Vitagoods

TRAVEL PULSE

Portable Blood Pressure Monitor

Instruction Manual

Congratulations on your Vitagoods purchase.

With your Travel Pulse Blood Pressure Monitor, you can now measure your vital blood pressure parameters in the comfort of your home.

To get the most out of your new blood pressure monitoring device and ensure your safety, read the user manual prior to use.

Please follow the instructions carefully, and reference the user manual for future reference.

For assistance, call 1-888-870-2786 or visit vitagoods.com

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SAFETY INFORMATION

The Travel Pulse BPM measures systolic and diastolic blood pressure as well as pulse rate by using a pressurized cuff on the left wrist. The device is designed for home use only, and is not intended for ambulatory measurement (measurement recorded continuously throughout the day) or use on children.

Blood pressure measurements determined with this device are equivalent to those obtained by a trained observer using the American National Standard, manual, electronic, or automated sphygmomanometers.

If you suffer from a heart rhythm disorder (arrhythmia), only use this blood pressure monitor after consulting with your physician. In certain oscillometric cases, this measurement method may produce incorrect readings.

This Life Report System device is not intended to be a diagnostic device. Contact your physician immediately if pre-hypertensive or hypertensive values are indicated.

CAUTION

Read this user manual thoroughly before use. This device is designed and manufactured to operate within defined limits as misuse may result in harm. The following should be observed to best use and maintain your device:

- The Travel Pulse BPM has been designed for adult use only.
- This device is made for non-invasive measuring and monitoring of arterial blood pressure. It is intended for the wrist, so do not use on any other extremeties.
- Its sole function is blood pressure measurement.
- Monitoring blood pressure with this device does not equate to a medical diagnosis.
- This device allows you to monitor your blood pressure under the care of a physician.
- If you are taking medication, consult with your physician to determine the most appropriate time for your measurements. Never change a prescribed medication without your physician's consent.
- This device is not suitable for continuous monitoring during medical emergencies or operations.
- If the pressure of the cuff exceeds 40 kPa (300 mmHg), the device will automatically deflate. Should the cuff not deflate when its pressure exceeds 40 kPa (300 mmHg), detach the cuff from the wrist and press START/STOP to stop inflation.
- Do not use the monitor under the conditions of a strong electromagnetic field (e.g. medical radio frequency equipment) that radiates an interference signal or an electrical fast transient/ burst signal.
- The device is not AP/APG equipment. It is not suitable for use in the presence of flammable gases (avoid oxygen, nitrous oxide).
- Keep the unit out of reach of infants or children. Inhalation or swallowing of the device's small pieces is dangerous or even fatal.
- Only use specified accessories and detachable parts authorized by the manufacturer. Not doing so may cause damage to the unit or danger to you.

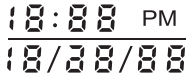
SAFETY INFORMATION

THE FOLLOWING SYMBOLS, DEFINED BELOW, ARE FOUND ON YOUR PRODUCT AND IN THIS USER MANUAL.

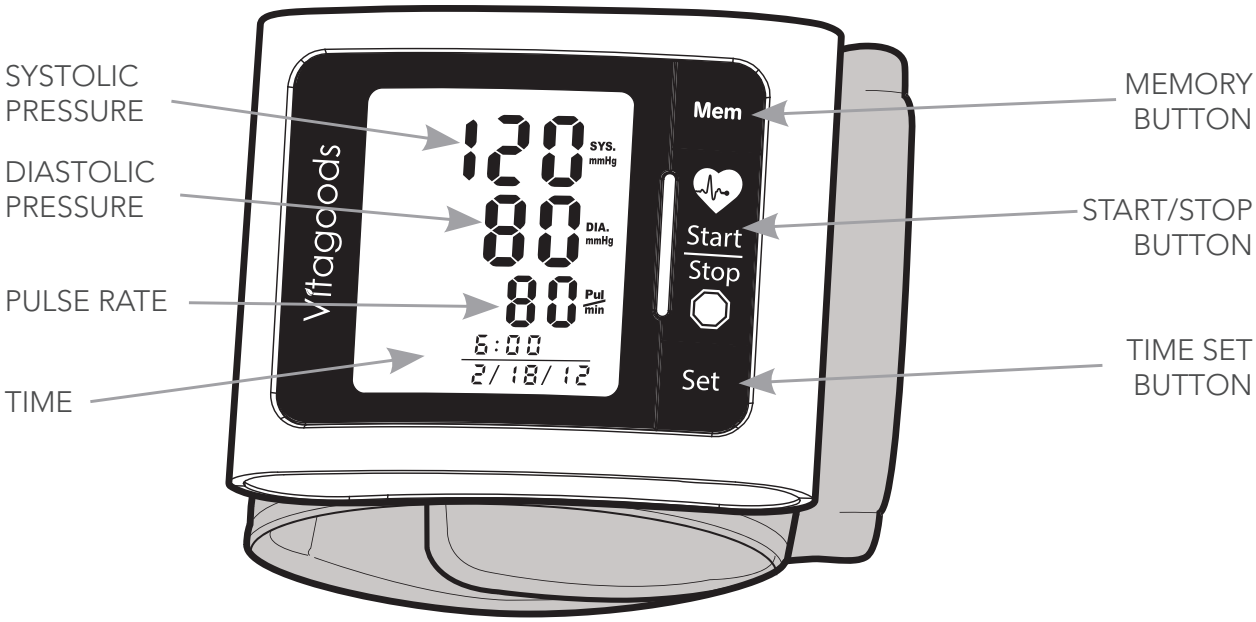
THEY ARE REQUIRED AND STANDARD FOR USE.

