



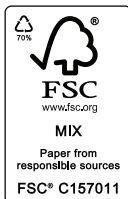
CE 0123



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Medical Device Safety Service GmbH  
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Kinetik TMB-1970 UK IB 20221130



# User Manual

Blood Pressure Monitor

Arm Type



REF TMB-1970

- Thank you so much for selecting the Kinetik Wellbeing Blood Pressure Monitor
- Please read the user manual carefully and thoroughly so as to ensure the safe usage of this product. Keep the manual safe for future reference in case you have problems.

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## ♥ Support

Our manual should provide you with all the information you need to set up and use this product.

If you have a question, have a look at our Troubleshooting page!

For further assistance, why not contact our Customer Care team directly? We're here to help!

Our Customer Care team are available from 9am-5pm, Monday to Friday (excluding bank holidays).

We promise to respond to all queries and will ensure to resolve any issue you may be having.

You can reach us by...

**Phone:**  
+44 1483 937969

**Live Chat:**  
Simply visit [www.kinetikwellbeing.com](http://www.kinetikwellbeing.com) and send us a message.

**Email:**  
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**Post:**  
Kinetik Medical Devices Limited  
Unit 11, Perrywood Business Park, Honeycrock Lane,  
Salfords, Redhill. RH1 5JQ

## ♥ General Description

Thank you for selecting Kinetik arm type blood pressure monitor (TMB-1970). The monitor features blood pressure measurement, pulse rate measurement and the result storage. The design provides you with two years of reliable service.

Readings taken by the TMB-1970 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:

- 52 mm × 58 mm Digital LCD display
- Maximum 90 records
- 3rd technology: Measuring during inflation

## ♥ 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 22cm to 32 cm (about 8¾"-12½") or 22cm to 42cm (about 8¾"-16½"). It is intended for adult indoor use only.

## ♥ Contraindications










- 1.The device should not be used by any person who may be suspected of, or is pregnant .
- 2.The device is not suitable for use on patients with implanted, electrical devices, such as cardiac pacemakers or defibrillators.

## ♥ 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 atmospheric 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.

## ♥ Safety Information

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

	Refer to instruction manual/ booklet To signify that the instruction manual/booklet must be read.		Symbol for "TYPE BF APPLIED PART"
CE 0123	CE marking indicates that a product has been assessed by the manufacturer and deemed to meet EU safety, health and environmental protection requirements. It is required for products manufactured anywhere in the world that are then marketed in the EU.		The symbol indicates that the product should not be discarded as unsorted waste but must be sent to separate collection facilities for recovery and recycling.
	Symbol for "MANUFACTURER"		Symbol for "RECYCLE"
	Symbol for "SERIAL NUMBER"		Indicates that caution is necessary when operating the device or control close to where the symbol is placed, or that the current situation needs operator awareness or operator action in order to avoid undesirable consequences.
	Symbol for "DIRECT CURRENT"		
	Symbol for "MANUFACTURE DATE" and Made in China		

