A&D Medical + LIFESOURCE® A&D Medical

PREMIER / TRICHECK™ BLOOD PRESSURE MONITOR

Models UA-1020 + UA-1020CN

Instruction Manual
ORIGINAL

ENGLISH

THIS MONITOR IS CLINICALLY VALIDATED

This blood pressure monitor was clinically validated by an independent organization. Blood pressure measurements determined with this device are equivalent to those obtained by a trained observer using the cuff/stethoscope auscultation method within the limits prescribed by the American National Standard Institute (ANSI/AAMI SP10) for electronic sphygmomanometers. The published study was performed by a reviewing committee consisting of physicians and/or nurses. Among blood pressure manufacturers, A&D Medical is proud to have the highest number of Clinically Validated monitors with a positive recommendation from professionals that are available to consumers.

PRELIMINARY REMARKS

- ☞ This device conforms to the European Directive 93/42 EEC for Medical Products. This is made evident by the CE 0366 mark of conformity. (0366: The reference number to the involved notified body)
- ☞ The device is designed for use on adults only, not newborns or infants.
- ☞ Environment for use. The device is for use indoors.

PRECAUTIONS

The UA-1020 is designed to be used at home, by those who are eighteen (18) years and older, to monitor blood pressure (systolic and diastolic) and pulse rate. It is not designed for ambulatory use.

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.

- ☞ Use appropriate AC adapter and converter(s) when outside the U.S.A.
- ☞ Avoid tightly folding the cuff or storing the hose tightly twisted for long periods, as such treatment may shorten the life of the components.
- ☞ The device and cuff are not water resistant. Prevent rain, sweat and water from soiling the device and cuff.

- ☞ Measurements may be distorted if the device is used close to televisions, microwave ovens, cellular telephones, X-ray or other devices with strong electrical fields.
- ☞ The device was designed and manufactured for a long service life. However it is generally recommended to have the device inspected every 2 years, to ensure proper functioning and accuracy. Please contact the authorized dealer in your area or A&D for maintenance.
- ☞ Used equipment, parts and batteries are not treated as ordinary household waste, and must be disposed of according to the applicable local regulations.

IMPORTANT INFORMATION

Please read this important information before using your monitor.

- ☞ Please remember that only a medical practitioner is qualified to interpret your blood pressure measurements. Use of this device should not replace regular medical examinations.
- ☞ Consult your physician if you have any doubt about your readings. Should a mechanical problem occur, contact A&D Medical in the U.S.A. at 1-888-726-9966 or contact Auto Control in Canada at 1-800-461-0991.
- ☞ Do not attempt to service, calibrate, or repair this monitor.
- ☞ Because your UA-1020 monitor contains delicate, high-precision parts, avoid exposing it to extremes in temperature or humidity or to direct sunlight, shock and dust. A&D Medical guarantees the accuracy of this monitor only when it is stored and used within the temperature and humidity ranges noted on page E-26.
- ☞ Clean the monitor and cuff with a dry, soft cloth or a cloth dampened with water and a mild detergent. Never use alcohol, benzene, thinner or other harsh chemicals to clean monitor or cuff.
- ☞ Remove and replace batteries if monitor is not used for more than six months. Alkaline batteries recommended.

A&D Medical + LIFE SOURCE® A&D Medical

Fast. Easy. Accurate.

Congratulations on purchasing a state-of-the-art A&D Medical blood pressure monitor—one of the most technologically advanced monitors available today. Designed for ease of use and accuracy, this monitor will facilitate your daily blood pressure regimen.

Physicians agree that daily self-monitoring of blood pressure is an important step individuals can take to maintain cardiovascular health and prevent the serious consequences associated with undetected and untreated hypertension.

A&D Medical has been manufacturing high quality healthcare products for over 20 years. We are committed to providing you and your family with monitoring devices that provide the utmost in accuracy and convenience.

A&D Medical - Designed for Life.

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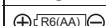
WHAT DISPLAY SYMBOLS MEAN

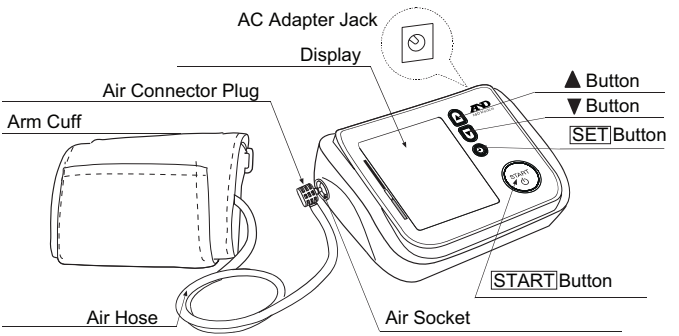
Symbols that are printed on the device case

Symbols	Function / Meaning	Recommended Action
	Standby and turn the device on.	———
	Battery installation guide	———
	Direct current	———
SN	Serial number	———
	Date of manufacture	———
	Type BF: Device, cuff and tubing are designed to provide special protection against electrical shock.	———
	EC directive medical device label	———
	WEEE label	———
	Manufacturer	———
	EU-representative	———

