Fully Automatic Upper Arm

Blood Pressure Monitor

Model Number: C02

USER'S MANUAL

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LEGAL DISCLAIMER

Disclaimer regarding the blood pressure monitor, the device is Over-the-Counter (OTC), and the measurements are for informational purposes only and are not intended to diagnose, treat, cure or prevent any disease or health condition.
Reminder.
The model number of this device is: C02
Has been approved by FDA, certification 510K number: K200437
In order to get more accurate measurement results, please pay attention to the correct measurement requirements.

SAFETY INFORMATION AND PRECAUTIONSINTRODUCTION

1. *Read all instructions.*
2. *This device is not intended to be a diagnostic device.*
3. *To avoid any possibility of accidental strangulation, do not drape tubing around your neck.Keep this unit away from children and pets .*
4. *This device is intended for use on upper arm to obtain a blood pressure measurement. This device is not suitable for continuous monitoring or frequently measuring your blood pressure. Do not use the device for any other purpose.*
5. *Consult your physician before measuring blood pressure, especially if you have any of following conditions: hypertension, diabetes, arteriosclerosis, vascular disease, or any conditions affecting circulation.*
6. *Do not change medication or diagnose based on the measurement from the device. Only a physician is qualified to diagnose and treat high blood pressure.*
7. *Do not put the cuff on wounds. If you feel uncomfortable when the cuff inflates, press START/STOP button to stop inflation.*
8. *If heart arrhythmias occur during a measurement, it may cause inaccurate readings or fail to detect blood pressure. Consult your physician to evaluate your blood pressure.*
9. *Power the device with either 3 AA batteries or an AC adapter. Do not use both. Remove batteries if the device is not likely to be used some time. Avoid strong electromagnetic field radiated interference signals and electrical burst signals.*
10. *Do not use this device near flammable gases or flammable liquids are present.*
11. *Use this device under Operating Conditions specified in the SPECIFICATIONS.*
12. *Do not disassemble or attempt to repair this device or any of its components.*
13. *Use only Jamr authorized parts and accessories.under Operating Conditions specified in the SPECIFICATIONS.Consult your physician to evaluate yourblood pressure.*

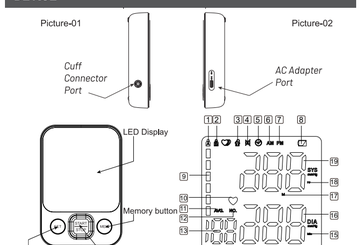
WARRANTY

Your Blood Pressure Monitor is covered by a one-year manufacturer's warranty against defects from the original purchaser from the date of purchase. Proof of purchase is required.
Type-C charging cable is excluded from the warranty. The warranty is void if the product has been subjected to mechanical damage or mistreatment, such as immersion. This warranty is in lieu of all other warranties, and limits the liability of the manufacturer.

INTRODUCTION

The device is a fully automatic blood pressure monitoring device,it is intended to measure the systolic and diastolic blood pressure as well as the pulse rate by using the oscillometric method.
The device is used for adult that ages are more than 12 years old,and used for over-the-counter,it can be used in medical facilities and at home.

DEVICE



The symbols on the LED display

1.User A *2.User B*
3.Movement error symbol *4.Mute symbol*
5.Cuff self-detecting function *6.AM symbol*
7.PM symbol *8.Low battery symbol*
9.WHO function symbol *10.Heartbeat symbol (Flashes during measurement)*
11.Average value symbol *12.NO. symbol*
13.Pulse symbol *14.Date symbol*
15.Minute symbol *16.Diastolic blood pressure*
17.Month symbol *18.Hour symbol*
19.Systolic blood pressure

Features of Model C02

1. Cuff self-checking function *2. Double users: 2 x 120 sets memory*
3. Average value function *4. Low battery display*
5. WHO function *6. Auto power-off*
7. External power adapter support *8. Time stamp in memory*

1. Connect the Cuff Tube to the Monitor.
Insert the tube into the opening on the left side of the monitor.

2.Use only AA batteries. *(For eco-friendly and transport safe, batteries and adapters are not included in the product package.)*
1) Open battery cover.
2) Install the 3AA batteries by matching the correct polarity.
3) Close the cover.
4) Replace the batteries when Low Battery Indicator shows, the display dims, or the display does not light up.

3. Option: External AC Adapter *(Not Included)*
You may also operate this monitor using an external AC adapter (output 5V DC/1A with Type-C Cable).

Caution
1) Remove batteries if the device is not likely to be used for over three months. Battery leakage can damage your device.
2) Do not dispose of batteries with other ordinary trash. They are harmful to the environment.
3) Do not dispose of batteries in fire. They may explode.
4) Follow your local recycle guidelines to properly dispose of used batteries.

