InBody S10

User's Manual

Please note the important information below before reading this manual.

Warning

Failure to comply with safety warnings and regulations can cause serious injury or death.

Caution

Failure to comply with safety cautions and regulations can cause injury or property damage.

Note

Referring to notes can help improve equipment use.

InBody Co., Ltd. [HEAD OFFICE]
625, InBody Bldg., Eonju-ro, Gangnam-gu, Seoul 06106 Republic of Korea
TEL: +82-2-501-3939
FAX: +82-2-578-5669
Website: inbody.com
E-mail: info@inbody.com

Representative & Sponsor Information

InBody Europe B.V.
Gyroscoopweg 122, 1042 AZ, Amsterdam, The Netherlands
TEL: +31-20-238-6080 FAX: +31-6-5734-1858 Website: nl.inbody.com E-mail: info.eu@inbody.com

Australian Sponsor. [AUSTRALIA]
Emergo AUSTRALIA. Level 20, Tower II, Darling Park, 201 Sussex Street, Sydney, NSW 2000, AUSTRALIA
TEL: +61-2-9006-1662 FAX: +61-2-9006-1010 Website: emergogroup.com E-mail: Sponsor@emergogroup.com

Customer Service Information

InBody USA [USA]
13850 Cerritos Corporate Dr. Unit C Cerritos, CA 90703 USA
TEL: +1-323-932-6503 FAX: +1-323-952-5009 Website: inbodyusa.com E-mail: info.us@inbody.com

InBody Japan [JAPAN]
Tani Bldg., 1-28-6, Kameido, Koto-ku, Tokyo 136-0071 Japan
TEL: +81-3-5875-5780 FAX: +81-3-5875-5781 Website: inbody.co.jp E-mail: inbody@inbody.co.jp

InBody China [CHINA]
904, XingDiPlaza, No.1698 YiShanRoad, Shanghai 201103 China
TEL: +86-21-64439705 FAX: +86-21-64439706 Website: inbodychina.com E-mail: info@inbodychina.com

InBody s10

User's Manual Contents

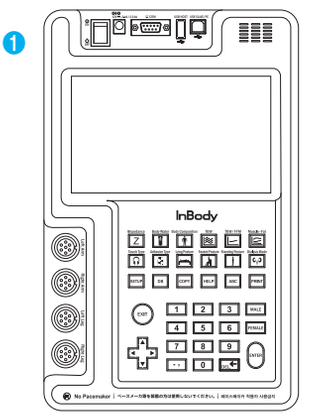
I. Installation & Maintenance

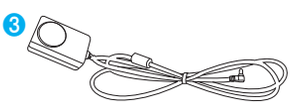
A. Contents of the Box

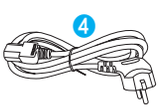
When opening the box, make sure all of the following items are inside:

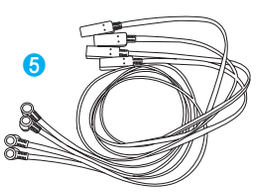
1. Included Items

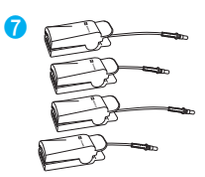
❶ InBodyS10 1EA
❷ User's Manual 1EA
❸ Adapter (12V, 3.4A/3.34A) 1EA
❹ Power cord (AC 125V, 10A, 1.8m) 1EA
❺ Electrode cable 4EA
❻ InBody carrying case 1EA
❼ Touch Type hand electrode 4 units
❽ Touch Type foot electrode 2 units
❾ Adhesive Type electrode 8 units
❿ EKG adhesives
⓫ USB Thumb Drive
⓬ Cart 1EA
⓭ IB Battery 120 or IB Battery 220 1EA
⓮ Cable (75cm) 1EA for connecting
IB Battery 120/220 to the unit

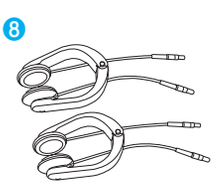


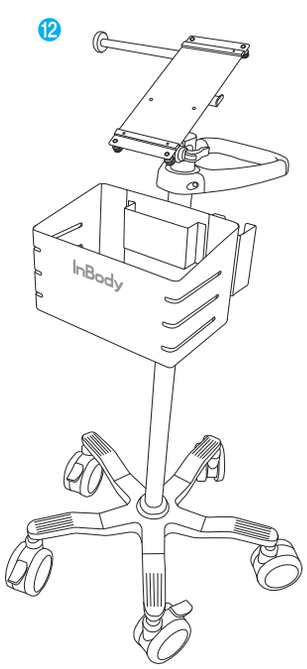


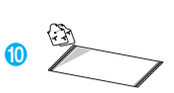


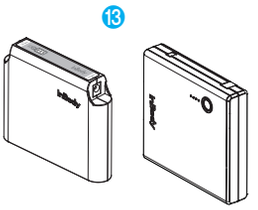












<IB Battery 120> <IB Battery 220>

⚠ Caution

- To prevent physical shock, use InBody's packing material when shipping or transporting the equipment. Refer to this Chapter I, Section D: "Transportation."

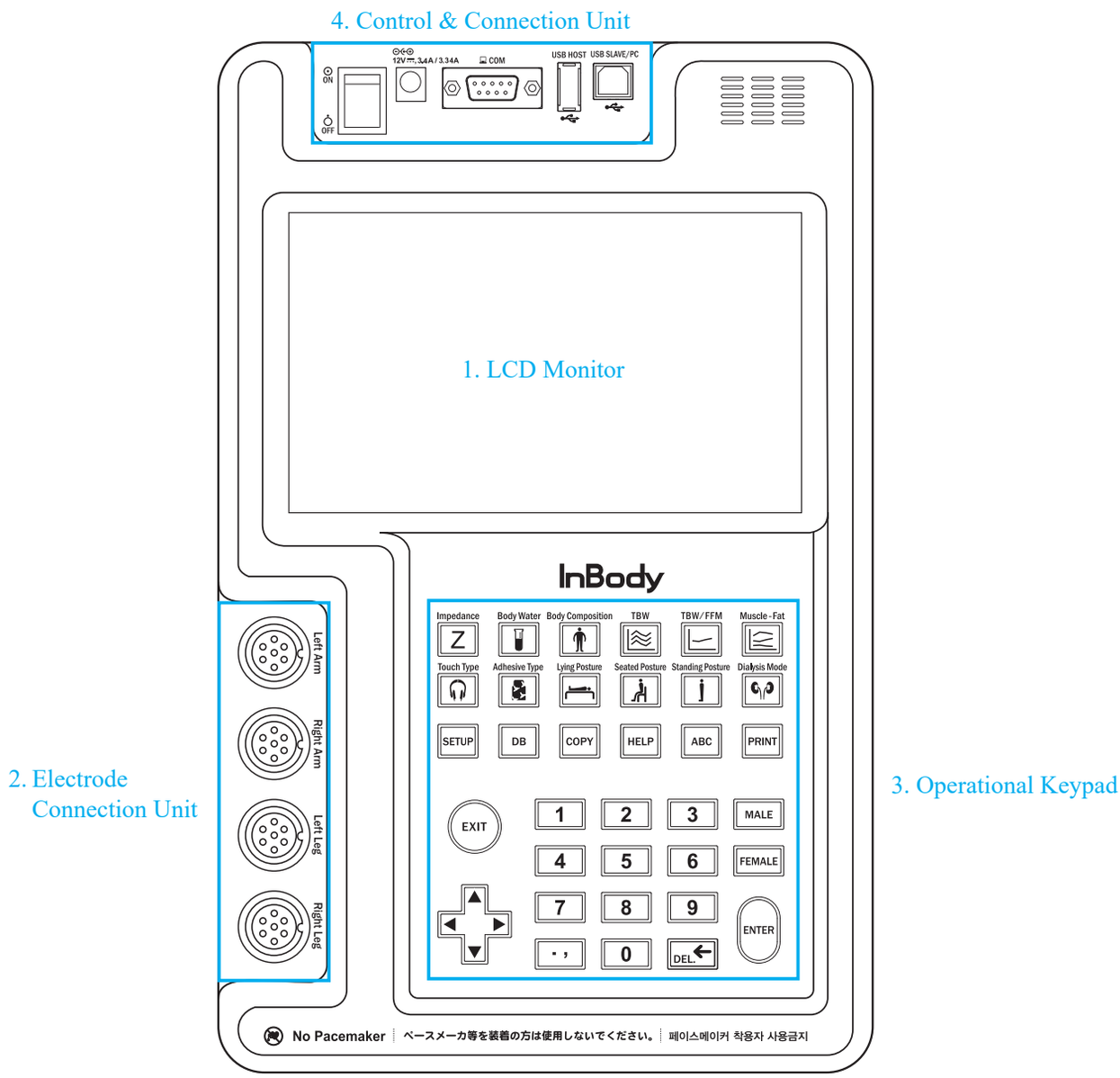
⚠ Note

- Save the wrapping material after unpacking in the event of relocation.

B. Exterior & Functions

Individual part identification and functions with schematic sketches are provided below. Please inspect each component of the InBodyS10 before installation to ensure there are no scratches or damage.

1. LCD Monitor
2. Electrode Connection Unit
3. Operational Keypad
4. Control & Connection Unit



⚠ Warning

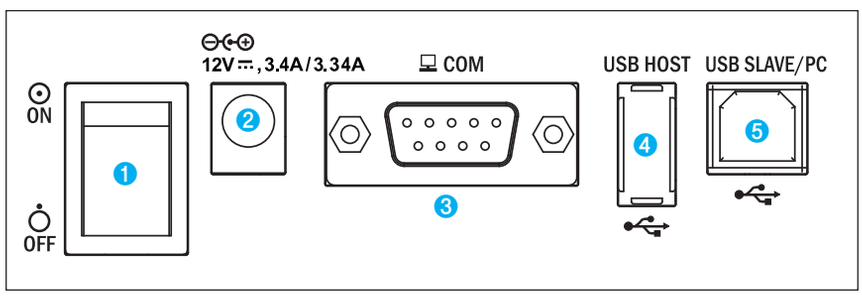
- Do not dismantle the equipment or open the back cover. Internal parts are not for customer use and may cause electric shock. If the equipment is dismantled, the warranty is void, and service costs will be charged.

1. LCD Monitor
   Touch-screen LCD. This displays the analysis procedure, messages and results.

2. Electrode Connection Unit
   Connects electrode cables into the InBodyS10's internal circuit.

3. Operational Keypad
   The keypad is divisible into input buttons and function buttons.
   The buttons are used to input data required for body composition analysis, set up the operating environment or to print out test results.

4. Control & Connection Unit
   Connects to peripherals such as a PC or a printer for data transmission.



❶ Power Switch
   Powers the InBodyS10 on/off.

❷ Power Input Port
   Use to connect the power adapter.

❸ 9 Pin Serial Port, Female (RS-232C)
   Use to connect optional devices.
   SD400(Serial Distributor) provided by InBody is for the connection of several optional devices.

❹ USB Host Port
   Use to interface with a USB printer or a USB storage device.

❺ USB Slave Port
   Use to connect with a PC.

⚠ Warning

- Do not drop any food or liquid on the equipment. It may affect the electrical parts in the equipment or cause damage.
- Only use the adapter provided by InBody.

⚠ Note

- When you use the adapter cable, insert the adapter cable tightly into the InBodyS10.
- Including the optional equipment, only the peripherals provided by InBody can be connected to the InBodyS10. For any inquiry about peripherals, contact InBody.

C. Installation Instructions

1. Workplace Requirements

Location: Indoors only. Any outdoor area where the equipment is to be located should meet all the conditions below.

(1) Operation Condition

Temperature range	10 ~ 40˚C (50 ~ 104˚F)
Relative humidity	30 ~ 75%
Atmospheric pressure range	70 ~ 106kPa

(2) Adapter

Manufacturer	BridgePower Corp.	Mean Well Co, Ltd
Model	BPM040S12F07	GSM 40A12-P1IR
Power Input	AC 100 ~ 240V, 50/60Hz, 1.2A(12A-0.6A)	AC 100-240V, 50/60Hz, 1.0-0.5A
Power Output	DC 12V, 3.4A	DC 12V, 3.34A

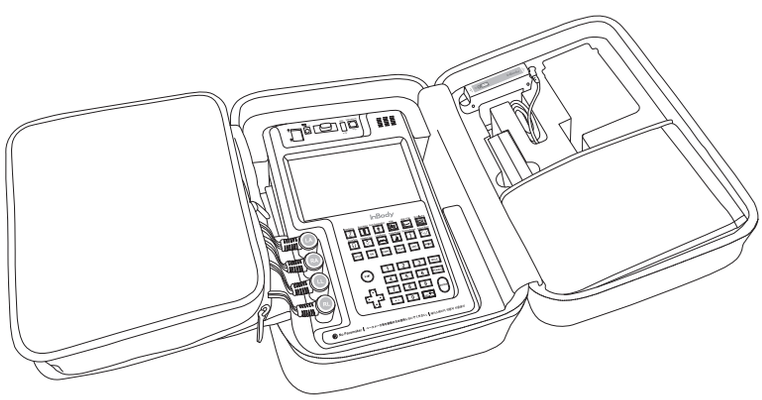
(3) Connect it to an outlet with a grounding terminal. Equipment may be damaged or malfunction due to electrical shock, which may result in inaccurate test results.

(4) If InBodyS10 experiences electrical interference, the test results may be inaccurate. Do not install near fluorescent lamps, large AC motor equipment (running machines, refrigerators, air conditioners, compressors), high-frequency thermal therapy devices, and electric heaters.

(5) Do not connect multiple peripherals to the same outlet. If it is plugged into a power outlet such as an electrical appliance, disconnect it and plug it into a different power outlet.

2. For InBody Carrying Case Users

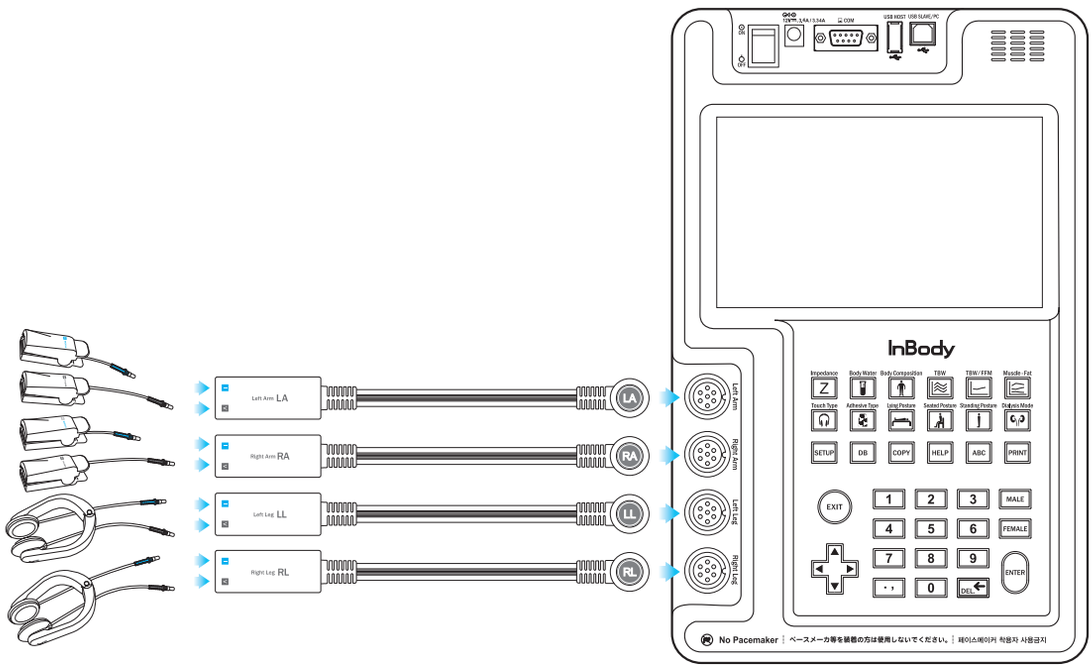
(1) When opening the box, check to make sure all the following items are inside.



