

Digital Blood Pressure Monitor

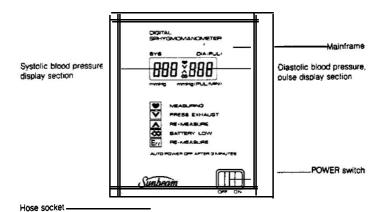
Model 7620

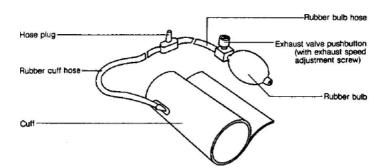
Instruction Manual

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Identification of Parts





. Notes for Proper Measurements

- Attach the arm cuff at the proper position of the arm as high as the level of th heart.
- Do not. give vibration to the instrument during measurement, or proper measurement will not be achieved.
- 3. Perform measurement quietly in a relaxed posture.
- 4. Do not wind the arm cuff over jacket or sweater sleeve, or measurement cannot be done. Also, if the upper arm is squeezed by the shirt sleeve rolled up to the upper arm, proper measurement results will not be obtained.
- 5. Blood pressure naturally varies from time to time throughout the day.
- 6. Although such cases are rare, for subjectshaving an extremely weak pulse or irregular pulse, errors may result which prevent proper measurement. If such abnormal variations are noticed, consult your physician or the sales representative -from which you purchased this instrument.
- This device is intended for adult use. Please consult your physician should you wish to use the device on children.

Description of Display Marks

Display mark	Condition/Cause	Corrective
Measurement in progress	Mark appears in the measurement condition and flashes when pulse is detected.	Measurement in progress —remain quiet.
V Exhaust	Mark flashes when power is applied and there is air remaining in the cuft. Mark flashes at the completion of the measurement until exhaust is complete.	Press the exhaust button to exhaust the air.
A		

Insufficient insufficient. pressure cessively low. Replace batteries

Exhaust speed

flashing (exhaust

speed error)

OAppears when the battery voltage is exwith new ones. Appears when the Frr blood pressure could not be measured ac-Measurement error curately. the when Err ⊖Appears pulse could not ac curately be measured. Pulse error

Flashing when exhaust

Hg/s.

speed is above 8 mm-

Increase gun but pressure was

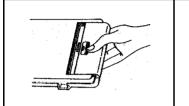
pressurization level by 30 to 40mmHa and measure once again. Replace all four batteries

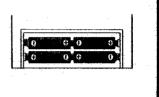
First exhaust air from the cuff, reapply the cuff properly and remeasure.

Adjust exhaust speed to 2

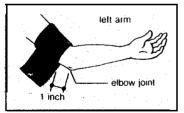
to 5mmHg/s

Preparation for Measurements

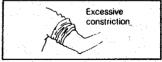




Attaching the Arm Cuff Wind the arm cuff around the left upper arm tightly so that the bottom edge of the cuff is positioned one inch above the elbow joint.



 Rolling up a shirt or jacket sleeve to allow the arm cuff to be litted may cause constriction of the upper arm preventing accurate readings.



 Postures During Measurements Remain in a seated or reclining posture during measurements.

Measurements

1. Turn Power ON

When power is turned ON, all display marks appear for approximately 1 second.

When the " 0 " is displayed the unit is ready for measurement.
 If the V mark appears, release air with the air release button until " O: appears.

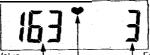






Approx. 1 second

- 2. Attach the arm cuff to the left arm.
- 3. Pressurize the arm cuff with the rubber bulb.
 - Pressurize the arm cuff to approximately 30 40mmHg above the estimated Systolic blood pressure to be measured.
 - A buzzer sounds when pressure reaches 160, 200 240 and 280mmHq.
- 4. When pressurization is completed, the automatic exhaust mechanism will gradually reduce arm cuff pressure, and the mark wilt appear on the display indicating that measurement is in progress.
 - @Pressure value appears on the left, and exhaust speed on the right side of the display.



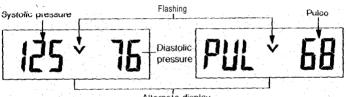
 Exhaust Speed

- Accurate measurement cannot be taken when exhaust speed is outside the 1 - 5 mmHg range.
 - Remain still during measurement.
- (2) When a pulse is detected, the pressure value moves to the right side of the display. At this time the warm mark flashes at the same rate as pulse rate, and the buzzer sounds.

