

ULTRACONNECT

Premium Wireless Wrist Blood Pressure Monitor



Instruction Manual
ORIGINAL
English
1WMPD4003418A

GREETINGS

This A&D blood pressure monitor is one of the most advanced monitors available and is designed for ease of use and accuracy. This device will facilitate your daily blood pressure regimen.

We recommend that you read through this manual carefully before using the device for the first time.

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INTENDED USE

A&D UB-1100BLE digital blood pressure monitor is designed for adult at home or clinic use. It measures systolic, diastolic, and pulse rate. UB-1100BLE uses the oscillometric method to determine blood pressure. If the user has a massive body movement or irregular heartbeats, a heart symbol will be shown on the app display. At the end of the measurement, the blood pressure results are compared with JNC 7 hypertension classification. The rating is also displayed. UB-1100BLE has *Bluetooth*® low energy wireless (BLE) communication capability with Smart devices. UB-1100BLE fits wrist size from 13.5 to 21.5 cm.

PRELIMINARY REMARKS

- The device complies with part 15 of the FCC rules and contains the FCC ID VPYLBZY.
- The device is designed for use on adults only, and is not intended for infants.
- This device is designed for use in the home healthcare environment to measure blood pressure and pulse rate of people for diagnosis.

PRECAUTIONS

- Precision components are used in the construction of this device. Extremes in temperature, humidity, direct sunlight, shock or dust should be avoided.
- Clean the device and cuff with a dry, soft cloth or a cloth dampened with water and a neutral detergent. Never use alcohol, benzene, thinner or other harsh chemicals to clean the device or cuff.
- 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, X-ray or other devices with strong electrical fields.
- When using the device, confirm that it is clean.
- Used equipment, parts and batteries are not treated as ordinary household waste, and must be disposed of according to the applicable local regulations.
- Do not modify the device. It may cause accidents or damage to the device.

PRECAUTIONS

- To measure blood pressure, the wrist must be squeezed by the cuff hard enough to temporarily stop blood flow through the artery. This may cause pain, numbness or a temporary red mark to the wrist. This condition will appear especially when measurement is repeated successively. Any pain, numbness, or red marks will disappear with time.
- If you feel strong pain during the measurement, please remove the cuff.
- Measuring blood pressure too frequently may cause harm due to blood flow interference.
- Do not apply the cuff on wrist in which another medical device is attached. The equipment may not function properly.
- People who have a severe circulatory deficit in the wrist must consult a doctor before using the device, to avoid medical problems.
- Do not self-diagnose the measurement results and start treatment by yourself. Always consult your doctor for evaluation of the results and treatment.
- Do not apply the cuff on wrist with an unhealed wound.
- Do not apply the cuff on wrist receiving an intravenous drip or blood transfusion. It may cause injury.
- Do not use the device where flammable gases, such as anesthetic gases are present. It may cause an explosion.
- Do not use the device in highly concentrated oxygen environments, such as a high-pressure oxygen chamber or an oxygen tent. It may cause a fire or explosion.

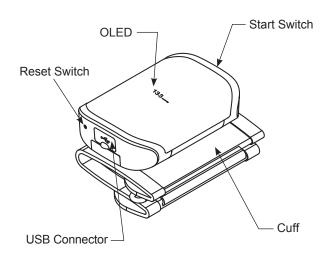
PRECAUTIONS

- This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions:
 - (1) This device may not cause harmful interference, and
 - (2) This device must accept any interference received, including interference that may cause undesired operations.
- When the AC adapter is used, make sure that it can be readily removed from the electrical outlet when necessary.
- Sometimes, the temperature of the cuff can reach 44°C in an ambient temperature of 40°C. If you feel the cuff is too hot, please remove the cuff immediately
- Please do not simultaneous use HF surgical equipment.
- Clinical testing has not been conducted on pregnant women. Do not use on the device on pregnant women.
- If you have had a mastectomy, please consult a doctor before using the device.
- Do not let children use the device by themselves and do not leave the device within the reach of children.
- There are small parts that my cause a choking hazard if swallowed by mistake by infants.
- Do not touch the batteries and the patient at the same time. That may result in electrical shock.
- Wireless communication devices, such as home networking devices, mobile phones, cordless phones and their base stations, walkie-talkies can affect this blood pressure monitor. Therefore, a minimum distance of 1 meter/3.2 feet should be kept from such devices.

