

# LifeSource™

*Your source for a lifetime of health*



**C**ongratulations. You have purchased a LifeSource state-of-the-art blood pressure monitor, one of the most technologically advanced yet easy to use products available in the marketplace today. This LifeSource monitor is designed to make your daily regimen useful, and convenient.

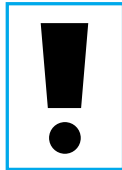
Physicians agree that daily self-monitoring of blood pressure is an important way individuals can contribute to maintaining their cardiovascular health and preventing the serious consequences of hypertension left undiagnosed and untreated.

LifeSource has been manufacturing quality healthcare products for more than 20 years. Rest assured that we are committed to providing you and your family with monitoring devices specifically designed for high accuracy and ease of use. LifeSource—your source for a lifetime of health.

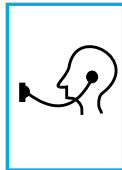
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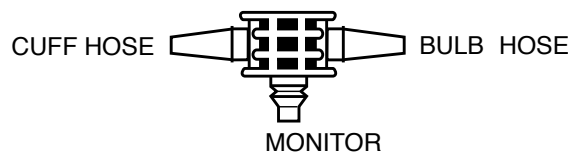


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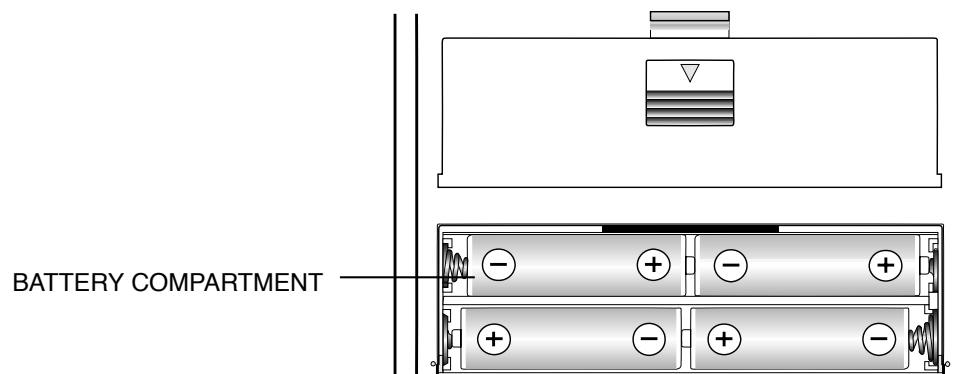
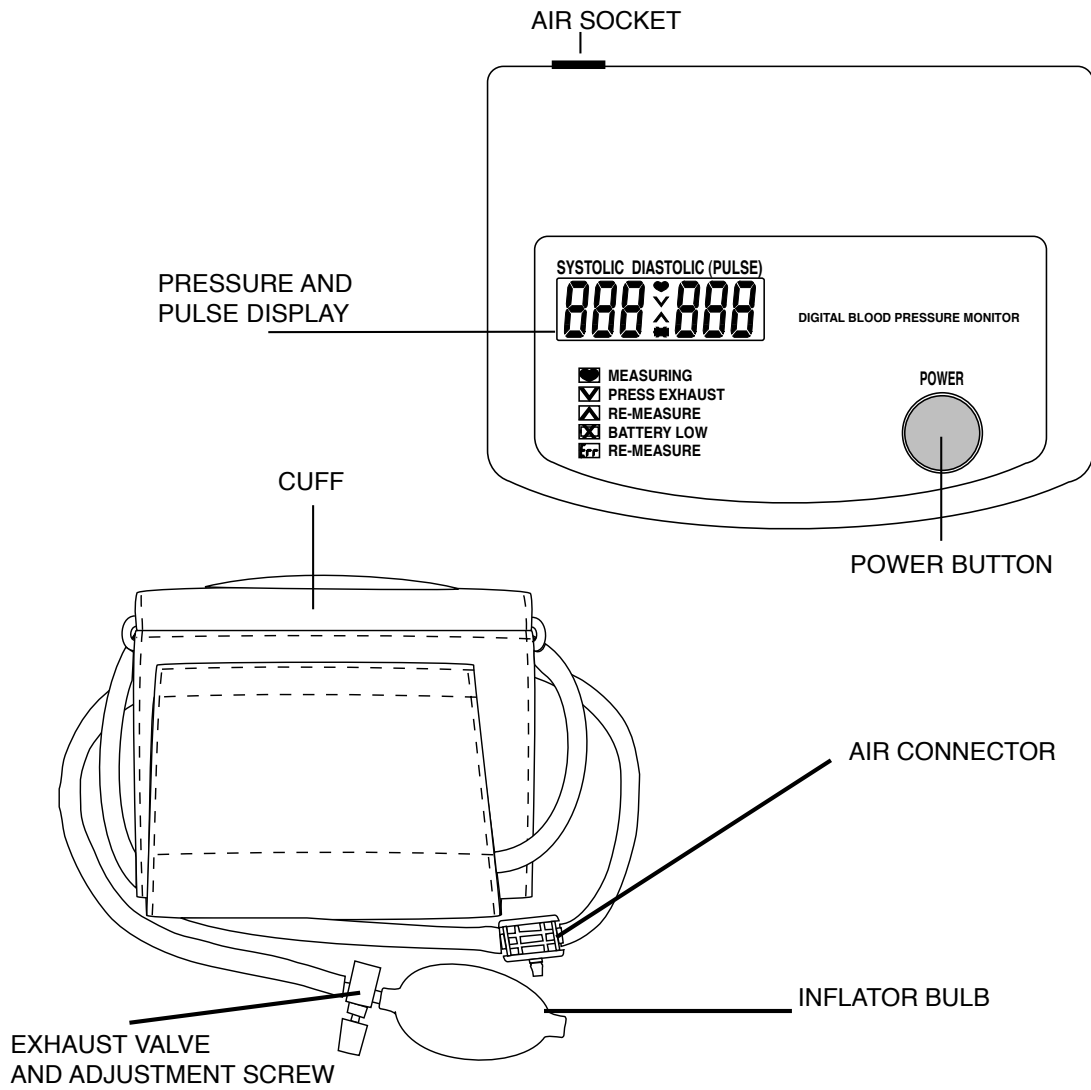