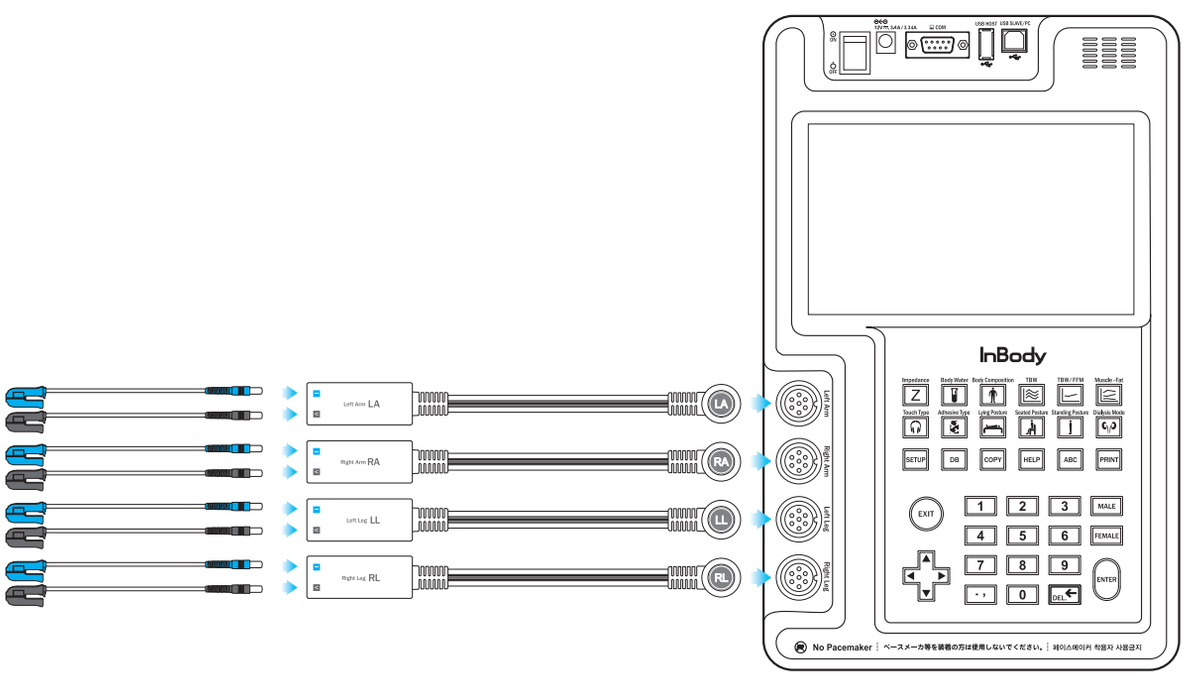
(2) Connect the electrode cables to the InBodyS10.

Connect electrodes of RA(Right Arm), LA(Left Arm), RL(Right Leg), LL(Left Leg) to each corresponding part of the InBodyS10. InBodyS10 offers two types of electrodes: the Touch Type electrodes and Adhesive Type electrodes.

Installing Touch Type Electrodes:

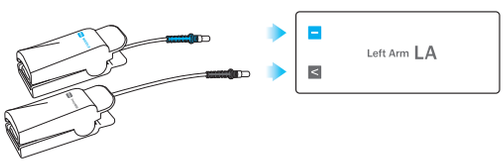


Installing Adhesive Type Electrodes:



❶ Touch Type

Connect the black cable to the black port(V) of the electrode module, and connect the red cable to the red port(I) of the electrode module.



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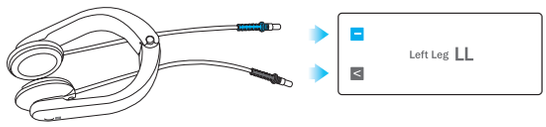
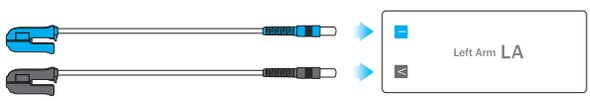


<foot electrode>

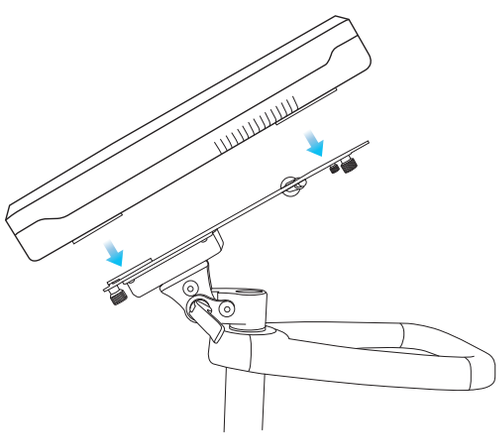
❷ Adhesive Type

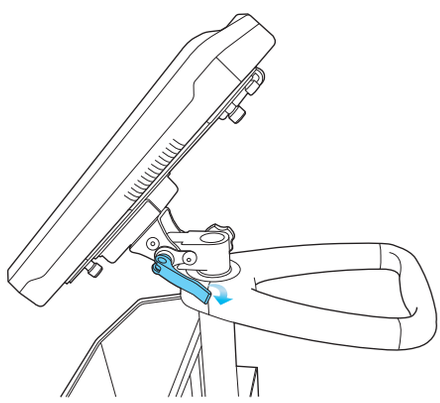
Connect the black cable to the black port(V) of the electrode module, and connect the red cable to the red port(I) of the electrode module.



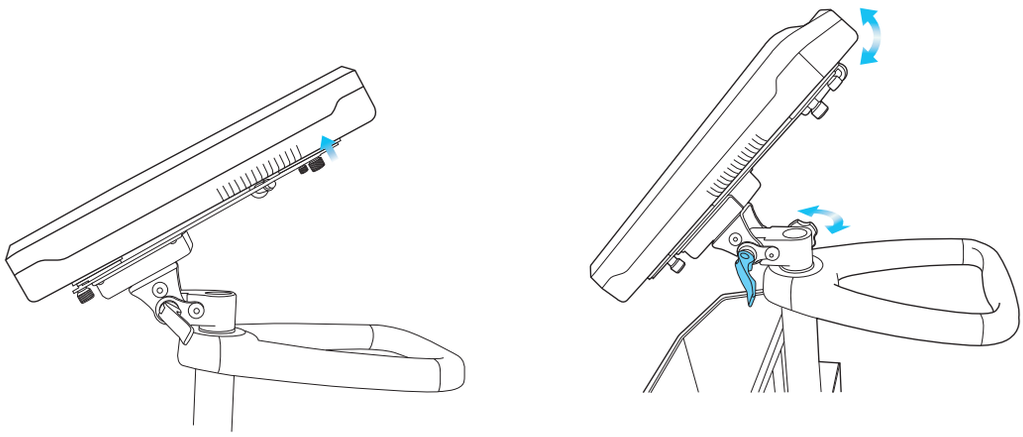
3. How to Install the InBodyS10 Cart

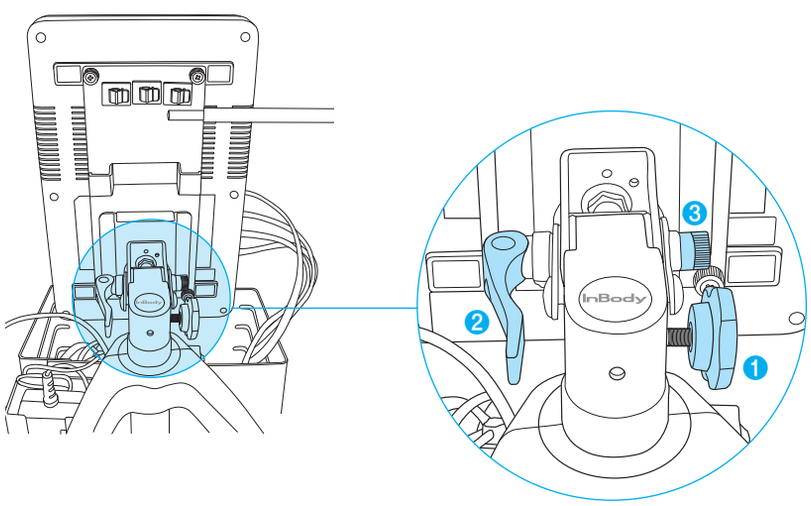
(1) Please place the InBodyS10 on the cart. Align the InBodyS10's 4 screws on the rear side of the unit to the cart's 4 grooves on the head unit. Screw them to fasten the InBodyS10 onto the cart.





(2) As shown below, adjust the direction and angle as desired.





*** HELP**

❶ For left/right control

Loosen the screw by twisting left. Fasten the screw by twisting right.

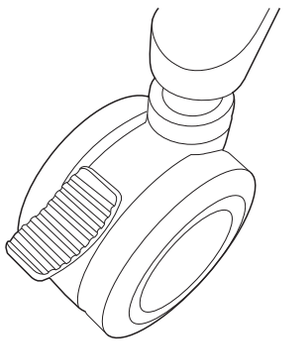
❷ For up/down control

Loosen ❷ and adjust the angle degree. Fasten ❷ again.

❸ When ❷ is too tight or loose

If unscrewed, ❷ becomes loose. If screwed, ❷ becomes tight.

(3) After installation, you can lock the wheels by pushing down the locking lever(as illustrated below).



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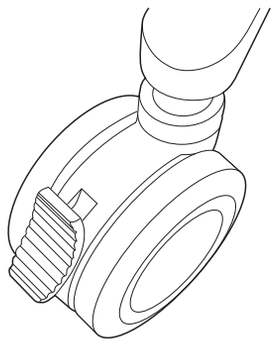
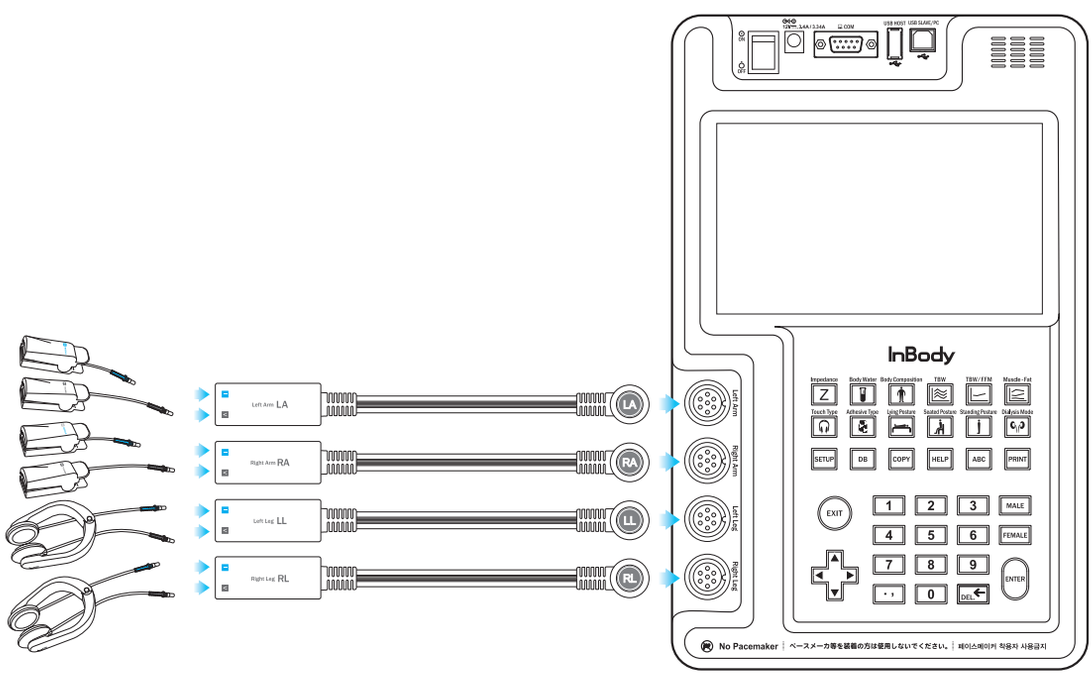


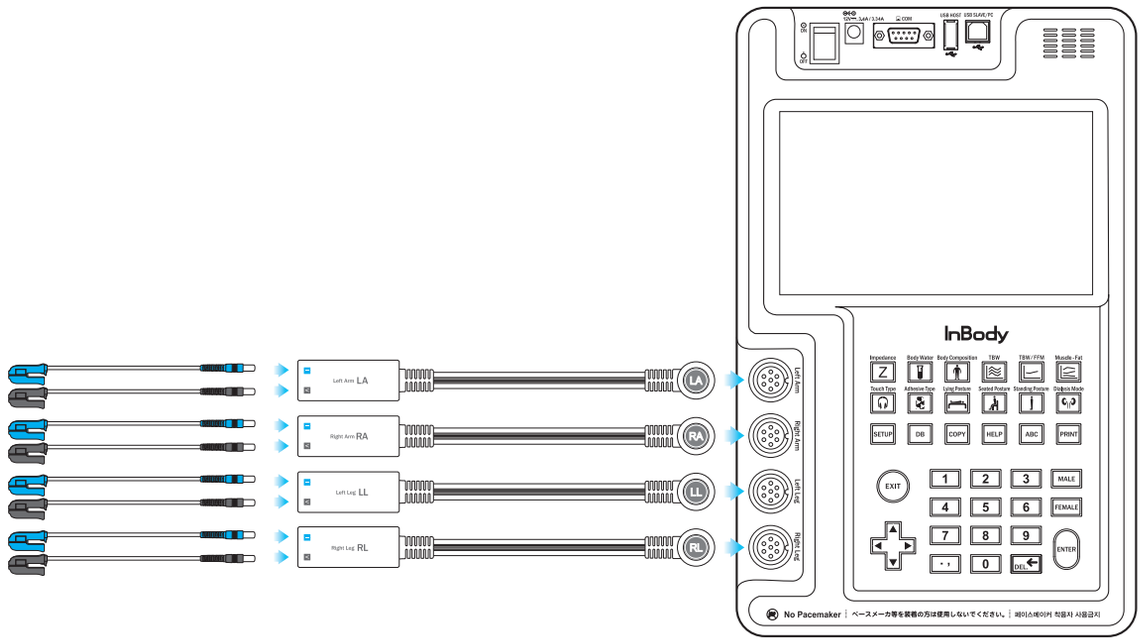
<Caster locked>

(4) Connect the electrode cables to the InBodyS10.
Connect the RA(Right Arm), LA(Left Arm), RL(Right Leg), LL(Left Leg) electrodes to each corresponding part of the InBodyS10. The InBodyS10 offers two types of electrodes: the Touch Type electrodes and Adhesive Type electrodes.

Installing the Touch Type Electrodes:

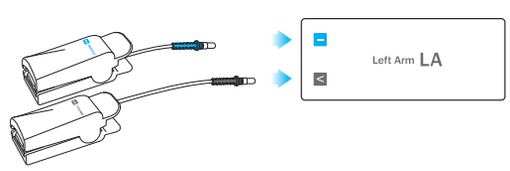


Installing the Adhesive Type Electrodes:

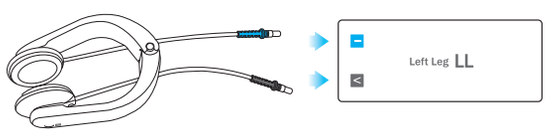


❶ Touch Type

Connect the black cable to the black port(V) of the electrode module, and connect the red cable to the red port(I) of the electrode module.



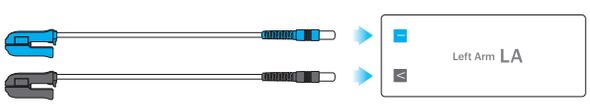
<hand electrode>



<foot electrode>

❷ Adhesive Type electrode

Connect the black cable to the black port(V) of the electrode module, and connect the red cable to the red port(I) of the electrode module.



