# TALKING AUTOMATIC DIGITAL BLOOD PRESSURE MONITOR

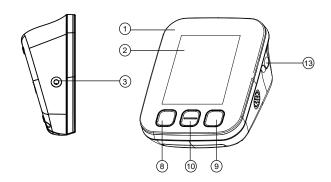
# LD MEDICAL

# INSTRUCTION MANUAL

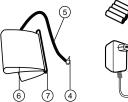
Article No.: 06456 (Factory Ref. No. LD-576)



# **PARTS AND COMPONENTS**



- 1. Main Body
- 2. Display
- 3. Air Connector
- 4. Tube Plug
- 5. Air Hose
- 6. Cuff
- 7. D-ring
- 8. Button 'M1'
- 9. Button 'M2'
- 10. Button '也'
- 11. Batteries (Not Included)
- 12. Adapter (Not Included)
- 13. Adapter Jack





# SYMBOLS

Symbols	Meaning
***	Manufacturer
EC REP	Authorized Representative in the European community
	Symbol for the marking of electrical and electronics devices according to Directive 2002/96/EC.  The device, accessories and the packaging have to be disposed of waste correctly at the end of the usage. Please follow Local Ordinances or Regulations for disposal.
<b>(€</b> 0123	CE marking in conformity with EC directive 93/42/EEC
Ť	Keep dry
Ţi	Attention, consult accompanying documents
☀	Type BF Applied Part
(h	Stand by

# **TABLE OF CONTENT**

I. GENERAL	
-PRINCIPLE OF OPERATION	4
-NEW TECHNOLOGIES USED	4
2. TIPS ON TAKING BLOOD PRESSURE MEASUREMENT ·····	5
3. BATTERY INSTALLATION	7
4. USEING THE DEVICE WITH AC POWER ADAPTER	7
5. CORRECT POSTURE FOR MEASUREMENT	8
6. ASSEMBLING THE CUFF	9
7. CARRYING OUT A MEASUREMENT	10
-RAPID DEFLATION DURING MEASUREMENT	10
8. SETTING THE DATE AND TIME ·····	11
9. VOLUME ADJUSTMENT ·····	11
10. SETTING THE LANGUAGES ·····	12
11. FUNCTION OF MEMORY	13
-MEMORY RECALL	13
-MEMORY CLEARANCE	13
12. WHO BLOOD PRESSURE CLASSIFICATION INDICATION	14
13. IRREGULAR HEARTBEAT DETECTOR ·····	14
14. ERROR AND LOW BATTERY INFORMATION	15
15. MAINTENANCE, STORE, REPAIR AND RECYCLE ·····	15
16. TROUBLESHOOTING	16
17. WARRANTY OBLIGATIONS	16
18. SPECIFICATIONS	17
19. BLOOD PRESSURE RECORD ·····	18
20. MANUFACTURER'S DECLARATION	19
21. QUALITY GUARANTEE ·····	22
22. REQUIRING RECORD ·····	22
23. PERIODIC SAFETRY CHECKS ·····	23

#### **GENERAL**

This instruction manual is intended to assist the user for safe and efficient operation of the automatic digital talking blood pressure monitor (hereinafter: device) model LD-576. The device must be used in accordance with the procedures described in the manual. It is important to read and understand the entire manual, especially the section <Tips on taking blood pressure measurements>.

This device is intended for the non-invasive measurement of systolic and diastolic arterial blood pressure and pulse rate in adults (age 15 and above). Consult a physician if measurement is taken in chlidren or persons with arrhythmia as errors may occur.

#### PRINCIPLE OF OPERATION

This device adopts the oscillometric technology with Fuzzy Algorithm to measure the arterial blood pressure and pulse rate. The cuff is wrapped around the arm and automatically inflated by the air pump. The sensor of the device catches weak fluctuation of the pressure in the cuff produced by extension and contraction of the artery of the arm in response to each heartbeat. The amplitude of the pressure waves is measured, converted in millimeters of the mercury column, and is displayed by digital value.

ATTENTION: This device can not provide reasonable accuracy if used or stored in the temperature or humidity beyond the range stated in the section <SPECIFICATIONS> of this manual.

CAUTION: DO NOT USE THE DEVICE OUTDOORS.

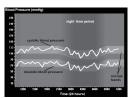
#### **NEW TECHNOLOGIES USED**

Fuzzy Algorithm is the processing algorithm, taking into account the specialty of individual heartbeats, which provides higher accuracy of measurement.