## WHAT DISPLAY SYMBOLS MEAN

Display Symbol	Condition/ Cause	Recommended Action
 MEASURING	Appears during measurement; blinks and beeps when pulse is detected.	Remain still and refrain from talking; measurement in progress.
 ERROR	Appears on display prior to and during measurement. Blinks if there is air in cuff at power up.	Press exhaust button to release air.
 RE-MEASURE	Measurement begun, but pressure is not sufficient for reading.	Increase pressurization by 30 mmHg to 40 mmHg and repeat measurement.
 LOW BATTERY	Battery voltage is too low for monitor to work properly.	Replace all batteries with new ones.
 ERROR	Appears when blood pressure cannot be measured accurately due to erratic pulse or noise interference.	Exhaust air from cuff, reapply cuff properly, power up again and repeat measurement in quiet environment.
 PULSE ERROR	Appears when pulse cannot be measured accurately.	Exhaust air from cuff, reapply cuff properly, power up again and repeat measurement.
EXHAUST SPEED FLASHING	Occurs when exhaust velocity rate is more than 8 mmHg.	Adjust exhaust rate to 2 mmHg to 5 mmHg.
No Display Symbol	No Display Symbol	Check for correct air connector. Make sure air connector is inserted correctly into the hoses and monitor.



# MONITOR COMPONENTS





## HOW 702 WORKS

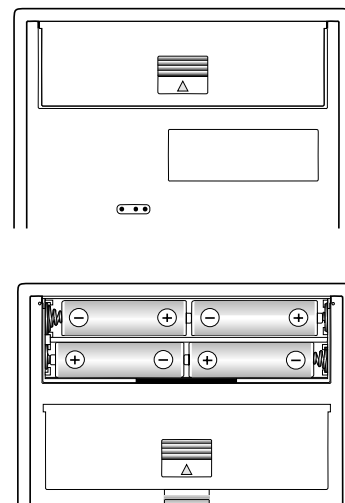
LifeSource Blood Pressure Monitors are easy to use, accurate and digitally display full measurement readouts. Our technology is based on the “oscillometric method” — a noninvasive blood pressure determination. The term “oscillation” refers to any measure of vibrations caused by the arterial pulse. The cuff is first inflated until the artery is fully occluded. Then, the monitor takes measurements while the cuff deflates. Our monitors examine the pulsatile pressure generated by the arterial wall as it expands and contracts against the cuff with each heartbeat.

## BEFORE YOU START



You must install 4 type AA (1.5 volt) batteries and attach the cuff to the monitor before using it. To install batteries (or replace them if the “Low Battery” symbol appears on display), proceed as follows:

1. Remove battery compartment cover by gently pushing down on arrow and sliding cover forward.
2. Put in top row of batteries first. Place the batteries in compartment with positive (+) and negative (–) terminals matching those indicated in the compartment. Be sure batteries make contact with compartment terminals.
3. Replace cover by sliding it into the compartment and gently pressing into place.

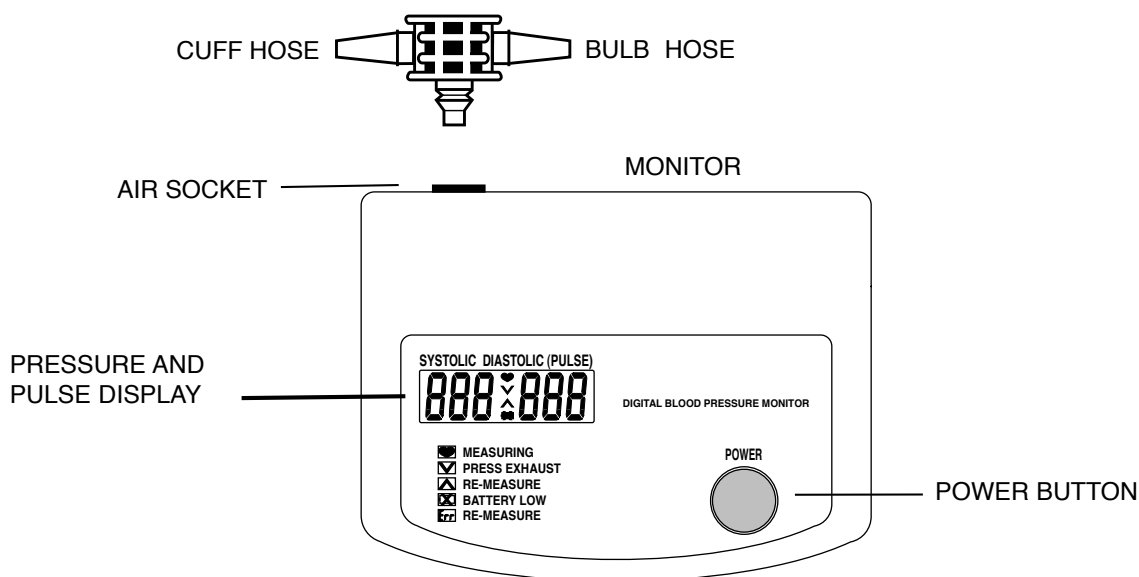


## SELECTING THE CORRECT CUFF



Using the correct cuff size is important for an accurate reading. A cuff that is too large will produce a reading that is lower than the correct blood pressure; a cuff that is too small yields a measurement that is higher. With your arm hanging at the side of your body, measure the circumference of your upper arm at the midpoint between shoulder and elbow.

