InBody770

User’s Manual

InBody770 User's Manual for Measurement Guide and Setup

Thank you for purchasing the InBody770. This user’s manual describes all the features of the InBody770. Please read before use and keep it in a safe place. By following the manual instructions, you will be able to use the InBody770 more safely and effectively.

1. Intended use

InBody770 in mainly used for healthy and acute or chronically ill populations in hospitals, medical practices and inpatient care facilities in accordance with national regulations. It can be used to assist in the assessment of nutritional status, obesity and muscle balance. Body composition analysis is important in preventive medicine since it provides the basis of appropriate physical activity and dietary habits for improving personal daily routine. It can be also usefully applied to follow-up studies of patients treated for various diseases.

2. Indications for Use

- Medical check-up: Four body composition analysis can be identified for the risk of developing diseases that are highly related to body composition imbalance like obesity, malnutrition, fluid imbalance and osteoporosis for medical check-up.
- Obesity: Percent body fat has been recommended rather than BMI to ensure proper weight loss and improvements in long-term health, tracking changes for adjusting/developing customized treatments.
- Pediatric obesity: Body composition measurement is an essential part of health assessments for children and adolescents. Percent Body fat is better than the indicators of weight status to identify children and adolescents with unfavorable lipid profile.
- Sarcopenia: InBody provides a quick, easy to perform test that provides a calculation for skeletal muscle index (SMI), the sum of the lean mass in the arms and legs, normalized for height. This marker is useful in identifying low muscle in the appendages, which increases frailty risk.
- Diabetes & endocrinology: Diabetes is often associated with excess fat, however having insufficient muscle mass is just as detrimental and increases diabetes risk. And visceral fat plays a key role in the development of metabolic and cardiovascular disease.
- Edema: Over-hydration as assessed by ECW ratio (ECW/TBW) is prevalent in dialysis patients, and is associated with loss of residual renal function, inflammation, malnutrition and hypertension. Monitoring the ECW ratio (ECW/TBW) provides an assessment of fluid accumulation in the extracellular space resulting from compromised cardiovascular function. The patients who did not have ascites originally but have higher ECW/TBW had a higher incidence of ascites in liver cirrhosis.
- Segmental fluid retention: InBody objectively measures each region of the body separately and provides segmental ECW ratio measures for each of the arms, legs and the trunk, and these measures can be used to detect fluid imbalances resulting from the development or progression of lymphedema.
- Nutrition: The four primary components of the nutritional assessment are summarized by the mnemonic ABCD, with A standing for anthropometric measurements including stature, body weight, BMI and body composition. Body composition analysis can reveal changes in body composition (body water, protein, minerals and body fat) that cannot be known by changes in body weight.
- Fitness: Strength training greatly stimulates muscle growth, exercise burn the calories strengthens cardiorespiratory capacity, which reduce the risk of diabetes, heart disease, and other health concerns and result in the various changes in body composition. Body composition analysis shows skeletal muscle mass and lean in each segment of body, it helps focusing on building more muscle or correct imbalance.

* The InBody770 is not a diagnostic device. To make an accurate diagnosis, the physician needs to commission thorough examinations and take their results into account in addition to the results of the InBody770.
* The InBody770 is not used in home healthcare environment.

3. Contraindication

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. Individuals with known metal allergies against stainless steel materials shall not use the equipment.

4. Intended user profile

1. Education:
   - At least, the user needs to be able to understand explanation of words on screen.
2. Knowledge:
   - At least, the user needs to be able to understand explanation of words on screen.
   - No maximum.
3. Language understanding:
   - Basic language: English
   - Languages are supported as specified in the marketing need.
4. Experience:
   - No minimum and maximum.

5. Intended patient population and user profile

1. Age: 3+ years
2. Weight: 2 ~ 270 kg (4.4 ~ 595.2 lb)
3. Health: Examinee need to be able to stand for 1~2minutes.
4. Condition: 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.
5. Nationality: Multiple
6. Patient state: Woken up, mentally healthy
7. Height: 95 ~ 220 cm (3 ft 1.40 in ~ 7 ft 2.61 in)

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

㈜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]
625, InBody Bldg., Eonju-ro, Gangnam-gu, Seoul 06106 Republic of Korea
TEL: +82-2-501-3939 FAX: +82-2-6919-2417
Website: inbody.com E-mail: info@inbody.com

㈜인바디
31025 충청남도 천안시 서북구 입장면 흑암길 15
TEL: 041-581-3003 FAX: 041-581-3103
Website: inbody.com E-mail: info@inbody.com

InBody 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

EC REP 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

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 Email: oceania@inbody.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 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]
〒137-0071 東京都江東区亀戸1-28-6 タニビル
TEL: +81-3-5875-5780 FAX: +81-3-5875-5781
Website: inbody.co.jp E-mail: inbody@inbody.co.jp

拜斯倍斯医疗器械贸易（上海）有限公司[售后服务] [CHINA]
拜斯倍斯医疗器械贸易（上海）有限公司 [代理人及售后服务]
代理人地址：上海市闵行区宜山路1698号903、904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

InBody MEXICO [MEXICO]
Av. Eugenia 197 Piso 1 Ofic 1-B, Col. Narvarte, Benito Juarez, C.P. 03020, Ciudad de Mexico, Mexico
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

InBody770

User's Manual Contents

I. InBody770 Installation

A. Product Components

The InBody770 consists of the following components. Please make sure all of the following components are present.

* Please inspect each component of the InBody770 for defects prior to installation.

❶ InBody770

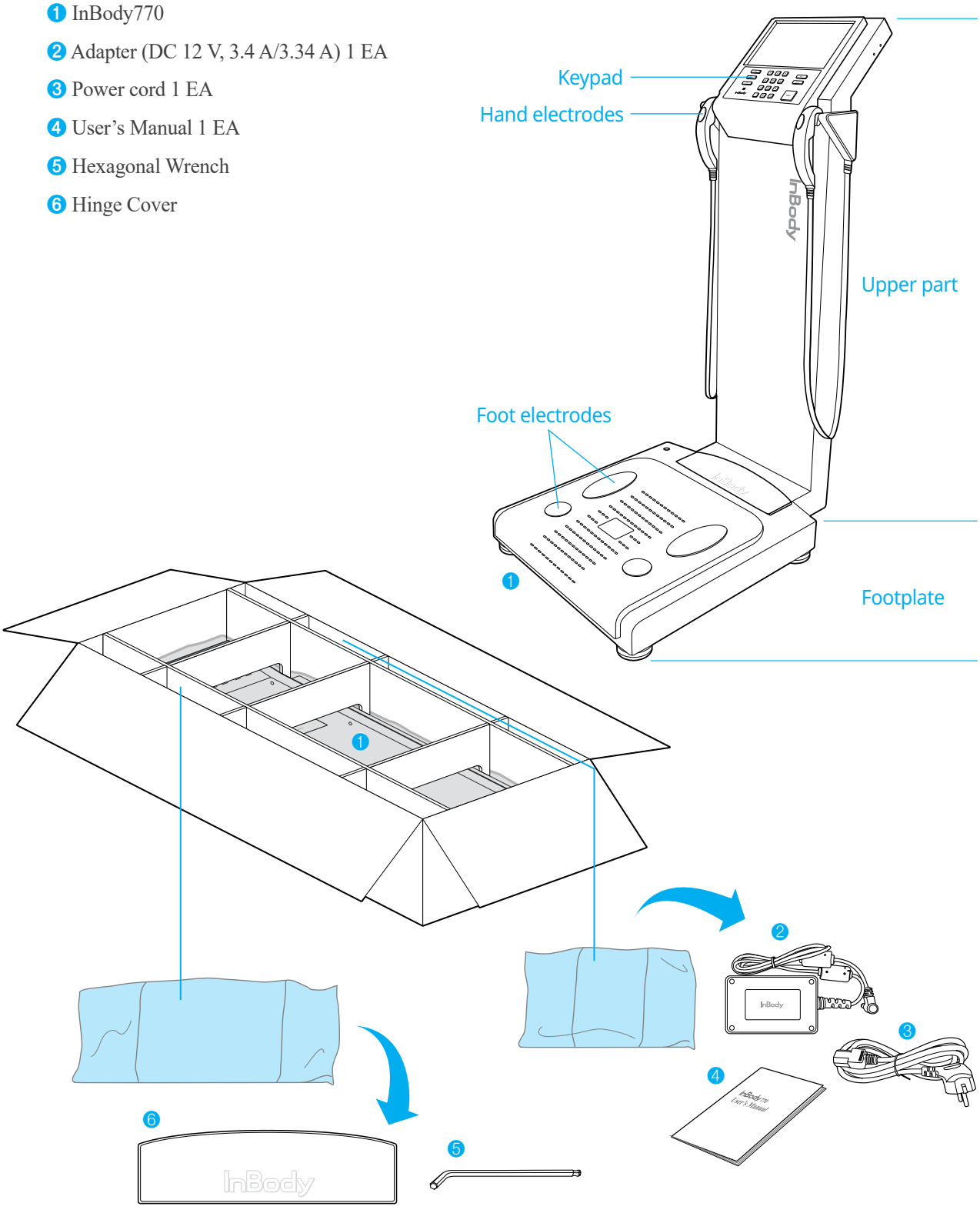
❷ Adapter (DC 12 V, 3.4 A/3.34 A) 1 EA

❸ Power cord 1 EA

❹ User's Manual 1 EA

❺ Hexagonal Wrench

❻ Hinge Cover



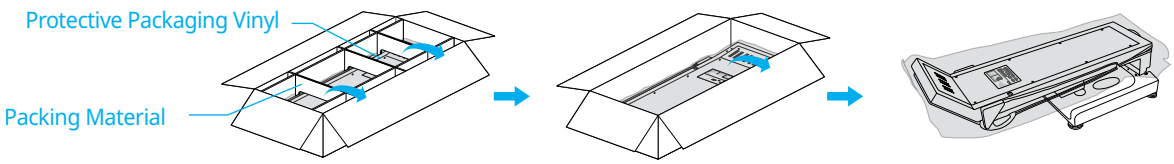
B. Operating Environment

Please make sure that the environment is adequate for the InBody770 installation. This equipment is designed for indoor use. If installing outdoors, the following requirements must be fulfilled.

