version:1.0

User Manual

Blood Pressure Monitor

Arm Type

Please do read the user manual carefully and thoroughtly so as to ensure the safe usage of this product, and keep the manual well for further reference in case you have problems.

CATALOGUE

Table of Contents

♥ General Description

Readings taken by the BM-201 are equivalent to those obtained by a trained observer using the cuff and stethoscope auscultation method.

This manual contains important safety and care information, and provides step by step instructions for using the product.

Read the manual thoroughly before using the product.

Features:
60mm×40.5 mm Digital LCD display
3rd technology: Measuring during inflation
(The updated technology in the world)

Indications for Use

The Blood Pressure Monitor is digital monitors intended for use in measuring blood pressure and heartbeat rate with arm circumference ranging from 22 cm to 32 cm (about 8¾″-12½″) .

♥ It is intended for adult indoor use only.

Safety Information

The signs below might be in the user manual, labeling or other component. They are the requirement of standard and using.

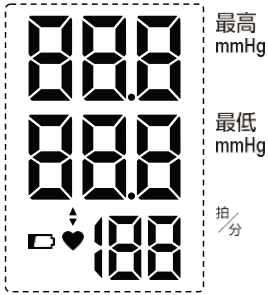
♥

	Symbol for "THE OPERATION GUIDE MUST BE READ"		Symbol for "TYPE BF APPLIED PARTS"
CE 0123	Symbol for "CONFORMITE EUROPEENNE"		Symbol for "ENVIRONMENT PROTECTION - Electrical waste must not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or dealer for recycling advice"
	Symbol for "MANUFACTURER"		
SN	Symbol for "SERIAL NUMBER"		
⎓	Symbol for "DIRECT CURRENT"	EC REP	Symbol for "Authorized Representative in the European Community"
	Symbol for "MANUFACTURE DATE"		Caution: These notes must be observed to prevent any damage to the device.

⚠ CAUTION

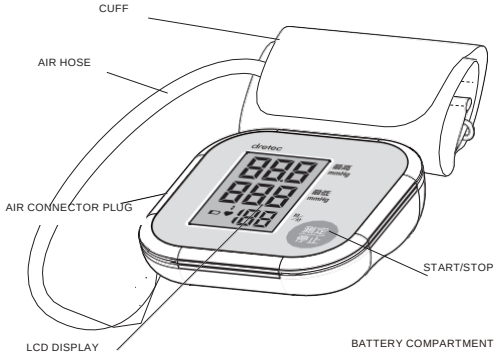
This device is intended for adult use only.
This device is intended for no-invasive measuring and monitoring of arterial blood pressure. It is not intended for use on extremities other than the arm or for functions other than obtaining a blood pressure measurement.
Do not confuse self-monitoring with self-diagnosis. This unit allows you to monitor your blood pressure.Do not begin or end medical treatment without asking a physician for treatment advice.
If you are taking medication,consult your physician to determine the most appropriate time to measure your blood pressure. Never change a prescribed medication without consulting your Physician.
When the device was used to measure patients who have common arrhythmias such as atrial or ventricular premature beats or atrial fibrillation, the best result may occur with deviation. Please consult your physician about the result.
If the cuff pressure exceeds 40 kPa (300 mmHg), the unit will automatically deflate. Should the cuff not deflate when pressures exceeds 40 kPa (300 mmHg), detach the cuff from the arm and press the START/STOP button to stop inflation.
The equipment is not AP/APG equipment and not suitable for use in the presence of a flammable anesthetic mixture with air of with oxygen or nitrous oxide.
The operator shall not touch output of batteries and the patient simultaneously.
To avoid measurement errors, please avoid the condition of strong electromagnetic field radiated interference signal or electrical fast transient/burst signal.
The user must check that the equipment functions safely and see that it is in proper working condition before being used.
This device is contraindicated for any female who may be suspected of, or is pregnant.
Besides providing inaccurate readings, the effects of this device on the fetus are unknown.
Manufacturer will make available on request circuit diagrams, component parts list etc.
This unit is not suitable for continuous monitoring during medical emergencies or operations.
Otherwise, the patient's arm and fingers will become anaesthetic, swollen and even purple due to a lack of blood.
Please use the device under the environment which was provided in the user manual. Otherwise, the performance and lifetime of the device will be impacted and reduced.
During use, the patient will be in contact with the cuff. The materials of the cuff have been tested and found to comply with requirements of ISO 10993-5:2009 and ISO 10993-10:2010. It will not cause any potential sensization or irritation reaction.
Please use ACCESSORIES and detachable partes specified/ authorised by MANUFACTURE. Otherwise, it may cause damage to the unit or danger to the user/patients.
The device doesn't need to be calibrated within the two years of reliable service.
Please dispose of ACCESSORIES, detachable parts, and the ME EQUIPMENT according to the local guidelines.
If you have any problems with this device, such as setting up, maintaining or using, please contact the SERVICE PERSONNEL of Transtek. Don't open or repair the device by yourself.
Please report to Transtek if any unexpected operation or events occur.
Please use the soft cloth to clean the whole unit. Don't use any abrasive or volatile cleaners.