ARM SIZE	RECOMMENDED CUFF SIZE	REPLACEMENT CUFF MODEL#
5.1" - 7.9" (13-20cm)	Small	UA-279
7.5" - 12.2" (19-31cm)	Medium	UA-280
11.8" - 17.7" (30-45cm)	Large	UA-281






The air connector is attached to the cuff and inflator bulb tubing. Attach this into the back of the monitor. When changing the cuff size, the exhaust velocity may need to be adjusted (see page 11).



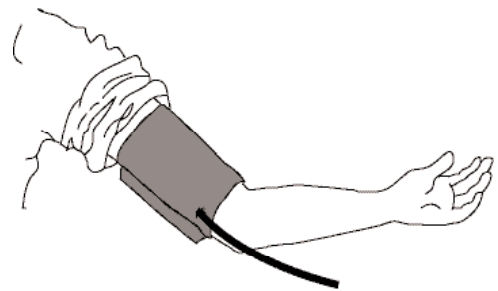
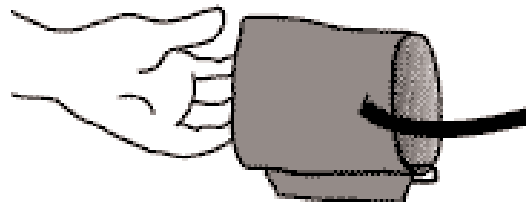
## TAKING YOUR BLOOD PRESSURE

Tips for Blood Pressure Monitoring:

-  Relax for about 5 to 10 minutes before measurement.
-  Remove constricting clothing and place cuff on bare arm.
-  Unless your physician recommends otherwise, use left arm to measure pressure.

Now you are ready. Follow these simple steps:

- 1.** Sit comfortably with your left arm resting on a flat surface so that the center of your upper arm is at the same height as your heart.
- 2.** Lay left arm on the table, palm up and thread cuff end through metal loop, smooth side against arm. Then position the tube off-center toward the inner side of arm in line with the little finger.
- 3.** Pull the end of the cuff to tighten it, fold back the extra material, and fasten securely. The cuff should be snug but not too tight. You should be able to insert two fingers between the cuff and your arm.



 **IMPORTANT:** Measure pressure at the same time each day.

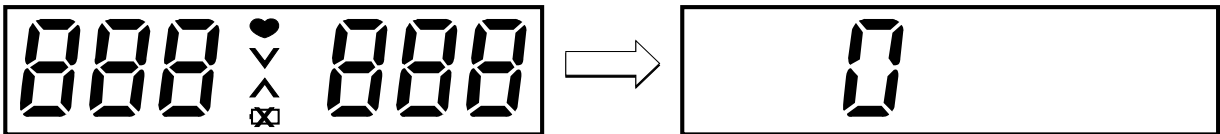


# TAKING YOUR BLOOD PRESSURE



 **IMPORTANT:** Measure pressure at the same time each day.

4. Press the POWER button.
5. Watch for all display symbols to appear briefly, followed by a zero, indicating that monitor is ready for measurement.



6. Watch the display and squeeze the bulb quickly until cuff pressure reaches about 30 mmHg to 40 mmHg above expected systolic pressure. To help you determine the correct inflation level, the monitor is programmed to beep quickly three times at each of the four preset pressure levels (160, 200, 240, and 280). We recommend using the chart shown below to determine which preset measurement to use. If the “re-measure” symbol appears, pressure is not sufficient for reading and measurement must be taken again.

