

# **BP170 / BP170B**

## **User's Manual**

### **BP170(B) User's Manual for Measurement Guide and Setup**

Thank you for purchasing the BP170(B). This user's manual describes all the features of the BP170(B). Please read before use and keep it in a safe place. By following the manual instructions, you will be able to use the BP170(B) more safely and effectively.

Please note the important information below before reading this manual.



### Warning

Failure to observe these precautions can result in personal injury or equipment damage.



### Caution

Failure to comply with safety precautions can damage the equipment.



### Note

Reading the notes can help you get the most out of your device your user experience.



### Avertissement

*Le non-respect de ses précautions peut causer des blessures ou des dommages à l'appareil.*



### Attention

*Le non-respect de ses précautions peut causer des dommages à l'appareil.*



### Remarque

*Se référer aux notes peut aider à améliorer l'utilisation de l'appareil.*

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Visit our website ([inbody.com](http://inbody.com)) to view and download additional information about the BP170(B). InBody Co.,Ltd. reserves the right to modify the appearance, specifications, etc. of this product to improve its quality, without prior notice.

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## Intended Use

The BP170(B) is a digital monitor intended for use in measuring blood pressure and pulse rate in user population with upper arm circumference ranging from 22cm to 42cm (9-inch to 17-inch). The systolic blood pressure and diastolic blood pressure are measured by non-invasive blood pressure (“NIBP”) measuring method. This device may provide useful clinical information about the current health status of not only the users who are diagnosed with hypertension but also those who are not diagnosed with hypertension. Warnings and cautions described in the user’s manual should be observed at all times.

\* This device is designed for use in home environment.

\* Measured results should be interpreted by experienced medical professionals and should not be used for diagnosis, medication, or any other treatment performed at consumer’s discretion without valid prescription.

# BP170 / BP170B

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## Warranty

# I. Introduction

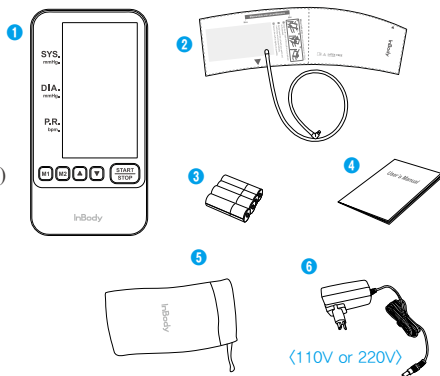
The InBody BP170(B) is a compact and easy-to-use automatic blood pressure monitor.

The BP170(B) operates on the oscillometric principle to measure your blood pressure and pulse rate.

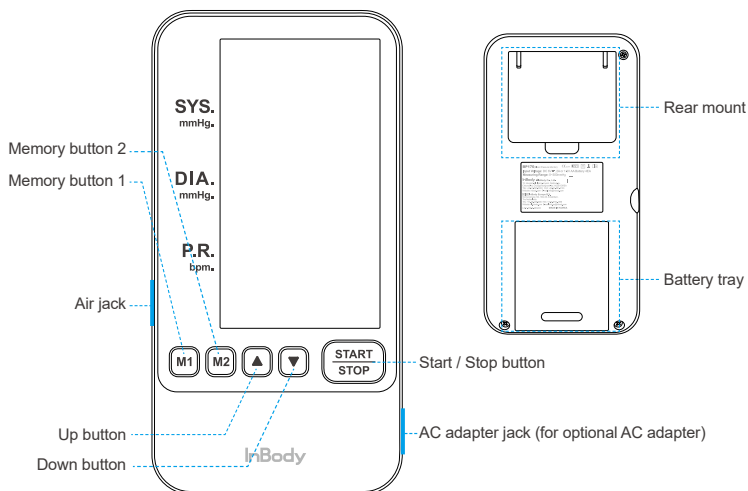
The BP170(B) is primarily designed for general household use and for individuals who need regular blood pressure management.

## \* Product Components

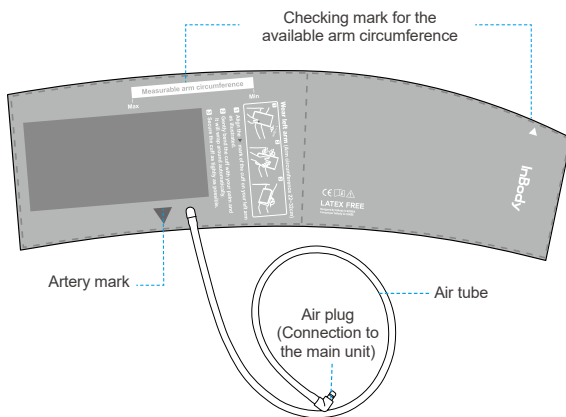
- 1 Main unit (1EA)
- 2 One-touch cuff (1EA)
- 3 "AA" alkaline batteries (4EA)
- 4 User's manual (1EA)
- 5 Storage pouch (1EA)
- 6 AC adapter (110V or 220V) (Optional)



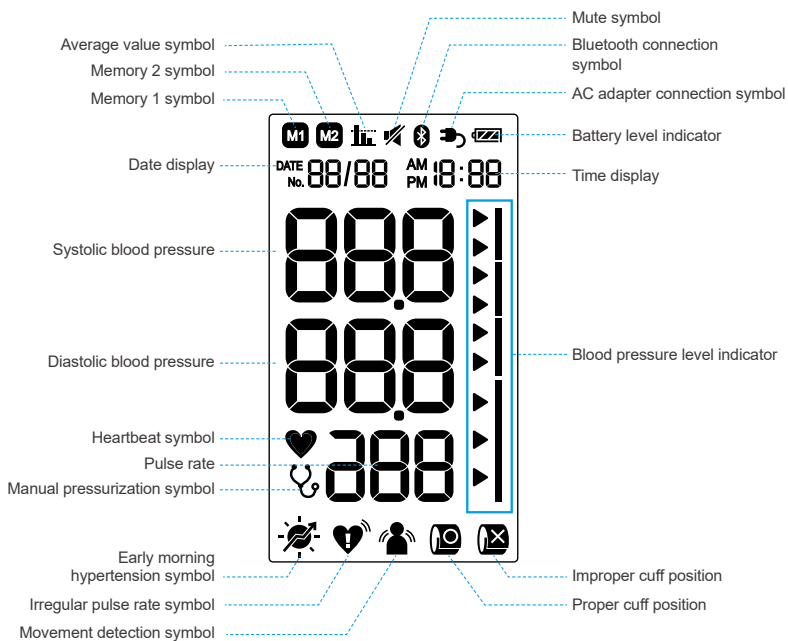
## \* Main Unit Parts



## \* Cuff Parts



## \* Display Screen Parts



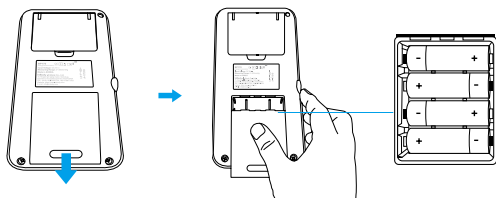
## II. Using the BP170(B)

### A. Preparing for Measurement

- \* If the BP170(B) has been stored in a hot or cold environment, keep it at room temperature for at least one hour.

