## **RELATED ITEMS**



Hopkins® Flex Temp Thermometer #579420

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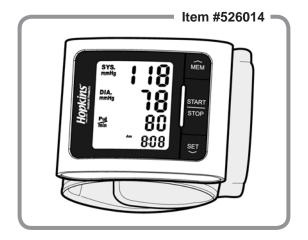
Hopkins® IMPACT Digital Wrist BP



5 Greenwood Place • Baltimore, MD 21208 1-800-835-1995 • FAX: 410-484-4036 www.hmponline.com

# **User Manual**

# Hopkins® IMPACT Digital Wrist BP



Thank you for selecting the Hopkins® IMPACT Digital Wrist BP #526014.

To use this BP monitor correctly and safely, please read this entire manual thoroughly and keep it for your reference.



 LCD display Monitor components

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Thank you for selecting the Hopkins® IMPACT Digital Wrist BP (Item #526014). This monitor features blood pressure measurement, pulse rate measurement, and an auto-save function.

Readings taken by the #526014 are equivalent to those obtained by a trained observer using the cuff and stethoscope auscultation method.

This manual contains important safety and care information, and provides step by step instructions for using this product. Read this manual thoroughly before using this product

## Features

- Measures Systolic Blood Pressure
- · Measures Diastolic Blood Pressure
- · Measures Pulse Rate
- Retains historic records of up to 60 previous measurements

# ♥ Safety Information

The following symbols may be used in the user manual, product labeling, or on other components. They are the requirement of standard and use.

$\triangle$	Caution: consult accompanying documents	∱	Type B applied part
C €0123	CE Mark: conforms to essential requirements of the Medical Device Directive 93/42/EEC	X	DISPOSAL: Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
***	Manufacturer	===	Direct current
SN	Specifies serial number	EC REP	Authorized Representative in the European Community

## CAUTION -

This device is 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 extremities other than the arm or for functions other than obtaining a blood pressure measurement and pulse rate.

Do not confuse self-monitoring with self-diagnosis. This unit allows you to monitor your blood pressure. Do not begin or end medical treatment based solely on self-monitoring, consult a physician for treatment advice.

If you are taking medication, consult your physician to determine the most appropriate time to measure your blood pressure. Never change a prescribed medication without consulting your physician. This unit is not suitable for continuous monitoring during medical emergencies or operations. If the cuff pressure exceeds (300 mmHq), the unit will automatically deflate. Should the cuff not deflate when pressures exceeds (300 mmHq), detach the cuff from the arm and press the START/ STOP button to stop inflation.

To avoid measurement errors, carefully read this manual before using this device.

This device is not AP/APG equipment and not suitable for use in the presence of a flammable anesthetic mixture with air, or with oxygen, or nitrous oxide.

Please avoid strong electromagnetic fields as they may interfere with or damage this device.

Always check this device to make sure that it is in proper working condition before use.

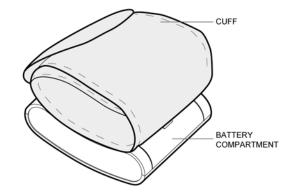
# **▼** LCD Display



SYMBOL	DESCRIPTION	EXPLANATION	
SYS	Systolic BP	High pressure result	
DIA	Diastolic BP	Low pressure result	
Pul/min	Pulse	Pulse per Minute (Beats per Minute)	
Ū+Lo	Low Battery	Batteries are low and need to be replaced	
mmHg	Millimeters Mercury	Measurement unit of blood pressure	
	Irregular Heartbeat	Irregular heartbeat (arrhythmia) detected	
88	Memory	If "MEM" shows, the displayed measurement value is from the memory of recorded measurements (See page 9 for instructions)	
AVG	Average	The average of the blood pressure measurements	
_	Inflating	The unit is inflating with air to obtain the needed level of pressure	
•	Deflating	The unit is deflating and the air is being exhausted from the cuff	
8888	Time (hour:minute)	The current time (set by user)	

# **♥** Monitor Components



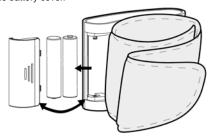


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# ▼ Installing and Replacing the Batteries

- 1. Slide off the battery cover on the back of the unit.
- 2. Install the batteries by matching the correct polarity, as shown below.