SYSTEM SETUP

Setting the User:
Press the SET button to select User A or User B. When display A (/B) on the screen press the SET button to switch to user B (/A). Press the START/STOP button to confirm.

Setting the Year/Month&Date/Time:
Long press the SET button for more than 6s, and then you can start to set.

Setting the Year:
Initial year is 2022. when the year display is flashing, press the MEM button, the year will increase by 1 year each, hold the MEM button and it will increase continuously 1 by 1, until 2049 and then rollover to 2022, once the year set is OK, press SET button to confirm.

Setting Month/Date:
Initial Month/Date is 01/01, when the Month display is flashing, press the MEM button, the month will increase by 1, press SET button to confirm, and do in the same way to set the date. Press SET button to confirm.

Setting Time :
When the hour display is flashing, press the MEM button, the hour will increase by 1, press SET button to confirm, and do in the same way to set the minute. Press SET button to confirm.

Record Delete:
When you checking the memory data, long press MEM button to delete existing user measurement data.

Note:
If you decide to delete the all memory, please keep the memory in another way, incase you need it some days later. Take the battery out won't lead to a memory missing.

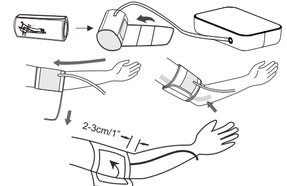
TIPS FOR MEASUREMENT

1. *Take measurements under the similar conditions to have consistent and comparable measurements.*
2. *Use the same arm each time to measure your blood pressure.*
3. *The best time to take measurement:*
   - *within an hour of getting up in the morning, after emptying bladder and before breakfast.*
   - *before bed at night.*
4. *Wait at least three minutes between measurements is recommended.*
5. *Avoid taking measurements under following conditions that may cause inaccuracy.*
   - *within one hour of eating or drinking*
   - *within 20 minutes after taking a bath or a shower*
   - *when talking or moving your fingers*
   - *when needing to use the restroom*
   - *in a very cold or hot environment*

MEASUREMENT

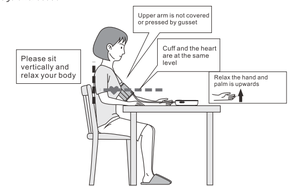
Fasten the Cuff

1) *Fasten the cuff on your left upper arm about one inch (2~3 cm/1") away from your elbow. Position the tube off-center toward the inner side of the arm. The artery mark (the edge of the cuff) is close to the artery upper arm in line with the little finger.*
2) *The cuff should snug but not too tight. You should be able to insert one finger between the cuff and your arm.*
3) *The middle of the cuff should be at the level of your heart.*



Position Yourself

Sit comfortably with your arm resting on a flat surface, palm up, feet flat on the floor and legs uncrossed.



Start the Measurement

1) *Select your user ID. Press "SET" button to toggle which user you want to measure. Press "START/STOP" button to turn off the monitor.*
2) *Press "START/STOP" button to turn on the blood pressure monitor and the measurement starts. It will display Systolic/Diastolic blood pressures and pulse rate when the measurement is done.*
3) *The monitor will display if irregular heartbeat is detected during the measurement.*
4) *Press "START/STOP" button to power off, otherwise the monitor will automatically turn off within one minute of the reading.*

Note: If you feel uncomfortable when the cuff inflates, press START/STOP button to stop inflation.

SPECIFICATIONS

Technical alterations reserved!

Model: C02
Size(mm): 126 (W)×85 (L)×28 (H)
Size(inch):4.84"(W)×3.23"(L)×0.98"(H)

Display: LED Digital Display
Display(mm): 62.5×63.5mm
Display(inch): 2.46"x2.5"

Weight: 261g (Batteries and AC adapter are not included); Accessories: 1×Main Device, 1×Users manual, 1×Type-c Cable, 1×Wide range rigid cuff 8.7" – 15.7" (22 - 40 cm)

Automatically power off : 60 seconds
Measuring method: Oscillometric
Pressure sensor: Resistive
Measuring resolution: 1 mmHg
Users: Adult

DIA Measuring range: 40-200mmHg
SYS Measuring range: 60-255mmHg
Pulse Measuring range: 40 to 170 per minute
Cuff pressure display range:<295mmHg
Atmospheric pressure range: 70kPa~106kPa

Operating Conditions: Temperature: 5℃ to 40℃;Humidity : 15% to 93% RH;
Storage And Shipping Conditions:Temperature: -25℃ to +70℃; Humidity:≤93% RH;
Memory: Automatically stores the last 120 measurements for 2 users (total 240)
Accuracy: Pressure within ± 3 mmHg / pulse ± 5 % of the reading

Power source: a) 3×AA batteries, 4.5 V
b) AC adapter INPUT: 100-240VAC 50/60HZ OUTPUT: 5V DC 1A

Expected service life of the device and accessories: 5 years

CERTIFICATIONS

Device standard:
This device is manufactured to meet the American blood pressure monitors: IEC 80601-2-30 • IEC60601-1-11 • IEC60601-1
Electromagnetic compatibility:
Device fulfills the stipulations of the International standard: IEC60601-1-2

CARE AND MAINTENANCE

1. Store the monitor kit in a dry place.
2. Clean the monitor with a dry cloth as needed. Avoid contact with water.
3. Clean the cuff with a damp cloth as needed. Do not wash the cuff.
4. Handle the tube carefully. Do not pull or twist the tube.
5. Remove batteries if the device is not likely to be used for some time.

