



## **User's Manual**

## InBody User's Manual for Measurement Guide and Setup

Thank you for purchasing the InBody.

This user's manual describes all the features of the InBody.

Please read before use and keep it in a safe place.

By following the manual instructions, you will be able to use the InBody more safely and effectively.

## 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.

## Headquarters Information

### InBody

(주)인바디 본사 [대한민국]

06106 서울시 강남구 언주로625 인바디빌딩

TEL: 02-501-3939 FAX: 02-6919-2417 고객센터: 1899-5841

Website: inbody.com E-mail: info@inbody.com

### InBody Co., Ltd. [HQ]

InBody Bldg., 625, Eonju-ro, Gangnam-gu, Seoul 06106 KOREA

TEL: +82-2-501-3939 FAX: +82-2-6919-2417

Website: inbody.com E-mail: info@inbody.com

### 인바디 (주)

31025 충청남도 천안시 서북구 입장면 흑암길 15

TEL: 041-581-3003 FAX: 041-581-3103

Website: inbody.com E-mail: info@inbody.com

### 인바디 Co., Ltd. [MANUFACTURER]

15, Heugam-gil, Ipjang-myeon, Seobuk-gu, Cheonan-si, Chungcheongnam-do 31025 KOREA

TEL: +82-41-581-3003 FAX: +82-41-581-3103

Website: inbody.com E-mail: info@inbody.com

## Representative & Sponsor Information

### InBody Europe B.V. [NETHERLANDS]

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

Website (CS): csinbody.eu E-mail (CS): support@inbody.com

### InBody Europe B.V. Niederlassung Deutschland [GERMANY]

Mergenthalerallee 15-21, 65760 Eschborn, Germany

TEL: +49-6196-76-916-62 FAX: +49-6196-76-916-11

Website: de.inbody.com E-mail: erfolg@inbody.com

### InBody UK [UNITED KINGDOM]

11 Phoenix Park, Telford Way, Stephenson Industrial Estate, Coalville LE67 3HB, United Kingdom

TEL: +44-1530-569620

Website: uk.inbody.com E-mail: uk@inbody.com

### InBody Oceania [AUSTRALIA]

Main office: Level 8, 1 York Street, SYDNEY, NSW 2000, Australia

Showroom: U2/82-86 Minnie Street, Southport, Queensland

TEL: +61-7-5681-1900

Website: au.inbody.com E-mail: oceania@inbody.com

### 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 BWA Inc. [USA]

2550 Eisenhower Avenue, Suite C 209, Audubon, PA 19403

TEL: +1-610-348-7745

Website: inbodybwa.com E-mail: bwainquiries@inbody.com

### 株式会社インボディ・ジャパン [JAPAN]

〒136-0071 東京都江東区亀戸1-28-6 タニビル

TEL: +81-0120-900-369 (フリーアクセス) FAX: +81-3-5875-5781

Website: inbody.co.jp E-mail: customer-support@inbody.co.jp

### 拜斯倍斯医疗器械贸易(上海)有限公司 [代理人及售后服务] [CHINA]

代理人地址: 上海市闵行区虹莘路3999号上海万象城MT2写字楼306b-308室

电话: +86-21-6443-9705 传真: +86-21-6443-9706

网站: inbodychina.com 电子邮箱: info@inbodychina.com

### InBody Asia [MALAYSIA & SINGAPORE]

Unit 3A-11, Oval Damansara, 685 Jalan Damansara Kuala Lumpur, WP KL 60000 Malaysia

TEL: +60-3-7732-0790 FAX: +60-3-7733-0790

Website: inbodyasia.com E-mail: info@inbodyasia.com

### Biospace Latin America [MÉXICO]

Insurgentes Sur 1457, Piso 15 Int.2. Col. Insurgentes Mixcoac, Alcaldia Benito Juarez, C.P. 03920, Ciudad de México, México

TEL: +52-55-5025-0147

Website: inbodymexico.com E-mail: info.mx@inbody.com

### InBody India [INDIA]

57/57 A, 1st Floor, Raj Industrial Complex, Military Road, Marol, Andheri (East). Mumbai- 400059, Maharashtra, India

TEL: +91-22-6223-1911

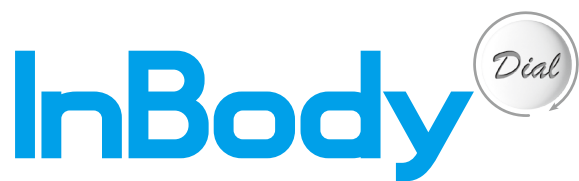
Website: inbody.in E-mail: india@inbody.com

## Copyright

Reproduction, adaptation, or translation of this manual is prohibited without prior written consent from InBody Co., Ltd. under the copyright laws. This manual may be printed incorrectly and subject to change without notice. InBody Co., Ltd. shall not be liable for any errors, incidental, or consequential damages that occurred by not complying with the content of the User's Manual. Visit our website (inbody.com) to view and download additional information about the InBody.

