LUMISCOPE®

Model 1140
Automatic Wrist Style
Blood Pressure Monitor

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Introduction

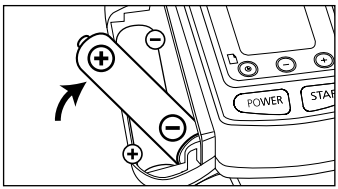
Congratulations on your purchase of the new Lumiscope model 1140. This fully automatic, wrist style blood pressure monitor is both easy to use and ideally suited for daily measurements. The large display includes systolic, diastolic and pulse, all clearly shown at the completion of each reading.

In addition, you can store up to 30 measurements per Memory Zone using your 1140's built-in memory, ideal for users who want to monitor and track their blood pressure on a regular basis. The 1140 is compact and portable, making it ideal for home use and travel.

Blood pressure measurements determined with your 1140 are equivalent to those obtained by a trained observer using cuff/stethoscope auscultation method, within the limits prescribed by the American National Standard, Electronic or Automated Sphygmomanometers.

Please read this manual carefully before use. For specific information on your own blood pressure, contact your physician. Please be sure to keep this manual.

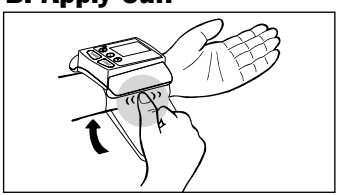
A. Install Batteries



Battery Type:
2 Alkaline (AAA) size

See Page 13

B. Apply Cuff



Apply cuff to left wrist with palm facing up

See Pages 14,15

C. Correct Posture

Place the wrist at heart level

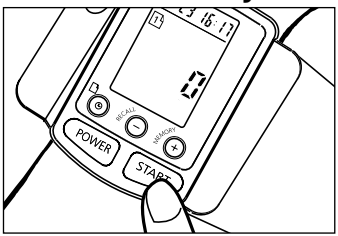
See Pages 16,17

D. Press POWER Key

Wait until a "0" is shown on the LCD screen.

See Page 20

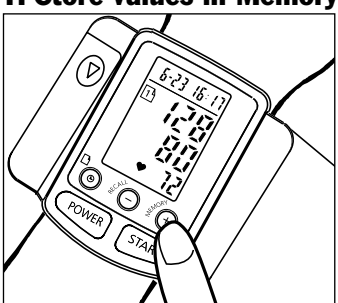
E. Press START Key



Remain still during measurement

See Page 20

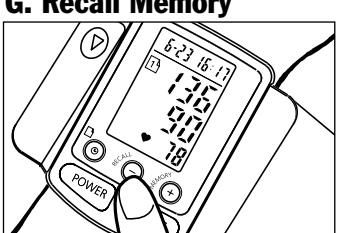
F. Store values in Memory



Press " ⏲ " key to select Memory Zone 1 or 2, then press the Memory key ⊕ to store the measured values in the selected Memory Zone. Your new model 1140 stores a maximum of 30 measured values per Memory Zone.

See Page 22

G. Recall Memory



Use " ⊖ " key to select a Memory Zone, then press RECALL key to recall prior measured values from that Memory Zone.

See Page 23

Your model 1140 uses the oscillometric method to detect your blood pressure. Before the cuff starts inflating, the device will establish a baseline cuff pressure, which is equivalent to the air pressure. The measurement of your blood pressure is based on this baseline pressure. After the cuff inflates to block your blood in the artery, the deflation process starts. During the deflation of the wrist cuff, your 1140 is detecting the pressure oscillations generated by the beat-to-beat pulsatile. Any muscle movement during this period of time will cause measurement error. After detecting the amplitude and the slope of the pressure oscillations during the deflation process, your 1140 will determine the systolic and diastolic pressures for you, and your pulse rate is detected at the same time.

What is Blood Pressure?