#### (1) Inserting / replacing the batteries

- 1 Remove the battery cover.
- 2 Insert four (4) "AA" alkaline batteries in the correct orientation as indicated on the battery tray.
- 3 Close the battery cover.



#### Caution


- Be careful with the polarity + and - of the batteries during insertion.
- Dispose of used batteries in a designated location.
- Use 1.5V "AA" alkaline or manganese batteries.
- Replace four batteries with new batteries of the same brand and model.
- When inserting the batteries, refer to the guideline in the battery tray and the image above for the correct orientation.
- Check battery level shown on the battery level indicator after inserting the first "AA" batteries.
- In case of low battery level, refer to the battery replacement (page 8) to replace the batteries.

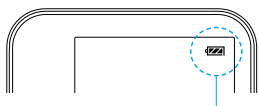
#### Attention


- Portez attention à la polarité des piles + et - lorsque vous les insérez.
- Disposez des piles usagées uniquement aux endroits désignés à cette fin.
- Utilisez des piles alcalines ou au manganèse de taille AA 1.5 V.
- Utilisez des piles de la même marque et du même modèle au moment de les remplacer.
- Lorsque vous insérez les piles, référez-vous aux directives inscrites à l'intérieur du panneau et à l'image au-dessus pour insérer les piles dans la bonne direction.
- Vérifiez le niveau de charge des piles affiché sur l'icône des piles après avoir inséré les premières piles AA.
- Si le niveau de charge s'avérait faible, lisez les directives de remplacement (p. 8), et utilisez l'appareil BP170 seulement une fois les piles remplacées.



## (2) Battery level indicator

- The user may check the remaining battery level in the upper right corner of the screen while using the blood pressure monitor.
- When using the AC adapter, the AC adapter connection symbol (  ) displays instead of the battery level indicator



 : The capacity of the batteries is sufficient.

 : Battery level is low.

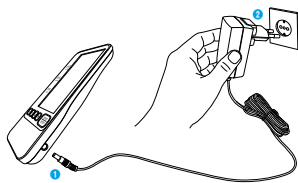
 : Battery is depleted.

Please replace with new batteries.

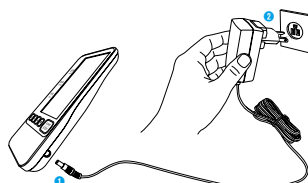
## (3) Using the AC adapter (Optional)

- 1 Insert the AC adapter plug into the AC adapter jack on the side of the main unit.
- 2 Plug the AC adapter into an electrical outlet.

\*When the BP170(B) is used with the AC adapter connected, "AA" alkaline batteries are not required to operate the BP170(B).



<220V>



<110V>

### Caution

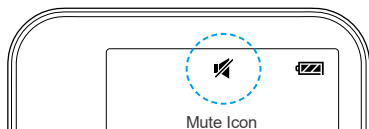
- To disconnect the AC adapter, unplug the AC adapter from the electrical outlet first and then remove the AC adapter from the main unit of the BP170(B).

### Attention

- Lors de la déconnexion de l'adaptateur CA, d'abord déconnecter l'adaptateur CA de la prise, et ensuite déconnecter l'adaptateur CA de la partie principale du BP170(B).

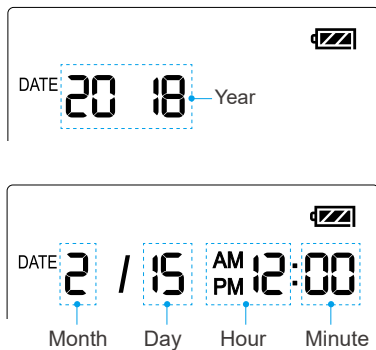
## (4) Mute setting

To turn off the beep sound, press and hold  and  buttons at the same time for more than 3 seconds while the blood pressure monitor is turned off.



## (5) Date/Time Setting

- 1 When the batteries are inserted into the blood pressure monitor or the AC adapter is connected, the blood pressure monitor is automatically turned on, and the date and time can be set.
- 2 Set the date and time in the order of year, month, day, hour, and minute.  
(The number being set flashes.)
- 3 Use the ▲ or ▼ button to change year, and press the Start / Stop button to set the year.
- 4 Set the month, day, hour, and minute in the same way as described in step 3.



### **Caution**

\* AM: before noon PM: afternoon

- For proper blood pressure management, please set the date and time before using the BP170(B).
- If the user did not set the time or set it wrong, the early morning hypertension function may be incorrect.
- When the batteries are removed, the time will be initialized. To reset the time, remove the batteries and insert them again after waiting 10 seconds.
- For the BP170B, the date and time are automatically set by connecting data through application. (However, the time of previously measured data cannot be changed.)

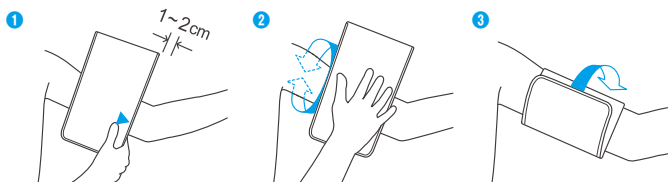
### **Attention**

- *Pour une gestion appropriée de vos données de tension artérielle, régler la date et l'heure avant d'utiliser le BP170(B).*
- *Si l'heure est mal réglée, la fonction Hypertension élevée matinale peut être inexacte.*
- *L'horloge est formatée lors du remplacement des piles. Pour réinitialiser l'horloge, enlever les quatre(4) piles et les réinsérer après 10 secondes.*
- *Pour le BP170B, l'horloge est réglée automatiquement lors de la connexion aux données par l'application. (Cependant, l'heure des données mesurées auparavant ne peut être changée.)*

## B. Blood Pressure Measurement

### (1) How to wear the one-touch cuff

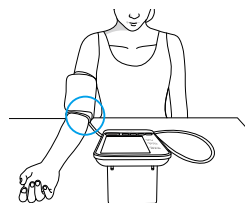
- Please remove thick clothing from your upper arm. It is recommended to take measurement on bare skin.
- Please sit down comfortably at a table.
- Connect the air plug of the cuff into the air jack located on the left side of the main unit.
- Please put on the cuff in the following order.



- 1 Place the ▼ mark of the cuff on the left arm as shown above.
- 2 Bend the cuff with your palm. The cuff will automatically wind around your arm.
- 3 Secure the cuff firmly around the arm.

#### ※ Caution for right arm measurement

Make sure to wear the cuff so that the air tube is placed on the inner arm.