InBody Co., Ltd. reserves the right to modify the appearance, specifications, etc. of this product to improve its quality, without prior notice.

©2024 InBody Co., Ltd. All rights reserved.



# User's Manual Contents

## **I. InBody Dial Installation**

A. Product Components	4
B. Operating Environment	5
C. Installation Instructions	5
D. Maintenance	6

## **II. InBody Test**

A. Precautionary Steps	7
B. Test Instructions	8
C. Test Posture	10

## **III. Testing Weight Range** 11

## **IV. Frequently Asked Questions (FAQ)**

A. Regarding the InBody	12
B. Regarding the InBody Test	14

## **V. Others**

A. Exterior and Functions	16
B. Classification	17
C. Specifications	17

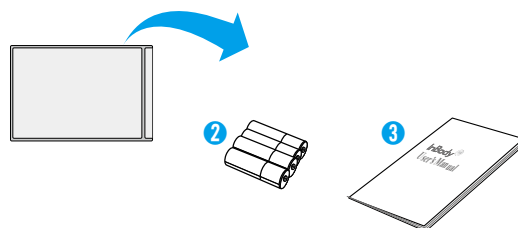
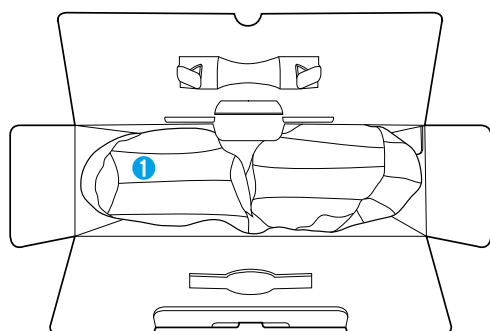
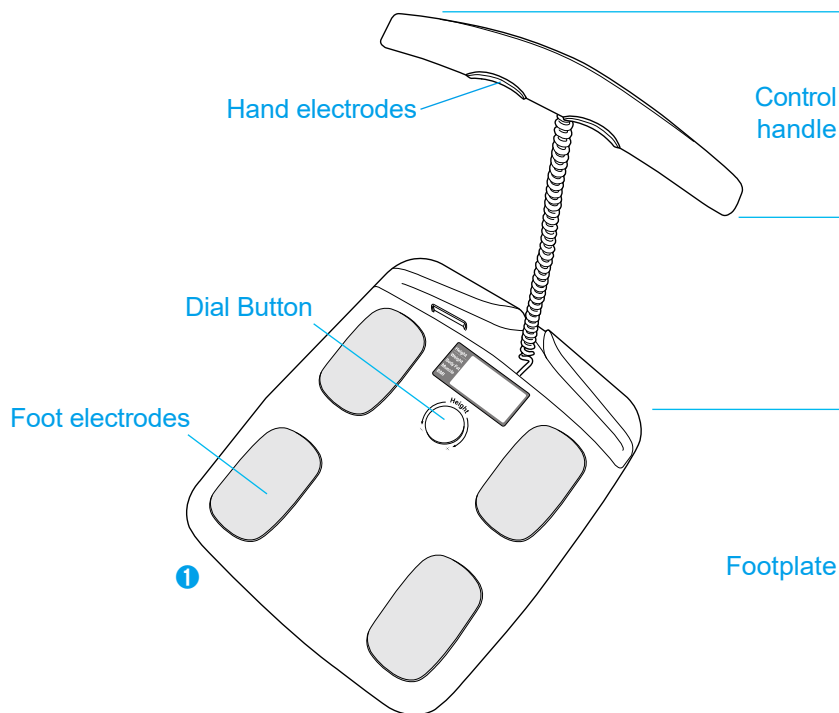
# I. InBody Dial Installation

## A. Product Components

The followings are the names and functions of each part of the InBody. Make sure all of the following components are present.

\* Please inspect each component of the InBody Dial for damage prior to installation.