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PARTS IDENTIFICATION



CONTENTS

- 1 Blood Pressure Monitor
- 1 Instruction Manual
- 1 Quick Start Guide
- 1 Charging Cable

Symbols that appear on the display and the app

Symbols	Function/Meaning	Recommended Action
AND	A&D logo	
SYS mmHg	Systolic blood pressure in mmHg	
DIA mmHg	Diastolic blood pressure in mmHg	
PUL /min	Pulse per minute	
4	The battery power is low	Charge the device
å	User Select mode	Select the user
€ []	Application is connected with the device	
€ []	Application has disconnected from the device	
CPG	C.P.G. (Correct Position Guidance)	_
	The C.P.G. Indicator: LOW. The height of the blood pressure monitor is lower than your heart.	Place the blood pressure monitor at the same level as your heart.
OK	The C.P.G. Indicator: LEVEL. The height of the blood pressure monitor is the same level as your heart.	

SYMBOLS

Symbols	Function/Meaning	Recommended Action
\uparrow	The C.P.G. Indicator: HIGH. The height of the blood pressure monitor is higher than your heart.	Place the blood pressure monitor at the same level as your heart.
•	Appears while measurement is in progress.	Measurement is in progress. Remain as still as possible.
PUL E /min	The pulse is not detected correctly.	Apply the cuff correctly, and take another measurement.
Err 1	Unstable blood pressure due to movement during measurement. The systolic and diastolic values are within 10 mmHg of each other.	Take another measurement. Remain still during measurement.
Err 3	The pressure value did not increase during inflation. The cuff is not applied correctly.	Apply the cuff correctly, and take another measurement.
Err 9	Blood pressure monitor internal error	Press the reset button. After reset, clock data will disappear. If the error still appears, contact A&D Medical.
8	Data is transferring	

SYMBOLS

Symbols	Function/Meaning	Recommended Action
A	Airplane mode	Measurements can be taken but device will not transmit data wirelessly.
Monitor screen App screen	Appears when a body or wrist movement is detected.	The reading may yield an incorrect value. Take another measurement. Remain still during measurement.
Monitor screen App screen	Appears during measurement when the cuff is attached loosely.	The reading may yield an incorrect value. Apply the cuff correctly, and take another measurement.
	Firmware is updating	
"O"	Appears when irregular heart beat is detected.	
×	Appears when your arm was in the incorrect position during measurement, either higher than your heart or lower than your heart.	Take another measure- ment and ensure your wrist is at the same height as your heart.
	Appears when your arm is in the correct position during measurement.	

SYMBOLS

Symbols printed on the device case and cuff

Symbols	Function/Meaning
ტ	Stand by and turn the device on.
===	Direct current
*	Type BF: Device and cuff are designed to provide special protection against electrical shocks.
SN	Serial number
③	Refer to instruction manual/booklet
*	Keep dry
ВТ	Bluetooth® address
IP	Ingress Protection symbol

ULTRACONNECT Wireless Wrist Blood Pressure Monitor features 5 measurement modes.

1. In-App Mode Measurement:

User can take measurements and view their trends in the A&D Connect app.

2. Offline Mode Measurement:

Measurement can also be completed without the A&D Connect app. Data will be stored on the monitor and transferred to the app on next connection.

3. Multiuser Mode Measurement:

Up to 6 users (5 accounts and 1 visitor) can use and store data on the app. Each user must have a mobile device paired with the monitor.

4. Guest Mode Measurement (In-app):

User can take a measurement as Guest, without account registration in the A&D Connect app. The data is saved on the mobile device memory but not in your account.

5. Visitor Mode Measurement (Offline):

Select "0 Visitor" to take a measurement in visitor mode from the monitor only. Data is not stored in visitor mode.