Measurements



(3) When the measurement and buzzer sounds (beep), Systolic pressure is displayed on the left and Diastolic pressure on the right.
2 or 3 seconds later, pressure value and pulse appear alternately on the display.



Alternate display

 When a measurement is made with insufficient pressure the "Err" mark appears. Pressurize to a value 30-40mmHg higher than that previously used and perform the measurement again.

5. Press the exhaust push button to completely release the air

from within the cuff.

6. Turn Power OFF

Press the power switch to turn power off.

Subsequent Measurements
 When a measurement needs to be made again, turn off the power once and turn it on to restart the measurement.

8. Automatic Power-OFF Funciion
If this unit is left on after measurement an automatic power-off function turns the power off after approximately 2 min. 40

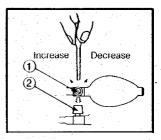
seconds.

Exhaust Velocity

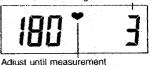
- The exhaust velocity is the rate of gradual pressure drop from the pressure applied manually using the rubber bulb.
- The exhaust condition is displayed in the right portion of the display from the time of pressurization until the measurement mark starts flashing.
- This unit is adjusted so that the exhaust velocity is I-5mm Hg/s at 150 mmHg.
 - Note that if this exhaust velocity is not proper, correct measurements are not possible.

Exhaust Velocity Adjustment _

- Perform this adjustment procedure if the exhaust velocity is not within the proper range as described above.
- Apply the arm cuff to the left arm and pressurize to the pressure approximately 60mmHg above your suspected systolic pressure. Hold the area (2) in the figure, and insert a screwdriver into groove (1).
- 2. If the exhaust velocity is too fast, turn to the left and if it is too slow, turn to the right so that the value shown in the right portion of the display is in the range 2 5mm-Ha/s.
- When the adjustment is completed, reduce the pressure and recheck. If the adjustment is not proper after one try, repeat several times.
 - Exhaust velocity will differ slightly depending upon the size of the and the method of winding the cuff.



Adjust exhaust velocity to 2~5 mmHg/s.



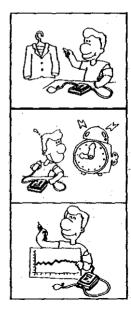
Adjust until measuremen mark flashes

More About Blood Pressure Measurements

How Is A Proper Measurement Made?

Blood pressure varies according to the conditions prevailing at the time of measurement, so be sure to consider the following in order to obtain the most accurate measurements.

- In preparation for blood pressure measurement, the subject should urinate and should remain relatively still for 10 to 15 minutes prior to measurement.
- Shirts or other garments which fit tightly on the upper arm should be removed prior to fitting the arm cuff
- Exercise, eating and drinking, smoking, etc., prior to measurement can affect the results.
- The blood pressure varies constantly throughout the day. Measurement should be made regularly at the same time each day.
- Do not be too impressed by the results of one measurement. Keep a record of blood pressure variations. Many readings tell a story.
- 6. When making repeated measurement, the arm becomes heavy with blood, resulting in wide variations in measure ment values. For this reason, repeated measurements should be made after a rest period of approximately 5 to 10 minutes or after raising the arm to relieve the engorged condition.
- In general, the blood pressure is low in summer (when it is hot) and high in winter (when it is cold).
- Emotional stresses may tend to cause blood to rise.



More About Blood Pressure Measurements

What is Blood Pressure?

The blood pressure will reach its highest levels in the large arteries near the heart and drop off toward the peripheral areas of the circulatory system.

The blood pressure varies in accordance with the beating of the heart, and when the heart contracts, squeezing the blood out, the pressure inside the blood vessels is said to be systolic, and when the heart expands, sucking the blood back in, the pressure of the blood inside the blood vessels is said to be diastolic.

Hypertension, which is most common among adults and the old, if left unattended, can cause many health problems including stroke, heart attack, etc. It is therefore necessary to control the blood pressure to prevent it from becoming high, by reducing salt, dietary regimens, and by controlling thesubject's activities. Even people who are born with high blood pressure can prevent the progress of high blood pressure by means of adequate control.

Why Is It a Good Thing to Measure Blood Pressure at Home?

Having one's blood pressure measured by a doctor in a hospital or a clinic, and group health checks, tend to stimulate nervousness in the subject and may even create sufferers of high blood pressure. Also blood pressures varies in accordance with a variety of conditions, and so judgement is not possible on the basis of a single measurement.