- ❶ InBody Dial
- ❷ Battery AA 4 EA
- ❸ User's Manual 1 EA



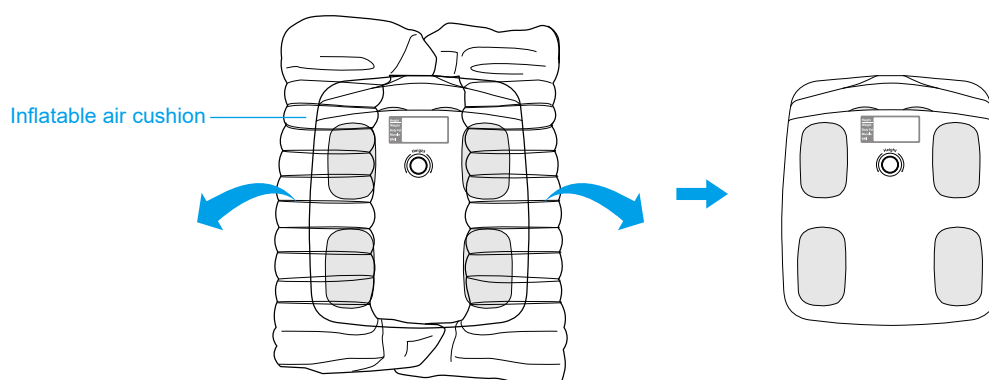
## B. Operating Environment

Please make sure that the environment is adequate for the InBody Dial installation. This equipment is designed for indoor use. If installing outdoors, the following requirements must be fulfilled.

Temperature range	10 ~ 40°C
Relative humidity	30 ~ 75% RH
Atmospheric pressure	70 ~ 106kPa

## C. Installation Instructions

1. Open the packing box of the InBody Dial and remove the inflatable air cushion.



### ! Caution

- Keep the packaging materials provided for repacking the equipment in the future. Other wastes should be disposed of according to relevant laws and regulations.

2. After removing the inflatable air cushion, place the InBody Dial on a leveled surface.

\* Leveling the equipment is necessary for accurate weight measurement.



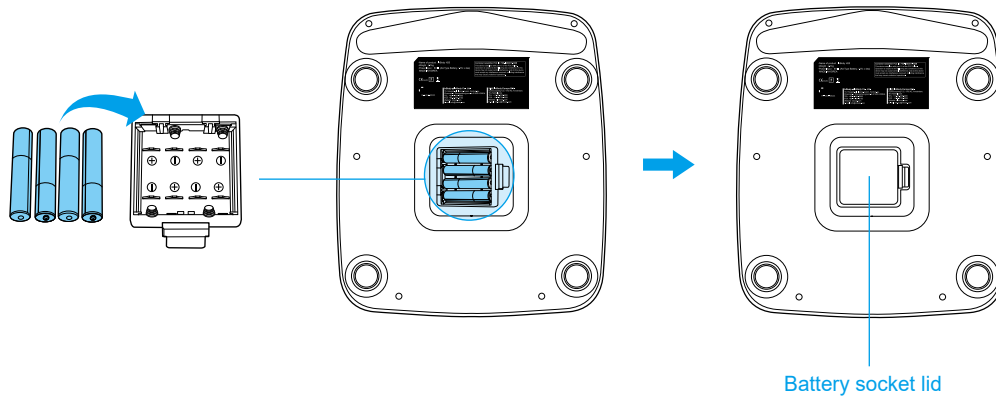
### ! Caution

- Install the InBody Dial on a leveled, non-vibrating surface. Installing the equipment on an uneven surface may cause the examinee to fall down.
- Never clean the hand and foot electrodes with liquid spray or detergent directly. The equipment may corrode and/or malfunction if the liquid or detergent leaks inside. Use the InBody Tissue when cleaning the InBody Dial.

\* For inquiries regarding the InBody Tissue, please contact InBody.

3. InBody Dial uses batteries as its power source. Follow the instructions below when using batteries.

- 1) Open the battery socket lid which is located on the bottom of the InBody Dial.
- 2) Insert 4 AA batteries.
- 3) Cover the battery socket with the battery socket lid.



#### **Caution**

- 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.

#### **Cautions when changing Batteries**

To reduce the risk of injury and other complications from prolonged battery use, we strongly recommend.

- Replacing the four old AA batteries with four new AA batteries.
- Using four AA batteries of the same make and model for optimum performance.

Please also ensure all batteries are installed correctly; incorrect installation may cause device damage and/or malfunction.

