

FORE-CARE™

ADVANCED ARM TYPE BLOOD PRESSURE MONITOR



CE 0123

■ **Manufacturer**

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P/N 310005 REV 0.1 SEP/08

♥ SE-800/2000

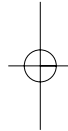
USER MANUAL



READ BEFORE USE

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1. Caution

This device is designed to make automatically rapid exhaust if cuff pressure is 320 mmHg or more. If the cuff doesn't make automatically rapid exhaust when cuff pressure is 320 mmHg or more, please detach the cuff from the arm.

POWER SOURCES :
SIZE AA BATTERIES(4) BF TYPE
INSTRUMENT



2. Important Information before Blood Pressure Measurement.

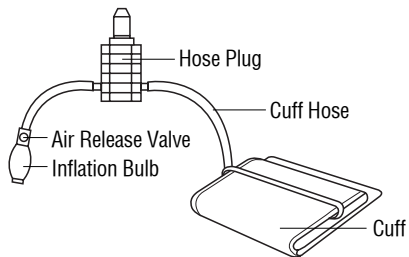
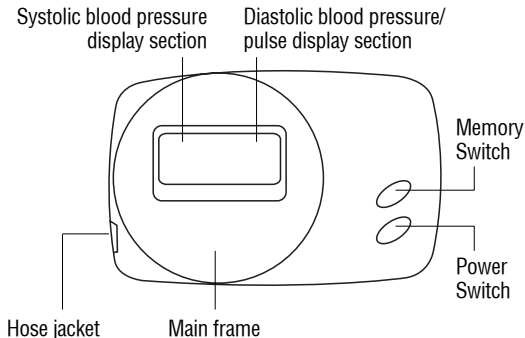
1. To ensure accurate measuring result, carefully read these use instructions.
2. This product is intended for household use only. Keep product and batteries away from children.
3. People suffering from cardiac arrhythmia, vascular constriction, arteriosclerosis in extremities, diabetes or users of cardiac pacemakers should consult their doctor before measuring their blood pressure themselves, since deviations in blood pressure values may occur in such cases.
4. If you are under medical treatment or taking any medication, please consult your doctor first.

5. The use of this blood pressure monitor is not intended as a substitute for consultation with your doctor.
6. Hold the monitor at heart level when measuring.
7. Wait approximately 5 minutes before repeating a measurement.
8. Always take readings at the same time of the day, ideally in the morning under same conditions,
9. Do not measure within 30 minutes after smoking, coffee or tea consumption.
10. Take off wrist watch and jewelry before fitting the monitor on the measuring arm.
11. While taking a measurement, sit down, relax, keep still, especially the hand of the measuring arm, do not move or speak.
12. It is recommended that the performance should be checked every two years after maintenance and repair according to the requirements in 7.1.1 of EN 1060 - 1:1995 and 7.4.1 of EN 1060 - 3:1997

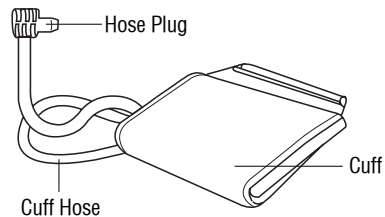
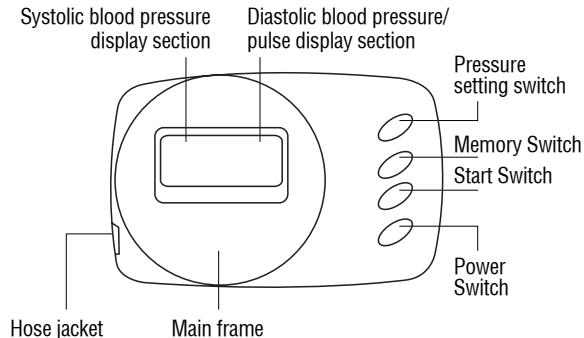
Blood pressure measurement determined with this device are equivalent to those obtained by a trained observer using the cuff/stethoscope auscultation method, within the limits prescribed by the American National Standard for Electronic or Automated Sphygmomanometer.

3. Parts Identification

(SE-800)



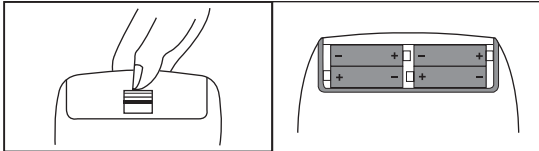
(SE-2000)



4. Preparation for Measurements

4.1 Battery installation

Remove the battery cover and insert batteries into the battery compartment as shown, taking extreme care that the polarities + and - are observed.