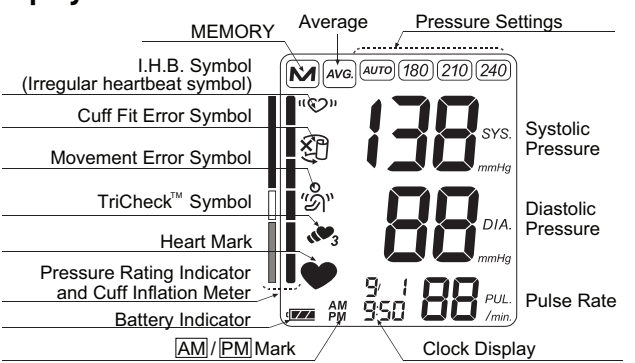
Symbols that appear on the display

Symbols	Function / Meaning	Recommended Action
	Appears while measurement is in progress. It blinks when the pulse is detected.	Measurement is in progress. Remain as still as possible.
	**I**rregular **H**eart**b**eat symbol (I.H.B.) Appears when an irregular heartbeat is detected during measurement.	———
	TriCheck mode Takes three consecutive measurements automatically and displays the average values of the three measurements.	———
	Appears when a body or arm movement is detected.	The reading may yield an incorrect value. Take another measurement. Remain still during measurement.

Symbols	Function / Meaning	Recommended Action
	Appears during measurement when the cuff is applied loosely.	The reading may yield an incorrect value. Apply the cuff correctly, and take another measurement.
M	Previous measurements stored in memory	———
AVG.	Average data	———
Full Battery	The battery power indicator during measurement.	———
Low Battery	The battery is low when it blinks.	Replace all batteries with new ones when the mark blinks.
Err	Unstable blood pressure due to movement during measurement.	Take another measurement. Remain still during measurement.
	The systolic and diastolic values are within 10 mmHg of each other.	Apply the cuff correctly, and take another measurement.
	The pressure value did not increase during the inflation.	
Err CUF	The cuff is not applied correctly.	
E PUL. DISPLAY ERROR	The pulse is not detected correctly.	
ErrE	Blood pressure monitor internal error	Remove the batteries and press the START button, and then install the batteries again. If the error still appears, contact the A&D.
Err9		
SYS.	Systolic blood pressure in mmHg	———
DIA.	Diastolic blood pressure in mmHg	———
PUL./min.	Pulse per minute	———
AM	Data taken in the AM	———
PM	Data taken in the PM	———
AUTO 180 210 240	Pressure settings Indicates the pressure value as set by the user.	———


AC Adapter Jack
Display
Air Connector Plug
Arm Cuff
▲ Button
▼ Button
SET Button
START Button
Air Hose
Air Socket
Battery Compartment
Battery Cover
1.5V Batteries
(AA, LR6 or R6P)

Display


MEMORY
Average
Pressure Settings
I.H.B. Symbol
(Irregular heartbeat symbol)
Cuff Fit Error Symbol
Movement Error Symbol
TriCheck™ Symbol
Heart Mark
Pressure Rating Indicator
and Cuff Inflation Meter
Battery Indicator
AM / PM Mark
AVG.
AUTO 180 210 240
138
SYS.
mmHg
88
DIA.
mmHg
88
PUL.
/min.
AM
PM
Clock Display
Systolic Pressure
Diastolic Pressure
Pulse Rate

HOW UA-1020 WORKS

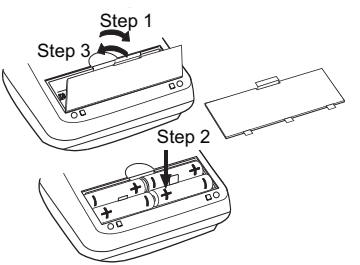
A&D blood pressure monitors are easy to use, accurate and digitally display full measurement readouts. Our technology is based on the "oscillometric method" – a noninvasive blood pressure determination. The term "oscillation" refers to any measure of vibrations caused by the aterial pulse. Our monitor examines the pulsatile pressure generated by the aterial wall as it expands and contracts against the cuff with each heartbeat.

The cuff is inflated until the artery is fully blocked. The inflation speed is maximized and the pressure level is optimized by the device. The monitor takes measurements while the cuff is both inflating and deflating. This results in a faster measurement providing greater comfort to the user.

BEFORE YOU START

You must install 4 type A (1.5 volt) batteries (alkaline batteries recommended), or use the AC Adapter (see page E-19 for using the Monitor with AC Adapter) and attach the cuff to the monitor before using it. To install batteries (or replace them if the "Low Battery" symbol appears on display), proceed as follows:

1. Remove battery compartment cover by gently pushing down on arrow and sliding cover forward.
2. Put in bottom row of batteries first. Place the batteries in compartment with positive (+) and negative (–) terminals matching those indicated in the compartment. Be sure batteries make contact with compartment terminals.
3. Replace cover by sliding it into the compartment and gently pressing into place.



NOTE: Rechargeable batteries are not recommended for use with this monitor.

NOTE: Please dispose of batteries following local regulations.

