

BT-CSIM1

Intramuscular Injection Simulator

USER'S GUIDE




S/W User Guide



English

Product Information

Product Name	Intramuscular Injection Assessment Buttocks model
Model Name	BT-CSIM1
Manufacturer	BT Inc.
Country of Origin	Republic of Korea
Certification	 (Contains FCC ID : S7A-IW05)

Product Specification

Dimensions	330 X 260 X 380mm
Weight	5.5kg
Power Converter	Input AC100-240~, 50/60Hz, 0.4A Output DC 12V, 1.5A
Battery	6LF22 - 1EA(9V)

Customer Service

Website	www.btinc.co.kr
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	bt@btinc.co.kr



Cautions for battery disposal

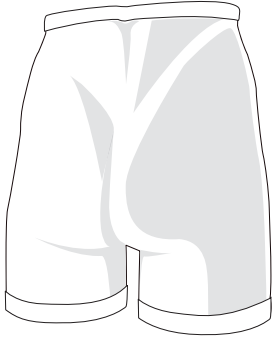
- * Please follow the regulations of corresponding area for the disposal of used batteries.

Cautions

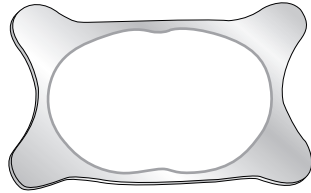
Please read it carefully to ensure correct usage and user's safety through understanding of the product.

- Ⓢ Do not use the product for other purposes described in the manual.
- Ⓢ Do not use the product for other purposes described in this manual.
- Ⓢ If you disassemble or modify the product without any permission by BT Inc, you cannot get the warranty. Also, making imitated or altered products for commercial purposes are prohibited by law.
- Ⓢ During the usage, please contact us after any electricity power off when the product is overheated or smelled something burning
- Ⓢ Keep the product away form water or moisture. If the product gets wet, do not turn it on.
- Ⓢ Do not use the product near strong magnetic fields or high voltage power lines. The product might malfunction due to the electromagnetic waves.
- Ⓢ Do not use the product under a weather of lightning. It can cause the product malfunction and increases the risk of electric shock
- Ⓢ Do not use the product with temperatures below 0°C or above 40°C
(Operation temperature : 0°C ~ 40°C, Storage temperature : -10°C ~ 50°C)
- Ⓢ Do not keep the product near hot places such as heaters. Deterioration of product or internal damage might occur
- Ⓢ Never clean the product with chemicla substances such as solvent, benzene or thinner, as these may Cause ignition or cause the surface deterioration.
- Ⓢ Please make sure that clean water is the only fluid of injection
- Ⓢ BT Inc. can change or adjust the product specification without any notice in order to improve the product.

Components



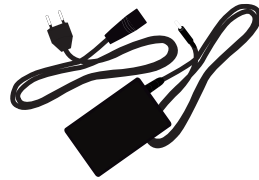
Buttocks Body model



Positioning holder



Tablet PC (Option)