## ⚠ CAUTION

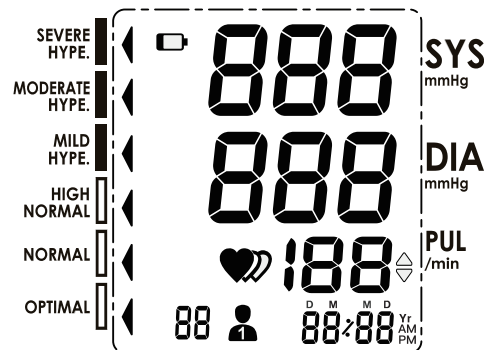
- \* This device is intended for indoor, home use.
- \* This device is not intended for public use.
- \* This device is portable, but it is not intended for use during patient transport.
- \* This device is not suitable for continuous monitoring during medical emergencies or operations.
- \* This device 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 any purpose other than obtaining a blood pressure measurement.
- \* This device is for adults. Do not use this device on neonates or infants. Do not use it on children unless otherwise instructed by a medical professional.
- \* Do not use on the women in pregnant, including pre-eclamptic, patients.
- \* The device is not suitable for use on patients with implanted, electrical devices, such as cardiac pacemakers, defibrillators.
- \* The effectiveness of this device has not been established for use:
  - on users with common arrhythmias such as atrial or ventricular premature beats or atrial fibrillation,
  - on users with peripheral arterial disease,
  - on users undergoing intravascular therapy, or with arteriovenous (AV) shunt.
- \* Consult a medical professional before use.
- \* Do not use this device for diagnosis or treatment of any health problem or disease. Contact your physician if you have or suspect any medical problem. Do not change your medications without the advice of your physician or health care professional.
- \* If you are taking medication, consult your physician to determine the proper time to measure your blood pressure.
- \* This device may be used only for the intended use described in this manual, the manufacturer shall have no liability for any incidental, consequential, or special damages caused by misuse or abuse.
- \* Report any unexpected operation or events to the manufacturer.
- \* Do not apply the cuff on an arm that has an intravenous drip or a blood transfusion attached.
- \* Warning: Do not kink, fold, stretch, compress, or otherwise deform the tube during measuring, as the cuff pressure might continuously increase, which could prevent blood flow and result injury.
- \* Warning: Taking blood pressure measurements too frequently could disrupt blood circulation and cause injuries.
- \* Warning: Do not apply cuff to areas on patient where skin is delicate or damaged. Check cuff site frequently for irritation.
- \* Warning: Do not place the cuff on the arm of a person whose arteries or veins are undergoing medical treatment, i.e. intra-vascular access or intra-vascular therapy or an arteriovenous (A-V) shunt, which could disrupt blood circulation and cause injuries.
- \* Do not place the cuff on the arm on the same side of a mastectomy (especially when lymph nodes have been removed). It is recommended to take measurements on the unaffected side.
- \* Do not wrap the cuff on the same arm to which another monitoring device is applied. One or both devices could temporarily stop functioning if you try to use them at the same time.
- \* Please check that the operation of the device do not result in prolonged impairment of patient blood circulation.
- \* Warning: On the rare occasion of a fault causing the cuff to remain fully inflated during measurement, loosen and remove the cuff immediately. Prolonged high pressure applied to the arm (cuff pressure >300 mmHg or constant pressure >15 mmHg for more than 3 minutes) might lead to bruising and discolored skin.
- \* Warning: Do not use this device with high-frequency (HF) surgical equipment at the same time.



