

UPPER ARM STYLE Blood Pressure Monitor



Model No.: BP386A Instructions Manual

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Introduction

Your new digital blood pressure monitor uses the oscillometric method of blood pressure measurement. This means the monitor detects your blood's movement through your brachial artery and converts the movement into a digital reading. An oscillometric monitor does not need a stethoscope, and so is easy to use.

The Medescan automatic blood pressure monitor will measure your systolic pressure, diastolic pressure and pulse.

This blood pressure monitor is intended for use by an adult.

The intelligent inflation will reduce any discomfort experienced due to over-inflation, and will shorten the measurement time.

Each measurement is displayed on the backlit colour screen then stored in one of the 2 x 120 memory sets.

Please read all instructions carefully before using your Medescan Blood Pressure.

Safety Information

To ensure the correct use of the Medescan Blood Pressure Monitor, safety measures should always be followed, including the warning and caution list in the instructions manual.

Symbol Description

The following symbols may appear in this instructions manual, on the label, on the device or on it's accessories. Some of the symbols represent standards and compliances associated with the device and it's use.

A WARNING: This alert identifies hazards that may cause serious personal injury or death.

▲ CAUTION: This alert identifies hazards that may cause minor personal injury, product damage or property damage.

Type BF applied part

SN Specifies serial number

C C ma CE Mark: confirms to essential requirements of the Medical Device Directive 93/42/EEC

DISPOSAL: Do not dispose of this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

---- Direct Current

iOperating Instructions

Safety Information

Those who have arrythmia, diabetes, blood circulation or applexy problems, please consult your doctor before using the Medescan Blood Pressure Monitor

Contact your doctor for specific information about your blood pressure. Self diagnosis and treatment which use measured results may be dangerous. Follow the instructions of your doctor or licensed healthcare professional.

▲ Keep out of reach of children.

A No modification of this equipment is allowed.

 $m \Lambda$ The cuff hose is a suffocation hazard.

The swallowing of small parts like packaging bag, battery, battery cover etc. may cause suffocation.

▲ Do not use dilution agents, alcohol or petrol to clean the Medescan Blood Pressure Monitor.

⚠ Dropping The Medescan monitor or a heavy hit can damage the unit

▲ Remove batteries from battery compartment when not in use for an extended period of time

A Replace with new batteries when the unit displays a low battery symbol

Safety Information

⚠ Do not mix the old with new batteries

▲ Do not use a mobile phone near the blood pressure monitor as it may result in operational failure

▲ Do not use the Medescan Blood Pressure Monitor near flammable gas (such as anesthetic gas, oxygen or hydrogen) or flammable liquid such as alcohol are present.



WARNING:

Do not dispose of this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

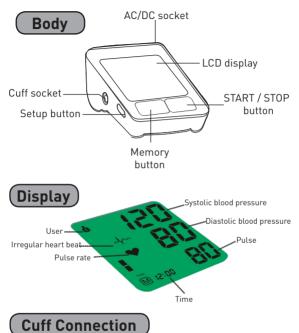
Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

Classification:

- 1. Internally powered equipment
- 2. Type BF applied part
- 3. Protection against ingress of water: IPX0
- 4. Not category AP / APG equipment
- 5. Mode of operation: Continuous operation

▲ The user must check that the equipment functions safely and see that it is in proper working condition before being used.

Know your Monitor



The cuff supplied is M size, for upper arm circumference 22-32cm.

Insert the connector with cuff tube into the hole which is on the left side of the device as pictured.



Battery Installation

When battery power is low, this symbol will appear on the LCD display. The batteries must be replaced to ensure accurate measurement of blood pressure using the Medescan monitor.

- Remove the battery cover
- Insert 4 x AA batteries into the compartment ensuring each battery is in the correct polarity direction.





Battery type and replacement

Please use 4 x identical AA 1.5V alkaline batteries. Do not use batteries beyond their expiry date.

Please remove the batteries if you do not intend to use the Medescan Blood Pressure Monitor for an extended period of time.

Using optional AC adapter

- Insert the adapter plug into the hole on the backside of the unit
- Insert the other side of the adapter into the outlet with 100-240V.
- To remove the AC adapter, disconnect the adapter plug from the outlet first and then disconnect the cord from the unit's socket.

Adapter technical features

- Output voltage: 6V 5%
- Max. output current: At least 600 mA
- Output plug polarity: <+> inner
- External diameter: 5.5mm 0.1mm
- Internal diameter: 2.1mm 0.1mm

Setting your BP Monitor

Setting the time and date and unit of measure

- 1. Press and hold the "SET" button located on the side of your Medescan BP Monitor until the year appears flashing.
- 2. Use M button to set the desired year
- 3. Press the "SET" key again to confirm the year and enter into the month setting
- 4. Use ⁽) button to set the desired month
- 5. Press the "SET" key again to confirm the month and enter into the day setting
- 6. Use M button to set the desired day
- 7. Press the "SET" key again to confirm the day and enter into the time (hour) setting
- 8. Use low button to set the desired hour
- 9. Press the "SET" key again to confirm the hour and enter into the time (minute) setting
- 10. Use[®] button to set the desired minute
- Press the "SET" key again to confirm the minute and enter into the unit of measure for your blood pressure "Kpa" or "mmHg"
- 12. Use M button to set the desired unit of measure
- 13. Press the "SET" key again to complete your settings of "Time", "Date" and "Unit of measure"

Your Medescan Blood Pressure Monitor will now store the time, date and measurement of blood pressure.