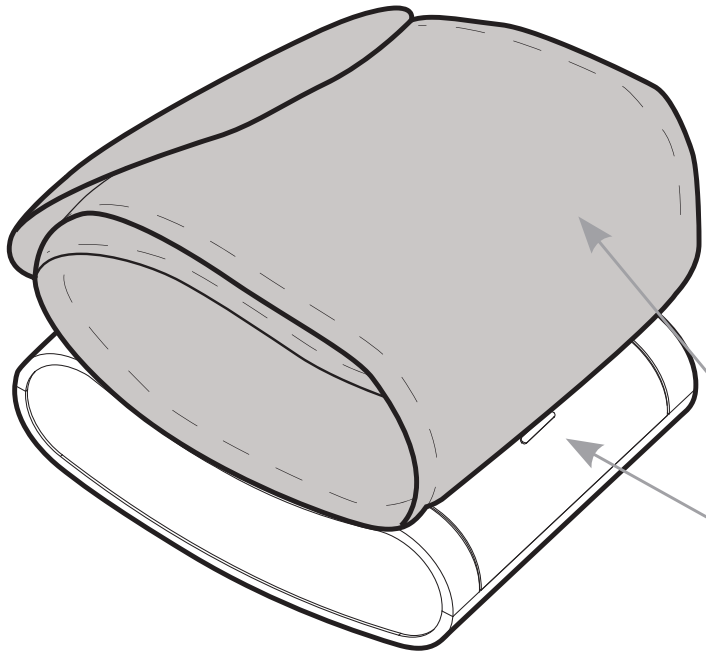
	This part of the Operation Guide Must be Read		Indicates Type B Applied Parts
CE 0123	Indicates compliance with MDD 93/42/ECC Requirements		ENVIRONMENT PROTECTION Electronic products should not be disposed of with household waste. Please recycle.
	Represents the Manufacturer		
SN	Indicates the Serial Number		Indicates Direct Current

DISPLAY AND INDICATORS

SYMBOL	DESCRIPTION	DEFINITION
SYS.	Systolic Blood Pressure	High Pressure Result
DIA.	Diastolic Pressure	Low Pressure Result
Pul/min	Pulse per Minute, BPM	Beats per minute
 + Lo	Low Battery	Batteries are low and need to be replaced
mmHg	mmHg	Measurement Unit of Blood Pressure (1mmHg=0.133kPa)
IHB	IHB Indicator	Irregular Heartbeat Detector
ERROR	Error	Indicates an error in measurement, usually a result of movement
MEMORY REVIEW	Memory	Recalling previous records
	Time	Hour : Minute (Month/Day/Year)

FEATURES AND COMPONENTS





COMPONENT LIST

MICRO CONTROL UNIT

AMPLIFIER

AIR PIPE

PUMP

VALVE

CUFF (TYPE B APPLIED PART)

BATTERY COMPARTMENT

PRODUCT INCLUDES:

1 - VGP-4300 VITAGOODS TRAVEL BLOOD PRESSURE MONITOR
2 - AAA BATTERIES
1 - USER MANUAL

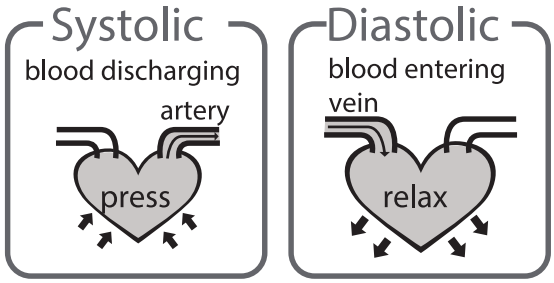
ABOUT BLOOD PRESSURE

Measuring your own blood pressure is an important way of monitoring your health. High blood pressure (hypertension) is a major health problem that can be treated effectively once detected. Regularly measuring your own blood pressure between doctor visits and keeping accurate records, helps monitor any significant changes in blood pressure.

SYSTOLIC PRESSURE AND DIASTOLIC PRESSURE

When ventricles contract and pump blood out of the heart, the blood pressure reaches its maximum value in the cycle, **systolic pressure**.

When the ventricles relax, the blood pressure reaches its minimum value in the cycle, which is called **diastolic pressure**.



