

# QARDIO ARM 2

WIRELESS BLOOD  
PRESSURE MONITOR

USER MANUAL

Download: [www.qardio.com/manuals](http://www.qardio.com/manuals)

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## QARDIOARM 2: THE SMART BLOOD PRESSURE MONITOR

QardioArm 2 is a clinically validated, portable blood pressure monitor. QardioArm 2 is the smart way to measure and track your systolic and diastolic blood pressure and heart rate. This device was developed in collaboration with physicians and clinical tests were conducted to prove its measurement accuracy.

Qardio offers a better way of tracking heart health that fits effortlessly into your life. Our devices are powerful and smart, have a beautiful design with a delightful user experience so you can use them anytime, anywhere.

With its ease of use and accuracy, QardioArm 2 is ideal for monitoring your blood pressure in your home, office or wherever is convenient for you.

Please read through these instructions carefully so you understand all functions and safety information. We want you to be happy with your QardioArm 2. If you have any questions, problems or suggestions, please contact Qardio's Customer Service at [support.qardio.com](https://support.qardio.com), or visit our website [www.qardio.com](https://www.qardio.com) for more information.

## INTENDED USE FOR QARDIOARM 2 (A200)

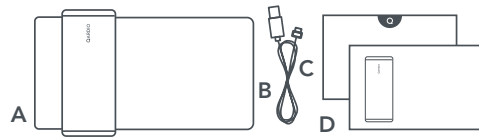
The QardioArm 2 (A200) is a fully automatic, non-invasive, wireless blood pressure monitor intended to measure the systolic and diastolic blood pressures and pulse rate of adult individuals. It utilizes an inflatable cuff that is wrapped around the upper arm. The arm circumference is limited to 8.7 - 18.5 inches (22 - 47 cm). The device detects the appearance of irregular heartbeats during measurement and gives a warning signal with readings. It is not intended to be used as a diagnostic device and users are instructed to contact their physician if hypertensive values are indicated.

## IMPORTANT SAFETY INFORMATION

Please read the User Manual carefully before using the QardioArm 2 blood pressure monitor. In the case of pregnancy, arrhythmia or arteriosclerosis, consult your doctor before use. User or operator can use QardioArm 2 blood pressure monitor on their own. Both user and operator need to read the user manual carefully before using the device.

## PACKAGE CONTENTS

- A** QardioArm 2 blood pressure monitor with a detachable standard cuff
- B** USB C Charging Cable
- C** Quick Guide
- D** User Manual



## REQUIREMENTS

QardioArm 2 requires a device with:

- Bluetooth 5.0
- iOS 12.0 or later
- Android 9 or later

And works with:

- iPhone, iPod, iPad and Apple Watch
- Android phones and tablets

In order to use your QardioArm 2 blood pressure monitor, you must download the free Qardio App from the Apple App Store or Google Play, or go to <https://www.qardio.com/download/>

## USING QARDIOARM 2 FOR THE FIRST TIME

1. Before your first measurement please make sure that your QardioArm2 is fully charged using the USB C cable provided. If QardioArm 2 is not fully charged you will not be able to activate it. To charge QardioArm 2, plug the charging cable into the USB port on your computer, or a UL-certified USB wall charger. When QardioArm 2 is charging the green light will blink. When the device is fully charged it will show a solid green light.
2. Download the free Qardio App. On your device, go to [www.qardio.com/download](http://www.qardio.com/download). Alternately, go to the Apple App Store or the Google Play Store and search for "Qardio".

3. Open the Qardio App on your device to create and setup a new user account, or log in with your existing credentials.
4. If requested, enable Bluetooth on your device. You can also enable Bluetooth anytime via Settings.
5. Once Bluetooth is on, QardioArm 2 must be paired with your device. Pairing is done through the Qardio App.
6. On your dashboard on the Qardio App, swipe left until you see the plus icon "+" and tap on it. Select QardioArm and follow the instructions to initiate the blood pressure measurement. Blood pressure can be affected by the position of the cuff and your

physiological condition. It is very important that the cuff is correctly placed. Please read the "Detailed Instructions On Correct Cuff Placement" and the "Checklist For Measuring Your Blood Pressure Correctly and Accurately" section in the User Manual with particular care.

The blood pressure measurement can be stopped at any time by pressing the Cancel button on the Qardio App.

When you have finished using Qardioarm 2, always store it in a clean and safe location.

In order to ensure correct pairing, the QardioArm 2 should be placed in close proximity to the phone or tablet.

Once a QardioArm is paired, the QardioApp will only connect to the last paired QardioArm. To connect a new QardioArm it is necessary to repeat the in-App instructions to complete device pairing.

There is no on/off switch, QardioArm 2 is always on. We recommend charging your QardioArm 2 once every two months.

## CUFF SIZES

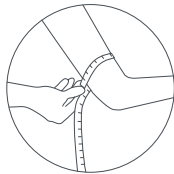
QardioArm 2 has 2 available cuff sizes.  
To select the correct cuff size use this size guide.