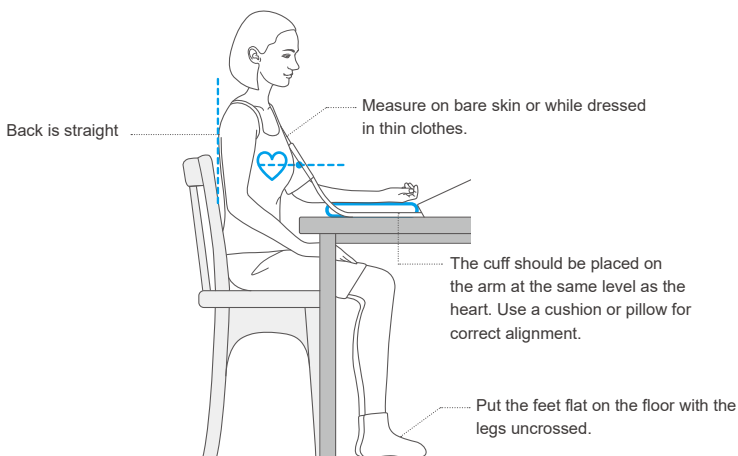
#### ! Caution

- For correct measurement, please wear the cuff properly.
- If the user wears the cuff too loosely, the measured blood pressure values may not be correct.
- M-size cuff is recommended for users with an arm circumference between 22 to 32 cm (9 to 13 in). If the user's arm circumference exceeds 32cm (13 in), please use L-size cuff (optional).
- Blood pressure may be affected by the measuring environment, posture, prior and/or current physical activity, as well as psychological state of the user. If you feel that your blood pressure is incorrect, please consult with a doctor.

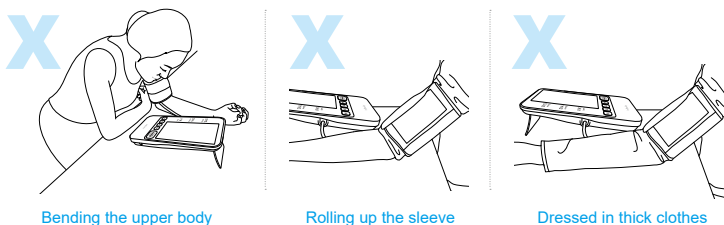
#### ! Attention

- *Pour une mesure correcte, porter la manchette convenablement.*
- *La valeur de la tension artérielle pourrait ne pas être exacte si la manchette est trop relâchée.*
- *Une manchette de taille M est recommandée pour les usagers ayant un tour de bras entre 22 et 32 cm (9 et 13 in). Si le tour de votre bras dépasse les 32cm (13 in), bien vouloir utiliser une manchette de taille L(optionnel).*
- *La tension artérielle peut être affectée par l'environnement de mesure, la posture, l'activité physique avant/ou pendant, ainsi que l'état psychologique de l'utilisateur. Si vous pensez que votre tension artérielle est incorrecte, veuillez consulter un médecin.*

## (2) Proper measurement posture



## (3) Improper measurement posture



### ⚠ Caution

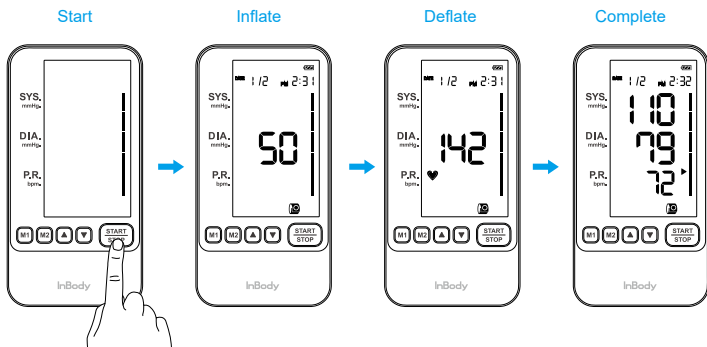
- The measurement posture may affect the blood pressure values.
- Please keep the proper measurement posture for accurate measurement.
- If the arm position is too low, place a towel or cushion under the elbow.
- Be in a resting state for at least 5 minutes prior to measurement in order for your body to be in a stable state.

### ⚠ Attention

- *La posture de mesure peut affecter les valeurs de la tension artérielle*
- *Maintenir une position de mesure appropriée pour une mesure exacte.*
- *Si la position du bras est trop basse, placer une serviette ou un coussin sous le coude.*
- *Être dans un état de repos pendant au moins 5 minutes avant la prise de mesure pour que l'état de votre corps soit stable.*

#### (4) Start measurement

- 1 Check again that the cuff is properly worn and measurement posture is correct
- 2 Press the Start / Stop button to start the blood pressure measurement.
- 3 The BP170(B) begins to inflate the cuff, and when it reaches a certain pressure point, it slowly deflates and measures the blood pressure.
- 4 When the measurement is complete, the blood pressure is displayed on the screen.



#### Note

- The user can adjust the pressure as desired by pressing ▲ or ▼ buttons during pressurization.
- Target pressure value during pressurization is displayed in the pulse rate area.
- If you are aware that your systolic blood pressure is 210mmHg or higher, set the target pressure to be 30-40mmHg higher than your systolic blood pressure.
- If an error number is shown on the screen during measurement (E1 to E7 or Lo) and thus measurement has failed, please refer to page 23.

#### Remarque

- L'utilisateur peut ajuster la pression à sa guise en appuyant sur les boutons ▲ ou ▼ pendant la pressurisation.
- La valeur de la pression cible pendant la pressurisation est affichée dans la zone du pouls.
- Si votre tension artérielle systolique est supérieure ou égale à 210 mmHg, fixer la te pression cible à 30-40 mmHg plus élevée que votre tension artérielle systolique.
- Si une note d'erreur s'affiche sur l'écran pendant la mesure (E1 à E7 ou Lo) et que la mesure échoue, veuillez vous référer à la page 23.

### Caution

- Do not pressurize more than necessary.
- Pain may occur if/when cuff is inflated too much.
- Do not talk or move during measurement.
- If user is in pain or has any problem during the measurement, press the Start / Stop button. If pressing the start / stop button does not lead to automatic rapid deflation, remove the air tube from the main unit of the BP170(B) or unwind the cuff on your arm.

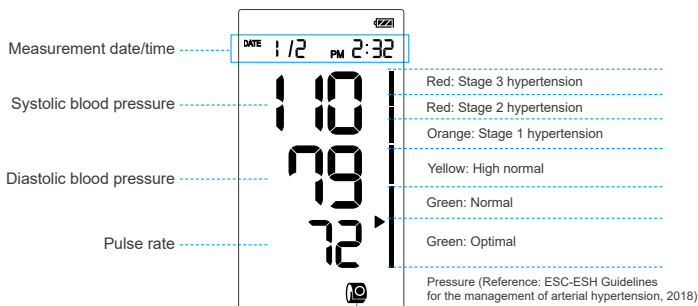
### Attention

- *Ne pas pressuriser plus que nécessaire.*
- *Trop pressuriser la manchette peut provoquer des douleurs.*
- *Ne pas parler ou bouger pendant la mesure.*
- *Si l'utilisateur a mal ou rencontre tout autre problème pendant la mesure, appuyer sur le bouton Arrêt / Marche. Si appuyer sur le bouton Arrêt / Marche ne libère pas rapidement la pression, déconnecter le tube à air de la partie principale du BP170(B) ou d'rouler la manchette de votre bras.*

#### (5) Check the measured values

- 1 Check the basic blood pressure readings and proper cuff status.