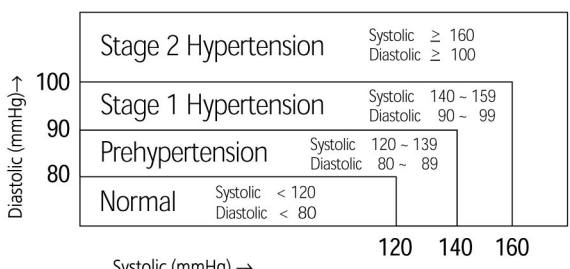
Blood pressure is the pressure exerted on the artery tube while blood flows through the arteries. The pressure measured when the heart contracts and sends blood out of the heart is systolic (highest). The pressure measured when the heart dilates with blood flowing back into the heart is called diastolic (lowest) blood pressure.

Why Measure Your Blood Pressure?

Among the various health problems afflicting modern people, problems associated with high blood pressure are by far the most common. High blood pressure's dangerously strong correlation with cardiovascular disease has made measuring blood pressure a necessity of identifying those at risk.

Blood Pressure Standard

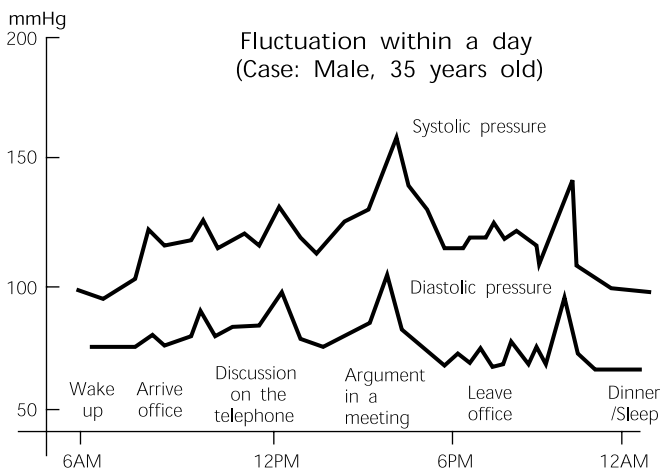
The World Health Organization (WHO) has developed a blood pressure standard, according to which areas of low- and high-risk blood pressure are identified. This standard, however, is a general guideline and blood pressures vary between different people, age groups, etc.



It is important that you consult with your physician regularly. Your physician will tell you your normal blood pressure range as well as the point at which you will be considered at risk.

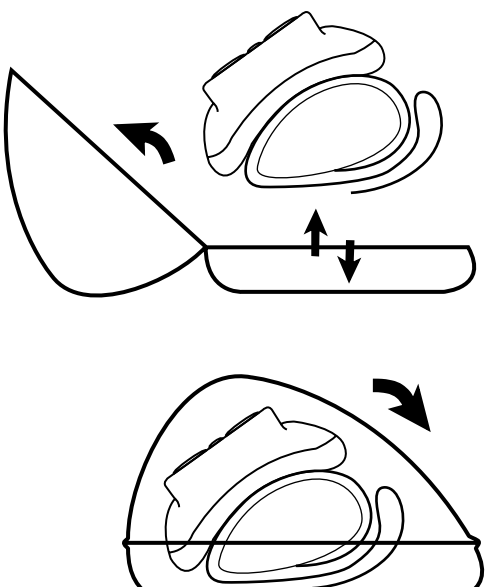
Blood pressure fluctuates all the time!

You should not be overly worried if you encounter two or three measurements at high levels. Blood pressure changes over the month and even throughout the day. It is also influenced by season and temperature.

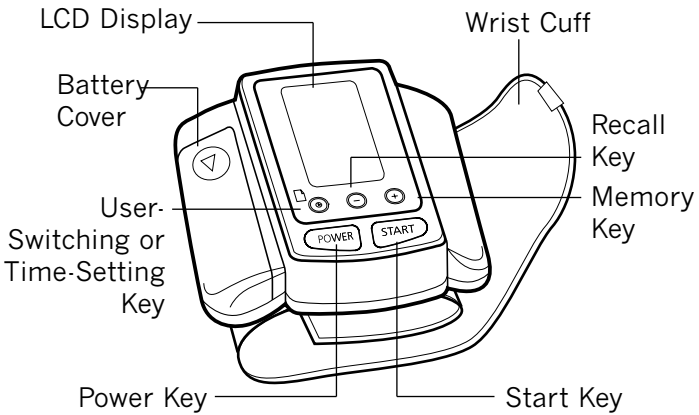


Carrying Case:

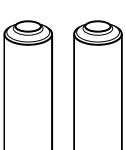
Please store the blood pressure monitor in the carrying case as shown below:



Monitor:

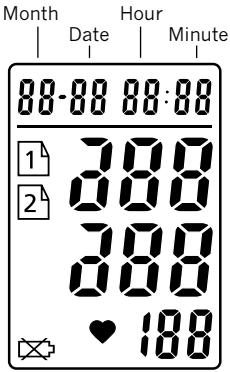


Accessories:



2 "AAA" size, 1.5V Alkaline batteries

Display:

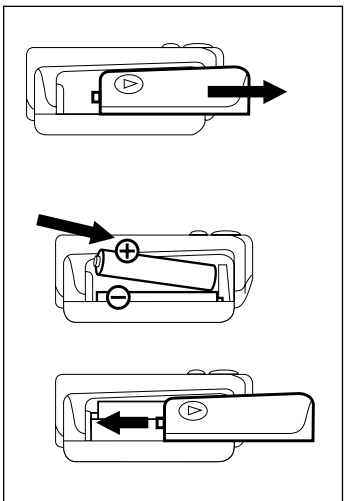


Symbol:

1 Memory Symbol 1	Appears when measurement value is stored in memory zone 1 or is recalled from memory zone 1
2 Memory Symbol 2	Appears when measurement value is stored in memory zone 2 or is recalled from memory zone 2
Weak Battery Mark	Appears when batteries should be replaced
Pulse Mark	Shows the pulse rate per minute
EE Error Mark	Occurs when a mistake was made during measurement

Installing Batteries

1. Slide battery cover off.
2. Install lower battery first. Ensure correct polarity.
Battery Type:
2 Alkaline 'AAA' size
3. Replace the cover.



Replace the batteries if:

1. The weak battery mark appears in the display
2. Nothing appears in the display when the power is switched on.

Remove batteries when unit is not in use for extended periods of time.

Note: Batteries are hazardous waste. Do not dispose together with household garbage.

Applying the Cuff

1. Remove all watches, jewelry, etc. prior to attaching the wrist monitor. Clothing sleeves should be rolled up and the cuff should be wrapped on bare skin for correct measurements.

2. Apply cuff to left wrist with palm facing up as Fig. A.

3. Make sure the edge of the cuff is about 1 cm from the palm as Fig. B.

4. In order to insure accurate measurements, fasten the velcro strap securely around your wrist so there is no extra space between the cuff and the wrist as Fig. C.

Fig. A

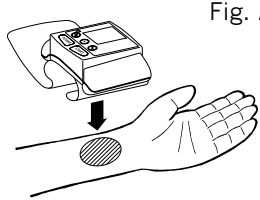


Fig. B

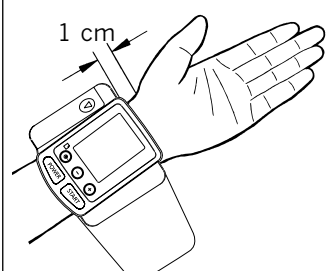
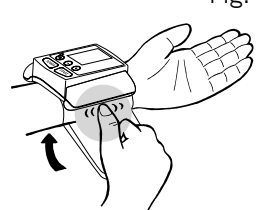


Fig. C



If the cuff is not wrapped tight enough, the measurement values will be false.

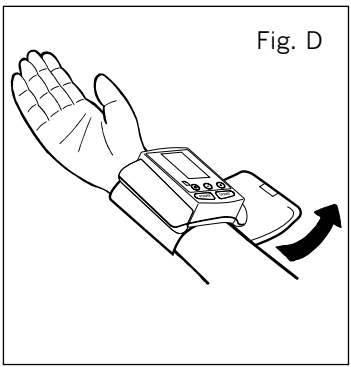


Fig. D

5. The measurement values will be correct even if you wrap the cuff askew.

6. If your physician has diagnosed you with poor circulation on your left arm, carefully place the cuff around your right wrist as shown in Fig. D.