STANDARD BLOOD PRESSURE CLASSIFICATION

Blood Pressure Category	Systolic mm Hg (upper #)		Diastolic mm Hg (lower #)
Normal	less than 120	and	less than 80
Pr-hypertensive	120-139	or	80-89
High Blood Pressure	140-159	or	90-99
High Blood Pressure	160 or higher	or	100 or higher
Hypertensive Crisis	Higher than 180	or	Higher than 110

This chart is the standard blood pressure classification published by American Heart Association (AHA).

AHA Home Guideline for upper limit of normal blood pressure:

SYS	135 mm Hg

DIA	85 mm Hg

CAUTION

Please contact your physician if your measurement results are outside the normal range. Only a physician can tell you whether your blood pressure value has reached a dangerous level.

BLOOD PRESSURE FLUCTUATIONS

Why does my blood pressure measurement change within a one-day period?

- Individual blood pressure varies throughout the day. Measurements are also affected by the way you fasten your cuff and your measurement position. Try to take daily measurements at the same time and in the same condition.
- Individuals who take medication are more prone to variation in blood pressure.
- To ensure the most accurate measurements, wait at least 5 minutes before conducting another.

Why does my blood pressure measurement in a hospital differ from at-home readings?

Blood pressure variations are common. Measurements are different during a 24-hour period due to both internal (exercise, stress, etc.) and external (weather, etc.) conditions.

WRIST CHOICE

Is the result the same if I measure on my right wrist instead of my left wrist?

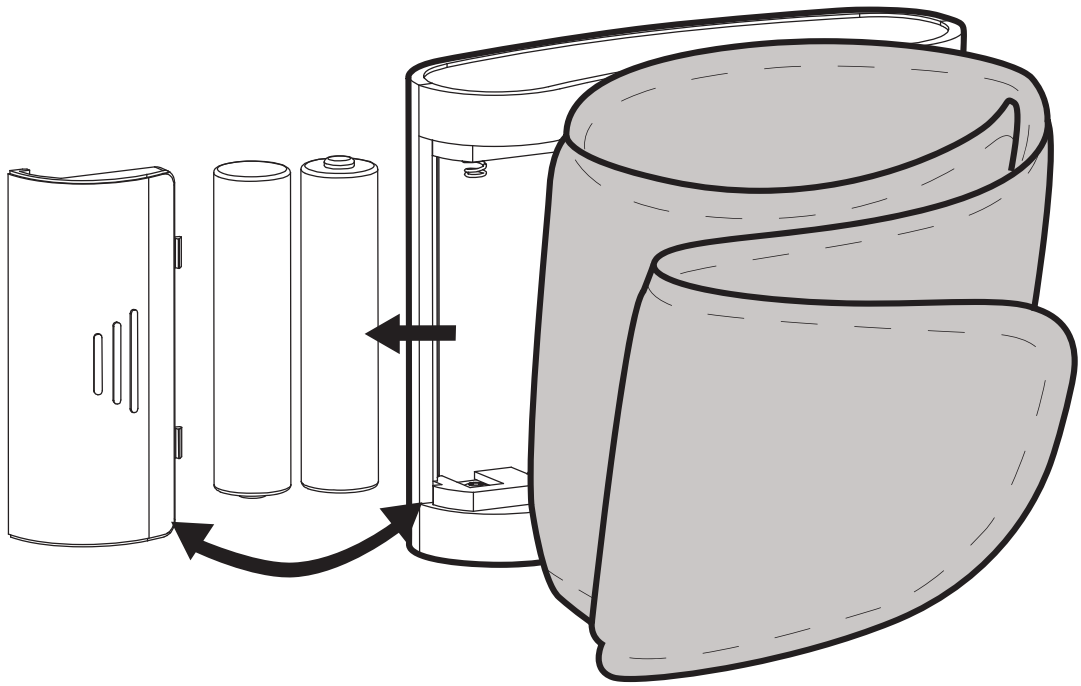
You should try to use your left wrist but can use your right wrist. Reading results between both wrists tend to be random, but the difference is usually not significant.

Guidelines to measure your blood pressure at home:

- Fasten the cuff securely on your wrist.
- Make sure the cuff is not too tight or too loose.
- Avoid use if pressure on your body gives you anxiety.
- Take 3 deep breaths before beginning the measurement.

INSTALLING AND REPLACING THE BATTERIES

1. Open the battery door.
2. Insert the batteries according to the polarity indications. (Always select the authorized / specified battery: Two LR03 AAA-size alkaline batteries).
3. Close the battery door.