Use a measuring tap to find your arm size. Measure the top of your left arm around the bicep.

Standard cuff - Arm circumference  
8.7in – 14.6in (22 – 37 cm)

Large cuff - Arm circumference  
14.6in – 18.5in (37 – 47 cm)

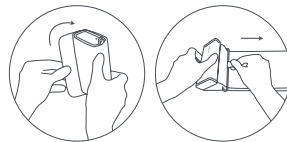
To purchase a different size cuff visit your sales vendor.



## DETAILED INSTRUCTIONS FOR CORRECT CUFF PLACEMENT

1. Ideally, remove close-fitting garments from your upper arm. If you roll up your sleeve, ensure it does not cause constriction of the blood flow in your upper arm.
2. Unroll the cuff of your QardioArm 2, and pull the tab to open the cuff loop. (As indicated in drawing 1.)
3. Insert your arm inside the cuff loop. (As indicated in drawing 2.)
4. Pull the cuff to close it around your arm (As indicated in drawing 2). You should fit the cuff closely, but not too tight so you can insert a finger between your arm and the cuff.

5. Make sure that the cuff is positioned about 1 inch or 2 cm above the elbow, and your QardioArm 2 is positioned on the inner side of the arm, over the artery. The Qardio logo should be on the bottom, towards your hand.
6. Support your arm so it is relaxed, and ensure that the QardioArm 2 is at the same height as your heart. Your arm should remain slightly bent while taking the measurement.



1. Unroll the QardioArm 2 cuff and pull the tab



2. Slide your left arm through and close the cuff.

## BODY POSTURE DURING BLOOD PRESSURE MEASUREMENT

Note:

Blood pressure can be affected by the position of the cuff and your physiological condition.

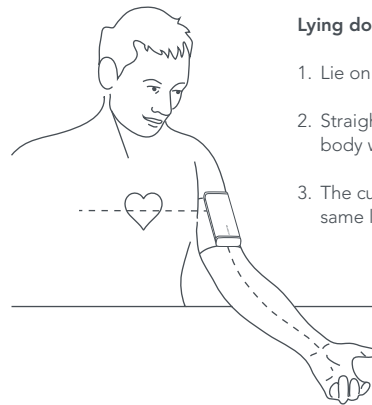
You must follow these steps exactly to ensure an accurate blood pressure measurement.

Please ensure to wear the correct size cuff as stated on page 9.

Measurements can be affected by extreme temperatures, humidity & altitude.

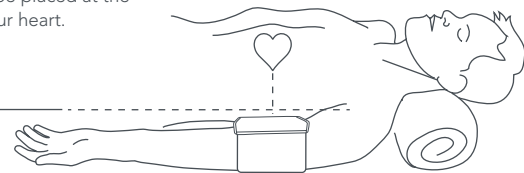
### Sitting during measurement:

1. Be comfortably seated with your legs uncrossed and your feet flat on the floor. Ensure your back and arm are supported.
2. Place your hand, palm-side up, in front of you on a flat surface such as a desk or a table.
3. The middle of the cuff should be at the same level as the right atrium of the heart.
4. We recommend that 5 minutes before taking your measurement, you try to relax as much as possible. Do not talk while the measurement is in progress.



### Lying down during measurement:

1. Lie on your back.
2. Straighten your arm alongside your body with your palm facing up.
3. The cuff should be placed at the same level as your heart.



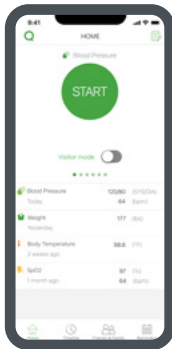
## DETAILED INSTRUCTIONS ON TAKING A BLOOD PRESSURE MEASUREMENT

Taking a blood pressure measurement with the QardioArm 2 is easy and is done in a few simple steps:

1. Open the Qardio App on your iOS or Android device.
2. Slide the cuff around your left arm
3. Fit the QardioArm 2 cuff around your upper arm. You can review the instructions for proper cuff placement at any point in page 10 of this user manual. Disconnect the USB charging cable before taking a measurement.

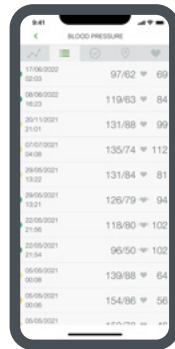
4. Press the green START button on the Qardio App to start measuring. The cuff will inflate automatically. Relax, do not move and do not tense your arm muscle until the measurement result is displayed.

Breathe normally and do not talk. When the correct pressure is reached, the inflation stops and the pressure gradually decreases.



If the required pressure was not reached, the device will automatically inflate additional air into the cuff.

5. The result, comprising of the systolic and the diastolic blood pressure and the pulse rate, is displayed on the Qardio App.
6. When you have finished using QardioArm 2, always store it in a clean and safe location.



