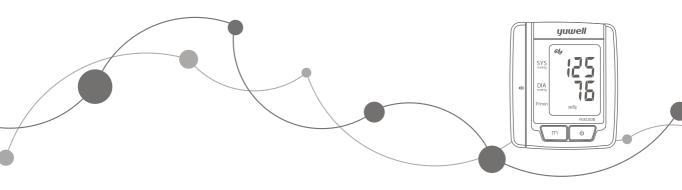
# yuwell



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# YE8100B

**Electronic Blood Pressure Monitor** 

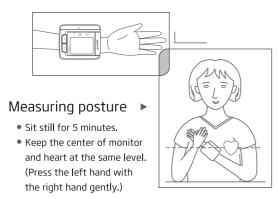
# User's Manual

Please read the user's manual closely before using!

## Contents

#### Using method

- Wear the monitor on the wrist as the following picture.
- The suitable circumference for wrist is 13.5cm~19.5cm.



## Start measuring

- Press the " **b** " button to measure.
- Do not speak or move while measuring.
- Don't eat, smoke, drink, take bath or do any high impact sport within half an hour before measuring.

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#### Cautions

Pay attention with the symbols shown here to prevent harm or damage to the user.

Symbol	Description	
<u> </u>	Attention! It might cause damage	
$\Diamond$	Prohibited	
0	Obligatory	
<b>*</b>	Type BF application part	
	Class II device	
$\triangle$	Consult the manual	
<u> </u>	Keep Upright	
	Fragile	
7	Keep Dry	

## Application scope and attention items\_

#### 1. Range of application

Diabetes, high blood lipids, hypertension will accelerate atherosclerosis and cause nerve ending dysaemia. We advice these patients and eldly to use upper arm type monitors for measurement.

#### 2. Attention items

- Caution: Pay attention to the following points when measuring or it may cause the incorrect results.
- ① Sit still for 5 minutes before measuring to ensure quiet and stable mode.
- O not take the measurement while standing, walking or having body pressed.
- O Do not take the measurement after smoking, drinking wine or coffee (black tea).
- O Do not take the measurement after sport or bath.
- O Do not speak or move while measuring.
- On not move, shake arm or bend fingers while measuring.
- O Do not take the measurement at extreme

## Application scope and attention items

temperature condition or the varied severely environment.

- O Do not take the measurement in a moving vehicle.
- Do not measure continuously. (2~3 minutes or more should be spared between two measurements).
- O Do not measure within 1 hour after meal.
- On not use mobile phone near the monitor.
- Please reinstall the batteries and start again if cannot measure.
- For patient of arrhythmia, measuring results may not be accurate.
- On not keep the cuff in the aerated state for a long time.

Note: Do not diagnose with the measurement, Please follow doctor's instruction.

Statement: If the monitor has not been stored in the required temperature and humidity range, it may not conformance to specification.

## Features and technical parameters

#### 1. Summary

The monitor is used for measuring blood pressure of human body (adult older than 12, not suitable for new born baby)! This monitor is suitable for daily healthcare. People can measure blood pressure anytime and anywhere.

#### 2. Features

Full-automatic intelligent wrist type
Large screen & big font LCD
60 groups of memory
Average value display of three times measurement
kPa & mmHg units display
Automatically shut down in 3 minutes after
measurement.

#### Measurement principle

The product adopts with oscillation mensuration to measure blood pressure. The principle is: the program will automatically calculate the systolic pressure, diastolic pressure and pulse in the process of deflation of the cuff.

## Features and technical parameters

3. Technical parameters

Displaying: LCD digital display

Measuring method: oscillation mensuration

Measuring range:

Systolic pressure: 60-230mmHg (8.0-30.7kPa) Diastolic pressure: 40-130mmHg (5.3-17.3kPa)

Pulse rate: 40-200 time/min

Precision:

Pressure: within 3mmHg(0.4kPa)
Pulse rate: within 5% of reading value

Working system: Intermittent

Electric classification: Class II, type BF application part

Pressure sensor: Semiconductor pressure sensor

Pressurization: Automatic pressurize
Depressurization: Automatic air releasing

Power supply: 2 AA batteries Maximum battery life: 300 times

Suitable wrist circumference: 13.5-19.5cm

Wight: about 120g

## Features and technical parameters

Dimension: 69x58.3x27.5(mm)

Operation conditions:

Working temperature: +5°C∼+40°C

Relative humidity: 15%~80%

Working atmosphere pressure: 80kPa~105kPa

Operation environment:

Avoid electromagnetic interference, violent shock and

noise environment.