REPLACE THE BATTERIES UNDER THE FOLLOWING CIRCUMSTANCES:

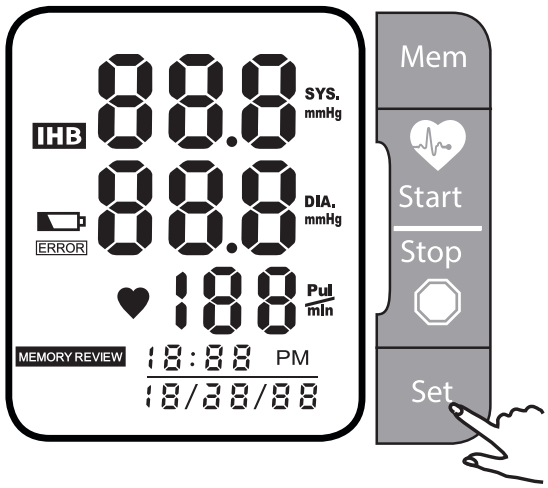
- + Lo displays on the LCD
- The LCD display dims
- When powering the monitor on, the LCD does not light up

SAFETY INFORMATION

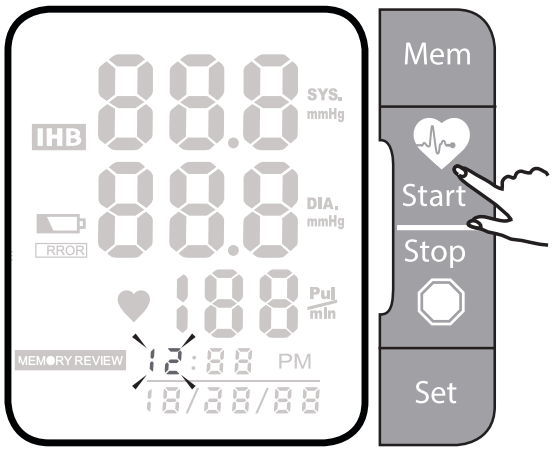
- Remove the batteries if the device is not likely to be used for some time.
- Worn out batteries are harmful to the environment. Do not dispose of them with daily waste, please recycle.
- Remove the old batteries from the device following your local recycling guidelines.

SETTING DATE, TIME & MEASUREMENT UNITS

Please set the time on your device before use. Having the correct time set ensures that each record is labeled with the correct time stamp (Year Range: 2012-2052; Time Format: 12 Hours).

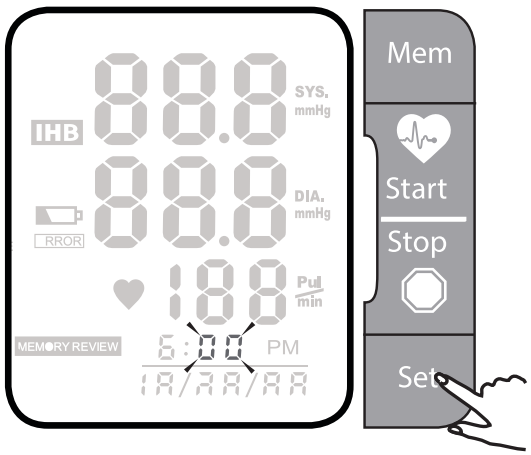


1. When the monitor is OFF, press and hold the "SET" button for 2 seconds to enter "Time Setting" mode.



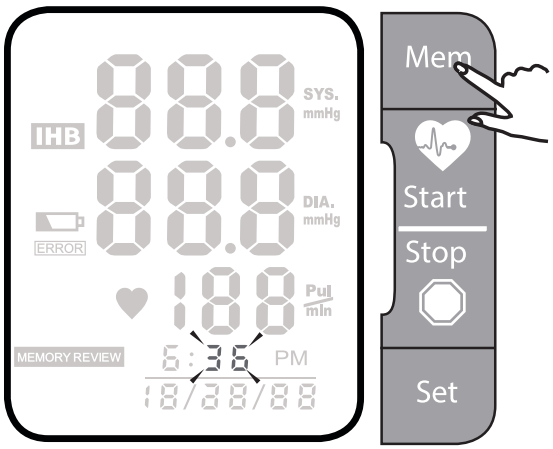
2. As pictured on the left, the numeral "12" will begin blinking, representing the HOUR.

   Press "MEM" button to change the numeral. Each press will increase the numeral by one.

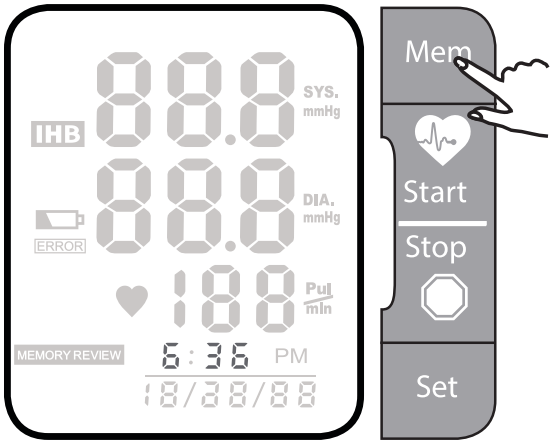


3. Press the "SET" button again to confirm the HOUR selection.

   Then the numeral representing the MINUTE will begin blinking.



4. Repeat steps 2 and 3 to confirm the MINUTE selection.



5. Repeat steps 2 and 3 to confirm the MONTH, DAY, and YEAR.

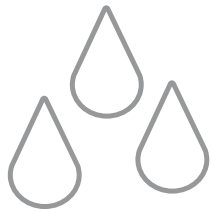
6. After confirming the YEAR, the LCD will display "DONE" and the monitor will shut off automatically.