## CHECKLIST FOR MEASURING YOUR BLOOD PRESSURE CORRECTLY AND ACCURATELY

- ✓ Avoid eating, smoking or any activity immediately before taking the measurement.
- ✓ Sit down and relax for a few minutes before taking the measurement.
- ✓ Always measure the same arm (normally left, or as instructed by your doctor).
- ✓ Ideally, remove close-fitting garments from upper arm. If you roll up your sleeve, ensure it does not cause constriction of the blood flow in your upper arm. Do not place the cuff over thick clothes.



- ✓ You should fit the cuff closely, but not too tight so you can insert a finger between your arm and the cuff.
  - ✓ Make sure that the cuff is positioned about 1 inch or 2 cm above the elbow, and your QardioArm 2 is positioned on the inner side of the arm, over the artery.
  - ✓ The Qardio logo should be facing down towards your hand.
  - ✓ Support your arm so it is relaxed and ensure the QardioArm 2 is at the same level as your heart. Your arm should remain slightly bent while taking the measurement.
  - ✓ The blood pressure measurement can be stopped at any time by pressing the Cancel button on the Qardio App.
  - ✓ Ensure your arm circumference is within the cuff limits of 8.7 in – 18.5 in circumference (22 cm – 47 cm circumference)
  - ✓ Measurements can be affected by extreme temperatures, humidity & altitude.
- QardioArm 2 has 2 available cuff sizes to purchase.
- Standard cuff: Arm circumference 8.7in – 14.6in (22 – 37 cm)
  - Large cuff: Arm circumference 14.6in – 18.5in (37 – 47 cm)

## BLOOD PRESSURE CLASSIFICATIONS

The blood pressure measurement screen shows you the range within which the indicated blood pressure value lies. Blood pressure classifications display the blood pressure values in a color coded chart that corresponds with the international guidelines (WHO, AHA), as described in “How to Evaluate Your Blood Pressure”.

## SELECTING MULTIPLE MEASUREMENT AVERAGING

Blood pressure constantly fluctuates so a result determined by multiple measurements is more reliable and accurate than one produced by a single measurement.

To activate the Multiple Measurement Averaging, which is also useful in case of pulse irregularity, press the menu button (on the top left of the screen), then press the Settings button.

On the Settings screen you can select the number of measurements and the pause between measurements (which is set at 30 seconds by default).

When the Multiple Measurement Averaging feature is on, the individual results during the measurement are not displayed. Your blood pressure will only be displayed after all measurements are taken. A countdown indicates the remaining time between measurements. Do not remove the cuff between measurements.

## VISUALIZING YOUR HISTORICAL BLOOD PRESSURE DATA

To see your historical blood pressure and heart rate data tap on Blood Pressure on your dashboard.



## IMPORTANT FACTS ABOUT BLOOD PRESSURE AND SELF-MEASUREMENT

QardioArm 2 measures your blood pressure. Blood pressure is the pressure of the blood flowing in the arteries generated by the pumping of the heart. Two values, the systolic (upper) value and the diastolic (lower) value, are always measured.

QardioArm 2 also measures your pulse rate. Pulse rate is the number of times the heart beats in a minute.

High blood pressure, especially when permanent or recurrent, can negatively affect your health and must be treated by your doctor.

Always discuss your measurement readings with your doctor and tell them if you have noticed anything unusual or if you feel unwell. Never rely on a single blood pressure reading.

There are several potential causes of high blood pressure. Your doctor will explain them in more detail and offer treatment where appropriate. Besides medication, weight loss and exercise can also help to lower your blood pressure. You should never alter the dosage of any medications prescribed by your doctor.

Blood pressure is subject to wide fluctuations throughout the day, depending on various potential factors, including physical exertion and physical condition. You should routinely take your measurements in quiet conditions

when you feel relaxed. Ideally, you should take two readings every time (both in the morning and in the evening) or as prescribed by your doctor.

Deviations between measurements taken by your doctor or in the pharmacy and those taken at home are quite normal, as these situations are completely different.

It is recommended to have at least 30 seconds in between measurements.

Physical activity including eating, drinking, and smoking as well as excitement, stress, and many other factors can influence blood pressure results.

Consult your physician before using this monitor if you have common arrhythmias such as atrial or ventricular premature beats or atrial fibrillation; arterial sclerosis; poor perfusion; diabetes; pregnancy; pre-eclampsia; or renal disease.

## HOW TO EVALUATE YOUR BLOOD PRESSURE

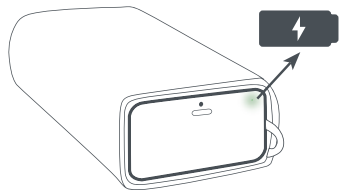
The American Heart Association (AHA) has created the following guide for assessing high blood pressure in adult. It is important to note that various factors (e.g. diabetes, obesity, smoking, etc.) also need to be considered. Consult with your physician for an accurate assessment and diagnosis of your health condition.

This chart is not intended to provide a basis for any type of diagnosis or emergency assessment; this chart only depicts different classifications of blood pressure. Consult your physician for an interpretation and diagnosis based on your personal blood pressure results.