LCD display signal



SYMBOL	DESCRIPTION	EXPLANATION
最高	Systolic blood pressure	High blood pressure
最低	Diastolic blood pressure	Low blood pressure
拍/分	Pulse display	Pulse in beats per minute
▼	Deflation symbol	The cuff is deflating.
♥	Heartbeat	Blood pressure monitor is detecting a heartbeat during measurement.
mmHg	mmHg	Measurement Unit of the blood pressure (1mmHg=0.133kPa)
lo	Low battery	Batteries are low and need to be replaced

Monitor Components



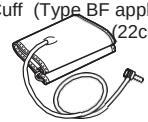
Component list of pressure measuring system

1 Cuff
2 Air pipe
3 PCBA
4 Pump
5 Valve

List

1.Blood Pressure Monitor (TMB-1491-A)

2.Cuff (Type BF applied part) (22cm~32cm)



(Please use TRANSTEK authorized cuff. The size of the actual cuff please refer to the label on the attached cuff.)

3. 4×AAA batteries

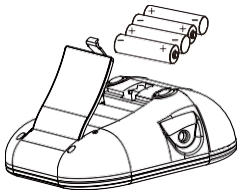
4.User manual

♥ Measurement Principle

This product uses the Oscillometric Measuring method to detect blood pressure. Before every measurement, the unit establishes a “zero pressure” equivalent to the air pressure. Then it starts inflating the arm cuff, meanwhile, the unit detects pressure oscillations generated by beat-to-beat pulsatile, which is used to determine the systolic and diastolic pressure, and also pulse rate.

♥ Installing and Replacing the Batteries

- . Open the battery cover.
- . Install the batteries as indicated in the battery compartment. (Always select the authorized / specified battery: Four AAA-size batteries).
- . Replace the battery cover.



Replace the batteries whenever the below happen

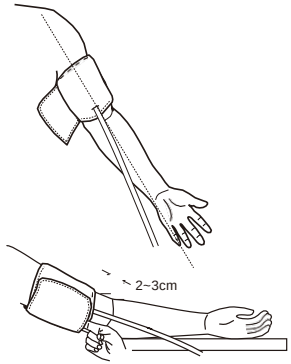
- The Lo+ shows
- The display is dim
- The display does not light up

⚠ CAUTION

- Do not use new and used batteries together.
- Do not use different types of batteries together.
- Do not dispose the batteries in fire. Batteries may explode or leak.
- Remove batteries if the device is not likely to be used for some time.
- Worn batteries are harmful to the environment. Do not dispose with daily garbage.
- Remove the old batteries from the device following your local recycling guidelines.

♥ Tie the cuff

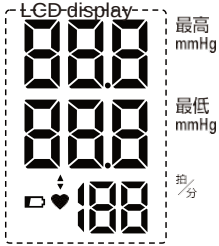
1. Tie the cuff on your upper arm, then position the tube off-center toward the inner side of arm in line with the little finger. Or position the artery mark ϕ over the main artery (on the inside of your arm). Note: Locate the main artery by pressing with 2 fingers approximately 2 cm above the bend of your elbow on the inside of your left arm. Identify where the pulse can be felt the strongest. This is your main artery.
2. The cuff should be snug but not too tight. You should be able to insert one finger between the cuff and your arm.
3. Sit comfortably with your tested arm resting on a flat surface.
4. Patients with Hypertension:
   The middle of the cuff should be at the level of the right atrium of the heart; Before starting measurement, please sit comfortably with legs uncrossed, feet flat on the floor, back and arm supported.