Radio frequency interference

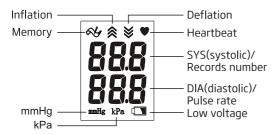
There is the potentia risk of radio frequency interference between the device and other devices. If there is, please find out the problems and take the following measures:

- (1) Turn off the device, and turn on again,
- (2) Change the direction of the device,
- (3)Keep the product away from the interferential devices.

## Main part



## Display



#### Accessories

- ◆ Storage box
- ◆ 2 AA batteries
- User's manual(Warranty card)

## **Battery installation**

# Battery installation\_

 Open the battery cover as the direction of the arrow
 Note: Press the two sides bulge of the battery cover tightly and pull outward.



Install two AA batteries properly.

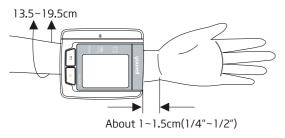


3. Close the cover.



- If accidentally strayed the electrolyte of battery into eyes, skin or cloth, please rinse with plenty of water.
- The" □ "icon appearing means the battery is running out. Please replace all the batteries.
- Please take out the batteries if the monitor will not be used for a long time (over three months).
- Please do not mix new batteries with old batteries .
- Please dispose batteries in accordance with the local environmental law.

- Please wear the cuff on bare wrist, do not leave cloth inside of the cuff. Maintain the cuff is not too loose or too tight.
- 2. The distance between palm and the end of monitor should be about 1.0cm~1.5cm.



- 3. Please stick the cuff firmly. Or it may get loose while measurement and affect the results.
- 4. Wind the spare part of cuff properly.

#### Tips!

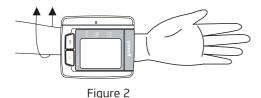
Both wrists can be measured.

- 1. Sit straightly and keep relax. (as Figure 1)
- O Do not bend down or body bend forward.
- 2. Take 3 ~ 4 deeply breath then relax shoulder and arm before measurement.
- 3. Keep the monitor and heart at the same level.Do not talk, move, shake hand or bend fingers while measurement. We suggest supporting the arm with a cushion.



Figure 1

The correct wrist posture(as Figure 2)



NOTE: Relax fingers and keep a natural extension of state.

#### Wrong measurement postures

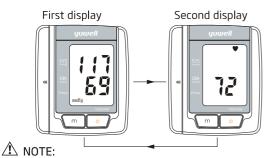
- 1.Do not clench fists, or may cause higher blood pressure.
- 2. Do not hold the cuff with another hand.
- 3. Do not hold the arm hard while measurement. If it is necessary please support the arm with a cushion.

1. Press the " **U** " button to start measuring after batteries installation.

Then the monitor starts pressurizing.



- 2. After measurement, the monitor will show the SYS, DIA and pulse rate, then inflate the air automatically. (Also it will power off automatically in 3 minutes without any operation.)
- 3. The monitor will show the SYS, DIA at first display, and show pulse rate at second display.



- Do not move and keep quiet until measurement finished.
- 2. Keep the monitor and heart at the same level.
- 3. Restart if the cuff got loose while measurement.
- 4. Push the " **b** " button to stop measurement. If it does not work, please take off the cuff.
- 5. The time interval between two measurements should be at least 2~3 minutes or longer.

— 15 —

The monitor will store the measurement data automatically (including time, date, blood pressure and pulse), and the upper limit of records is 60.



Press the " M " button for the records.

A. Press the " M " button to show the average value of the latest 3 times measurement.



The average value



The 2nd group of memory

B. Repress the" **M** "button to display the 1st group of memory, the serial number is displayed as "1" to "60".
"1" is the latest group and the "60" is the earliest one.