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

C. Installation Instructions

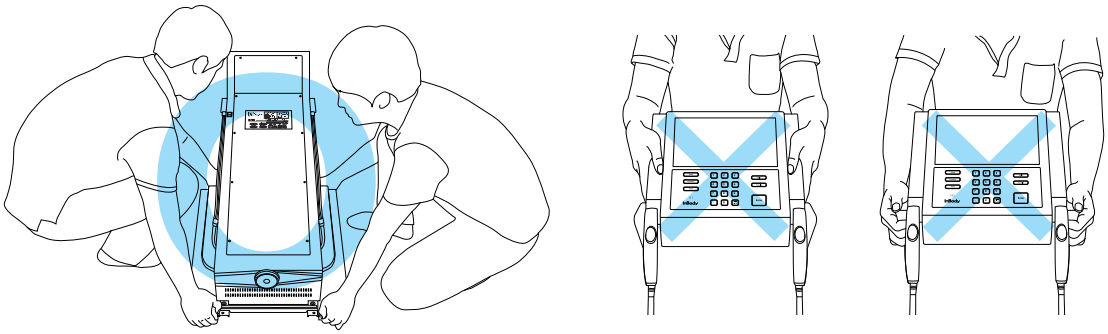
1. Open the packing box of the InBody770 and remove the packing material. Then take the InBody770 out of the box.



⚠ Caution

- If you have any problems installing your InBody770, please contact InBody for assistance.
- Do not transport the equipment by holding the screen portion or the joints of the hand electrodes.
- Keep the packing materials provided for repacking the equipment in the future. Other wastes should be disposed of according to relevant laws and regulations.

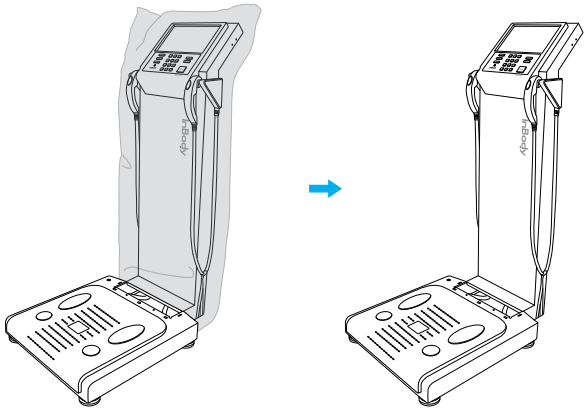
* Please refer to the following illustrations to properly transport the equipment.



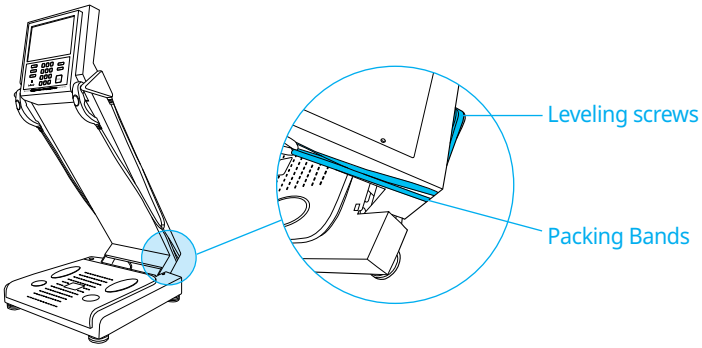
⚠ Caution

- Using the InBody770 on carpet may cause static electricity, which could damage the equipment. If installing the InBody770 on carpet is unavoidable, please use an antistatic mat.
- Install the InBody770 on a leveled, non-vibrating surface. Installing the equipment on an uneven surface may cause the examinee to fall down. Test results may also be inaccurate.
- 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 alcohol-based disinfectant (e.g., 70 % ethanol) when cleaning the InBody770.

2. After completely raising the upper part of the InBody770, remove the protective packaging vinyl. Then remove the packing material from the footplate.



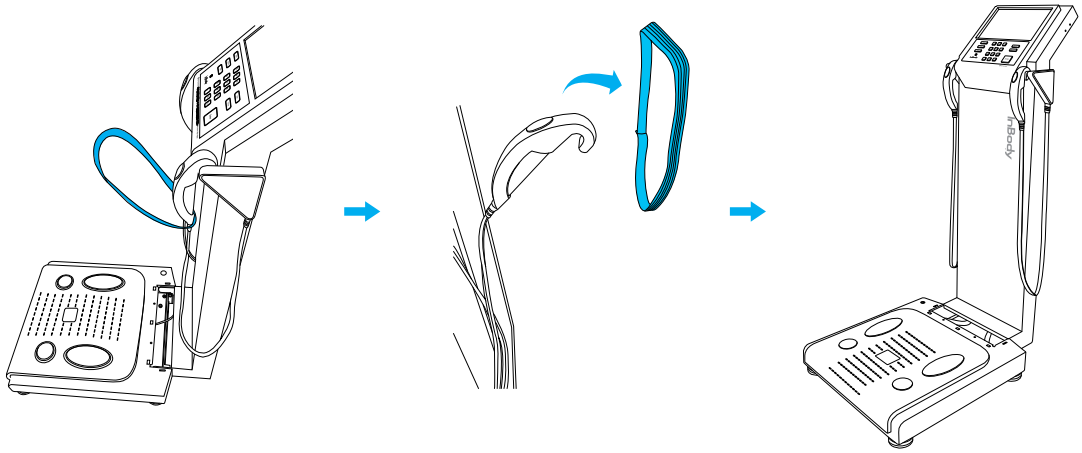
3. Slightly lower the upper part of the InBody770 and remove the packing bands, which are used to connect the leveling screws and the hand electrode cables.



⚠ Caution

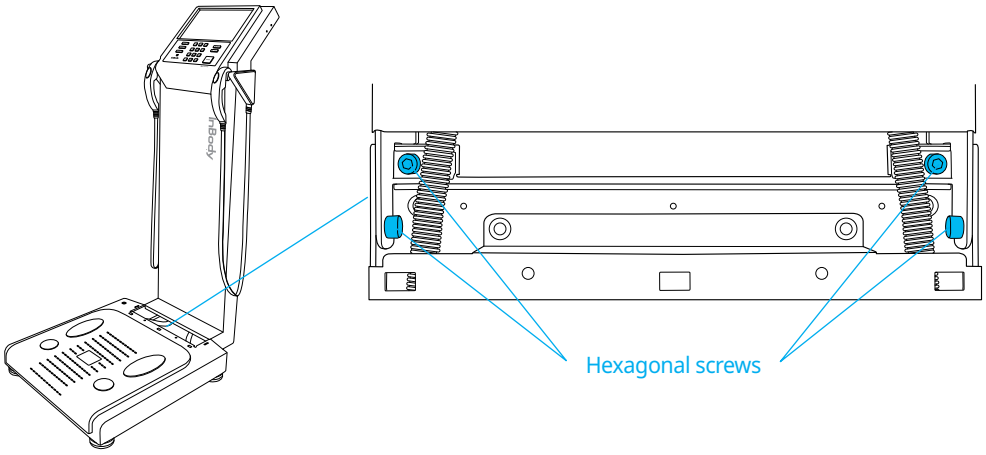
- Do not use a knife or scissors to remove the packing bands. Keep packing bands for repacking the InBody in the future.

4. Please refer to the following illustrations to remove the Packing Bands from both hand electrode cables.

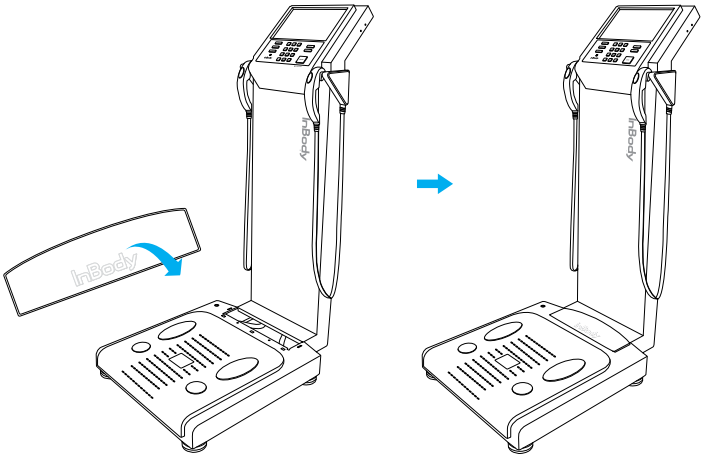


5. Completely raise the upper part of the InBody770.

6. Tighten the hexagonal screws, on the InBody770 joint, by rotating the Hexagonal Wrench clockwise.

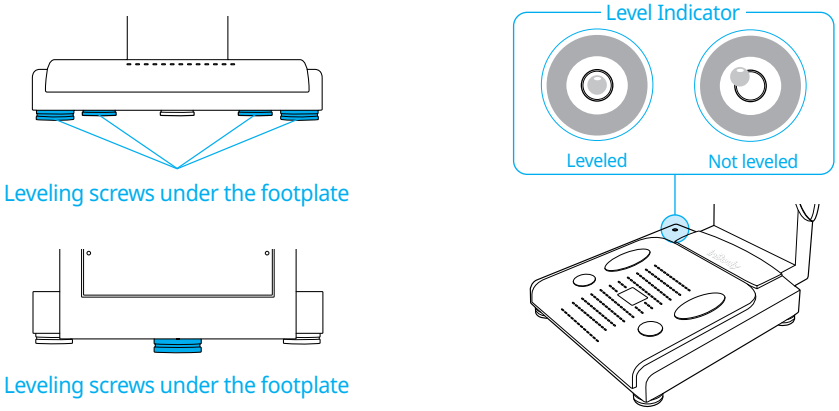


7. Please refer to the following illustrations to insert the Hinge Cover.



8. Level the InBody770 by rotating the leveling screws under the footplate to the left and right so that the air bubble is centered.

   * Leveling the equipment is necessary for accurate measurement of weight. There are a total of 5 leveling screws.

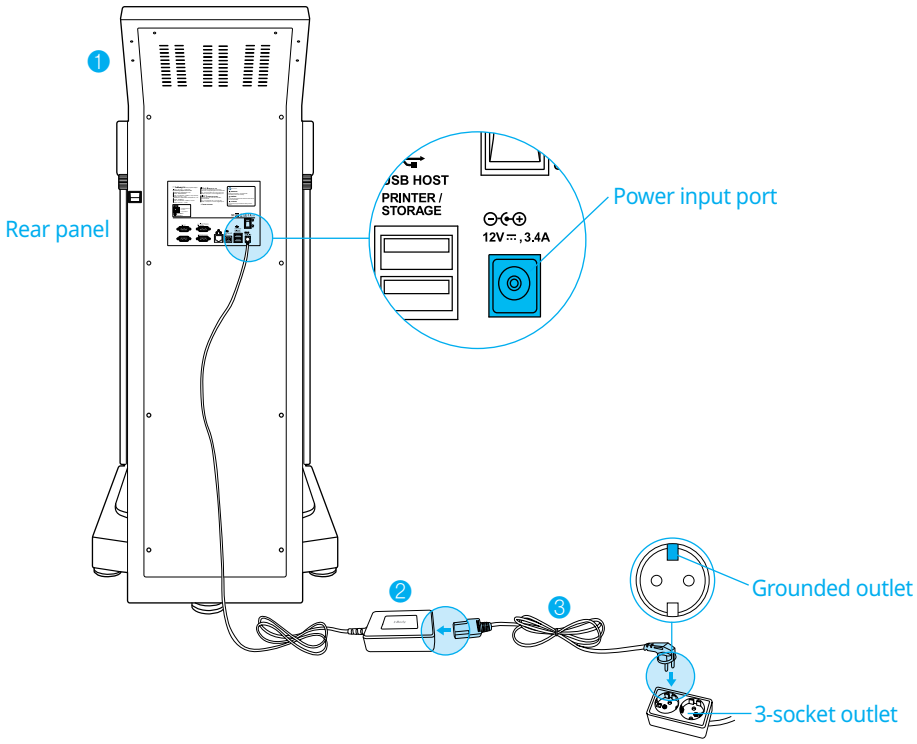


⚠ Caution

- Avoid injuring your hands when rotating the leveling screws under the footplate.