#### ESC/ESH

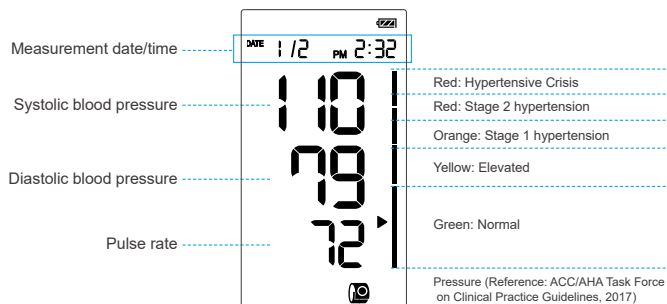


The cuff was properly worn.



The cuff was loosely worn.  
Please wear the cuff properly and measure again.  
Please remove any thick clothing before measuring again.

## ACC/AHA



The cuff was properly worn.



The cuff was loosely worn.  
Please wear the cuff properly and measure again.  
Please remove any thick clothing before measuring again.

- 2 Check for early morning hypertension, irregular pulse rate, and detected movement.  
The symbols shown in the bottom of the screen represent abnormality or unusuality of the measured values.



Early morning hypertension:  
High blood pressure in the morning.



Irregular pulse rate detection:  
Irregular pulse rate detected. Please measure again. If irregular pulse rate is continuously detected, check the average of three measurements.



Movement detection:  
Movement was detected during the measurement. Please measure again.

 **Note**

- Among measured values between 4a.m. and 10a.m., early morning hypertension is detected if the systolic blood pressure is greater than 135mmHg and/or the diastolic blood pressure is greater than 85mmHg.
- Irregular pulse rate is detected when there is a difference in the pulse of more than 25% of the reference pulse.
- Irregular pulse rate may be detected by physical movement during measurement.

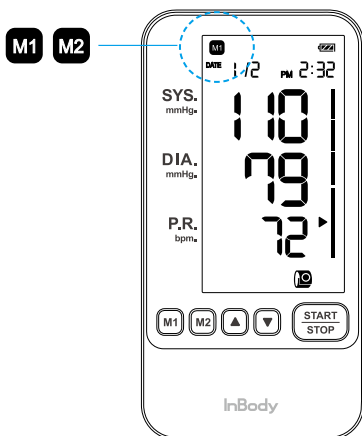
 **Remarque**

- *L'hypertension élevée matinale est détectée lorsque la mesure est prise entre 4h et 10h du matin, avec une tension artérielle systolique supérieure à 135 mmHg et une tension artérielle diastolique supérieure à 85 mmHg.*
- *Le rythme cardiaque irrégulier est détecté lorsqu'il y a une différence de pouls supérieure à 25 % du pouls de référence.*
- *Le rythme cardiaque irrégulier peut être détecté par un mouvement physique pendant la prise.*



## C. Saving Measurement Results

- (1) After finishing the blood pressure measurement, press **M1** or **M2** to save the results in Memory1 or Memory2. The same symbol as the button pressed is displayed at the top of the screen.
- (2) Press the Start / Stop button to complete the save, and the BP170(B) will shut down.



### Note

- M1 and M2 can store blood pressure measurement results up to 100 times each. If it exceeds 100 records, the oldest data is automatically deleted.
- After the measurement is complete, the BP170(B) will automatically shut down after one minute has elapsed without pressing any buttons.
- BP170B provides Health Device Profile function. The BP170B may save the measured data into a compatible mobile application.

### Remarque

- M1 et M2 peuvent sauvegarder jusqu'à 100 valeurs de mesure. Les données les plus anciennes seront automatiquement supprimées au-delà de la 100e valeur de mesure.
- Le BP170(B) s'éteindra automatiquement s'il reste oisif pendant une minute après la dernière mesure.
- Le BP170(B) fournit une fonction de Profil de santé sur l'appareil. Le BP170(B) peut sauvegarder des valeurs de tension artérielle prises en utilisant une application compatible.

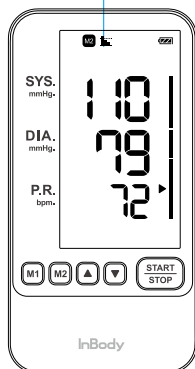
## D. Check the Stored Blood Pressure

- (1) With the BP170(B) turned off, press **M1** or **M2** to check the blood pressure results stored in the corresponding location.
- (2) When the button is pressed, the average blood pressure for the last three measurements is displayed on the screen. Press **▲** or **▼** button to check the stored results in turn.

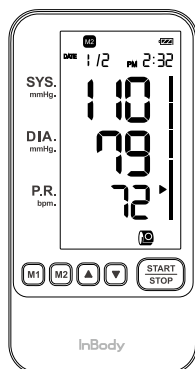
**▲** : To the older results

**▼** : To the more recent results

 Average value symbol



Display average results



Display stored results

### Note

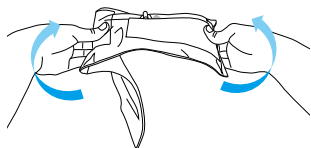
- Remove stored blood pressure measurement result.
  - To delete the result, press the save button (M1 or M2) and the Start / Stop button at the same time and hold for 3 seconds.
  - All records in the corresponding storage space (M1 or M2) will be deleted.
- The average blood pressure will not be displayed if the number of stored measurements is less than three.

### Remarque

- *Suppression des résultats de tension artérielle de la mémoire.*
  - *Pour le faire appuyer sur le bouton de sauvegarde (M1 ou M2) et sur le bouton Arrêt Marche en même temps et maintenir pendant trois secondes.*
  - *Tous les enregistrements contenus dans la zone correspondante de stockage (M1 et M2) rimés.*
- *La tension artérielle moyenne ne s'affichera pas si le nombre de mesures prises est inférieur à trois.*

### III. Storage

- (1) Always maintain the BP170(B) in a clean state.
- (2) Wipe any stains on the main unit with a smooth and lint-free cloth.
- (3) Unfold the one-touch cuff and place it in a storage pouch with the main unit.



#### Note

- To unfold the cuff, hold the both sides of the cuff and stretch them in the opposite direction that the cuff winds.
- If the cuff is contaminated and can no longer be used, please replace with a new cuff.
- Please contact Product Support to purchase a replacement cuff.

#### Remarque

- *Tenir la manchette aux extrémités et les étirer dans le sens contraire de l'enroulement.*
- *Si le manchon est contaminé, et qu'il ne peut plus être utilisé, veuillez le remplacer par un nouveau manchon*
- *Communiquez avec le représentant InBody de votre région pour vous procurer des manchons additionnels.*



The BP170(B) 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 range | 50 ~ 106 kPa                  |

### **Caution**

- Do not store the air tube with the tube bent or folded severely.
- Do not place any object on the BP170(B). Keep away from water, humid environments, direct sunlight, dust, bleach, corrosive gas, etc. during storage.
- Do not store in a place subject to vibration or impact.
- Do not use volatile liquids, benzene thinner, etc. when cleaning the main unit or cuff.
- Cuffs cannot be washed. Keep cuff away from water.
- Do not bend or press cuff with force. Cuff may be damaged.
- Use a soft and dry cloth, or a soft and moistened cloth and neutral soap to clean the monitor and cuff. The user may also use UV sterilizer to disinfect the cuff or follow hospital infection control protocols.