Charging the Device

Battery may be partially charged but be sure to charge the device completely upon first use after purchase.

- 1. Remove the USB connector cover.
- 2. Connect the charging cable.
- 3. During charging, the red LED will illuminate.
- 4. When charging is complete, the red LED will turn off.
- 5. Once charging is complete, remove the charging cable.

CAUTION!

- The battery life varies with the ambient temperature and may be shorter at low temperatures.
- Please use the specified charging cable shipped with the device.
- · Blood pressure measurement cannot be done during charging.
- When disconnecting the AC adapter from the electrical outlet, grasp and pull the AC adapter body out of the outlet.
- When disconnecting the charging cable from the blood pressure monitor, grasp and pull the charging cable out of the outlet.
- Do not connect to the equipment other than those specified.
- Do not change the battery.
- If the battery can no longer be charged, please contact the dealer.
- Overcharging the battery may reduce its lifetime.
- Lithium battery replacement by inadequately trained personnel could result in a hazard such as a fire or explosion.

Wireless Function

- ➤ In the unlikely event that this monitor causes radio wave interference to a different wireless station, change the location where this monitor is used or stop use immediately.
- ➤ Be sure to use in a location where visibility between the two devices that you want to connect is good. The connection distance is reduced by the structure of buildings or other obstructions. In particular, connection may be impossible when devices are used on either side of reinforced concrete.
- Do not use Bluetooth® connection in the range of a wireless LAN or other wireless devices, near devices that emit radio waves such as microwaves, in locations where there are many obstructions, or in other locations where signal strength is weak. Doing so may result in frequent loss of connection, very slow communication speeds and errors.
- ➤ Using close to an IEEE802.11g/b/n wireless LAN device may cause mutual interference to occur, which may result in reduced communication speeds or which may prevent connection. In this case, switch off the power supply to the device that is not being used, or use the monitor in a different location.
- If the monitor does not connect normally when used near a wireless station or broadcast station, use the monitor in a different location.
- ➤ A&D Medical cannot accept liability for any damages incurred due to impaired operation or data loss, etc. that occur through the use of this product.
- ➤ This product is not guaranteed to connect to all Bluetooth® compatible devices.

Bluetooth® Transmission Bluetooth®

This product is equipped with a *Bluetooth*[®] 4.1 wireless function and can connect to the following *Bluetooth*[®] devices.

Apple iOS v.6.0 or newer Android OS 4.4.4, 5.1, 6.0,

iPhone 4s or newer; and 7.0

iPod touch 5th gen; Bluetooth® device.

iPad 3,4; iPad Air; iPad mini Selected Android phones only.

For the latest compatibility list visit

www.wellnessconnected.jp/english/compatibility/

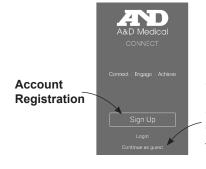
To connect with your mobile device – download and install the "A&D application" onto your mobile device. Later referred to as "APP".





Account Registration

Launch the A&D Connect app and follow the instructions for Wellness Connect account registration.



Guest Mode

(reading is saved on mobile device memory but not in your account)

Device Setup (Pairing)

- Ensure the Bluetooth® function of the mobile device is ON.
- Select **UB-1100BLE** from the Device Setup screen on the app.
- Bring the mobile device near the monitor.



The icon to the left will blink on the monitor.

4. Accept the pairing request from the pop-up window.





Multiuser Pairing

The monitor can be registered for up to 6 users. Follow the above instructions to pair the mobile device for each user.

New users can be added anytime. The user who has the lowest frequency of measurement times will be cleared once the device has reached the 6 user max.

Note: If new user uses the same mobile device, then re-pairing is not required as this has been complete.

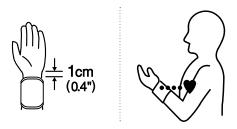
CAUTION!

The communication distance between this monitor and the receiver device is about 33 feet (10m). This distance can be reduced by the conditions in the surrounding environment, so be sure to check that the distance is short enough for a connection to be made after measurement is complete.