⚠ Warning

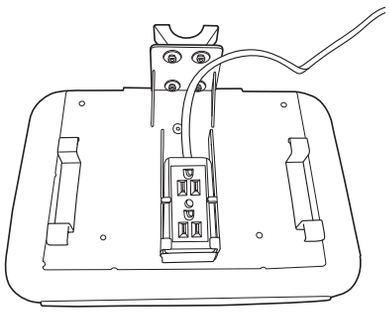
- Do not place the InBodyS10 in a location making it difficult to disconnect the power cord.
- Do not plug in or pull out the power cord with wet hands. There is a risk of an electric shock.
- Always use an outlet with a voltage range of 100 - 240. Using outlets outside this range may result in fire or malfunction.
- When using a power surge protector, make sure that the outlet or the extension cable has adequate power capacity.
- Do not disassemble or modify the equipment, including internal parts, without written consent from the manufacturer. This may cause electric shock or injury, product malfunction, inaccurate results, and will void the manufacturer's warranty.
- If this equipment is modified, appropriate inspection and testing must be conducted to ensure continued safe use of equipment.
- Do not directly contact the InBodyS10 with any other electronic device when the InBodyS10 is on. This may result in an electric shock.

⚠ Caution

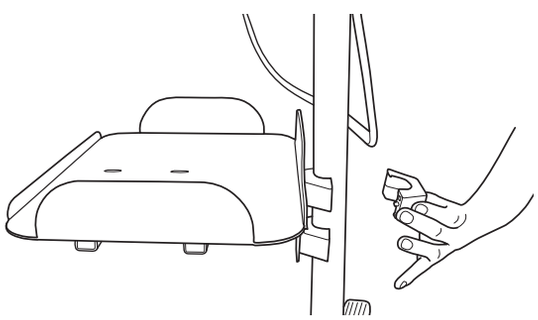
- If you have any problems installing your InBodyS10, please contact InBody for assistance.
- If the InBodyS10 is not plugged into a grounded outlet, damage due to electric surges or product malfunctions may occur. This may affect the test results.
- The test results may be inaccurate if the InBodyS10 is under electrical interference. Do not install the InBodyS10 near products that generate electrical interference such as fluorescent lights, large AC motor equipment(treadmill, vibration plate, refrigerator, air-conditioner, compressor, etc.), high-frequency thermal therapy equipment, or heating appliances. Do not share the power source of the InBodyS10 with other electrical devices. This may affect the test results.
- When connecting the InBodyS10 with other test equipment, turn on the other equipment first. When turning off other equipment, turn off the InBodyS10 first. This is necessary to minimize electrical surges to the InBodyS10.
- Always use the specified adapter provided by InBody, as it is a part of the InBodyS10. Using other adapters may result in a malfunction of the InBodyS10.
- Operation of the InBodyS10 2,000m above sea level may affect the weight measurement.
- Adapter must be arranged so the power may easily be cut off when a problem occurs in the InBodyS10.

✻ Installing the Printer onto the Cart

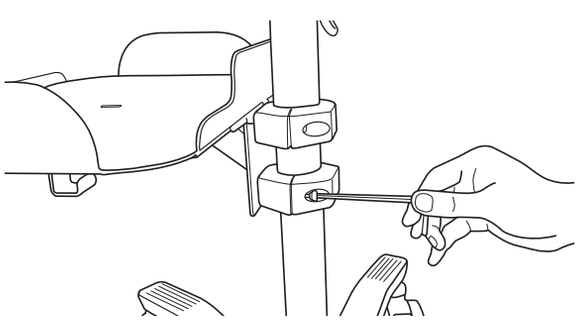
❶ Insert a power strip in the slot provided under the printer platform.



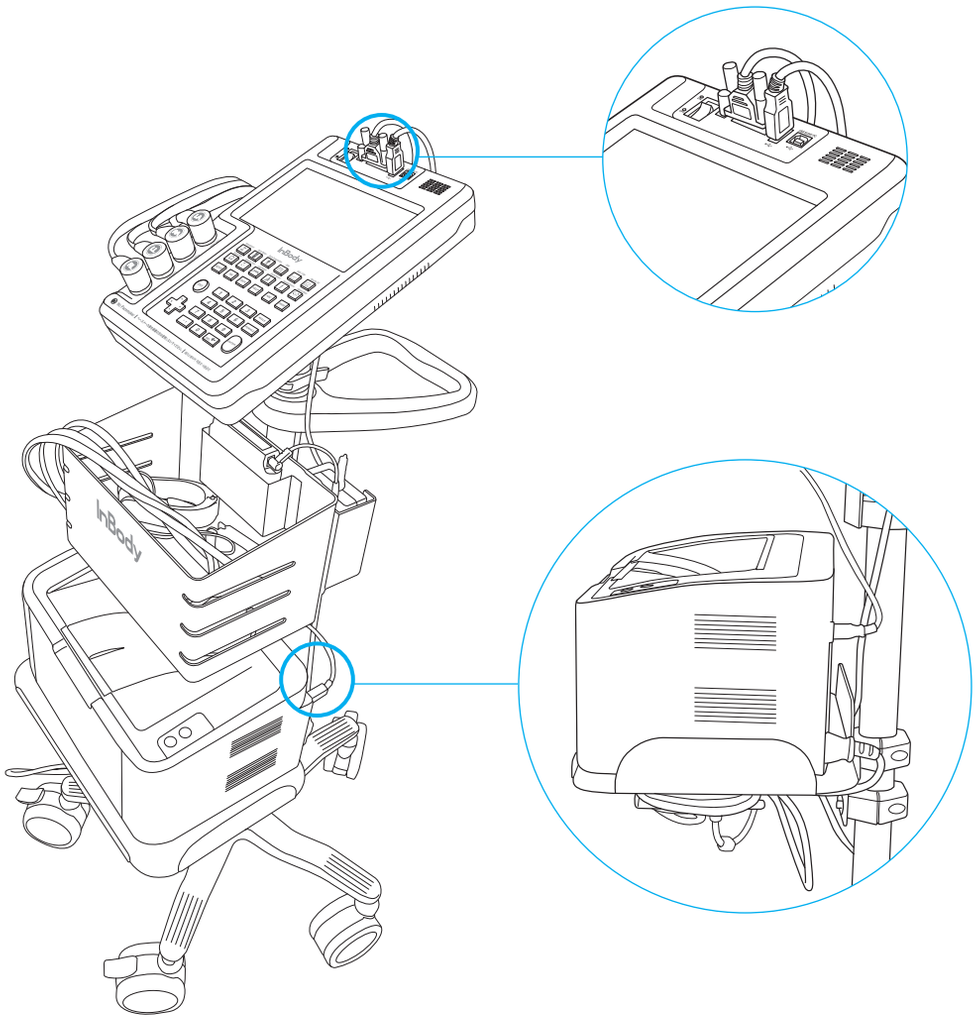
❷ Install the printer platform on the cart pole.



❸ Use a hex key to fasten the printer platform into place.



❹ Use the USB cable to connect the printer to the unit.



D. Transportation

If it must be transported, be extra careful to ensure safe handling. The following are some tips for safely transporting the InBodyS10.

- Before transporting the InBodyS10, turn off the power switch and unplug the adapter.
- Be careful not to damage the hand module.
- Be careful not to damage the electric cables.

1. Environmental Requirements

Storage environment

Temperature range	-10 ~ 70˚C (14 ~ 158˚F)
Relative humidity	10 ~ 80%RH (No condensation)
Atmospheric pressure range	50 ~ 106kPa

2. Transporting Before Installation

Before installation, the InBodyS10 will be shipped in a box designed by InBody.

⚠ Warning

・ Severe physical impact can cause damage. Be careful not to drop or shake the InBodyS10.

3. Transporting After Installation

To prevent physical shock, use InBody's packing material when shipping or transporting the equipment.

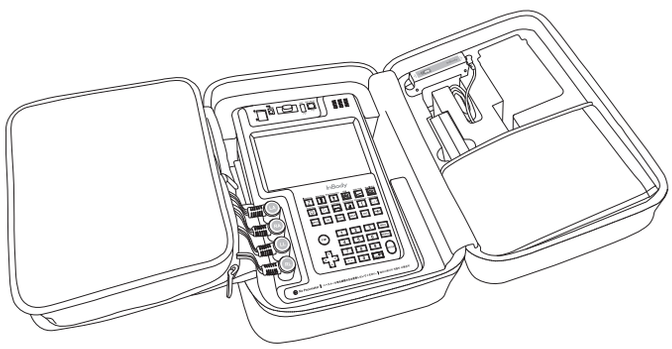
E. Repacking

Be sure to turn off the power switch and unplug the power cable before repacking. Be careful to avoid severe physical shock, jarring or other damage while repacking, especially with regard to the electrode cables and touch type hand/foot electrodes.

(1) Turn off the power switch.

(2) Remove all cables connected to the InBodyS10.

(3) Put the separated units in the provided carrying case.



(4) You can carry the machine easily with the carrying case.

F. Maintenance

⚠ Caution

- Do not apply excessive force on the equipment.
- Turn off the equipment if you are not using it for a day or more.
- Do not allow any liquid substances to contact the equipment directly. Keep food and drinks away from the equipment. Substances getting inside the equipment can cause critical damage to the electronic components.
- Use a lint-free cloth to gently wipe the external surface of the equipment about once every week. Be careful not to scratch the LCD screen.
- The InBodyS10 does not need regular maintenance. If problems occur while operating the device, please contact InBody. We do not take any responsibility for problems or damage caused by unlicensed repairs not performed by InBody.
- Do not pull the electrode cables by force. Treat them with care.
- Do not drag the electrode cables on the floor or drag them on the ground.
- Turn off the InBodyS10's power switch then turn off any other electrical devices. Minimize any possible electrical shock to InBodyS10.
- Be careful not to drop the hand electrode and the food electrode on the floor. Impacts can cause severe damage to electronic components inside the electrode.
- Do not wipe the hands and foot electrode with a cleaning solution. If the liquid in cleaning solution enters the electrode, corrosion may occur and the equipment may fail. To clean the electrode, use an InBody tissue containing alcohol or physiological saline and wipe lightly.
- Use a disposable electrode (EKG) if your patient has wounds or contagious diseases.

⚠ Warning

- Do not modify this equipment without the authorization of the manufacturer.
- If the equipment is modified, appropriate inspection and testing must be conducted to ensure continued safe use of equipment.

Ⅱ. Management & Results Description

A. Cautions before Measurement

⚠ Warning

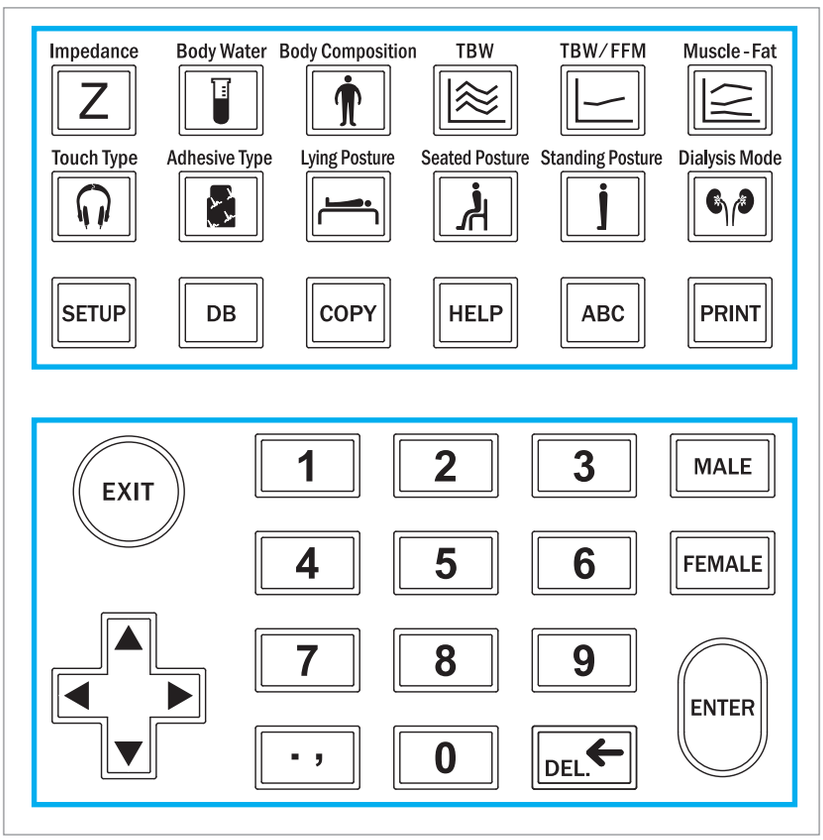
- Individuals with medical implant devices such as pacemakers, or essential support devices such as patient monitoring systems, must not use this equipment. Safe, low-level currents will flow through the body during the test, which may cause a malfunction of the device or endanger lives.
- Children and people with limited mobility should be supervised or assisted when attempting to test on the InBodyS10.
- After an individual with any kind of contagious disease or infection tests on the InBodyS10, use an InBody Tissue to clean the equipment.

⚠ Caution

- Stand upright for about 5 minutes before testing. Taking the test immediately after lying in bed or sitting for a long period of time might result in a slight change in the test results. This is because body water tends to move to the lower body as soon as the person stands or gets up.
- Do not eat before testing. In cases where the examinee has already eaten, the test should be put off for at least two hours after the meal. This is because food mass is included in the examinee's weight and thus, may result in measurement errors.
- Use the bathroom before testing. Waste is not included in the body's compositional elements, but the volume of urine and excrement is included in the weight measurement, which may affect the accuracy of the test results.
- Do not exercise before testing. Strenuous exercise or sharp movements can cause temporary changes in body composition. Even light exercise can change your body composition temporarily.
- Take the test in the morning, if possible. Body water tends to gravitate towards the lower body throughout the day, affecting the accuracy of the test results.
- Thoroughly wipe the palms and soles with an InBody Tissue before testing. Testing may be difficult if the examinee's palms and soles are too dry or if the examinee has too many calluses.
- Avoid contact with the examinee during testing. Contact may lead to interference that may affect the test results.
- Make sure that the body does not make any contact with conductive materials such as steel structures during measurement. Secure enough space for arms to be spread out.
- Administrator or guardian should assist Children or patients with reduced mobility to take the measurement. Be sure not to make any physical contact during measurement.

B. Exterior and Functions of Keypad

The InBodyS10 has a keypad for data input. To input all information, press the relevant buttons on the keypad. The keypad is located below the LCD Monitor. It can be divided into two categories based on button function:



1. Function Buttons

(1) Check test results

❶ Impedance Z button

You can check the impedance analysis results.

❷ Body Water button

You can check body water analysis results.

❸ Body Composition button

You can check body composition analysis results.

❹ TBW button

You can check accumulated analysis results of ICW(Intracellular Water), ECW(Extracellular Water) and TBW(Total Body Water).

❺ 

button

You can check the accumulated analysis results of TBW/FFM(Ratio of Total Body Water to Fat Free Mass).

❻ 

button

You can check the accumulated analysis results of Weight to Muscle Mass to Percent Body Fat.

(2) Select electrode connection type

❶ 

button

Use when using Touch Type electrodes.

❷ 

button

Use when using Adhesive EKG electrodes.

(3) Select posture

❶ 

button

Set for examinees who are lying down.

❷ 

button

Set for examinees who are sitting down.

❸ 

button

Set for examinees who are standing up.

❹ 

button

If examinees are receiving kidney dialysis, make sure to set the equipment to Dialysis Mode.
At I.D. input, check the measurement time (before/during/after dialysis), access position, and examinee's paralysis location. The information will be stored in the equipment and can be viewed categorically by before/during/after dialysis in the history graph.

(4) Others

❶ 

button

Use the SETUP button when setting up the InBodyS10.

❷ 

button

The DB button is to check, delete, print, and copy the results as well as copy them to or from a USB storage device.

❸ 

button

The COPY button will copy all data from the equipment to a USB storage device. Insert the USB storage device into the InBodyS10 and press the COPY button. Do not remove the USB storage device before the process is complete.

❹ 

button

This button provides guidelines.

❺ 

button

Press the ABC button when entering I.D. information into the InBodyS10. A keyboard will appear on the screen.

❻ 

button

Use the PRINT button to print the results of the last user. This button is also used when printing the results shown on the screen.

2. Input Buttons

❶ 

button

The EXIT button is used to stop the process that is in progress or to go back to the previous process.

❷ 
button

The directional buttons consist of up, down, left and right.

❸ Numerical Buttons (0~9)

The input buttons are used to enter alpha-numeric data such as the examinee’s age, height and I.D..

❹ 

button

This button is used to enter a decimal point or comma for height, age, I.D., and weight.