### **Attention**

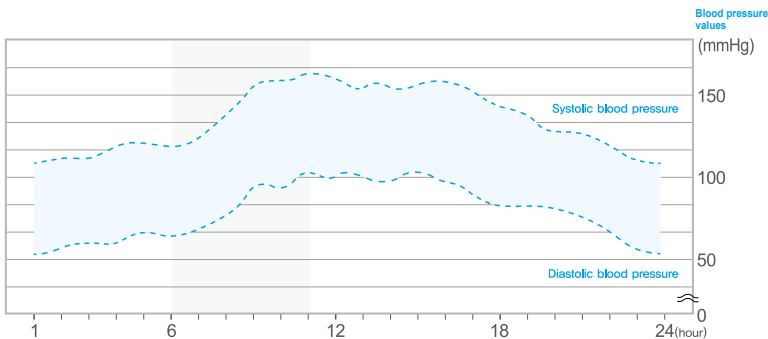
- *Ne pas ranger le tube courbé ou plié.*
- *Ne placer aucun objet sur le BP170(B). Tenir à distance de l'eau, d'un environnement humide, de la lumière directe du soleil, de la poussière, du javel, des gaz d'érosion, etc..., pendant le rangement.*
- *Ne pas ranger dans un lieu sujet aux vibrations ou à un impact.*
- *Ne pas utiliser des liquides volatiles, du benzène lors du nettoyage de la partie principale ou de la manchette.*
- *Les manchettes ne peuvent pas être lavées. Tenir la manchette à distance de l'eau.*
- *Ne pas plier ou presser fortement la manchette.*
- *Utilisez un linge sec et doux, ou un linge légèrement humide et un savonnetre pour nettoyer le moniteur et le manchon. Vous pouvez également utiliser un stérilisateur UV pour désinfecter le manchon ou suivre les protocoles de prévention des infections du milieu hospitalier.*

## IV. FAQ

### A. Regarding Measurement

You will find answers to frequently asked questions about the BP170(B) below. If you have any questions that are not answered in this section, please contact Product Support.

#### Question 1. The blood pressure values are different per every measurement.



**Answer 1.** Blood pressure may vary throughout the day, as shown in the figure above.

It is best to test at the same time each day under the same conditions.

**Answer 2.** Blood pressure may change in the following cases.

- Within 1 hour after meals
- After having alcohol or caffeine
- After smoking
- After taking a bath
- After exercise
- After urination and defecation
- When talking during the measurement
- When being anxious or not relaxed
- When testing in an unfamiliar location

### **Question 2. The blood pressure value is low compared to the value measured in the hospital.**

**Answer 1.** Since the user is psychologically stable at home, the blood pressure measurement is usually lower by 20 to 30mmHg than the reading taken at the hospital. It is important to know the measurement value in a stable state at home.

**Answer 2.** If the cuff position is high compared to the heart level during the measurement, the blood pressure may be lower. In such a case, place a pillow or cushion under the arm with the cuff.

### **Question 3. The blood pressure value is high compared to the value measured in the hospital.**

**Answer 1.** If cuff is worn too loosely during the measurement, the blood pressure may be measured high because the cuff pressure is not transmitted to the pulse. Tighten the cuff well, so that there is no gap between the cuff and the arm.

**Answer 2.** If the cuff position is low compared to the heart level during the measurement, the blood pressure may be elevated. Check the measurement posture once again.

**Answer 3.** If user has taken antihypertensive drugs, the blood pressure may be elevated as the drug effect drops down gradually. Please consult with a doctor.

### **Question 4. Which time period is ideal for the measurement?**

**Answer 1.** It is recommended to measure blood pressure before breakfast after getting up and urinating. If the user measures in the evening, it is recommended to measure blood pressure before bedtime.

**Answer 2.** It is recommended to measure blood pressure at the same time each day, because changes in blood pressure may vary from 30 to 50mmHg in a day.

### **Question 5. The blood pressure values are strange.**

**Answer 1.** If arrhythmia is severe, accurate measurement may be difficult. Check the average on the blood pressure values after measuring more than three times.

**Answer 2.** Measurement results may be inaccurate if the user moves during the measurement. Measure the blood pressure again in the correct posture without moving.

**Answer 3.** If user is not in a psychologically stable state, the measured values may be inaccurate.

**Question 6. The exhaust is too fast.**

**Answer 1.** When the cuff is worn too loosely, the exhaust may be faster. Please wear the cuff properly, and measure again.

**Question 7. There was no response even when the button was pressed.**

**Answer 1.** Check the battery insertion polarity.

**Answer 2.** The battery level may be insufficient.  
If the battery level is not displayed at the top of the screen, replace them with new batteries.

**Question 8. Pressurization is lower than the systolic blood pressure.**

**Answer 1.** If systolic blood pressure is higher than 210 mmHg, refer to “(4) Start measurement” on page 13 and pressurize manually.

**Question 9. No sound was heard from the BP170(B).**

**Answer 1.** The beep sound of the BP170(B) can be turned on and off. Press and hold the **M1** and **M2** buttons at the same time for 3 seconds.

## B. Troubleshooting

In this section, you will find troubleshooting information for device issues. When an error occurs, **Err** will display in the Diastolic blood pressure column.

| Error Display | Issue   | Potential Solution  |
|---------------|---|---|
| <b>Err 1</b>  | <p>Cuff failed to pressurize.</p> <ul style="list-style-type: none"><li>· Cuff not connected.</li><li>· Cuff worn too loosely.</li><li>· Cuff leaking air.</li></ul>  | <ul style="list-style-type: none"><li>· Check if the cuff is connected and worn properly.</li><li>· If air leaks from the cuff, replace it with a new unit.</li></ul>   |
| <b>Err 2</b>  | <p>The cuff pressure changes rapidly during pressurization.</p> <ul style="list-style-type: none"><li>· Intense movement during the measurement.</li><li>· The air tube is folded.</li><li>· The cuff is released.</li><li>· The air tube fell out.</li></ul> | <ul style="list-style-type: none"><li>· Check that the monitor is connected and the cuff is worn properly, and measure the blood pressure in a stable state.</li></ul>  |
| <b>Err 3</b>  | <p>The cuff pressure changes rapidly during the exhaust.</p> <ul style="list-style-type: none"><li>· Intense movement.</li><li>· The air tube is folded.</li><li>· The cuff is released.</li><li>· The air tube fell out.</li></ul>                           |   |
| <b>Err 4</b>  | <p>The indicator of blood pressure is too weak.</p> <ul style="list-style-type: none"><li>· Measured in thick clothes.</li><li>· The pulse is inherently weak.</li></ul>  | <ul style="list-style-type: none"><li>· If measurement was taken over clothing, remove the clothes and measure on bare skin.</li><li>· Check if the cuff was worn properly.</li></ul>   |
| <b>Err 5</b>  | <p>The pressure exceeds 300 mmHg.</p> <ul style="list-style-type: none"><li>· The user carried out the manual pressurization excessively.</li><li>· Intense movement during the measurement.</li></ul>  | <ul style="list-style-type: none"><li>· Perform manual pressurization properly. (Please pressurize 30 to 40 mmHg higher than expected pressure of the user's blood pressure.)</li><li>· Measure the blood pressure in a stable state.</li></ul> |
| <b>Err 6</b>  | <p>Adapter malfunction.</p>   | <ul style="list-style-type: none"><li>· Disconnect the connected adapter.</li><li>· Use the AC adapter for BP170(B) only.</li></ul>   |
| <b>Err 7</b>  | <p>Product malfunction.</p>   | <ul style="list-style-type: none"><li>· Please contact to Product Support.</li></ul>  |
| <b>Lo</b>     | <p>Low battery voltage.</p>   | <ul style="list-style-type: none"><li>· Replace with new batteries.</li></ul>   |