Applying the Wrist Cuff

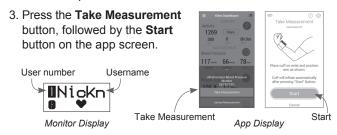
- 1. Wrap the cuff around your wrist about 1cm above your hand as shown in the figure below.
- 2. Apply the cuff tightly using the Velcro strip.

Note: For accurate measurements, apply the cuff tightly and measure on a bare wrist.



In-App Mode Measurement

- 1. Ensure the Bluetooth® function of the mobile device is ON.
- 2. Open the A&D Connect app. The app will automatically detect the presence of the monitor.



- The C.P.G. indicator will display the correct wrist position briefly.
- The cuff starts to inflate. It is normal for the cuff to feel tight. The app displays the pressure value once inflation starts.
- 6. When the measurement is complete, the app and the monitor will display results similar to the icon on the right. (Systolic, diastolic and pulse rate will be displayed in rotation.)



Note: Press the start button again to turn the monitor off. The monitor is also provided with an automatic power shut-off function. Allow at least one minute between measurements on the same person.

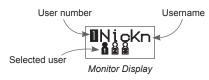
Offline Mode Measurement

Press the Start button on the monitor.
 After the A&D logo appears for 1 second, the User Select screen will display.



2. Press the **Start** button again to select a user or switch between username from User Select screen.

Username can be changed in the app under Settings. When this is not set, the first name will display as the username.



- The C.P.G. indicator will display the correct wrist position briefly. Measurement starts automatically after 3 seconds.
- Zero(0) is displayed blinking briefly. Then the display changes, as measurement begins.



The cuff starts to inflate. It is normal for the cuff to feel tight. The Monitor displays the pressure value once inflation starts.



 When the measurement is complete, the monitor will display results similar to the icon on the right. (Systolic, diastolic and pulse rate will be displayed in rotation.)



Note: Press the start button again to turn the monitor off. The monitor is also provided with an automatic power shut-off function. Allow at least one minute between measurements on the same person.

MEASUREMENT

Upload Stored Measurement

The monitor can store up to 100 readings and can be transferred to the app on next connection.

To transfer data, open the A&D Connect app and select **Upload Measurement** from the dashboard pop-up window.

Upload Measurement



App Display

Multiuser Mode Measurement

- Up to 6 people can use and store readings on the app. Each user must have a mobile device paired with the monitor. (See pg. E-16 for pairing instructions.)
- If you are taking the reading without the app, press the **Start** button on the monitor to switch between username.
 Select the desired user before each reading. Data will transfer to the app on your next connection.



Note: Username will be displayed in order of greater usage frequency.

Guest Mode Measurement

User can take a measurement as Guest without account registration through the app. Select **Continue As Guest** from sign in page on the app. Data is saved on the device memory but not in your account.

Follow the In-App mode instructions (pg. E-18) once you are logged in as Guest.



Continue As Guest App Display

MEASUREMENT

Visitor Mode Measurement

- 1. Press the Start button on the monitor.
- Press the Start button again to switch between username and select "0 Visitor".
- 3. The C.P.G. indicator will display the correct wrist position briefly. Measurement starts automatically after 3 seconds.
- 4. When the measurement is complete, the monitor will display results similar to the icon on the right. (Systolic, diastolic and pulse rate will be displayed in rotation.)



Visitor Mode is only available through the monitor. Data is not stored in visitor mode.

Tips for a good Measurement

- Sit down in a comfortable position. Place the wrist to be used for the measurement on a table or other support so that the center of the cuff will be at the same height as your heart.
- Relax for several moments before measurement.
- · Remove constricting clothing and place cuff on bare wrist.
- Unless your physician recommends otherwise, use left wrist to measure pressure.
- · Do not talk during measurement.
- Do not measure immediately after physical exercise or a bath.
- Do not smoke or ingest caffeine at least 30 minutes prior to measurement.
- Compare blood pressure taken at the same time each day.
- This device bases its measurements on the heartbeat. If you have a very weak or irregular heartbeat, the device may have difficulty determining your blood pressure.
- Should the device detect a condition that is abnormal, it will stop the measurement and display an error symbol. Refer to the section "Symbols" for the description of the symbols.
- This device is intended for use by adults only. Consult with your physician before using this device on a child.
 A child should not use this device unattended.
- Do not cross your legs and keep your feet flat on the floor during measurement.