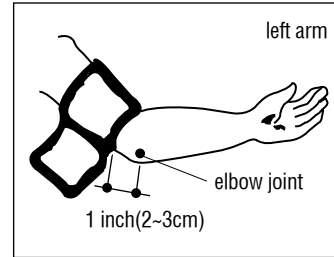
Only discard empty batteries. They should not be disposed of in the household waste, but at appropriate collection sites or at your retailer.

4.2 Inserting Hoses

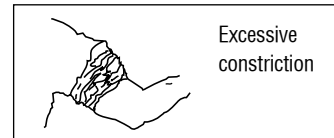
Insert hose plug into the hose jack.

4.3 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.



- Don't roll up a shirt or a jacket. It may cause constriction of the upper arm and proper measurement results will not be obtained.



If your BMI(Body mass index) is over 30, "*FORE-CARE large size cuff*" must be used for accurate result. *FORE-CARE large size cuff* is sold separately.

4.4 Measuring Posture

Remain in a seated or reclining posture.
Do not move your arm while measuring.

5. Description of Display Symbols

Display symbol	Condition/Cause	Corrective action
♥ Measurement in progress	Appears in the measurement condition and flashes when pulse is detected.	Measurement in progress-remain quiet.
↓ Exhaust	Flashes when power is applied and there is air remaining in the cuff.	Automatic exhaust is performed.
↑ Insufficient pressure	Measurement has begun but the pressure was insufficient.	Raise the cuff pressure 30-40mmHg more and measure once again. (SE-800) Raise the pressure setting one level up and measure once again. (SE-2000)
🔋 Replace batteries	Appears when the battery voltage is excessively low.	Replace both batteries with new ones.
Err Measurement error	Appears when the accurate blood pressure could not be obtained accurately.	Exhaust the air from the cuff, and reapply the cuff properly and remeasure.
PUL Err Pulse error	Appears when the accurate pulse rate could not be obtained accurately.	

6. How to Measure

6.1 Turn Power On

- When Power is turned on, all display symbols appear for approximately 1 second.
- When the “0” is displayed the unit is ready for measurement. If the “↓” symbol appears, release air in the arm cuff by pressing air release valve or removing the hose plug from the unit.



Approx. 1 second

6.2 Attach the arm Cuff to the left arm.

6.3 Pressurize the arm cuff with the inflation bulb. (SE-800)

- ★ pressurize the arm cuff to approximately 30-40mmHg above the estimated Systolic blood pressure to be measured. (SE-800)

Set the pressure value approximately 40mmHg above your normal Systolic blood pressure by pressurizing the Pressure switch. There are 9 settings: 120, 140, 160, 180, 200, 220, 240, 260, 280, and 300mmHg (SE-2000)

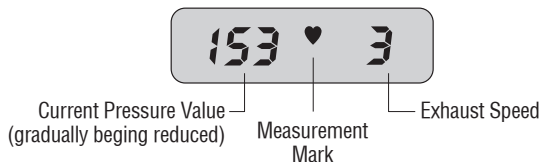


6.4 Press the Start switch.(SE-2000)

- The arm cuff pressurizes when the Start Switch is pressed.
- When the Start Switch is subsequently pressed during pressurization, air in the arm cuff is released.

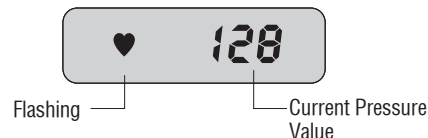
6.5 When Pressurization is completed, the automatic exhaust mechanism will gradually reduce arm cuff Pressure, and the “♥” symbol will appear indicating that measurement is in Progress.

- ① Pressure value appears on the left, and exhaust speed on the right side of the display.

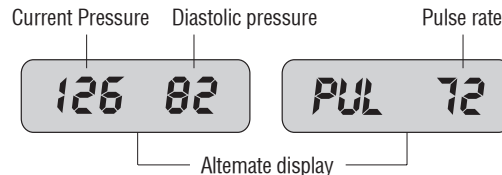


- Remain still during measurement.

- ② When a pulse is detected, the pressure value moves to the right side of the display. At this time the “♥” symbol flashes at the same rate as pulse rate, and the buzzer sounds when measurement is completed.



- ③ When the measurement is completed and the buzzer sounds (beeps), Systolic pressure is displayed on the left and Diastolic pressure is displayed on the right side of the display, 2-3 seconds later, pressure value and Pulse appear alternately on the display.



- When a measurement is made with insufficient pressure the “ERR” symbol appears. pressurize 30-40 mmHg higher than that previously used and perform the measurement again. (SE-800)

- If insufficient pressure is obtained, the unit will inflate the cuff again to the next pressure. the unit will continue to re-inflate unit it is able to obtain a sufficient pressure, each time inflating to the next preset pressure. At that point, if the unit is unable to obtain sufficient pressure the “ERR” symbol will appear in the display. **(SE-2000)**

6.6 push the air release valve to completely release the air from the cuff. **(SE-800)**

6.7 Turn Power OFF

Press the Power switch to turn Power off.

