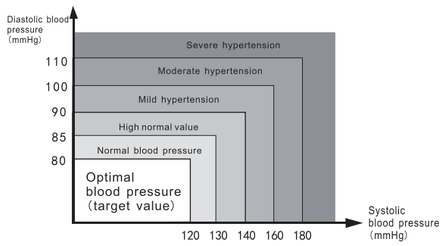
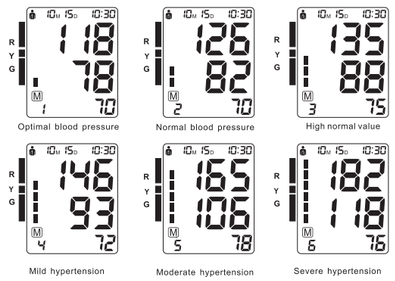
About blood pressure

■According to the blood pressure classification by the WHO/ISH.

■SYS lower than 100mmHg(13.3kPa) is considered as hypotension.



■ Blood pressure type



Specification

Description	Automatic upper arm blood pressure monitor	
Display	LCD digital display	
Measuring principle	Oscillometric method	
Measuring localization	Upper arm	
Measurement range	Pressure	0～299 mmHg (0～39.9kPa)
	Pulse	40～199 pulses/min
Accuracy	Pressure	±3mmHg (±0. 4kPa)
	Pulse	±5% of reading
LCD indication	Pressure	3 digits display of mmHg
	Pulse	3 digits display
	Symbol	Memory/Heartbeat/Low battery
Memory function	2x90 sets memory of measurement values	
Power source	4pcs AA alkaline battery DC. 6V or AC adapter	
Automatic power off	In 3 minutes	
Main unit weight	Approx. 219g(batteries not included)	
Main unit size	L132mm x W100mm x H45mm	
Main unit lifetime	10,000 times under normal use	
Battery life	Could be used for 300 times for normal condition	
Accessories	Cuff, instruction manual	
Operating environment	Temperature	5～40℃
	Humidity	15%～85%RH
	Air pressure	86kPa～106kPa
Storage environment	Temperature -20℃～55℃, Humidity :10% ～85% avoid crash, sun burn or rain during transportation.	

EMC Declaration

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHZ	3 V	Portable and mobile RF communications equipment should be used no closer to any part of the "blood pressure monitor", including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance d=1.2 √P d=1.2 √P 80MHz to 800MHz d=2.3 √P 800MHz to 2.5 Ghz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol:
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2,5 Ghz	3 V/m	

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

a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the "blood pressure monitor" is used exceeds the applicable RF compliance level above, the blood pressure monitor should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the "blood pressure monitor".

b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than [V1] V/m.

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the **following measures:**

-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

FCC RF Exposure Information and Statement

When carrying the product or using it while worn on your body, either use an approved accessory such as a holster or otherwise maintain a distance of 5 mm from the body to ensure compliance with RF exposure requirements. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

Exceptional Situation

Error indicators

■The following symbol will appear on the display when measuring abnormal.

Symbol	Cause	Correction
E-1	Weak signal or pressure change suddenly	Wrap the cuff properly.
		Remeasure with correct way.
E-2	External strong disturbance	When near cell phone or other high radiant device , the measurement will be failed.
		Keep quite and no chatting when measure.
E-3	It appears error during the process of inflating	Wrap the cuff properly.
		Make sure that the air plug is properly inserted in the unit.
		Remeasure.
E-5	Abnormal blood pressure	Repeat the measurement after relax for 30 mins , if get unusual readings for 3 times,please contact your doctor.
	Low battery	Replace all the worn batteries with new ones.

Trouble removal

Problem	Check	Cause and solutions
No power	Check the battery power	Replace new one
	Check the polarity position	Installation for proper placement of the batteries polarities
No inflation	Whether the plug insert	Insert into the air socket tightly
	Whether the plug broken or leak	Change a new cuff
Err and stop working	Whether move the arm when inflate	Keep the body peaceful
	Check if chatting when measured	Keep quite when measure
Cuff leak	Whether the cuff wrap too loose	Wrap the cuff tightly
	Whether the cuff broken	Change a new cuff

⚠ Please contact the distributor if you can't solve the problem, do not disassemble the unit by yourself!