## V. Others

### A. Safety Information

#### Device Application

This product is a device for measuring blood pressure or pulse rate.

Please do not use for other purposes besides blood pressure and pulse measurement.

Do not use this device near Magnetic Resonance Imaging (MRI) Equipment.



#### Warning

##### General Information

1. Measured results can only be interpreted by experienced healthcare professionals and can not be used for diagnosis, medication, or other treatment performed at the consumer's discretion without a prescription.
2. Severe injury or death may occur if the air tube is wrapped around the neck. Please keep away from children.
3. Do not use the device if the user's arm is injured or under medical treatment.
4. Do not measure blood pressure on the arm that is undergoing an intravenous injection or transfusion.
5. Do not use device at the same time with other medical or electronic devices unless under the supervision of a skilled medical professional.
6. If the user has heart or blood vessel disease, please consult a doctor before using the device.
7. If the air tube connected to the cuff is twisted, the air in the cuff will not be released, which can cause injury due to blood flow interference.
8. Too frequent measurements can cause injury to the patient due to blood flow interference.
9. Wearing a cuff on a wound site may worsen the injury.
10. Applying pressure by wrapping the cuff around a limb with an open wound may interfere with the blood flow temporarily and cause injury.
11. If pressure is applied by wrapping the cuff around a limb where an arterio-venous (A-V) shunt is performed, it may interfere with the blood flow temporarily and cause injury.
12. Do not put pressure on the arm of the side where a mastectomy has been performed.
13. When pressure is applied to the cuff, a medical device performing surveillance in the same limb may temporarily lose its function.
14. It is necessary to confirm that the operation of the automatic blood pressure monitor does not result in damage to the blood circulation of the patient.

#### Battery Handling

1. Do not install batteries with wet hands.
2. Make sure that the polarities (+) and (-) are in the correct position.

#### AC Adapter Handling (Optional)

1. Do not plug in or pull out the AC Adapter with wet hands.
2. Serious injury or death may occur if the AC adapter wires become tangled around the neck. Keep out of reach of children.
3. Do not use a damaged AC adapter cord.
4. Do not use the AC adapter for any other purpose.

## **Avertissement**

### **Situation générale**

1. *Les résultats mesurés ne peuvent être interprétés que par un professionnel de santé expérimenté, et ne peuvent être utilisés pour un diagnostic, une prescription ou un traitement par le client sans aucune prescription médicale.*
2. *Si le tube à ai est enroulé autour du cou, il y a risque de mort par suffocation.*
3. *Ne pas utiliser si le bras du patient est blé ou sous traitement médical.*
4. *Ne pas prendre de tension artérielle sur un bras qui reçoit une injection intraveineuse ou une transfusion.*
5. *Do not use it at the same time with other medical devices or electronic devices except a skilled medical professional.*
6. *Si l'utilisateur a une maladie cardiaque ou des vaisseaux sanguins, bien vouloir l'utiliser après avoir consulté un médecin.*
7. *Si le tube connecté à la manchette est tordu, l'air dans la manchette ne sera pas relâché ce qui pourrait causer des blessures au patient dues à l'interférence avec le flux sanguin.*
8. *Des prises de mesure trop fréquentes peuvent causer des blessures au patient dues à l'interférence avec le flux sanguin.*
9. *Porter la manchette sur une blessure peut l'aggraver.*
10. *Appliquer la pression en mettant la manchette autour d'un membre où le vaisseau sanguin est touché et sur soin peut interférer avec le flux sanguin de manière temporaire et causer des blessures au patient.*
11. *Appliquer la pression en mettant la manchette autour d'un membre où un shunt artérioveineux est installé peut interférer avec le flux sanguin de manière temporaire et causer des blessures au patient.*
12. *Ne pas mettre de pression sur le bras du côté où la mastectomie a été effectuée.*
13. *Lorsque la pression est appliquée à la manchette, un appareil médical qui réalise une fonction de surveillance peut arrêter de fonctionner de manière temporaire.*
14. *Il est nécessaire de confirmer que le moniteur de tension artérielle automatique ne crée aucun dommage à la circulation du sang du patient.*

### **Manutention des piles**

1. *Ne pas installer les piles avec des mains mouillées.*
2. *S'assurer que les polarités (+) ou (-) sont correctes.*

### **Manutention de l'adaptateur CA (Optionnel)**

1. *Ne pas brancher ni débrancher l'adaptateur CA avec des mains mouillées.*
2. *Si les câbles de l'adaptateur CA s'enroulent autour du cou, il y a risque de mort par suffocation.*
3. *Si la corde de l'adaptateur CA est endommagée, ne pas l'utiliser.*
4. *Ne pas l'utiliser à d'autres fins excepté pour ce moniteur de tension artérielle.*



## Caution

### General Information

1. Consult a trained healthcare professional for a detailed interpretation the measured results.
2. Temporary bruising may happen due to the cuff compression during excessive repeated measurements.
3. Measure the blood pressure in a stable state. Do not measure in an unstable state, such as in a standing position or riding in a vehicle.
4. Do not disassemble or modify the equipment arbitrarily.
5. Only use the one-touch cuff provided with the BP170(B) for accurate measurements.
6. Keep the blood pressure monitor out of the reach of infants and children.
7. If the user feels any pain or abnormality during the measurement, stop the measurement immediately.
8. Do not use the BP170(B) in an environment where a physical shock may happen.
9. The performance of the BP170(B) may be affected by extreme temperatures, humidity and/or latitude. Please use the device in the appropriate environment.
10. Please use and store in an environment without pets.
11. Keep away from environments with water, humidity, lint, direct sunlight, dust, heat, steam, bleach, corrosive gas, etc. Improper maintenance may affect performance and product quality.

### Battery Handling

1. Use "AA" alkaline or manganese batteries.
2. Do not mix the new batteries with the old ones. Replace all four "AA" alkaline batteries at once.
3. Remove the batteries from the blood pressure monitor if it will not be used for a long period.
4. Dispose of used batteries in a designated location.