# CAUTION

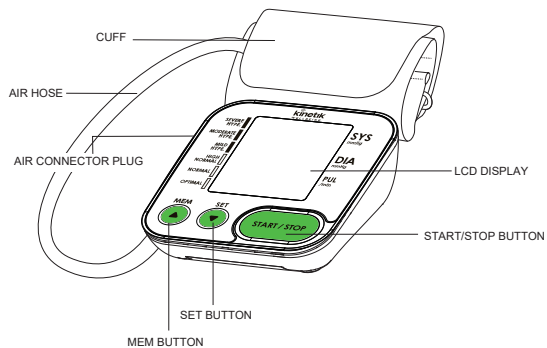
- Warning: This device is not AP/APG equipment. Do not use the device where flammable anesthetic are present, or in environments mixture with air of with oxygen or nitrous oxide.
- The device contains sensitive electronic components. To avoid measurement errors, avoid taking blood pressure measurements near a strong electromagnetic field radiated interference signal or electrical fast transient/burst signal.
- Wireless communication equipment, such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies may cause interference that may affect the accuracy of measurements. A minimum distance of 1 foot (30 cm) should be kept from such devices during a measurement.
- You can use this device to take your own measurement, no third-party operator is required.
- Please use the device under the environment which is provided in the user manual. Otherwise, the performance and lifetime of the device will be impacted and reduced.
- The device may require up to 30 minutes to warm up / cool down from the minimum / maximum storage temperature before it is ready for use.
- Warning: Excessive cuff tube lengths could cause strangulation if you don't manage them properly.
- Warning: Do not touch output of the batteries/adaptor and the user simultaneously.
- Adapter is specified as a part of ME EQUIPMENT.
- Warning: The power cord is considered the disconnect device for isolating this equipment from supply mains. Do not position the equipment so that it is difficult to reach or disconnect.
- The blood pressure monitor, its adapter, and the cuff are suitable for use within the patient environment.
- Warning: Do not use this device if you are allergic to polyester, nylon, or plastic.
- Warning: Only use accessories approved by manufacturer. Using unapproved accessories might cause damage to the unit and injure users.
- Warning: If you experience discomfort during a measurement, such as pain in the arm or other complaints, press the Power button immediately to release the air from the cuff.
- No calibration is required within two years of reliable service.
- Do not attempt to repair the unit yourself if it malfunctions. Only have repairs carried out by authorized service centers.
- At the request of authorized service personnel, circuit diagrams, component part lists, descriptions, and calibration procedures will be made available by the manufacturer or distributor.
- It is recommended that the performance should be checked after repair, maintenance, and every two years of use, by retesting the requirements in limits of the error of the cuff pressure indication and air leakage (testing at least at 50 mmHg and 200 mmHg).
- Warning: Do not use the device while under maintenance, or being serviced.
- Store your device, cuff and adapter in a clean and dry place, protect it against extreme moisture, heat, lint, dust and direct sunlight. Never place any heavy objects on it.
- Make sure the rubber tube of the cuff is not squeezed, stretched, or kinked during storage.
- Warning: Keep the device, cuff, and batteries away from children as they may pose a risk of choking or strangulation if used improperly.
- Clean both device and cuff with a soft, dry cloth. If necessary use a dampened cloth and natural detergent. Do not use alcohol, benzene, or other harsh chemicals.
- Do not wash the cuff in a washing machine or dishwasher!
- The service life of the cuff may vary by the frequency of washing, skin condition, and storage state. The typical service life is 10000 times.
- Dispose of accessories, detachable parts, and the device according to the local guidelines.

# ♥ LCD display signal



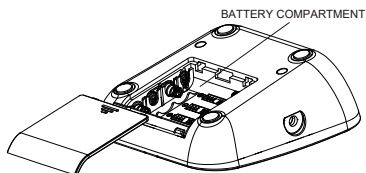
SYMBOL	DESCRIPTION	EXPLANATION
<b>SYS</b>	Systolic blood pressure	High blood pressure
<b>DIA</b>	Diastolic blood pressure	Low blood pressure
<b>PUL /min</b>	Pulse display	Pulse in beats per minute
▽	Deflation symbol	The cuff is deflating.
<b>88</b>	Memory	Indicate it is in the memory mode and which group of memory it is.
<b>mmHg</b>	mmHg	Measurement Unit of the blood pressure
⚡ + 🔋	Low battery	Batteries are low and need to be replaced
♥	Irregular heartbeat	Blood pressure monitor is detecting an irregular heartbeat during measurement.
⬆	Blood pressure level indicator	Indicate the blood pressure level
<b>8:88 AM</b>	Current Time	Year/Month/Day, Hour/Minute
♥	Heartbeat	Blood pressure monitor is detecting a heartbeat during measurement.
👤	User 1	Start measurement for User 1

## ♥ Monitor Components



### Component list of pressure measuring system

- 1 Cuff
- 2 Air pipe
- 3 PCBA
- 4 Pump
- 5 Valve



♥ List

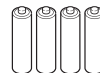
- ### 1. Blood Pressure Monitor (TMB-1970)



- 2.Cuff (Type BF applied part)  
( 22~42 cm)



3. 4× AAA batteries



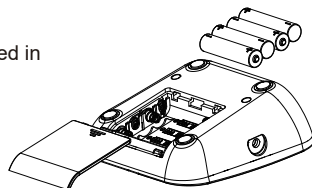
- #### 4. User manual

## ♥ Installing and Replacing the Batteries


- Open the battery cover.
- Install the batteries as indicated in the battery compartment.

