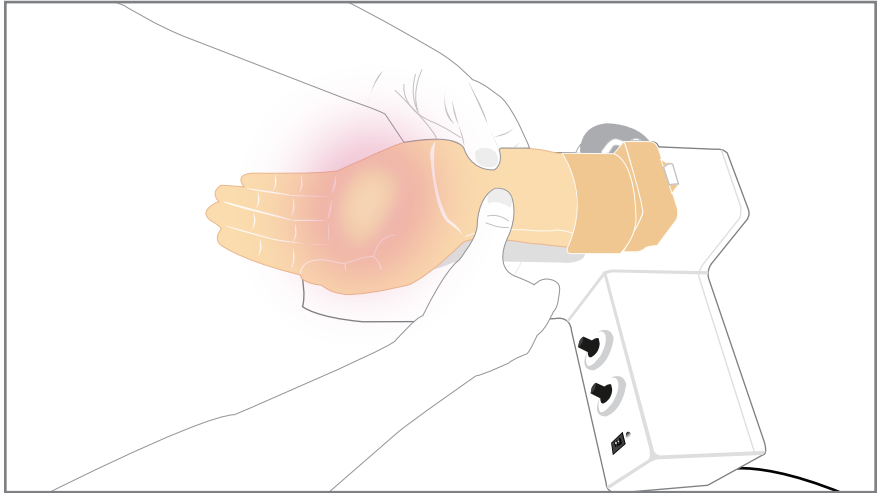
## < LED lamp showing the status >

Status of system	LED lamp showing the status	Lamp
Power ON	Red light ► Green light ► Blue light ON	
Set pulse rate switch to 60/80/100	Blue light flickering 3 seconds and ON	
Set pulse rate switch to Stop	Green light flickering 5 seconds and Blue light ON	
Set pulse rate switch to Clear	Green light ON	
Low battery	Red light flickering	

※ The LED lamp will flicker when the battery is low. Turn the power off and change the batteries.

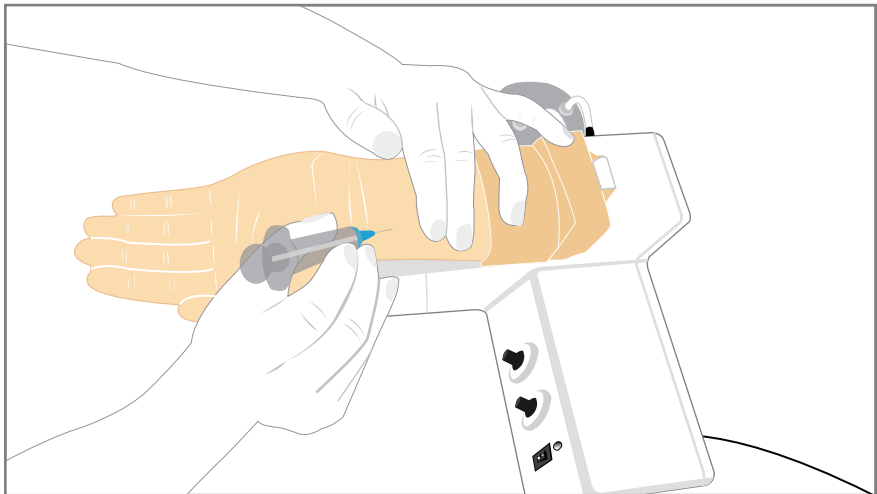
## Function

### <Allen's test>



- Perform Allen test with the model.
- You can check the color of palm is changing.

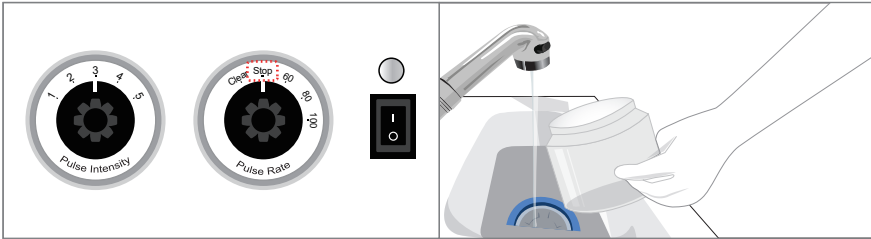
### <Arterial Puncture Training>



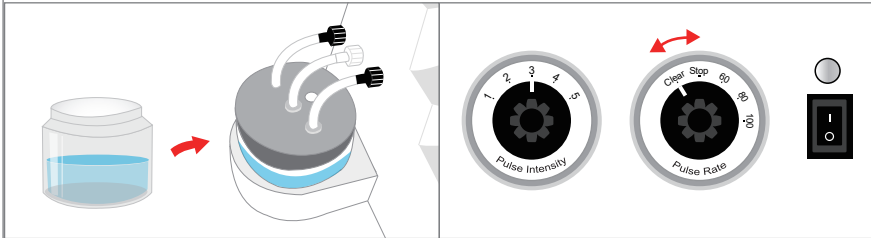
- Find the radial artery and perform the arterial puncture.
- You can check the back flow of blood due to arterial pressure.