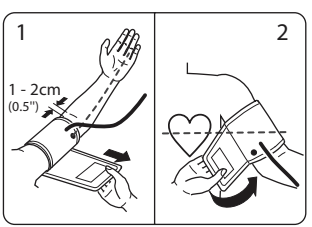
SELECTING THE CORRECT CUFF SIZE

Using the correct cuff size is important for an accurate reading. A cuff that is too large will produce a reading that is lower than the correct blood pressure; a cuff that is too small will produce a reading that is higher than the correct blood pressure. With your arm hanging at the side of your body, measure the circumference of your upper arm at the midpoint between the shoulder and elbow.

ARM SIZE	CUFF NAME	BRAND	REPLACEMENT CUFF MODEL#
6.3" - 9.4" (16 - 24 cm)	SlimFit™ Small Cuff	A&D MEDICAL	UA-289
9.0" - 14.6" (23 - 37 cm)	SlimFit™ Medium Cuff	A&D MEDICAL	UA-290
12.2" - 17.7 " (31 - 45 cm)	SlimFit™ Large Cuff	A&D MEDICAL	UA-291
9.0" - 14.6" (23 - 37 cm)	SmoothFit™ Cuff	A&D MEDICAL	UA-392

Our unique cuff is designed to accommodate a wide range of arm sizes, from 9 – 14.6" (23 – 37 cm). The SlimFit™ cuff is designed to provide you with a quick and comfortable fit. Just slide the cuff onto your upper arm and secure – it's that simple! For more detail, please read the section Taking Your Blood Pressure (see pg. E-12).

If your arm circumference is greater than 14.6" (37 cm) or smaller than 9" (23 cm), you will need to purchase a different size cuff than the one that is included in this box. Please call A&D Medical at 1-888-726-9966 (in Canada please call 1-800-461-0991) for more information on our alternate cuff sizes.



ADJUSTING THE CLOCK

The UA-1020 blood pressure monitor has a built-in clock that gives you the time and date and can tell you when a blood pressure reading stored in memory was taken. We recommend that you adjust the clock prior to use. To adjust the clock, follow these simple steps:

1. Press the clock button (🕘) located to the right of the display.
2. Use the arrow ▲ ▼ buttons to set the year.
3. After reaching the desired year, press the clock button (🕘) again.
4. Repeat the process for the month, day and hour.
5. The next setting will be for pressure.

ADJUSTING THE PRESSURE

1. After setting the year, month, day and hour, the next mode is the pressure setting.
2. Default is (AUTO), which stands for automatic.
3. For even more rapid readings, you can adjust the default to about 30 mmHg or more above your expected systolic pressure.
4. Use the arrow ▲ ▼ buttons to set the pressure.
5. After reaching the desired pressure, press the clock button (🕘) again.
6. The next setting will be for TriCheck™ Mode.

TRICHECK™ MODE

The UA-1020 blood pressure monitor has an optional feature to automatically take three consecutive readings one minute apart and then provide you with the average. This complies with the American Heart Association's recommended measuring method.

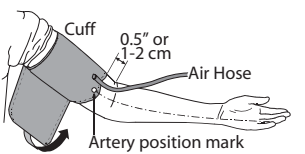
1. After setting the year, month, day, hour and pressure, the next mode is the 3 TriCheck™ Mode.
2. Default is off.
3. To turn on, use the arrow ▲ ▼ buttons.
4. To turn off again, use the arrow ▲ ▼ buttons.
5. After reaching the desired setting, press the clock button again.
6. This will end your settings session.
7. To adjust any values, push the clock button and begin again.

TIPS FOR BLOOD PRESSURE MONITORING:

- ☞ Relax for several moments before measurement.
- ☞ Do not smoke or ingest caffeine at least 30 minutes prior to measurement.
- ☞ Remove constricting clothing and place cuff on bare arm.
- ☞ Unless your physician recommends otherwise, use left arm to measure pressure.
- ☞ Do not talk during measurement.
- ☞ Do not cross legs and keep your feet flat on floor during measurement.

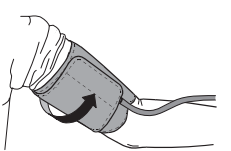
NOW YOU ARE READY. FOLLOW THESE SIMPLE STEPS:

1. Sit comfortably with your left arm resting on a flat surface so that the center of your upper arm is at the same height as your heart.

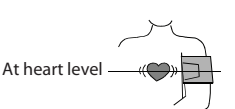


2. Lay left arm on the table, palm up and wrap the cuff around the upper arm, about 0.5" (1-2 cm) above the inside of the elbow, as shown, Place the cuff directly against the skin, as clothing my cause a faint pulse, and result in a measurement error.

3. Secure cuff around arm. The cuff should be snug but not too tight. You should be able to insert two fingers between the cuff and your arm.



4. Make sure cuff is aligned at heart level



5. Press the START button. All of the display segments are displayed. Zero (0) is displayed blinking briefly. The display changes, as indicated in the figure at the right, as the measurement begins. The cuff starts to inflate. It is normal for the cuff to feel very tight. A pressure bar indicator is displayed, on the left edge of the display, during the inflation.