### AC Adapter Handling (Optional)

1. Plug the AC adapter fully into the electrical outlet.
2. When unplugging the AC adapter, grasp the adapter body and pull it out.
3. Do not pull on the cord.
4. Do not apply excessive force to the AC adapter body and plug.
5. Keep the AC adapter jack away from other objects.
6. Only use the AC adapter provided by InBody.
7. Unplug the AC adapter when not using the BP170(B) for a long time.

## **Safety Precautions**

1. Do not use or store the BP170(B) in an environment where the cuff and air tube can be pressed by heavy objects.
2. Be careful when using or storing the cuff and air tube, as they can be damaged by sharp edges.
3. Do not use the blood pressure monitor without wearing the cuff on the arm.
4. Dispose of the blood pressure monitor main unit, cuff parts, accessories, and optional accessories according to local regulations.

## **Protecting the Natural Environment**

1. For biologically hazardous parts and accessories, please dispose of them according to the laws of the authorities.



## Attention

### General Situation

1. Consulter un professionnel de santé formé pour les résultats des mesures.
2. Une hémorragie interne temporaire (égratignure) peut survenir dû à la compression de la manchette suite des mesures répétées excessives.
3. Prendre la mesure de la tension artérielle dans un état stable. Ne pas prendre de mesure pendant que vous bouger, êtes debout ou conduisez un véhicule.
4. Ne pas démonter ou modifier l'équipement de manière arbitraire.
5. Utiliser uniquement la manchette indiquée pour des mesures exactes.
6. Maintenir le moniteur de tension artérielle hors de portée des enfants.
7. Si l'utilisateur ressent une douleur ou une anomalie pendant la prise de mesure, arrêter la prise immédiatement.
8. Ne pas utiliser le BP170(B) s'il y a risque de choc physique.
9. La performance du BP170(B) peut être affecté par des températures extrêmes, l'humidité ou la latitude. Bien vouloir l'utiliser dans l'environnement idéal.
10. Bien vouloir l'utiliser et le garder dans un environnement sans animaux.
11. Bien vouloir le garder à distance de l'eau, de la peluche, de la lumière directe, de la chaleur, de la vapeur, du javel, des gaz d'érosion. ceci peut affecter la performance et la qualité.

### Piles Handling

1. Utiliser des piles alcalines ou au manganèse de taille AA.
2. Ne pas mélanger les piles neuves et vieilles. Remplacer les quatre piles à la fois au moment opportun.
3. En lever les piles du moniteur de tension artérielle s'il ne sera pas utiliser pendant une longue période.
4. Se débarrasser des piles usagées uniquement dans le lieu indiqué.

### Manutention de l'adaptateur CA (Optionnel)

1. Brancher complètement l'adaptateur CA dans la prise au mur.
2. Pour débrancher l'adaptateur CA, tenez le corps de l'adaptateur et tirez.
3. Ne pas tirer sur la corde électrique.
4. Ne pas appliquer une force excessive sur le corps de l'adaptateur et sa fiche.
5. Maintenir la fiche de l'adaptateur CA loin des matériaux étrangers.
6. N'utiliser que l'adaptateur CA fourni par InBody.
7. Débrancher l'adaptateur lorsque vous n'utiliserez pas le BP170(B) pendant un bon moment.

### **Précaution de sécurité**

- 1. Ne pas utiliser ou conserver le BP170 (B) dans un environnement où le tube à air et la manchette peuvent être appuyés par des objets lourds.*
- 2. Faire attention aux objets tranchants lors de l'utilisation et du stockage de la manchette et du tube à air.*
- 3. Ne pas utiliser le moniteur de tension artérielle sans attacher la manchette sur le bras.*
- 4. Se débarrasser de la partie principale du moniteur de tension artérielle, les parties de la manchette, les accessoires et les autres accessoires optionnels selon la réglementation en vigueur locale.*

### **Protection de l'environnement naturel**

- 1. Pour des parties et accessoires comportant un risque biologique, bien vouloir s'en débarrasser selon les lois des autorités.*

## B. Optional Equipment

- L-size one-touch cuff (only for arm-circumference 32~42cm (13 ~ 17 in))
- AC adapter for BP170(B)

## C. Safety Information

### Safety Information

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Warning / Caution

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Note

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BF-type equipment

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Power adapter connection terminal

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CLASS II equipment (AC adapter)

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### Other Symbols

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European conformity

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Operating instructions

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Manufacturer

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Authorized representative in the EUROPEAN COMMUNITY

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Serial number

---



NRTL mark (MET)

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Unique Device Identification

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\* MET symbols apply to products sold in the United States and Canada.

## D. Classification

- Type of protection against electric shock: Class 2 equipment or Internal power source-type equipment
- Level of protection against flooding: IP21
- Operation mode: Continuous Operation
- Level of protection against electric shock: BF-type equipment

## E. Specifications

|                              |  |
|------------------------------|--|
| Product Name<br>(Model Name) | Automatic electronic blood pressure monitor (BP170/BP170B)   |
| Display Method               | Digital display method (Custom segment LCD)  |
| Test Range                   | Pressure: 0-300 mmHg, Pulse : 30-240 bpm   |
| Degree of Precision          | Pressure: $\pm 3$ mmHg, Pulse: Within $\pm 3\%$  |
| Minimum Scale Unit           | 1mmHg  |
| Measurement Method           | Oscillometric method   |
| Measured Values              | Systolic blood pressure, Diastolic blood pressure, Pulse rate  |
| Pressurization               | Automatic pressurization method  |
| Depressurization             | Automatic exhaust method   |
| Exhaust                      | Automatic rapid exhaust method   |
| Power Supply                 | "AA" alkaline batteries or dedicated AC adapter (DC 6V)<br>input : AC 100-240V, 0.5A, 50/60Hz<br>output : DC 6V 2.0A |
| Battery life                 | Approximately 800 measurements   |
| Storage                      | Two 100 times blood pressure information storage   |
| Cuff                         | M-size cuff (Only for arm circumference 22~32cm (9 ~ 13 in))<br>Not made of natural rubber latex                     |
| Operating 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)  |
| IP classification            | IP21   |
| Dimension                    | Approx. 99 (W) × 26 (H) × 191 (L) mm<br>Approx. 3.9 (W) x 1.0 (H) x 7.5 (L) in                                       |
| Equipment Weight             | Approx: 379g (0.8 lb)<br>(Main unit: Approx. 257g (0.6 lb), Cuff: Approx. 122g (0.3 lb))                             |
| Package Weight               | Approx. 760g (1.7 lb)  |




|                       |                                  |
|-----------------------|----------------------------------|
| Useful life           | Device: 5 years<br>Cuff: 1 years |
| Manufacturing Country | Republic of Korea                |
| Manufacturing Company | InBody Co., Ltd.                 |

- \* For purposes of improvement, specifications are subject to change without notice.
- \* This product is 'medical equipment'. Read guide and cautions before using this blood pressure monitor.
- \* Battery life test conditions: using new alkaline batteries, operating temperature 23°C, Arm circumference 25cm, max pressure 170mmHg.
- \* IP classification is degrees of protection provided by IEC 60529.
- \* BP170B has a Bluetooth function.