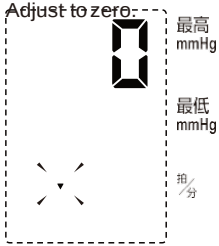
- Rest for 5 minutes before measuring.
- Wait at least 3 minutes between measurements. This allows your blood circulation to recover.
- For a meaningful comparison, try to measure under similar conditions. For example, take daily measurements at approximately the same time, position of upper arm, or as directed by a physician.

Start the Measurement

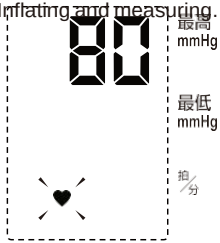
1. When the monitor is off, press the “START/STOP” button to turn on the monitor, and it will finish the whole measurement .



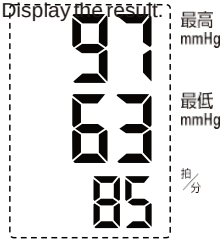
LCD display.



Adjust to zero.



Inflating and measuring.

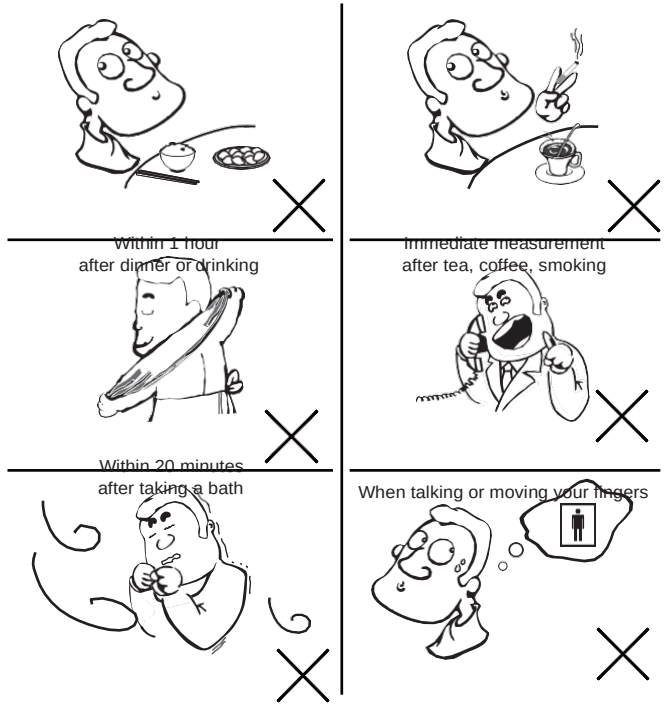


Display the result.

2. Press the “START/STOP” to power off, otherwise it will turn off within 1 minute.

Tips for Measurement

Measurements may be inaccurate if taken in the following circumstances.



♥ Maintenance

In order to get the best performance, please follow the instructions below.

Put in a dry place and avoid the sunshine

Avoid touching water, clean it with a dry cloth in base.

Avoid intense shaking and collisions

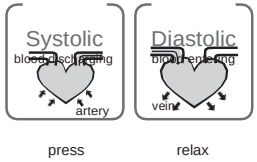
Avoid dusty and unstable temperature environment

Using wet cloths to remove dirt

Do not attempt to clean the resuable cuff with water and never immerse the cuff in water.

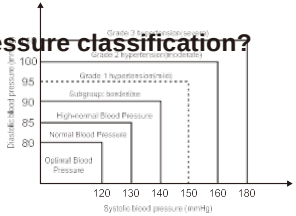
♥ What are systolic pressure and diastolic pressure?

When ventricles contract and pump blood out of the heart, the blood pressure reaches its maximum value in the cycle, which is called systolic pressure. When the ventricles relax, the blood pressure reaches its minimum value in the cycle, which is called diastolic pressure.



What is the standard blood pressure classification?

The blood pressure classification published by World Health Organization (WHO) and International Society of Hypertension (ISH) in 1999 is as follows:



CAUTION

Only a physician can tell your normal BP range. Please contact a physician if your measuring result falls out of the range.
Please note that only a physician can tell whether your blood pressure value has reached a dangerous point.

