# USER GUIDE

Arm Manikin for IV Access Training

(Infants Arm Manikin, Model : BT-CSIV-I)



### 1. Cautions

This manual describes how to use BT-CSIV-I Properly.
 Read it carefully to avoid damaging the product and injuring yourself.
 Pay attention to the following series of warnings.

① Use only components provided or approved by BT Inc.

② Do not disassemble, repair, or modify this product on your own.

③ Keep the product away from water. If the product gets wet, do not turn it on. You could be injured by electric shock.

④ Do not use the product near strong magnetic fields or high voltage power lines. The product might malfunction due to electromagnetic waves.

(5) Do not use the product under a condition of thunder and lightning. It can cause the product malfunction and increases the risk of electric shock.

6 Do not use the product in locations with temperatures below 0°C or above 40°C.

(Operation temperature :  $0^{\circ}$ C ~  $40^{\circ}$ C, Storage temperature :  $-10^{\circ}$ C ~  $50^{\circ}$ C)

 $\bigcirc$  Do not keep the product near hot places such as heaters. Transformation of product or internal damage might occur.

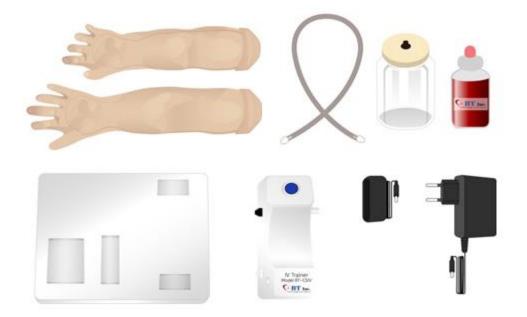
Never clean the product with chemical substances such as solvent, benzene or thinner, as
 these may cause ignition, electric shock or cause the surface to deteriorate.

(9) BT Inc. can change or adjust the product specification without any notice in order to improve the product.

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## 3. Components

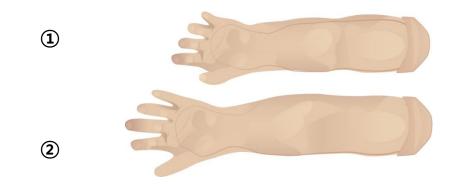


- (1) Left Infants Arm Manikin
  - 1) Infants Arm Model(Vein Tube installed) 2ea
- (2) Pump Driving Device
  - ① Pefistaltic pump (installed) 1ea
  - 2 Microprocessor controller (installed) 1ea
  - ③ Arm Mount adapter 1ea

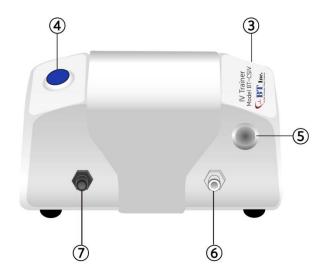
#### (3) Accessories

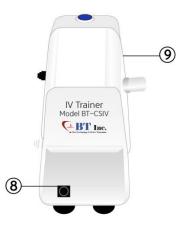
- ① Mount 1ea
- Simulated blood (30ml) 1ea
- ③ Plastic bottle 1ea
- ④ Power source adapter (9VDC) 1ea
- 5 Battery Holder 1ea
- 6 Connection tube 3ea
- ⑦ Storage case 1ea

# 4. Features and Functions

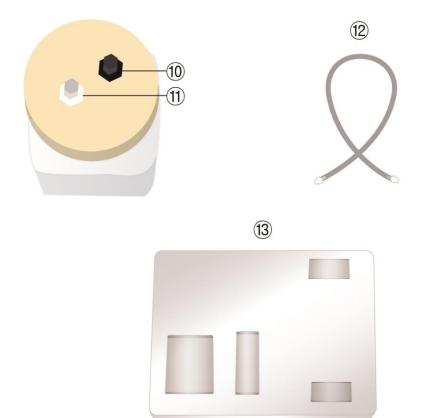


- ① 1 Year Infant Arm model
- ② 3 Year infant Arm model





- ③ Blood circulation controller
- ④ Timer switch
- (5) Rapid blood circulation switch
- 6 Blood IN connector
- O Blood OUT connector
- (8) Power supply connector
- (9) Arm mount adaptor



- 10 Plastic bottle IN connector
- ① Plastic bottle OUT connector
- ② Connection tube
- 13 Mount

## 5. Installation

- (1) Please arrange the product as the figure below.
- Either Adapter or Battery can be used as the power supply.
- Drop a few drops of simulated blood in a plastic bottle with some water and shake it.



(2) Connect the silicon tube as below.



## 6. User Manual

- (1) As described in "5. Installation", connect the power supply and connection tube.
- (2) If you connect the power supply properly, You can hear a short buzzer sound.
- (3) Press the Rapid Blood Circulation Switch to fill the blood vessel of Skin pad with simulated blood.



- (4) The purpose of Rapid Blood Circulation Switch is to fill simulated blood into the empty Skin-pad rapidly.
- (5) After you press the Timer Switch once, you can hear one buzzer sound in about two second. Then the LED lamp turns on and blood flows for 5 minutes.
- (6) When you press the Timer Switch more than once, you can hear buzzer sounds as shown in the chart below. Then, blood will flow for several minutes as shown below.
- (7) When you press the Timer Switch 7 times, you can hear three buzzer sounds. Then blood circulation will stop.

No. of counts for pressing timer switch	Total Operating time(min)	Buzzer Sound	Remark
1	5	1	beep
2	10	2	beep-beep
3	15	3	beep-beep-beep
4	20	4	beep-beep-beep-beep
5	25	5	beep-beep-beep-beep-beep
6	30	6	beep-beep-beep-beep-beep
7	Automatic Stop	3	beep-beepbeep

(8) When you press the Timer Switch for 3 seconds, blood circulation will stop automatically.



- (9) After terminating the operation, you can hear the three buzzer sounds. (beep beep --- beep)
- (10) If you want to restart, just press the Timer Switch again.
- (11) After finishing the practice, please keep the product as described in "Chapter 7. Cleaning and Storage".

## 7. Cleaning and Storage

- (1) After finishing the practice, you need to disconnect the white connector from the Plastic Bottle and then press the Rapid Blood Circulation Switch to remove blood in the tube.
- (2) Fill the bottle with clean water after expelling simulated blood.(You can reuse the simulated blood if you keep the blood in an empty container)
- (3) Reconnect the white connector to the Plastic bottle.
- (4) Press the Rapid Blood Circulation Switch in order to circulate the clean water to clean up the tube.
- (5) Disconnect the white connector from the Plastic Bottle and then press the Rapid Blood Circulation Switch to remove clean water in the tube just as "(1)".
- (6) After pouring the water out of the bottle, disconnect the connection tubes.
- (7) If water leaks out from the end of connector, remove water with the tissue paper or soft cloth.
- (8) Please keep the product carefully in the Storage case.