## F. EMC Declaration

This EUT is intended for use in the electromagnetic environment specified below. The user must assure that it is used in such an environment.

| Immunity Test  | IEC 60601-1-2 Test Level   | Compliance Level  | Electromagnetic Environment - Guidance   |
|--|--|---|--|
| Electrostatic discharge (ESD)<br>IEC 61000-4-2                   | $\pm 8$ kV contact<br>$\pm 2$ kV, $\pm 4$ kV,<br>$\pm 8$ kV, $\pm 15$ kV air | $\pm 8$ kV contact<br>$\pm 2$ kV, $\pm 4$ kV,<br>$\pm 8$ kV, $\pm 15$ 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%.  |
| Electrical fast transient/burst<br>IEC 61000-4-4                 | $\pm 2$ kV<br>100 kHz<br>repetition frequency                                | $\pm 2$ kV<br>100 kHz<br>repetition frequency   | Mains power quality should be that of a typical commercial or hospital environment.  |
| Surge Line-to-line<br>IEC 61000-4-5                              | $\pm 0.5$ kV, $\pm 1$ kV   | $\pm 0.5$ kV, $\pm 1$ kV  | Mains power quality should be that of a typical commercial or hospital environment.  |
| Voltage dips<br>IEC 61000-4-11                                   | 0 % UT; 0.5 cycle<br>At 0°, 45°, 90°,<br>135°, 180°, 225°,<br>270° and 315°  | 0 % UT; 0.5 cycle<br>At 0°, 45°, 90°,<br>135°, 180°, $\sqrt{2}225^\circ$ ,<br>270° and 315° | Mains power quality should be that of a typical commercial or hospital environment. If the user of the EUT image intensifier requires continued operation during power mains interruptions, it is recommended that the EUT image intensifier be powered from an uninterruptible power supply or a battery. |
|  | 0 % UT; 1 cycle<br>and 70 % UT; 25/30<br>cycles<br>single phase: at 0°       | 0 % UT; 1 cycle<br>and 70 % UT; 25/30<br>cycles<br>single phase: at 0°                      |  |
| Voltage interruptions<br>IEC 61000-4-11                          | 0 % UT; 250/300<br>cycle   | 0 % UT; 250/300<br>cycle  |  |
| RATED power frequency magnetic fields (50/60Hz)<br>IEC 61000-4-8 | 30 A/m   | 30 A/m  | Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.  |

|  |  |  |   |
|--|--|--|---|
| <p>Conducted disturbances induced by RF fields<br/>IEC 61000-4-6</p> | <p>3 V<br/>0.15 MHz - 80 MHz<br/>6 V in ISM bands between 0.15 MHz and 80 MHz 80 % AM at 1 kHz</p> | <p>3 V<br/>0.15 MHz - 80 MHz<br/>6 V in ISM bands between 0.15 MHz and 80 MHz 80 % AM at 1 kHz</p> | <p>Portable and mobile RF communications equipment should be used no closer to any part of the EUT, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended separation distance:</p>   |
| <p>Radiated RF EM fields<br/>IEC 61000-4-3</p>                       | <p>10V/m<br/>80 MHz - 2.7 GHz<br/>80 % AM at 1 kHz</p>   | <p>10V/m<br/>80 MHz - 2.7 GHz<br/>80 % AM at 1 kHz</p>   | <p> <math display="block">d = \left[ \frac{3.5}{V_1} \right] \sqrt{P}</math> <math display="block">d = \left[ \frac{3.5}{E_1} \right] \sqrt{P} \quad 80 \text{ MHz to } 800 \text{ MHz}</math> <math display="block">d = \left[ \frac{7}{E_1} \right] \sqrt{P} \quad 80 \text{ MHz to } 2.7 \text{ GHz}</math> <p>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).<br/>Field strengths from fixed RF transmitters as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range.<br/>Interference may occur in the vicinity of equipment marked with the following symbol:</p>  </p> |

## Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment

| Test frequency (MHz) | Band a)<br>(MHz) | Service a)   | Modulation                            | Maximum power (W) | Distance (m) | Immunity test level (V/m) |
|----------------------|------------------|--|---------------------------------------|-------------------|--------------|---------------------------|
| 385                  | 380 – 390        | TETRA 400  | Pulse modulation<br>18 Hz             | 1.8               | 0.3          | 27                        |
| 450                  | 430 – 470        | GMRS 460,<br>FRS 460   | FM<br>± 5 kHz deviation<br>1 kHz sine | 2                 | 0.3          | 28                        |
| 710                  | 704 – 787        | 710  | Pulse modulation<br>217 Hz            | 0.2               | 0.3          | 9                         |
| 745                  |                  |  |                                       |                   |              |                           |
| 780                  |                  |  |                                       |                   |              |                           |
| 810                  | 800 – 960        | GSM 800/900,<br>TETRA 800,<br>iDEN 820,<br>CDMA 850,<br>LTE Band 5 | Pulse modulation<br>18 Hz             | 2                 | 0.3          | 28                        |
| 870                  |                  |  |                                       |                   |              |                           |
| 930                  |                  |  |                                       |                   |              |                           |
| 1 720                |                  |  |                                       |                   |              |                           |
| 1 845                | 810              | GSM 800/900,<br>TETRA 800,<br>iDEN 820,<br>CDMA 850,<br>LTE Band 5 | Pulse modulation<br>217 Hz            | 2                 | 0.3          | 28                        |
| 1 970                |                  |  |                                       |                   |              |                           |
| 2 450                | 2 400 –<br>2 570 | Bluetooth,<br>WLAN,<br>802.11 b/g/n,<br>RFID 2450,<br>LTE Band 7   | Pulse modulation<br>217 Hz            | 2                 | 0.3          | 28                        |
| 5 240                | 2 400 –<br>2 570 | Bluetooth,<br>WLAN,<br>802.11 b/g/n,<br>RFID 2450,<br>LTE Band 7   | Pulse modulation<br>217 Hz            | 0.2               | 0.3          | 9                         |
| 5 500                |                  |  |                                       |                   |              |                           |
| 5 785                |                  |  |                                       |                   |              |                           |

# Product Warranty

**Name of Product** : BP170/BP170B

**Product No** :

**Date of Purchase** :

**Place of Purchase** :

■ **This product warranty gives an assurance for the InBody product as below:**

1. This product undergoes a strict review process to ensure quality control.
2. The warranty period of this product follows the warranty period policy of the manufacturer.
3. If the product malfunctions under normal use, InBody will repair it free of charge during the warranty period.
4. The warranty will be voided and repair services will be offered at cost under the following circumstances:
  - Failure and/or damage caused by mishandling.
  - Failure and/or damage caused by not following the directions and precautions stated in the User's Manual.
  - Failure and/or damage caused by a natural disaster.
  - Failure and/or damage caused by a power malfunction.
5. The warranty will be voided if:
  - The InBody was disassembled by unauthorized personnel.
  - The InBody was repaired by unauthorized personnel.
6. Services are available at a cost after the warranty period.  
Contact InBody.

**InBody**







