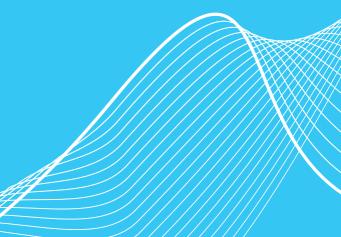
VGP-4300-G

# Vítagoods Travel Pulse

**Blood Pressure Monitor for Travel** 



#### Congratulations on your Vitagoods purchase.

The **Travel Pulse Blood Pressure Monitor**, will allow you to measure vital blood pressure parameters when you are on the move.

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

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

For assistance, call 1-888-870-2786 or visit

# Vítagoods.com

# Table of Contents

INTRODUCTION
FEATURES AND COMPONENTS
ABOUT BLOOD PRESSURE
INITIAL START-UP
TAKING MEASUREMENTS
DATA MANAGEMENT
CARE
WARRANTY
TROUBLESHOOTING
SPECIFICATIONS
CONTACT INFORMATION
ELECTROMAGNETIC GUIDANCE

#### SAFETY INFORMATION

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

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

If you suffer from disorder of heart rhythm (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 manuel thoroughly before use. This device is designed and manufactured to operate within defined design limits. Misuse may result in harm. The following should be observed to best use and maintain your device:

- · This device is intended for adult use only.
- This device is intended for non-invasive measuring and monitoring of arterial blood pressure. It is not intended for use on body extremities other than the wrist.
- 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 measurement. 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 strong electromagnetic field (e.g. medical radio frequency equipment) that radiates interference signal or 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.
- Use only accessories and detachable parts specified and 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 MANUEL.

THEY ARE REQUIRED AND STANDARD FOR USE.

6	This part of the Operation Guide Must be Read	¥	Indicates Type B Applied Parts	
C€0123	Indicates compliance with MDD 93/42/ECC Requirements	X	ENVIRONMENT PROTECTION Electronic products should not be	
-	Represents the Manufacturer	-	disposed of with household waste. Please recycle.	
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 and error in measurement, usually a result of movement	
MEMORY REVIEW	Memory	Recalling the historic records	
18:88 PM 18/38/88	Time	Hour:Minute (Month/Day/Year)	

#### FEATURES AND COMPONENTS

SYSTOLIC MEMORY PRESSURE BUTTON ő DIASTOLIC PRESSURE START/STOP ftagor BUTTON PULSE RATE TIME SET BUTTON TIME COMPONENT LIST MICRO CONTROL UNIT AMPI IFIER AIR PIPE PUMP VALVE CUFF (TYPE B APPLIED PART) BATTERY COMPARTMENT

#### PRODUCT INCLUDES

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

Diastolic

blood entering

#### 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, which can be treated effectively once detected. Measuring your own blood pressure between doctor visits on a regular basis and keeping accurate records helps monitor any significant changes in blood pressure.

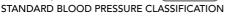
Systolic

blood discharging

#### 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**.



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 Stage 1 (Hypertension)	140-159	or	90-99
High Blood Pressure Stage 2 (Hypertension)	160 or higher	or	100 or higher
Hypertensive Crisis (Emergency Care Needed)	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:



DIA 85 mm Hg



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

#### 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
  daily take 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 five (5) minutes before conducting another.

#### HOSPITAL VERSUS HOME READINGS

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

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.

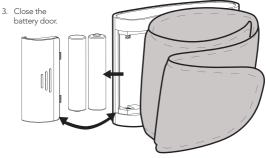
Guidelines to measure your blood pressure at home:

- 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 three deep breaths before beginning the measurement.