Preparing for an accurate reading

- Please keep quiet for 5- 10 minutes, and avoid eating, drinking alcohol, smoking, exercising and bathing before taking a measurement. All these factors will influence the blood pressure measurement result.
- Remove any garment that fits closely to your upper arm.
- Always measure on the same arm (normally left).
- Take measurement regularly at the same time of every day, as blood pressure changes even during the day.

Common mistakes

- All efforts by the patient to support their arm can increase blood pressure.
- Make sure you are in a comfortable relaxed position and do not activate any of the muscles in the arm during measurement. Use a cushion for support if necessary.
- For best result, ensure the arm is level with the heart
- Only use clinically approved cuffs.
- A faulty cuff causes false reading.
- With quick successive measurements, blood accumulates in the arm which can lead to a false reading.
- Consecutive blood pressure measurements should be repeated after 5 minutes pause or after the arm has been held up in order to allow the accumulated blood to flow away

Fitting the cuff

- Put the cuff flat on a table with the velcro side down. Pass the end of the cuff through the metal loop so that a circle is formed. The velcro closer will now be facing outwards (ignore this step if the cuff has already been prepared).
- Push the cuff over the left upper arm so that the tube points in the direction of the lower arm.
- 3. Wrap the cuff on the arm as illustrated. Make certain that the lower edge of the cuff lies approximately 2 to 3 cm above the elbow and the rubber tube leaves the cuff on the inner side of the arm.
- 4. Tighten the free end of the cuff and close the cuff by affixing the velcro.
- 5. The cuff should be snug on your upper arm so that you can fit 2 fingers between the cuff and your upper arm. Any piece of clothing which restricts the arm must be taken off.
- 6. Secure the cuff with the velcro closer in such a way that it lies comfortably and not too tight. Lay your arm on a table(palm upwards) so that the cuff is at the same height as the heart. Do not bend the tube.

Note

If it is not possible to fit the cuff to your left arm, it can also be placed on the right. However, all measurements should be made using the same arm.













After the cuff has been appropriately positioned, the measurement can begin:

- Briefly press and hold the "Set" button to choose "User 1" or "User 2". This is shown on the top left of the LCD screen
- 2. Press the START/STOP button, all symbols appear on the display, you can hear short beeps then the pump begins to inflate the cuff, the rising pressure in the cuff is shown on the display.
- After the suitable pressure has been reached, the pump stops and the pressure gradually falls. The cuff pressure is displayed. In case that the inflation is not sufficient, the device automatically re-inflates to a higher pressure.
- When the device detects the signal, the heart symbol ♥ on the display starts to flash, you can hear the beep for every heartbeat once the heartbeat signal is detected.
- 5. When the measurement has been completed, a long beep is emitted. Once the systolic, diastolic and pulse rate appear on the display, the cuff will deflate.
- The measurement readings remain on the display until you switch off the device. If no button is pressed for a period of 3 minutes, the device automatically switches off in order to save power.
- The Medescan Blood Pressure Monitor LCD screen will change colour to help you understand your measurement results. Green for normal result, Orange for a mid range blood pressure and Red for a high blood pressure reading

Note: The symbol 4 will be displayed along with the reading if the irregular heartbeat is detected during the measurement.

Discontinuing a measurement

If it is necessary to interrupt a blood pressure measurement for any reason (eg. the patient feels unwell) the START/STOP button can be pressed at any time. The device immediately decreases the cuff pressure automatically.

Memory function - Recall

The Medescan Blood Pressure Monitor automatically stores 2 sets of 120 measurement values. The oldest record will be replaced by the latest value when more than 120 values are used per user.

- Briefly press and hold the "Set" button to choose "User 1" or "User 2". This is shown on the top left of the LCD screen
- Press the
 button when power off, the last measurement value will be shown.
- 3. Subsequent measurements can be display one after the other by pressing the (w) button each time.

Memory function - Clear all readings

If you are sure that you want to permanently remove all stored memories.

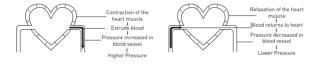
- 1. Press and hold the $(\!\!\!\!\!\!\!\!\!\!\!)$ button until CL appears on the LCD screen
- Once CL appears, press the
 button again then all the records will be cleared.

About Blood Pressure

Blood pressure is the pressure exerted on the arteries.

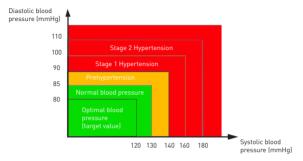
The systolic blood pressure value represents the blood pressure produced by the contraction of the heart muscle.

The diastolic blood pressure value represents the blood pressure produced by the relaxation of the heart muscle.