MEMORY

1. View Records

1) Press "SET" button to toggle which user you want to view history for.
2) Press the "MEM" button to display the average value of the latest three records. Continue to press the "MEM". The monitor will display previous records, starting with the latest record first.

2. Delete Records

Warning: ALL records associated with the user will be deleted! Please write down as needed before operating the steps below.
1) Press "SET" button to select the user.
2) Press "MEM" button to view the user's history.
3) Hold down the "MEM" button for three seconds. All records associated with the user will be erased.

TROUBLE SHOOTING

SYMBOL	CAUSE	CORRECTION
No display appears	Weak battery or improper placement	Replace both batteries with new ones. Check the battery installation for proper placement of the battery polarities.
Er 1	Sensor abnormal	Please make sure the cuff pressure is drained and then measure again. If the error is still displayed, please send it to local distributor
Er 2	Monitor could not detect pulse wave or cannot calculate the blood pressure data	Tie the cuff correctly and make the measurement again. If the error is still displayed, please send it to local distributor
Er 3	Measurement result is abnormal	Occasionally-measure for one more time/ Always -send it to local distributor
Er 4	Too loose cuff or air leakage	Tie the cuff correctly and make sure the air plug is properly inserted in the unit
Er 5	The air tube is crimped or the cuff is tied too tight.	Correct it and make the measurement again
Er 6	The sensor is sensing great fluctuation in the pressure	Please keep quiet and don't move
Er 7	The pressure that the sensor sensing is over the limit	Please send back to the local distributor
Er 8	The demarcation is incorrect or the device has not been demarcated	Please send back to the local distributor
HI	The pulse rate exceeds the upper limit (>170 per minute)	Beyond the measurement range, normal reminder
LO	The pulse rate is less than the lower limit (<40 per minute)	Beyond the measurement range, normal reminder

The following symbol will appear on the display when measuring abnormal

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 is broken	Change a new cuff

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

BASICS ABOUT BLOOD PRESSURE

What is the Blood Pressure? What is the difference between systolic pressure and diastolic pressure?

The blood pressure is the pressure of the blood within the arteries, the result of two forces. The first force (systolic pressure) occurs as blood pumps out of the heart and into the arteries that are part of the circulatory system when it reaches its maximum value in the cycle. The second force (diastolic pressure) is created as the heart rests between heart beats when it reaches its minimum value in the cycle.

Blood Pressure Categories

The five blood pressure ranges are categorized by the WHO Heart Association.

Blood pressure category	Systolic mmhg	Diastolic mmhg
Best	≤119	≤79
Normal	120-129	80-84
Elevated	130-139	85-89
High Blood Pressure(Hypertension)Stage 1	140-159	90-99
High Blood Pressure(Hypertension)Stage 2	160-179	100-109
Hypertension Crisis(consult your doctor immediately)	≥180	≥110

Blood Pressure Fluctuations

1) Individual blood pressure varies throughout the day. It is normally lower at night while you are sleeping. Your blood pressure starts to rise a few hours before you wake up, continues to rise during the day,usually peak in the middle of the afternoon. Then in the afternoon and evening, your blood pressure begins dropping again.
2) Certain medications can affect your blood pressure.
3) Strong emotions, particularly stress and anxiety, can cause your blood pressure to spike.
4) Weather is also a factor to affect your blood pressure, usually higher in the cold and lower in the heat.
5) It is normal to see temporary increases in blood pressure duringexercise.

Different Blood Pressures from the Hospital and from Home Possible causes

1) Your blood pressure can vary throughout the day due to many factors listed in item 3.
2) Check the following situations that could be causing a false measurement:
- The cuff is too loose or too tight.
- The cuff is not secured properly.
- The cuff is not placed correctly around the arm.
- Your arm is not rest correctly.
- Your legs are crossed.
- You measure too quickly after a previous reading.

Irregular Heartbeat Detector

During each measurement, if the device has detected irregular heart beats, the Irregular Heart beat symbol will be displayed.

The following symbols may appear in this manual, on the Digital Blood Pressure Monitor C02.