❺ 

button

Used to delete entered data.

❻ 

button

These buttons are used for gender input when entering a personal profile.

❼ 

button

This button is used when data input is finished or to move on to the next item.

C. Measurement Posture

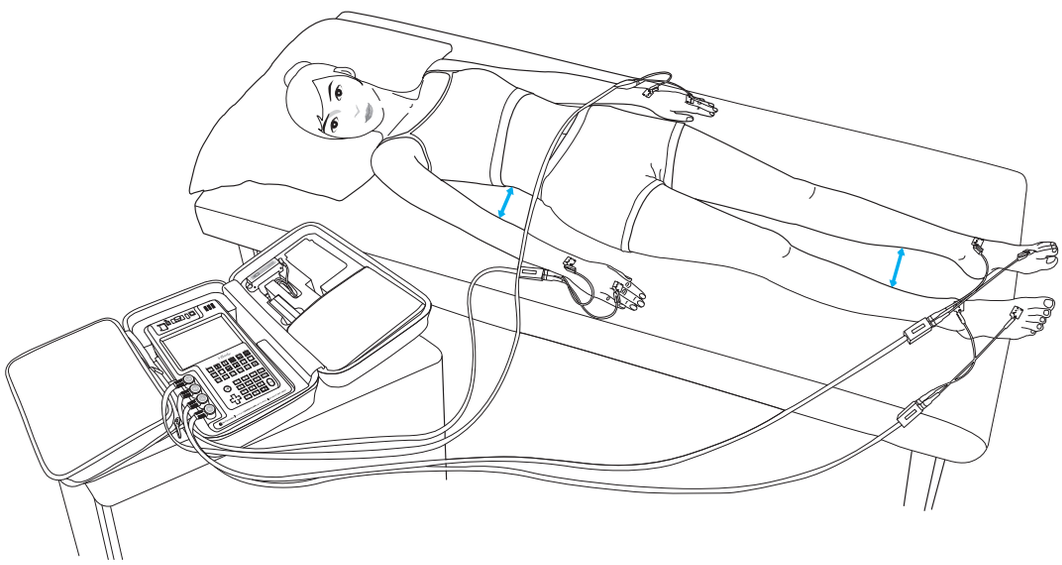
Maintaining the right posture during the test is essential to achieve reliable results and accuracy. It's important for an examinee to maintain their posture for 10-15 minutes so that impedance can be measured accurately.

1. Lying Posture

(1) It is recommended that the examinee lie down for about 10~15 minutes before the test, so that body water may be dispersed evenly inside the body.

(2) Make sure the arms do not touch the torso. Spread them naturally to a 15 degree angle away from trunk.

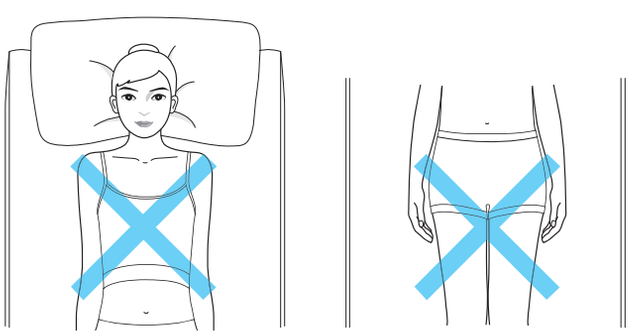
(3) Make sure thighs do not touch each other, and spread legs shoulder-width apart.



Attention

- It is recommended that the examinee stays in the testing posture for about 10~15 minutes.
- Make sure the arms do not touch the torso. Spread them naturally to a 15 degree angle away from trunk.
- Make sure thighs do not touch each other, and spread legs shoulder-width apart.
- Precaution must be taken to make sure electrode cables or tester's body parts are not making any contact with steel frames.
- If there is a heating mat (electric blanket) on the floor or mat, be sure to turn off the power and unplug the power plug when possible.

※ Since InBodyS10 is shielded between cable and cable cover, it is not affected by interference between electrode cables and contact with steel structure of electrode cable. However, in order to obtain more stable measurement value, take precaution to prevent any contact with steel structure.



Make sure arms do not touch the torso.

Make sure thighs do not touch each other.

2. Seated Posture

(1) It is recommended that the examinee sits in the testing posture for about 10~15 minutes before the test, so that body water may be dispersed evenly inside the body.

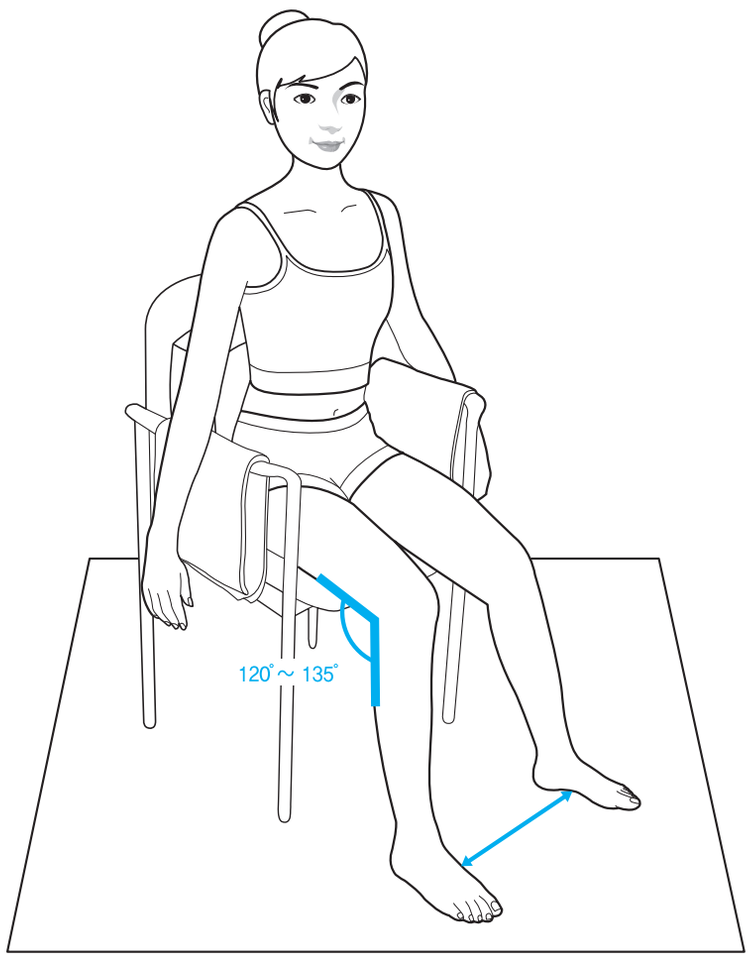
(2) Make sure that the examinee's back is not touching the chair and is sitting straight.

(3) Use a cushion to support the examinee's back.

(4) Arms should be lowered naturally as in the standing posture. Spread them 15 degrees away from trunk part of body.

(5) Make sure that the examinee's thighs do not touch each other, and spread them shoulder-width apart.

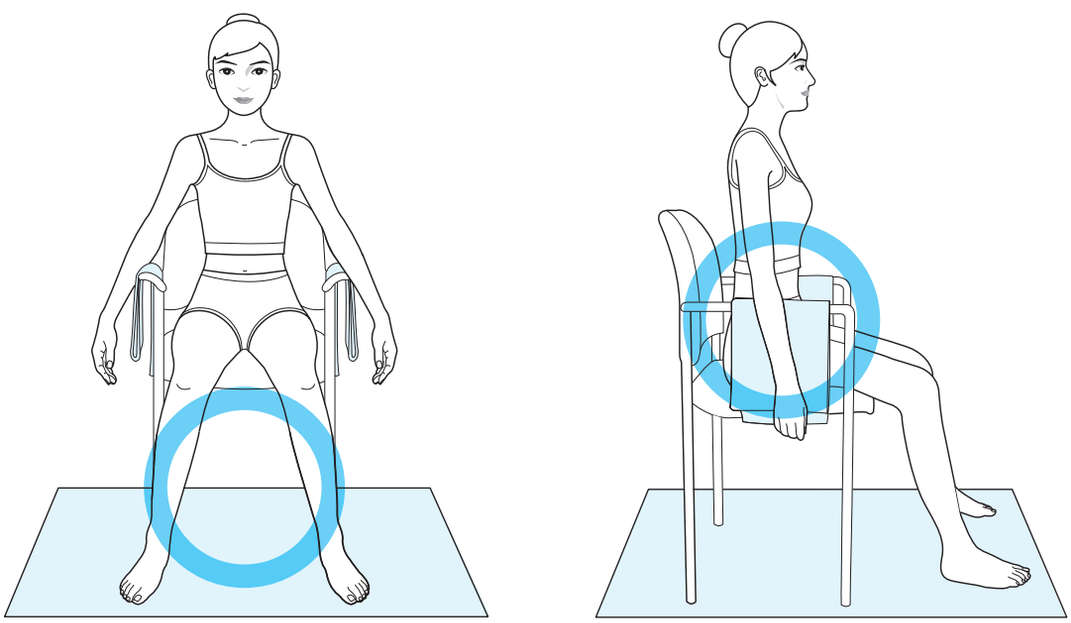
(6) Spread legs to the front and do not maintain a 90 degree angle.

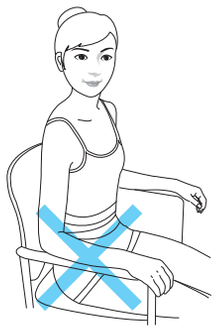


Attention

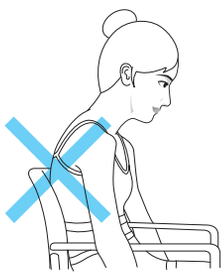
- Make sure that the examinee maintains a straight sitting position during the test.
- It is recommended that the examinee maintain a seated posture for about 10~15 minutes prior to testing.
- When measurement is taken on a chair or a wheelchair with any conductive materials on frame, any exposed frame should be covered by an insulating materials such as blankets.
- Make sure that the examinee’s bare feet are not in direct contact with the metallic part of the chair or the floor.
- Due to the weight of the cables, the EKG electrodes might fall off when you try to attach it to the examinee’s body. Make sure that the EKG electrodes are attached securely to your examinee’s body.
- Spread legs to the front; do not maintain a 90 degree angle. If the examinee is measuring barefoot, make sure the feet do not touch the floor by placing a mat under the examinee's feet.

※ Since InBodyS10 is shielded between cable and cable cover, it is not affected by interference between electrode cables and contact with steel structure of electrode cable. However, in order to obtain more stable measurement value, take precaution to prevent any contact with steel structure.

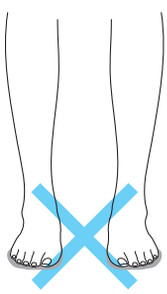




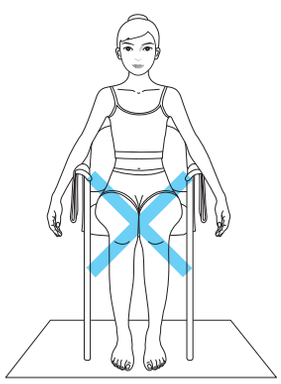
The examinee should not rest his/her arm on the arm rest of the chair.



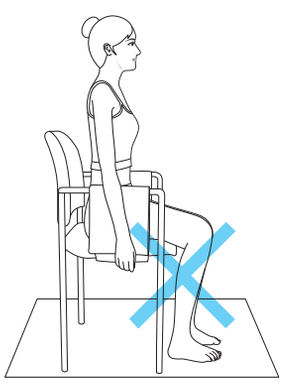
The examinee should not slouch.



Make sure bare feet do not touch the floor.
Use a mat that does not conduct electricity.



Make sure thighs do not touch each other.



Do not position the examinee’s legs at a 90 degree angle, but stretch them slightly to the front.

3. Standing Posture

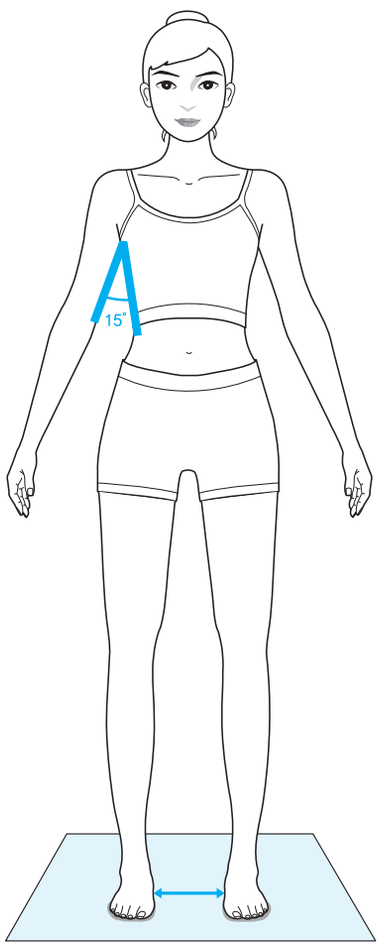
(1) It is recommended that the examinee stand for about 10~15 minutes before the test so that body water may be dispersed evenly inside the body.

(2) Make sure bare feet do not touch the floor. Use a mat that does not conduct electricity.

(3) Make sure arms do not touch the torso. Spread them naturally to a 15 degree angle away from trunk.

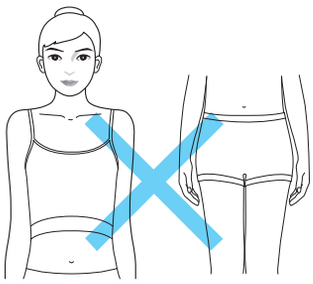
(4) Arms should be extended naturally.

(5) Make sure thighs do not touch each other, and spread legs shoulder-width apart.

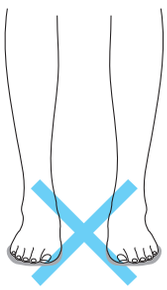


Attention

- It is recommended that the examinee stand for about 10~15 minutes.
- Make sure bare feet do not touch the floor. Use a mat that does not conduct electricity.
- For an examinee with high foot arches feet, the foot electrodes might not attach properly when using the Touch Type electrodes. Make sure to attach them as best as possible.
- If examinees have dry hands and feet, wipe the equipment with an InBody tissue before testing.
- Due to the weight of the cable, it is easy for the Adhesive Type electrodes to fall off during the test. Please be careful and make sure that the electrodes are attached properly.



Make sure arms do not touch the torso and that the legs do not touch each other.



Make sure bare feet do not touch the floor.
Use a mat that does not conduct electricity.

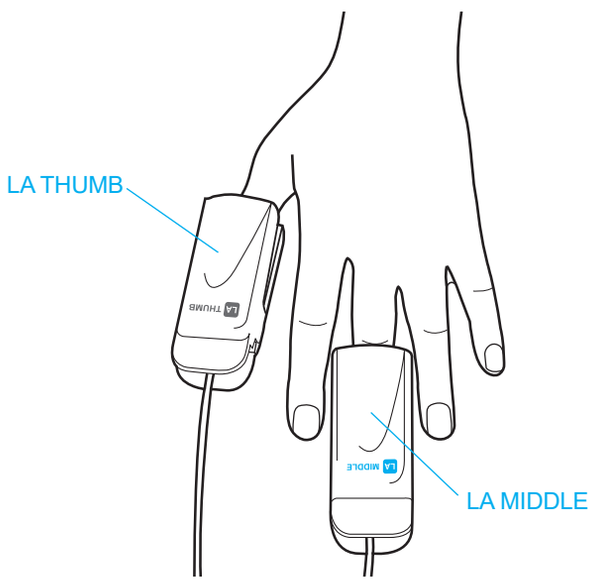
D. Connecting the Electrodes

InBodyS10 offers two types of electrodes: the Touch Type electrodes and the Adhesive Type electrodes.
Check the RA, LA, RL, LL. (RA: Right Arm, LA: Left Arm, RL: Right Leg, LL: Left Leg)
Check on the electrode part that will come into contact with examinee's hands and feet.