(Always select the authorised / specified battery: Four AAA-size batteries).

- Replace the battery cover.



Replace the batteries whenever the below happens

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

### ⚠ CAUTION

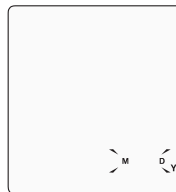
- Do not use new and used batteries together.
- Do not use different types of batteries together.
- Do not dispose the batteries in fire. Batteries may explode or leak.
- Remove batteries if the device is not likely to be used for some time.
- Worn batteries are harmful to the environment. Do not dispose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

## ♥ Setting the Date and Time

It is important to set the date and time before using your blood pressure monitor for the first time, so that a correct time stamp can be assigned to each record that is stored in the memory.

(The setting range of the year: 2021—2050, Time format: 24H / 12H)

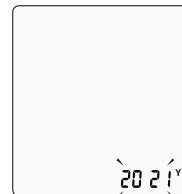
1. When the monitor is off, press “SET” button shortly, it will display the date format. Then press “SET” or “MEM” button to switch the date format.



2. Then press the “START/STOP” button to confirm the date format, and the year will flash. Press the “MEM” or “SET” button to change the year. Each press will increase the numeral by one in a cycling manner.

Press and hold the “MEM” button to quickly advance the years.

Press and hold the “SET” button to quickly go backwards through the years.



3. Press “START/STOP” button to confirm the year, then the month will flash. Repeat the same steps to change the month, day, time format, hour, and minute.



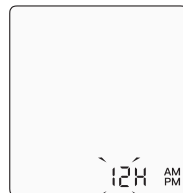
Month



Day



Time format



Time format

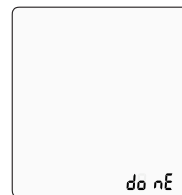


Hour





Minute


4. After confirming the minute, the LCD will display "do nE" and the monitor will shut off after several seconds.

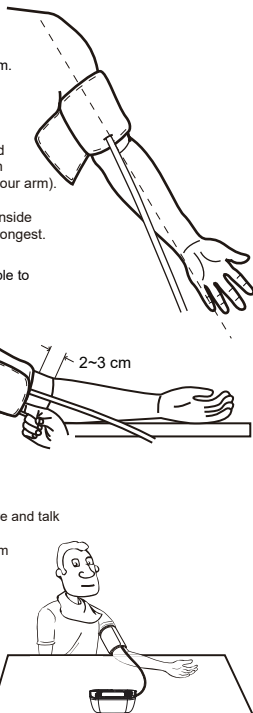


### ♥ About user ID

There is only one user ID  available. The user  has 90 memory spaces, and is designed for 1 person to save measured values.

## ♥ Tie the Cuff

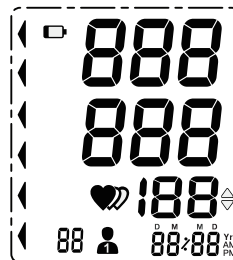
1. Remove all jewelry, such as watches and bracelets from your left arm. Note: If your doctor has diagnosed you with poor circulation in your left arm, use your right arm.
2. Roll or push up your sleeve to expose the skin. Make sure your sleeve is not too tight.
3. Hold your arm with your palm facing up and 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  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.
4. The cuff should be snug but not too tight. You should be able to insert one finger between the cuff and your arm.
5. Sit comfortably with your tested arm resting on a flat surface. Place your elbow on a table so that the cuff is at the same level as your heart. Turn your palm upwards. Sit upright in a chair, and take 5-6 deep breaths.
6. Helpful tips for Patients, especially for Patients with Hypertension:
  - Rest for 5 minutes before first measurement.
  - Wait at least 3 minutes between measurements. This allows your blood circulation to recover.
  - Take the measurement in a silent room.
  - The patient must relax as much as possible and do not move and talk during the measurement procedure.
  - The cuff should maintain at the same level as the right atrium of the heart.
  - Please sit comfortably. Do not cross your legs and keep your feet flat on the ground.
  - Keep your back against the backrest of the chair.
  - For a meaningful comparison, try to measure under similar conditions. For example, take daily measurements at approximately the same time, on the same arm, or as directed by a physician.