9. Connect the adapter (❷) to the power input port, which is located on the rear panel (❶). Connect the adapter (❷) to the power cord (❸). Plug the power cord (❸) into a grounded 3-socket outlet.

* The InBody770 can be used in connection with other test equipment such as a stadiometer, a blood pressure monitor, or data management software called LookinBody120. For more information, please refer to 'A. Exterior and Functions 3. Rear Panel' in section 'V. Others' in this User's Manual.



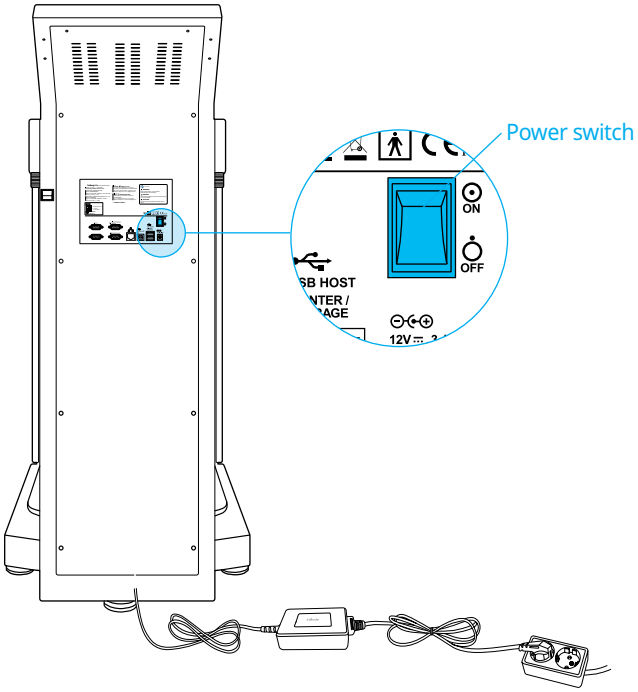
⚠ Warning

- Do not pull the power cord violently.
- Do not place the InBody770 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 connected to the rated power (AC 100 - 240 V). Using other power rated outlets 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.
- Do not directly contact the InBody770 with any other electronic device when the InBody770 is on. This may result in an electric shock.
- If you are not using the InBody770 for a long time, unplug the power code.

Caution

- If the InBody770 is not plugged into a grounded outlet, it may cause damage through electric surges or product malfunction. This may affect the test results.
- The test results may be inaccurate if the InBody770 is under electrical interference. Do not install the InBody770 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 equipments, or heating appliances. Do not share the power source of the InBody770 with other electrical devices. This may affect the test results.
- When connecting the InBody770 with other test equipment, turn on the other equipment first. When turning off other equipment, turn off the InBody770 first. This is necessary to minimize electrical surges on the InBody770.
- Always use the specified adapter provided by InBody as it is a part of the InBody770. Using other adapters may result in malfunction of the InBody770.
- Operation of the InBody770 2,000m above sea level may affect the weight measurement.

10. Flip the power switch to turn on the InBody770.



D. Initial Setup

1. The InBody770 automatically starts booting when it is turned on. While booting, it performs a self weight calibration.
   * While booting (about 5 minutes), make sure there is nothing on top of the footplate. Please do not stand on the footplate, or place objects on the footplate.

2. Press the [Administrator Menu] button on the screen, which appears when no one is on the footplate.

Administrator Menu

3. Input the password (default password: 0000) to access the Administrator Menu.

4. The Administrator Menu will give you access to 'Setup' and 'Troubleshooting'.
   * If you store the contact information for Customer Service under '24. Customer Service Information' in Setup of the Administrator Menu, you can refer to it when you have a question or a problem with the InBody770.

Setup

Troubleshooting

1) Setup: Configure settings and manage data according to the test environment.

01. Date/Time/Units/Country/Language/Password/Volume

: Change or modify the InBody's basic settings.

02. Self Mode/Professional Mode

- Self Mode: The examinee takes the InBody Test by entering only his/her height.
  Throughout the test, instructions and the InBody Information will be shown on screen.
- Professional Mode: An examiner is present and guiding the examinee through the InBody Test.

03. N/A

04. Cloud Service

: InBody App provides services that allow members to check and manage results themselves. If you enter your mobile phone number, you can check the results on the member's mobile phone as the InBody results are transmitted to InBody Cloud.

05. Bypass Age/Gender

: The examinees can bypass inputting their age or gender if the test environment is designed for testing only adults or a specific gender.

06. View/Print/Delete Data

: The administrator can manage test results using ID.

07. Export Data as Excel

: You can export test results as an excel file on a USB Thumb Drive. Exported test results can be viewed as an excel file on a computer.

08. Data Backup/Restoration

: Back up the InBody Test results to a USB Thumb Drive or restore test results using a backup file on a USB Thumb Drive.

09. Printer Setup

: Connect the printer to the InBody. A connected printer will allow for printing results sheets after testing.

10. Results Sheet Types

: Select which results sheets to utilize with the InBody770.
(InBody Results Sheet, InBody Results Sheet for Children, and Body Water Results Sheet).

11. Automatic Printing Options

: Print applicable results sheets automatically after each completed test. The InBody can print up to 2 copies after every test.

12. Paper Types

: Select the paper type for printed results sheets. Options include blank A4 paper or pre-printed InBody Results Sheets provided by InBody.

13. Outputs/Interpretations for Results Sheet

: Select outputs or interpretations that will appear on the right side of the InBody Results Sheet, InBody Results Sheet for Children, and Body Water Results Sheet.

14. Results Sheet Custom Logo

: Insert a logo on upper right corner of the printed results sheet.

* Please contact InBody for help with uploading or modifying a logo.

15. Printing Alignment

: Adjust the alignment of where the results will be printed on the results sheets.

16. Internet Options

: You can connect the InBody to the Internet. When the InBody is connected to the internet, can connect to data management software LookinBody120, regardless of location.

17. Bluetooth

: Connect the InBody770 to data management software LookinBody120 via Bluetooth.

18. Manual/Automatic Weight

: Select whether to have weight automatically weighed or manually entered before testing.

19. Adjust Weight

: Adjust measured weight by a fixed value on the InBody. (Example: Workout clothes at the gym are approximately 0.2kg; most examinees are assumed to be wearing workout clothes, so the examiner may adjust the set value to -0.2kg.)

20. Normal Range

: Set the normal range for BMI, Percent Body Fat and Waist-Hip Ratio.

* The ideal value of BMI may also be set.

21. N/A

22. Standard Child Growth Curve

: Set the type of standard child growth curve to use on the InBody Result Sheet for Children.

23. Touchscreen Alignment

: Adjust the alignment of the touchscreen.

24. Customer Service Information

: Save the customer service (supplier) contact information. Please refer to the customer service information if you have any inquiries regarding the InBody Test, or problems that cannot be resolved through the 'Troubleshooting' menu.

25. Auto-Lock

: Set the password and wait time for auto-lock on the InBody770.

2) Troubleshooting: See additional information on how to use the InBody. Refer to the troubleshooting checklist when there are problems that occur during the InBody use/test.

01. Customer Service Information
: See the customer service contact information saved under the Setup of the Administrator Menu '24. Customer Service Information'. Please contact the customer service if your problem cannot be resolved through the 'Troubleshooting' or if you need further inquiries regarding the InBody Test.

02. Results Sheet does not print.
: View the troubleshooting checklist when the Results Sheet does not print by the printer connected to the InBody.

03. Weight is not being measured.
: View the troubleshooting checklist when weight is not being measured, after stepping on to the InBody footplate.

04. Weight measurement seems to be inaccurate.
: View the troubleshooting checklist when the weight measurement seems to be inaccurate.

05. The InBody Test has stopped.
: View the troubleshooting checklist when the InBody Test has stopped.

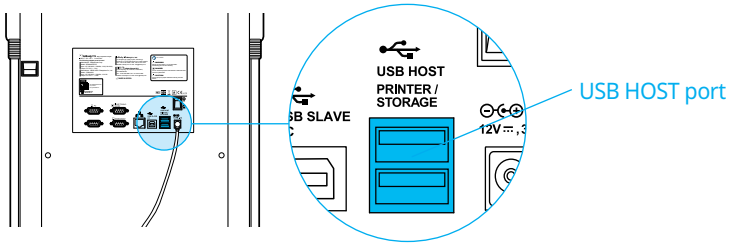
06. Test results seem to be inaccurate.
: View the troubleshooting checklist when the test results seem to be inaccurate.

E. Connecting Compatible Device

1. Printer

In order to print InBody Results Sheets, an InBody770 compatible printer is required.

1) First turn off the InBody770 and then the printer.
   * You may experience connection issues in connecting the printer to the InBody770 if the InBody is turned on.
2) Plug the USB cable provided with the printer into the USB HOST port on the rear panel of the InBody770 and plug the other end of the USB cable into the printer.



3) Turn on the printer.
4) Turn on the InBody770 and setup your printer under Setup of the Administrator Menu '09. Printer Setup'.
5) You can edit your printing settings under Setup of the Administrator Menu from '10. Results Sheet Types' through '15. Printing Alignment'.

2. Stadiometer

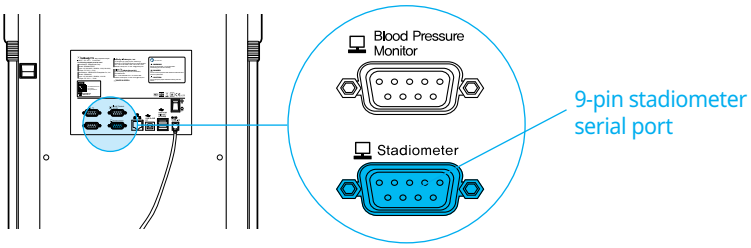
If a stadiometer is connected to the InBody770, the height values measured by the stadiometer will be sent directly to the InBody770.

* Always connect the stadiometer from InBody.

To connect the stadiometer to the InBody770, confirm the connection type.
There are two connection types to connect the stadiometer: 9-pin Serial port (Female, RS-232C) and Bluetooth.

* Connection methods would vary depending on the stadiometer models.