  Always use the correct battery type (2 alkaline AAA size)
- 3. Replace the battery cover.



Replace the batteries when any of the following happens

- •The □+Lo shows
- The display dims
- •The display does not light up

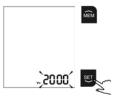
## CAUTION -

- If this device will be stored for an extended period of time, please remove the batteries in order to avoid corrosion.
- Used batteries are harmful to the environment, so please dispose of appropriately.
   Remove the old batteries from the device and follow your local recycling guidelines
- Battery corrosion is not covered under your three year limited warranty.

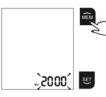
# **▼** Setting the Year, Date, Hour Format, Time, and Measurement Units

It is important to set the clock before using your blood pressure monitor so that a time stamp can be assigned to each record stored in the memory. (The year can be set to anywhere between 2000 and 2050.)

**1.** When the unit is off, press the "SET" button once then press "SET" again and hold for 3 seconds to enter the mode settings.



- **2.** The [YEAR] will begin to flash. Press "MEM" to advance to the current year.
- **3.** Press "SET" when you have reached the correct year to save your choice and advance to the next step.



**4.** Repeat steps 2 and 3 to set the [MONTH] and [DAY].



**6.** Repeat steps 2 and 3 to set the [HOUR] and [MINUTE].



**8.** Your selected settings will advance for review and the monitor will then turn off automatically.

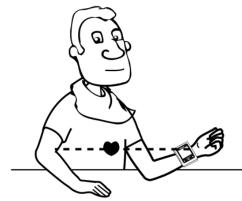


# **♥** Tips for Accuracy

- You should always rest for at least 5 minutes before measuring your blood pressure.
- Wait at least 3 minutes between measurements. This allows your blood circulation to recover.
- For a meaningful comparison, try to take blood pressure measurements under similar conditions. For example, take daily measurements at approximately the same time, on the same arm, or as directed by a physician.

# **♥** Positioning the Wrist Cuff

- Remove all accessories (watch, bracelets, etc.) from your left wrist. If your physician has diagnosed you with poor circulation in your left arm, use your right wrist instead.
- 2. Roll or push up your sleeve to expose the skin.
- 3. Apply the cuff to your left wrist with your palm facing up.
- 4. Keep the monitor level with your heart.
- 5. Position the edge of the cuff about 1 inch from your wrist.
- 6. Fasten the wrist cuff around your wrist, leaving no extra room between the cuff and your skin. If the cuff is too loose, the measurement will not be accurate.

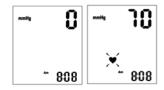


#### **♥** Start the Measurement



**1.** Press the "START/STOP" button to turn on the monitor, and it will complete the whole measurement automatically.

The monitor will adjust to zero automatically, then inflate and begin the measurement automatically.



The monitor will display and save the results automatically.

The Level Indicator Light next to the "START/ STOP" button will display a color corresponding with the category of your reading. For more about blood pressure levels, see page 13.



#### **Blood Pressure Level Indicator Light Colors**

GREEN	YELLOW	RED
Optimal & Normal	Mild Hypertension	Moderate to Severe Hypertension
(lower than SYS 140 & DIA 90)	(SYS 140-159 & DIA 90-99)	(higher than SYS 160 & DIA 100)



2. Press the "START/STOP" button to power off the monitor, otherwise it will automatically turn off within 1 minute.

# **▼** Recalling Recorded Measurements

**1.** Press the "MEM" button to display the average of the records.



**2.** Press either the "MEM" button or the "SET" button to toggle between the records.



The order of the record, date, and time will display alternately.