1. Touch Type

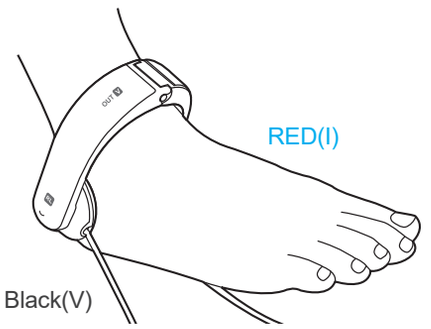
(1) Hand electrodes

LA: connects to Left Arm.
RA: connects to Right Arm.
The hand electrodes are marked THUMB for the thumb and MIDDLE for the middle finger.

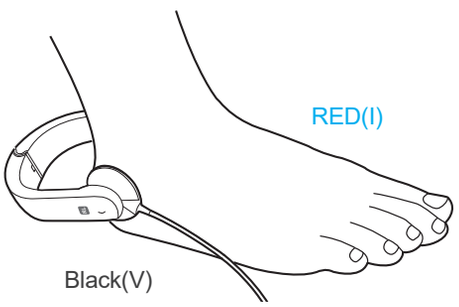


(2) Foot electrodes

LL: connects to Left Leg.
RL: connects to Right Leg.
The foot electrodes should be positioned between examinee's ankle bone and heel. Try to have the electrodes in contact with as much surface area as possible. The part marked in red should be positioned on the inner ankle.
If the examinee's ankles are too thick to attach the electrodes across the top of the foot, place them behind the heel.



<When electrodes are attached aross the top of the foot>



<When electrodes are attached behind the heel>

Attention

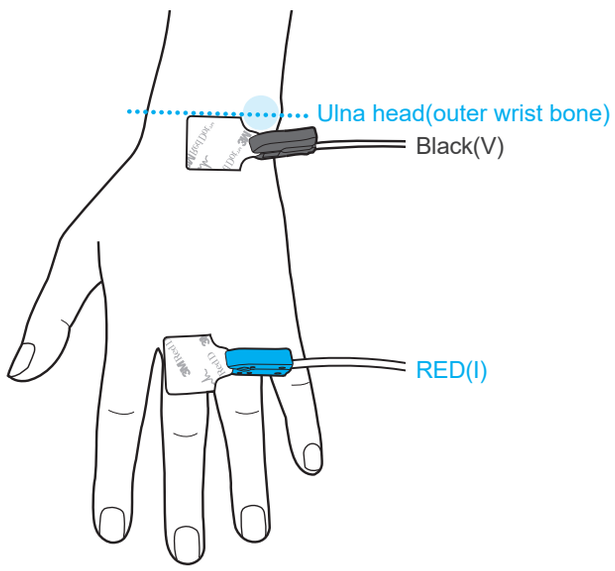
- If the examinee's ankles are too thick to place the electrodes across the top of the foot, place them behind the heel.
- Make sure that the part labeled (I) is placed on the inner side of the feet.
- For an examinee with high arches, the foot electrodes might not attach properly when using the Touch Type electrodes. Make sure to attach them as best as possible.
- The test might not work properly or the results might be inaccurate if the examinee has dry hands/feet. Wipe the examinee's hands and feet with an InBody tissue before testing.

2. Adhesive Type

Attach the EKG electrodes to the examinee's hands and feet as shown below.
Then, connect the adhesive electrodes to the EKG electrodes.

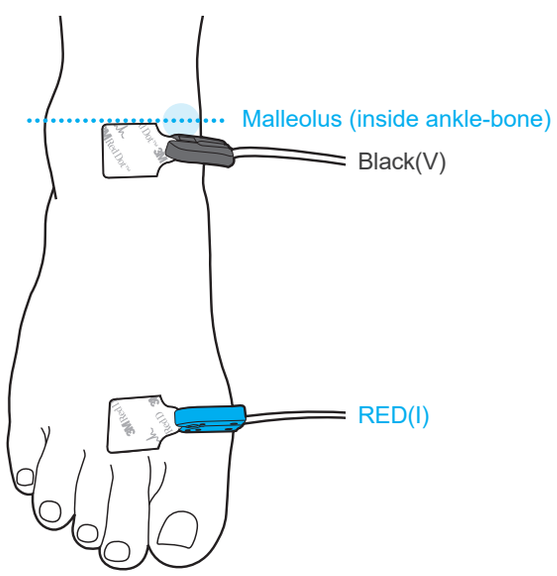
(1) Hand electrodes

Find the ulna head(outer wrist bone) by feeling the wrist joint. Imagine or draw a line bisecting the ulna head, perpendicular to the arm. Place the electrode on this line(on the back of the hand), with the tab of the electrode pointing away from the body. The other electrode should be wrapped around the middle finger, with the tab facing away from the body.



(2) Foot electrodes

The black electrode should be attached to the medial malleolus (inside ankle bone) in the same way the black electrode is attached to the ulna head on the hand. The red electrode should be placed at the base of the second toe.



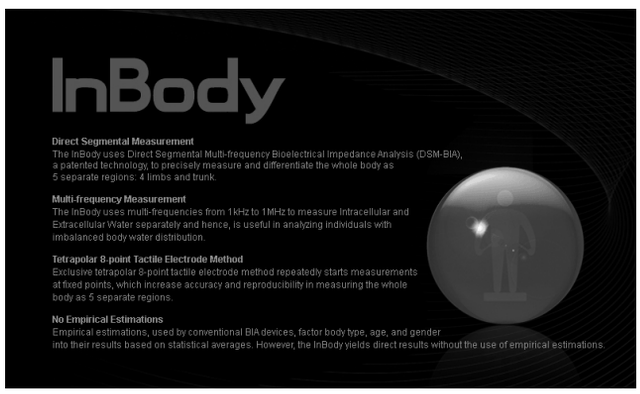
Note

- Once used, the EKG electrodes should be discarded. Reuse may cause contamination through indirect physical contact.
- As EKG electrodes will be in direct contact with the body of the examinee, only use products with CE certification. We officially recommend 2330 Red Dot Resting Electrode-Tab Style of 3M and RT34 Tab-Electrodes for resting ECG of SKINTACT for the InBodyS10.

E. Power Connection & Getting Started

(1) Connect the adapter cable to the power input port.

(2) When the system switch is turned on, the screen shown below will be displayed and the device will begin warming up automatically.



(3) While warming up, the InBodyS10 will proceed to self-test itself and make any necessary adjustments to the internal circuits.

⚠ Warning

- When connecting peripherals (printers and other optional devices) to the InBodyS10, turn on the power of peripherals before turning on the InBodyS10. When turning the power off, turn off the InBodyS10 first before turning off the peripherals. This process will minimize harm to the equipment caused by electric shock.

F. Home Screen

The InBodyS10 has a touch screen function for data input. Press the buttons on the LCD screen or use the keypad buttons to enter information.

The home screen of the InBodyS10 has numerous options for both the user's and the examinee's convenience.

(1) Personal Information Screen

This is for I.D., weight , height , age and gender.

(2) Information Screen

This screen displays help, status, and error messages for each step.

(3) Analysis Result Screen

Before printing out the results, you can check the key figures on the screen. All figures shown on the screen are printed on the results sheet.

(4) State Screen

This screen displays the electrode type, posture type, dialysis mode, testing date, and testing time.

⚠ Warning

- Please do not poke the touch screen with sharp objects. This could cause damage to the touch screen.

G.Measurement Settings

1. Select electrode connection type

❶ Touch Type  button

Use when using Touch Type electrodes.

❷ Adhesive Type  button

Use when using Adhesive EKG electrodes.

2. Select posture

❶ Lying Posture  button

Set for examinees who are lying down.

❷ Seated Posture  button

Set for examinees who are sitting down.

❸ Standing Posture  button

Set for examinees who are standing up.

❹ Dialysis Mode  button

If examinees are receiving kidney dialysis, make sure to set the equipment to Dialysis Mode.
At I.D. input, set the measurement time (before/during/after dialysis), access position, and the examinee's paralysis location. The information will be stored in the equipment and can be viewed categorically before/during/after dialysis in the history graph.

H. Personal Profile

Weight and height are essential information for body composition analysis, and to provide a frame of reference for the data, age and gender are used to provide standard ranges. The InBodyS10 analyzes the measurement results based on the input data. To reduce errors and acquire more reliable results, input examinee data after reading the following carefully:

I.D.	Weight	Height	Age	Gender

(1) I.D. (Permitted range: 14 Characters)
You can use the number buttons on the keypad when inputting numbers. If you are entering letters, press the ABC button on the keypad. This will cause the LCD screen to turn to both letters and numbers.

(2) Weight (Recommended input range: 22.0 ~ 551 lbs)
Use the keypad to enter weight.

(3) Height (Recommended input range: 3ft 1.4in. ~ 7ft 2.6in.)
Use the keypad to enter height. Height can have one digit after the decimal point.

(4) Age (Recommended input range: 3 ~ 99 years)
Use the keypad to enter age. For optimal accuracy, for examinees under the age of 18, you may include a decimal point when inputting their age.
Example: 13 and 6 months years old = 13 years + 6 months/12 months = 13.5

(5) Gender
You can select the gender by using the Male or Female buttons.

In case of the discovery of typos and misspelled words, you can make changes through the following:

1. If you find an error, use the left/right button to move to the incorrect item.
   Use the DEL. button to delete the data, and enter in the correct information.
2. If you press the EXIT button during the InBodyS10 test, you can re-enter your data.
   If you press EXIT one more time, you will be transferred to the home screen.

I. How to Operate the Equipment

(1) Please select the electrode type. (Touch Type, Adhesive Type).

(2) Please select the examinee's posture type.
(Lying Posture, Seated Posture, Standing Posture)

(3) Please select whether you will be using 'Dialysis Mode' or not. (Enable, Disable)
If examinees are receiving kidney dialysis, make sure to set the equipment to 'Dialysis Mode'.
Set the measurement time (before/during/after dialysis), access position, and paralysis location.

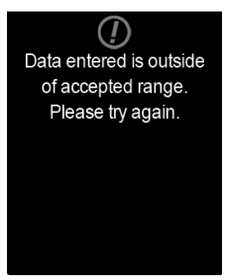
(4) Before the test, the examinee must maintain his/her posture for 10 minutes in order to reposition his/her body water level.

(5) Please refer to Chapter D. Connecting the Electrodes for guidelines and attach the electrodes to the examinee's hands and feet.

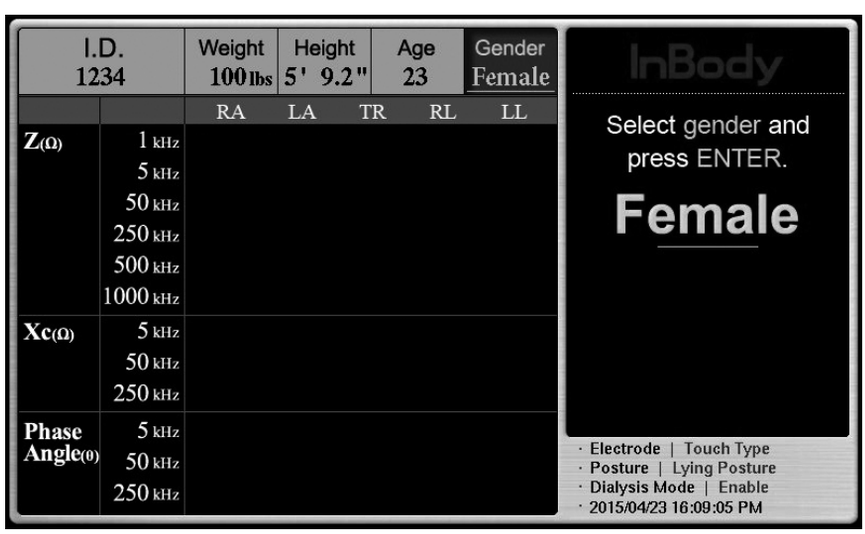
(6) Input I.D., weight, height, age, and gender.

Note

- If you enter information that is out of range, the above error will appear on the screen. Please re-enter the personal information.

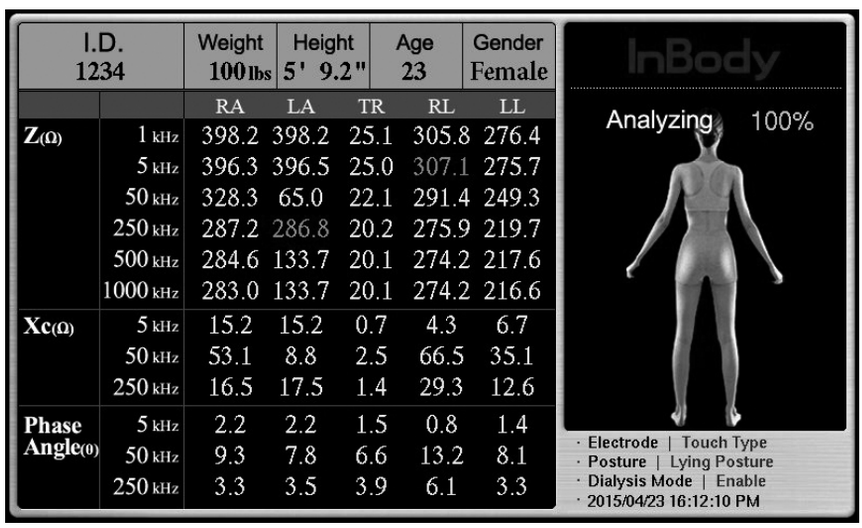


(7) Check that the electrodes are attached securely and press the 'Enter' button. If you did not attach the electrodes to the examinee's body, please do so now. After attaching the electrodes, please check again to ensure that the examinee's posture is correct and that the electrodes are connected securely. Once everything has been properly set, press the 'Enter' button to start the test. Please make sure that the examinee maintains his/her position during the test.



(8) During the test, the LCD information screen will display the testing status and the analysis results screen will display impedance, reactance and phase angles. If you want to modify the examinee's personal information during the test, please press the EXIT button. Move to the item you want to modify by using the direction button. After modifying the information, press the ENTER button to start the test again.

(9) After the test is completed, a "Test Complete" message will appear on the information screen. If you entered the examinee's I.D. for the test, the InBodyS10 will automatically save all results in the system. If the printer is connected and there are results sheets in the printer, the printer will automatically print the results on the results sheet.



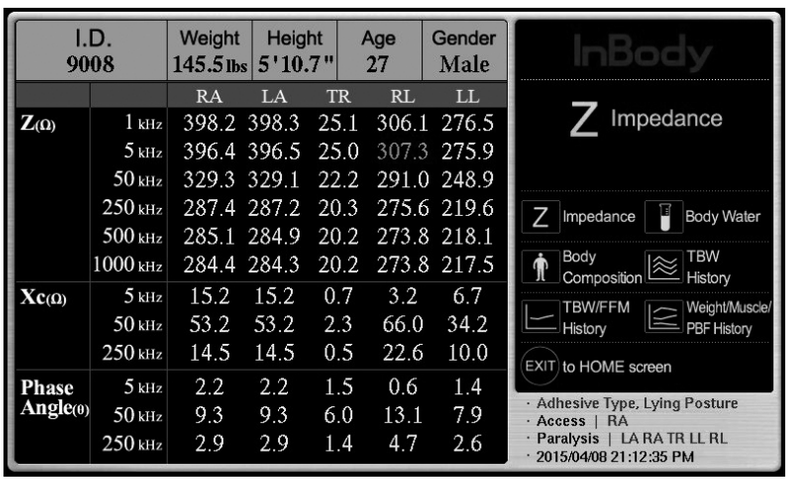
(10) After the measurement process is completed, the impedance results will appear on the screen. The Help section of the information screen will advise you which items you should choose to check a certain result. You can check the results as well as the cumulative results on the LCD screen. Press the 'Exit' button to close the results screen and return to the home screen.