BLOOD PRESSURE CLASSIFICATION CHART	Systolic BP mmHg		Diastolic BP mmHg	COLOR INDICATOR
Normal	< 120	and	< 80	Green
Elevated	120 - 129	and	< 80	Yellow
Hypertension Stage 1	130 - 139	or	80 - 89	Orange
Hypertension Stage 2	≥ 140	or	≥ 90	Red
Hypertensive Crisis (consult your doctor immediately)	> 180	and/ or	> 120	Dark Red

## CHARGING QARDIOARM 2

First charge your QardioArm 2 by connecting the charging cable to the device and connecting the cable to a USB power source. QardioArm 2 will not work until the battery has enough power.



When QardioArm 2 is charging a small green LED light will blink.

When the device is fully charged it will show a solid green light.

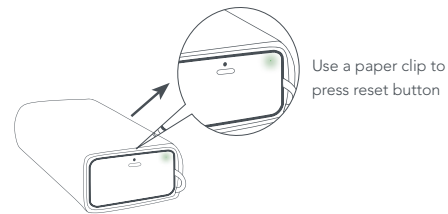
The Qardio App will notify the user when QardioArm 2 has a low battery. The App does this via App notifications, assuming these are enabled, and via the main measurement screen, which will display a short message indicating QardioArm 2 requires charging.

Qardio recommends charging your QardioArm 2 once every two months.

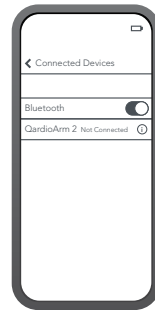
The QardioArm 2 will not operate while charging.

## HOW TO RESET QARDIOARM 2 ON IOS

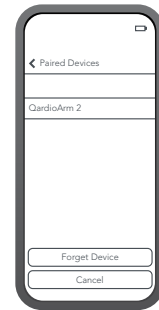
In order to reset the QardioArm 2, use a paper clip to press down the reset button located in the pinhole next to the USB charging port. Press down for 5 seconds and you will see a green light flashing confirming your QardioArm 2 reset.



Then, go into the Settings of your phone or tablet, tap on the i icon next to the QardioArm 2 and select "Forget this device"



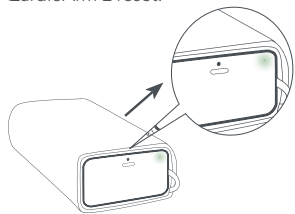
Step 1



Step 2

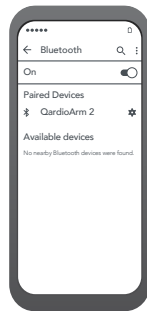
## HOW TO RESET QARDIOARM 2 ON ANDROID

In order to reset the QardioArm 2, use a paper clip to press down the reset button located in the pinhole next to the USB charging port. Press down for 5 seconds and you will see a green light flashing confirming your QardioArm 2 reset.



Use a paper clip to press reset button

Then, go into the Settings of your phone or tablet, tap on the cog wheel and select "Forget this device".



Step 1



Step 2

## ACCURACY TESTING AND MAINTENANCE

QardioArm 2 comprises sensitive components and must be treated with caution. Observe the storage and operating conditions described in the "Technical Specifications" section.

If you can't fix the problem using the troubleshooting instructions, please contact Qardio customer service at [support.qardio.com](https://support.qardio.com).

## ⚠️ CAUTIONS

No modification of this equipment is allowed. Do not modify this equipment without the authorization of the manufacturer.

QardioArm 2 may only be used for the purpose described in this User Manual.

The manufacturer cannot be held liable for damage or injury caused by incorrect use. Always follow the operating procedures described in this User Manual to measure your blood pressure accurately and safely.

QardioArm 2 contains magnets. If you have an internal electronic device or implantable pacemaker, consult your physician before using QardioArm 2. As a general rule, maintain a minimum distance of 6 inches or 15 cm between QardioArm 2 and your implanted devices, or more if so specified by the manufacturer of your implanted device.

If you suffer from an irregular heartbeat, measurements taken with the QardioArm 2 should be evaluated with your physician.

Consult your physician before using the QardioArm 2 on an arm where intravascular cues or therapy, or an artery-venous (A-V) shunt is present.

Consult your physician before using the QardioArm 2 if

you have had a mastectomy.

Consult your physician before using the QardioArm 2 if you have severe blood flow problems or blood disorders as cuff inflation can cause bruising.

Do not take measurements more often than necessary because bruising, due to blood flow interference, may occur.

Please check, by observation of the arm being used, that the QardioArm 2 is not causing any impairment of the blood circulation.

If you experience discomfort or pain while using the QardioArm 2, stop using the QardioArm 2 and consult your physician.

## WARNING

- Do not adjust medication based on measurement results from this blood pressure monitor. Take medication as prescribed by your physician. Only a physician is qualified to diagnose and treat high blood pressure.
- Do not use the QardioArm 2 on an injured arm or an arm under medical treatment.
- Do not wear the cuff on your arm while on an intravenous drip or blood transfusion.
- Do not apply or inflate the cuff around any body parts other than your upper arm.
- Consult your physician before using the QardioArm 2 if you have common arrhythmias such as atrial or ventricular premature beats or atrial fibrillation; arterial sclerosis; poor perfusion; diabetes; pregnancy; pre-eclampsia; or renal disease.
- Self-diagnosis of measurement results and self-treatment are potentially dangerous. You should always consult your physician.