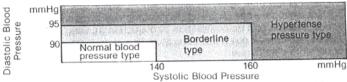
The blood pressure measured first thing in the morning after getting up, before taking any food, and with the subject still, is known as the fundamental blood pressure. In practice it is rather difficult to record the fundamental blood pressure, but to come as near as possible to measuring the blood pressure in an environment that is close to this. it is useful to be able to take the measurement at home.

Further, you could carry out your own blood pressure control with your own blood pressure monitor at home to take blood pressure readings on a regular basis.

More About Blood Pressure Measurements

WHO Blood Pressure Classifications

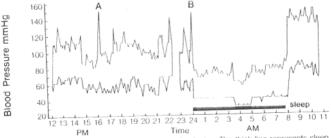
Standards for assessment of high or low blood pressure, without regard to age, have been established by the World Health Organization (WHO), as shown in this chart.



Reference Material: Investigation into Adult Diseases Report by the Ministry of Health and Social Seucurity, 1971

Variations in Blood Pressure

Individual blood pressures vary greatly both on a daily and a seasonal basis. These variations are even more pronounced in hypertense patients. Normally the blood pressure rises while at work and is at its lowest during the sleeping period. The graph below illustrates the variations in blood pressure over a whole day with measurement taken every five minutes.



Shown is data for measurement taken every 5 minutes. The thick line represents sleep. The rises in blood pressure at 4 PM (A in the graph) and 12 PM (B in the graph) correspond to an at-19 tack of pain and sexual intercourse. (Beven, Honour & Stott: Clin. Sci. 36.329, 1969)

Precautions

- This instrument is constructed of precision components, and should not be sub. jected to extremes in temperature, humidity, direct sunlight, shock or dust.
- Use a dry, soft cloth to clean the instrument Do not use the thinner, alcohol, benzene, or wet dusters for the cleaning.



Avoid tightly folding the cuff or storing the hose in the folded stage for long periods, as such treatment may shorten the life of the components.

Specifications

Model

Type Display

Measurement range

Accuracy

Pressurization Depressurization

Deflation

Power Sources

Battery life

Operating environment Storage environment

Dimensions

Weight

Origin:

7620

Oscillometric

Digital

20 - 280mmHg (Pressure)

40 ~ 200 pulses/minute (Pulse)

±3mmHg or 2% whichever greater (Pressure)

±5% (Pulse)

Manual pressurizing

Automatic Constant-Air-Pressure

Release Exhaust Value System

Manual push button

Type AA batteries (4)

Approx. 2 years with 3 mm usage per day

+ 10°C - + 40°C, less than 85% RH

- 20°C - + 55°C, less than 95% RH

144(W) × 70(D) × 36(H)mm

APProx 200g

Made in Japan for Hanson Scale Company Division of Sunbeam Carp Highway

45 North Shubuta, MS

FULL ONE YEAR WARRANTY

This product is warranted for one year from the date of purchase against defects in material and workmanship. If the product fails to operate during this period, return it prepaid to Hanson Scale Service Center 117 Central Industrial Row, Purvis, MS 39475, for repair or replace. ment without charge at the manufacturer's option. This warranty gives you specific legal rights, and you may have other rights which vary, from state to state.

warrantor.

Hanson Scale Company Division of Sunbeam Corporation, Purvis,MS 39475 If purchased in Canada, Return prepaid to: Sunbeam Corporation (Canada) Limited. 1040 Islington Avenue Toronto, Ontario M8Z 4R5 A Member Company of Allegherry International Made in Japan.

CUSTOMER SERVICE HELP LINE

We want to be sure you are completely satisfied with your new purchase. If you have any questions or experience any problems, please

call our toll free help line.

In U.S.A. only: phone: 1-800-621-8854 between 8:00 a.m.- 12 p.m. and 1:00 p.m. · 4:00 p.m. Central Standard Time. Monday through Friday. In CANADA only: phone 1-800-268-2743 (112-800-268-2743 in B.C. only) between 8:30 a.m. 12:30 pm and 1:30 p.m. - 4:30 p.m. (Monday through Thursday) or 8:30 a.m. 12:00 p.m. (Friday) Eastern Standard Time.

We will give you prompt assistance in resolving only questions or problems. It is very important that you follow the instructions then. CALL BEFORE RETURNING THE PRODUCT FOR REPAIR.

Notes/Notas