MEASUREMENT

Tips for a Good Measurement (continued)

- The automatic blood pressure monitor's performance may be affected by excessive temperature, humidity, or altitude.
- · Keep your back straight.

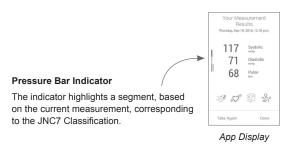
WHAT IS AN IRREGULAR HEARTBEAT

When an irregular heartbeat is detected, the app shows IHB icon "\(\infty\)". ULTRACONNECT provides a blood pressure and pulse rate measurement even when an irregular heartbeat occurs. An irregular heartbeat is defined as a heartbeat that varies by 25% from the average of all heartbeats during the blood pressure measurement. It is important that you are relaxed, remain still and do not talk during measurements.

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

PRESSURE BAR 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.



JNC7 Classification Table – for adults within the U.S			
BP Classification	Systolic (mmHg) Diastolic		
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	more than 160	or	more than 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.

SETTINGS

Setting	Description
Nickname	User can overwrite the default monitor display username and assign a personal username (up to 10 characters).
Start Time	Enables a user to choose how long of an interval between pressing "Start" button and when the monitor will start measurement. For multiple users, a longer interval is useful. For single users, a shorter interval is useful. Default for single user is set at 1 second and for multiple users is set at 5 seconds.
Remove User	Allows user to remove himself as a user in the BP monitor.
Check Software Update	Enables users to update the monitor with the most recent <i>Bluetooth</i> ® software.
Unpair	Allows user to unpair his mobile device with the BP monitor. This can also be accomplished via the <i>Bluetooth</i> ® setting in the mobile device.
Reset	This function will reset the monitor to factory settings. All data in the monitor will be deleted. This will not affect any data stored in your mobile device.
C.P.G.	Allows user to Enable/Disable the Correct Position Guidance indicator.
My Position	Allows user to set position for correct wrist angle.

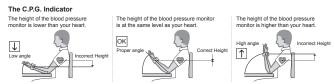
SETTINGS

The C.P.G. Indicator Setting

The C.P.G. (Correct Position Guidance) indicator is the function to inform a difference between the height (wrist angle) of the blood pressure monitor and your cardiac height in the correct posture (Example: sitting posture, height of table and chair, etc.) during the measurement. The indicator can be used to get a more stable measurement condition.







The position of the device is checked both before and after measurement. The correct measurement position is indicated by "arm mark logo" on the A&D Connect app.

My Position

Your CPG allows you to set position for correct wrist angle for each user.

Press the setting icon in the **Take Measurement** screen of the wrist monitor.

Select My Position and then Set my Position.



App Display

SETTINGS

Press **Next** to set your CPG position. Have the wrist monitor at your heart level and press **Set**.

The blood pressure monitor now memorizes your best position. You'll see a check mark in the **Set my Position** box indicating it's done.



Press Next to set position

App Display

Monitor Setting

Airplane mode feature can be used in an environment that does not allow the emittance of radio frequency. Measurement can be done in airplane mode and data will transfer to the app on next connection.

 Hold the **Start** button and the airplane mode select screen will display. Tap the **Start** button to switch between ON and OFF.



2. Select ON and wait 3 seconds to enter airplane mode.



In airplane mode, the airplane icon to the left will be illuminated.