1) 9-pin Serial port (Female, RS-232C)
   ❶ First turn off the InBody770 and then the stadiometer.
      * You may experience connection issues in connecting the stadiometer to the InBody770 if the InBody is turned on.
   ❷ Plug the serial cable provided with the stadiometer to the 9-pin stadiometer serial port on the rear panel of the InBody770.



   ❸ Turn on the stadiometer.
   ❹ Turn on the InBody770. If the stadiometer is connected to the InBody770, the stadiometer icon (1) will appear on the top left corner of the screen when no one is on the footplate.

2) Bluetooth

❶ Press the [Administrator Menu] button on the screen, which appears when no one is on the footplate.

❷ Input the password (default password: 0000) to access the Administrator Menu.

❸ Select '19. Bluetooth' in Settings of the Administrator Menu.

❹ Enable the Bluetooth connection. Bluetooth can connect the InBody to LookinBody120 or other devices. Select 'Stadiometer' to connect via Bluetooth.

* Only one device can be connected via Bluetooth at a time. The InBody will disconnect any other device and then connect to the stadiometer.

❺ Turn on the stadiometer. The stadiometer's Bluetooth ID is located on the stadiometer.

❻ Select the stadiometer's Bluetooth ID, then press [Connect].

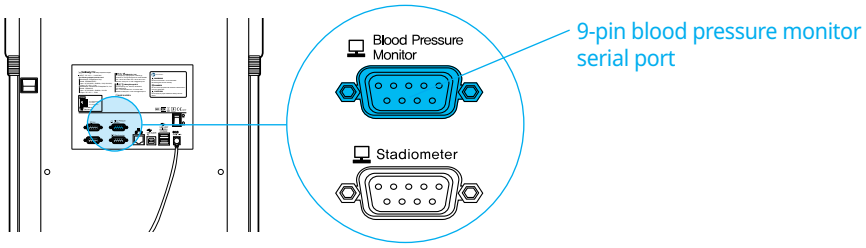
❼ If the stadiometer is connected to the InBody770, the stadiometer icon () will appear on the top left corner of the screen when no one is on the footplate.

3. Blood Pressure Monitor

If a blood pressure monitor is connected to the InBody770, the blood pressure values measured by the blood pressure monitor will be sent directly to the InBody770.

* Always connect a blood pressure monitor from InBody.
* If you select to print blood pressure measurements under Setup of the Administrator Menu '13. Outputs/Interpretations for Results Sheet', the blood pressure measurements will be printed on the InBody Results Sheet.

1) First turn off the InBody770 and then the blood pressure monitor.
   * You may experience connection issues in connecting the blood pressure monitor to the InBody770 if the InBody is turned on.
2) Plug the serial cable provided with the blood pressure monitor to the 9-pin blood pressure monitor serial port on the rear panel of the InBody770.



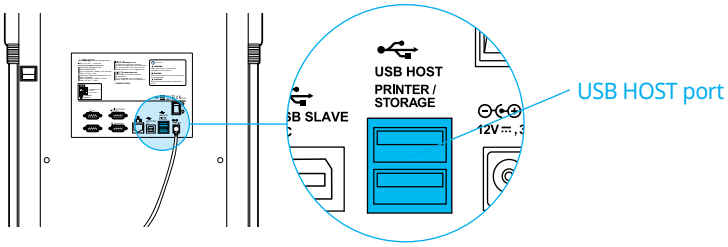
3) Turn on the blood pressure monitor.
4) Turn on the InBody770. If the blood pressure monitor is connected to the InBody770, the blood pressure monitor icon ( ) will appear on the top left corner of the screen when no one is on the footplate.

4. Barcode Reader

If a barcode reader is connected to the InBody770, the ID will be inputted automatically.

* If the InBody cannot recognize the barcode reader, please contact InBody.

1) First turn off the InBody770.
   * You may experience connection issues in connecting the barcode reader to the InBody770 if the InBody is turned on.
2) Plug the USB cable of the barcode reader into the USB HOST port on the rear panel of the InBody770.



3) Turn on the InBody770. If the barcode reader is connected to the InBody770, the barcode reader icon ( ) will appear on the top left corner of the screen when no one is on the footplate.

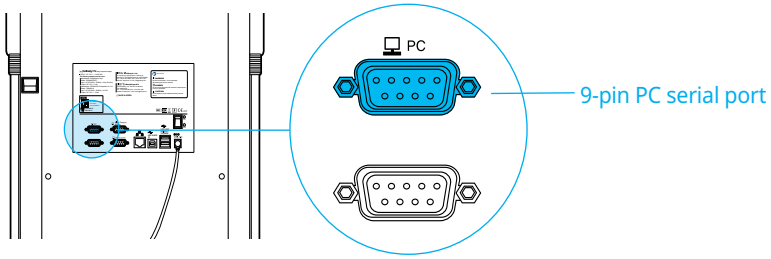
5. LookinBody

By connecting LookinBody to InBody770, you can manage your InBody data.

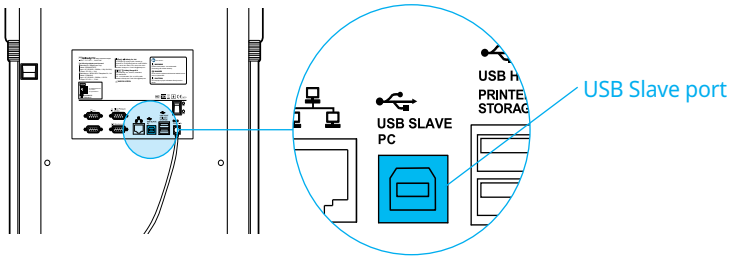
* If LookinBody is not recognized, please contact InBody Customer Service.

❶ Turn off InBody770.
When InBody770 is already turned on, LookinBody might not properly connect.

❷ If the PC has a serial port, connect the serial cable provided with LookinBody to the PC 9-pin serial terminal on the rear of the InBody770, and connect the other end of the serial cable to your PC.



If there is no serial port on your PC, you can connect a normal USB-AB type cable to the USB SLAVE port on the rear of InBody770 instead, and connect the other end of the USB cable to the USB port of the PC.



❸ Turn on InBody770. Then launch LookinBody installed on your PC and follow its instructions to connect to InBody770.

Caution

- When you are connecting the cable to the device, be careful not to move or pull the device. It may cause a weight measurement error.
- Avoid laying cables connecting to compatible devices where people frequently pass. This may cause individuals to trip over or become injured.
- Do not connect compatible devices that are not specified from InBody to the InBody770. Otherwise, it may cause malfunction.

F. IT security measures

InBody would like to clarify that the user access to the InBody770 is only granted for the authorized users, who have appropriately registered the passcode in the system setting menu of the InBody770. The actual steps for registering the access passcodes which is implemented to grant the access to only the authorized users are illustrated with the images of the passcode set ups as shown below:

G. Maintenance

⚠ Caution

- Place the hand electrodes on the hand electrode holder to prevent the electrodes from falling down. Dropped hand electrodes may cause malfunctions.
- Do not extend the handles of the hand electrodes beyond its limitation.
- Do not place any objects on the footplate.
- Do not apply excessive force on the equipment.
- Turn off the equipment if you are not using it for a day or longer.
- 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.

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.
- Children and people with limited mobility should be supervised or assisted when attempting to test on the InBody.
- After an individual with any kind of contagious disease or infection tests on the InBody, use the alcohol-based disinfectant (e.g., 70 % ethanol) to clean the equipment.
- Use caution when stepping onto and off of the device. Serious injuries can occur.

⚠ 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.
- Thoroughly wipe the palms and soles with the alcohol-based disinfectant (e.g., 70 % ethanol) 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 affecting test results.
- When stepping onto or off of the device, do not grab or shove the device. Serious injuries to you or damage to the device can occur.

B. Test Instructions

1. Step on the footplate when the screen below is shown.
   * The screens vary according to the Setup of the Administrator Menu '02. Self Mode/Professional Mode'.
     Professional Mode: An examiner is present and guiding the examinee through the InBody Test.
     Self Mode: The examinee takes the InBody Test following the instructions that are displayed on screen.