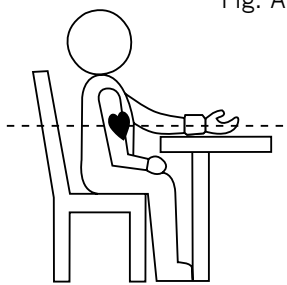
Correct Measuring Posture

1. Place your elbow on a table so that the cuff is at the same level as your heart as Fig. A.

Note: Your heart is located slightly below your armpit.

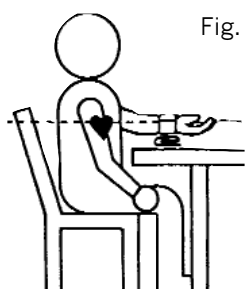
Relax your entire body, especially the area between your elbow and fingers.

Fig. A



2. If the cuff is not at the same level as your heart or if you can not keep your arm completely still throughout the reading, use a soft object such as folded towel to support your arm as Fig. B. Do not allow hard objects to come in contact with the wrist cuff.

Fig. B



3. Turn your palm upwards.

4. Sit upright in a chair, and take 5-6 deep breaths.

Avoid leaning back while the measurement is being taken as Fig. C.

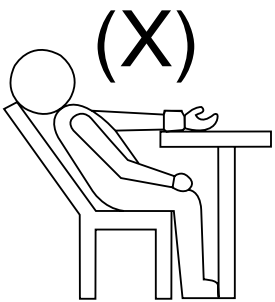


Fig. C

18 More Accurate by Using Step Valve Technology

The new Lumiscope 1140 Blood Pressure Monitor incorporates cutting-edge **Step Valve Technology**, resulting in greater measurement accuracy. Step valve technology uses an electronic valve system as opposed to the traditional mechanical valve system, allowing the monitor to analyze oscillations during measurement and adjust cuff pressure accordingly.

Adjustments in cuff pressure occur in steps and result in an audible ticking as the valve releases air from within the cuff.

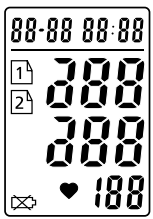
Releasing pressure in steps allows the monitor to analyze oscillations within the cuff and evaluate them for accuracy. When the monitor does not detect oscillations for a particular step, it releases air pressure.

If the monitor detects oscillations, it will continue to evaluate at that particular step until it confirms the accuracy of those oscillations.
The monitor's ability to detect and analyze oscillations at each step and adjust cuff pressure accordingly results in the monitor's increased measurement accuracy.

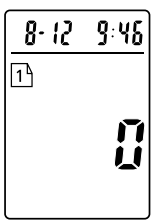
Here are a few helpful tips to help you obtain more accurate readings:

- Do not measure your blood pressure immediately after consuming a large meal. To obtain more accurate readings, please wait one hour before measuring.
- Do not smoke or drink alcohol before measuring your blood pressure.
- You should not be physically tired or exhausted while taking a measurement.
- It is important that you relax during measurement.Take a 15-minute rest before taking a reading.
- Do not take measurements if you are under stress or under tension.
- Take your blood pressure at normal body temperature. If you are feeling cold or hot, wait a while before taking a measurement.
- If the monitor is stored at very low temperature (near freezing), have it placed at a warm location for at least one hour before using it.
- Wait about 5 minutes before taking the next pressure measurement.

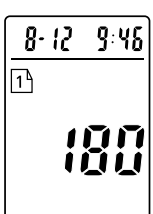
1. Place the cuff on the wrist. Press the **POWER** key. All digits will light up, checking the display functions. The checking procedure will complete after about 2 seconds.



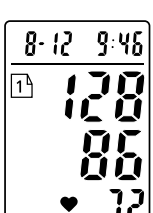
2. After all symbols appear, the display will show a "**0**". At this time, the monitor is ready to measure.



3. Press the **START** key. Once the monitor inflates the cuff to approximately 180 mmHg, measurement will begin.

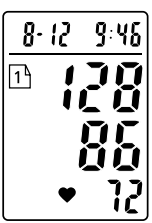


4. When the measurement is completed, systolic, diastolic and pulse will be shown simultaneously on the LCD screen.



Note 1: This monitor automatically switches off approximately 3 minutes after last key operation.
Note 2: To interrupt the measurement, simply press any key. The cuff will deflate immediately after a key is pressed.
Note 3: During the measurement, do not talk or move your arm or hand muscles.