J. Results

1. Result Screen

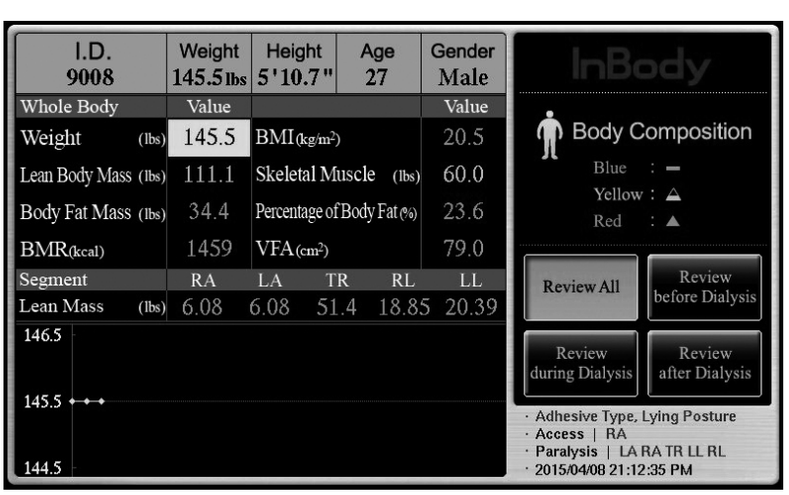
You can check the impedance results first. If you want to check other results, such as body water level, body composition, cumulative body water level, cumulative TBW/FFM, and cumulative weight/muscle/percent fat, press the relevant keypad button. Please refer to the help section of the information screen.

(1) Impedance(Z)/ Reactance(Xc)/ Phase angle(θ)



(2) Body Water

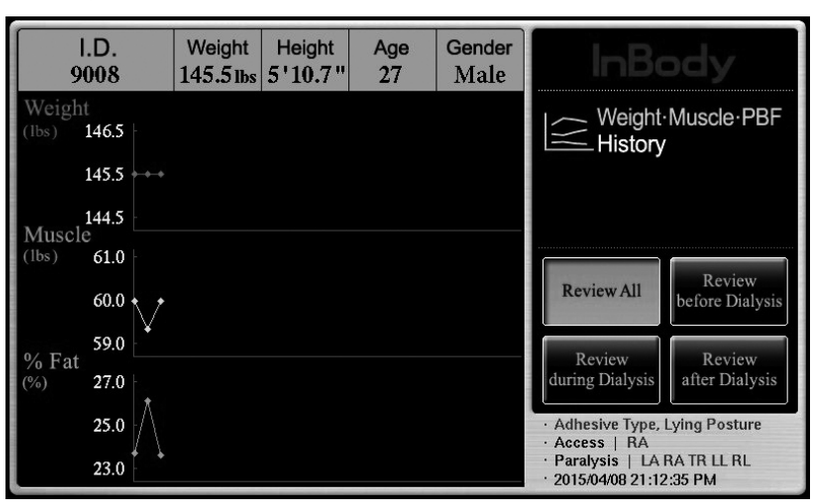
(3) Body Composition



(4) TBW, ICW, ECW History

(5) TBW/FFM History

(6) Weight/Muscle/PBF History

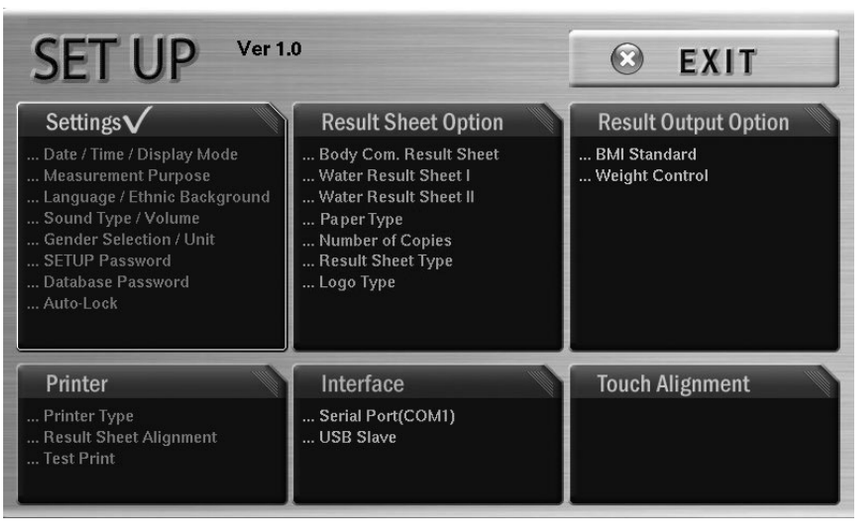


Ⅲ. Setup Establishment

A. Setup

The InBodyS10 has a setup menu to modify the settings for the user's preference. The setup menu consists of Settings, Results Sheet Option, Results Output Option, Printer, Interface and Touch Alignment.

The setup menu is shown below. If you want to save a change made in the setup menu, press 'ENTER'.



(1) Select the category that you wish to access.
(Settings, Results Sheet Option, Results Output Option, Printer, Interface, Touch Alignment)

(2) In your selected category, choose the item you wish to modify.

(3) Options will appear. To select an option, use the direction arrows that appear on the right. You can change the option by using the direction buttons.

(4) Press the 'ENTER' button after the revision, and the revision will be saved automatically. If the 'ENTER' button is not pressed, the revised content will not be saved.

(5) Press the 'EXIT' button to return to the home screen.

⚠ Warning

- Please do not poke the touch screen with sharp objects. This could cause damage to the touch screen.

B. Setup Menu

Items from the small categories will be listed. To select an option, use the direction buttons (▲,▼) on the right. You can make modifications using the direction buttons (▲,▼).

1. Settings

(1) Date / Time / Display Mode

·Date: Set the current date.

·Time: Set the current time in the order of OO(hour)/OO(min)/OO(sec)

·Display Mode: Select the date display mode. (YY/MM/DD, MM/DD/YY, DD/MM/YY)

(2) Measurement Purpose

· Measurement Purpose

❶ Research Purpose: A Use for research purposes. (Including reactance measurements)

❷ Medical Purpose: B Use for medical purposes. (Without reactance measurement)

(3) Language / Ethnic Background / Sound Type / Volume

·Language: Select the language to be used.

·Ethnic Background: Select the ethnic background of the examinee.
(Asian, Caucasian, African, Hispanic, Others)

·Sound Type: Set a beeping sound to inform measurement status.(Beep)

·Volume: Use to control the volume.(0~100%)

(4) Gender Selection / Unit

·Gender Selection

❶ Female: Gender will be automatically set as female.

❷ Male: Gender will automatically be set as male.

❸ Last Gender: It sets the most recent examinee's gender data. Examinee can revise it during measurement.

·Unit: Select the unit to be used for height and weight. (kg/cm, kg/in., lb./cm, lb./in.)

(5) Setup Password / Database Password

· Setup Password: Set a password to restrict the use of the «Réglages (SET UP)».

· Database Password: Set a password to restrict the use of the «BASE DE DONNÉES».

(6) Auto Lock

· Lock Select

❶ Enable: Enable the auto-screen lock.

❷ Disable: Disable the auto-screen lock.

· Time: Set the auto-lock time.

· Password: Set a auto-lock password.

2. Results Sheet Types

(1) Body Composition Result Sheet / Water Result Sheet (I/II)

· Body Composition Result Sheet

❶ Enable: Print the Body Composition Results Sheet.

❷ Disable: Do not print the Body Composition Results Sheet.

· Water Result Sheet (I/II)

❶ Enable: Do not print the body water results sheet.

❷ Disable: Print the body water results sheet.

(2) Paper Type / Number of Copies / Result Sheet Type

• Paper Type : Select whether to print the results sheets provided by InBody or A4 size paper.

❶ Printed paper: Select to use the printed results sheets provided by InBody.

❷ Blank paper: Select to use the A4 size paper.

•Number of Copies : You can decide the numbers of results sheet automatically printed after measurement.

❶ Manual: When measurement is completed, results sheets are not printed automatically. To print the results, you will need to manually select “Print” in the database menu.

❷ 1 Copy: When measurement is completed, one copy of the results sheet will be printed.

❸ 2 Copy: When measurement is completed, two copies of the results sheet will be printed.

• Result Sheet Type: Select the version of the result sheet to be printed.

❶ Type 1: Print on the old version result sheet.

❷ Type 2: Print on the new version result sheet."

(3) Logo Type

•Results Sheet Custom Logo: Users can set their logo that will be displayed on the result sheet.

❶ Logo Image: Select this when you input a logo using another computer connected to the InBodyS10. Users cannot input a logo directly. To modify the logo, please contact InBody USA.

❷ Text: You can input up to three logos using the letter buttons on the LCD. When you press ‘Text’, the keypad will appear. You can create a logo using English letters and Arabian numerals.

3. Result Output Option

(1) BMI Standard

•BMI Standard: This sets the standard BMI range to be printed on the result sheet.

❶ Option1: The standard range is 18.5~25.0kg/m^2.

❷ Option2: The standard range is 18.5~23.0kg/m^2.

(2) Weight Control

• Weight Control

❶ Enable: Prints out the 'Weight Control' on the result sheet.

❷ Disable: Do not print 'Weight Control' on the result sheet."

4. Printer

(1) Printer Type

Select the type of printer. Printers that support PCL3 or above and SPL are compatible with the InBodyS10. (PCL Compatible, SPL Compatible, SPL 2009 Compatible, SPL 2009-600, SPL 2011)

(2) Results Sheet Alignment

It is possible to adjust the coordinates on the results sheet. After adjustment, you can check whether the alignment has done properly by selecting “test print”.
The adjustment range: X (▲,▼), Y (▲,▼) +50 ~ -50

(3) Test Print

You can check the printing coordinates by printing out a sample. When you press ‘Click’, it prints a results sheet from the default printer set for use.

5. Interface

Sets the connection of external devices to the InBodyS10. You can connect many of the optional devices provided by InBody at the same time.

(1) Serial Port (COM1)

Select the external device to be connected with the 9 pin serial port.

❶ Disable: Disables the 9 pin serial port.
❷ Lookin’Body : Select when you use Lookin’Body with a 9 pin serial cable.
❸ Stadiometer (From InBody): Select to use the stadiometer provided by InBody.

(2) USB Slave

Enable when you use the Lookin’Body program. (Disable, Lookin’Body)
Select the external device to be connected with the 9 pin serial port.

6. Touch Alignment

If a related function does not operate when pressing a part of the touch screen, there is a problem with the input system. Touch Alignment enables the user to solve this problem.
When you run Touch Alignment, InBodyS10’s power will be turned on/off automatically.

7. Example for Environmental Setup

(1) To adjust the volume

❶ Press the SETUP button.
❷ Touch the Settings button.
❸ Select Sound Type/Volume, second from the left. Detailed options will be displayed.
❹ Select Volume from the list and adjust the volume using (▲,▼) buttons.
❺ Touch the ENTER button to save automatically.

(2) To input a logo directly from the unit

❶ Press the SETUP button.
❷ Touch the Results Sheet Option button.
❸ When you select Logo Type from the third at the left, you will see ‘Text’ on the right side.
❹ When you click ‘Text’, the ‘Click’ button will appear. Three logos will be displayed in the Input Logo window.
❺ When you touch ‘Text1’, ‘Text2’ or ‘Text3’, the keypad screen will be displayed to input the logo. You can create a logo using letters and numbers.
❻ Touch the ENTER button to save automatically.

C. Database

Press ‘Database’ on the home screen to open the database.

Press the Database key on the keypad to bring up the database screen as shown below.

If you have created a personal I.D., your data is automatically saved.

Data saved in the database is available to search, print, or delete. You can also view the results of the InBody Test, as well as backup/recover data. The InBodyS10 can save up to a maximum of 100,000 entries.

1. Data Search

In the Database screen, all the data saved in the system will be automatically saved. To search for specific data, use I.D. and date search.

(1) I.D. search: Touch 

button and input the letters or numbers included in the I.D.

Touch 

button. If you leave this field blank, then all data in the database will be displayed.

(2) Date search: Input the period you want to search for. Input the starting date in ‘From’ and the last date of search in ‘To’. Touch 

to view the search result. If the date is marked in dark gray, date search is not available.

Note

- The default date is the current date.

2. Database Menu

You may choose Print, Copy, or Delete by pressing their respective buttons on the database screen. Select the desired data and touch the corresponding button.

(1) VIEW: To view a past result, choose the data that you would like to see and touch the button. However, if you click on more than one data entry, only the results for the data placed at the top will be displayed.

(2) EXIT: Click Exit to return to the home screen.

(3) Select All: Click Select All to select or cancel all data entries.

(4) Print: Click Print to print a results sheet based on the selected data.

(5) Delete: Click Delete to delete the selected data.

(6) Copy: Click Copy to move the selected data to a USB storage device. The file will be saved as a csv/LIB form in the 'InBody' file.
You may open the result in Excel (csv file).

(7) Bakcup: Click Backup to back up all measurement results from the InBodyS10 to a USB storage device.

(8) Restore: Click Restore to import previously backed up InBodyS10 data from a USB storage device.

(9) Combine: Click <<Combine>> to import previously backed up InBodyS10 data from a USB storage device. Data currently stored in InBodyS10 is retained and measurements from the USB storage are merged.

Note

- restoring data from a USB storage device will replace any and all data currently stored on the InBodyS10.

Warning

- When saving data on a USB storage device, do not remove the USB storage device or turn the equipment off during the procedure.

Note

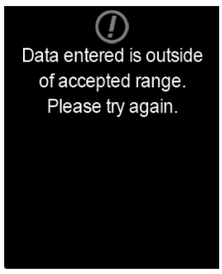
- When you restore data from a USB storage device, the InBodyS10's existing database will be replaced by the data in the USB storage device. Please ensure that you have backed up any data you wish to save from InBodyS10's database before using this feature.
- Please contact InBody for information on which USB storage devices can be used with the InBodyS10.

IV. Problems & Solutions

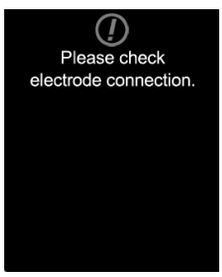
A. Error Messages

The InBodyS10 displays the following error messages to warn the user of the problems encountered during operation and to guide the users in solving them. The following are the most common error messages and the steps to handle the corresponding errors:

1. "Data entered is outside of accepted range. Please RE-ENTER."
   This message appears when the value for age or height of the examinee is out of the permissible range. Check your entry again.
   For the permissible recommended input range for the data, refer to "Chapter II, Section H: Personal Profile."



2. "Please check electrode connection."
   This message appears when the posture of the examinee is not appropriate or the examinee's palms or soles are too dry or have too much hard skin, making it impossible to start the test. Correct the posture of examinee or wipe examinee's hands and feet with an electrolyte tissue before testing again.



B. Troubleshooting

This section explains out the order of steps to be taken in the event of of malfunction, with the assumption that you have some basic knowledge about how to operate the equipment. If you still have a problem after taking the following steps, contact InBody USA.

1. The equipment does not seem to run, even after the power is on.
   (In a normal situation, a signal sounds and the LCD is turned on.)

Cause 1: The plug is not pushed all the way into the electrical outlet.
Action 1: Push the plug all the way into the electrical outlet.

Cause 2: Extension is not turned on (when using a surge protector) or the power does not flow into extension.
Action 2: Check if the power flows into the extension and the electrical outlet where the extension is connected.

Cause 3: An adapter other than the one provided by InBody is being used.
Action 3: Use the adapter provided by InBody only.

Cause 4: Adapter is not tightly inserted into the InBodyS10.
Action 4: Insert the adapter into the power input port tightly.

2. Impedance is not measured.

Cause 1: The electrodes are not properly connected.
Action 1: Please make sure electrodes are properly connected.

Cause 2: The examinee's hands and feet are too dry.
Action 2: Electric currents will not flow well if examinee has dry hands and feet.
Wipe examinee’s hands and feet with an InBody tissue before re-measuring impedance.

Cause 3: Another cause not addressed in Cause 1 or Cause 2.
Action 3: There’s a chance that the cable wire is disconnected due to external impact. Please try again.
If it still doesn’t work after 1 and 2 are checked, please contact Customer Service.

3. The analysis results are unexpected or unusual.

(It is not common to observe unexpected values. All analyzed values should not be outside pre-determined ranges.)

Cause 1: The examinee is in the wrong position or the electrodes are improperly connected.
Action 1: Please make sure the examinee’s actual electrodes type/test posture matches the settings selected on the InBodyS10.

Cause 2: Personal information has been entered incorrectly.
Action 2: Check if personal information has been entered correctly. Refer to the recommended input ranges in Chapter II: ‘H. Personal Profile’

4. The results sheet is not printing from the printer.

(In a normal situation, the results sheet automatically prints out after the measurement.)

