



## Digital Blood Pressure Monitor



MODEL : SK-015BL

## Instruction manual

## Introduction

---

▲ Thank you for purchasing  Fully Automatic Upper Arm Digital Blood Pressure Monitor.

▲ The device uses the oscillometric method of blood pressure measurement. It means the device detects the movement of your blood through your brachial artery and converts your blood pressure into a digital reading. An oscillometric monitor does not need a stethoscope, hence the device is simple to use.

▲ The device could measure the systolic pressure, diastolic pressure and pulse. The components included in the box are the body arm cuff and printed instruction manual. However, batteries are optional. The device is intended to be used by adults only.

▲ Intelligent inflation reduces the uncomfortable feeling by incorrect inflation, and shorten the measurement time, prolong the cuff's usage lifetime.

▲ The device stores automatically 2x99 sets of measurement value and each measurement result will be displayed on the screen. The stored data can be read conveniently by pressing the memory button. This device has blood classification index which helps to easily check your blood pressure.

Please read the instruction manual carefully before using the device, and keep the manual well after using it.

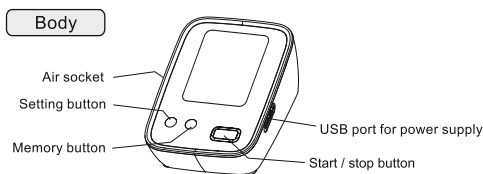
## Table of Contents

---

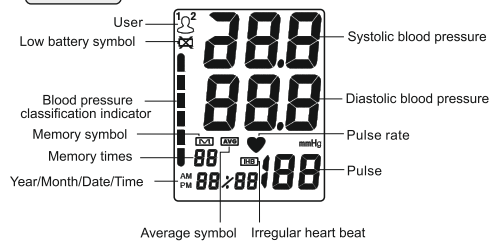
Introduction .....	3
Product Structure .....	4
Safety Information .....	5
About Blood Pressure .....	8
Specifications .....	10
How to use	
– How to use the arm cuff .....	11
– Measure blood pressure accurately .....	13
-- Common factors responsible for error in measurement .....	13
– How to measure blood pressure .....	14
– To discontinue the ongoing measurement .....	14
– How to use the memory function .....	15
– To display the measurement values .....	15
-- To delete all values stored in the memory .....	15
System setup of User, Time and Date function .....	16
Battery Installation / Replacement .....	18
Troubleshooting .....	20
Care and Maintenance .....	22
Warranty Information .....	24

## Product Structure

### Body

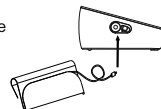


### Display



### Cuff size and connection

The accessories cuff is M size, for upper-arm circumference 22- 36cm use. The cuff is treated as the applied part. Insert the connector with cuff tube into the hole which is on the left side of the device as picture. (Only provided cuff can be used, can not change to any other branded cuff.)



## Safety Information

---

- To assure the correct use of the device, some basic safety measures should be followed including the precautions listed in the manual:
- ▲ Those suffering from arrhythmia, diabetes, blood circulation or apoplexy problem, please use under the physician's advice.
- ▲ Self-diagnosis of measured result and treatment is dangerous. Contact your physician for specific information about your blood pressure. Follow the instructions of your doctor.
- ▲ The device is intended to be used in measuring blood pressure and pulse rate for adults only and is it not recommended for neonatal baby.
- ▲ Operate the device only as intended. Do not modify, use for any other purpose without authorization of the manufacturer.
- ▲ Do not disassemble or attempt to repair the device or any components as it will cause the device to function erroneously.
- ▲ The swallowing of small parts like packaging bag, battery, battery cover, wrapping of cuff hose around the neck may cause suffocation.
- ▲ Please don't use a dilution agent, alcohol or petrol to clean the device. Please don't hit heavily or drop the device from a high place.
- ▲ Do not use the device where flammable gases (such as anesthetic gas, oxygen or hydrogen) or flammable liquid (such as alcohol) are present.

## Safety Information

---

- ⚠ Do not use a cellular phone near the device. It may result in operational failure.
- ⚠ Please avoid using in high radiant area in order to make your measuring data correctly.










### ⚠ WARNING:

Do not dispose of the electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding collection systems available. If electrical appliances are disposed in landfills or dumps, hazardous substance can leak into the groundwater and get into the food chain, damaging your health and well-being.