Software version: V1.1

#### TIPS ON TAKING BLOOD PRESSURE MEASUREMENT

1.It is necessary to know that arterial blood pressure is subjected to sharp fluctuations. The level of the arterial blood pressure depends on many factors. Generally arterial blood pressure is lower in summer and higher in winter. Arterial blood pressure changes with atmospheric pressure and is affected considerably by many factors, e.g. physical loads, emotional excitability, stress, meals, etc. Medicines, Drinking, smoking affect greatly the level of an individual's blood pressure. When blood pressure is measured in hospital, the value is always higher than that at home. The reason is the intensity in such cases is especially serious in the group of patients, which is known as 'white coat effect' medically. Blood pressure will raise in low temperature, so it is better to take blood pressure measurement in room temperature(approximately 20°C), If this device was stored in low temperature, it is necessary to leave it in room temperature for at least 1 hour, otherwise the measurement can be inaccurate. Blood pressure does vary with age and individuals, and it is recommended to write down the readings from blood pressure records daily, then you can check with your doctor to find out what is a "normal blood pressure measurement" for you.



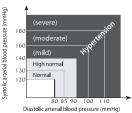
The illustration is from British Hypertension Society.

Take measurement under doctor's instruction for patients with cardiovasular diseases.

Under no circumstances should you alter the dosages of any drugs prescribed by your doctor!

3.Accurate measurement of blood pressure may be difficult in arrhythmia, premature beat, atrial fibrillation atreriosclerosis hypoperfusion diabetes pregnancy nephropathy, weak pulse, or in patients with obvious fluctuation of heart contraction rhythm. Please consult a qualified physician to interpret your blood pressure readings.

4.It is necessary to keep quiet during measurement to get accurate readings. Measurement should be conducted in quiet environment at room temperature. Don't eat or smoke before a measurement. This device is supplied with the standard cuff which is fit for the arm size 22-32 cm. Care should be taken to ensure that the cuff size is appropriate for the person whose blood pressure is



Arterial blood pressure classification by World Health Organization

being taken. Children and adults whose cuff size falls outside the range of the standard and large cuff size must select special size cuffs. Please contact the dealer to get these special size cuffs.

**ATTENTION:** Do not use cuff other than the original cuffs contained in this kit! 5. Repeated measurements with an interval of 3 minutes are recommended, so you can calculate the average to get a more accurate measurement. Atherosclerosis patients may require longer interval (10-15minutes) as elasticity of patient's vessels decreases significantly with the disease. 10-15minutes interval is also applicable for patients suffering from diabetes for a long period of time.

#### **CLASSIFICATION**

- ME EQUIPMENT not intended for use in an oxygen rich environment or in the
  - presence of flammable mixers.
- Internally powered equipment (without adaptor), Class II equipment (with adapter).
- Type BF applied part, recognize the cuff as applied part.

#### **BATTERY INSTALLATION**

- 1.Open the battery cover and install four 'AA' type batteries into the battery compartment as indicated. Make sure that the polarity is correct;
- 2. Close the battery compartment cover.
- Replace the batteries when the replacement indication "
   "appears in the display or nothing after "
   " button is pressed;
- Batteries in this kit are intended to check work capacity of the device and the life-span of the batteries can be shorter than the recom-
- mended time;
  - Use R6,LR6 or AA alkaline batteries, do not use rechargeable
- batteries;
  - Only same type batteries are allowed to be used together. Replace
- all batteries simultaneously;
- If the device is to be unused for a long time, please take out the batteries;

Don't leave the worn batteries in the device.

### **USE THE DEVICE WITH AC POWER ADAPTER**

Besides batteries you can use AC power adapter as the power supply. The AC power adapter is optional for this device for sale.

- Insert the AC adapter cord into the jack on the right side of the monitor .
- Insert the AC adapter plug into the outlet.
- To remove the AC adapter, disconnect the adapter plug from the AC outlet first and then disconnect the cord from the monitor's jack.

#### Caution

- When using optional AC adapter, the AC adapter must comply with the requirements of standard IEC60601-1.
- To avoid possible damage of the monitor, use only the exclusive AC adapter that can be purchased from authorized dealers. Other adapter may damage the blood pressure monitor.
- The AC adapter is used as an isolating means, the AC adapter plug shall insert into the outlet nearby the operator, make it easy to disconnection the device from the outlet.
- If long time work, remove the plug after the adapter cools, and prevent bums

Note: The monitor is designed not to draw power from the batteries when the AC adapter in use.