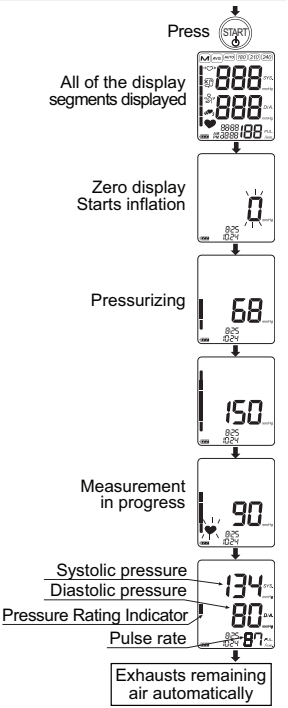
Note: If you wish to stop inflation at any time, press the START button again.

6. When inflation is complete, deflation starts automatically and ❤ blinks, indicating that the measurement is in progress. Once the pulse is detected, the mark blinks with each pulse beat.

   Note: If an appropriate pressure is not obtained, the device starts to inflate again automatically. To avoid re-inflation, see "Measurement with the SET Pressure" on the next page.

7. When the measurement is complete, the systolic and diastolic pressure readings and pulse rate are displayed. The device announces the measurement results. The cuff exhausts the remaining air and deflates completely.

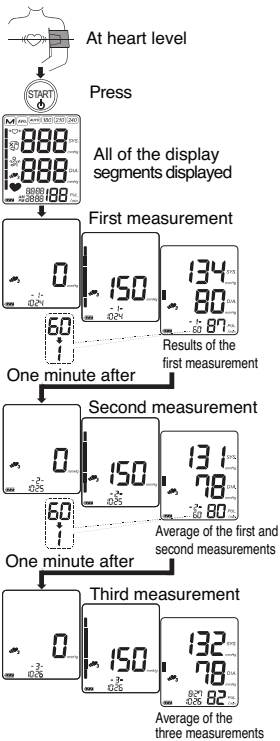
8. Press the START button to turn the device off. After one minute of non-operation, the device will turn off automatically.



9. The reading is then stored into memory. See page E-18 for more details about the memory function.

10. Remove cuff and make a note of blood pressure and pulse rate on the chart in the back of this manual, indicating date and time of measurement. Additional logbook charts can be downloaded and printed for free at www.andmedical.com or in Canada at www.autocontrol.com. We advise that you record the date and time after each measurement becaue an accurate blood pressure history relies not on single or sporadic readings, but on a pattern over time.

1. Press the START button.
   All of the display segments are displayed. Zero (0) is displayed blinking briefly and the first measurement starts.
2. When the measurement is complete, the systolic and diastolic pressure readings and pulse rate are displayed, then a one-minute countdown starts for the second measurement.
3. After one minute, the second measurement starts.
4. When the measurement is complete, the average readings of the first and second measurements are displayed, then a one-minute countdown starts for the third measurement.
5. After one minute, the third measurement starts.
6. When the measurement is complete, the average readings of the three measurements are displayed and stored in memory.



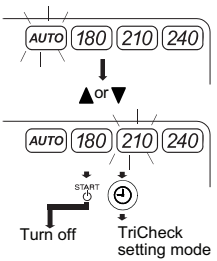
Notes:

- During the measurement, the TriCheck 3 symbol is displayed.
- To cancel the measurement, press the START button. In this case, no data is stored in memory.
- When the cuff fit error symbol appears during the first measurement, cancel the measurement, reapply the cuff correctly and start a new measurement.
- After measurement, the average data of the three measurements is stored in memory. No data will be stored, when canceling the measurements, or before completion of the third measurement.

MEASUREMENT WITH SET PRESSURE

The UA-1020 is designed to detect the pulse and to inflate the cuff to a systolic pressure level automatically. If re-inflation occurs repeatedly, use the following methods.

During the blood pressure measurement, re-inflation may occur. A fixed pressure value can be set to avoid re-inflation.

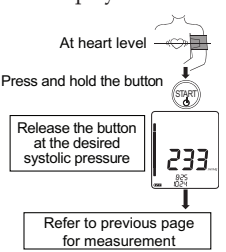


1. At step 6 of the clock adjustment procedure (see page E-10), press the SET button to go to the pressure setting mode. The current setting blinks.
2. Press the ▲ or ▼ button to select a pressure value about 30 mmHg or more above your expected systolic pressure from the following.
   - AUTO : Automatic pressurization (default value)
   - 180 : Pressure value of 180 mmHg (fixed)
   - 210 : Pressure value of 210 mmHg (fixed)
   - 240 : Pressure value of 240 mmHg (fixed)
3. Press the SET button to go to the TriCheck setting mode.

   Press the START button to turn the device off. After three minutes of non-operation, the device will turn off automatically. The next measurement will be performed with the new pressure value.

MEASUREMENT WITH DESIRED SYSTOLIC PRESSURE

Use this method when re-inflation occurs repeatedly even if the pressure value is set to 240 in the procedure above or when the results are not displayed even if the pressure decreases to 20 mmHg or less.



1. Place the cuff on the arm (preferably the left arm).
2. Press and hold the START button until a number about 30 to 40 mmHg higher than your expected systolic pressure appears.
3. When the desired number is reached, release the START button to start measurement. Continue to measure your blood pressure as described on the previous page.

