

**A Graham-Field Brand** 



## Item 707A, 707AX, 707AC Digital Blood Pressure Monitor with Manual Inflation & Automatic Deflation User Manual

**Read this manual before operating the Labtron Digital Blood Pressure Monitor. Save this manual for future reference.** 

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#### **SAFETY GUIDELINES - PLEASE READ BEFORE USE**

- △ WARNING: If components are damaged or missing, contact your Graham-Field dealer immediately. DO NOT use substitute parts.
- △ WARNING: GF Health Products, Inc. assumes no responsibility for any damage or injury caused by improper installation or use of this product.

#### **INTENDED USE**

The Labtron Digital Blood Pressure Monitor is intended to measure arterial blood pressure. This device is intended for use by adults, and not for use by children except under the supervision of an adult. This device is not intended to replace regular medical examinations. Review your procedure for using this monitor with your physician, who is the only person qualified to interpret blood pressure monitor results.

#### **FEATURES**

Main features of the Digital Blood Pressure Monitor, referred to in this manual, are shown in the picture at right.



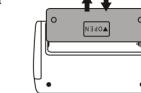
### **BATTERY INSTALLATION / REPLACEMENT**

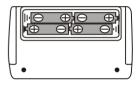
- 1. Slide the battery cover off in the direction of the arrow.
- 2. Install or replace the four AAA batteries, oriented as shown by battery compartment diagram, into the battery compartment.
- 3. Replace the battery cover. Ensure that the battery cover is securely fastened.

Info: Ensure that the batteries are correctly installed. Incorrect installation will prevent the device from operating.

### **BLOOD PRESSURE**

**Blood Pressure** is a measure of the blood's pressure in the circulatory system, which changes constantly during the course of the cardiac cycle. Blood pressure readings report two values. The higher reading (**systolic pressure**) shows the highest pressure





in the arteries occurring when the heart contracts. The lower reading (**diastolic pressure**) shows the lowest pressure in the arteries, which occurs right before the heart contracts. Blood pressure readings are written with the highest value first, then the lowest value. Readings of 120/80 are considered to be normal, with high blood pressure being defined as a systolic pressure which is 140mmHg or more at rest and a diastolic pressure which is 90mmHg or more at rest. Only a patient's physician is qualified to determine whether the readings obtained are normal for that person.

#### Preparing to measure blood pressure

- 1. Blood pressure fluctuates continuously throughout the day. To consistently track your blood pressure, try to take your blood pressure at the same time each day.
- 2. Relax and remain still for 5 to 10 minutes before a blood pressure measurement, and between blood pressure measurements.
- 3. Refrain from eating, smoking, and drinking, especially alcoholic

beverages, before a measurement.

- 4. Remove any clothing on the upper arm to place the cuff directly on the skin. Constriction of the upper arm by clothing or a rolled-up sleeve, as shown at right, may cause an inaccurate reading; remove any constricting garments.
- 5. Sit down in a chair with back support and place both feet on the floor.
- 6. Extend the arm from which the blood pressure will be taken to the front or side. Rest your hand, palm-up, on a table as shown at right.



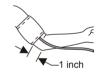


Info: Place the cuff at the same level as your heart to obtain accurate measurements. Your heart is located slightly to the right of your left armpit.

7. Attach the cuff: Hold the area of the cuff where the hose exits the cuff firmly against the inside of the bare upper arm directly over the brachial artery, and the bottom of the cuff approximately one inch (2-3cm) above the elbow, as shown in the third picture at right. Never place the cuff over **clothing.** Pull the opposite end of the cuff snugly around the arm and secure with the hook and loop fastener. The cuff should be snug, but not too tight. If one or two fingers can fit between the cuff and the arm, the cuff is properly secured. If you are unable to fit the cuff as described above, a smaller or larger cuff should be used.







#### Measuring blood pressure

Symbol key: LCD symbols you may see during measurement					
$\mathbf{\vee}$	Deflating				
	Inflating				
Err	Measurement error				
۲	Measuring				
X	Low battery				

- 1. Ensure that cuff is properly placed and that you are positioned as described in previous paragraphs.
- 2. Press the ON/OFF button. All LCD symbols will appear momentarily. If a downward arrow symbol displays, press the exhaust valve button (see earlier labeled picture) located between the inflation bulb and the tube to release the residual pressure from the cuff.

Info: The low battery symbol will also appear at this time while the monitor checks the power level. This does not indicate that the batteries are low unless the low battery symbol remains on continuously.

- 3. After "0" displays, pressurize the cuff by squeezing the bulb until the pressure value displayed is 50mmHg above your usual systolic pressure. If you do not know your usual systolic pressure, squeeze the bulb just until 200mmHg displays.
- 4. The cuff will automatically deflate after you stop pressurizing the cuff. If an upward arrow symbol displays, you must inflate the cuff to a higher pressure than you did the first time. If an upward arrow does not display, the monitor is taking your measurement. Remain calm and still to avoid causing any measurement error.
- 5. The systolic pressure, diastolic pressure, and pulse will display in the format shown at right. The device will completely deflate when measurement is finished. **To accelerate deflation, press the exhaust valve button.**



Info: To stop measurement in progress for whatever reason, press the exhaust value button to release the pressure and turn off the device.

Info: If during measurement the power drops to an insufficient level, the device will end the measurement and display the low battery symbol. Replace the batteries and repeat the measurement.

Info: If the device cannot detect your pulse, it will end the measurement. Wait several minutes, ensure that you and the cuff are positioned properly, and try again.

6. The device will automatically shut off three minutes after completing a reading, or you may turn it off manually by pressing the ON/OFF button.