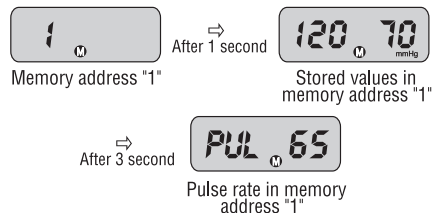
6.8 Automatic Power OFF Function

If the unit is left on after measurement, an automatic Power-OFF function turns the power off after approximately 2 min.30 seconds. To continue measurement press the Power switch turning the unit on.

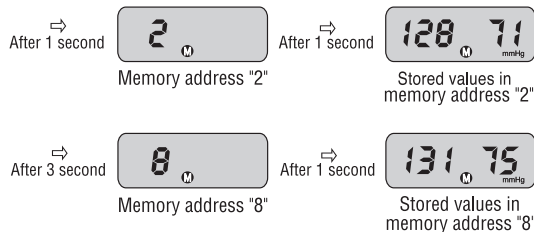
6.9 Memory Recall Function

- ① To confirm memory values, press the memory switch when “0” is displayed on the left side of LCD by turning the unit on or when current measurement is being displayed on the LCD after measurement.
- ② Memory address “1” is displayed on left side of LCD. After 1 second, stored values in memory address “1”

are displayed. Systolic and diastolic value are displayed for 3 seconds, and then pulse rate is displayed for 1 second.



- ③ If memory switch is pressed again while memory address “1” is being displayed while stored value is displayed then, memory address is changed to 2 and stored values in memory address “2” are displayed. Pulse rate is not displayed from memory addresses 2 to 8.



- ④ Shift of stored values in memory addresses by new measurement. When new measurement value is added by new measurement, each values in memory addresses automatically shift to next. Measurement value stored in memory address “1” shifts to memory address “2”, “2” to “3”, “3” to “4”, “4” to “5”, “5” to “6”, “6” to “7”, “7” to “8”, and those in memory address “8” are removed.

7. More about Blood Pressure Measurements

7.1 What is Blood Pressure ?

Blood Pressure is a measurement of the force of blood flowing against the walls of the arteries. Arterial blood pressure is constantly changing during the course of the cardiac cycle. The highest pressure in the cycle is called the SYSTOLIC BLOOD PRESSURE; the lowest is the DIASTOLIC BLOOD PRESSURE. Both pressure readings, the SYSTOLIC and DIASTOLIC, are necessary to enable a physician to evaluate the status of a patient’s blood pressure. Many factors such as physical activity, anxiety, or the time of day, can influence your blood pressure. Blood pressure is typically low in the morning and increases from afternoon to evening. It is lower in the summer and higher in the winter.

7.2 Why is it a Good Thing to Measure Blood Pressure at Home?

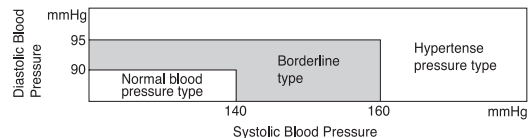
Having one’s blood pressure measured by a doctor in a hospital or a clinic, and group health checks, tend to stimulate nervousness in the subject and may even create high blood pressure. Also blood pressure varies in accordance with a variety of conditions, and so judgement is not possible on the basis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

7.3 WHO Blood Pressure Classifications

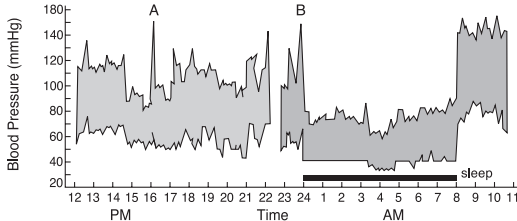
Standards for assessment of high or low blood pressure, without regard to age, have been established by the World Health Organization (WHO), as shown in the chart.



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

7.4 Variations in Blood Pressure

Individual blood pressures vary greatly both on a daily and a seasonal basis. These variations are even more pronounced in hypertensive 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 measurements taken every 5 minutes. The thick line represents sleep. The rise in blood pressure at 4 PM(A in the graph) and 12 PM(B in the graph) correspond to an attack of pain and sexual intercourse. (Beven, Honour & Stott: Clin. Sci. 36 : 329, 1969)

8. Care And Maintenance

1. Avoid storing the unit where it will be exposed to direct sunlight, dust or high humidity.

2. Do not Wash the main unit or pressure cuff.
3. Do not disassembling the unit.
4. Do not drop the unit. Protect it from sudden jars or shocks.
5. Do not clean the unit with volatile liquids.
6. The unit and pressure cuff may be wiped clean with a soft, dry cloth.