- **Tips!** The 60th data may be replaced by the 59th when the memory capacity is full.
- C. Read the recorded data by pressing the " **M** "button as the sequence: "1", "2" ......"60"(max). Then return to the 1st.
- D. Holding the "  $\,$   $\,$   $\,$  button to search the data quickly.

#### Delete the recorded data

Press the both " **b** " button and " **m** " button in memory display until the display shown as the following picture, which means the recorded data is cleared.



riangle Note: This operation will delete all the recorded data.

Long press both the "  $\mbox{\bf 0}$  " button and "  $\mbox{\bf m}$  " button to enter the mmHg/ kPa unit setting. Press the "  $\mbox{\bf m}$  " button to switch and press the "  $\mbox{\bf 0}$  " button to confirm.





kPa display

This function is mainly for professional personnel to enter the static mode to test the monitor through standard pressure gauge.

Warning: Normal users don't need to know this function and also do not operate. The company will not take any responsibility for damage caused by this operation.

#### System restores

Press the "  $\psi$  " button after battery installation, then the screen will show the"  $\aleph$  " icon, which means the system is in restore testing. Several seconds later, the "  $\aleph$  " icon disappears and the air pump starts inflating at the same time, which indicates the test ended. Then press the "  $\psi$  " button to stop inflating and take out the batteries to enter the next step.

Note: It must restore the system before entering the static mode, otherwise it may cause inaccurate results.

#### 2. Entering the static mode

Press the " M " button and hold, meanwhile install the batteries. Hold on for about 3 seconds then release the" M " button. Then screen will show the pressure value " 0 ", the date and time. Now the system has restored and entered the static mode. Now can take the static test.



The static mode

#### Tips!

- ▶ After entering the static mode, if the screen still doesn't show " ▮ ", please operate again as the System restore. Please contact with the local distributor if it still does not work.
- ▶ The monitor will automatically power off if there is no operation in 4 minutes.

#### About the blood pressure on wrist and upper-arm

Diabetes, high blood lipids, hypertension will accelerate atherosclerosis and cause nerve ending dysaemia. The blood pressure on wrist and upper-arm may have a significant difference on these patients. Even if in unsuitable conditions, healthy persons may cause about 20 mmHg( 2.6kPa) difference. So we suggest do not diagnose by oneself, please consult the doctor.

Normally, the blood pressure on wrist and upper-arm are same.But circulatory system disorders may have a significant difference. Please manage your blood pressure with experts.

Healthy persons have a 20 mmHg( 2.6kPa) difference between blood pressure on wrist and upper-arm.

## About measuring posture

If wrist and heart are not at a same level, the blood pressure will change as a result of the weight of blood. When the wrist is higher than the heart, the value measured will be lower, and vice-versa. Every 10cm

about 8 mmHg(1kPa) difference. Of course the value is more closely related to the measuring posture.

#### Blood pressure on wrist

When take bath with high temperature water ,the blood pressure will rise. But oif ake bath withwarm water, the blood pressure will drop. And the blood pressure on wrist will drop more than on upper-arm.

#### 1. What is blood pressure?

Blood pressure is the force exerted by blood against the walls of the arteries. Systolic pressure occurs when the heart contracts. Diastolic pressure occurs when the heart expands. Blood pressure is measured in millimetres of mercury (mmHg). One's natural blood pressure is represented by the fundamental pressure, which is measured first thing in the morning while one is still at rest and before eating.

## 2. What is Hypertension and how is it controlled?

Hypertension, an abnormally high arterial blood pressure, if left unattended can cause many health problems including stroke and heart attack. Hypertension can be controlled by altering lifestyle, avoiding stress, and with medication under a doctor's supervision.

To prevent Hypertension or keep it under control: Do not smoke, exercise regularly, reduce salt and fat intake, have regular physical checkups, maintain proper weight.

#### 3. Why measure Blood Pressure at home?

Blood pressure measured at a clinic or doctor's office may cause apprehension and can produce an elevated reading, 25~30 mmHg higher than that measured at home. Home measurement reduces the effects of outside influences on blood pressure readings, supplements the doctor's readings and provides a more accurate, complete blood pressure history.

