

BM-130

Brielle[®]

AUTOMATIC ARM-TYPE Blood Pressure Monitor

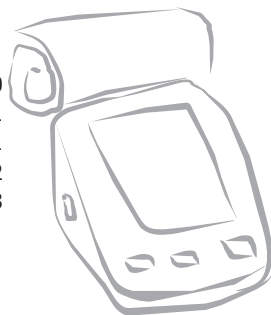


Operation Manual
Manual de Operación
Manuel d'utilisation
Bedienungsanleitung
操作手册
オペレーションマニュアル
사용 설명서




Operation Manual

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Important Notes

1. Only a physician is qualified to interpret changes in your blood pressure. This device is not intended to replace regular medical examinations. It is recommended that your physician review your procedure for using this monitor. Never make adjustments to your medication unless it is the advice of a physician.
2. This Blood Pressure Monitor is intended for use by adults. Children should not use this monitor unless it is under the supervision of an adult.
3. Don't use other vendor's cuff, since this will affect measurement accuracy.
4. Please read the entire instructions carefully before using this Blood Pressure Monitor.
5.  Warning Symbol
6.  Type B Symbol
7.  Class II Symbol

Measurement Accuracy

This blood pressure measuring device bears the CE (conformity) label "CE0473". The quality of the device has been verified and conforms to the provisions of the E-council directive 93/42/EEC as well as the EMC directive 89/336/EEC:

EN 1060-1

Non-invasive blood pressure measuring equipment
General requirements

EN 1060-3

Non-invasive blood pressure measuring equipments
Supplementary requirements for electro-mechanical
blood pressure measuring system

EN 60601-1

Safety requirements for medical electrical equipment

EN 60601-1-2

Electromagnetic compatibility and safety for medical
electrical equipment

EN 14971

Risk analysis for medical devices
Accord with requirement in section 21 of CMDR'S

Helpful Information

What is Blood Pressure?

Blood Pressure is the force that blood exerts on the arteries. This force is constantly changing as the heart beats. When the heart contracts, blood pressure reaches its highest value. This is called systolic blood pressure.

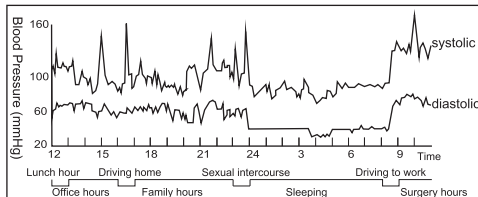
When the heart relaxes between beats, the value of blood pressure is lower. This is called the diastolic blood pressure. The device for measuring blood pressure is the millimeter of mercury, abbreviated mmHg.

For example, an individual's blood pressure may be measured as 120 mmHg (systolic) and 80 mmHg (diastolic). This would be spoken as "120 over 80" and written as "120/80".

Remember that blood pressure varies throughout the day. Food intakes, smoking, time of day, stress, level of exercise and many other factors affects it.

Typical daily blood pressure fluctuations

(Example: 35-year-old male)

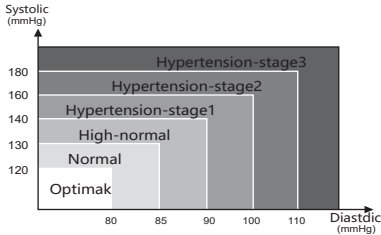


What is High Blood Pressure?

Hypertension, or high blood pressure, is a condition where an individual's blood pressure remains high over a long period of time. Untreated, hypertension can cause many serious medical problems including strokes and heart attacks. To control hypertension, the American Heart Association recommend not to smoke, reduce fat and salt intake, maintain proper weight, exercise and get regular physical check-ups.

Blood Pressure Classification:

The World Health Organization (WHO) and the International Society of Hypertension (ISH)



Why is it Important to Measure Your Blood Pressure at Home?

Having your blood pressure taken at the doctor's office may cause you to become nervous, thus artificially repressure at home makes it easy to record a log of your daily readings.