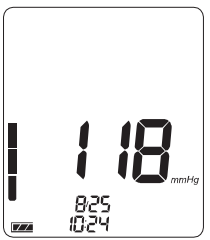
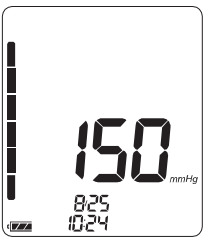
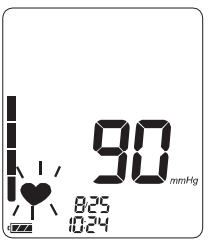
WHAT IS AN IRREGULAR HEARTBEAT

The UA-1020 blood pressure monitor provides a blood pressure and pulse rate measurement even when an irregular heartbeat occurs. The Irregular Heartbeat symbol (♡) will appear in the display window in the event an Irregular Heartbeat has occured during measurement. An irregular heartbeat is defined as a heartbeat that varies by 25% from the average of all heartbeat intervals during the blood pressure measurement. It is important that you relax, remain still and refrain from talking during measurements.

Note: We recommend contacting your physician if you see this symbol frequently.

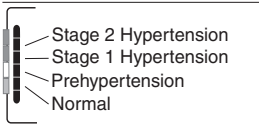
ABOUT CUFF INFLATION METER

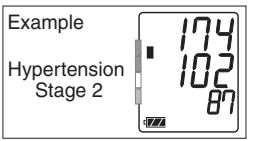
The Cuff Inflation Meter is located on the left side of the display screen to tell you when the blood pressure monitor is inflating and deflating the cuff. The Cuff Inflation Meter moves up during inflation and moves down during deflation.

Inflation in Progress	Inflation Complete	Deflation/Measurement in Progress
		

ABOUT THE PRESSURE RATING INDICATOR™

The Pressure Rating Indicator™ is a feature which provides a snapshot of your blood pressure classification based on your measurements. This will let you quickly know what your blood pressure readings mean. Each segment of the bar indicator corresponds to the Seventh Report of the Joint National Committee (JNC7) on Prevention, Evaluation and Treatment of High Blood Pressure from the National Heart, Lung and Blood Institute - May 2003. For a more detailed look at this blood pressure classification, please refer to "Assessing High Blood Pressure" on page E-21.





■ : The indicator displays a segment, based on the current measurement, corresponding to the JNC7 Classification.

NOTE: Due to other risk factors (e.g. diabetes, obesity, smoking, etc.) in addition to your blood pressure measurement, the Pressure Rating Indicator is approximate. Please consult with your physician for interpretation and diagnosis of your blood pressure measurements.

NOTE: Residents outside of the United States (e.g.. Canada and Mexico) should refer to the WHO Classification Table on page E-21 for assessment of their blood pressure measurement.

Note: This device stores the last 90 measurements in memory. The device announces the memory data values as they are displayed.

1. Press the ▲ or ▼ button. The average of all measurements and the number of data are displayed. (If no data, "0" is displayed. Press the ▲, ▼ or START button to turn the device off.)
2. Each time the ▼ button (or the ▲ button to display the data in the reverse order) is pressed, the memory data is displayed as follows.

   Average of all AM (morning) measurements taken between 4:00 and 9:59. (In the example, 10 measurements. If no data, "--" is displayed.)

   ↓

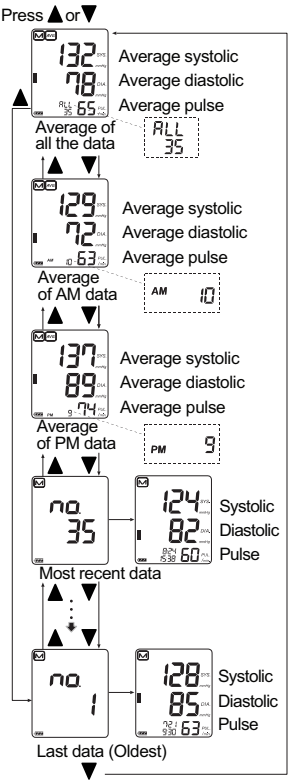
   Average of all PM (evening) measurements taken between 18:00 and 1:59. (In the example, 9 measurements. If no data, "--" is displayed.)

   ↓

   Most recent data (See No. 35). Three seconds after the data number display, the measurement data is displayed.

   ⋮

   Last data (No.1). Three seconds after the data number display, the measurement data is displayed.



3. After the last data is displayed, press the ▼ button to return the average display of all measurements.
4. Press the START button to turn the device off. After one minute of non-operation, the device will turn off automatically.

USING THE MONITOR WITH AC ADAPTER

The UA-1020 has an AC adapter jack to allow you to supply power from an outlet in your home. We recommend you only use the exclusive AC adapter to avoid potential damage to the monitor. Please contact A&D Medical at 1-888-726-9966 or if you are in Canada contact AutoControl at 1-800-461-0991, if you would like to purchase an AC adapter.