## **D. Maintenance**

#### **Caution**

- Do not bend the handles of the hand electrode.
- Do not place any objects on the footplate.
- Do not allow any liquid substances contact to the equipment directly. Keep food and drinks away from the equipment. Substances getting inside the equipment can cause critical damage to the electronic components.
- When storing the InBody Dial, remove the batteries, repackage, and place the equipment on a leveled surface.

## II. InBody Test

### A. Precautionary Steps

#### **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 malfunctioning of the device or endanger lives.
- Bioelectrical Impedance Analysis (BIA) uses safe low level currents, which are not harmful to the body. However, we do not recommend pregnant women test.
- Do not run around or play around the footplate. This may result in serious injury.
- Children and people with limited mobility should be assisted when attempting to test on the InBody.
- After an individual with any kind of contagious disease or infection tests on the InBody, use an InBody Tissue to clean the equipment.

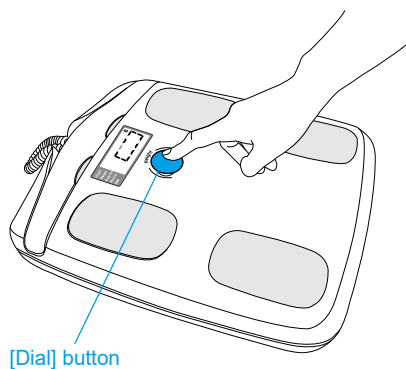
#### **Caution**

- 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 affecting 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 accuracy of the test results.
- Testing may be difficult if the examinee's palms and soles are too dry or if the examinee has too many calluses. Thoroughly wipe the palms and soles with the InBody Tissue before testing.

## B. Test Instructions

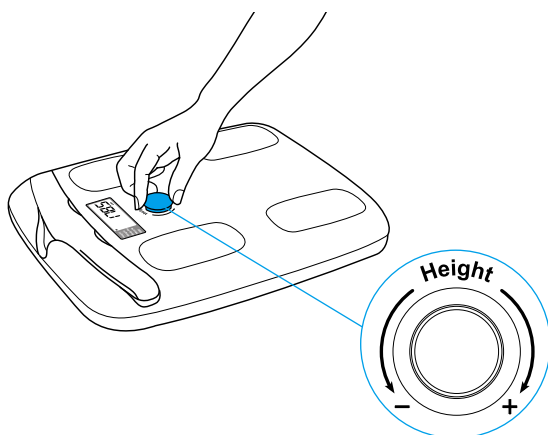
1. Press the Dial button to turn on the InBody Dial.

- \* The LCD indicates a Bluetooth icon only in the Bluetooth version.
- \* When using the Dial button, make sure not to press on the footplate.



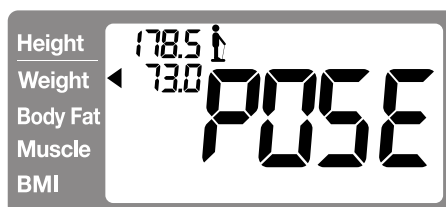
2. Turn Dial button to input height.

- \* Input height in 0.5 cm increments.



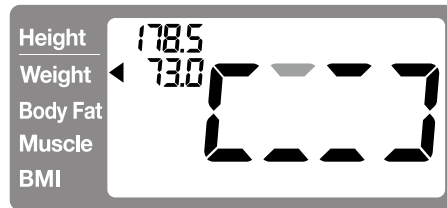
3. Step on the footplate barefoot and maintain proper posture to take the test.

- \* Refer to 'C. Test Posture.' for the proper posture.





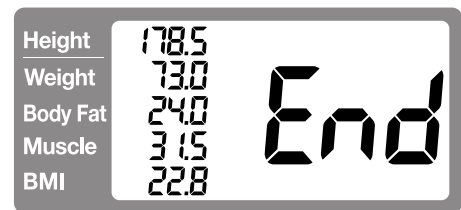
4. The InBody Test will begin.



5. When the test is completed, the results will be shown on screen. Results: Height, Weight, Body Fat (Percent Body Fat), Muscle (Skeletal Muscle Mass), and BMI.

\* Turn Dial button to enlarge test measurement results.

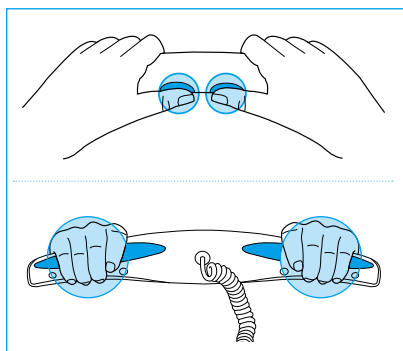
In order to recheck test results, you must turn the dial button within 100 seconds of the test results display. InBody will turn off 100 seconds after test results are displayed or 100 seconds after the last time the user uses the dial. If user wants to turn off immediately, press and hold Dial button.