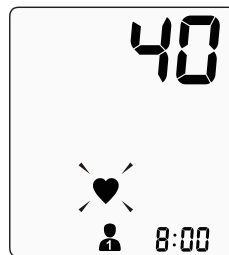
## ♥ Start the Measurement

1. When the monitor is off, press the “START/STOP” button, the LCD display will show shortly.
2. Remain still and do not talk until the full measurement is complete.

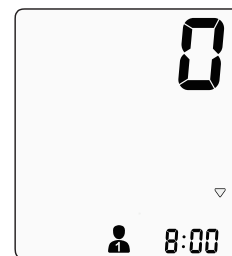
LCD display



Inflating and measuring



Adjust the zero point.



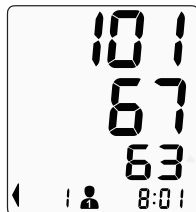
Display and save the measurement result



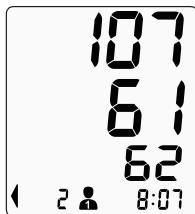
3. Press the “START/STOP” button to turn off the monitor, otherwise it will turn off after about 1 minute.

## ♥ Recall the Records

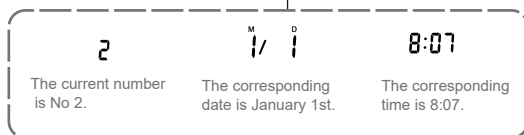
1. When the monitor is off, press the "MEM" button, the latest record will display.



2. Press "SET" or "MEN" button to find the record you want.



The date and time of the record will be shown alternately.



### ⚠ CAUTION

The most recent record (1) is shown first. Each new measurement is assigned to the first (1) record. All other records are pushed back one digit (e.g., 2 becomes 3, and so on), and the last record (90) is dropped.

## ♥ Delete the Records

If you did not get the correct measurement, you can delete one record or all records by following steps below.

### Delete one record:

1. Press the "MEM" button to enter the memory mode, then press the "MEM" or "SET" button to find the record you want to delete. Then hold and press "START/STOP" button for about 3 seconds, the LCD will display and flash "dEL yES".



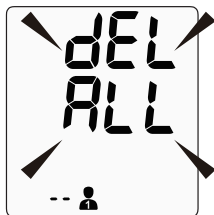
2. Press the 'SET' or 'MEM' button to toggle between deleting this reading (dEL YES) or not (dEL no).

3. If you do wish to delete this reading, then press the "START/STOP" button when the screen is flashing "dEL YES". This reading will disappear and the LCD will display "dEL donE".



**Delete all records:**

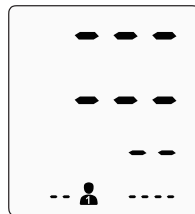
1. Press the 'MEM' button to enter the memory mode, then press and hold the 'SET' button. The LCD will display and flash 'dEL ALL'.



2. Press the 'SET' or 'MEM' button to toggle between deleting all readings (dEL ALL) or not (dEL no).



3. If you do wish to delete all memories, then press the "START/STOP" button when the screen is flashing "dEL ALL". All the readings will disappear and the LCD will display "dEL done".



After step 3 the right picture will show automatically. Press "START/STOP" button to turn off the monitor, otherwise it will turn off automatically after about 1 minute.

**Note:** If you replace the batteries, all the records will disappear, and the LCD will display the same as the right picture.

**♥ Tips for Measurement**

Measurements may be inaccurate if taken in the following circumstances.