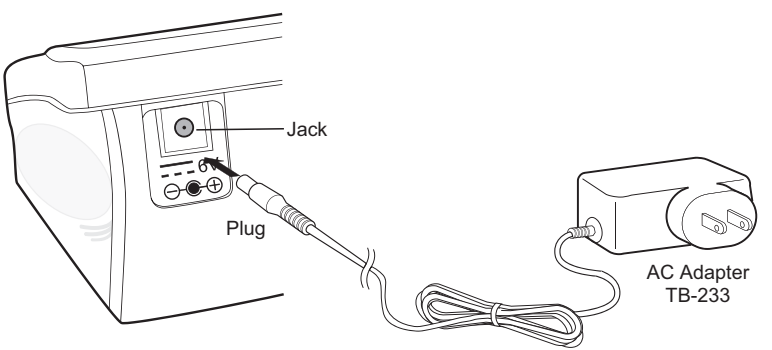
CONNECTING THE AC ADAPTER TO THE MONITOR:

1. Gently insert the AC adapter plug into a 120V AC outlet.
2. Connect the AC adapter plug into the jack on the back of the monitor.

DISCONNECTING THE AC ADAPTER FROM THE MONITOR:

1. Turn the unit off by pressing the START button.
2. Disconnect the plug from the jack of the monitor quickly.
3. Gently remove the AC adapter from the outlet.

NOTE: If monitor has batteries and an AC adapter connected, the measurements stored in memory may be lost if AC adapter is unplugged from the wall first. To ensure that measurements remain in memory, make sure the unit is off and that the jack plugged into the monitor is removed quickly before unplugging adapter from the wall.



WHAT IS BLOOD PRESSURE?

Blood pressure is the force exerted by blood against the walls of the arteries. Systolic pressure occurs when the heart contracts; diastolic pressure occurs when the heart expands. Blood pressure is measured in millimeters of mercury (mmHg).

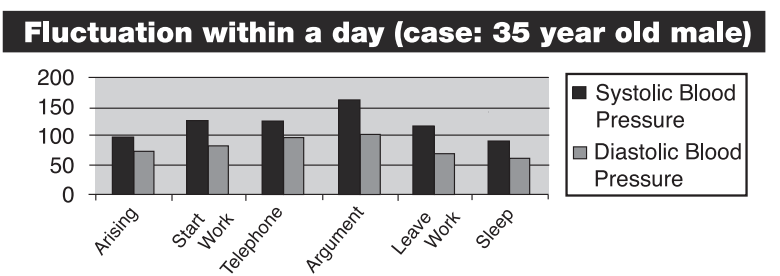
WHAT AFFECTS BLOOD PRESSURE?

Blood pressure is affected by many factors: age, weight, time of day, activity level, climate, altitude and season. Certain activities can significantly alter one's blood pressure. Walking will likely raise an individual's blood pressure. Sleeping will likely decrease blood pressure. Not relaxing for several moments before measurements can influence readings as well.

In addition to these factors, beverages containing caffeine or alcohol, certain medications, emotional stress and even tight-fitting clothes can make a difference in the readings.

WHAT CAUSES VARIATIONS IN BLOOD PRESSURE?

An individual's blood pressure varies greatly from day to day and season to season. For hypersensitive individuals, these variations are even more pronounced. Normally, blood pressure rises during work or play and falls to its lowest levels during sleep.



ASSESSING HIGH BLOOD PRESSURE FOR ADULTS

The following standards for assessing high blood pressure (without regard to age or gender) have been established as a guideline. Please note that other risk factors (e.g. diabetes, obesity, smoking, etc.) need to be taken into consideration and may affect these figures. Consult with your physician for an accurate assessment.

JNC7 Classification Table – for adults within the U.S

BP Classification	Systolic (mmHg)		Diastolic (mmHg)
Normal	less than 120	and	less than 80
Prehypertension	120-139	or	80-89
Stage 1 Hypertension	140-159	or	90-99
Stage 2 Hypertension	greater than or equal to 160	or	greater than or equal to 100

SOURCE: The Seventh Report of the Joint National Committee on Prevention, Evaluation and Treatment of High Blood Pressure for adults. National Heart, Lung and Blood Institute - May 2003.

WHO Classification Table – for adults outside of the U.S. (e.g. Canada, Mexico)

BP Classification	Systolic (mmHg)		Diastolic (mmHg)
Optimal	less than 120	and	less than 80
Normal	less than 130	or	less than 85
High-Normal	130-139	or	85-89
Grade 1 Hypertension	140-159	or	90-99
Grade 2 Hypertension	160-179	or	100-109
Grade 3 Hypertension	greater than or equal to 180	or	greater than or equal to 110

SOURCE: Standards to assess high blood pressure, without regard to age or gender, have been established by the World Health Organization (WHO).

WHAT IS HYPERTENSION?

Hypertension (high blood pressure) is the diagnosis given when readings consistently rise above normal. It is well known that hypertension can lead to stroke, heart attack or other illness if left untreated. Referred to as a "silent killer" because it does not always produce symptoms that alert you to the problem, hypertension is treatable when diagnosed early.

CAN HYPERTENSION BE CONTROLLED?