Optional AC adapter technical feature:

Output voltage: 6V±5%

Max. output current: At least 600 mA Output plug polarity: <-> inner DC 6V ⊕-**©**-⊖



# **CORRECT POSTURE FOR MEASUREMENT**

1.Sit beside the table and let the table support your arm as you take the measurement. Make sure that the cuff on the upper arm no cross, and is at approximately the same level as the heart,make sure that your feet lie on the ground and no cross.

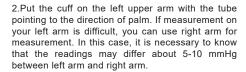


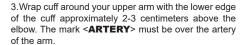
2. You may lie on your back and take a measurement. Look at the ceiling, keep calm, and don't move your neck or body during the measurement. Make sure that the cuff on the upper arm is approximately at the same level as the hear.

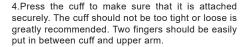


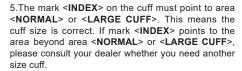
## **ASSEMBLY THE CUFF**

1.Insert the edge of the cuff approximately 5 centimeters into the D-ring as shown in figure.









6.Sometimes it is difficult to make the cuff regular depending on the shape of the user's upper arm, the cone-shape assembly of cuff is also acceptable.

7.If your clothes restrict the blood circulation of your upper arm, or you roll your sleeve up so as to result in such restriction. Please take off your shirt to get an accurate measurement if necessary.















## CARRYING OUT A MEASUREMENT

- 1 Insert the air hose into the air connector Before the measurement, take 3~5 times deep breath and relax yourself. Don't talk or move your arm:
- 2. Press button ' ()', and all symbols will appear on display in 2 seconds as in Fig.1.Two short beep will sound and the LCD backlight will light in orange. Then '0 mmHg' will appear on the screen as in Fig 2. Pump begins to inflate with display showing the reading of pressure.
- 3. Pressure in cuff increases to working pressure. Then the pump stops and pressure falls at the speed of 2mmHg ~10mmHg per second.

NOTE: The device will inflate to a higher pressure automatically in case the inflation pressure is not sufficient to determine measurement result

- 6. The heart symbol start to flash every heart beat once pulse is detected when pressure falls as in Fig. 2.
- 7. If irregular heartbeat was detected during the measurement, LCD display the '♥ ' icon to remind users of heartbeat irregularity as in Fig 3.
- 8. The air in the cuff will deflate quickly and the blood pressure reading, pulse reading will show in the display with a voice prompt. Then the icon ' i will flash to remind the user to record the reading as in Fig 4:

Attention: We recommend contacting your physician if you see the ' o ' indicator frequently.

#### RAPID DEFLATION DURING MEASUREMENT

If you do not feel well during measurement or want to stop the measurement for some reason, you can press the button '(1)'. The device will quickly release the air in cuff and the device will be returned to standby mode.



Fig.1





Fig.2



Fia.3



### SETTING THE DATE AND TIME

The function provides accurate measuring time for each measurement. To get an accurate date and time, the user should preset the date and time correctly before the first use of this device.

0000

The operation procedure for presetting Date/Time is as follows: 1. When the device is connected to power supply at first, the

Fig.5

- 1. When the device is connected to power supply at first, the display will show as in Fig.5:
- SO 15
- 2. Press and hold the button 'M1', then press the button '  $\circlearrowleft$  ' , and the year number flashes as in Fig.6;
- Fig.6
- 3. Press button 'M1',or 'M2' to subtract or add the number, and press button '∪' for confirmation;
  4. When the year setup is finished, the month number will flash automatically. Please follow the same instruction as above to
- 5. Press button ' ()' to finish the setup. If you want to change the date and time, please repeat procedure 2,3,4.

Annotation: When under the mode of Date/Time setting without any operation, the device will automatically return to standby mode after one minute.

### **VOLUME ADJUSTMENT**

The device has a voice function. To adjust the volume of the voice, please follow procedures below:

₩3

1. When the device is on stand by, press and hold button "M1", then press button "  $\circlearrowleft$  " two times until the volume will display on the LCD as in Fig.7;

Fig.7

- 2. Press button 'M1' to adjust volume level;
- 3. Press button " U " when you have finished adjusting the volume.

#### Annotation:

set month, date and time:

- 1. There are 4 given levels of volume levels for this device( level 0, level 1, level 2, level 3) and it displays with a number;
- 2. Level 3 is the default when the device is used for the first time;
- 3. When volume level 0 is selected, the device is on mute and you will not hear any voice messages announced.