Usual Systolic	Inflate to
Up to 130	160
131-170	200
171-210	240
211-250	280

**NOTE: Beeping sound may be difficult to hear due to its pitch. Watch the display for the correct inflation level. Be sure to completely deflate the cuff before use.**

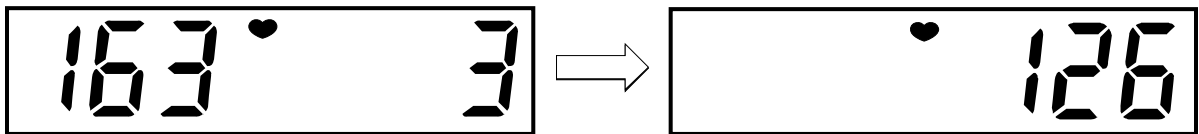






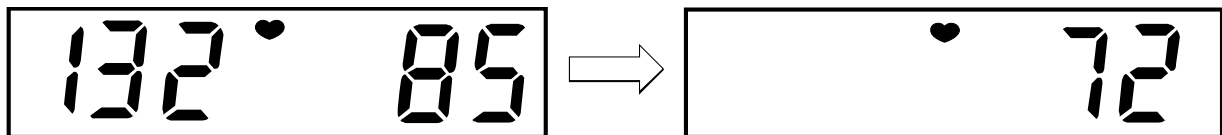
## TAKING YOUR BLOOD PRESSURE

7. Sit quietly during measurement. Pressure values are displayed at left, then right, along with ♥ symbol blinks and beeps with pulse beat.



**NOTE: If you wish to stop inflation at any time, press the exhaust valve to release air.**

8. Wait for the long beep, indicating that the measurement is complete. Your systolic pressure will appear on the left and your diastolic pressure on the right of the display screen, alternating with pulse reading.



9. Press the exhaust valve to release the air from the cuff. The monitor shuts off automatically in about two minutes, or press POWER to shut off.



## TAKING YOUR BLOOD PRESSURE

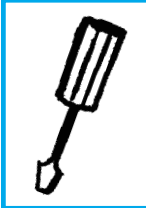


**10.** Remove cuff and make a note of your blood pressure and pulse rate on the chart (see page 16), indicating date and time of measurement.

We advise that you record the date and time after each measurement because an accurate blood pressure history relies not on single or sporadic readings but on a pattern over time.

**NOTE:** If you wish to take your blood pressure again, relax and wait 5-10 minutes to enable the flow of blood in the arm to return to normal. There is no need to wait if someone else wishes to use the monitor.





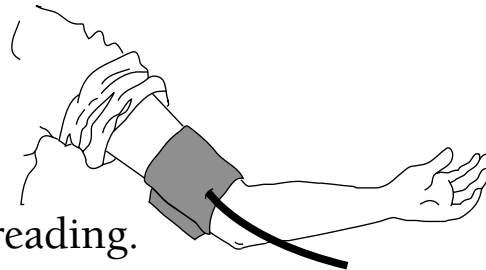
## CHECK/ADJUST EXHAUST VELOCITY

Exhaust velocity is the rate at which the air pressure in the cuff deflates during the course of measurement. It is preset at the factory and generally does not need any further adjustment.

**NOTE: The exhaust rate of your monitor was preset and tested at the factory to ensure proper measurement. The rate set is dependent on cuff size, not arm size. If using a cuff other than the one shipped with the unit, you may need to adjust the exhaust velocity rate.**

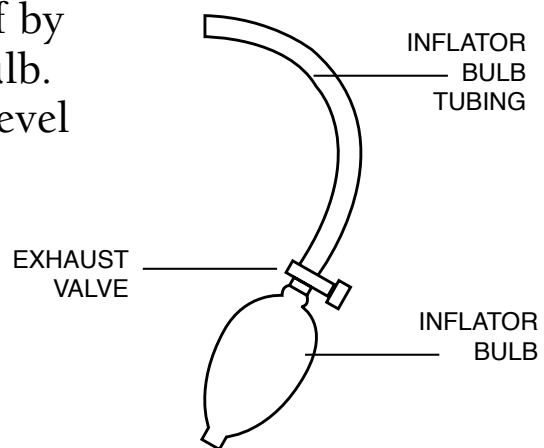
To check the exhaust velocity rate, proceed as follows:

1. Put on the arm cuff.



2. Press the POWER button.  
The unit will begin taking a reading.

3. When zero appears, inflate the cuff by squeezing the handheld inflator bulb. Pump it until it shows a pressure level 40 mmHg higher than your usual systolic measurement.