In many individuals, hypertension can be controlled by altering lifestyle and minimizing stress, and by appropriate medication prescribed and monitored by your doctor. The American Heart Association recommends the following lifestyle suggestions to prevent or control hypertension:

- **Don't smoke.**
- **Reduce salt and fat intake.**
- **Maintain proper weight.**
- **Exercise routinely.**
- **Have regular physical checkups.**
- **Monitor your blood pressure at periodic intervals.**

WHY MEASURE BLOOD PRESSURE AT HOME?

It is now well known that, for many individuals, blood pressure readings taken in a doctor's office or hospital setting might be elevated as a result of apprehension and anxiety. This response is commonly called "white coat hypertension."

In any case, self-measurement at home supplements your doctor's readings and provides a more accurate, complete blood pressure history. In addition, clinical studies have shown that the detection and treatment of hypertension is improved when patients both consult their physicians and monitor their own blood pressure at home.

ANSWERS TO WHY YOUR READINGS ARE DIFFERENT BETWEEN HOME AND AT THE DOCTOR'S OFFICE

Why are my readings different between home and at a doctor's office?

Your blood pressure readings taken in a doctor's office or hospital setting may be elevated as a result of apprehension and anxiety. This response is known as white coat hypertension.

When I bring my monitor to a doctor's office, why do I get a different measurement from my monitor to that taken by a doctor or nurse?

The healthcare professional may be using a different sized cuff. The size of the bladder inside the cuff is critical for the accuracy of the measurement. This may give you a different reading. A cuff too large will produce a reading that is lower than the correct blood pressure; a cuff that is too small will produce a reading that is higher than the correct blood pressure. There may also be other factors that can cause the difference in measurements.

KEYS TO SUCCESSFUL MONITORING:

Blood pressure fluctuates throughout the day. We recommend that you are consistent in your daily measurement routine:

- Measure at the same time every day.
- Sit in the same chair/position.
- Do not cross legs and keep your feet flat on the floor.
- Relax for several minutes before measurement.
- Use the correct cuff size to get an accurate reading.
- Sit still during measurement – no talking, eating or sudden movements.
- Record your measurement in a logbook.

ESTABLISHING BASELINE MEASUREMENTS

The most important method to get an accurate blood pressure measurement is consistency. To get the most benefit out of your monitor, it is important to establish a "baseline measurement." This helps build a foundation of measurements that you can use to compare against future readings. To build this baseline measurement, devote two weeks for consistent blood pressure monitoring. This involves doing everything the same way when you measure (e.g. measuring during the same time of day, in the same location, sitting in the same chair, using the same cuff, etc.). Once you establish your baseline measurement, you can start evaluating if your measurement has been affected based on things like lifestyle changes or medication treatment.

HOW DO I RECORD MY BLOOD PRESSURE?

Blood pressure readings are typically recorded with the systolic pressure written first, followed by a slash mark and the diastolic pressure. For example, 120 mmHg systolic and 80 mmHg diastolic measurements are written as 120/80. Pulse is simply written with the letter "P" followed by the pulse rate—P 72, for example. Please see the back of the manual for the blood pressure tracking record.

CUSTOMER SUPPORT TOOLS ONLINE

Additional tools are available on www.andmedical.com to help you get the most out of your blood pressure monitoring. These include:

- Large Print Instruction Manuals
- Animated Operating Instructions
- Additional Logbook Sheets

Problem	Probable Cause	Corrective Action
Nothing appears in the display, after I press the START button.	Batteries are drained.	Replace all batteries with new ones. Alkaline batteries recommended.
	Battery terminals are not in the correct position.	Reinstall the batteries with negative and positive terminals matching those indicated in the battery compartment.
The cuff does not inflate.	Battery voltage is too low. Low battery symbol blinks. [If the batteries are drained completely, the mark does not appear.]	Replace all batteries with new ones. Alkaline batteries recommended.
The unit does not measure. Readings are too high or too low.	The cuff is not fastened properly.	Fasten the cuff correctly.
	You moved your arm or body during the measurement.	Make sure you remain very still and quiet during the measurement.
	The cuff position is not correct.	Sit comfortably and still. Make sure the cuff is at the same level as your heart.
	You are using the wrong size cuff.	See Pg. E-9 "Selecting the Correct Cuff."
	Taking too many readings on the same arm in a short period of time.	Relax several minutes before each measurement.
The value is different from that measured at a clinic or doctor's office.	The healthcare professional may be using a different sized cuff.	See Pg. E-23 "Answers to Why Your Readings Are Different Between Home and the Doctor's Office."
	Your measurements may be elevated by white coat hypertension	See Pg. E-22 "Why Measure Blood Pressure at Home."

NOTE: If the actions described above do not solve the problem, call 1-888-726-9966. Do not attempt to repair the device yourself.