Date of manufacture.		Manufacturer
SN Specifies serial number	Keep dry	Type BF applied part
Direct current	Handle gently	Put up
Fragile	Temperature range	Avoid the sun
DISPOSAL: Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.		
Follow instructions for use		MR unsafe.
IP21 The degree of avoid ingress of water or particulate matter into ME equipment		
No Sterilize requirement	Not category AP / APG equipment	
Mode of operation: continuous		

EMC DECLARATION

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

Warning: Don't near 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 Blood Pressure Monitor (C02), including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

If any: a list of all cables and maximum lengths of cables (if applicable), transducers and other ACCESSORIES that are replaceable by the RESPONSIBLE ORGANIZATION and that are likely to affect compliance of the ME EQUIPMENT or ME SYSTEM with the requirements of Clause 7 (EMISSIONS) and Clause 8 (IMMUNITY). ACCESSORIES may be specified either generically (e.g. shielded cable, load impedance) or specifically (e.g. by MANUFACTURER and EQUIPMENT OR TYPE REFERENCE).

If any: the performance of the ME EQUIPMENT or ME SYSTEM that was determined to be ESSENTIAL PERFORMANCE and a description of what the OPERATOR can expect if the ESSENTIAL PERFORMANCE is lost or degraded due to EM DISTURBANCES (the defined term "ESSENTIAL PERFORMANCE" need not be used).

Technical description

1. All necessary instructions for maintaining BASIC SAFETY and ESSENTIAL PERFORMANCE with regard to electromagnetic disturbances for the excepted 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	Class A
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Applied

Table 2

Guidance and manufacturer's declaration - electromagnetic Immunity		
Test frequency	**Modulation**	**IMMUNITY TEST LEVEL (A/m)**
30 kHz	CW	8
134,2 kHz	Pulse modulation b) 2,1 kHz	65 c)
13,56 MHz	Pulse modulation b) 50 kHz	75 c)

a) This test is applicable only to ME EQUIPMENT and ME SYSTEMS intended for use in the HOME HEALTHCARE ENVIRONMENT.
b) The carrier shall be modulated using a 50 % duty cycle square wave signal.
c) r.m.s., before modulation is applied.

Table 3

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, ±4 kV, ±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air
Electrical fast transient/burst IEC 61000-4-4	Power supply lines: ±2 kV input/output lines: ±1 kV 100 kHz repetition frequency	Power supply lines: ±2 kV
Surge IEC 61000-4-5	line(s) to line(s): ±0.5 kV line(s) to earth: ±2 kV line(s) to lines(s): ±1 kV	line(s) to line(s): ±0.5 kV line(s) to line(s): ±1 kV.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% 0.5 cycle At 0º, 45 º, 90 º, 135 º, 180 º, 225 º, 270 º and 315 º 0% 1 cycle And 70% 25/30 cycles Single phase: at 0 0% 300 cycle	0% 0.5 cycle At 0º, 45 º, 90 º, 135 º, 180 º, 225 º, 270 º and 315 º 0% 1 cycle And 70% 25/30 cycles Single phase: at 0 0% 300 cycle
Power frequency magnetic field IEC 61000-4-8	30 A/m 50Hz/60Hz	30 A/m 50Hz/60Hz
Conduced RF IEC61000-4-6	150KHz to 80MHz: 3Vrms 6Vrms (ISM and amateur radio bands) 80% Am at 1kHz	150KHz to 80MHz: 3Vrms 6Vrms (ISM and amateur radio bands) 80% Am at 1kHz
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
Proximity magnetic fields IEC 61000-4-39	30 kHz: 8A/m 134.2 kHz: 65A/m 13.56 MHz: 7.5A/m	30 kHz: 8A/m 134.2 kHz: 65A/m 13.56 MHz: 7.5A/m

NOTE 1: U_T is the a.c. mians voltage prior to application of the test level.

Table 4

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 a) (MHz)	Service a)	Modulation a)	IMMUNITY TEST LEVEL (V/m)
	385	380-390	TETRA 400	Pulse modulation b) 18 Hz	27
	450	430-470	GMRS 460, FRS 460	FM c) ±5 kHz deviation 1 kHz sine	28
	710 745 780	704-787	LTE Band 13, 17	Pulse Modulation b) 217 Hz	9
	810 870 930	800-960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse Modulation b) 18 Hz	28
	1720 1845 1970	1700-1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse Modulation b) 217 Hz	28
	2450	2400-2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse Modulation b) 217 Hz	28
	5240 5500 5785	5100-5800	WLAN 802.11 a/n	Pulse Modulation b) 217 Hz	9

If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000-4-3.

a) For some services, only the uplink frequencies are included.
b) The carrier shall be modulated using a 50 % duty cycle square wave signal.
c) As an alternative to FM modulation, the carrier may be pulse modulated using a 50 % duty cycle square wave signal at 18 Hz. While it does not represent actual modulation, it would be worst case.