Power converter



Drain tube

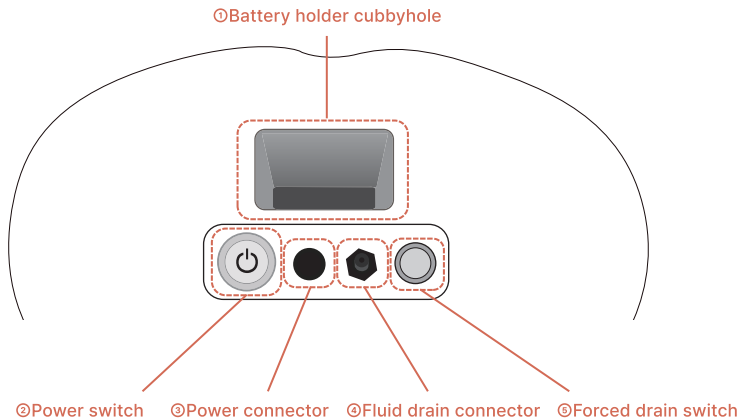


Drain bottle

* etc. - Battery holder, Storage case

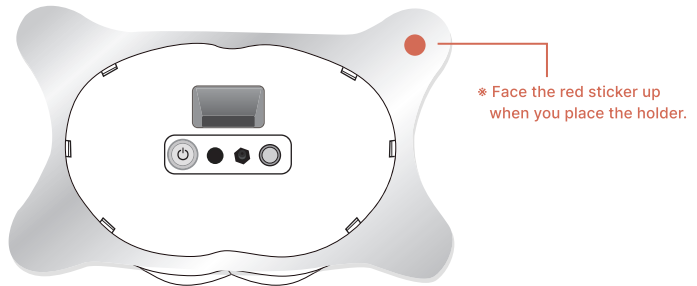
Hardware

1. Features & Functions



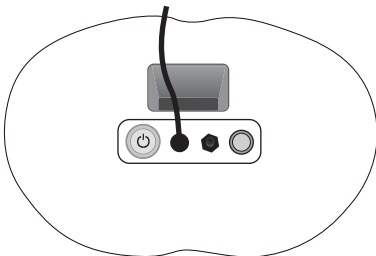
- ⓪ Battery holder cubbyhole : Insert the battery holder in to this cubbyhole.
- ⓪ Power switch : It is possible to turn on/off the buttocks body model.
- ⓪ Power connector : Connect the power plug of power converter of battery.
- ⓪ Fluid drain connector : Connect the drain tube with the drain bottle.
- ⓪ Forced drain switch : It turns on the drain pump to pumping out the injected fluid.

2. Assembly of positioning holder

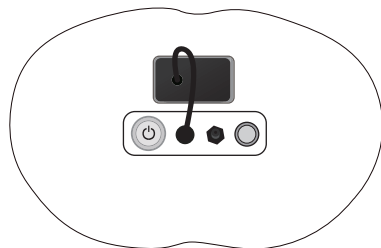


- The holder supports the position of the buttocks body model for various injection postures.
- Press down the buttocks holder on the top of the buttocks model until the holder snaps in hooks and you hear a click.
- When you remove the holder from the buttocks, Press the hook levers on the cover plate with both thumbs and lift up the buttocks holder.

3. Power Connection



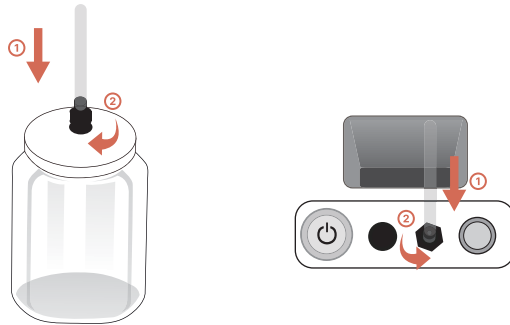
<AC Power Connection>



<Battery Connection>

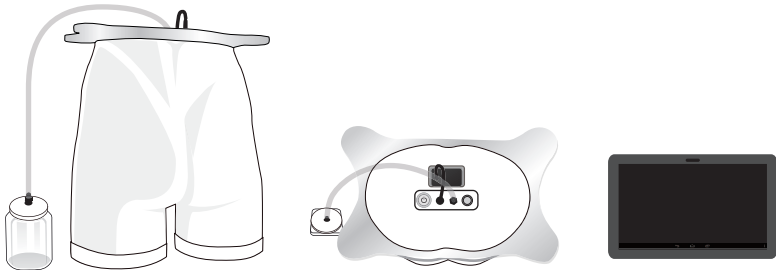
- The product can be powered by AC adapter or battery.
- When you use the battery, insert and connect it to the battery holder.

4. Installation of drain bottle



- Please connect the drain tube to drain bottle and drain connector.

5. Setting and Cautions



< Complete set up of the Product >

- ① Connect the power converter, drain bottle and buttocks holder to the buttocks body model referring to the instructions of "Hardware".
- ② When setting is completed, turn the power of the buttocks body model on.
- ③ Turn on the power of tablet PC, and then press the BT-CSIM icon to launch the program.
- ④ Before practicing the fluid injection, make sure the drain bottle is connected.

* Cautions for injecting fluid

- Only the **clean water** is allowed for injection.
- Using different fluids besides water can cause the malfunction of sensing systems.
- Battery power consumption can be accelerated by the draining of fluids.
- Using AC Power is more recommended than a battery.