#### 4. WHO Blood Pressure Classification?

Standards to assess high blood pressure, without regard to age, have been established by the world Health Organization (WHO), as shown below:

Range	Systolic pressure	Diastolic pressure	Counter- measures
Hypotension	≤13,3/100	≤8.0/60	Consult dr.
Ortho-arteriotony	13.3/100~18.7/140	8.0/60~12.0/90	Self check
Mild hypertension	18.7/140~21.3/160	12.0/90~13.3/100	Consult dr.
Medium hypertension	21,3/160~24,0/180	13.3/100~14.7/110	Consult dr.
Severe hypertension	≥24.0/180		Danger! Go to hospital as soon as possible

Note: There is no definition about hypopiesia, and generally SYS(systolic pressure) less than 100mmHg is called hypopiesia.

#### 5. Blood pressure variations?

An individual's blood pressure varies greatly on a daily and seasonal basis. It may vary by 30 to 50 mmHg due to various conditions during the day. In hypertensive individuals variations are even more pronounced. Normally, the blood pressure rises while at work or play and falls to its lowest levels during sleep. So do not be overly concerned by the results of one measurement.

Take measurements at the same time every day using the procedure described in this manual to get to know your normal blood pressure. Regular readings give a more comprehensive blood pressure history. Be sure to note date and time when recording your blood pressure. Consult doctor to interpret the blood pressure data.

## **Common questions**

# Common fault and trouble shooting \_

- 6. When is the best time to measure blood pressure?
- ▶ After urination, before breakfast in the morning.
- ▶ Before sleeping at night.
- ▶ Before taking medicine.
- ▶ Please keep a stable body state and mind every time measuring. We suggest taking measurements at a same time every day.

Common fault	Solutions
It doesn't work after pressing the " <b>७</b> "button	Check the batteries are installed correctly
with batteries installation	Replace new batteries
	Check the connection and winding of cuff
Multiple occurrences of measuring failure, or measured value is low	Check if the cuff winded too tight or too loose. Take off your clothes if rolled too tight
(or high)	Please ensure a quiet, relaxed body state o. Deep breathing to relax yourself before measurement
The monitor is in good condition, but the each measuring result are different	Please read the "blood pressure variations"carefully
The value is different from that measured at a clinic or doctor's office	Write down the value every day, and consult a doctor
Pump works, but the pressure doesn't rise	Check whether the cuff has connected well

The table below shows the possible fault displaying icon, possible reason, and solutions.

Wrong indication	Fault cause	Solution
Err4	Unable to measure pressure	Fasten cuff correctly before measurement
Err5	Pressurizing error	Check if there is air leakage from the cuff
Err6	Pressurizing error caused by arm or body motion	Keep arm and body still and measure again
Err7	Cuff is too lose or fall off	Fasten cuff tightly
Err8	Pressure exceeds the maximum value (290mmHg)	Measure again please
Showing low voltage icon	Battery is low	Replace new batteries

Warning: If the situations cannot be solved or unexpected problem happens, please consult the local distributor.

Please observe the following items to protect the device and ensure the accuracy of measurement.

- Please store the monitor and accessories properly after use.
- Do not place the monitor and accessories in high temperature, moisture, dust, or exposure to sunshine. The cuff contains an airbag inside, please care in applications, do not fold, pull or twist it.
- ① Do not disassemble or repair the device without authorization.
- Do not replace the parts without authorization. Please clean the monitor with soft dry cloth. If it's necessary, please use wiped soft cloth with water or neutral detergent before cleaning by soft dry cloth.
- O Using absorbent cotton to wipe gently with rubbing alcohol, disinfection of the machine when it necessary.
- **①** Do not use detergent to clean.
- O Do not let water seep into the device.

## Maintenance

## Tips!

We advice to calibrate the monitor according to local laws and regulations.

## Transport and storage conditions

Temperature: -20°C~ +55°C

Relative humidity:15%~80%, no condensation

Atmosphere pressure: 80kPa ~ 105kPa