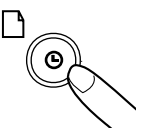
This monitor will re-inflate automatically to approximately 220 mmHg if the system detects that your body needs more pressure to measure your blood pressure.

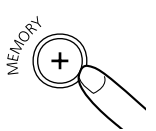


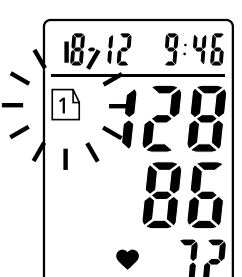
Storing Values in and Recalling Values from Memory

1. The Monitor has two Memory Zones (1 and 2). Each zone can store up to 30 measurements.

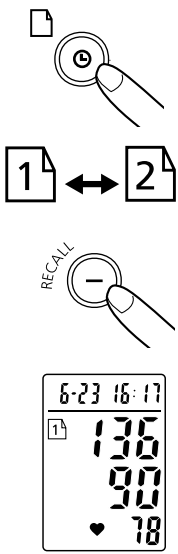
2. To store values, use the User-Switching or Time-Setting Key " ⏲ " to select a Memory Zone (1 or 2) to store the values in. Then, by pressing the Memory Key " ⊕ "after the measurement was taken, the values will be stored in the selected Memory Zone.







3. To read memory values from a selected Memory Zone, use the User-Switching or Time-Setting Key "⏲" to select a Memory Zone (1 or 2) from which you want to recall values from. Then, press the RECALL key "⊖" and the values will be shown on the LCD display. The last measurement will be shown first. Every new press of the RECALL "⊖" key calls for one prior value stored.

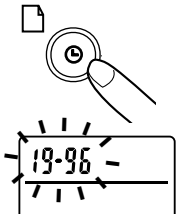


Note 1: The data in the memory will not be lost even when the Blood Pressure Monitor is switched off.

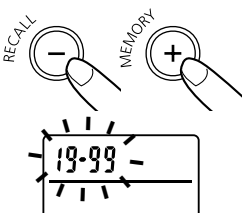
Note 2: While the device is turned on, the data in memory can be erased if any of the batteries are moved away from the socket for one second. If the device is turned off, the data will be erased when any of the batteries are removed for at least 10 seconds.

Time Adjustment

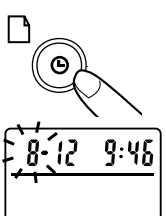
1. While the Blood Pressure Monitor is turned on, press and hold the Time-Setting key ⏲ for 3 seconds until the date/time disappears. Once you release the key, the display will show a blinking number showing the year.

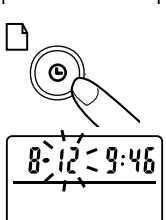


2. Change the year using the Memory ⊕ or the Recall ⊖ Keys. Press the Time-Setting key ⏲ again to confirm the entry, and the screen will show a blinking number representing the month.

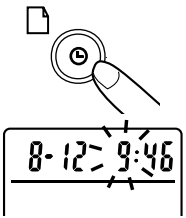


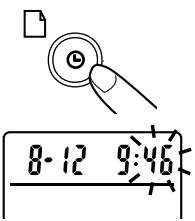
3. Change the month, the date, and the time as described in Step 2 above, using the Memory ⊕ or the Recall ⊖ Keys to change and the Time-Setting Key ⏲ to confirm the entries.

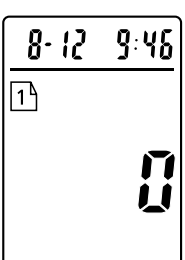




4. A "0" will reappear as the Blood Pressure Monitor is ready for measurement again.







If any abnormality should arise during use, please check the following points.