Cause 1: The printer cable is unplugged.
Action 1: Ensure the cable is connected tightly to the InBodyS10. Occasionally, this may occur as a result of a bad cable. In this case, you must replace the cable.

Cause 2: The paper tray is empty.
Action 2: Check if there is an indicator light or message on the printer. If the tray is empty, refill it with results sheet. Be sure to place the paper properly in the tray (proper direction and surface orientation).

Cause 3: The printer setup is not properly configured.
Action 3: Press the SETUP button, and touch the “Results Sheet Options” button.
Make sure that the “Number of Copies” is on ‘1 Copy’ or ‘2 Copy’.

Cause 4: There is an issue with printer status.
Action 4: Press the SETUP button and touch the “Printer” button on the screen. Then touch “Printer Type”.
Touch the right arrow and choose Printer Setup.

5. The results sheets are not printing properly.

Cause 1: The alignment is off.
Action 1: Press the SETUP button, and then touch the “Printer” button on the screen.
Touch ‘Result Sheet Alignment’ and adjust the X and Y axes. The X axis adjusts left and right and the Y axis adjusts up and down.

Cause 2: The option selected in “Result Sheet Option” is not the appropriate selection.
Action 2: If you have selected "Blank Paper" in the Setup menu, please ensure that you are using standard 8 1/2" × 11" paper.

Cause 3: The results are printed on the back of the result sheet.
Action 3: Ensure that the results paper is properly set in the appropriate direction for your printer.

Cause 4: The results sheet appears faded.
Action 4: The printer has insufficient ink or toner. Please replace the ink or toner cartridge.

Note

- A problem arises when the orientation setting in the printer's settings doesn’t correspond with that of the InBodyS10. Refer to the user’s manual of the printer to change the orientation of the printer. The standard printing orientation for the InBodyS10 is portrait.
- As error messages, misprints, and burnt-out fuses are items that technical service representatives can examine in the process of troubleshooting, keep them in a safe spot or keep records of them.

C. Frequently Asked Questions (FAQ)

Even if no problems arise from the equipment, users may still have many questions, especially regarding clinical procedures. Below are a few of the more common questions with answers. If additional questions or more clarification is desired, e-mail your inquiries to support@inbodyusa.com.

Question	Answer
• Must socks or stockings be removed from the feet for analysis?	• Yes. Bare skin contact is essential for analysis using the BIA method. Socks or stockings may cause a certain amount of distortion in the results. Socks and stocking must be removed to obtain accurate data.
• What are the circumstances where an analysis cannot be performed?	• Examinees who have a pacemaker or other internal electronic medical devices should never use the InBodyS10.
• Is the electrical current applied to a human body through electrodes safe?	• Yes. The BIA method uses an electrical current, but is harmless. The InBodyS10 has acquired the CE and other certifications that assure the safety of the medical equipment.
• Do accessories (jewelry, watches, rings, etc.) or any other metal objects worn by an examinee affect the analysis?	• The ideal condition for the analysis is simply standing with no clothes (naked) and wearing no accessories. However, this may not always be possible. Therefore, we recommend that the examinee remove as many clothing items and accessories that may affect weight as possible.
• How often does the examinee perform the analysis?	• Body composition will change according to diet, exercise, medical treatment, etc. We recommend that you test on the InBodyS10 once every two to four weeks to reliably see the changes.
• Do I have to use an InBody Tissue? Can I just use a wet cloth?	• InBody Tissues are specifically designed for optimal testing, as opposed to a wet cloth. Always use an InBody Tissue for accurate testing.
• How should the examinee prepare his/herself for accurate analysis?	• For accurate analysis, InBody recommends the following: - Measure with an empty stomach. - Measure 2 hours after a meal or on an empty stomach. - Measure after urination and excretion. - Remove heavy clothes or accessories. - Do not exercise or take a shower before measurement. - Make sure to maintain measurement posture for 10-15 minutes before measuring. - Do not measure after abruptly standing up. - Do not measure while taking a diuretic. - For females, avoid testing during the menstrual period as total body water will be higher than normal. - Input accurate weight and height. - Keep room temperature at 20 ~ 25°C (68 ~ 77°F). Warm yourself up for 20 minutes before a test performed in winter.

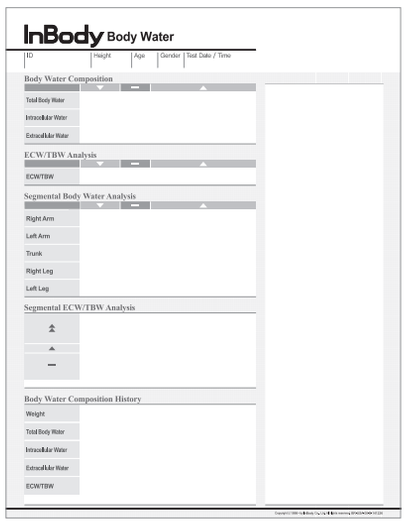
V. Other

A. Results Sheet

1. Results Sheet

When using the InBodyS10 with a printer, it is strongly recommended to use the results sheet supplied by InBody. If more results sheets are needed, please contact InBodyUSA.

Results sheet size	210 × 297 mm
Number of sheets	500 / 1box
Printed condition	4 colors
Manufacturer	InBody Co., Ltd



B. Accessories

InBody provides optional devices to make the operation of the InBodyS10 more efficient and convenient. For more information, contact InBody.

IB Battery 120/220

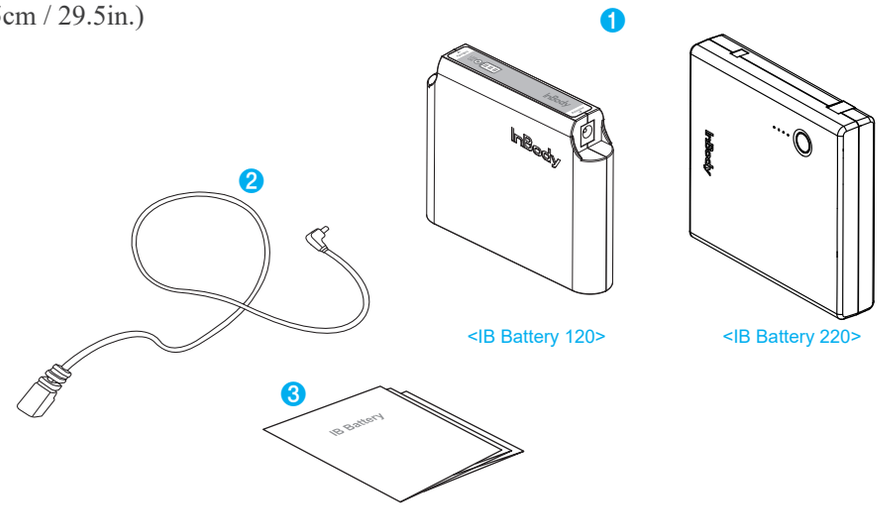
The IB Battery 120/220 was made to be used in connection with the InBodyS10. Please do not use the IB Battery 120/220 for purposes other than connecting with the InBodyS10. The IB Battery 120/220 allows the InBodyS10 to be conveniently transported and carried indoors. Even if the power cable adapter is taken out, the InBodyS10 will not turn off.

(1) Product Components

❶ IB Battery 120/220

❷ Connection Cable (75cm / 29.5in.)

❸ User Manual



Note

- Because battery life is affected by its environment, it is best to use it in a dry room temperature environment.

(2) How to Use IB Battery 120

1) Function of Parts

❶ Connection Cable

This is a cable for connecting InBodyS10 and the IB Battery 120. The larger end is connected to InBodyS10 and the smaller end is connected to the IB Battery 120.

❷ Adapter Connection Socket

This is a socket for connecting the adaptor to recharge the IB Battery 120.

❸ InBody Connection Socket

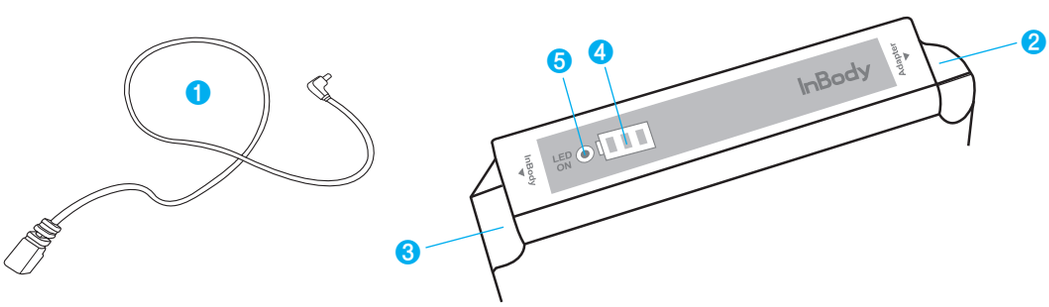
This is a socket for connecting the InBodyS10 with connection cable.

❹ Remaining Battery LED

It is an LED indicating the remaining battery.

❺ LED ON Button

When the button is pressed, the LED indicating the remaining battery lights up for about 3 seconds.



2) How to Operate IB Battery 120

❶ When using for the first time

Check the remaining battery. If you press the LED ON button once, you will hear a beep. When you press the LED ON button once again, the remaining battery is displayed on the LED.

❷ When recharging

While the IB Battery 120 is recharging and connected to the adapter, the remaining battery LED flashes. If all three LEDs light up and the flashing stops, recharging is complete.

❸ When recharging is needed

If the IB Battery 120 is depleted and only 10% remains, you will hear an alert from the IB Battery 120. Please recharge the IB Battery 120.

❹ When checking the remaining battery

If you press the LED ON button, the LED flashes according to the remaining battery. It flashes for approximately 3 seconds and turns off.

❺ When storing the IB Battery 120

- When the IB Battery 120 is not used, store while pressing the LED ON button for more than 3 seconds until you hear a beep sound.
- When the IB Battery 120 is not used for a long time, store after sufficiently charging the battery to prevent over discharging of the battery.

❻ Connection Cable

- Please use the connection cable for only connecting the IB Battery 120 to InBodyS10.
- Do not insert both sides of the connection cable into both sockets of the IB Battery 120. It can cause the IB Battery 120 to malfunction.

3) How to Recharge the IB Battery 120

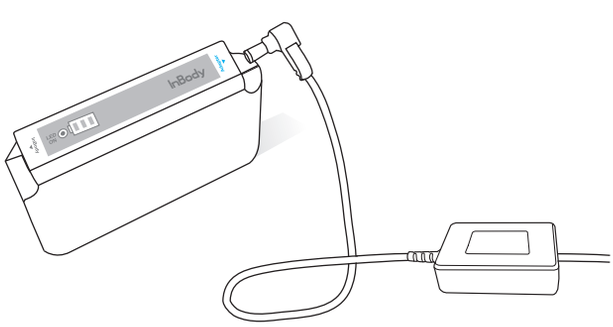
Recharge by inserting the adapter of the InBodyS10 into the adapter socket of the IB Battery 120.

⚠ Note

・ Please recharge using the adapter provided by InBody.

＊ Adapter Specification

- Manufacturer: BridgePower Corp., MeanWell
- Model Name: BPM040S12F07, GSM 40A12-P1IR
- Rated Voltage: AC100 - 240 V, 50/60Hz, 1.2A (1.2A~0.6A)/1.0-0.5A
- Rated Output: DC 12V, 3.4A/3.34A



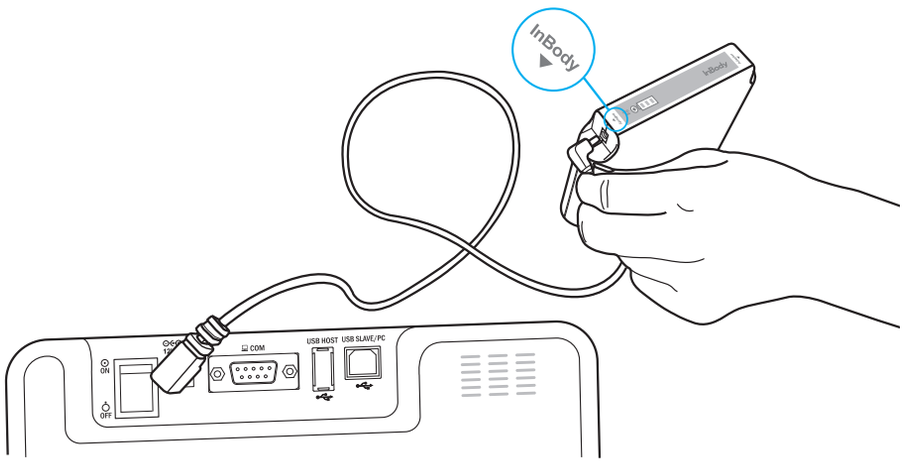
4) Installing and Using the InBodyS10

It is recommended to connect the InBodyS10 to the IB Battery 120, and then use it while the adapter is connected to the IB Battery 120.

❶ Connect the connection cable to InBodyS10 and IB Battery 120.

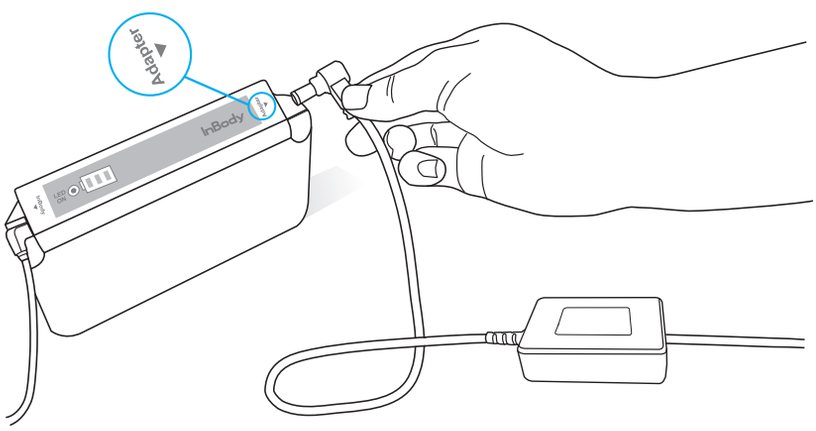
The connection cable has connection plugs on both sides, but the sizes are different.

Connect the big plug to InBodyS10 and the small plug to the side labeled “InBody” on the IB Battery 120.



❷ Connect the adapter of the InBodyS10 to the IB Battery 120.

Connect the adapter cable to the side labeled “Adapter” on the IB Battery 120, and connect the power cable to the power.



❸ Once the IB Battery 120 is properly connected, the power cable may be safely removed from the InBodyS10, and the device may be carried around. Because the IB Battery 120 is connected, the InBodyS10 will not shut off when the cable is removed.

❹ If you do not wish to use it anymore, disconnect the adapter and the InBodyS10 from IB Battery 120 and store the IB Battery 120 after pressing the LED ON button for more than 3 seconds.

(3) How to Use IB Battery 220

1) Function of Parts

❶Power adapter connection socket

This socket is used to connect the adapter when the battery is in stand-alone charge mode.

❷External connection socket for the InBodyS10's device

This socket is used to connect the InBodyS10's device and battery with the battery cable.

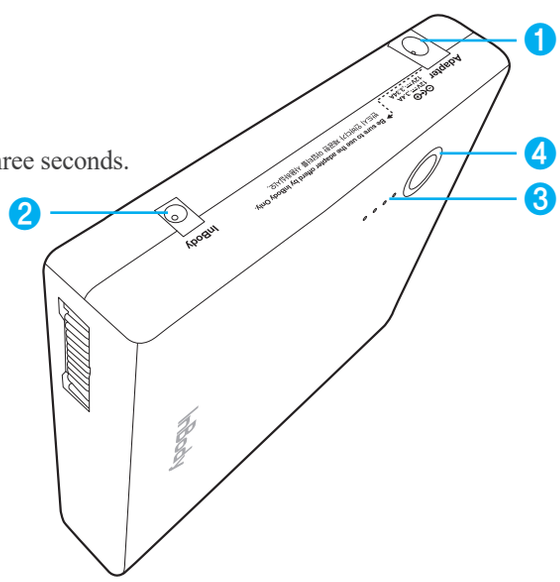
❸Battery level indicator (LED)

This LEDs show the remaining level of the battery.