# INITIAL START-UP

#### INSTALLING AND REPLACING THE BATTERIES

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



#### 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

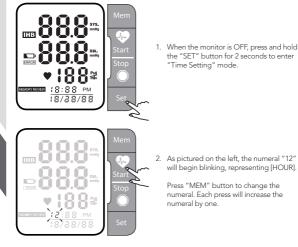
#### SAFETY INFORMATION

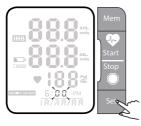
- · Remove the batteries if the device is not likely to be used for some time.
- Worn out batteries are harmful to the environment. Do not dispose of them with daily garbage, please recycle.
- Remove the old batteries from the device following your local recycling guidelines.

7

#### SETTING DATE, TIME & MEASUREMENT UNITS

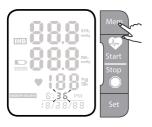
Please Set the time on your device before you use it. Having the correct time set ensures that each record is labeled with the correct time stamp (Year Range: 2012-2052; Time Format: 12 Hours).





 Press the "SET" button again to confirm the [HOUR] selection.

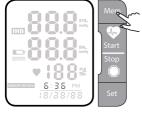
Then the numeral representing the [MINUTE] will begin blinking.



 Repeat steps 2 and 3 to confirm the selection of the [MINUTE].

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

 After confirming the [YEAR], the LCD will display "dONE" and the monitor will shut off automatically.





#### POSITIONING THE WRIST CUFF

- 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 your skin.

Wrap the cuff around your wrist, palm facing up, and fasten.

- 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.)
- Sit comfortably on a chair. The central of the cuff should remain at the same level as your heart. Your legs should be relaxed with the feet falling outwards.

#### TIPS FOR MEASUREMENT

Do not take a measurement under any of the following circumstances, inaccuracies may result.



Eating or drinking within one hour prior to measurement



Wait at least 20 minutes after taking a bath



In a very cold environment



Immediate measurement after tea, coffee, smoking





When talking or moving your fingers

If you need to use the restroom

#### MEASUREMENT



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



1a. Adjust to Zero

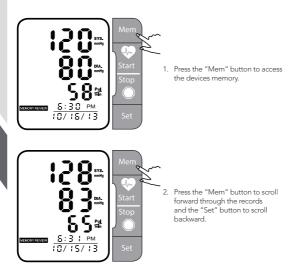


1b. Inflating and Measuring



1c. Display and Save the Measuring Result

#### RECALLING THE RECORDS



# 

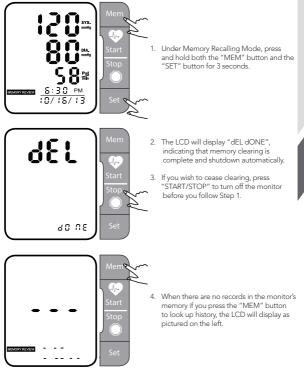
The most recent record (1) is shown first. Each new measurement is assigned to the first (1) record. All other records are pushed back one digit (e.g., 2 becomes 3, and so on), and the last record (60) is dropped from the list.

11

12

#### DELETING THE RECORDS

When you did not obtain the accurate measurement, you can clear all the measuring results by following below steps.



#### MAINTENANCE

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



Put in a dry place and avoid the sunshine





Clean it with a dry cloth in case

Avoid shaking and collision.



Avoid dusty environment and unstable temperature surrounding



Use the slightly damp cloth to remove the dirt

Avoid washing the cuff

#### **CI FANING**

Dusty environments may affect the performance of the unit. Use a soft cloth to remove dust before and after use. Please make sure the unit functions safely and it is in proper working conditions before use.

Please follow the instructions for correct replacement of interchangeable or detachable parts specified by SERVICE PERSONNEL of 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 net (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 products 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 blood pressure monitor. If the device is not operating properly, check here before arranging for service.