7. If performing measurement for the first time, repeat the measurement two or more times to ensure that you and cuff are positioned correctly and that results are accurate and consistent. Record your results; there is a log provided, with examples, at the end of this manual for this purpose. Always check with your physician to ensure that readings are performed correctly. If you have concerns or questions about your results, always contact your physician. **Only your physician is qualified to analyze blood pressure.** 

#### **MAINTENANCE**

# ▲ NOTICE: To prevent product damage, please follow these recommended care and maintenance instructions:

Do not use monitor close to any device with a strong electrical field such as television, microwave oven, X-Ray equipment, etc.

Never inflate cuff above 300mmHg. Never inflate cuff unless it is positioned on an arm.

Do not expose the monitor components to direct sunlight, high temperature, or high humidity.

Do not put any part of monitor in contact with sharp objects which could pierce the material and cause damage.

Do not dismantle or disassemble monitor components.

Cleaning	Wipe off all components with a clean, dry cloth. Do not use solvents or other petroleum-based cleaners. Do not press cuff with a hot iron.
	Always deflate the cuff completely before storage. Remove the batteries when the device is to be stored for extended periods of time. Info: Removing the batteries will erase all readings in memory.

#### TROUBLESHOOTING

#### **Error indicators**

0	Indication	Cuff pressure reaches 330mmHg				
Enr 330	Cause	Twisted bladder inside cuff				
	Correction	Ensure that bladder lies flat within cuff				
Err	Indication	"Err" displays, cuff pressure releases, then "0 pressure" displays				
	Cause	Excessive arm movement or talking during measurement				
	Correction	Turn monitor OFF then ON and measure again while remaining still				
	Indication	Could not obtain pulse rate				
	Cause	Cuff was too loosely applied, extremely weak pulse, or arrhythmia				
	Correction	Reapply cuff and measure again; if problem persists after cuff is correctly positioned, seek medical attention immediately				
M	Batteries are exhausted. Replace with four new AAA alkaline batteries					

#### **General troubleshooting**

Problem	Recommended Action
Nothing appears in LCD	Ensure that batteries are correctly oriented in battery holder (polarity matches battery case placement indicators)
No measurement occurs	Ensure that cuff is positioned correctly Go over measurement procedure; measure again
Blood pressure measurements are too high or too low	Ensure that user and cuff are positioned as instructed Rest your arm on a table so that the cuff is level with your heart during measurement Remain seated and still during entire measurement period Refrain from hand and body movements during measurement
Blood pressure measurements vary	Your blood pressure can fluctuate considerably throughout the day. All of the following factors can influence your blood pressure: • Emotional state • Daily activities / exercise • Smoking • Drinking alcoholic beverages • Eating • Taking certain medications

#### **SPECIFICATIONS \***

Digital Blood Pressure Monitor Model	707A, adult-size cuff, fits 7.5 in 12.2 in. (19-31cm) arm 707A X, large adult-size cuff, fits 11.8 in 17.7 in. (30-45cm) arm 707A C, small adult-size cuff, fits 5.1 in 7.9 in. (13-29cm) arm
Measurement method	Oscillometric
Display	Digital LCD
Measurement range	Pressure 20-280mmHg, Pulse 40-180bpm
Measurement accuracy	Pressure ±3mmHg, Pulse ±5%
Inflation system	Manual inflation with air pumping bulb
Deflation system	Automatic deflation
Power	1.5V (AAA) alkaline batteries X 4
Automatic power-off	Approximately 3 minutes after measurement
Reference method for clinical trials	Auscultatory measurement
Weight	Approximately .75 lb (340g) without batteries

Specifications, continued *							
Environmental conditions	Operation	50°F ~ 104°F (10°C ~ 40°C), 10% ~ 85% RH					
	Storage & transport	14°F ~ 140°F (-10°C ~ 60°C), 10% ~ 95% RH					
Standard cited	EN 1060-1	Noninvasive blood pressure measuring equipment general requirements					
	EN 1060-3	Noninvasive blood pressure measuring equipment supplementary requirements for electromechanical blood pressure measuring systems					
	EN 60601-1	Safety requirements for medical electrical equipment					
	EN 60601- 1-2	Electromagnetic compatibility and safety for medical electrical equipment					
	EN 14971	Risk analysis for medical devices					
* Specifications are	subject to change	without notice					

#### WARRANTY

GF Health Products, Inc. ("Graham-Field") warrants the Labtron Digital Blood Pressure Monitor Model 707A/707A X/707A C for a period of one year for defects in workmanship and materials. If a product is deemed to be under warranty, GF Health Products, Inc. shall provide, at its option, (1) replacement of any defective part or product or (2) a credit of the original selling price made to GF Health Products, Inc.'s initial customer. The warranty does not include any labor charges incurred in replacement part(s) installation or any associated freight or shipping charges to GF Health Products, Inc.

The warranties contained herein contain all the representations and warranties with respect to the subject matter of this document, and supersede all prior negotiations, agreements and understandings with respect thereto. The recipient of this document hereby acknowledges and represents that it has not relied on any representation, assertion, guarantee, warranty, collateral contract or other assurance, except those set out in this document.

#### **BLOOD PRESSURE MEASUREMENT LOG**

Date	1/1	1/1	1/1				
Time	7:00	13:30	20:00				
mmHg 24	0						
22	0						
	_						
20	0						
18	0						
10	0						
16	0						
	0						
14	0						
	128	134					
12	0		-123				
10	0						
	0 84	90					
8	0 84		76				
	0						
	0						
Pulse	70	73	69				
	10	13	09				
Body Condition							

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