## Classification

1. Internally powered equipment;
2. Type BF applied part;
3. Protection against ingress of water: IPX0;
4. Not category AP / APG equipment;
5. Mode of operation: Continuous operation;

Safety Information

Symbol descriptions	
	WARNING: This alert identifies hazards that may cause serious personal injury or death.
	Type BF applied part
	Manufacturer
SN	Specifies serial number
	DISPOSAL: Do not dispose this device as an unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
	Keep dry
	Follow instructions for use
	CAUTION: Consult accompanying documents

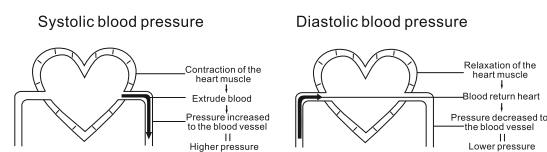
## About blood pressure

### 1. What is blood pressure?

Blood circulation is responsible for supplying the body with oxygen. Blood pressure is the pressure exerted on the arteries.

The **systolic blood pressure** value (higher pressure or top value) represents the blood pressure produced by contraction of the heart muscle.

The **diastolic blood pressure** value (lower pressure or lower value) represents the blood pressure produced by relaxation of the heart muscle.



**Note:** Blood pressure is measured in millimetres of mercury (mmHg)

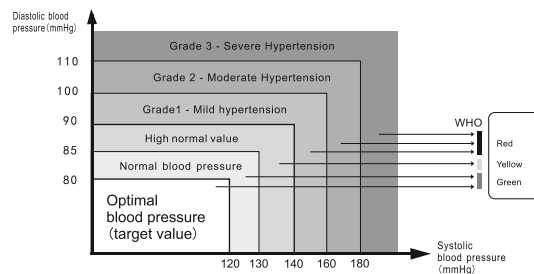
### 2. WHO blood pressure classification

Standards for assessment of high blood pressure, without regard to age, have been established by the World Health Organization (WHO).

According to the blood pressure classification by the WHO/ISH, SYS lower than 100mmHg (13.3kPa) is considered as hypotension.



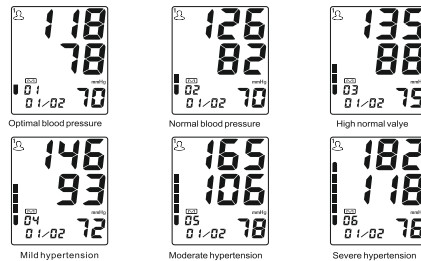
## About blood pressure



**Note:** When a person's systolic and diastolic pressures fall into different categories, the higher category should apply.

### 3. Classification of blood pressure

After each measurement is completed, the LCD display will show your position automatically on the six segments of the bar indicator which corresponds to WHO Blood Pressure indicator.



## Specifications

Description	Automatic upper arm blood pressure monitor	
Display	LCD digital display	
Measuring principle	Oscillometric method	
Measuring localization	Upper arm	
Measurement	Pressure	0~299 mmHg (0~39.9kPa)
range	Pulse	40~180 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/Average/IHB/Heartbeat/Low Battery,etc.
Cuff pressure	0-299 mmHg	
Memory function	2x99 sets memory of measurement values	
Power source	4pcs AA alkaline battery DC. 6V or USB 5V power supply	
Automatic power off	In 2 minutes	
Main unit weight	Approx. 230g (batteries not included)	
Main unit size	L121mm x W90 mm x H58mm	
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	10~40℃
	Humidity	15%~90%RH
	Air pressure	80kPa~105kPa
Storage environment	Temperature -20℃~55℃, Humidity :10% ~95% avoid crash, sun burn or rain during transportation.	
Blood Pressure Indication Range	SYS: 60~260mmHg	
	DIA: 30~200mmHg	

Note: the product can not be operated at an altitude of 2000m.

## How to use

### How to use the arm cuff

1) Make sure the air plug is inserted properly in the main device.



2) Remove all clothes from your upper arm allowing the cuff to fit directly on the skin.



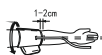
3) Pass the end of the cuff through the metal and keep the hose outwards (ignore this step if the cuff has already been prepared).



4) Push the cuff over the left upper arm so that the tube points in the direction of the lower arm.



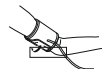
5) Wrap the cuff on the arm as illustrated. Make certain that the lower edge of the cuff lies approx 1 to 2 cm above the elbow and the rubber tube leaves the cuff on the inner side of the arm.