#### **SETTING THE LANGUAGES**

There are three languages of voice for choice, it includes English, French and German. To adjust the languages:

1. Press button 'M1' and don't release, then press button 'Chree times until the language icon displays on the LCD as in Fig.8



Fig.8

2.The device will show"L1"(English is the default when the device is used in first time)with the voice prompt. Press button 'M' to set the other languages ; 3. Press button ' $\circlearrowleft$ ' when you have finished setup. If you want to change the languages, please repeat the above procedure

L1-----English

L2----French

L3-----German

#### Annotation:

1.The icon "L1" in the LCD indicates the language is English, And there will be a demo voice "We wish you good health" in English. The icon "L2" indicates French, and speak a demo voice in relative languages. The icon "L3" indicates German, and speak a demo voice in relative languages.

2.The volume level of voice will be 3 when languages are under setting.
3.The voice function will increases the power consumption and reduces the life of batteries.

#### **FUNCTION OF MEMORY**

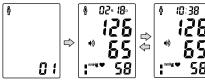
1.The device can store 90 sets of readings respectively in 'M1' and 'M2', and will automatically calculate the average value of the latest 3 readings for 'M1' and 'M2'. When the memory is full (90 sets of readings are stored), the oldest reading will be replaced by a new one. Readings in the memory will not clear away even if power supply is removed:

2.When a measurement is finished or the device is on stand by, the user can press button 'M1' or 'M2' to recall memory. Press button 'M1' or 'M2', the display will show the average value of the latest 3 readings with a voice prompt as in Fig.9;

3.Press again, the display will show '01', which means the latest reading, then turns to another screen to show readings and measuring time with a voice prompt as in Fig.10;

4.Press again, the display will show '02', which means the seconds to the latest reading





Fia.10

#### MEMORY CLEARANCE

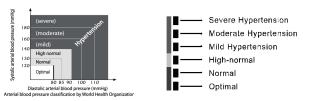
When a measurement is finished or when the device is on stand by, hold down button 'M1' or 'M2' for at least 5 seconds, the display will show 'CLR' which means the stored reading for 'M1' or 'M2' are removed as in Fig.11.



Fia.11

# WHO BLOOD PRESSURE CLASSIFICATION INDICATION

Standards for assessment of high or low blood pressure, regardless of age, have been established by World Health Organization(WHO) as show in the chart as below:



The indicator display a segment, based on the current data, corresponding to the WHO classification.

For example, if your blood press is 145mmHg (systolic pressure), 88mmHg (diastolic pressure), according to the world health organization standard, your blood pressure level is Mild Hypertension.

Note: If the systolic blood pressure and the diastolic blood pressure fall into different categories, the higher value should be taken for classification.

#### IRREGULAR HEARTBEAT DETECTOR

Model LD-576 digital blood pressure monitor provides a blood pressure and pulse rate measurement even when an irregular heartbeat occurs. When the device detects the irregular heartbeat or any excessive body movement during measurement, the '♥' icon will display in the LCD. It is important that you are relaxed, remain still and do not talk during measurement.

Notice: We recommend contacting your physician if you see this '♥)' indicator frequently.

#### ERROR AND LOW BATTERY INFORMATION

INDICATION	POSSIBLE REASON	CORRECTION METHODS
	The cuff is put on wrongly or the tube plug is inserted too loosely.	Make sure that cuff is put on correctly and the tube plug is inserted tightly and repeat the measurement.
Err	Movement of arm/hand or talking during measurement.	Repeat the measurement with following completely recommendations of manual.
	The cuff is not inflated to necessary pressure.	Repeat the measurement with pumping cuff to higher pressure.
	The batteries are weak	Replace all 4 batteries with new ones.
<b>-</b>		

#### MAINTENANCE, STORING, REPAIR AND RECYCLING

- 1. It's necessary to protect this device against high moisture, direct sunlight, shock, solvent, alcohol and gasoline.
- Remove the batteries if the device is being stored for a long time, and keep the batteries far away from children.
- 3. Keep the cuff away from sharp objects and don't extend or twist the cuff.
- 4. Use only soft and dry cloth to clean the device.
- 5. The cuff is sensitive and must be handled with care. You can clean the cuff with damp cloth for daily maintenance.
- To avoid cross infection when sharing the cuff, you can sterilize the fabric cover of the cuff with tampons moistened by 3% solution of hydrogen dioxide. After long use there will be a partial discoloration on the fabric surface of the cuff. Do not laundry the cuff as well ironing with a hot flatiron.