About Blood Pressure

Classification of Blood Pressure for Adults (WHO)





Optimal BP



Stage 1 High BP



Normal BP



Stage 2 High BP 14



Pre-High Blood Pressure



Severely High BP

Troubleshooting

Error Messages

Symbol	Cause	Correction	
E-1	Weak signal or pressure change suddenly	Ensure the cuff is correctly wrapped and positioned. Remeasure	
٤-2	Strong external disturbance	Near a mobile phone or highly radiant device. Measurement failed. Remove interferring device from vicinity	
E-3	Error appears during inflation	Wrap the cuff properly Make sure the air plug is securely inserted into the unit Remeasure	
E-5	Abnormal blood pressure	Relax for 30 minutes and repeat the measurement. If unusual reading obtained 3 times, please contact your doctor	
	Low Battery	Replace baterries with new ones	

Problem	Check	Cause and solution
No power	Check the battery power	Replace batteries
	Check batteries installed correctly	Place batteries in correct order and polarity
No inflation	check the plug insert	insert into air socket tightly
	check if plug is broken or air leak	change to a new cuff
Err and stop working	check if there was body movement or talking during measurement	keep still and quiet during measurement
Cuff Leak	check if cuff wrap is too loose	wrap cuff tightly
	check if cuff is broken	Replace with new cuff

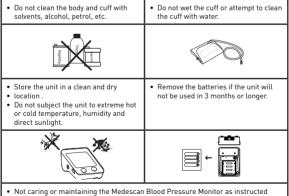
A Please contact Medescan customer service if you have any other queries or are unable to solve the problem. 1300 736 330

Care and Maintenance

- Keep the unit in the storage case when not in use
- Clean the unit with soft dry cloth. Do not use any abrasive or volatile cleaners.
- Never immerse the unit or any component in water



- Make sure the monitor is off prior to cleaning, a mixture of distilled water and 10 percent bleach could be used.
- Using a spray bottle, moisten a soft cloth towel with the bleach or detergent mix until it is fully saturated. Squeeze any excess moisture from the cloth to avoid any dripping or potential oversaturation of the cuff.
- Wipe all surfaces of the blood pressure monitor cuff thoroughly, making sure to clean the inside and outside of the cuff. Be cautious not to get any moisture in the main unit.
- Using a dry cloth, gently wipe away any excess moisture that may remain on the blood pressure cuff. Lay the cuff flat in an unrolled position and allow the cuff to air dry.



Specifications

Description	Automatic upper arm blood pressure monitor		
Display	3 Colour backlit LCD Display		
Measuring Principle	Oscillometric method		
Measuring localisation	Upper arm		
	Pressure	0 - 299 mmHg (0-39.9 KPa)	
Measurement range	Pulse	40-199 beats/min	
A	Pressure	±3mmHg (±0.4kPa)	
Accuracy	Pulse	±5% of reading	
	Pressure	3 digits display of mmHg	
LCD Indication	Pulse	3 digits display	
	Symbol	Memory/ Heartbeat/ Low battery	
Memory function	2 x 120 memory sets of measurement values		
Power source	4 x AA alkaline battery DC. 6V or AC adapter		
Automatic power off	In 3 minutes		
Main unit weight	Main unit weight Approx. 417g[batteries included]		
Main unit size	L138mm x W121mm x H90mm		
Main unit lifetime	10,000 times under normal use		
Battery life	Could be used for 300 times for normal condition		
Accessories	Cuff, instruction manual		
Operating environment	Temperature	5-40 [°] C	
	Humidity	15% - 85% RH	
	Air pressure	86kPa - 106kPa	
Storage environment	Temperature - 2 0°C - 55°C , Humidity : 10% 85% Avoid extreme weather conditions and water during transportation		

Warranty Information

Statement

- The intended use: the unit is intended to be used by adults at home or medical center to measure blood pressure and pulse rate from the upper arm.
- The unit satisfies the requirements of EN 1060-1:1995+ A2:2009 Non-invasive sphygmomanometers, EN 1060-3: 1997+A2:2009 Non-invasive sphygmomanometers.
- Blood pressure measurements determined with this device are equivalent to those obtained by a trained observer using the cuff / stethoscope auscultatory method, within the limits prescribed by the American National Standard, manual, electronic, or automated sphygmomanometers.

Warranty Information

- The unit is guaranteed to be free of defects in workmanship and materials under normal use for a period of Two Years from the date listed on the purchase record.
- For repair under this warranty. Our customer service center must be advised of the fault within the period of the warranty. This warranty covers parts and labor only under normal operations. Any defect resulting from natural causes, eg. flood, hurricane etc, is not within this guarantee. This guaranty does not cover damage incurred by use of the unit not in accordance with the instructions, accidental damage, or being tampered with or serviced by unauthorized service agents.
- Monitor subjected to misuse, abuse, and neglect of these manual content, non-instructional purposes; unauthorized repair or modifications will be excluded from this warranty



- This device requires no calibration.
 - This device is not repairable and contains no serviceable part



For customer inquires please write to: info@medescan.com.au or call 1300 736 330

Please go to **www.medescan.com.au** to find the latest copy of our User Manual.

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