6) Tighten the free end of the cuff and close the cuff by affixing the Velcro.



7) The cuff should be snug on your upper arm so that you can fit 2 fingers between the cuff and your upper arm. Any piece of clothing restricts the arm which must be taken off.



8) Secure the cuff with the Velcro closer in such a way that it lies comfortably and not too tight. Lay your arm on a table (palm upwards) so that the cuff is at the same height as the heart. Do not bend the tube.



## How to use

---

**Note:**

In case it is not possible to fit the cuff to your left arm, it can also be placed on the right arm. However, all measurements should be made using the same arm.



**The following effects may be caused while using the arm cuff:**

- 1) There may be blood flow interference and resultant harmful injury to the patient caused by continuous cuff pressure due to kinking of connecting tube.
- 2) The application of arm cuff over a wound can cause further injury.
- 3) The application of arm cuff and its pressurization on any limb where intravascular access or therapy or an arterio-venous (A-V) stent is present could result in injury to the patient due to temporary interference to blood flow.
- 4) The application of arm cuff and its pressurization on the arm on the side of a mastectomy.
- 5) The pressurization of the arm cuff can temporarily cause loss of function of simultaneously used monitoring ME EQUIPMENT on the same limb. In this situation use the right cuff, otherwise it won't work.

**Note:**

- Only use clinically approved arm cuffs.
- A loose cuff or an exposed bladder causes false reading.
- With repeated measurements, blood starts to accumulate in the arm which can lead to false reading.
- Blood pressure measurements should be repeated after gap of 1-2 mins or after the arm has been lifted up in order to allow the accumulated blood to flow away.

## **How to use**

---

### **To measure blood pressure accurately**

- Please remain silent for 5-10 minutes. Avoid eating, drinking alcohol, smoking, exercising and bathing before taking the measurement as all these factors will influence the measurement result.
- Remove any garment that fits closely to your upper arm.
- Always measure on the same arm (normally left).
- Take measurement regularly at the same time of the day, as blood pressure changes even during the day.
- Please maintain the posture of: legs uncrossed, feet flat on the floor, back and arm supported while normally using the product.

### **Common factors responsible for error in measurement**

- Any efforts made by the patient to support their arm can raise the blood pressure.
- Ensure that you are in a comfortable, relax position. Do not make any arm movement during measurement. Use a cushion for support, if necessary.
- If the position of the arm artery is below or above the heart level, a false reading will be obtained.

## How to use

### How to measure blood pressure

1) Set the arm cuff in proper position as directed in the previous section "How to use the arm cuff". Press the START/STOP button.

All display symbols appear on the screen for 2 secs and then "0" will display.



2) The cuff starts inflating automatically displaying the rising pressure on the screen. In case the desired pressure is not detected, the device will automatically re-inflate to a higher pressure.



3) When the device detects the pulse, the heart symbol "♥" on the display screen will flash.

4) When the measurement is completed, the systolic, diastolic and pulse rate will appear on the display screen.



5) The measurement readings remain on the display until you switch off the device. If no button is pressed for a period of 2 mins, the device switches off itself in order to save the power.

#### Note:

The symbol "HFB" will be displayed along with the reading if irregular heartbeat is detected during the measurement.

### To discontinue the ongoing measurement

When it is necessary to interrupt the blood pressure measurement for any reason (eg. the patient feels unwell) press the START/STOP button. The device will automatically decrease the arm cuff pressure.

## How to use

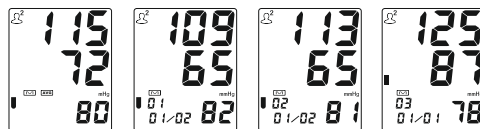
### How to use the memory function

The device stores the blood pressure and the pulse rate in the memory after completing each measurement. It can automatically store 99 sets of measurement values for two users. The oldest record is deleted to save the latest measurement value for each user reading reaches more than 99 sets.

### To display the measurement values

When the device is power off, press the "MEM" button to view the last three measurement average value.

Press the "MEM" button again to view the last measurement value. Press the "MEM" button repeatedly and each time it will show the subsequent measurement value one by one and the date and time will display alternately.



### To delete all values stored in the memory

To permanently remove all stored memories, please enter into the memory reading mode. Press and hold the "SET" button until "CL NO" is displayed on the screen.