2. Weight measurement begins.

3. Input personal information.
   * Input height only if using Self Mode.

Professional Mode

Self Mode

4. Maintain proper posture to take the test.
   * Refer to 'C. Test Posture' for the proper posture.

5. The InBody Test begins.
   * InBody Information is shown if using Self Mode.

Professional Mode

Self Mode

6. When the test is completed, the results will be shown on screen.

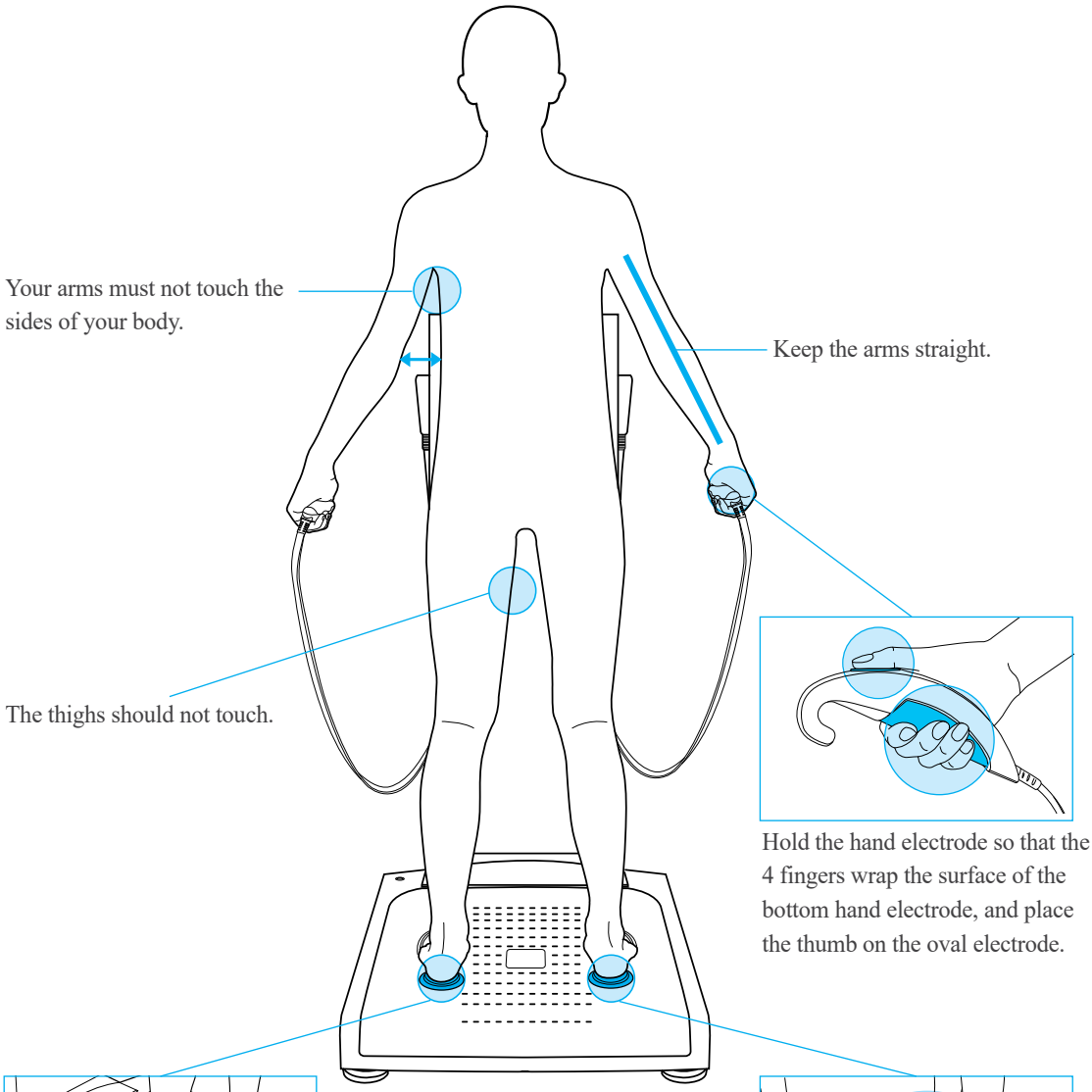
Professional Mode

Self Mode

C. Test Posture

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

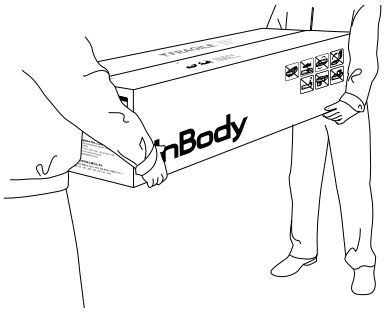
* The test will proceed when there is good electrical contact.



III. Transportation and Storage

A. Cautions during Transportation

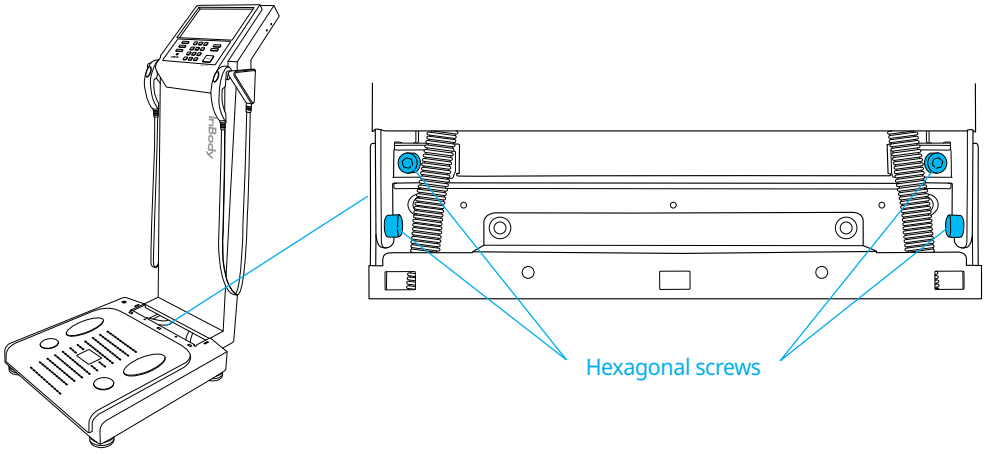
When transporting, have two people keep the InBody770 parallel to the ground.



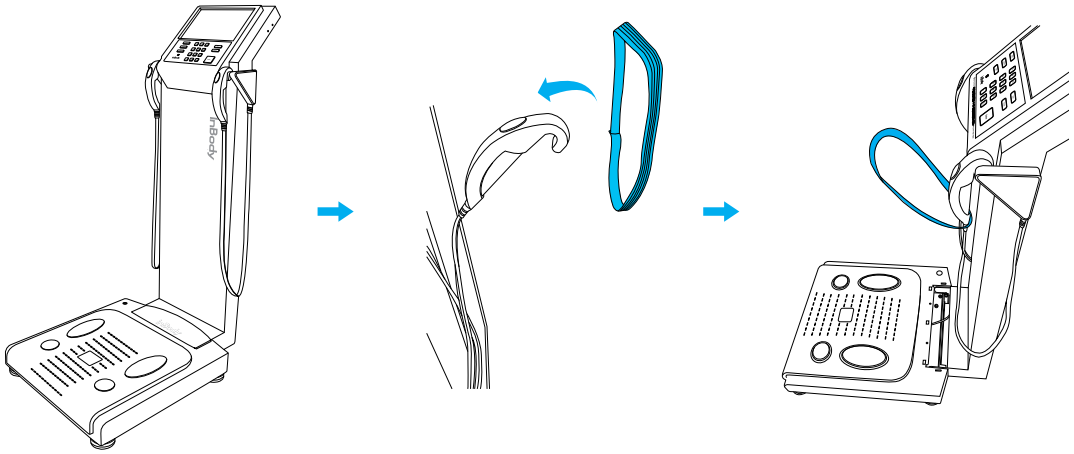
B. Repacking Instructions

Once the InBody770 is installed, avoid transporting the equipment. If it must be transported, repack it in the following sequence.

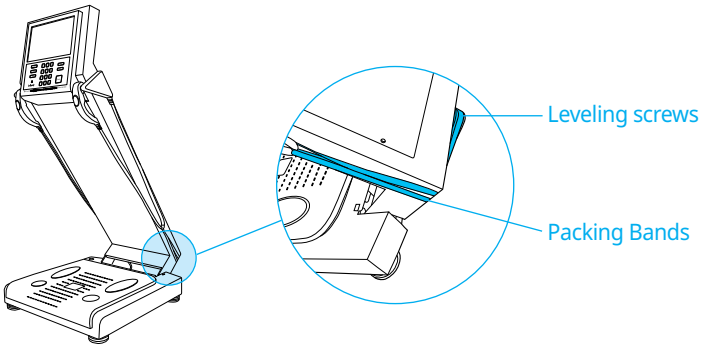
1. Turn off the InBody770.
2. Separate the connected Adapter, cords and cables from the equipment. Place both hand electrodes on the hand electrode holders.
3. Loosen the hexagonal screws which are located on the joints of the InBody770 to counter-clockwise using the Hexagonal Wrench.



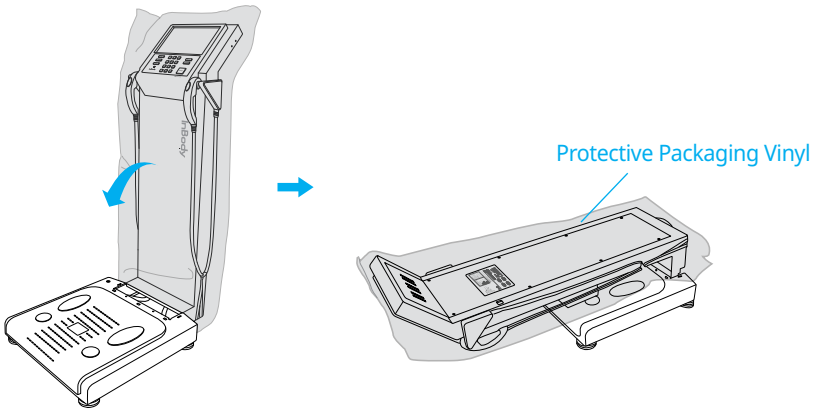
4. Please refer to the following illustrations to properly hang the Packing Bands on the hand electrodes.



5. Slightly lower the upper part of the InBody770 and hook the Packing Band to the leveling screws as illustrated below.



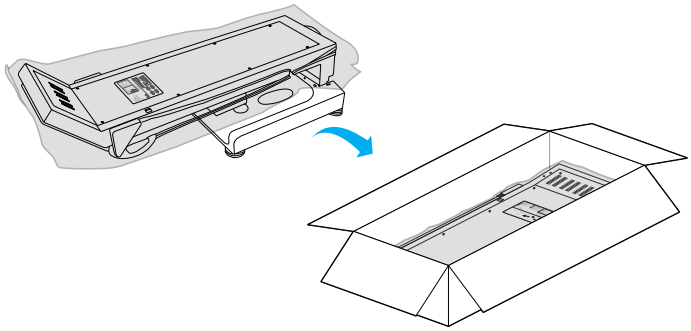
6. Cover the InBody770 with the polyethylene foam cover then fold down lower the upper part.



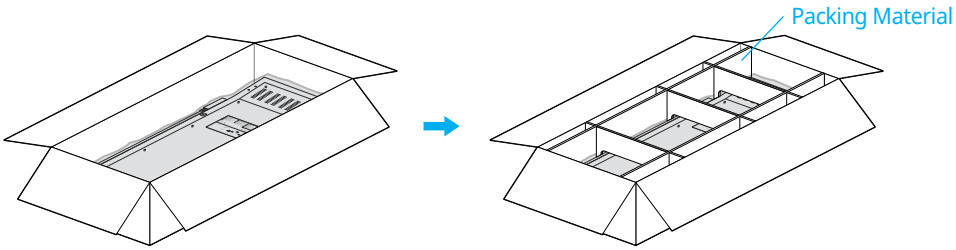
Caution

- Always use the protective packing materials provided by InBody when repacking.

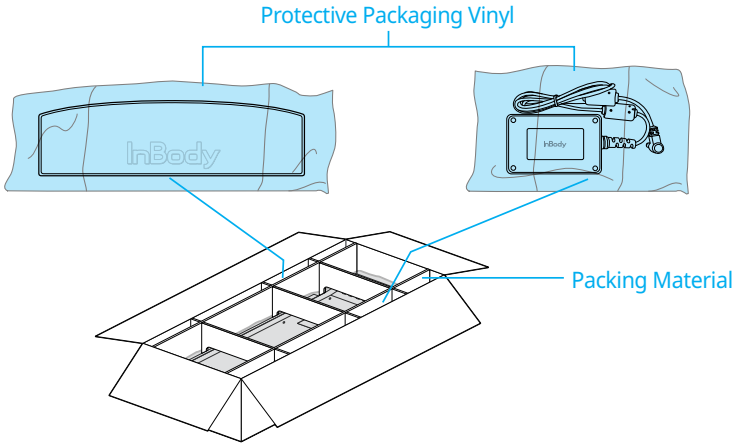
7. Place the InBody into the packing box.



8. Place the packing material over the equipment and tape up the packing box.



9. Place the Adapter into the protective packaging vinyl as illustrated below.
   Insert the Adapter and Hinge Cover into the packing material.



C. Transportation and Storage Environment

The InBody770 should be transported or stored under the following conditions.