POSITIONING THE WRIST CUFF

1. Remove your watch and/or jewelry from your left hand. (If your physician has diagnosed you with poor circulation in your left wrist, use your right wrist.)
2. If applicable, roll or push up your sleeve to expose bare skin.
3. Wrap the cuff around your wrist, palm facing up, and fasten.
4. Make sure the cuff is firmly against your skin and aligned to the center. (If the cuff is too loose, the measurement will not be accurate.)
5. Sit comfortably on a chair. The center of the cuff should remain at the same level as your heart. Your legs should be relaxed with your feet on the floor in front of you.

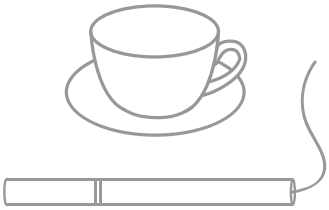
TIPS FOR MEASUREMENT

Don't eat or drink within one hour prior to measurement

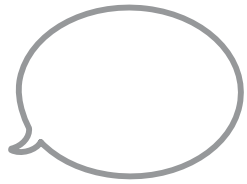


Wait at least 20 minutes after taking a bath

Don't use in a very cold environment



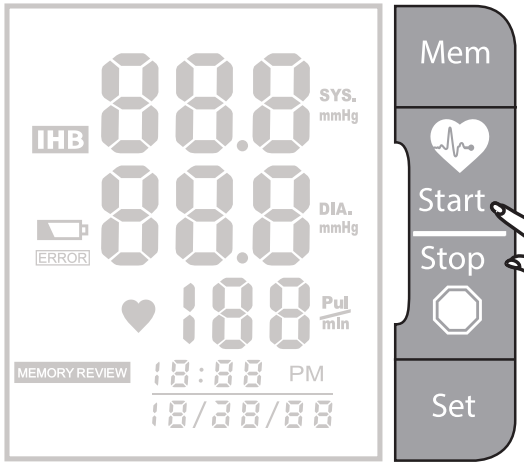
Avoid using immediately after drinking tea or coffee, or smoking



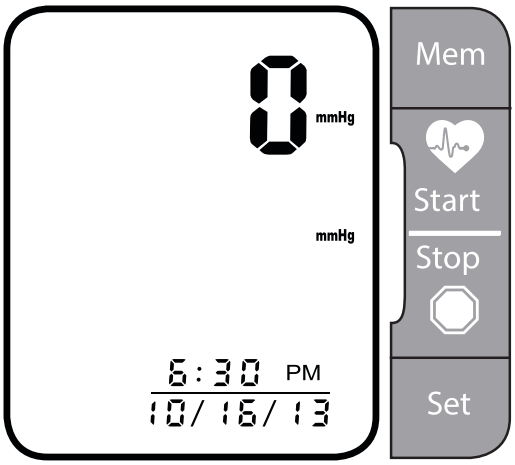
Try your best to avoid movement or talking while measuring

Don't measure if you need to use the restroom

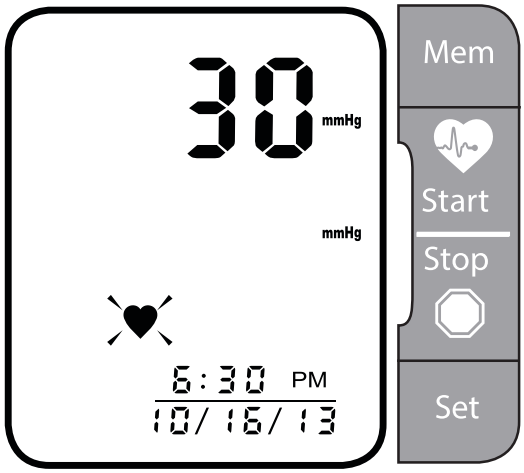
MEASUREMENT



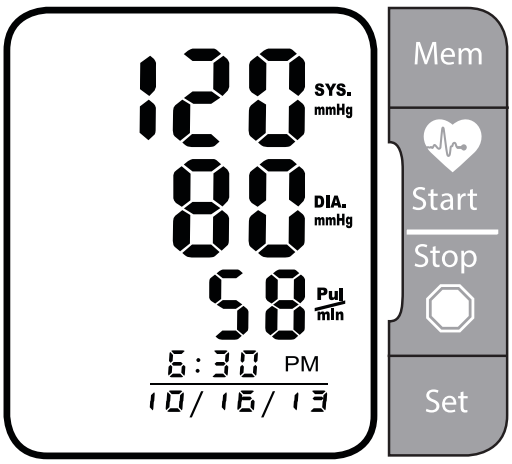
1. After correctly positioning the cuff, press the START button to turn on the monitor. The measurement process will begin automatically.