**⚠** CAUTION

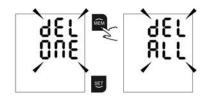
The most recent record  $\widehat{1}$  is shown first. Each new measurement is assigned to the first (1) record. All other records are pushed back one digit (e.g., 2 becomes 3, and so on), and the last record  $\widehat{50}$  is dropped from the list.

RECALLING RECORDS USER INFORMATION

# **♥** Deleting a Record from the Memory

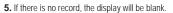
If you did not get the correct measurement, you can delete your most recent result, or you can delete all the results in the measurement history by following the steps below:

1. Press "MEM" button to enter the memory screen, then press and hold the "MEM" button for 3 seconds – the display will alternately flash "DEL ONE" and "DEL ALL".

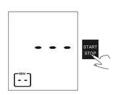


- 2. To delete the most recent record, wait until the display shows "DEL ONE", then press the "SET" button to delete the latest record.
- 3. To delete all of the records at once, repeat step 1 and when the display shows "DELETE ALL" press the "SET" button.









# **▼** Tips for Measurement

Measurements taken under some circumstances may cause the monitor to provide inaccurate readings:



Always wait at least 1 hour after eating or drinking



Never take a reading immediately after drinking tea or coffee, or after smoking.



Always wait at least 20 minutes after taking a bath or shower



Never take a reading while talking or moving your fingers



Never take a reading in a very cold environment



Never take a reading when you need to use the restroom

# **♥** Care and Storage

In order to get the best performance out of your blood pressure monitor, please follow the instructions below:



Avoid direct sunlight.



Do not submerge in water or any other liquid.



Avoid shaking or dropping the monitor.



Store at room temperature in a dry, clean environment.



Never use a wet cloth to remove dirt. Always use a clean, dry cloth.



Do not wash the monitor or the cuff.

# ▼ What are Systolic and Diastolic Pressure?



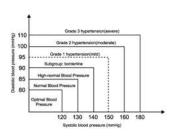


When the ventricles contract to pump blood out of the heart, the blood pressure reaches its highest pressure in the cycle. This is known as **systolic pressure**. The lowest blood pressure in the cycle occurs when the heart relaxes between heartbeats, and this is known as **diastolic pressure**.

The systolic pressure is the top number in your blood pressure reading, and the diastolic is the bottom number.

# ♥ What is a Normal Blood Pressure?

The following charts illustrate the blood pressure classification level established by the World Health Organization (WHO) and International Society of Hypertension (ISH) in 1999.



BP Level (mmHg)	Optimal BP	Normal BP	Mild Hypertension	Moderate Hypertension	Severe Hypertension
SYS	<120	120~139	140~159	160~179	>180
DIA	<80	80~89	90~99	100~109	>110



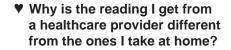
Only a physician can tell you your normal blood pressure range and the point at which you are at risk. Consult your physician to obtain these values.

If the measurements taken with these products fall outside the range, consult your physician.

ABOUT BLOOD PRESSURE TROUBLESHOOTING

## Why does my blood pressure fluctuate throughout the day?

- Individual blood pressure readings can naturally vary throughout the day, so for the best accuracy, take your readings the same way each time. (See Tips for Accuracy on page 6.)
- **2.** Blood pressure readings can fluctuate if you are taking medications.
- **2.** If you are taking multiple readings, wait at least 3 minutes between readings for best accuracy.



Your blood pressure can be different even during a 24 hour period because of factors like the weather, emotional state, recent exercise or exertion, etc. Your readings may be elevated in a healthcare setting because of anxiety caused by the "white coat effect" and you may get lower readings at home where you are calmer.