TROUBLESHOOTING

Symptom	Probable Cause	Treatment
Power	Low Battery	Charge the battery.
does not turn on.	Blood Pressure monitor internal error.	Press the Reset Switch.
	Battery charging cable is connected.	Remove the charging cable.
The cuff does not inflate.	Low Battery Charge the battery.	
The device does not measure.	You moved your wrist or body during measurement. Make sure you remain still are quiet during measurement.	
Readings are too high or too	are too Irregular neartoeat, to may have difficulty in may have difficulty in your blood pressure.	
	The cuff position is not correct.	Sit comfortably and still. Place your arm on a table with your palm facing upward and the wrist cuff at the same level as your heart.
Other	The value is different from that measured at a clinic or doctor's office.	At a clinic or doctor's office apprehension may cause an elevated reading. Home measurement reduces the effects of outside influences on blood pressure readings, supplementing the doctor's readings.

Note: If the actions described above do not solve the problem, contact the dealer. Do not attempt to open or repair this product, as any attempt to do so will make your warranty invalid.

MAINTENANCE

Do not open the device. It uses delicate electrical components and an intricate air unit that could be damaged. If you cannot fix the problem using the troubleshooting instructions, contact the authorized dealer in your area or our customer service department. A&D customer service can provide technical assistance and spare parts.

TECHNICAL DATA

Type UB-1100BLE

Measurement method Oscillometric measurement

Measurement range Pressure: 0 - 299 mmHg

Systolic pressure: 60 - 279 mmHg Diastolic pressure: 40 - 200 mmHg

Pulse: 40 - 180 beats/min

Measurement accuracy Pressure: ±3 mmHg

Pulse: ±5 %

Wrist circumference 13.5cm - 21.5cm
Power supply 3.7V Li-ion 325mAh

Number of measurements Approx. 100 times

With pressure value 170 mmHg,

room temperature 23 °C.

Classification Internally powered ME equipment

(Supplied by batteries)/
Class II (Supplied by adapter)
Continuous Operation mode

Clinical test According to ISO81060-2

Wireless communication ZY (MURATA Manufacturing Co.Ltd.)

Bluetooth® Ver. 4.1 Low Energy

Technology BLP

Operating conditions +10 to +40 °C / 15 to 85% RH / 800

to 1060 hPa

Transport/Storage conditions -20 to +60 °C / 10 to 95% RH / 700

to 1060 hPa

Dimensions Approx. 54 [W] x 76 [H] x 21 [D] mm

Weight Approx. 92g
Ingress protection Device: IP20
Applied part Cuff Type BF

Useful life 5 years (when used six times a day)

E-30

TECHNICAL DATA

Included items UB-1100BLE - 1PC

Instruction Manual - 1PC

Charging cable (KSUSB-2C) - 1PC

Quick Guide - 1PC

Option AC adapter: AX-TB265 (TSC-5E1)

FCC Caution

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). It is recommended that this equipment be installed and operated keeping the radiator at least 20 cm or more away from the user's body (excluding extremities: hands, wrists, feet and ankles).

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CONTACT INFORMATION

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
- · Personal Health Scales
- Digital Thermometers
- · Activity Monitors
- · Wireless Products

Limited 5 year warranty

Manufactured for:

A&D Engineering, Inc. 1756 Automation Parkway San Jose, CA 95131 U.S.A. www.andmedical.com 1-888-726-9966

Distributed in Canada by:

Auto Control Medical
6695 Millcreek Dr., Unit 6
Mississauga, ON, L5N 5R8 Canada
www.lifesourcecanada.com
1-800-461-0991

WARRANTY

Limited 5 Year Warranty

A&D Medical Blood Pressure Monitor

For purchasers within the US only:

Product	Consumer Warranty Term	Commercial Warranty Term
UB-1100BLE	5 Years	2 Years

Limited Warranty:

A&D Medical ("A&D") warrants to the first purchaser ("You") that the A&D product You purchased (the "Product") will be free from defects in material, workmanship and design for the applicable Warranty Term stated above from the date You purchased the Product under normal use. This Limited Warranty is personal to You and is not transferable. If the Product is defective, then (i) if You are a Consumer, You return the Product to the retailer You purchased it from (if within such retailer's return time frame) or You return it to A&D in accordance with the procedure set forth below, or (ii) if You are NOT a Consumer, You return the Product to A&D in accordance with the procedure set forth below. A&D's warranty obligation is limited to the repair or replacement, at A&D's option, of the defective Product that has been returned by You within the warranty period. Such repair or replacement will be at no charge to You. The repaired or replacement Product is warranted hereunder for the longer of the remainder of the original warranty period or 90 days from the date of shipment of the repaired or replacement Product. If you return the Product for warranty service to A&D. You must return the Product, freight and insurance