Temperature range	–10 ~ 70 °C (14 ~ 158 °F)
Relative humidity	10 ~ 80 % RH (No Condensation)
Atmospheric pressure	50 ~ 106 kPa

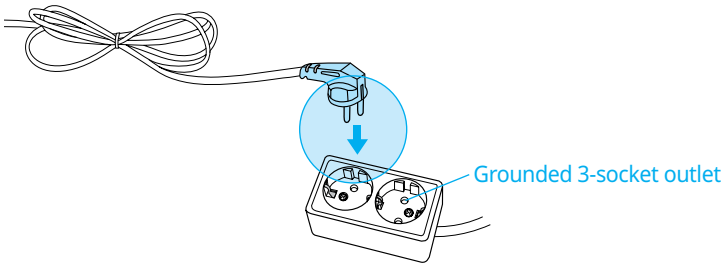
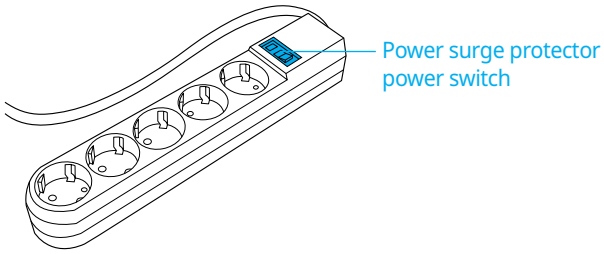
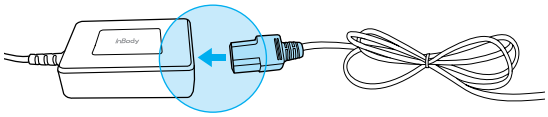
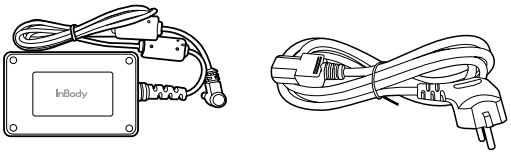
IV. Frequently Asked Questions (FAQ)

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

* Customer contact information can be found under Setup of the Administrator Menu '24. Customer Service Information'.

A. Regarding InBody

If a problem arises with the InBody770, you may first attempt to check the 'Troubleshooting' in the Administrator Menu. The InBody770 can help you diagnose and solve some problems. If your problem cannot be resolved through the 'Troubleshooting', please refer to the possible solutions below.

Question	Answer
• My InBody770 does not turn on.	• Insert the power plug completely into a grounded 3-socket outlet.  • When using a power surge protector, the equipment may not power on if the power switch on the power surge protector is turned off. Check the power surge protector which the power plug is connected to.  • The problem may occur if the power cord is not completely plugged into the adapter. Insert the power cord completely into the adapter.  • The problem may occur if you are using a power adapter that was not provided by InBody. Always connect a power adapter (DC 12 V, 3.4 A/3.34 A) provided by InBody.  Power adapter Power cord

Question	Answer
• My touchscreen is inaccurate or not responsive.	• Calibrate the touchscreen under Setup of the Administrator Menu '23. Touchscreen Alignment'. * Press firmly to optimize touchscreen response. • If you cannot enter the Administrator Menu due to touchscreen problems, please restart the InBody. The InBody stores the last touchscreen alignment and will automatically recall the previous touchscreen settings. The InBody can also recognize if its touchscreen alignment is off screen and will automatically take the user to the calibration screen after restarting.
• I would like to connect other equipment to the InBody770.	• Please refer to 'E. Connecting Printer, Stadiometer, Blood Pressure Monitor, and Barcode Reader' in section 'I. InBody770 Installation' in this User's Manual.

B. Regarding of Serious Incidents

If you are aware of a serious incident involving your product, or communicate a corrective action to you clients, you must report this as quickly as possible to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

The set deadlines in accordance with the MDR (EU) 2017/745 are:

Question	Answer
• When an accident occurs	• No later than within 15 calendar days after you have been informed of a serious incident. • No later than within 2 calendar days after you have been informed of a serious incident which implies a serious threat to public health. • No later than within 10 calendar days after you have been informed of a serious incident which has led to a death, or a serious deterioration in someone's state of health. You must report a serious incident before the corrective action to eliminate the risk is taken, except in an emergency, in which case you must immediately carry out a field safety corrective action.

C. 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
• Must socks or stockings be removed for the InBody Test?	• 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.
• Is it okay to wear accessories (jewelry, watch, rings, etc) or metal objects while taking the InBody Test?	• 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.
• Who cannot take the InBody Test or will have difficulties taking the InBody Test?	• 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. • Children, amputees, or the elderly, may have trouble testing if they cannot hold the hand electrodes or stand still on the foot electrodes.
• Can a person with metal implants in their body take the InBody Test?	• 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. • As the weight of clothes and other wear affects the results of the body composition analysis, it is strongly recommended to take off any heavy clothing or metallic wear. Except for the weight, jewelry does not effect the body composition analysis, as the contact point with the InBody770 are the hands and feet.
• I have limited mobility and cannot maintain proper posture for the InBody Test. How can I still be tested?	• It is impossible to test if an individual cannot maintain contact with the hand or foot electrodes. InBody has a line of products that conduct body composition analysis on bed ridden examinees that allow the patients to stay in bed. For more information, please contact InBody.
• Is the electric current harmful to the body?	• The physiological electric impedance method uses safe low level currents that is not harmful to the body. 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.
• How often should I take the InBody Test?	• Individuals who are undergoing any programs that may affect their body composition are strongly recommended to have the InBody Test done every two to four weeks. • Consistent testing will allow individuals to track and monitor their progress over time.
• What are the precautionary steps to ensure accuracy of the InBody Test?	• Please refer to ‘A. Precautionary Steps’ in section ‘II. InBody Test’ in this User’s Manual.

D. Residual Risks and Undesirable Side Effects

Undesirable side effects have been identified as general allergies that can be associated with the skin contact of the metal surface during the clinical use of the InBody770. Upon the comprehensive risk management, the metal patient contacting material of the stainless steel has been evaluated with ISO-10993 biocompatibility testing, particularly with the skin sensitization testing, which has resulted in the favorable biocompatibility test results. In addition, the following contraindication statement has been added to this IFU:

Individuals with known metal allergies against stainless steel materials shall not use the equipment.

V. Others

* The InBody770 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 following are the names and functions of each part of the InBody.
* Please inspect each component of the InBody770 for damage prior to installation.

1. Upper Part

❶ 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.

❷ Hand electrode cable: Supports the hand electrode and encloses the wiring for the electrode.

❸ Body: Connects the upper part of the equipment to the lower part.

❹ LCD screen: Shows each stage of the test, instructions, test results, etc. You can touch the screen to input the data required for the test, configure settings, or view test results.

❺ Number keypad: Used for inputting age, height, and other number-based data.

❻ Setup button: Used for entering 'Setup' under the Administrator Menu when no one is on the footplate.

❼ Function button: Used for entering 'Troubleshooting' under the Administrator Menu when no one is on the footplate.

❽ Print button: Used for printing the test results.

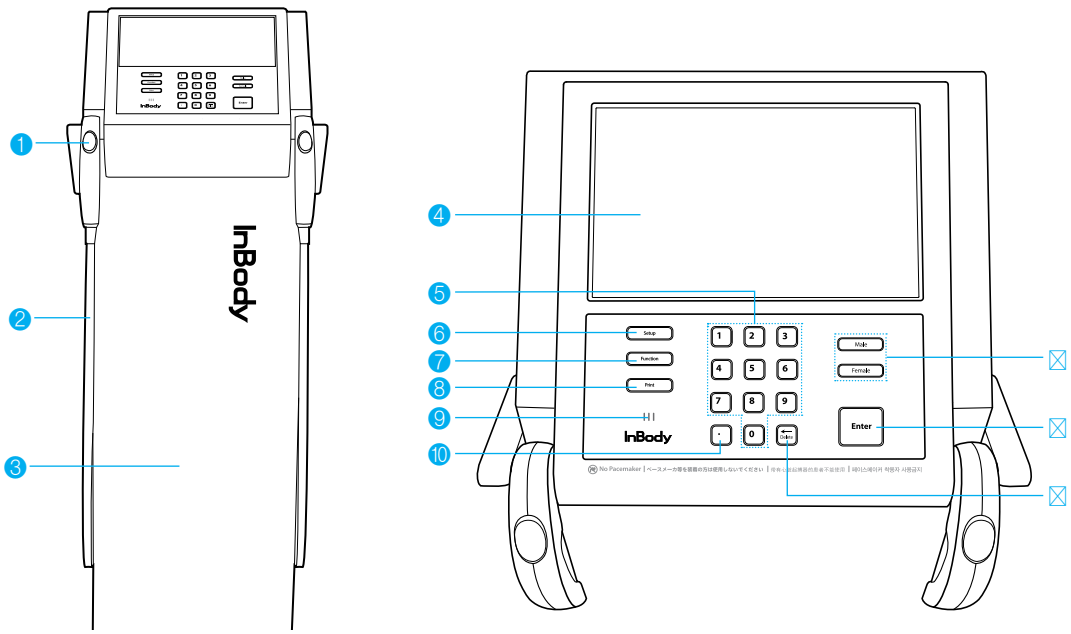
❾ Speaker: Provides audible indication for test in progress, test complete, and successfully saved setting changes.

❿ Decimal point button: Used for inputting the decimal point in ID, height, age, or weight.

☒ Gender buttons: Used for selecting gender (Male or Female).

☒ Enter button: Used to finish inputting data or to save changes in Administrator Menu.

☒ Delete button: Used for deleting inputted data.



2. Footplate

❶ Front sole electrode: The examinee makes contact with this electrode by stepping with the front part of their foot.

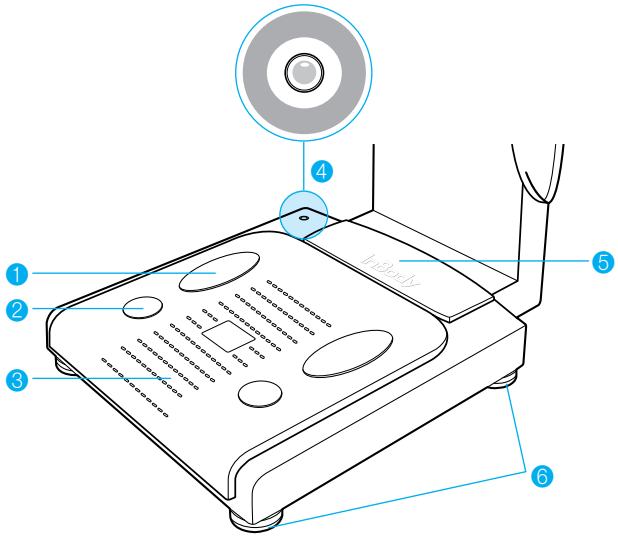
❷ Rear sole electrode: The examinee makes contact with this electrode by stepping with the heel of their foot.

❸ Footplate: This is connected to the scale, which measures the examinee's weight.

❹ Level indicator: Indicates the current horizontal level of the InBody770.

❺ Hinge Cover: Joins the upper part and lower part of the equipment together.