Software

1. Screen layout

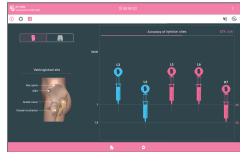
Main Screen (Mode selection)



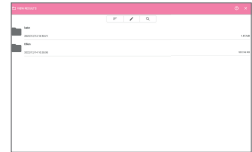
Training Mode



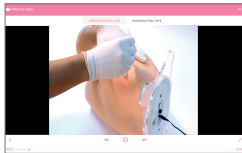
Evaluation Mode



View Results



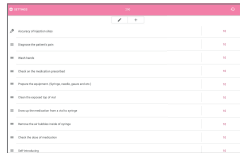
Practice Video



Checklist



Checklist setting



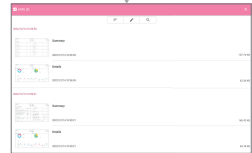
Practice Procedures



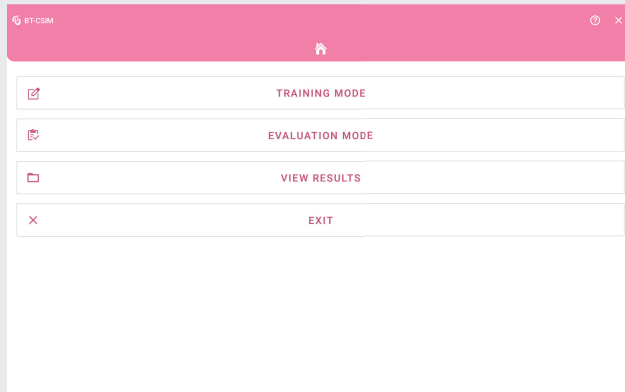
Results Summary



Results Details



2. HOME (Main page)



① Training Mode : Self-training mode used by a trainee.

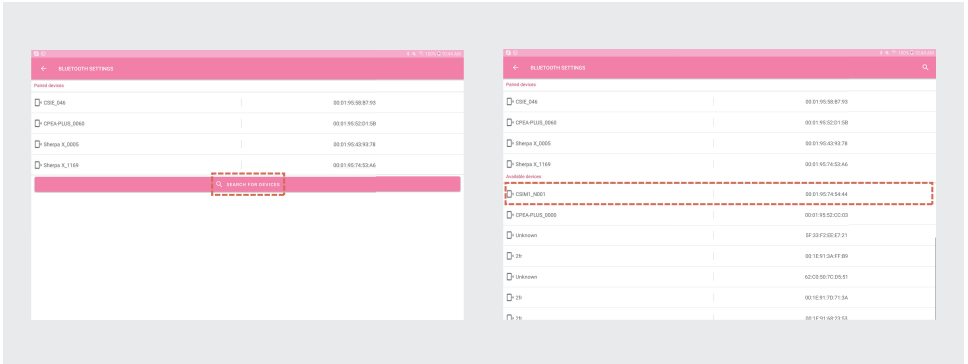
② Evaluation Mode :

Checklists and evaluation scores can be set, instructor can evaluate trainees in real time.

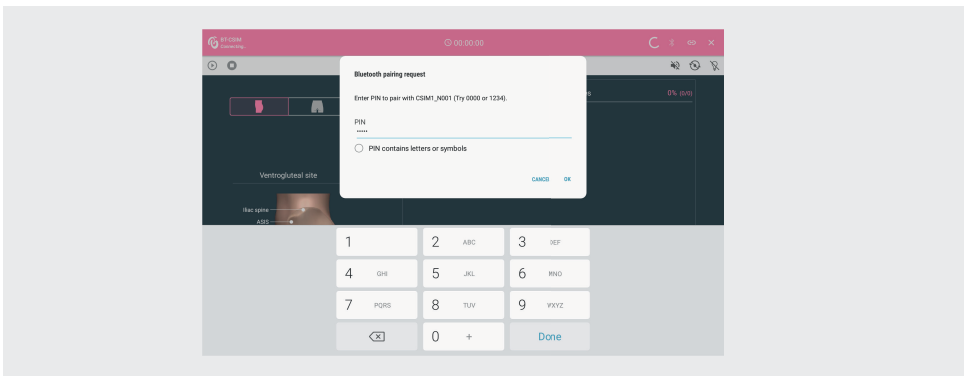
③ View Results : Saved result can be seen in "View Result".

3. Bluetooth Connection

- Butocks body model and tablet PC are connected via Bluetooth communication.
- Please refer to the procedure below for Bluetooth connection.