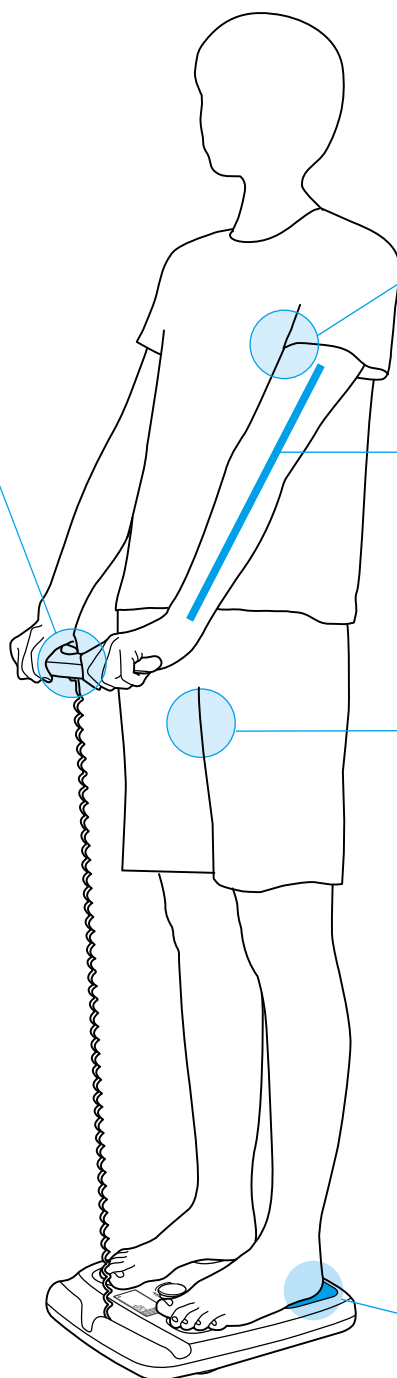
## C. Test Posture

The examinee must maintain proper posture to have accurate test results.

\* The test will proceed when there is good electrical contact.



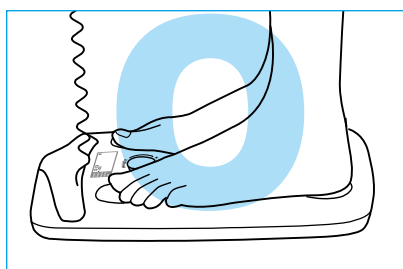
Hold the hand electrode so that the 4 fingers wrap the surface of the bottom hand electrode, and place the thumb on the oval electrode.



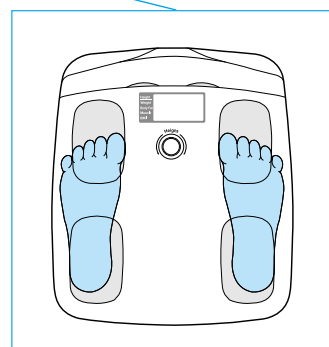
Your arms must not touch the sides of your body. It is strongly recommended to wear shirts with sleeves.

Keep the arms straight.

The thighs should not touch each other. Wear shorts that will separate the thighs, if necessary.

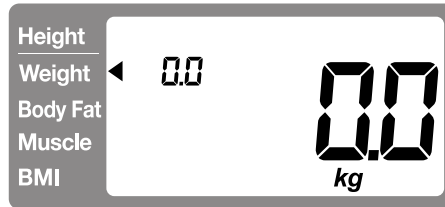


Step on the footplate barefoot.



### III. Testing Weight Range

1. Press the footplate to turn on. When 0.0 is displayed on screen, step onto the footplate.
  - \* 0 point adjustment: The InBody is turned on by either pressing on the footplate or by pressing on the Dial button, turning on automatically adjusts to 0 point.



2. “Beep-” sound means, check the weight indicated on the screen.



#### Note

- If user wishes to proceed with InBody test immediately after weight measurement; turn the Dial button immediately after weight measurement is taken, and input height. Then hold the hand electrode and maintain proper test posture.

## IV. Frequently Asked Questions (FAQ)

Even if no problems arise from the equipment, users may still have many questions, especially regarding clinical procedures. A few more of the common questions and answers are listed below. If your questions are not answered here, please contact InBody.

### A. Regarding the InBody

If a problem arises with the InBody Dial, please refer the possible solutions below. If your problem cannot be resolved from the following table, please contact InBody.