## GENERAL USAGE, SAFETY AND PRECAUTIONS, CLEANING

- Do not take a measurement immediately after eating, smoking, drinking alcohol, bathing, or exercising.
- Do not use the QardioArm 2 while operating a mechanical vehicle or during air travel.
- Do not leave the QardioArm 2 unattended around children or persons who cannot express their consent to use.
- Do not inflate the cuff when it is not wrapped around your arm.

- Do not wrap the cuff inside out.
- Do not apply strong shocks and vibrations to the QardioArm 2, as this may result in damage to the device.
- Do not drop the QardioArm 2.
- Do not expose the cuff or the QardioArm 2 to temperatures outside the storage or operating range.
- Do not expose the cuff or the QardioArm 2 to direct sunlight for extended periods of time.

- Do not expose the cuff or the QardioArm 2 to water, liquids, or moisture.
- Do not expose the cuff or the QardioArm 2 to dust or particles.
- Do not use an alcohol-based or solvent agent to clean the device.
- Clean the device only with a soft, dry cloth.
- Clean the cuff carefully with a damp cloth and soap.
- Do not submerge any part of QardioArm 2 in water at any time.
- Do not use this equipment while cleaning it.

- Do not use an arm cuff from another brand, supplier, or manufacturer.
- Do not use on pets.
- Remove tight-fitting or thick clothing from your arm while taking a measurement.
- Remain still and do not talk while taking a measurement.

## IRREGULAR HEART BEAT MESSAGE

If an irregular heart beat is detected during the measurement procedure, a message will be displayed. Repeat the measurement after one hour. If an irregular heart beat is detected several times in a day or week, we recommend you discuss this with your doctor.

Under this condition, the wireless blood pressure monitor can keep functioning, but the results may be inaccurate. There are 2 conditions under which the signal of irregular heart beat will be displayed:

1. The coefficient of variation (CV) of pulse period >25%.
2. The difference between adjacent pulse periods  $\geq 0.14$ s and the number of such pulses constitutes more than 53 percent of the total number of pulses.



If an irregular heartbeat is detected during the measurement procedure, a message will be displayed. The app will also show a small icon next to your reading to indicate an irregular heartbeat.

## CUSTOMER SERVICE CONTACT

Qardio customer service contact is available at [support.qardio.com](https://support.qardio.com).



## LIMITED WARRANTY

QardioArm 2 is covered by a one year limited warranty from the date of purchase. Batteries and other wearing parts are not covered by the limited warranty.

### When does our limited warranty apply?

The limited warranty is valid only on presentation of the purchase receipt confirming date of purchase. Opening or altering the device invalidates the limited warranty. This warranty applies only to purchases made by end users from Qardio and its authorized resellers. This warranty is void for purchases made from any other reseller, and Qardio offers no warranty for such purchases. The warranty does not cover damage caused by improper handling, abuse, discharged

batteries, accidents, modifications, non-compliance with the operating instructions, normal wearing of parts or other causes that are not defects in materials and workmanship.

The warranty applies only within supported locations, or those countries in which Qardio products can be shipped via the web store at [qardio.com](https://www.qardio.com). For products purchased outside of these locations, the retailer's warranty and/or return policy applies.

A list of supported locations can be found here: <https://www.qardio.com/shipping-returns/>.

### How to obtain warranty service

To obtain warranty service, contact Qardio at <https://support.qardio.com>.

## How we will support you

If a defect arises during the warranty period, Qardio, at its option and to the extent permitted by law will (1) repair the product at no charge, using new parts or parts that are equivalent to new in performance and reliability, (2) exchange the product with a functionally equivalent product that is new or equivalent to new in performance and reliability, or (3) refund the original purchase price. If Qardio opts to exchange the product, Qardio will bear the cost of shipping a replacement and, if deemed necessary, the return shipping of the original device.

## Online auctions and refurbished/second hand devices

Products purchased through online auctions are not eligible for rebates or other special offers from Qardio warranty coverage. Online auction confirmations are not accepted for warranty verification.

To obtain warranty service, an original or copy of the sales receipt from an authorized retailer is required. Qardio will not replace missing components from any package purchased through an online auction. The limited warranty only applies to the purchase of new and unused products, and excludes products purchased as refurbished, second hand, or previously used in any other way, unless such purchases are made directly at [qardio.com](https://www.qardio.com).

## Limitation of liability

Other than the consumer law rights to which you are entitled, all warranties, conditions and other terms not set out in this warranty document are excluded from the limited warranty. Some countries do not allow limitations on how long such warranties, conditions and/or implied terms may last, so the limitations described above may not apply to you.