Warranty information

Statement

- The intended use: the unit is intended to be used by adults at home or medical center to measure blood pressure and pulse rate from the upper arm.
- The unit satisfies the requirements of EN 1060-1:1995+A2:2009 Non-invasive sphygmomanometers, EN 1060-3:1997+A2:2009 Non-invasive sphygmomanometers.
- Blood pressure measurements determined with this device are equivalent to those obtained by a trained observer using the cuff/stethoscope auscultatory method, within the limits prescribed by the American National Standard, manual, electronic, or automated sphygmomanometers.
- The risk of patient and user can be lowered to acceptable level.

Warranty Information

- The unit is guaranteed to be free of defects in workmanship and materials under normal use for a period of Two Years from the date listed on the purchase record.
- For repair under this warranty. Our authorized service agent must be advised of the fault with the period of the warranty. This warranty covers parts and labor only under normal operations. Any defect resulting from natural causes, eg. flood, hurricane etc, is not within this guarantee. This guaranty does not cover damage incurred By use of the unit not in accordance with the instructions, accidental damage, or being tampered with or serviced by unauthorized service agents.
- Monitor subjected to misuse, abuse, and neglect of these manual content , non-instructional purposes; unauthorized repair or modifications will be excluded from this warranty.

⚠ The device requires no calibration.

⚠ The device is not repairable and contains no user serviceable parts.

EMC Declaration

Guidance and manufacturer's declaration – electromagnetic emissions

The "blood pressure monitor" is intended for use in the electromagnetic environment specified below. The customer or the user of the "blood pressure monitor" should ensure that it is used in such an environment.

Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The "blood pressure monitor" uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The "blood pressure monitor" is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

Fully Automatic Upper Arm Style

Blood Pressure Monitor

CE

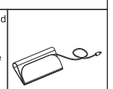
Rev.01

Care and maintenance

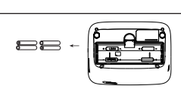
Care for the main unit and blood pressure monitor cuff

● Keep the unit in the storage case when no use.
● Clean the unit with soft dry cloth. Do not use any abrasive or volatile cleaners.
● Never immerse the unit or any component in water.

● Make sure the monitor is off prior to cleaning, a mixture of distilled water and 10 percent bleach could be used.
● Using a spray bottle, moisten a soft cloth towel with the bleach or detergent mix until it is fully saturated. Squeeze any excess moisture from the cloth to avoid any dripping or potential oversaturation of the cuff.
● Wipe all surfaces of the blood pressure monitor cuff thoroughly, making sure to clean the inside and outside of the cuff. Be cautious not to get any moisture in the main unit.
● Using a dry cloth, gently wipe away any excess moisture that may remain on the blood pressure cuff. Lay the cuff flat in an unrolled position and allow the cuff to air dry.



Maintenace

● Do not clean the body and cuff with naphtha, thinner or gasoline etc.	● Do not wet the cuff or attempt to clean the cuff with water.
	
● Store the unit in a clean and dry location . Do not subject the unit to extreme hot or cold temperature, humidity and direct sunlight.	● Remove the batteries if the unit will not be used in 3 months or longer.
	

※We won't be responsible for any quality problem if you don't care and maintain the product as instructed.

EMC Declaration

Guidance and manufacturer's declaration – electromagnetic immunity

The "blood pressure monitor" is intended for use in the electromagnetic environment specified below. The customer or the user of the "blood pressure monitor" should ensure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the elative humidity should be at least 30 %.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5 sec	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the "blood pressure monitor" requires continued operation during power mains interruptions, it is recommended that the "blood pressure monitor" be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE UT is the a.c. mains voltage prior to application of the test level.

EMC Declaration

Recommended separation distances between portable and mobile RF communications equipment and the blood pressure monitor

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

Rated maximum output power of transmitter W	eparation distance according to frequency of transmitter m		
	150 kHz to 80 MHZ $d = [\frac{3,5}{V_1}]\sqrt{P}$	80 MHz to 800 MHZ $d = [\frac{3,5}{E_1}]\sqrt{P}$	800 MHz to 2,5 Ghz $d = [\frac{7}{E_1}]\sqrt{P}$
0,01	0.12	0.12	0.23
0,1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.
NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.