1a. Adjust to Zero

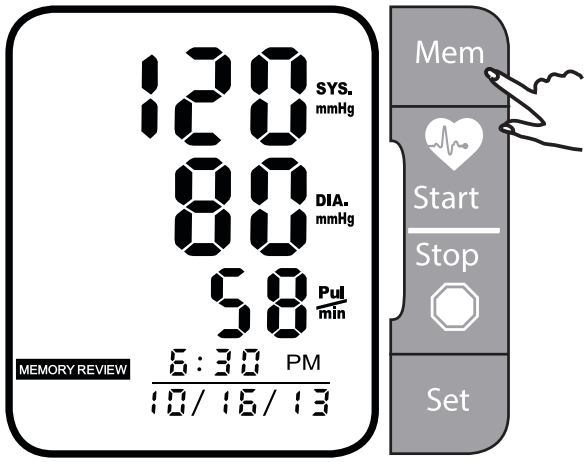


1b. Inflating and Measuring

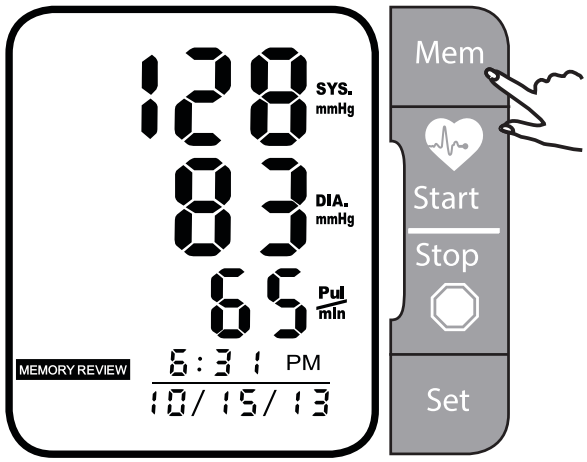


1c. Display and Save the Measurement Results

RECALLING RECORDS



1. Press the "Mem" button to access the device's memory.



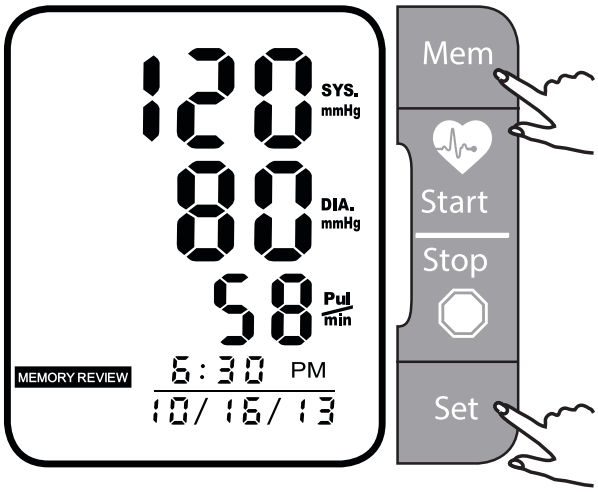
2. Press the "Mem" button to scroll forward through the records and the "Set" button to scroll backward.

CAUTION

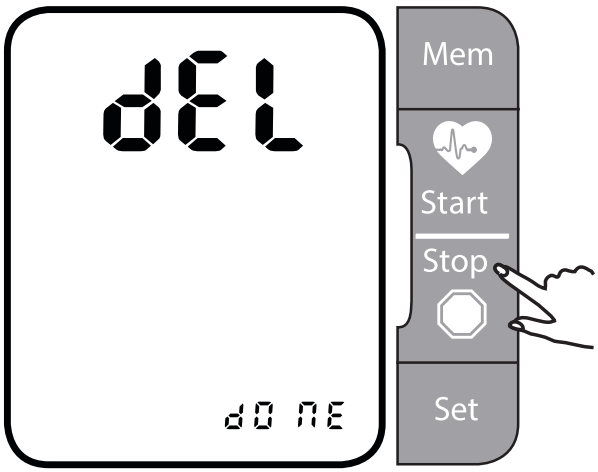
The most recent record (1) is shown first. Each new measurement is assigned to the first (1) record. All other records are pushed back one digit (e.g., 2 becomes 3, and so on), and the last record (60) is dropped from the list.

DELETING RECORDS

When you do not obtain an accurate measurement, you can clear the results by following steps below.

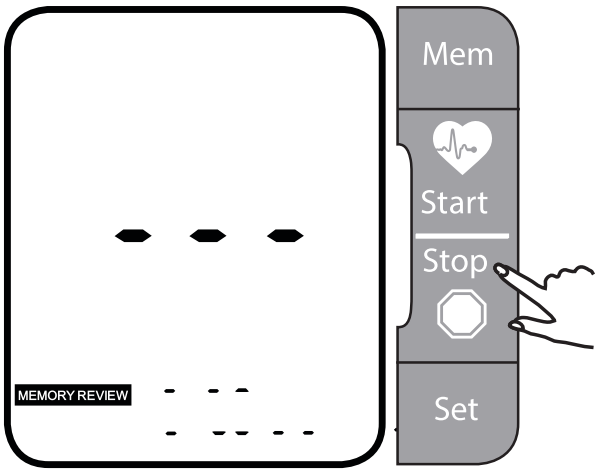


1. Under Memory Recalling Mode, press and hold both the "MEM" button and the "SET" button for 3 seconds.



2. The LCD will display "dEL dONE," indicating that memory clearing is complete before shutting down automatically.

3. If you wish to cancel the clearing process, press "START/STOP" to turn off the monitor before you follow Step 1.



4. If you look up the history when there are no records in the monitor's memory, you the LCD display will show what is pictured on the left.