In no event shall Qardio be liable for (a) any losses that were not caused by our breach of this limited warranty; (b) any incidental, special, indirect or consequential damages, whether resulting from use, misuse, or inability to use this product or from defects in the product, (c) losses relating to any business of yours, loss of profits,

loss of data or loss of opportunity.

The provisions of this limited warranty shall not apply to any other liability, except those that cannot be limited or excluded as a matter of law. Depending on where you live, some of the above limitations or exclusions may not apply to you.

## Australian purchases

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. The benefits under our Limited Warranty are in addition to other rights and remedies under applicable law in relation to the products.

## ERROR MESSAGES AND TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
START button is gray, not green.	QardioArm 2 is not connected to your smartphone or tablet.	Possible solutions: <ol style="list-style-type: none"><li>1. Low battery level. Charge your QardioArm 2 with the provided USB C Charge cable.</li><li>2. Ensure that Bluetooth is enabled on your phone or tablet and the QardioArm 2 is nearby your phone or tablet.</li><li>3. Reset the QardioArm 2.</li></ol>
Batteries depleted.	Battery level is too low.	Recharge QardioArm 2 according to the instructions. If the problem persists, please contact <a href="https://support.qardio.com">support.qardio.com</a> .

PROBLEM	CAUSE	REMEDY
No pressure in the cuff.	An adequate pressure cannot be generated in the cuff. A leak may have occurred.	<ol style="list-style-type: none"><li>1. Check that the cuff is correctly positioned and fits on the arm.</li><li>2. Check the blood pressure monitor connection to the iOS or Android device. Repeat the measurement. If the problem occurs again, contact customer service.</li></ol>
The cuff does not fit.	The arm circumference is limited to 8.7 - 18.5 inches (22 - 47 cm) and it is measured by a close fitting around the center of the upper arm.	Please contact customer service at <a href="https://support.qardio.com">support.qardio.com</a> .

PROBLEM	CAUSE	REMEDY
Irregular heartbeat.	Pulse irregularity was detected during measurement and the blood pressure measurement might not be fully reliable	Repeat the measurement after one hour. If irregular heart beat is detected several times in a day or week, we recommend you to discuss this with your doctor. If irregular heartbeat is detected during the measurement procedure, a message will be displayed. Under this condition, the wireless blood pressure monitor can keep functioning, but the results may be inaccurate. Please consult your physician for accurate assessment.
Measurement could not be performed.	During the measurement, error signals were auto-detected by the device, or the pulse signals on the cuff were too weak.	Re-position the cuff and repeat the measurement keeping your arm still and without talking. Check the marks on the cuff and the instructional videos on the Qardio App to verify you are positioning the QardioArm 2 correctly. Ensure you can fit a finger between your arm and the cuff. If the problem occurs again, please contact customer service.

PROBLEM	CAUSE	REMEDY
Abnormal result.	The measuring signals are inaccurate therefore no result can be displayed. This could be due to the cuff not being fully deflated before measurement, noise interference, user talking, user movements, cuff not correctly fastened, cuff broken, pump or valve failure, pressure overflow, or other special characteristics of the user	<ol style="list-style-type: none"> <li>1. Read through the instructions for performing reliable measurements. Reposition the cuff and repeat the measurement while keeping your arm still and without talking. If the problem occurs again, please contact customer service.</li> <li>2. If user has special conditions, please contact your physician.</li> </ol>

PROBLEM	CAUSE	REMEDY
Each measurement has significantly different results.	Under normal measuring circumstances, the reading at home is different from that of the clinics. The variation is due to the different environments.	1. Relax for a few minutes before each measurement. Try to measure your blood pressure at consistent times and locations. Discuss your blood pressure values with your physician.
	The blood pressure is changing according to the physiological or psychological conditions of your body.	2. If the problem occurs again, please contact customer service at <a href="https://support.qardio.com">support.qardio.com</a> .

## QARDIOARM 2 TECHNICAL SPECIFICATIONS

<b>Weight</b>	Device with standard cuff: 0.63 lb (290g) including battery; device with Large cuff: 0.67 lb (305g) including battery
<b>Cuff Size</b>	Standard cuff: 8.7 in – 14.6 in (22 - 37cm); Large cuff: 14.6 in – 18.5 in (37 - 47cm)
<b>Dimensions</b>	5.5 x 2.7 x 1.5 in (140 x 68 x 38 mm) when closed with standard cuff. 5.5 x 2.7 x 1.7 in (140 x 70 x 45mm) when closed with XL cuff.
<b>Measurement</b>	Oscillometric
<b>Measurement Range</b>	Systolic measurement range: 60~250mmHg Diastolic measurement range: 40~180mmHg Pulse measurement range: 40~200 beats per minute
<b>Accuracy</b>	± 3 mmHg or ± 2 % of readout value for blood pressure, ± 5% of readout pulse.
<b>Measurement Resolution</b>	1 mmHg for blood pressure, 1 beat/min for pulse.
<b>Power Source</b>	Lithium-ion battery (3.7V)
<b>Maximum pressure in normal condition</b>	300mmHg
<b>Service life</b>	5 year