Within 1 hour  
after dinner or drinking



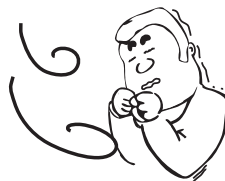
Immediate measurement  
after tea, coffee, smoking



Within 20 minutes  
after taking a bath



When talking or moving your fingers



In a very cold environment



When you need to use the toilet

## ♥ Maintenance

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



Put in a dry place and avoid the sunshine



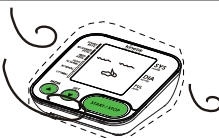
Avoid intense shaking and collisions



Using wet cloths to remove dirt



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



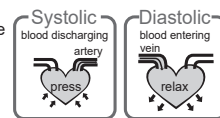
Avoid dusty and unstable temperature environment



Do not attempt to clean the reusable 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.

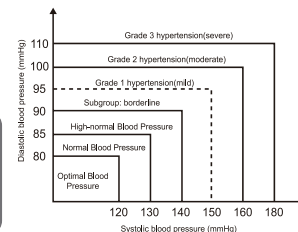


## ♥ What is the standard blood pressure classification?

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.



Level Blood Pressure (mm Hg)	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

## ♥ Irregular Heartbeat Detector

An irregular heartbeat is detected when a heartbeat rhythm varies while the device is measuring systolic pressure and diastolic pressure. During each measurement, blood pressure monitor will keep a record of all the pulse intervals and calculate the average value of them. If there are two or more pulse intervals, the difference between each interval and the average is more than the average value of  $\pm 25\%$ , or there are four or more pulse intervals, the difference between each interval and the average is more than the average value of  $\pm 15\%$ , then the irregular heartbeat symbol will appear on the display with the measurement result.

### ⚠ CAUTION

The appearance of the IHB icon indicates that a pulse irregularity consistent with an irregular heartbeat was detected during measurement. Usually this is NOT a cause for concern. However, if the symbol appears often, we recommend you seek medical advice. Please note that the device does not replace a cardiac examination, but serves to detect pulse irregularities at an early stage.

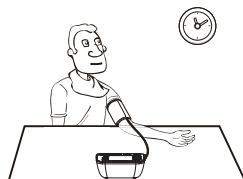


## ♥ Why does my blood pressure fluctuate throughout the day?

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 vary more.

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.

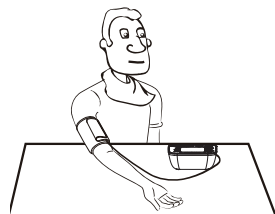
If the cuff is too tight or too loose.

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 product is not operating as you think it should, check here before arranging for servicing.

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 battery	Display is dim or show 	Battery is low.	Replace with new batteries
Error message	E 1 shows	The cuff is not secure or very tight.	Refasten the cuff and then measure again.
	E 2 shows	The monitor detected motion, talking or the pulse is too poor while measuring.	Relax for a moment and then measure again.
	E 3 shows	The measurement process does not detect the pulse signal.	Loosen the clothing on the arm and then measure again.
	E 4 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.
Warning message	out shows	Out of measurement range	Relax for a moment. Refasten the cuff and then measure again. If the problem persists, contact your physician.