WARNING: Under no circumstances may you wash the inner bladder!

- Since neither the device nor batteries are household waste, follow your local recycling rules and dispose them at an appropriate collection site.
- 7. Do not open the device, or delicate electrical components as an intricate air unit could be damaged. If you can not fix the problem using the troubleshooting instruction, please request service from your dealer.
- 8. Generally, we recommend having the device inspected every 2 years to ensure proper function, accuracy and safety. Please contact your dealer for maintenance.

WARNING: Do not repair the device without manufacturer's authorization.

9.Do not serve or maintain the cuff when in use with patient

#### **TROUBLESHOOTING**

SYMPTOM	CHECK POINT	REMEDY
No display when connect the power.	The batteries have run down. The polarity of battery is wrong. The contact of battery compartment is polluted.	Replace all the batteries with new ones. Install the batteries correctly. Clean the battery terminals with dry cloth.
Inflation stops and re-inflate later.	The automatic inflation for ensuring correct measurement. Did you talk or move your arm (or hand) during measurement?	See <automatic inflation=""> Keep quiet and silent during the measurement.</automatic>
The reading is extremely low or high.	Is the cuff at the same level as the heart? Is the cuff wrapped right? Did you strain your arm during measurement? Did you talk or move your arm (or hand) during measurement?	Make sure that your posture is right. Wrap the cuff correctly. Relax during measurement. Keep quiet and silent during the measurement.
Pulse rate is too low or too high.	Did you talk or move your arm (or hand) during measurement? Did you make measurement right after exercise?	Keep quiet and silent during the measurement. Take measurement again after resting for more than 5 minutes.
The batteries are run down soon.	Faulty batteries are used.	Use alkaline batteries of known manufacturers.

#### WARRANTY OBLIGATIONS

- 1. Warranty for this automatic digital blood pressure monitor is 24 months from the date of purchase. The 24 months warranty excludes the monitor cuff. The cuff is warranted for 12 months.
- 2. The addresses of organizations for guarantee or maintenance is listed below: MDL Medical, 2 Route de Californie, 07100 Annonay, France.

#### WARNING

- Do not modify this equipment without authorization of the manufacturer.
- All major maintains on the device must be performed by an authorized service center or distributor. No use-serviceable parts inside, before servicing to authorized representative or manufacturer!

#### DECLARATION:

When technical information for user requirements is not in the scope of confidentiality of the Company, the Company committed to provide information disclosure in accordance with procedure, including circuit diagrams and parts lists, and other related type technology information that do not involve commercial secrets may be disclosed. Access to information channels and procedures, please contact your dealer or manufacturer.

## **SPECIFICATIONS**

Model	06456 (LD-576)
Size	105(L) ×120(W) ×55(H)mm
Weight	Approximately 310g without batteries
Measuring method	Oscillometry
Extreme Pressure	300mmHg
Measuring range	40 to 260 mmHg (blood pressure) 40 to 160 beats/minute (pulse rate)
Measuring accuracy	± 3 mmHg for static pressure ± 5% of the reading for the pulse rate
Inflation	Automatic by the pump
Rapid deflation	Automatic electronic valve
Batteries	Optional component, 4"AA"×1.5V
Adapter	Optional component, 6V, 600mA
Memory	2 Users with 90 sets of memory each
Operation temperature and humidity, air pressure	+10°C to + 40°C, 85% and below 700hPa to 1060hPa
Transport and storage temperature and humidity, air pressure	-20°C to + 50°C, 85% and below 500hPa to 1060hPa
Upper arm circumference	Applicable for arm circumference 22-32cm (standard cuff)
Complete kit	Main body, cuff, 4×AA batteries (optional), adapter (optional), gift box, instruction manual(warranty card)
Pollution Degrees	Degrees 2
Overvoltage category	Category II
High Altitudes (m)	≤2000m
Fuse	Adapter: T3.15AH250V Main Unit: T630mAl250V



#### HONSUN (NANTONG) Co., Ltd.

Address:No.8 Tongxing Road Economic & Technological Development Area 226009 Nantong City PEOPLE'S REPUBLIC OF CHINA

EC RE

SHANGHAI INTERNATIONAL HOLDING CORP. GMBH (EUROPE)
Address: Eiffestrasse 80, 20537 Hamburg GERMANY

Distributor: MDL Medical, 2 Route de Californie, 07100 Annonay, France

## **BLOOD PRESSURE RECORD**

DATE	SYSTOLIC (mmHg)	DIASTOLIC (mmHg)	PULSE (beats/minute)

## **MANUFACTURER'S DECLARATION**

Guidance and manufacturer's declaration – electromagnetic immunity

The model LD-576 Digital Blood Pressure Monitor is intended for use in the electromagnetic environment specified below. The customer or the user of the model LD-576 Digital Blood Pressure Monitor should assure that is used in such an environment.