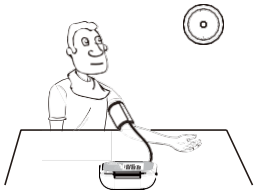
Blood Pressure (mm Hg) \ Level	Optimal	Normal	High-normal	Mild	Moderate	Severe
SYS	<120	120-129	130-139	140-159	160-179	≥180
DIA	<80	80-84	85-89	90-99	100-109	≥110

♥ Why does my blood pressure fluctuate throughout the day?

1. Individual blood pressure varies multiple times everyday. It is also affected by the way you tie your cuff and your measurement position, so please take the measurement under the same conditions.

2.If the person takes medicine, the pressure will varymore.

3.Wait at least 3 minutes for another measurement.



♥

Why do I get a different blood pressure at home compared to the hospital?

The blood pressure is different even throughout the day due to weather, emotion, exercise etc, Also, there is the "white coat" effect, which means blood pressure usually increases in clinical settings.

♥

What you need to pay attention to when you measure your blood pressure at home:

If the cuff is tied properly.

If the cuff is too tight or too loose.

If the cuff is tied on the upper arm.

If you feel anxious.

Taking 2-3 deep breaths before beginning will be better for measuring.

Advice: Relax yourself for 4-5 minutes until you calm down.

Is the result the same if measuring on the right arm?

It is ok for both arms, but there will be some different results for different people. We suggest you measure the same arm every time.

This section includes a list of error messages and frequently asked questions for problems you may encounter with your blood pressure monitor. If the products not operating as you think it should, check here before arranging for service.

PROBLEM	SYMPTOM	CHECK THIS	REMEDY
No power	Display will not light up.	Batteries are exhausted.	Replace with new batteries
		Batteries are inserted incorrectly.	Insert the batteries correctly
Low batteries	Display is dim or show	Batteries are low.	Replace with new batteries
Error message	E 1 shows	The cuff is not secure.	Refasten the cuff and then measure again.
	E 2 shows	The cuff is very tight	Readjust the cuff ,not too loose or too tight and then measure again.
	E 3 shows	The pressure of the cuff is excess.	Relax for a moment and then measure again.
	E10 or E11 shows	The monitor detected motion,talking or the pluse is too poor while measuring.	Relax for a moment and then measure again.
	E20 shows	The measurement process does not detect the pulse signal.	Loosen the clothing on the arm and then measure again
	E21 shows	The treatment of the measurement failed.	Relax for a moment and then measure again.
	EExx,shows on the display.	A calibration error occurred.	Retake the measurement. If the problem persists, contact the retailer or our customer service department for further assistance.Refer to the warranty for contact information and return instructions.

Power supply	Battery powered mode: 6VDC 4×AAA batteries
Display mode	Digital LCD V.A.60mm×40.5mm
Measurement mode	Oscillographic testing mode
Measurement range	Rated cuff pressure: 0mmHg~300mmHg Measurement pressure: 40mmHg-230mmHg Pulse value: (40-199) beat/minute
Accuracy	Pressure: 5℃-40℃within±3mmHg Pulse value:±5%
Normal working condition	Temperature:5℃ to 40℃ Relative humidity: ≤85%RH
Storage & transportation condition	Temperature:-20℃-60℃ Relative Humidity: 10%RH-93%RH
Measurement perimeter of the upper arm	About 22cm~32cm
Net Weight	Approx.170g(Excluding the dry cells and cuff)
External dimensions	Approx.110mm×110mm×41mm
Attachment	4×AAA batteries, user manual
Mode of operation	Continuous operation
Degree of protection	Type BF applied part

Contact Information

WARNING: No modification of this equipment is allowed.

♥ EMC Guidance

1) This equipment needs to be installed and put into service in accordance with the information provided in the user manual;

2) Wireless communications equipment such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies can affect this equipment and should be kept at least a distance d=3,3m away from the equipment.

(Note: As indicated in Table 6 of IEC 60601-1-2:2007 for ME EQUIPMENT, a typical cell phone with a maximum output power of 2 W yields d=3, 3m at an IMMUNITY LEVEL of 3V/m)