Question	Answer
<ul style="list-style-type: none"><li>• Weight measurement seems to be inaccurate.</li></ul>	<ul style="list-style-type: none"><li>• Press the footplate to turn on InBody, then check the LCD screen to see if a square rotates on the screen for 2-3 seconds before displaying 0.0.</li><li>• Weight measurement may not be accurate if measurement is taken while InBody is on the carpet or mat. Place InBody on hard surface prior to taking measurement.</li><li>• Check the InBody is placed to the leveled ground.</li><li>• Restart the InBody. Remove all objects on the footplate during the restart.</li></ul>
<ul style="list-style-type: none"><li>• Test results seems to be inaccurate.</li></ul>	<p>Results may be inaccurate in cases listed below. Check the following, then start the test again.</p> <ul style="list-style-type: none"><li>• Thumbs and heels are apart from the electrodes.</li><li>• Socks or stockings are worn. Test must be completed barefoot.</li><li>• There may be poor electrical contact due to dry hands or feet. Moisten before testing. For best results, use an InBody Tissue.</li><li>• Severely dry and calloused hands and feet must be completely wrapped and moisturized using an InBody Tissue for at least 30 seconds.</li><li>• Arms must not touch the sides of your body and thighs must not touch each other during test. If test is conducted when the arms or thighs are touching, the BIA method is not able to differentiate body parts such as the arms, body or legs, therefore the test results may not show accurate test results. If the arms or thighs touch, wear a t-shirt or knee length shorts during the test.</li><li>• If test precautions are not taken prior to test, this may result in affecting test results. Please refer to 'A. Precautionary Steps' in section 'II. InBody Test' in this User's Manual and follow all precautions to ensure the accuracy of the test results.</li><li>• Try conducting test as a different user. A person with implants in the body or of other special circumstances may affect test results.</li><li>• Should the test results of a different user seem inaccurate, restart InBody. Remove all objects on the footplate during the restart.</li></ul>


Question	Answer
----------	--------

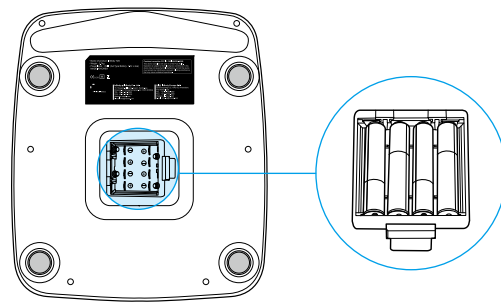
- The InBody Test has stopped. (LCD shows error codes during the InBody Test.)

It may be due to poor electrical contact with the body. Check the following, then start the test again.

- Thumbs and heels are apart from the electrodes.
- Socks or stockings are worn. Test must be completed barefoot.
- Naturally dried hands and feet must be moist using the InBody Tissue (wet wipe).
- Severely dry and calloused hands and feet must be completely wrapped and moisturized using an InBody Tissue for at least 30 seconds.
- Try conducting test as a different user. If other users's test results are normal but your results are inaccurate, check for the above items.
- Restart the InBody. Remove all objects on the footplate during the restart.

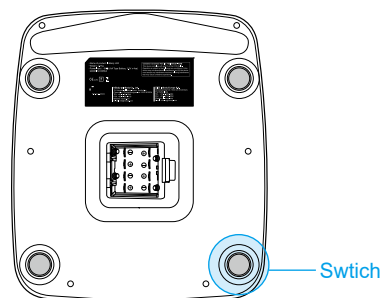
- My InBody Dial does not turn on.

- The problem may occur if the battery level is too low.
- If the battery icon (  ) appears on the screen, replace the batteries as soon as possible.



- Weight measurement cannot be taken and LCD screen shows a continuously rotating square.

- Press the footplate to turn on InBody, when LCD screen shows 0.0 after a square rotates on the screen for 2-3 seconds, step on to the footplate to take weight measurement.
- Check if someone is on the InBody or if an object is on the InBody, or if the 4 round switches at the bottom of the InBody are not being pressed down by debris.



## B. Regarding the InBody Test

Some of the more common clinical questions are answered below. If additional questions or more clarification is desired, please contact InBody.