❹Battery level check button

Press and hold the button on the battery until it "beeps".

The four LEDs display the remaining level after about three seconds.



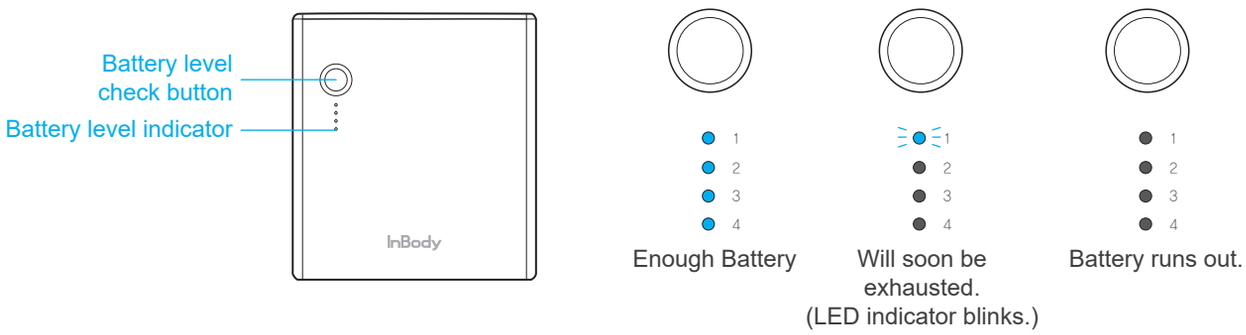
2) How to Operate IB Battery 220

❶On charging

The Battery level indicator(LED) blinks while the adapter is connected and charging.
When all four LEDs light up and stop flashing, charging is complete.

❷Checking the remaining battery level and charging time.

Press and hold the button on the battery until it “beeps”. The four LEDs display the remaining battery level after about three seconds. Before the battery runs out, the last remaining LED blinks and an alarm sounds "beep-beep-" every minute. If that occurs, please charge the battery.



❸Battery level indicator On / Off

- The LEDs light up when you press the battery level check button, while charging or while connected to InBody’s devices.
- The LEDs turn off when the battery is low.

Caution

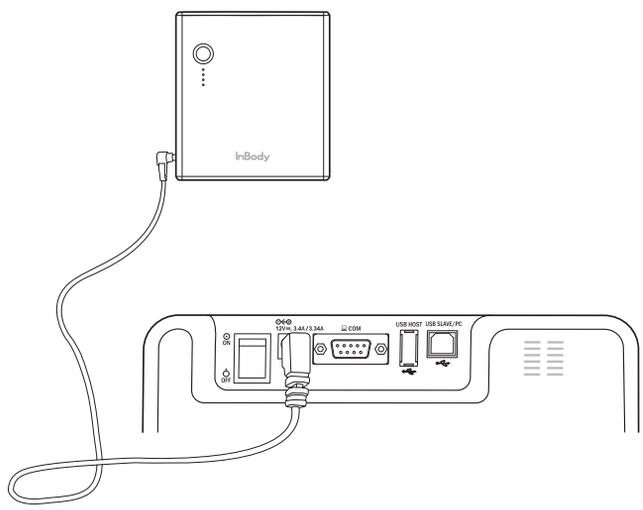
- Please recharge using the adapter provided by InBody.
- The battery level check button is for checking the remaining battery charge. The IB Battery 220 does not have a power on/off feature.

4) Installing and Using the InBodyS10

It is recommended to connect the InBodyS10 to the IB Battery 220, and then use it while the adapter is connected to the IB Battery 220.

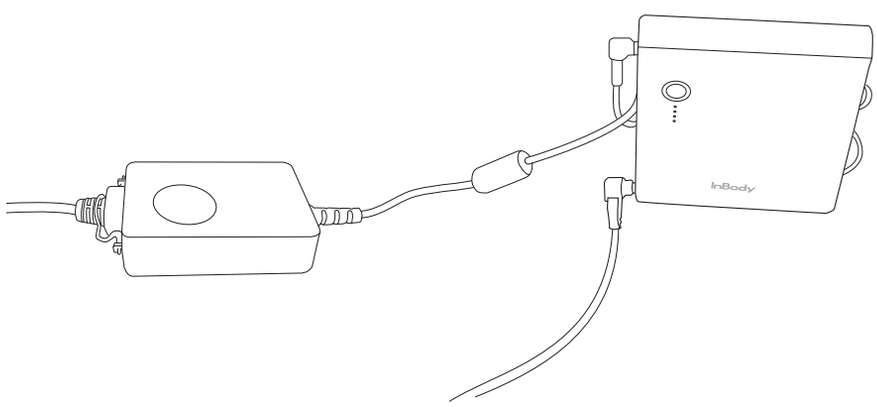
❶ Connect the connection cable to InBodyS10 and IB Battery 220.

The connection cable has connection plugs on both sides, but the sizes are different.
Connect the big plug to InBodyS10 and the small plug to the side labeled “InBody” on the IB Battery 220.



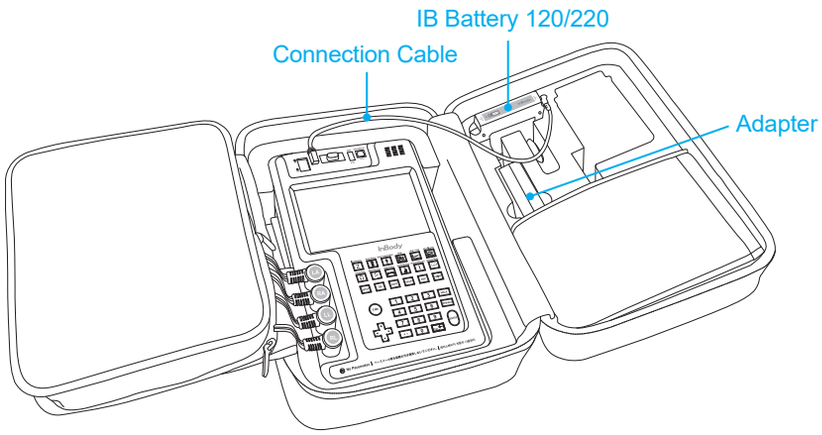
❷ Connect the adapter of the InBodyS10 to the IB Battery 220.

Connect the adapter cable to the side labeled “Adapter” on the IB Battery 220, and connect the power cable to the power.

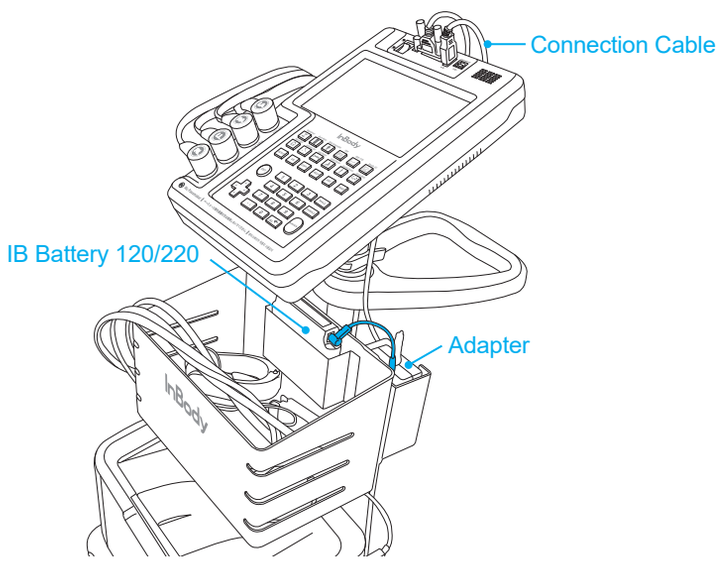


❸ Once the IB Battery 220 is properly connected, the power cable may be safely removed from the InBodyS10, and the device may be carried around. Because the IB Battery 220 is connected, the InBodyS10 will not shut off when the cable is removed.

▶ When using the InBodyS10 carrying case



▶ When using the InBodyS10 cart



⚠ Warning

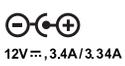
- Do not touch signal input, signal output or other connectors, and the patient simultaneously.
- External equipment intended for connection to signal input, signal output or other connectors, shall comply with relevant IEC Standard(e.g., IEC60950 for IT equipment and IEC60601-1 series for medical electrical equipment). In addition, all such combination-system-shall comply with the standard IEC60601-1 and/or IEC60601-1-1 harmonized national standard or the combination. If in doubt, contact a qualified technician or your local representative.

C. Safety Information

Indicators

	9 pin Serial Port, Female (RS-232C)
	USB Port (Slave)

Safety Symbols

	Warning, Caution, Note
	BF Type Equipment
	Adapter
	Power On
	Power Off

Etc. Symbols

CE 1639	European Conformity	SN	Serial number
	Manufacturer	⎓	Direct current
EC REP	Authorized representative in the EUROPEAN COMMUNTY		

Disposal of old Electrical & Electronic Equipment
(Application in the European Union and other European countries with separate collection system.) This symbol indicates that this product shall not be treated as household waste. Instead, it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling this product, please refer to local governing ordinances and recycling plans.

Note

Follow local government ordinances and recycling instructions regarding disposal or recycling of device components, including batteries.

Follow instructions for use
Suivez les instructions d’utilisation

WARNING

Electric shock hazard – do not dismantle.
Dismantling will void the warranty.

AVERTISSEMENT

Risque de choc électrique - ne pas démonter.
Le démontage annulera la garantie.

DANGER

Do not use this equipment with electrical medical device such as a pacemaker.
Ne pas utiliser cet équipement avec des appareils médicaux électriques comme un stimulateur cardiaque.

CAUTION

Do not spray any liquid substance directly onto the device.
Ne pulverisez aucune substances liquids directement sur l’appareil.

D. Classification

Body Composition Analyzer of Direct Segmental Multi-frequency Bioelectrical Impedance Analysis Method

- Type of protection against electric shock: Class I
- Type of the applied parts: BF Type
- Degree of protection against water infiltration: IPX0
- EMC Immunity: Level A
- EMC Emission: Level A
- Equipment is not suitable for use in the presence of flammable mixtures.

E. Specifications

Bioelectrical Impedance Analysis (BIA) Measurement Items	Bioelectrical Impedance (Z)	30 Impedance Measurements by Using 6 Different Frequencies (1kHz, 5kHz, 50kHz, 250kHz, 500kHz, 1000kHz) at Each of 5 Segments (Right Arm, Left Arm, Trunk, Right Leg and Left Leg)
	Reactance (Xc)	15 Impedance Measurements by Using 3 Different Frequencies (5kHz, 50kHz, 250kHz,) at Each of 5 Segments (Right Arm, Left Arm, Trunk, Right Leg, and Left Leg)
Electrode Method	Touch Type / Adhesive Electrode System	
Measurement Method	Direct Segmental Multi-frequency Bioelectrical Impedance Analysis Method, DSM-BIA method	
Body Composition Calculation Method	No use of Empirical Estimation	
Outputs (Body Water Results Sheet)	Intercellular Water, Extracellular Water, Total Body Water, ECW/TBW, Segmental Body Water Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg), Segmental ECW/TBW Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg), Body Water Composition History (Weight, Total Body Water, Intracellular Water, Extracellular Water, ECW/TBW), Segmental ICW Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg), Segmental ECW Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg), Dry Lean Mass, Lean Body Mass, Body Fat Mass, Weight, Skeletal Muscle Mass, Body Mass Index, Percent Body Fat, Basal Metabolic Rate, Visceral Fat Level, Reactance (5kHz,50kHz, 250kHz), Whole Body Phase Angle (50kHz, Right side of the body), Segmental Phase Angle (50kHz, Right Arm, Left Arm, Trunk, Right Leg, Left Leg), Impedance at each segment/frequency	
Outputs (Body Composition Results Sheet)	Intercellular Water, Extracellular Water, Total Body Water, Dry Lean Mass, Lean Body Mass, Body Fat Mass, Weight, Skeletal Muscle Mass, Body Mass Index, Percent Body Fat, Segmental Lean Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg), Segmental ECW/TBW Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg), ECW/TBW, Body Composition History (Weight, Skeletal Muscle Mass, Percent Body Fat, ECW/TBW), Visceral Fat Area, Body Fat-Lean Body Mass Control, Segmental Fat Analysis (Right Arm, Left Arm, Trunk,Right Leg, Left Leg), Basal Metabolic Rate, Leg Lean Mass, TBW/LBM, Reactance (5kHz,50kHz, 250kHz), Whole Body Phase Angle (50kHz, Right side of the body), Segmental Phase Angle (5kHz, 50kHz, 250kHz, Right Arm, Left Arm, Trunk, Right Leg, Left Leg) Impedance at each segment/frequency	
Logo Display	Possible to input name of the user's place, address and contact number	
Results Sheet	Body Water Results Sheet, Body Composition Results Sheet	
Portability	Indoors - with own cart, Outdoors - with own carrying case.	

Posture	Lying Posture, Seated Posture, Standing Posture		
Electrode Type	Touch Type, Adhesive Type		
Setting of Dialysis Mode	Measurement time(before/during/after dialysis), Access position, Paralyzed position set available		
Data Storage	Possible to save the results when ID is entered (Up to 100,000 measurements)		
User's Interface	Touch screen and key pad		
Use of USB Storage Device	Possible to backup and transfer data to USB storage device (compatible with Excel and Lookin'Body software) It is recommended to use the USB storage device provided by InBody.		
Data Back-Up	Possible to backup data through USB storage device and to restore the data to the InBody		
Printer Connection	USB port		
Applied Rating Current	Under 100μA(1kHz), 500μA(over 5kHz)		
Power Consumption	50VA		
Adapter	Bridgepower (BPM040S12F07)	Power Input	AC 100-240V, 50/60Hz, 1.2A(1.2A-0.6A)
		Power Output	DC 12V⎓, 3.4A
	Mean Well (GSM 40A12-P1IR)	Power Input	AC 100-240V, 50/60Hz, 1.0-0.5A
		Power Output	DC 12V⎓, 3.34A
Display Type	800 × 480 Touch Color LCD		
External Interface	RS-232C 1EA, USB Slave 1EA, USB Host 1EA		
Compatible Printer	Laser/Inkjet PCL 3 or above and SPL (Printer recommended by InBody)		
Dimension	8(W) × 12.7(L) × 2.1(H): inch 202(W) × 322(L) × 53(H): mm		
Machine Weight	4.4lbs (2kg)		
Measurement Duration	90 to 130 seconds		
Operation Environment	50 ~ 104°F (10 ~ 40°C), 30 ~ 75%RH, 70 ~ 106kPa		
Storage Environment	-10 ~ 70°C (14 ~ 158°F), 10 ~ 80%RH, 50 ~ 106kPa (No condensation)		
Weight Range	22.0 ~ 551lbs (10 ~ 250kg)		
Age Range	3 ~ 99 years		
Height Range	3ft. 1.4in. ~ 7ft. 2.6in. (95 ~ 220cm)		

* Specifications can be changed without prior notice.

F. EMC Declaration

The InBodyS10 is intended for use in the electromagnetic environment specified below. The customer or the user of the InbodyS10 should ensure that it is used in such an environment.

Electromagnetic emissions		
Emissions test	Compliance	Electromagnetic environment
RF emissions CISPR 11	Group 1	The InBodyS10 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class A	The InBodyS10 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

Electromagnetic immunity – for all ME equipment and ME systems			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient/burst IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input/output lines	± 2 kV for power supply lines ± 1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT for 25 cycles <5 % UT (>95 % dip in UT) for 5 s	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT for 25 cycles <5 % UT (>95 % dip in UT) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the InBodyS10 requires continued operation during power mains interruptions, it is recommended that the InBodyS10 be powered from an uninterruptible power supply or a battery.

Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE U_T is the a.c. mains voltage prior to application of the test level.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the InBodyS10, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d=1.2\sqrt{P}$ $d=1.2\sqrt{P}$ 80 MHz to 800 MHz $d=2.3\sqrt{P}$ 800 MHz to 2.5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol: 
RRadiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	

NOTE1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

[a] Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the InBodyS10 is used exceeds the applicable RF compliance level above, the InBodyS10 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the InBodyS10.

[b] Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

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