This will help you gain a greater understanding of your blood pressure reading and the factors that affect it. Be sure that you share your information with your physician.

Hints for Accurate Measurement

1. Relax and try to remain still for 5 to 10 minutes before you start.

2. Remove any clothing on the upper arm so that the cuff can be placed directly on the skin. Constriction of the upper arm caused by rolling up a shirt sleeve may cause and inaccurate reading.

Avoid this condition by completely removing the garment causing the constriction.



3. Refrain from eating, smoking, and drinking (especially alcoholic beverages) before a measurement since these activities can affect your blood pressure.

4. Remember that blood pressure varies continuously throughout the day. Try to take your blood pressure at the same time each day.

5. Do not be concerned with the results of one measurement. Many measurements, recorded over a long period of time, will provide a better indication of your blood pressure.

Correct Method of Measurement

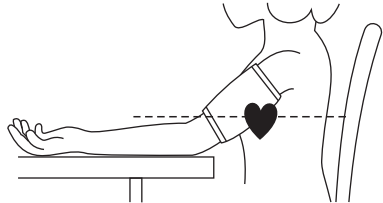
- Please relax for 5 to 10 minutes before taking another measurement.
- Many factors can affect your blood pressure such as exercising, eating, talking, moving, nervousness, environment and temperature changes, emotional stress can cause an increase in blood pressure. Daily fluctuations of 25 to 50 mmHg are common.

Please note:

Some individuals with hypertension, diabetes, kidney disorders, arteriosclerosis or poor circulation may notice a significant difference in blood pressure readings taken from the wrist as compared to readings from the upper arm. It is recommended that you consult with your physician concerning the use of this monitor.

To obtain the most accurate blood pressure measurement, please follow these important directions.

- Be seated in a chair with back support.
- Rest your arm on a table so the cuff is at the same level as your heart.
- Place both feet on the ground

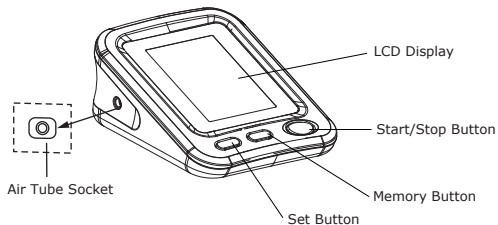


IMPORTANT:

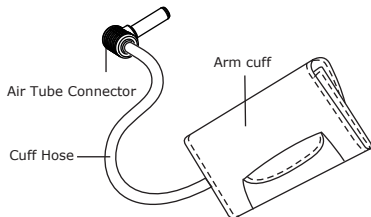
The arm cuff must be at the same level as your heart, or accurate measurement will not be possible. (Your heart is located slightly below your left armpit.)

Parts Identificaton







Monitor:



Accessories:



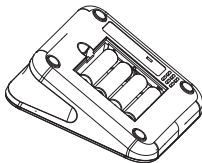
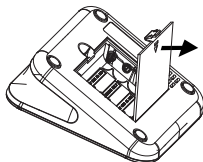
Description of Display Marks

	Inflating
	Deflating
	Measurement Error
	Measuring
	Battery Display Please replace with new batteries when the battery indicator flashes.
	Arrhythmia detection Function

Preparation before Taking a Measurement

Battery Installation / Replacement

1. slide the battery cover off in the direction of the arrow.
2. Install or replace the four alkaline "AA" batteries, noting the proper orientation of positive(+) and negative (-) terminals of the batteries in the battery compartment.
3. Replace the battery cover.
4. If the Low Battery Symbol appears on the display, replace all batteries with new ones.
5. Remove the batteries if the device will not be used for an extended period of time.



Note

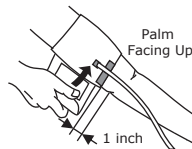
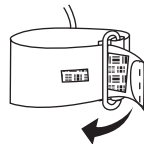
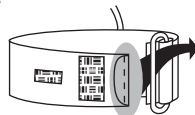
Batteries are hazardous waste. Do not dispose them together with the household garbage.