Question	Answer
<ul style="list-style-type: none"><li>• How accurate is the InBody Dial?</li></ul>	<ul style="list-style-type: none"><li>• InBody Dial, for weight measurement &gt;100 kg, is accurate to <math>\pm 100</math> g and for weight measurement &gt;150 kg, is accurate to <math>\pm 200</math> g.</li></ul> <p>InBody Dial, accuracy of the body composition analysis is defined by the standard errors and correlations to DEXA*. Correlation is defined by the level of correlation that exists between DEXA and InBody results for a similar person.</p> <p>Correlation of 1 indicates that it is same as DEXA. InBody Dial has a 0.93 correlation with DEXA.</p> <p>The standard error is indicated by the difference between InBody Dial and DEXA measurement data. Per percent body fat standard, the standard error margin is 3.3%.</p> <p>* DEXA (DEXA, Dual Energy X-ray Absorptiometry): Highly accurate standard body composition analysis equipment.</p>
<ul style="list-style-type: none"><li>• Must socks or stockings be removed for the InBody Test?</li></ul>	<ul style="list-style-type: none"><li>• Bare skin contact is essential in the analysis using the BIA method. Socks or stockings may cause a varying degree of distortion in the results. Socks or stockings must be removed to obtain accurate data.</li></ul>
<ul style="list-style-type: none"><li>• Is it okay to wear accessories (jewelry, watch, rings, etc) or metal objects while taking the InBody Test?</li></ul>	<ul style="list-style-type: none"><li>• The ideal condition for the analysis is simply standing with no clothes 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 the weight as possible.</li></ul>
<ul style="list-style-type: none"><li>• Who cannot take the InBody Test or will have difficulties taking the InBody Test?</li></ul>	<ul style="list-style-type: none"><li>• Individuals with medical implant devices such as pacemakers, or essential support devices such as patient monitoring systems, must not use this equipment. The currents will flow through the body during the test, which may cause malfunctioning of the device or endanger lives.</li></ul>
<ul style="list-style-type: none"><li>• Can a person with metal implants in the body take the InBody Test?</li></ul>	<ul style="list-style-type: none"><li>• The ideal test methodology is where the examinee does not wear anything metallic. Individuals with metallic implants may have skewed test results due to the conductivity of the metal affecting the results.</li></ul>
<ul style="list-style-type: none"><li>• I have limited mobility and cannot maintain proper posture for the InBody Test. How can I still be tested?</li></ul>	<ul style="list-style-type: none"><li>• It is impossible to test if an individual cannot maintain contact with the hand or foot electrodes.</li></ul> <p>* InBody has a line of products that conduct body composition analysis on bed ridden examinees that allow the patients to stay in bed.</p>
<ul style="list-style-type: none"><li>• Is the electric current harmful to the body?</li></ul>	<ul style="list-style-type: none"><li>• The physiological electric impedance method uses safe low level currents that is not harmful to the body.</li></ul> <p>The safety of the InBody has been tested and proven. The InBody products have been approved for medical use by the CE and all over the world. Many medical institutions around the world are actively using the InBody.</p>

Question	Answer
<ul style="list-style-type: none"> <li>• My thighs are thick and touch each other during test, will this affect test results?</li> </ul>	<ul style="list-style-type: none"> <li>• Arms must not touch the sides of your body and thighs must not touch each other during test. If test is conducted when the arms or thighs are touching, the BIA method is not able to differentiate body parts such as the arms, body or legs, therefore the test results may not show accurate test results. If the arms or thighs touch, wear a t-shirt or knee length shorts during the test.</li> </ul>
<ul style="list-style-type: none"> <li>• I don't know my exact height, will inputting an estimated height affect test results?</li> </ul>	<ul style="list-style-type: none"> <li>• Height is a factor for calculating test results and affects test results, therefore it must be accurately inputted. If an inaccurate height is inputted, there may be an error in the body composition analysis calculation and may result in inaccurate results.</li> </ul>
<ul style="list-style-type: none"> <li>• LCD screen turned off before being able to send test results to Smartphone, how can I extend the time test results are displayed on the LCD screen?</li> </ul>	<ul style="list-style-type: none"> <li>• Test results are displayed for 100 seconds. Turn to Dial button to extend display time. The display time will be extended by 100 seconds each time the dial is turned.</li> </ul>