## CHECK/ADJUST EXHAUST VELOCITY



4. Watch the display screen. As pressure automatically decreases, diastolic numbers should decline in increments of 2 to 5 mmHg.

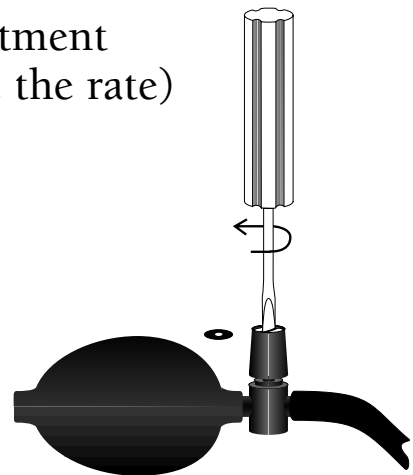


If the exhaust velocity range is not within 2 to 5 mmHg, make the following adjustment with the unit turned off:

1. The adjustment screw is located on the exhaust valve attached to the inflator bulb. It is covered by a thin grey protection cap with a hole in the center. To remove and discard the cap (you do not need to replace it), insert the end of a paper clip and lift off to see the gold adjustment screw underneath.
2. Using a small screwdriver, rotate the adjustment screw about 45 degrees clockwise (to raise the rate) or counterclockwise (to lower the rate).

**NOTE: This adjustment is very sensitive.**  
**Turn screw very gradually.**

3. Repeat the test until the exhaust velocity is between 2 to 5 mmHg.



**NOTE: Once the monitor is adjusted to a new cuff size, further adjustments should not be required unless cuff size is changed again.**





## ABOUT BLOOD PRESSURE

### ■ 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 millimeters of mercury (mmHg).

### ■ What Affects Blood Pressure?

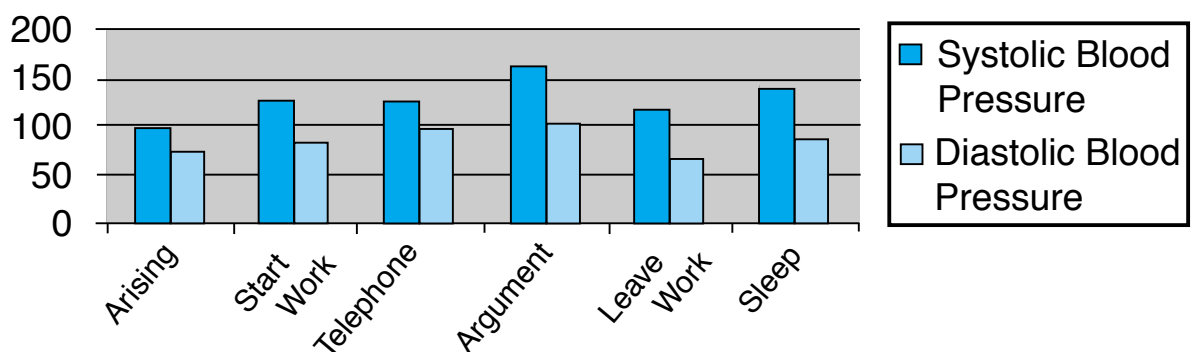
Blood pressure is affected by many factors: age, weight, time of day, activity level, climate, altitude and season. Certain activities can significantly alter blood pressure. Walking can raise systolic pressure by 12 mmHg and diastolic pressure by 5.5 mmHg. Sleeping can decrease systolic blood pressure by as much as 10 mmHg. Taking your blood pressure repeatedly without waiting an interval of at least 3 minutes between readings can also affect it.