Symptom	Check Point	Correction
No display when the START key is pressed	Have the batteries run down?	Replace with two new alkaline.
	Have the batteries polarities been positioned incorrectly?	Re-insert the batteries in the correct positions.
EE mark shown on display or the blood pressure value is displayed excessively low (high)	Is the cuff placed correctly?	Wrap the cuff properly so that it is positioned correctly.
	Did you talk or move durng measurement?	Measure again quietly.
	Did you shake the wrist with the cuff on?	

Note: If the unit still does not work, return it to your dealer. Under no circumstance should you disassemble the unit and attempt repairs yourself.

1. The unit contains high-precision assemblies. Therefore, avoid extreme temperatures, humidity, and direct sunlight. Avoid dropping or strongly shocking the main unit, and protect it from dust.
2. Clean the blood pressure monitor body and the cuff carefully with a slightly damp, soft cloth. Do not iron or bend the pre-formed cuff inside out. Do not wash the cuff or use chemical cleaner on it. Never use thinner, alcohol or petrol (gasoline) as a cleaner.
3. Leaky batteries can damage the unit. Remove the batteries when the unit is not used for a long time.
4. Do not press the START key when the cuff is not placed around the wrist.
5. The unit should not be operated by children.
6. Do not disassemble the main unit or cuff.
7. If the unit is stored near freezing, allow it to acclimate at room temperature before use.
8. Your model 1140 is not field serviceable. You should not use any tool to open the device nor should you attempt to adjust anything inside the device. If you have any problems, please contact the store from whom you purchased your model 1140 or call the Lumiscope Repair department at 1-800-672-8293.
9. For users diagnosed with common arrhythmia (atrial or ventricular premature beats or atrial fibrillation), diabetes, poor circulation of blood, kidney problems, or for users suffered from stroke the device might not be suitable for use. Do not use on unconscious patients.

Specifications:

Power source	: 3V DC, Two 'AAA' Alkaline batteries
Measurement method	: Oscillometric
Measurement range	: Pressure: 20~280 mmHg : Pulse: 40~180 beats/minute
Accuracy	: Pressure: ±3 mmHg Pulse: within ±5% of reading
Pressure sensor	: Semi-conductor
Inflation	: Pump driven
Deflation	: Automatic Pressure release valve
Memory capacity	: 30 memories for each zone
Auto-shut-off	: 3 minutes after last key operation
Operating environment	: 10˚C~40˚C(50˚F~104˚F) 40~85% RH max.
Storage environment	: -5˚C~60˚C(23˚F~140˚F) 10~95% RH max.
Weight	: 115g (without batteries)
Wrist circumference	: 13.5~19.5cm(5.3"~7.7")
Limited patient	: Over 18 years old
Dimensions	: 81(L) x 78(W) x 78(H) mm
K.B.	: Short time operation 3 minutes.

*Specifications are subject to change without notice.

Store the reading in memory zone: ☐ 1 ☐ 2

Age: Weight:

Date													
Time													
mmHg													
220													
200													
180													
160													
140													
120													
100													
80													
60													
Pulse													
Body Condition													

Two-Year Limited Warranty

Lumiscope guarantees this product free from defects in material and workmanship for a period of two years from the date of purchase, except as noted below:

This Lumiscope product warranty does not cover damage caused by misuse or abuse; the attachment of any unauthorized accessory; alteration to the product; or any other conditions whatsoever that are beyond the control of Lumiscope. Lumiscope shall not be responsible for any type of incidental, consequential, or special damage. All implied warranties, including, but not limited to those implied warranties of fitness and merchantability, are limited in the total duration of two years from the original date of purchase.

To obtain warranty service on your Lumiscope Blood Pressure Monitor, please contact the Lumiscope Repair Department at 1·800·672·8293 or visit www.lumiscope.net. There is a $15 fee for return shipping and handling. Please make checks payable to The Lumiscope Co., Inc.

Upon receipt Lumiscope will repair or replace as appropriate, the blood pressure monitor, and return it to you. Warranty is solely through the Lumiscope Repair Department. Service of this product by anyone other than the Lumiscope Repair Department voids warranty.

In the event that Lumiscope does not abide by the terms of this warranty the consumer may seek breach of contract remedies in the New York State Federal courts of law. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

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Repair Department: 1-800-672-8293
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