## V. Others

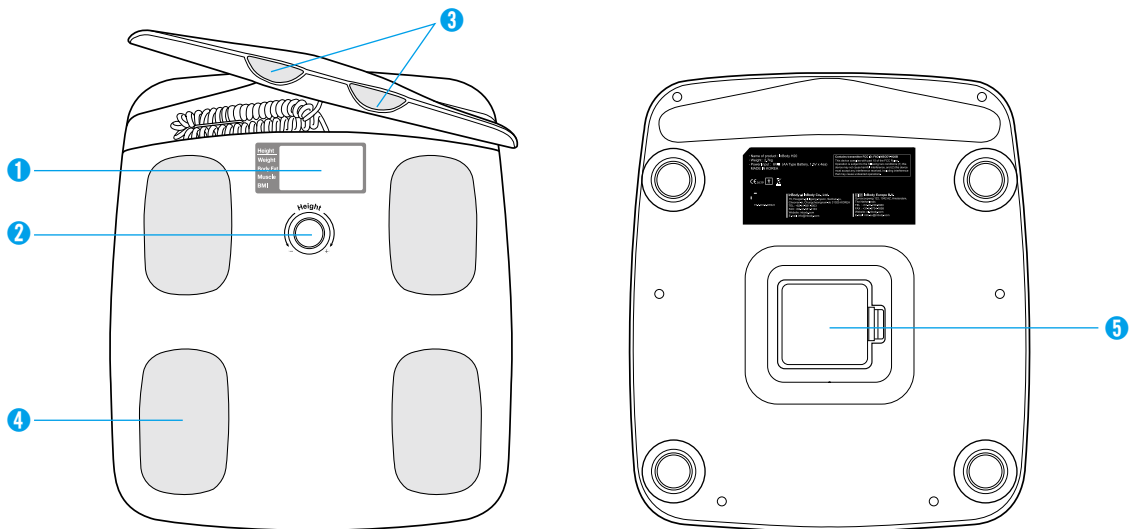
- \* The InBody Dial is manufactured according to the quality management procedure of InBody. InBody complies with the ISO9001 and ISO13485 which are international quality management systems.
- \* This equipment satisfies the IEC60601-1(EN60601-1), an international safety standard for electronic medical equipment. This equipment also satisfies the IEC60601-1-2(EN60601-1-2), an international standard for electromagnetic conformity.

### A. Exterior and Functions

The followings are the names and functions of each part of the InBody.

\* Please inspect each component of the InBody Dial for damage prior to installation.

- ❶ LCD screen: Shows each stage of the test, test results, etc.
- ❷ Dial button: Use to turn on/off, input height and confirm result items.
- ❸ Hand electrode: Examinee holds the hand electrode so that the 4 fingers wrap the surface of the bottom hand electrode while the thumb is placed on the oval electrode.
- ❹ Foot electrodes: The examinee makes contact with this electrode by stepping with the front part and the heel of their foot.
- ❺ Battery tray: Used for inserting batteries.





## B. Classification

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

- Type of protection against electric shock: Internal Power Supply
- Degree of protection against water infiltration: Standard Equipment (No special protection against external water infiltration)
- Not suitable for use with air, flammable an anesthetic gas, or oxygen/nitrogen dioxide/flammable an anesthetic gas
- Operation mode: Continuous Operation
- Type of the applied parts: BF Type

## C. Specifications

Bioelectrical Impedance (BIA) Measurement Items	Bioelectrical Impedance (Z)	10 Impedance Measurements by Using 2 Different Frequencies (20kHz, 100kHz) at Each of 5 Segments (Right Arm, Left Arm, Trunk, Right Leg, and Left Leg)
Electrode Method	Tetrapolar 8-Point Multi-frequency Measurement Method (Direct Segmental Multi-frequency Bioelectrical Impedance Analysis Method, DSM-BIA Type)	
Body Composition Calculation Method	No Empirical Estimation	
Outputs (LCD Screen)	Weight, Body Fat (Percent Body Fat), Muscle (Skeletal Muscle Mass), BMI	
Applied Rating Current	100 $\mu$ A	
Power Consumption	DC 6 V (1.5 V AA type Battery 4 EA)	
Display Type	Customize LCD	
Color	Soft White	
Dimension	310.3 (W) $\times$ 356.4 (L) $\times$ 58.3 (H): mm (12.2 (W) $\times$ 14 (L) $\times$ 2.3 (H): in)	
Weight	2.7 kg (5.9 lbs)	
Testing Time	Within 5 seconds after measuring impedance	
Operation Environment	10 - 40 °C (50 - 104°F), 30 - 75 % RH, 70 - 106 kPa	
Storage Environment	-20 - 70 °C (-4 - 158 °F), 10 - 80 % RH, 50 - 106 kPa (No Condensation)	
Testing Weight Range	10 - 150 kg (22 - 330 lbs)	
Height Range	95 - 220 cm ( 3 ft 1.40 in - 7 ft 2.61 in)	

\* Specifications may change without prior notice.