Model	UA-1020 / UA-1020CN (Canada)
Type	Oscillometric
Display	Digital character height Pressure (20.0 mm)/Pulse (11.5 mm) displayed simultaneously
Memory	90 readings
Measurement range	Pressure: 0 - 299 mmHg Systolic pressure: 60 - 279 mmHg Diastolic pressure: 40 - 200 mmHg Pulse: 40 - 180 beats per minute
Accuracy	Pressure: ± 3 mmHg or ± 2%, whichever is greater, Pulse: ± 5%
Power source	4 x 1.5 volt batteries (AA, LR6 or R6P) or 120 volt AC adapter (TB-233)
Classification	Type BF
Clinical test	According to ANSI / AAMI SP-10 1992
EMC	IEC 60601-1-2: 2007
Recommended operating environment	50ºF to 104ºF (10ºC to 40ºC) Less than 85% relative humidity
Recommended storage environment	-4ºF to 140ºF (-20ºC to 60ºC) Less than 95% relative humidity
Dimensions	Length: 4.1″ (105 mm) Width: 5.5″ (140 mm) Height: 2.4″ (60 mm)
Weight	10 oz. (285 g) without batteries
	CE 0366 (U.S.A.)

Blood pressure measurements determined by the UA-1020 are equivalent to those obtained by a trained observer using the cuff/stethoscope auscultation method within the limits prescribed by the American National Standards Institute for electronic or automated sphygmomanometers.

EMC TABLE

Medical Electrical Equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the following. Portable and mobile RF communication equipment (e.g. cell phones) can affect Medical Electrical Equipment. The use of accessories and cables other than those specified may result in increased emissions or decreased immunity of the unit.

Guidance and manufacturer's declaration – electromagnetic emissions

The A&D unit is intended for use in the electromagnetic environment specified below. The customer or the user of the A&D unit should assure that it is used in such an environment.

Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The A&D unit uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The A&D unit is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

Recommended separation distances between portable and mobile RF communications equipment and the A&D unit

The A&D unit is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the A&D unit can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the A&D unit 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 $d = 1.2\sqrt{P}$	80 MHz to 800 MHz $d = 1.2\sqrt{P}$	800 MHz to 2.5 GHz $d = 2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance *d* in metres (m) can be estimated 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 80 MHz and 800 MHz, the separation distance for 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.

Guidance and manufacturer's declaration – electromagnetic immunity			
The A&D unit is intended for use in the electromagnetic environment specified below. The customer or the user of the A&D unit should assure that it is 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 V_{rms} 150 kHz to 80 MHz 3 V/m 80 MHz to 2,5 GHz	3 V_{rms} 3 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the A&D unit, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance:** $d = 1.2\sqrt{P}$ $d = 1.2\sqrt{P}$ 80 MHz to 800 MHz $d = 2.3\sqrt{P}$ 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: 
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 and TV 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 A&D unit is used exceeds the applicable RF compliance level above, the A&D unit should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the A&D unit.

[b] Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Guidance and manufacturer's declaration – electromagnetic immunity			
The A&D unit is intended for use in the electromagnetic environment specified below. The customer or the user of the A&D unit should assure that it is used in such an environment.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment – guidance**
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. 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 ± 1 kV for input/output lines	± 2 kV for power supply lines ± 1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line to line ±2 kV line to earth	± 1 kV line to line ±2 kV line to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	< 5% U_T (> 95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles < 5% U_T (> 95% dip in U_T) for 5 s	< 5% U_T (> 95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles < 5% U_T (> 95% dip in U_T) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the A&D unit requires continued operation during power mains interruptions, it is recommended that the A&D unit be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) 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 : U_T is the AC mains voltage prior to application of the test level.			

Our products are designed and manufactured using the latest scientific and technological methods, and offer accurate, easy to use, home monitoring and treatment options. Our full product line includes:

- **Digital Blood Pressure Monitors**
- **Manual Blood Pressure Monitors**
- **Blood Pressure Cuffs**
- **Stethoscopes**
- **Personal Health Scales**
- **Digital Thermometers**
- **Activity Monitors**
- **Wireless Products**

This blood pressure monitor and cuff carries different warranties in different countries of purchase. Please see below for warranty length and contact information where you purchased this product.

In the United States of America:
5 year warranty
Manufactured for:
Fabriqué pour:
A&D Engineering, Inc.
1756 Automation Parkway
San Jose, CA 95131 U.S.A.
www.andmedical.com
1-888-726-9966

In Latin America:
No warranty
Manufactured for:
A&D Medical
A division of A&D Engineering, Inc.
1756 Automation Parkway
San Jose, CA 95131
Toll-Free: 1-888-726-9966
www.andmedical.com

In Canada:
7 year warranty
Distributed in Canada by:
Distribué au Canada par:
Auto Control Medical, Inc.
6695 Millcreek Drive, Unit 6
Mississauga, Ontario, L5N 5R8 Canada
www.lifesourcecanada.com
1-800-461-0991

All other countries:
Various warranties - see packaging
Manufactured by:
Fabriqué par:
A&D Company, Limited
1-243 Asahi, Kitamoto-shi,
Saitama, 364-8585 Japan
www.aandd.jp
[81] (48) 593-1119

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BLOOD PRESSURE RECORD
JOURNAL DE LA TENSION ARTÉRIELLE
REGISTRO DE LA PRESION ARTERIAL

Name :
Nom :
Nombre :

Age :
Âge :
Edad :

Weight :
Poids :
Peso :

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BLOOD PRESSURE RECORD
JOURNAL DE LA TENSION ARTÉRIELLE
REGISTRO DE LA PRESION ARTERIAL

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