MAINTENANCE

To obtain the best performance, please follow the instructions below:

- Store in a dry place and avoid direct sunlight
- Avoid immersing in water
- Don’t shake or drop the device
- Keep out of dusty environments and unstable temperatures
- Use a slightly damp cloth to remove any dirt or dust
- Avoid washing the cuff

CLEANING

Dusty environments may affect the device’s performance. Use a soft cloth to remove dust before and after use. Make sure the unit functions safely and is in proper working condition before use.

Please follow the instructions for the correct replacement of interchangeable and detachable parts specified by manufacturer as “replaceable”.

DISPOSAL

Degraded sensors may result in inaccurate measurement, while loosened electrodes may cause the monitor to fail to power on. Please dispose of accessories, detachable parts, and equipment according to local guidelines.

WARRANTY

Vitagoods warrants device to the original purchaser or the person receiving the product as a gift against defects in materials and workmanship as based on the date of original purchase ("Warranty Period") from an Authorized Dealer. The original sales receipt showing the product name and the purchase date from an authorized retailer is considered such proof. Vitagoods warrants the device under normal use for a period of one (1) years from the date of retail purchase.

WHAT IS COVERED:

The Vitagoods warranty covers new products if a defect in material or workmanship occurs and a valid claim is received by Vitagoods within the Warranty Period. At its option, Vitagoods will either (1) repair the product at no charge using new or refurbished replacement parts or (2) exchange the product with a product that is new or has been manufactured from new, or serviceable used parts and is at least functionally equivalent or most comparable to the original product in Vitagoods current inventory, or (3) refund the original purchase price of the product.

Vitagoods warrants replacement products or parts provided under this warranty against defects in materials and workmanship from the date of the replacement or repair for ninety (90) days or for the remaining portion of the original product's warranty, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes Vitagoods' property. When a refund is given, your product becomes Vitagoods' property.

Note: Any product sold and identified as refurbished or renewed carries a ninety (90) day limited warranty.

THIS LIMITED WARRANTY DOES NOT COVER:

- Shipping charges to return defective product to Vitagoods.
- Product repair and/or part replacement because of improper use or maintenance, connections to improper voltage supply, power line surge, lightning damage, retained images, or screen markings resulting from viewing fixed stationary content for extended periods, product cosmetic appearance items due to normal wear and tear, unauthorized repair or other cause not within the control of Vitagoods.
- Damage or claims for products not being available for use, or for lost data or lost software.
- Damage from mishandled shipments or transit accidents when returning device to Vitagoods.
- A device that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- A device used for commercial or institutional purposes (including but not limited to rental purposes).
- A device lost in shipment and no signature verification receipt can be provided.
- Failure to operate per User Manuel.

Register your device online at www.vitagoods.com to ensure warranty confirmation.

TROUBLESHOOTING

This section includes a list of error messages and frequently asked questions for problems you may encounter with your Travel Pulse BPM. If the device is not operating properly, check here before arranging for service.

PROBLEM	SYMPTOM	CHECK THIS	REMEDY
No Power	Display is dim or will not light up.	Batteries are exhausted	Replace with new batteries
		Batteries are inserted incorrectly	Reinsert batteries correctly
Low Batteries	 Shown on the display	Low Battery	Replace with new batteries
	E2 Shows	The cuff is very tight	Refasten the cuff and measure again
	E3 Shows	The pressure of the cuff is excessive	Relax for a moment and then measure again
	E9 Shows	Product has not been activated	Reactivate
	E10 or E11 Shows	The monitor detected motion while measuring	Movement can affect the measurement, relax and measure again
	E20 Shows	The measurement process does not detect pulse signal	Loosen clothing on the arm and measure again
	E21 Shows	Incorrect measurement	Relax for a moment and then measure again
	EExx,shows on the display.	A calibration error occurred	Retake the measurement, and if the problem persists, contact the retailer or our customer service department for further assistance