WARRANTY

prepaid, within the warranty period to the address set forth below, together with satisfactory proof of the date of Your purchase (such as a sales receipt or statement of online warranty registration) and a description of the defect. Also, contact A&D Medical for appropriate shipping costs, then enclose a check for return shipping and insurance of the Product

In US

A&D Medical Attn.: Warranty Department 1756 Automation Parkway San Jose, CA 95131 1-800-726-9926

In Canada

Auto Control Medical Attn.: Warranty Department 6695 Millcreek Dr., Unit 6 Mississauga, ON, L5N 5R8 1-800-461-0991

This Limited Warranty does not cover, and A&D will not be liable for (i) any shipment damage, (ii) any damage or defect due to misuse, abuse, failure to use reasonable care, failure to follow written instructions enclosed with the Product, accident, subjecting the Product to any voltage other than the specified voltage, improper environmental conditions, or modification, alteration or repair by anyone other than A&D or persons authorized by A&D, or (iii) expendable or consumable components.

THIS LIMITED WARRANTY IS THE ONLY WARRANTY PROVIDED BY A&D; THERE ARE NO OTHER EXPRESS WARRANTIES. If A&D cannot reasonably repair or replace the Product, A&D will refund the amount You paid for the Product (not including taxes), less a reasonable charge for usage. To receive a refund you must have returned the Product and all associated materials to A&D. The

WARRANTY

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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
Harmonic emissions IEC 61000-3-2	n.a.	in all establishments, including domestic establishments and those directly connected to the
Voltage fluctuations/ flicker emissions IEC 61000-3-3		public low-voltage power supply network that supplies buildings used for domestic purposes.

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	Separation distance according to frequency of transmitter m			
transmitter W	150 kHz to 80 MHz d = 0.35 √P	80 MHz to 800 MHz d = 0.35 √P	800 MHz to 2.5 GHz d = 0.70 √P	
0.01	0.035	0.035	0.070	
0.1	0.11	0.11	0.22	
1	0.35	0.35	0.70	
10	1.1	1.1	2.2	
100	3.5	3.5	7.0	

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	10 V rms 150 kHz to		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:
61000-4-6	80 MHz	10 V rms	$d = 0.35 \sqrt{P}$
Radiated RF IEC 61000-4-3	10 V/m 80 MHz to 2.5 GHz	10 V/m	$d=0.35 \sqrt{P}$ 80 MHz to 800 MHz $d=0.70 \sqrt{P}$ 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.
- $^{\rm b}$ 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	± 8 kV contact ± 15 kV air	± 8 kV contact ± 15 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	n.a.	Mains power quality should be that of a typical commercial or hospital environment.

Surge	± 1 kV line	n.a.	Mains power quality		
IEC 61000-4-5	to line	11.a.	should be that of a typical		
	±2 kV line to earth		commercial or hospital environment.		
Voltage dips,short interruptions and voltage variations on power supply input lines IEC 61000-4-11	< 5% UT (> 95% dip in UT) for 0.5 cycle 40% UT (60% dip in UT) for 5 cycles 70% UT (30% dip in UT) for 25 cycles < 5% UT (> 95% dip in UT) for 5 s	n.a.	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	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.		
Note: UT is the AC mains voltage prior to application of the test level.					



BLOOD PRESSURE RECORD

NAME:			AGE:		WEIGHT:	
DATE	AM	SYS/DIA	PULSE	AM	SYS/DIA	PULSE



BLOOD PRESSURE RECORD

NAME:			AGE:		WEIGHT:	
DATE	AM	SYS/DIA	PULSE	AM	SYS/DIA	PULSE



BLOOD PRESSURE RECORD

NAME:			AGE:		WEIGHT:	
DATE	AM	SYS/DIA	PULSE	AM	SYS/DIA	PULSE



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