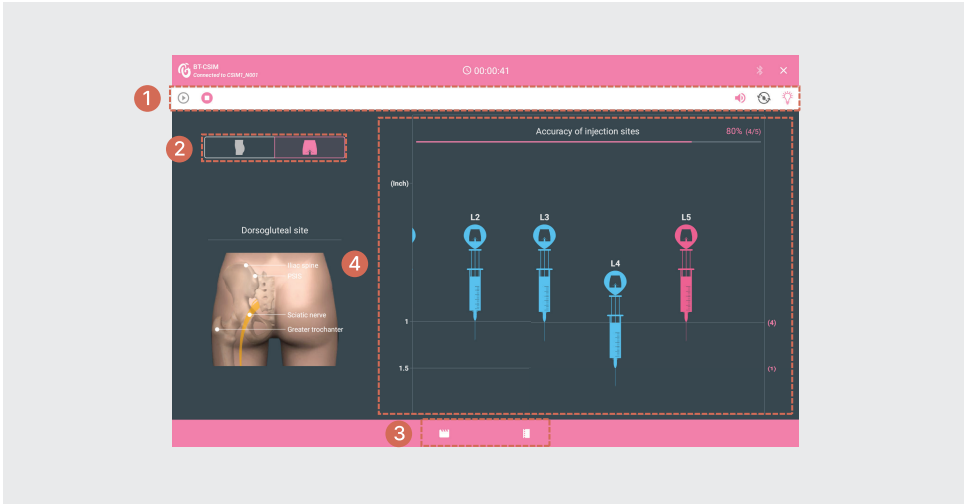


- ① First, check the power on of the buttocks body model.
- ② Click the Bluetooth icon to make sure the pairing with device.
- ③ If you are not paired, select the device that user wants at the pairing device list.



- ④ After selecting the device, enter the Pin Code as below.
 - * Pin Code : 56789
- ⑤ In the paired devices list, check the connection of the device.
- ⑥ Once connection is complete, the device & tablet PC will connect automatically.
 - * Reconnection Icon :

4. Training Mode



⊙ Top bar Icon

Icon	Description	Icon	Description
	Start Training		Stop Training
	Sound feedback - Activated		Sound feedback - Inactivated
	Drain pump - Activated		Sound feedback - Inactivated
	Landmark LED - Activated		Landmark LED - Inactivated

⊙ Mode Selection

	Ventrogluteal Mode		Dorsogluteal Mode
--	--------------------	--	-------------------

⊙ Self learning



Two side-by-side video player windows. The left window, titled 'PRACTICE VIDEO', shows a close-up of hands in white gloves performing a procedure on a human torso. The right window, titled 'PRACTICE PROCEDURES', shows an illustration of a nurse in a grey uniform attending to a patient lying in a hospital bed. Both windows have a pink header and a video control bar at the bottom.

Practice Video

Practice Procedures

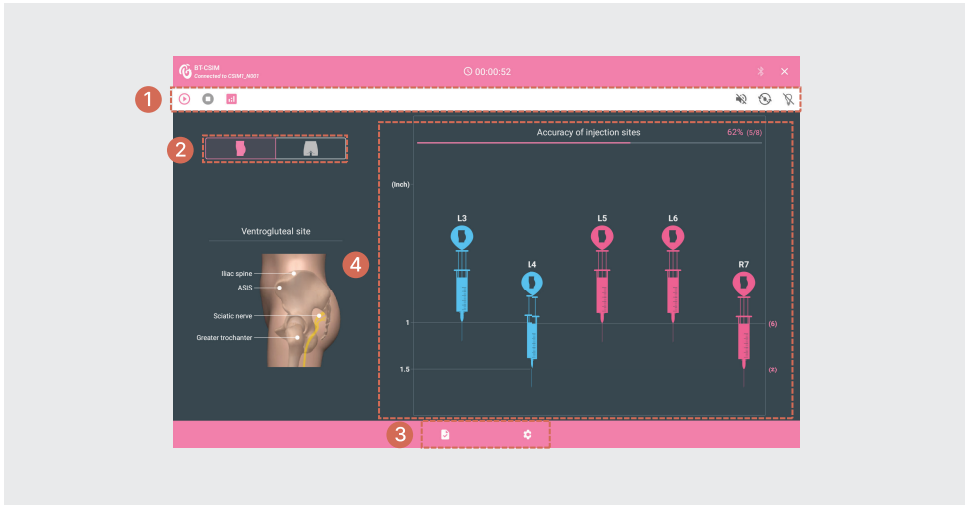
*During the training mode, user can practice with Video and Procedures.