Press the "SET" button again to choose "CL YES" to clear all the memories.

Press the START/STOP button to save the setting.

## System setup of User, Time and Date function

### System setup of User, Time and Date function

#### User setting:

Press the "SET" button to turn on the device. The screen will display U1 or U2.  
Press the "SET" button again to change U1 or U2.  
Press the START/STOP button to save the setting.

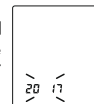


User setting

#### 1. Year setting:

Press and hold the button SET when power off until the year show on display. The screen will display and flash 20XX. Each time you press "MEM" button, the year will increase by one. You can choose from 2017 to 2050.

Press "SET" button to confirm the year and save your setting. It will then enter the month and date setting mode.



Year setting

#### 2. Month and Date setting:

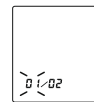
The screen will display month and date, and keep flashing on month.

Each time you press "MEM" button, the month will increase by one. You can choose from 1 to 12.

Press "SET" button to confirm the month. it will then enter the date setting mode.

Each time you press "MEM" button, the date will increase by one. The date will keep changing from 01 to 31

Press "SET" button when you confirm the date. It will then enter the time setting mode.



Month setting



Date setting



## System setup of User, Time and Date function

### 3. Time setting:

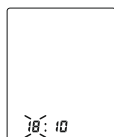
The screen will display hour and minute and will keep flashing on the digits of hour.

Each time you press "MEM" button, the hour will increase by one. You could choose from 0 to 23.

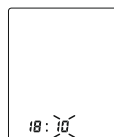
Press "SET" button when you confirm the hour. The digits of minute will then start to flash.

Each time you press the "MEM" button, the hour will increase by one. The minute will keep changing from 00 to 59.

Press "SET" button when you confirm the minute. It will then enter into the 12/24 time system mode.



hour setting



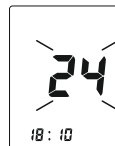
minute setting

### 4. 12/24 time system setting:

The screen will display 12 or 24.

Press the "MEM" button to change 12 or 24 as you like.

Press "SET" button to exit setting mode and save the settings.



12/24 hour setting

#### Note:

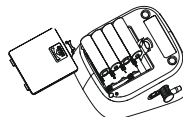
When you press the "MEM" button for a long time, the value will quickly change during setting process. You can stop the setting anytime when you press the START/STOP button to save the current setting and turn off.

## Battery Installation/Replacement


---

### Battery Installation

- a) Remove the battery cover from the battery compartment.
- b) Insert four AA powerful batteries into the compartment and ensure each battery is in the proper direction.
- c) Replace the battery cover.



### Low battery and Replacement

When power on, if the low battery symbol “” appears on the device, immediately replace the old batteries with new batteries otherwise the unit will stop working. Do not mix the old and new batteries.

### CAUTION

- 1) Please use 4pcs AA identical 1.5V alkaline batteries.
- 2) Do not use the batteries beyond their expiry date.
- 3) Never leave any low battery in the battery compartment and please remove the batteries if you do not need to use the device for long time since it may leak and cause damage to the unit.
- 4) Do not touch the live end of the battery and patient simultaneously while changing the batteries.

## Battery Installation / Replacement

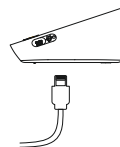
---

### WARNING:

Dispose of the battery in accordance with all federal, state and local laws. To avoid fire and explosion hazard, do not burn or incinerate the battery.

### USB POWER SUPPLY


This device can use USB as power supply when you don't use batteries. Please insert the USB cable as the picture showed.



**Please remove all the batteries before using the AC adapter.**


## Troubleshooting

- If you have trouble using the unit please check the following errors first.

Error Symbol Display	Possible Cause	Solution
<b>E-1</b>	Weak signal. Sudden change in pressure or cuff pressure exceed 99 mmHg.	Wrap the cuff properly.
		Remeasure with the correct procedure.
<b>E-2</b>	External strong disturbance	When near cell phone or other high radiant device, the measurement would fail.
		Remain silent and measure again.
<b>E-3</b>	Error appearing during inflation of arm cuff.	Wrap the cuff properly.
		Make sure that the air plug is properly inserted in the device.
		Measure again.
<b>E-5</b>	Abnormal blood pressure	Repeat measurement after relaxing for 30mins, if you still get unusual readings for 3 times, please contact you doctor.
	Low battery	Replace all the worn batteries with new ones and measure again.