How to Apply the Arm Cuff




(Preferably the left arm.)

1. Insert the end of the cuff through the D-Ring to make a loop. (Makes sure that the Velcro stays outside when it is done.)
2. Wear the arm cuff with the hose downward. Pull the end of the cuff and secure it snugly with the velcro.
3. Adjust the cuff that the bottom edge is about 1 inch above the elbow on the inside of the left arm. Please mind the colored area on the cuff covers the brachia artery.
4. Plug in the air tube connector to the monitor.



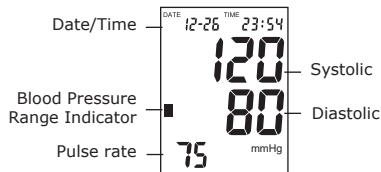
Taking a measurement

Please read the previous section on proper placement of the cuff and proper arm position.

1. After the cuff has been properly placed on the arm, please press Set button and select [] or [] on the up left hand corner of the LCD screen, and then press the Start / Stop button.
2. After the display reads "00", the cuff will automatically inflate to an appropriate pressure. After the inflation, it slowly deflates to take the measurement. When the heart mark "  " appears which indicating the measurement is in process. The cuff will be quite snug for a short while, this is normal. Try to remain relaxed, refrain from talking, and be as still as possible during the measurement.

Note: If the device determined that the initial inflation pressure was insufficient, it will re-inflate to a higher pressure.

3. The device will completely deflate when measurement is finished. The systolic and diastolic pressure and pulse rate will be displayed.



To end a measurement for any reason, just press Start/stop button to turn off the unit and release the cuff pressure.

If during a measurement the power drops to an insufficient level, the device will end the measurement and display the low battery symbol. Please replace the batteries and repeat the measurement.

If the device can not detect your pulse, it will end the measurement attempt. Please wait a few minutes make sure that the cuff is positioned properly, and try again.

The device will automatically shut off 1 minute after a measurement finished. You can also press Start/ Stop button to shut the device off.

Setting date and Time

1. The device with time and date displayed on the LCD, please set them per following method.
2. Long press the SET button, and the individual figure will start blinking sequentially from month, date, hour and minute.

Note: Press Memory button once will cause the display to advance by one digit.

Memory function

Memory input

When a valid measurement is made, the result (systolic, diastolic, pulse rate, date and time) will be stored in the memory automatically as soon as the device is turned off or when another measurement is initiated.

The device is capable to store 2×90 readings, and also compute the average of the latest 3 readings. When readings stored more than 90, the oldest ones will be replaced.

Memory recall

By pressing Memory button, AVG will be shown in the down left hand corner, which means you entered into memory function. AVG means the average of all recorded readings. Now press the Memory button again, 01 will be shown in the down right hand corner, which is your latest reading in the memory, when you press it again, 02 will be shown which is the one before the latest reading. When you press the button repeatedly, the records will be displayed sequentially

Memory erase

Press memory button and hold it down more than 3 seconds, you will erase the records of readings of the selected memory group.



Memory frequency

Er Indicators and Troubleshooting

Error indicators

Error indicators	Possible sources of errors
Er U	Indication: Incomplete inflation Correction: Check the cuff has been connected with device firmly, if same Er message indicated, request a repair
Er H	Indication: cuff over inflated and release automatically Correction: Take a break, and reposition the cuff and measure again
Er I	Indication: Could not obtain the pulse rate Correction: Reposition the cuff and measure again
Er 2	Indication: Strong Electromagnetic interference (Mobile phone and computer) Correction: Relax and take a break, and then measure again.
Er 3	Indication: irregular pulse rate or blood pressure, Correction: Relax and take a break, and then measure again.