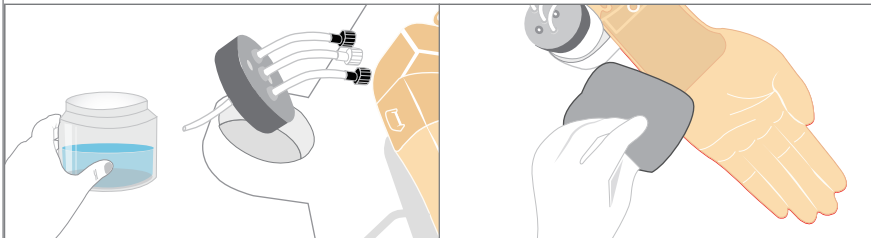
# Maintenance



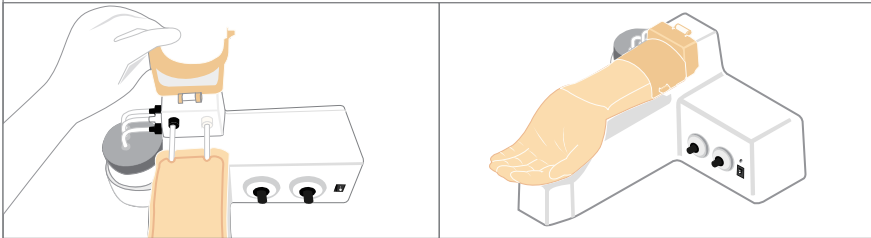
- ① Set the pulse rate switch to STOP.
- ② Disassemble the blood supply bottle from the circulation system and wash it.



- ③ Fill the blood supply bottle half with water and re-connect it to the system.
- ④ Set the pulse rate switch to CLEAR.
- ⑤ After cleaning the vein enough, set the rotary switch for pulse rate to STOP.

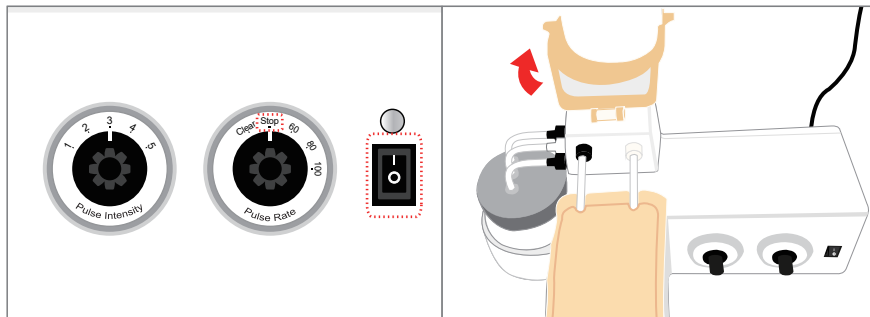


- ⑥ Disassemble the blood supply bottle from the circulation system and wash it.  
( Repeat ②~⑥ steps 2~3 times.)
- ⑦ After taking out the skin pad, wipe the arm with a clean soft cloth.

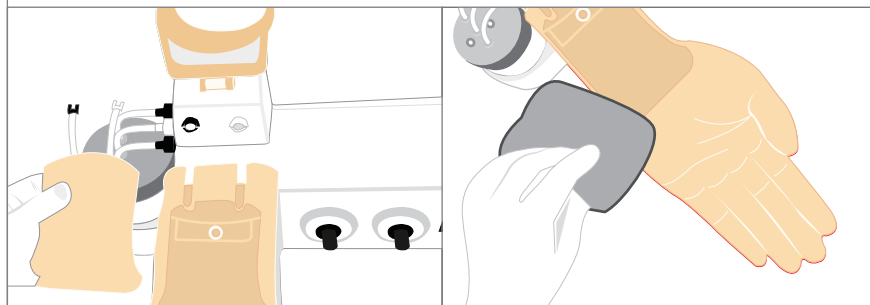


- ⑧ Re-place the blood supply bottle and skin pad on the circulation system.
- ⑨ Turn the power off and disconnect the power adaptor.
- ⑩ Store in a storage place.

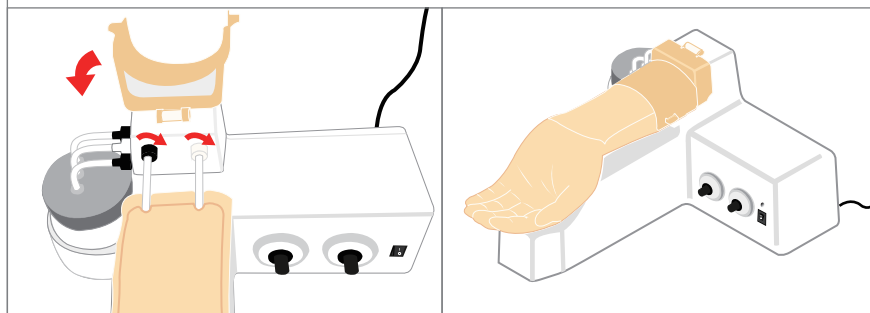
## Replacement of the skin pad



- ① Set the pulse rate switch to STOP.
- ② Turn the power off. ( Do not try to replace the skinpad while the power is on. )
- ③ Open the arm cover.



- ④ Disconnect the tube connectors and take the skin pad out.
- ⑤ Wipe the arm with a clean soft cloth.



- ⑥ Prepare the new skin pad.
- ⑦ Insert the skin pad into the arm and connect the tube connectors.  
( Rotate the tips until you hear a click. )
- ⑧ Replace the arm cover.
- ⑨ The model is ready to be used.

Arterial Puncture Training Model

# BT-CSPA

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Deogyang-gu, Goyang-si, Gyeonggi-do, 10594, Republic of Korea  
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