SPECIFICATIONS

Power supply	2 x AAA alkaline batteries
Display mode	Digital LCD V.A.36x41 mm
Measurement mode	Oscillographic testing moder
Measurement range	Pressure: 0kpa - 40kpa (0mmHg-300mmHg) Pulse value: 40 - 199 beats / minute
Accuracy	Pressure: 41°F - 104°F within ±0.4kpa (3mmHg) 32°F - 113°F (out of 41°F - 104°F) within ±0.7 kpa (5mmHg) pulse value ±5%
Normal working condition	Temperature: 41°F - 104°F Relative humidity ≤85% Atmospheric pressure: 86kPa to 106kPa
Storage & transportation condition	Temperature: -4°F - 140°F, Relative Humidity: 10% to 93% RH Atmospheric pressure: 50kPa to 106kPa
Measurement perimeter of the wrist	Approximately 5" - 8.5"
Weight	Approximately 4 Ounces (120 grams) excluding dry cells
External dimensions	Approximately 3.14"x 2.5" x 1" (80mm x 65mm x 22mm)
Attachment	2 x AAA alkaline batteries; user manual
Mode of operation	Continuous operation
Degree of protection	Type B applied part
Protection against ingress of water	IPX0
Software version	V01
Device classification	Internally powered ME Equipment

COMPILED EUROPEAN STANDARDS LIST

Risk Management	EN/ISO 14971:2007
Labeling	EN 980:2008
User Manual	EN 1041:2008
General Requirements for Safety	EN 60601-1:2006/AC:2010 EN 62304:2006/AC:2008 EN 60601-1-6:2010 EN 60601-1-11:2010
Non-invasive Sphygmomanometers General Requirements	EN 1060-1:1995+A2:2009 EN 1060-3:1997+A2:2009 EN 1060-4:2004
Electromagnetic Compatibility	EN 60601-1-2:2007/AC:2010

EMC GUIDANCE

Table 1
Guidance and manufacturer's declaration – electromagnetic emissions for all EQUIPMENT and SYSTEMS

Guidance and manufacturer's declaration - electromagnetic emission		
The VGP-4300 is intended for use in the electromagnetic environment specified below. The user of the monitor VS-4300 should assure that it is used in such an environment.		
RF Emissions CISPR 11	Group 1	The VGP-4300 must emit electromagnetic energy in order to perform its intended function. Nearby electronic equipment may be affected
RF Emissions CISPR 11	Class B	
Harmonic Emissions IEC 61000-3-2	Not Applicable	
Voltage Fluctuations / Flicker Emissions IEC 61000-3-3	Not Applicable	

Table 2
Guidance and manufacturer's declaration – electromagnetic immunity – for all ME EQUIPMENT and ME SYSTEMS

Guidance and manufacturer's declaration - electromagnetic immunity			
The VGP-4300 is intended for use in the electromagnetic environment specified below. The user of the VGP-4300 should assure that it is used in such an environment.			
Immunity Test	IEC 6060 1 Test Level	Compliance Level	Electromagnetic environment - guidance
Electrostatic discharge (ES D) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic time. If floors are covered with synthetic material, the relative humidity should be at least 30%
Electrical fast transient / burst IEC 61000-4-4	±2 kV for power supply lines	N/A	
Surge IEC 61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to earth	N/A	
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% U_T (>95% dip in the U_T) for 0.5 cycles	N/A	
	40% U_T (60% dip in the U_T) for 5 cycles	N/A	
	70% U_T (30% dip in the U_T) for 25 cycles	N/A	
	<5% U_T (>95% dip in the U_T) for 5 cycles	N/A	
Power Frequency (50Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a commercial or hospital environment.
Note: U_T is the a.c. mains voltage prior to application of the test level			

Table 3
Guidance and manufacturer's declaration – electromagnetic immunity –
for ME EQUIPMENT and ME SYSTEMS that are not LIFE-SUPPORTING

Guidance and manufacture's declaration – electromagnetic immunity			
The TMB-1014 is intended for use in the electromagnetic environment specified below. The customer or user of TMB-1014 should assure that it's used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2.5 GHz	N/A 3 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the TMB-1014, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance** $d = 1.167\sqrt{P}$ $d = 1.167\sqrt{P}$ 80 MHz to 800 MHz $d = 2.333\sqrt{P}$ 800 MHz to 2.5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, [a] should be less than the compliance level in each frequency range. [b] Interference may occur in the vicinity of equipment marked with the following symbol: 

Table 6

Recommended separation distances between portable and mobile RF communications equipment and the EQUIPMENT or SYSTEM – for ME EQUIPMENT or ME SYSTEM that are not LIFE-SUPPORTING

Recommended separation distances between portable and mobile RF communications equipment at the TMB-1014.			
The TMB-1014 is intended for use in an electromagnetic environment in which radiated RFdisturbances are controlled. The customer or the user of the TMB-1014 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmittters) and the TMB-1014 as recommended below, according to the maximum output power of the communications equipment.			
Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (m)		
	150 kHz to 80 MHz $d = 1.167\sqrt{P}$	80 MHz to 800 MHz d = 1.167	800 MHz to 2.5 GHz d = 1.167
0.01	.167	.167	.167
0.1	.167	.167	.167
1	.167	.167	.167
10	.167	.167	.167
.167	.167	.167	.167

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be determined using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80MHz and 800MHz, the separation distance for the higher frequency range applies.

NOTE 4 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

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CONTACT INFORMATION

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