## ♥ Which arm should I use to take my blood pressure?

Blood pressure readings can be taken on either the right or left arm, but it is recommended to take readings using the *left arm*. Consult your physician if you think you need to use your right arm instead. Whichever arm you use, it is important to take your blood pressure using the same arm every time you take a reading.



When taking your blood pressure at home you should always make sure the cuff is fastened and placed properly, and that the cuff is not too tight or too loose.

Make sure you are not overly anxious or stressed as this will elevate your readings. It is recommended to take 2-3 deep breaths before beginning to take your blood pressure.



This section includes a list of error messages and frequently asked questions for problems you may encounter with your blood pressure monitor. If this product is not operating as you think it should, please check here before arranging for service.

PROBLEM	SYMPTOM	CHECK THIS	REMEDY
Dis-levi!-	Display is dim or	Are the batteries dead?	Replace with new batteries.
No Power	will not light up	Are the batteries inserted correctly?	Insert the batteries correctly.
Low Batteries	T+Lo Shows on the display	Are the batteries low?	Replace with new batteries.
	"E 1" Shows on the display  The monitor detected that the cuff is not secure		Refasten the cuff and take a new reading.
the display  "E 3" Shows of the display  Error Message  "E 10" or "E 11" Shows the display  "EEXX" Shows	"E 2" Shows on the display  The monitor detected that the cuff is too tight		Refasten the cuff and take a new reading.
	"E 3" Shows on the display	The monitor detected that the pressure of the cuff is in excess	Relax for a moment and then take a new reading.
	"E 11" Shows on	The monitor detected motion while measuring	Movement can affect the measurement. Relax for a moment and then take a new reading. Try to remain still for the second reading.
	"EEXX" Shows on the display	A calibration error occurred	Take a new reading. If the problem persists, contact customer service for further assistance. Refer to page 17 for warranty and contact information.

**SPECIFICATIONS** 

$\overline{}$		
Power Supply	Two AAA Alkaline Batteries (included)	
Display Model	Digital LCD V.A. 1.5" x 1.375"	
Measurement Mode	Oscillographic Testing Mode	
Measurement Range	Pressure: 30 - 280mmHg Pulse Value: 40 - 199 beats/minute	
Accuracy	Pressure: Approx. 50°F - 77°F within ± 3mmHg Approx. 50°F - 104°F (out of 59°F ~ 77°F) within 6mmHg  Pulse Value: ± 5%	
Normal Working Conditions	Temperature: Approx. 50°F - 104°F Relative Humidity ≤ 80%	
Cuff Circumference	Approx. 5" - 8.5" (12.5cm - 21.5cm)	
Weight	Approx. 0.04 oz (excluding batteries)	
External Dimensions	Approx. 3" x 2.5" x 0.75"	
Parts Included	Two AAA Alkaline Batteries, and a User Manual	
Mode of Operation	Continuous Operation	
Degree of Protection	Type B Applied Part	
Protection Against Ingress of Water	IPX-0	

#### WARNING: No modification of this equipment is allowed

# **♥** Warranty & Registration Information

Your Hopkins® Digital BP comes with a 3 year limited warranty. This BP monitor is warranted against any defects in material and workmanship for 3 years from the date of purchase. If you experience a material or manufacturing defect at any time, repairs will be made without charge upon the return of the instrument to Hopkins Medical Products, except in cases of obvious abuse or accidental damage.

\*NOTE\* If your BP monitor will be stored for an extended period of time, please remove the batteries in order to avoid corrosion. Battery corrosion is not covered under your 3 year limited warranty.



To register your new Hopkins® Digital BP for its warranty with Hopkins Medical Products, please visit www.hmponline.com/registration or scan this QR code with your smartphone and complete the registration process. (Reorder #526014)

#### **♥** Contact Information

For more information about our products, please visit our website: **www.hmponline.com** 

For customer service, please call us at 1-800-835-1995 M-F 8:30 AM - 5 PM EST

# Hopkins Medical Products

5 Greenwood Place, Baltimore, MD 21208