❻ Leveling screws: Used for adjusting the horizontal level of the equipment.



3. Rear Panel

❶ Rear cover: Designed to be opened only by InBody service personnel for checking internal circuits, etc.

❷ 9-pin blood pressure monitor serial port (Female, RS-232C): Used for connecting the InBody770S to a blood pressure monitor.

* Only compatible with a InBody blood pressure monitor.

❸ 9-pin PC serial port (Female, RS-232C): Used for connecting the InBody770S to LookinBody120 installed on the computer.

* The InBody770S can be connected to LookinBody120 installed on a computer using one of the ports ❸, ❺, or ❻.

❹ 9-pin stadiometer serial port (Female, RS-232C): Used for connecting the InBody770S to a stadiometer.

* Only compatible with a InBody stadiometer.

❺ LAN port: Used for connecting the InBody770S to LookinBody120 installed on a computer.

* The InBody770S can be connected to LookinBody120 installed on a computer using one of the ports ❸, ❺, or ❻.

❻ USB SLAVE port: Used for connecting the InBody770S to LookinBody120 installed on a computer.

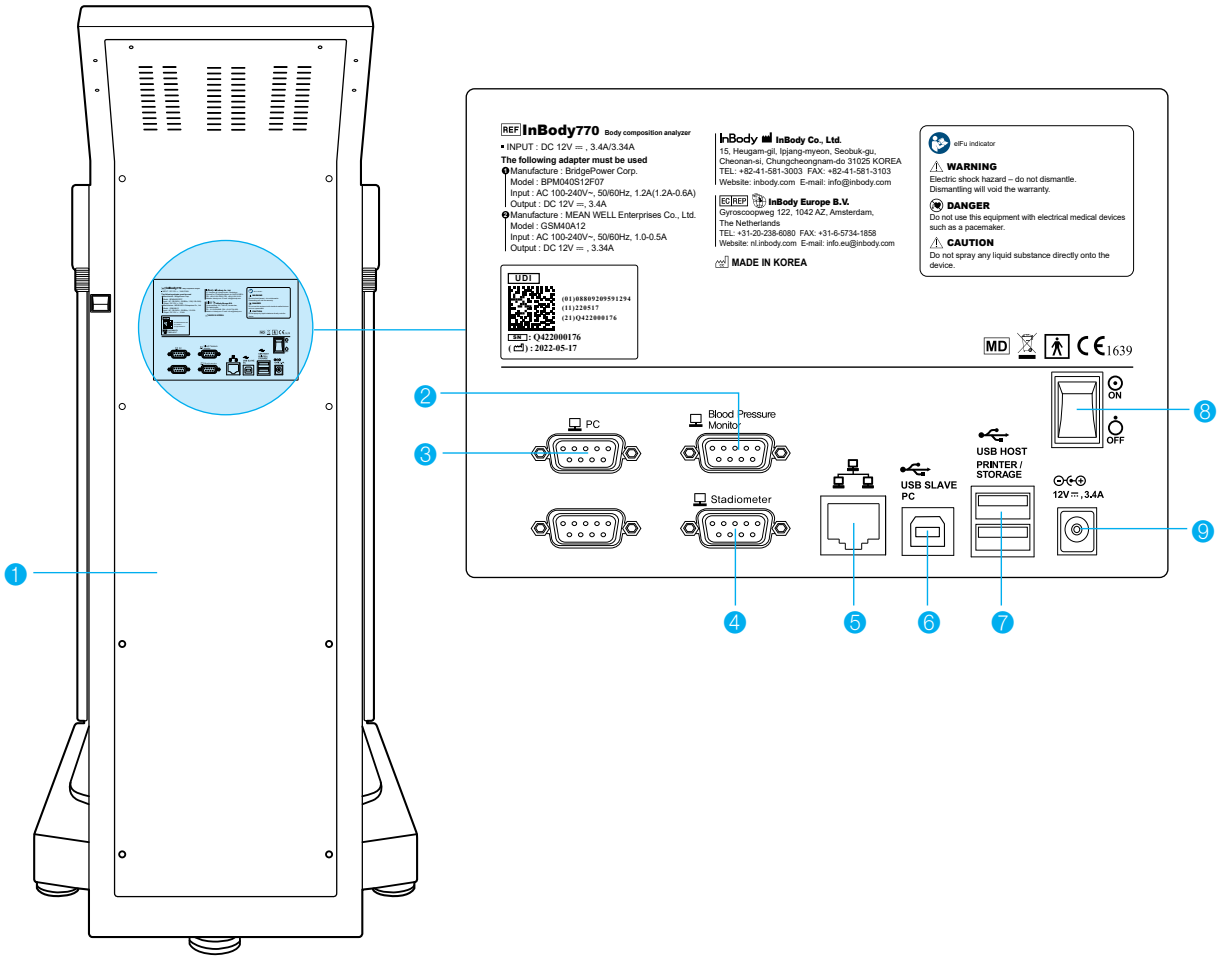
* The InBody770S can be connected to LookinBody120 installed on a computer using one of the ports ❸, ❺, or ❻.

❼ USB HOST port: Used for connecting to a printer, a barcode reader, or a USB Thumb Drive.

❽ Power switch: Used for turning on/off the equipment.

❾ Power input port: Used for connecting to the power adapter.

* Always use the specified adapter provided by InBody as it is a part of the InBody770S. Using other adapters may result in malfunction of the InBody770S.

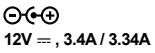


B. Safety Information

Indicators

	9-pin serial port (Female, RS-232C)
	LAN port (Ethernet)
	USB port (HOST, SLAVE)

Safety Symbols

	Dangerous High Voltage
	Warning, Caution
	BF Type Equipment
	Adapter
	Power On
	Power Off

Etc. Symbols

	European Conformity	SN	Serial number
	Manufacturer		Direct current
EC REP	Authorized representative in the EUROPEAN COMMUNTY		Operating instructions
MD	Medical Device	UDI	Unique Device Identifier
REF	Catalogue number		Importer
	Country of manufacture		Do not disassemble the product arbitrarily.

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.

WARNING

Electric shock hazard – do not dismantle.

Dismantling will void the warranty.

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.

CAUTION

No excessive force on shoulder joint

Ne pas appliquer de force excessive sur les bars articulés.

B-1. Cleaning

Use the alcohol-based disinfectant (e.g., 70 % ethanol) for 1 minute to clean the surfaces of the device.

B-2. Disinfecting

1. Use the alcohol-based disinfectant (e.g., 70 % ethanol).
2. Follow the instructions on the disinfectant.
3. Disinfect the device: Comply with the intervals specified in the below table.

Interval	Component
Before every measurement	Hand electrodes and Foot electrodes
After every measurement	Hand electrodes and Foot electrodes

C. 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
- EMC Emission: Class B
- Degree of protection against water: IPX0

D. Specifications

Bioelectrical Impedance Analysis (BIA) Measurement Items	Bioelectrical Impedance (Z)	30 Impedance Measurements by Using 6 Different Frequencies (1kH, 5 kHz, 50 kHz, 250 kHz, 500 kHz, 1000 kHz) at Each of 5 Segments (Right Arm, Left Arm, Trunk, Right Leg, and Left Leg)
	Phase Angle (°)	15 Phase Angle Measurements by Using 3 Different Frequencies (5 kHz, 50 kHz, 250 kHz) at Each of 5 Segments (Right Arm, Left Arm, Trunk, Right Leg, and Left Leg)
Electrode Method	Tetrapolar 8-Point Tactile Electrodes	
Measurement Method	Direct Segmental Multi-frequency Bioelectrical Impedance Analysis Method (DSM-BIA) Simultaneous Multi-frequency Impedance Measurement (SMFIM)	
Body Composition Calculation	No Empirical Estimation	
Outputs (InBody Results Sheet)	Results and Interpretations • Body Composition Analysis (Total Body Water, Protein, Soft Lean Mass, Minerals, Fat Free Mass, Body Fat Mass, Weight) • Muscle-Fat Analysis (Weight, Skeletal Muscle Mass, Body Fat Mass) • Obesity Analysis (Body Mass Index, Percent Body Fat) • Segmental Lean Analysis (Based on ideal weight/Based on current weight: Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • ECW Ratio Analysis (ECW Ratio) • Body Composition History (Weight, Skeletal Muscle Mass, Percent Body Fat, ECW Ratio) • InBody Score • Visceral Fat Area (Graph) • Body Type (Based on BMI/Percent Body Fat: Athletic Shape, Slightly Obese, Obesity, Muscular Shape, Average, Slightly Obese, Slim Muscular, Slim Sarcopenic Obesity, Thin, Slightly Thin) • Weight Control (Target Weight, Weight Control, Fat Control, Muscle Control) • Nutrition Evaluation (Protein, Minerals, Fat Mass) • Obesity Evaluation (BMI, Percent Body Fat) • Body Balance Evaluation (Upper, Lower, Upper-Lower) • Segmental Fat Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Segmental Body Water Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Segmental ICW Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Segmental ECW Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Segmental Circumference (Neck, Chest, Abdomen, Hip, Right Arm, Left Arm, Right Thigh, Left Thigh) • Waist-Hip Ratio (Graph) • Visceral Fat Level (Graph) • Research Parameters (Intracellular Water, Extracellular Water, Skeletal Muscle Mass, Basal Metabolic Rate, Waist-Hip Ratio, Waist Circumference, Visceral Fat Level, Visceral Fat Area, Obesity Degree, Bone Mineral Content, Body Cell Mass, Arm Circumference, Arm Muscle Circumference, FFMI, FMI)	