## Troubleshooting

### Trouble removal

Problem	Possible Cause	Solution
No power	Check the battery power.	Replace it with new batteries.
	Check the polarity position of the batteries.	Insert and place the batteries in the correct polarity direction.
No inflation	Whether the plug is inserted.	Insert into the air socket tightly.
	Whether the plug is broken or leaking.	Replace with a new cuff.
Err and stops working	Check whether arm or body has moved during inflation.	Do not move your arms and your body during measurement.
	Check whether you are chatting while measurement.	Keep quiet and measure again.
Cuff leak	Check whether the cuff is wrapped loosely.	Wrap the cuff tightly.
	Check whether the cuff is broken.	Change to a new cuff.
 Please contact our central helpline or local distributor in case you cannot resolve the problem. Do not dismantle the device by yourself.		

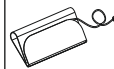
## Care and Maintenance

### Care

- Keep the device in the storage case when not in use.  
Clean the device with a soft dry cloth.
- Do not use any abrasive or volatile cleaners.
- Never immerse the device or any component in water.


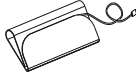

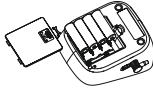


- Make sure the monitor is off prior to cleaning, a mixture of distilled water and 10 percent bleach could be used.
- When using a spray bottle, moisten a soft cloth towel with the bleach or detergent mix until it is fully saturated. Squeeze any excess moisture from the cloth to avoid any dripping or potential over saturation of the cuff.
- Wipe all surfaces of the cuff thoroughly. Make sure to clean the inside and outside of the cuff. Be cautious not to get any moisture in the main device.
- Use a dry cloth and 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 dry.



## Care and Maintenance

### Maintenance

<ul style="list-style-type: none"><li>Do not clean the body and cuff with naphtha, thinner or gasoline etc.</li></ul>	<ul style="list-style-type: none"><li>Do not wet the cuff or attempt to clean the cuff with water.</li></ul>
	
<ul style="list-style-type: none"><li>Store the device in a clean and dry location. Don't subject the device to extreme hot or cold temperature, humidity and direct sunlight.</li></ul>	<ul style="list-style-type: none"><li>Remove the batteries if the device will not be used for 3 months or longer.</li></ul>
	
<p>✱ We won't be responsible for any quality problem if you don't care and maintain the product as instructed.</p>	

## **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.
- Warning against servicing and maintenance while the medical equipment is in use.
- The device satisfies the requirements of EN ISO 81060-1:2012 and EN 1060-3:1997 +A2:2009 Non-invasive sphygmomanometers.
- Blood pressure measurements determined with this device are equivalent to those obtained by 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.
- Substitution of a cuff different from that supplied might result in measurement error.
- Specifications are subject to change without notice because of improvement in performance.

### **Warranty Information**

- This device carries a warranty for two years against any manufacturing defect as per Co's policy.



## Warranty Information

---

■ For repair under this warranty our authorized service agent must be advised of the fault within the period of the warranty. This warranty covers parts and labor only under normal operations. A transportation or freight fee that may be incurred will be the owner's responsibility. Any defect resulting from natural causes, eg. flood, hurricane etc, is not within this warranty. This warranty does not cover damage incurred by use of the device 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 repairing or modifications will be excluded from this warranty. This warranty specifically excludes expendables and consumables, for example batteries. All warranty claims must be directed to the distributor responsible for the sale of the device. The content of this warranty is subject to change without further notice.

■ The effects of degraded sensors and electrodes, or loosened electrodes, that can degrade performance or cause other problems.

■ Periodic check: Sensitive measuring devices must be checked from time to time for accuracy and leakage, we therefore recommend that the performance should be checked every 2 years and after maintenance and repair.

■ The device requires no calibration. It is not repairable and contains no user serviceable parts.

For any assistance contact our Central Helpline: +91 9433046999



## Digital Blood Pressure Monitor

Made in India by:

**SPACEAGE MULTIPRODUCTS PRIVATE LIMITED**

16, Ganesh Chandra Avenue, Kolkata- 700013, West Bengal, India

Central Helpline: +91 9433046999 | Email: [info@myspaceage.com](mailto:info@myspaceage.com)

From the house of **MORNING WALKER<sup>®</sup>**