<b>Operating Conditions</b>	5°C to 40°C (41°F to 104°F) temperature, 15% to 90% (non-condensing) relative maximum humidity, atmospheric pressure 70~106kpa, maximum altitude: 3000m (9,842 ft).
<b>Operating Range</b>	At a barrier-free space, the maximum range of detection your QardioArm 2 and the device is 10 yards (10 meters).
<b>Storage Conditions</b>	-25°C to 50°C (-13°F to 122°F) temperature, 10% to 90% (non condensing) relative maximum humidity, atmospheric pressure 70~106kpa, maximum altitude: 3000m (9,842 ft).
<b>Works with</b>	QardioArm 2 requires a smart phone or table with Bluetooth 5.0 and iOS 12 (or later) or Android 6 (or later). The detailed list of compatible devices is available on <a href="http://qardio.com/devices">qardio.com/devices</a> . Free Qardio App (available for download on the App Store or on Google Play).

Specifications are subject to change without prior notice or any obligation on the parts of the manufacturer. Certain features may require purchase of separate services.

## DISPOSAL



Actuation of European directives 2002/95/EC, 2002/96/EC and 2003/108/EC, for reduction in use of dangerous substances in the electric and electronic device and for garbage disposal. The symbol applied on the device or its packaging means that at the end of its useful life the product must not be disposed of with domestic waste.

At the end of devices useful life, the user must deliver it to the able collecting centers for electric and electronic garbage, or give back to the retailer when purchasing a new device. Disposing of the product separately prevents possible negative consequences for the environment and for health, deriving from inadequate disposal. It also allows the recovery of materials of which it's made up in order to obtain an important saving of energy and resources and to avoid negative effects to the environment and health. In case of abusive disposal of device by the user, will be applied administrative endorsements in compliance with current standard. The device and its parts is made with regard to disposal, as appropriate, in accordance with national or regional regulations.

This product complies with RoHS Directive 2011/65/EU and Amendment (EU) 2015/863.

## CE COMPLIANCE

This device complies with the following regulations and normative documents/standards:

- EN ISO 14971:2020: Medical devices - Application of risk management to medical devices
- COUNCIL DIRECTIVE 2014/53/EU of 16 April 2014 relating radio equipment (RED): A full declaration of conformity (DoC) may be consulted at: [www.qardio.com/conformity](http://www.qardio.com/conformity)
- Information regarding frequency band(s) in which the radio equipment operates and maximum radio-frequency power see <reference "RF statement" - on page 47.>.

- FCC part B 15B:2020 Electromagnetic Compatibility
- FCC Rule Part: 15.247 Cat: DSS (Bluetooth) FCC Rule Part: 15.247 Cat: DTS (BT4.0)
- EN 1060-1: 1995 + A2; 2009 Non-invasive sphygmomanometers, Part 1: General requirements

## FCC STATEMENT

Federal Communications Commission (FCC) Statement 15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

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.

A. This device complies with Part 15 of the FCC Rules/Industry Canada license-exempt RSS standard(s).

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 operation of the device.

B. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter

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

IMPORTANT NOTE (for portable device configuration):

Federal Communication Commission (FCC) Radiation Exposure

Statement. This EUT is in compliance with SAR for general population/uncontrolled exposure limits in ANSI/IEEE C95.1-1999 and has been tested in accordance with the measurement methods and procedures specified in OET Bulletin 65 Supplement C.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

- 1) il ne doit pas produire de brouillage et
- 2) L'utilisateur du dispositif doit être prêt à recevoir tout brouillage radioélectrique reçu, même si se brouillage est susceptible de compromettre le fonctionnement du dispositif.

ICES-003. This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

#### FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### IC Radiation Exposure Statement / IC Déclaration sur la radioexposition.

This EUT is in compliance with SAR for general population-uncontrolled exposure limits in IC RSS-102 and has been tested in accordance with the measurement methods and procedures specified in IEEE 1528. This equipment should be installed and operated with minimum distance of 1.5 cm between the radiator and your body.

Cet appareil est conforme avec SAR pour la population générale/ limites d'exposition abusive IC RSS-102 et a été testé en conformité avec les méthodes et procédures spécifiées dans la


norme IEEE 1528 mesure. Cet équipement doit être installé et utilisé à une distance minimale de 1,5 cm entre le radiateur et votre corps. La séparation de test SAR de la distance de 10 mm pour hotspot.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

En vertu de la réglementation de l'Industrie du Canada, cet émetteur de radio ne peuvent fonctionner en utilisant une antenne d'un type et maximum (ou moins) gain approuvé pour l'émetteur par Industrie du Canada. Pour réduire le risque de brouillage aux autres utilisateurs, le type d'antenne et son gain doivent être choisis de sorte que lapuissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas ce qui est nécessaire pour la réussite de comunication.

## RF STATEMENT

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 section.

Interference may occur in the vicinity of equipment marked with the following symbol .

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.

The device 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.

The device 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.

Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.