Emission 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 relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines	±2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode	±1 kV differential 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% U <sub>T</sub> (>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	for 0.5 cycle 40% UT (60% dip in UT) for 5 cycles 70% UT (30% dip in UT) for 25 cycles <5% UT	Mains power quality should be that of a typical commercial or hospital environment. If the user of the LD-576 Digital Blood Pressure Monitor Equipment requires continued operation during power mains interruptions, it is recommended that the LD-576 Digital Blood Pressure Monitor Equipment be powered from an uninterruptible power supply or a battery.

Power frequency 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.
Conducted RF IEC 61000-4-6	3Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the LD-576 Digital Blood Pressure Monitor Equipment, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = \begin{bmatrix} 3.5 \\ V_I \end{bmatrix} \sqrt{P}$ $d = \begin{bmatrix} 3.5 \\ I_I \end{bmatrix} \sqrt{P}$ 80 MHz to 800 MHz
Radiated RF IEC 61000-4-3	10 V/m 80 MHz to 2.5 GHz	3 V/m	$d = \begin{bmatrix} 7 \\ E_1 \end{bmatrix} \sqrt{P}  800 \text{ MHz to } 2.5 \text{ GHz}$ 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). <sup>b</sup> Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, <sup>c</sup> should be less than the compliance level in each frequency range. <sup>d</sup> Interference may occur in the vicinity of equipment marked with the following symbol: $\begin{pmatrix} ((\bullet)) \end{pmatrix}$

Note 1 At 80MHz and 800MHz, 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. <sup>a</sup> Field strength from fixed transmitters, such as base stations for radio 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 Model LD-576 Digital Blood Pressure Monitor is used exceeds the applicable RF compliance level above, the Model LD-576 Digital Blood Pressure Monitor should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Model LD-576 Digital Blood Pressure Monitor.

<sup>b</sup> Over the frequency range 150KHz to 80MHz, field strength should be less than 3 V/m.

Recommended separation distances between portable and mobile RF communications equipment and the LD-576 Digital Blood Pressure Monitor

The LD-576 Digital 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 LD-576 Digital Blood Pressure Monitor can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the LD-576 Digital Blood Pressure Monitor as recommended below, according to the maximum output power of the communications equipment.

Rated maximum	Separation distance according to frequency of transmitter		
output power of transmitter (W)	150 kHz to 80 MHz $d = \left[\frac{3.5}{V_1}\right] \sqrt{P}$		800 MHz to 2.5 GHz $d = \left[\frac{7}{E_1}\right]\sqrt{P}$
0.01	0.117	0.117	0.233
0.1	0.369	0.369	0.738
1	1.167	1.167	2.333
10	3.689	3.689	7.379
100	11.667	11.667	23.333

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (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.

# **QUALITY GUARANTEE**

MODEL			
Warranty period	Two years from purchasing date		
Purchasing date			
	Name:	Telephone:	
Purchasing shop	Address:		
Customer	Name:	Telephone:	
Custoffiel	Address:		

# REQUIRING RECORD

Date	TROUBLE	SERVICE MAN
Guarantee Regulation	1.During warranty period the repair could be made at any BPM repair department. 2. the following things not belong to warranty range: (1) Operating BPM different from procedures or instructions of the manual. (2) The body is damaged artificially. (3) Self-repairing or modifying the monitor construction in any way. (4) Breakdown due to corrosion of battery leakage. (5) Problem which occurs under natural calamity and other forcemajeures.	

## PERIODIC SAFETRY CHECKS

If you use the device with power adapter, preventive inspection and maintenance to be performed including the frequency of sunch maintenance.

- Every time before use, please check the adapter, once damaged, never to use.
- Please clean the plug of adapter plug at least once a year. Too much dust on plug may cause the fire.

The manufacturer reserves the right to make technical changes without notice in the interest of progress.

Prior notices will not be given in case of any amendments within this manual. The mentioned trademarks and names are owned by the corresponding companies.







MADE IN CHINA P576/1606/01