PROBLEM	SYMPTOM	CHECK THIS	REMEDY
	Display is dim or will not light up.	Batteries are exhausted	Replace with new batteries
No Power		Batteries are inserted incorrectly	Insert 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 then measure again
	E3 Shows	The pressure of the cuff is excess	Relax for a moment and then measure again
	E9 Shows	Product has not been activated	Reactivated
	E10 or E11 Shows	The monitor detected motion while measuring.	Movement can affect the measurement. Relax then measure again.
	E20 Shows	The measurement process does not detect the pulse signal.	Loosen clothing on the arm and them measure again.
	E21 Shows	Measure incorrectly	Relax for a moment and then measure again
	EExx,shows on the display.	A calibration error occurred.	Retake the measurement. If the problem persists, contact the retailer or our customer service department for further assistance.Refer to the warranty for contact information and return instructions.

#### SPECIFICATIONS

Power supply	2*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*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	

SPECIFICATION

#### CONTACT INFORMATION

For more information about our products, please visit:

# Vítagoods.com

For assistance, call 1-888-870-2786

#### 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

18

#### 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	
	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 in 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	Compliance	Electromagnetic environment	
	Test Level	Level	- 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	2	
Surge IEC 61000-4-5	$\pm 1$ kV line(s) to line(s) $\pm 2$ kV line(s) to earth	N/A		
	<5% U <sub>T</sub> (>95% dip in the U <sub>T</sub> ) for 0.5 cycles	N/A		
Voltage dips, short interruptions and voltage variations on	40% U <sub>T</sub> (60% dip in the U <sub>T</sub> ) for 5 cycles	N/A		
power supply input lines IEC 61000-4-11	70% U <sub>T</sub> (30% dip in the U <sub>T</sub> ) for 25 cycles	N/A		
	<5% U <sub>T</sub> (>95% dip in the U <sub>T</sub> ) 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 typical commercial or hospital environment.	
Note: ${\rm U}_{\rm T}$ is the a.c. mains voltage prior to application of the test level				

#### Table 3

Guidance and manufacture's declaration – electromagnetic immunity				
The VPG-4300 is intended for use in the electromagnetic environment specified below. The customer or user of VPG-4300 should assure that it's used in such an environment.				
lmmunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance	
			Portable and mobile RF communications equipment should be used no closer to any part of the VPG-4300, 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	
Conducted RF 30 KHz to 80 MHz N/A Radiated RF 80 MHz 3 V/m 3 V/m 3 V/m 2.5 GHz	$\label{eq:constraint} \begin{split} d &= 2.333 \sqrt{p^*} \; 800 \; MHz \; to \; 2.5 \; GHz \\ where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacture and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey', should be less than the compliance level in each frequency range.b$			
			Interference may occur in the vicinity of equipment marked with the following symbol:	

NOTE 1	At 80 MHz and 800 MHz, the higher frequency range applies.	
NOTE 2	These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.	
a.	Field strengths from fixed transmitters, such as base stations for radio (cellular / cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the VFG-4300 is used exceeds the applicable RF compliance level above, the VPG-4300 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the VPG- 4300.	
b.	Over the frequency range 150 kHz to 80 MHz, field strengths should be less than $3 \mbox{Vm}.$	

#### Table 4

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 VPG-4300.

The VPG-4300 is intended for use in an electromagnetic environment in which radiated RFdisturbances are controlled. The customer or the user of the VPG-4300 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmittlers) and the VPG-4300 as recommended below, according to the maximum output power of the communications equipment.

Rated	Separation distance according to frequency of transmitter (m)			
maximum output power of transmitter (W)	$d = 1.167 \int \frac{150 \text{ kHz to } 80 \text{ MHz}}{\sqrt{p}}$	80 MHz to 800 MHz d = 1.167 $\sqrt{p}$	800 MHz to 2.5 GHz d = 2.333 $\sqrt{p}$	
0.01	N/A	.117	.233	
0.1	N/A	.369	.738	
1	N/A	1.167	2.333	
10	N/A	3.690	7.377	
.167	N/A	11.67	23.33	

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 (M) 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.

NOTES		
MEASUREMENT	DATE	COMMENTS

Designed in California by Vitagoods



€ 0123