9. Limited 3 Years Warranty

Your SE-800 and SE-2000 Blood Pressure Monitor are warranted to be free from manufacturing defects for a period of two years under normal use. This warranty extends only to the original retail purchaser. Should repair be needed within the warranty period, ship the unit prepaid to **Genexel Medical Instrument, Inc. #196, Anyang7-Dong, Manan-Gu, 430-017 Anyang-City, Kyunggi-Do, KOREA.**

ATTN : Service Dept. Be sure to include the model number of your unit and your phone number on any correspondences. We will either repair or replace(at our option) free of charge any parts necessary to correct defects in the materials or workmanship.

The above Warranty is Complete and exclusive. The warrantor expressly disclaims liability for incidental, special, or consequential damages of any nature some states do not allow the exclusion or limitation of incidental or consequential

damages, so the above warranty may not apply to you. Any implied warranties arising by the operation of law shall be limited in duration to the term of this warranty. (Some states do not allow limitations on how long an implied warranty lasts, So the above limitation may not apply to you) This warranty gives you specific legal rights and you may have other rights which vary from state to state. As a condition to operation of your warranty, the enclosed registration card must be completed and sent to us within one month from the date of purchase.

FOR CUSTOMER SERVICE CALL 82-2-575-1141 (EXT : 201)

10. FCC Information

Warnings

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Note

Potential For Radio/ Television Interference(for U.S.A. only)
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in

accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Potential For Radio/Television Interference (for Canada only)
This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Canadian Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", NMB-003 édictée par le ministre des communications.

11. Specifications (SE-800)

Name and model number	Full Auto Fuzzy Blood Pressure Monitor 800
Display system	Digital display system / LCD 6 digits
Measuring method	Oscillometric Method
Power source	Size "AA" 1.5V x 4 Batteries
Measuring range	20~300mmHg (Pressure) 40~200 Pulses / minute (Pulse)
Accuracy	±3 mmHg (Pressure) ±5 % (Pulse)
Pressurization	Manual pressurization.
Depressurization	Constant-Air Release Valve System
Deflation	Manual air release Valve
Memory	Built-in Memory enabling display of the 8 previous measured value and current measurement value
Automatic Power Off	To be automatically cut off after 1 minute of non use to save energy.
Battery life	Approx. 6 months with 3 min. usage per day
Operating environment	+10°C~+40°C, less than 85% RH
Storage environment	- 10°C~+60°C, less than 95% RH
Dimensions	128(W) x 78(D) x 42(H)/mm
Weight	Approx. 315g (including 4 batteries)

Specifications (SE-2000)

Name and model number	Full Auto Fuzzy Blood Pressure Monitor 2000
Display system	Digital display system / LCD 6 digits
Measuring method	Oscillometric Method
Power source	Size "AA" 1.5V x 4 Batteries
Measuring range	20~300mmHg (Pressure) 40~200 Pulses / minute (Pulse)
Accuracy	±3 mmHg (Pressure) ±5 % (Pulse)
Pressurization	Automatic pressurization using a micro pump.
Depressurization	Constant-Air Release Valve System
Deflation	Automatic exhaust
Memory	Built-in Memory enabling display of the 8 previous measured value and current measurement value.
Automatic Power Off	To be automatically cut off after 1 minute of non use to save energy.
Automatic repressurization	To be automatically repressurized when the cuff pressure is insufficient
Preset Pressure	120, 140, 160, 180, 200, 220, 240, 260, 280, 300mmHg
Battery life	Approx. 4 months with 3 min. usage per day
Operating environment	+10°C~+40°C, less than 85% RH

Storage environment	- 10°C~+60°C, less than 95% RH
Dimensions	180(W) x 90(D) x 40(H)/mm
Weight	Approx. 350g (including 4 batteries)

Subject to change without notice.

This device conforms to the following standards :

DIN EN 60601-1 : 3/96 <Medical electrical equipment> -

Part 1 : General requirements for safety

DIN EN 1060-1 : 12/95, AMD 1 09/02 <Non-invasive sphygmomanometers> -

Part 1 : General requirements

DIN EN 1060-3 : 9/97 <Non-invasive sphygmomanometers> -

Part 1 : General requirements

DIN EN 1060-3 : 9/97 < Non-invasive sphygmomanometers> -

Part 3 : Supplementary requirements for electro - mechanical blood pressure measuring systems

MEDICAL ELECTRICAL EQUIPMENT needs special precautions regarding EMC. For detailed description of EMC requirements please contact the Genexel Medical Instrument, Inc.

Potable and mobile RF communications equipment can affect **MEDICAL ELECTRICAL EQUIPMENT**.



At the end of the product's useful life, please disposal of it at appropriate collection points provided in your country.