In addition to these factors, beverages containing caffeine or alcohol, certain medications, emotional stress and even tight-fitting clothes can make a difference in the readings.

### ■ What Causes Variations In Blood Pressure?

An individual's blood pressure varies greatly from day to day and season to season. In hypersensitive individuals, these variations are even more pronounced. Normally, blood pressure rises during work or play and falls to its lowest levels during sleep.

Fluctuation within a day (case: 35 year old male)





## ■ Assessing High Blood Pressure

The following standards for assessing high blood pressure (without regard to age) have been established as a guideline.

BP Classification	Systolic (mmHg)		Diastolic (mmHg)
Normal	<120	and	<80
Prehypertension	120-139	or	80-89
Stage 1 Hypertension	140-159	or	90-99
Stage 2 Hypertension	≥160	or	≥100

**SOURCE: The Seventh Report of the Joint National Committee on Prevention, Evaluation and Treatment of High Blood Pressure. National Heart, Lung and Blood Institute - May 2003.**

## ■ What Is Hypertension?

Hypertension (high blood pressure) is the diagnosis given when readings consistently rise above normal. It is well known that hypertension can lead to stroke, heart attack or other illness if left untreated. Referred to as a “silent killer” because it does not always produce symptoms that alert you to the problem, hypertension is treatable when diagnosed early. Those who fall within the Prehypertensive range are more likely to develop hypertension in the future.

## ■ Can Hypertension Be Controlled?

In many individuals, hypertension can be controlled by altering lifestyle and minimizing stress, and by appropriate medication prescribed and monitored by your doctor. The American Heart Association recommends the following lifestyle suggestions to prevent or control hypertension:

- Don't smoke.
- Reduce salt and fat intake.
- Maintain proper weight.
- Exercise routinely.
- Have regular physical checkups.
- Monitor your blood pressure at periodic intervals.





## ABOUT BLOOD PRESSURE

### ■ Why Measure Blood Pressure at Home?

It is now well known that, for many individuals, blood pressure readings taken in a doctor's office or hospital setting might be elevated as a result of apprehension and anxiety. This response is commonly called "white coat hypertension." One way to determine whether this is the case for you is to take your home monitor to the doctor's office and, before the doctor or nurse takes your pressure, do it yourself on your home monitor and compare it to your record of home readings.

In any case, self-measurement at home supplements your doctor's readings and provides a more accurate, complete blood pressure history. In addition, clinical studies have shown that the detection and treatment of hypertension is improved when patients both consult their physicians and monitor their own blood pressure at home.

### ■ Keys to Successful Monitoring:

Blood pressure fluctuates throughout the day. We recommend that you are consistent in your daily measurement routine:

- Measure at the same time every day.
- Sit in the same chair/position.
- Relax for 5 minutes before measurement.
- Sit still during measurement – no talking, eating or sudden movements.
- Record your measurement in a logbook.

### ■ How Do I Record My Blood Pressure?

Blood pressure readings are typically recorded with the systolic pressure written first, followed by a slash mark and the diastolic pressure. For example, 120 mmHg systolic and 80 mmHg diastolic measurements are written as 120/80. Pulse is simply written with the letter "P" followed by the pulse rate—P 72, for example. Please see Page 16 for the blood pressure record.
















## IMPORTANT INFORMATION

Please read this important information before using your monitor.

-  Please remember that only a medical practitioner is qualified to interpret your blood pressure measurements. Use of this device should not replace regular medical examinations.
-  Have your physician review your procedure for using this device. He or she will want to verify blood pressure measurements before prescribing or adjusting medications.
-  Consult your physician if you have any doubt about your readings. Should a mechanical problem occur, contact LifeSource.
-  Do not attempt to service, calibrate, or repair this device.
-  Because your UA-702 monitor contains delicate, high-precision parts, avoid exposing it to extremes in temperature or humidity or to direct sunlight, shock and dust. LifeSource guarantees the accuracy of this device only when it is stored and used within the temperature and humidity ranges noted on page 18.
-  Clean the monitor and cuff with a dry, soft cloth or a cloth dampened with water and a mild detergent. Never use alcohol, benzene, thinner or other harsh chemicals to clean monitor or cuff.
-  Remove and replace batteries if monitor is not used for more than **six months**.