<b>Power supply</b>	Battery powered mode: 6V DC 4x AAA batteries
<b>Display mode</b>	Digital LCD display V.A.52 mm × 58 mm
<b>Measurement mode</b>	Oscillographic testing mode
<b>Measurement range</b>	Rated cuff pressure: 0 mmHg~299 mmHg Measurement pressure: SYS: 60 mmHg~230 mmHg DIA: 40 mmHg~130 mmHg Pulse value: (40-199) beat/minute
<b>Accuracy</b>	Pressure: 5°C-40°C within ± 3 mmHg Pulse value: ±5%
<b>Normal working condition</b>	A temperature range of : +5°C to +40°C A relative humidity range of 15% to 90%, non-condensing, but not requiring a water vapour partial pressure greater than 50 hPa An atmospheric pressure range of : 700 hPa to 1060 hPa
<b>Storage &amp; transportation condition</b>	Temperature: -20°C to +60°C A relative humidity range of ≤ 93%, non-condensing, at a water vapour pressure up to 50 hPa
<b>Measurement perimeter of the upper arm</b>	About 22~42 cm
<b>Net Weight</b>	Approx.198 g (Excluding the batteries)
<b>External dimensions</b>	Approx.102 mm × 107 mm × 40 mm
<b>Attachment</b>	4× AAA batteries, user manual
<b>Mode of operation</b>	Continuous operation
<b>Degree of protection</b>	Type BF applied part
<b>Protection against ingress of water</b>	IP21, It means the device could be protected against solid foreign objects of 12.5 mm Ø and greater, and protect against vertically falling water drops.
<b>Device Classification</b>	Battery Powered Mode: Internally Powered ME Equipment
<b>Software Version</b>	A01

WARNING: No modification of this equipment is allowed.

## ♥ Contact Information

For more information about our products, please visit

**[www.kinetikwellbeing.com](http://www.kinetikwellbeing.com)**

## ♥ EMC Guidance

The ME EQUIPMENT or ME SYSTEM is suitable for home healthcare environments.

Warning: Don't be near the active HF surgical equipment and the RF shielded room of an ME system for magnetic resonance imaging, where the intensity of EM disturbances is high.

Warning: Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

Warning: Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

Warning: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the equipment TMB-1970, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

## Technical description:

1. All necessary instructions for maintaining BASIC SAFETY and ESSENTIAL PERFORMANCE with regard to electromagnetic disturbances for the expected service life.
2. Guidance and manufacturer's declaration -electromagnetic emissions and Immunity

Table 1

Guidance and manufacturer's declaration - electromagnetic emissions	
Emissions test	Compliance
RF emissions CISPR 11	Group 1
RF emissions CISPR 11	Class B
Harmonic emissions IEC 61000-3-2	Not applicable
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable

Table 2

Guidance and manufacturer's declaration – electromagnetic Immunity		
Immunity Test	IEC 60601-1-2 Test level	Compliance level
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±2 kV, ±4kV, ±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4kV, ±8 kV, ±15 kV air
Electrical fast transient/burst IEC 61000-4-4	Not applicable	Not applicable
Surge IEC61000-4-5	Not applicable	Not applicable
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	Not applicable	Not applicable
Power frequency magnetic field IEC 61000-4-8	30 A/m 50Hz/60Hz	30 A/m 50Hz/60Hz
Conducted RF IEC61000-4-6	Not applicable	Not applicable
Radiated RF IEC61000-4-3	10 V/m 80 MHz – 2.7 GHz 80 % AM at 1 kHz	10 V/m 80 MHz – 2.7 GHz 80 % AM at 1 kHz
NOTE $U_T$ is the a.c. mains voltage prior to application of the test level.		

Table 3

Guidance and manufacturer's declaration - electromagnetic immunity							
Radiated RF IEC61000-4-3 (Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment)	Test Frequency (MHz)	Band (MHz)	Service	Modulation	Modulation (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)
	385	380-390	TETRA 400	Pulse modulation b) 18Hz	1.8	0.3	27
	450	430-470	GMRS 460, FRS 460	FM c) $\pm$ 5kHz deviation 1kHz sine	2	0.3	28
	710	704-787	LTE Band 13,17	Pulse modulation b) 217Hz	0.2	0.3	9
	745						
	780						
	810	800-960	GSM 800/900, TETRA 800, IDEN 820, CDMA 850, LTE Band 5	Pulse modulation b) 18Hz	2	0.3	28
	870						
	930						
	1720	1700-1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4,25; UMTS	Pulse modulation b) 217Hz	2	0.3	28
	1845						
	1970						
	2450	2400-2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation 217 Hz	2	0.3	28
	5240	5100-5800	WLAN 802.11 a/n	Pulse modulation 217 Hz	0.2	0.3	9
	5500						
	5785						