⊙ Training Screen

A training screen diagram titled 'Accuracy of injection sites' with a score of '80% (4/5)'. It features four syringes labeled L2, L3, L4, and L5. L2 and L3 are blue, while L4 and L5 are red. A vertical scale on the left indicates injection depths of 1 inch and 1.5 inches. A legend on the right identifies 'Correct Injection (Blue)' and 'Wrong Injection (Red)'. Red dashed boxes and arrows highlight specific injection sites and depths.

- In training mode, you can practice no limit of Injections.

5. Evaluation Mode



Ⓞ Top bar Icon

Icon	Description	Icon	Description
	Start Training		Stop Training
	Alarm On		Alarm Off
	Drain pump On		Drain pump Off
	Landmark LED On		Landmark LED Off
	Evaluation Results		

Ⓞ Mode Selection

	Ventricular Mode		Dorsogluteal Mode
--	------------------	--	-------------------

☉ Checklist



Checklist

Checklist Setting

*You can set and change the checklist and scores.

☉ Training Screen

Accuracy of injection sites 80% (4/5)

Injection Site (Ventro / Dorso)

Injected side (L / R)

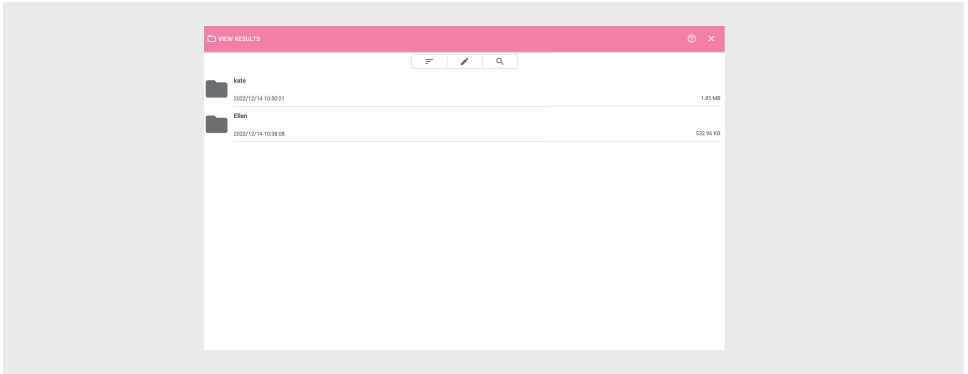
Injection Depth (1 / 1.5 inch)

Correct Injection (Blue)
Wrong Injection (Red)

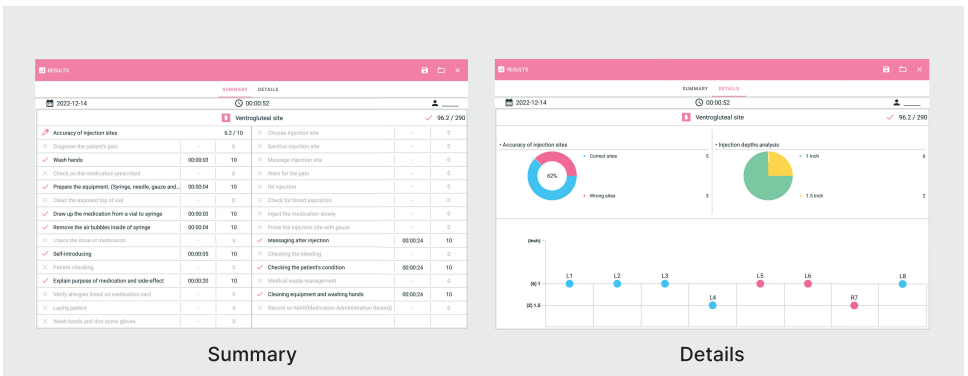
- In evaluation mode, you can practice up to 8 times of injection.
- After the evaluation, the result can be reviewed and saved.

6. View Results

- Saved result can be reviewed in "View Results".



- ① Saved result can be sorted, edited and searched according to the folders of the trainee's name.



- ② Click the file to see the result in PNG or PDF format.

- ③ Save result can be shared or transmitted to e-mail.

BT-CSIM1

Intramuscular Injection Simulator

A-313, Samsung Techno-valley, 140, Tongil-ro,
Deogyang-gu, Goyang-si, Gyeonggi-do, 10594, Republic of Korea

Homepage: www.btinc.co.kr / E-mail: bt@btinc.co.kr
Tel: +82-2-2038-2903, +82-51-903-1144 / Fax: +82 303-3130-0607

Copyright(c) BT Inc. All rights reserved.