## PRECAUTIONS

UA-702 is designed to be used at home, by those who are eighteen (18) years and older, to monitor blood pressure (systolic and diastolic) and pulse rate. This monitor is not designed to measure the blood pressure of people with common arrhythmias, such as atrial or ventricular premature beats or atrial fibrillation. It is not designed for ambulatory use.



## SPECIFICATIONS



<b>Model</b> .....	UA-702
<b>Type</b> .....	Oscillometric
<b>Display</b> .....	Digital, 10-mm character height Pressure/pulse displayed alternately
<b>Measurement range</b> .....	Pressure: 20 mmHg to 280 mmHg Pulse: 40 pulses to 200 pulses/minute
<b>Accuracy</b> .....	Pressure: $\pm 3$ mmHg or 2%, whichever is greater Pulse: $\pm 5\%$
<b>Pressurization</b> .....	Manual by inflator bulb
<b>Depressurization</b> .....	Constant-air release-valve system
<b>Deflation</b> .....	Hand-held push button
<b>Power source</b> .....	4 type AA (1.5 volt) alkaline batteries (not included)
<b>Battery life</b> .....	Approximately 6 months with 3 daily measurements
<b>Operating environment</b> .....	50°F to 104°F (10°C to 40°C) Less than 85% relative humidity
<b>Storage environment</b> .....	-4°F to 140°F (-20°C to 60°C) Less than 95% relative humidity
<b>Dimensions</b> .....	Length: 4.1" (105 mm) Width: 5.3" (135 mm) Height: 1.7" (44 mm)
<b>Weight</b> .....	4.9 oz. (140 g) without batteries

Blood pressure measurements determined by the UA-702 are equivalent to those obtained by a trained observer using the cuff/stethoscope auscultation method within the limits prescribed by the American National Standards Institute for electronic or automated sphygmomanometers.





## CONTACT INFORMATION

Our products are designed and manufactured using the latest scientific and technological methods, and offer accurate, easy to use, home monitoring and treatment options. Our full product line includes:

- **Aneroid Blood Pressure Kits**
- **Blood Pressure Cuffs**
- **Digital Blood Pressure Monitors**
- **Digital Thermometers**
- **Heart Rate Monitors**
- **Nebulizers**
- **Personal Health Scales**
- **Stethoscopes**

**This *LifeSource* blood pressure product is covered by a Lifetime Warranty. See warranty card for details.**

**Visit our web site at [www.LifeSourceOnline.com](http://www.LifeSourceOnline.com)  
for warranty registration.**

For more information regarding use, care or servicing of your blood pressure monitor, contact:

### **A&D Medical**

**A division of A&D Engineering, Inc.**

1555 McCandless Drive

Milpitas, CA 95035

LifeSource Health Line (Toll-Free): 1-888-726-9966

[www.LifeSourceOnline.com](http://www.LifeSourceOnline.com)

For Canada Residents, please contact:

### **Auto Control Medical**

6695 Millcreek Drive, Unit 5

Mississauga, Ontario

L5N 5R8 Canada

Auto Control (Toll-Free): 1-800-463-5414

[www.autocontrol.com](http://www.autocontrol.com)



**IMPORTANT!**

**If You Need Assistance with the Set-Up or Operation**

**We Can Help!**

**Please call us FIRST before contacting your retailer at**

**LifeSource Health Line**

**1-888-726-9966 - Toll Free**

**1-800-463-5414 - In Canada**

**A specially trained representative will assist you**



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