Troubleshooting

Problem	Recommended method
No display	Make sure that the batteries are installed in the proper direction. (Polarity matches to the indication in the battery case.)
No measurement occurs	Check that the cuff is positioned properly, pgo over the measurement procedure again.
Blood pressure readings are too high or too low	Check if the arm is positioned properly Position your arm on a table, so the cuff is at the same level as your heart Remain seated during the entire measurement period Refrain from hand and body movements during measurement
Blood pressure reading are vaiable	Your blood pressure can fluctuate considerably throughout the day, all of the following factors can influence your blood pressure Emotional state Daily activities or exercise Smoking Drinking alcoholic beverages Eating Taking certain medications

Sensor Calibration Mode

The blood pressure device should be calibrated by the qualified company. And you can send back to our company for calibration.

mmHg and kPa transferring instruction

when the device powered on and finished a measurement, the systolic and diastolic pressure will be displayed, which unit is mmHg; if you want to change the measurement unit, you can press Start / Stop button for 10 seconds when the device powered off, and then press " Memory" button select mmHg or Kpa.

Care and Maintenance

- . Keep the device away from high temperature or high humidity, and direct sunlight.
- . Keep sharp objects away from the cuff.
- . Do not press the Start/Stop button without the cuff around your arm to avoid excess pressure build up that may damage the cuff.
- . Use the device at a sufficient distance from devices with strong electrical fields, such as television, microwave ovens, X-ray equipment, etc.
- . Do not subject the device to strong impacts or drop it on the floor.
- . Do not disassemble or modify the device or the cuff.
- . Remove the batteries when the device is to be stored for extended periods of time.

Note:

Removing the batteries will erase all readings in memory.

- . Use only a soft dry cloth to clean the unit. Do not use solvents or other petroleum based cleaners.
- . Circuit diagram and repairable part can be provided if it's necessary.

Specifications

Model:	BM-130
Measuring method:	Oscillometric
Memory function:	2 users, stores up to 90 memory each
Display:	Digital LCD
Measuring range:	Pressure: 20-280 mmHg, Pulse: 40-199/minute
Sensor accuracy:	Pressure: ± 3 mmHg, Pulse: $\pm 5\%$
Inflation system:	Electro-pneumatic pump
Arm size ranges:	24-34 cm (9.4-13.4 inches)
Batteries:	1.5V Alkaline LR06/AA X 4 (Included)
Automatic power-off:	Approx. 1 minute after measurement
Reference method for clinical trials:	Auscultatory measurement
Weight:	Approx. 400g (without batteries)
Operating condition:	+5 C ~ +40 C 10% ~ 90%RH
Storage and transport condition:	-20 C ~ +65 C 10% ~ 95%RH
Standard cited:	EN 1060-1 EN 60601-1-2 EN 1060-3 EN 14971 EN 60601-1

Blood Pressure Log

Date	1/1	1/1	1/1						
Time	7:00	13:30	20:00						
mmHg	240								
	220								
	200								
	180								
	160								
	140								
	120	128	134	123					
	100								
	80	84	90	76					
	60								
Pulse	70	73	69						
Body Condition									



Product Warranty Card

NAME:	DATE OF PURCHASE:
ADDRESS:	PURCHASED FROM:
MODEL: AUTOMATIC ARM-TYPE BLOOD PRESSURE MONITOR (BM-130)	REGISTRATION DATE:

Inmed Corporation warrants this product to be free from defects in material or workmanship within 1 year from date of purchase under normal use. If fault is found, please return the equipment, freight prepaid, in its original packaging along with the purchase receipt to the address below. Inmed Corporation will repair or replace any defective parts free of charge subject to the terms and conditions stated herein.

Warranty does not cover batteries and normal wear and tear.

For service, the unit is to be returned freight prepaid to:

Inmed Corporation

5 Calle Industria, Bagumbayan,
Quezon City 1110, Philippines
Tel: +63.2.5711888 | Fax: +63.2.5719912

Please register your unit online at www.inmed.com.ph