	Results Interpretation QR Code Reactance (5 kHz, 50 kHz, 250 kHz) Whole Body Phase Angle (50 kHz) Segmental Phase Angle (50 kHz, Right Arm, Left Arm, Trunk, Right Leg, Left Leg) Impedance (Each segment and each frequency)
Outputs (InBody Result Sheet for Children)	Results and Interpretations • Body Composition Analysis (Total Body Water, Protein, Minerals, Body Fat Mass, Weight) • Muscle-Fat Analysis (Weight, Skeletal Muscle Mass, Body Fat Mass) • Obesity Analysis (Body Mass Index, Percent Body Fat) • Growth Graph (Height, Weight, BMI) • Body Composition History (Height, Weight, Skeletal Muscle Mass, Percent Body Fat) • Growth Score • Nutrition Evaluation (Protein, Minerals, Fat Mass) • Obesity Evaluation (BMI, Percent Body Fat) • Body Balance (Upper, Lower, Upper-Lower) • Segmental Lean Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Segmental Body Water Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Research Parameters (Intracellular Water, Extracellular Water, Basal Metabolic Rate, Child Obesity Degree, Bone Mineral Content, Body Cell Mass, FFMI, FMI) Results Interpretation QR Code Reactance (5 kHz, 50 kHz, 250 kHz) Whole Body Phase Angle (50 kHz) Segmental Phase Angle (50 kHz: Right Arm, Left Arm, Trunk, Right Leg, Left Leg) Impedance (Each segment and each frequency)
Outputs (Body Water Result Sheet)	Results and Interpretations • Body Water Composition (Total Body Water, Intracellular Water, Extracellular Water) • ECW Ratio Analysis (ECW Ratio) • Segmental Body Water Analysis (Graph, Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Segmental ECW Ratio Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Body Water Composition History (Weight, Total Body Water, Intracellular Water, Extracellular Water, ECW Ratio) • Segmental Body Water Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Segmental ICW Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Segmental ECW Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) • Body Composition Analysis (Protein, Minerals, Body Fat Mass, Soft Lean Mass, Bone Mineral Content) • Muscle-Fat Analysis (Weight, Skeletal Muscle Mass, Soft Lean Mass, Body Fat Mass) • Obesity Evaluation (BMI, Percent Body Fat) • Research Parameters (Basal Metabolic Rate, Waist-Hip Ratio, Waist Circumference, Visceral Fat Level, Visceral Fat Area, Obesity Degree, Body Cell Mass, Arm Circumference, Arm Muscle Circumference, TBW/FFM, FFMI, FMI) Results Interpretation QR Code Reactance (5 kHz, 50 kHz, 250 kHz) Whole Body Phase Angle (50 kHz) Segmental Phase Angle (50 kHz: Right Arm, Left Arm, Trunk, Right Leg, Left Leg) Impedance (Each segment and each frequency)
Compatible Device	Stadiometer from InBody and Blood pressure monitor from InBody
Logo Display	Name, Address, and Contact Information can be shown on the InBody Results Sheet.
Digital Results	LCD Monitor, Data management software LookinBody120

Type of Result Sheets	InBody Test Results Sheet, InBody Test Results Sheet for Children, Body Water Results Sheet		
Voice Guidance	Provides audible indication for test in progress, test complete, and successfully saved settings changes.		
Data Storage	Test results can be saved if the member ID is utilized. The InBody can save up to 100,000 results.		
Test Mode	Self Mode, Professional Mode		
Administrator Menu	Setup: Configure settings and manage data Troubleshooting: Additional information to help use the InBody770		
USB Thumb Drive	Copy the InBody770 data (can be viewed on Excel or LookinBody data management software), backup, or restore the InBody770 data		
Barcode Reader	The member ID will be automatically inputted when the barcode ID is scanned.		
Backup data	Backup data saved in the InBody by using a USB Thumb Drive, Restore results on the InBody from a backup file.		
Applied Rating Current	80μA (±10μA)		
Adapter	Bridgepower (BPM040S12F07)	Power Input	AC 100 - 240 V, 50/60 Hz, 1.2 A (1.2 A - 0.6 A)
		Power Output	DC 12 V ⎓ , 3.4 A
	Mean Well (GSM 40A12)	Power Input	AC 100 - 240 V, 50/60 Hz, 1.0 - 0.5 A
		Power Output	DC 12 V ⎓ , 3.34 A
Display Type	800 × 480 10.2inch Color TFT LCD		
Internal Interface	Touchscreen, Keypad		
External Interface	RS-232C 4 EA, USB HOST 2 EA, USB SLAVE 1 EA, LAN (10T) 1 EA, Bluetooth 1 EA, Wi-Fi 1 EA		
Compatible Printer	Laser/Inkjet PCL 3 or above and SPL		
Dimension	526 (W) × 854 (L) × 1175 (H): mm 20.7 (W) × 33.6 (L) × 46.3 (H): inch		
Equipment Weight	38 kg (83.8 lb)		
Test Duration	About 60 seconds		
Operation Environment	10 - 40 °C (50 - 104 °F), 30 - 75 % RH, 70 - 106 kPa		
Storage Environment	–10 - 70 °C (14 - 158 °F), 10 - 80 % RH, 50 - 106 kPa (No Condensation)		
Testing Weight Range	2 - 270 kg (4.4 - 595.2 lb)		
Age Range	3+ years		
Height Range	95 - 220 cm (3 ft 1.40 in - 7 ft 2.61 in)		

* Specifications are subject to be changed without prior notice.
* “QR Code” is registered trademark of DENSO WAVE INCORPORATED.

E. Guidance and Manufacturer's Declaration

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

Electromagnetic emissions		
Emissions test	Compliance	Electromagnetic environment
RF emissions CISPR 11	Group 1	The InBody device 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 B	The InBody device 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			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge IEC 61000-4-2	± 8 kV contact ± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV air	± 8 kV contact ± 2 kV, ± 4 kV, ± 8 kV, ± 15 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 % is recommended.
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	± 0.5 kV, ± 1 kV differential mode ± 0.5 kV, ± 1 kV, ± 2 kV common mode	± 0.5 kV, ± 1 kV differential mode ± 0.5 kV, ± 1 kV, ± 2 kV common mode	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	0 % U_T (100 % dip in U_T) for 0.5/1 cycles 70 % U_T (30 % dip in U_T) for 25/30 cycles 0 % U_T (100 % dip in U_T) for 250/300 cycles	0 % U_T (100 % dip in U_T) for 0.5/1 cycles 70 % U_T (30 % dip in U_T) for 25/30 cycles 0 % U_T (100 % dip in U_T) for 250/300 cycles	Mains power quality should be that of a typical commercial or hospital environment. If the user of this product requires continued operation during power mains interruptions, it is recommended that this product be powered from an uninterruptible power supply or a battery.

Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a commercial or hospital environment.

Recommended separation distances between portable and mobile communication equipment and InBody device

The InBody device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the InBody device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the InBody device as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter [W]	Separation distance according to frequency of transmitter [m]	
	IEC 60601-1-2: 2014	
	150 kHz to 80 MHz $d = 1.2\sqrt{P}$	80 MHz to 2.7 GHz $d = 2.0\sqrt{P}$
0.01	0.12	0.20
0.1	0.38	0.63
1	1.2	2.0
10	3.8	6.3
100	12	20

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1	At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.
NOTE 2	These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

Electromagnetic immunity			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6	3 V 150 kHz to 80 MHz	3 V	Portable and mobile RF communications equipment should not be used closer to any part of the Ultrasound System, including cables, than the recommended separation distance. This is calculated using the equation applicable to the frequency of the transmitter.
Radiated RF IEC 61000-4-3	6 Vrms 150 kHz - 80 MHz In ISM bands[1] amateur radio bands Bands[2] 10 V/m 80 MHz to 2.7 GHz	6 V 10 V/m	Recommended separation distance $d = 1.2\sqrt{P}$ IEC 60601-1-2:2014 d = 2.0 80 MHz to 2.7 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 meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[3] should be less than the compliance level in each frequency range.[4] Interference may occur in the vicinity of equipment marked with following symbol: 
NOTE 1	At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.		
NOTE 2	These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.		

1. The ISM (Industrial, Scientific and Medical) bands between 150 kHz and 80 MHz are 6.765 MHz to 6.795MHz; 13.553 MHz to 13.567 MHz; 26.957 MHz to 27.283 MHz; and 40.66 MHz to 40.70 MHz.
2. The amateur radio bands between 0.15 MHz and 80 MHz are 1.8 MHz to 2.0 MHz, 3,5 MHz to 4.0 MHz, 5.3 MHz to 5.4 MHz, 7 MHz to 7.3 MHz, 10.1 MHz to 10.15 MHz, 14 MHz to 14.2 MHz, 18.07 MHz to 18.17 MHz, 21.0 MHz to 21.4 MHz, 24.89 MHz to 24.99 MHz, 28.0 MHz to 29.7 MHz and 50.0 MHz to 54.0 MHz.
3. Field strength 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 InBody device is used exceeds the applicable RF compliance level above, the InBody device should be observed to verify normal operation. If abnormal performance is observed, additional measures maybe necessary, such as re-orienting or relocating the InBody device.
4. When the frequency range exceeds 150 kHz - 80 MHz, the electric field strength should be not higher than 3 V/m.

Electromagnetic emissions

The InBody device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. Portable RF communications equipment should be used no closer than 30 cm (12 inches) to any part of the InBody device. Otherwise, the performance of this equipment could be impaired.

Immunity test	Band	Service[5]	Modulation[6]	IEC60601 test level	Compliance level
Proximity fields from RF wireless Communications IEC61000-4-3	380 - 390 MHz	TETRA 400	Pulse modulation 18 Hz	27 V/m	27 V/m
	430 - 470 MHz	GMRS 460 FRS 460	FM[7] ± 5 kHz deviation 1 kHz sine	28 V/m	28 V/m
	704 - 787 MHz	LTE Band13, 17	Pulse modulation 217 Hz	Band	Band
	800 - 960 MHz	GSM800:900 TETRA 800 iDEN 820 CDMA 850 LTE Band 5	Pulse modulation 18 Hz	28 V/m	28 V/m
	1700 - 1990 MHz	GSM 1800 CDMA 1900 GSM 1900 DECT LTE Band 1,2,4,25 UMTS	Pulse modulation 217 Hz	28 V/m	28 V/m
	2400 - 2570 MHz	Bluetooth WLAN 802.11b/g/n RFID 2450 LTE Band	Pulse modulation 217 Hz	28 V/m	28 V/m
	5100 - 5800 MHz	WLAN 802.11a/n	Pulse modulation 217 Hz	9 V/m	9 V/m
NOTE	If it is necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1m. The 1m test distance is permitted by IEC 61000-4-3.				

5. For some services, only the uplink frequencies are included.
6. The carrier shall be modulated using a 50 % duty cycle square wave signal.
7. As an alternative to FM modulation, 50 % pulse modulation at 18 Hz may be used because while it does not represent actual modulation, it would be the worst case.

F. Key Performance Claims of InBody770

The key performance claims of InBody770 has been established as the correlation coefficient ratio (R) of Fat Free Mass (FFM), which is numerically defined as the R value shall be ≥ 0.80 (80%)

* Clinical Benefit

Using the InBody770 with the probability of harm occurring is more beneficial when compared to the severe harm that might occur from not using the Body Composition Analyzer of InBody (Models: InBody770). The Body Composition Analyzer of InBody (Models: InBody770) provides clinical benefits to support the aforementioned intended use, as the of InBody (Models: InBody770) in mainly used for healthy and acute or chronically ill populations in hospitals, medical practices and inpatient care facilities in accordance with national regulations. It can be used to assist in the assessment of nutritional status, obesity and muscle balance. Body composition analysis is important in preventive medicine since it provides the basis of appropriate physical activity and dietary habits for improving personal daily routine. It can be also usefully applied to follow-up studies of patients treated for various diseases.

The key performance claims of Inbody770 have been established as the correlation coefficient ratio (R) of Fat Free Mass (FFM), which is numerically defined as the R value shall be ≥ 0.80 (80%). Inaccurate measurements of the Fat Free Mass (FFM) could have a negative impact on further use of the body composition analysis data gathered from the clinical use of InBody770.

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