The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. Any other accessories, transducers and cables may result in increased emissions or decreased immunity and EMC performance.

The device should not be used adjacent to or stacked with other equipment and if adjacent or stacked use is necessary, it should be observed in order to verify normal operation in the configuration in which it will be used.

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.



<b>Manufacturer's declaration-electromagnetic emissions</b>		
The QardioArm 2 (Model No.: A200) Wireless Blood Pressure Monitor system is intended for use in the electromagnetic environment specified below. The customer or the user of the QardioArm 2 Wireless Blood Pressure Monitor system should assure that it is used in such an environment.		
<b>Emissions test</b>	<b>Compliance</b>	<b>Electromagnetic environment-guidance (for home healthcare environment)</b>
Radiated Emission CISPR 11	Group 2	The QardioArm 2 Wireless Blood Pressure Monitor 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.

<b>Manufacturer's declaration-electromagnetic emissions</b>		
The QardioArm 2 (Model No.: A200) Wireless Blood Pressure Monitor system is intended for use in the electromagnetic environment specified below. The customer or the user of the QardioArm 2 Wireless Blood Pressure Monitor system should assure that it is used in such an environment.		
<b>Emissions test</b>	<b>Compliance</b>	<b>Electromagnetic environment-guidance (for home healthcare environment)</b>
Conducted Emission CISPR 11	Class B	The QardioArm 2 Wireless Blood Pressure Monitor 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	Not applicable	
Voltage fluctuations /Flicker emissions IEC 61000-3-3	Not applicable because device cannot be used while charging.	

Designed by and manufactured for Qardio, Inc. California, USA.  
FOR US AND INTERNATIONAL

[www.qardio.com](http://www.qardio.com)



Type BF Applied Part (cuff)



2022



YA HORNG ELECTRONIC CO., LTD.  
No. 35, Shalun, Anding Dist.,  
Tainan City 745, Taiwan.



Read this manual  
before use.



MR Unsafe

**US Importer**

Qardio, Inc.  
345 California Street, Suite 600 & 700  
San Francisco, CA 94104, USA



FC

**IP22**

Protected from water spray  $\pm 15$  degrees  
from vertical.

Designed by and manufactured for Qardio, Inc. California, USA.  
FOR CANADA

[www.qardio.com](http://www.qardio.com)



Type BF Applied Part (cuff)



Qardio, Inc.  
345 California Street, Suite 600 & 700  
San Francisco, CA 94104, USA



Read this manual before use.



2022




**US Importer**

Qardio, Inc.  
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San Francisco, CA 94104, USA

**IP22**

Protected from water spray  $\pm 15$  degrees  
from vertical.

<b>Manufacturer's declaration-electromagnetic immunity</b>			
The QardioArm 2 (Model No.: A200) Wireless Blood Pressure Monitor system is intended for use in the electromagnetic environment specified below. The customer or the user of the QardioArm 2 Wireless Blood Pressure Monitor system should assure that it is used in such an environment.			
<b>Immunity test</b>	<b>IEC 60601 test level</b>	<b>Compliance level</b>	<b>Electromagnetic environment-guidance (for home healthcare environment)</b>
Radiated RF IEC 61000-4-3	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	<p>Recommended separation distance:  <math>d = 1,2 \sqrt{P} \sqrt{P}</math>  <math>d = 1,2 \sqrt{P} \sqrt{P}</math> 80MHz to 800 MHz  <math>d = 2,3 \sqrt{P} \sqrt{P}</math> 800MHz to 2,7 GHz</p> <p>Where <math>P</math> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <math>d</math> is the recommended separation distance in meters (m).</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol: </p>

<b>Manufacturer's declaration-electromagnetic immunity</b>			
The QardioArm 2 (Model No.: A200) Wireless Blood Pressure Monitor system is intended for use in the electromagnetic environment specified below. The customer or the user of the QardioArm 2 Wireless Blood Pressure Monitor system should assure that it is used in such an environment.			
<b>Immunity test</b>	<b>IEC 60601 test level</b>	<b>Compliance level</b>	<b>Electromagnetic environment-guidance (for home healthcare environment)</b>
Conducted RF IEC 61000-4-6	3 Vrms: 0,15 MHz – 80 MHz  6 Vrms: in ISM and amateur radio bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz	Not applicable  Not applicable	Portable and mobile RF communications equipment should be used no closer to any part of the QardioArm 2 Wireless Blood Pressure Monitor system including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
NOTE1 At 80 MHz and 800 MHz, the higher frequency range applies. NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

<b>Manufacturer's declaration-electromagnetic immunity</b>			
The QardioArm 2 (Model No.: A200) Wireless Blood Pressure Monitor system is intended for use in the electromagnetic environment specified below. The customer or the user of the QardioArm 2 Wireless Blood Pressure Monitor system should assure that it is used in such an environment.			
<b>Immunity test</b>	<b>IEC 60601 test level</b>	<b>Compliance level</b>	<b>Electromagnetic environment-guidance (for home healthcare environment)</b>
Electrostatic discharge (ESD) IEC 61000-4-2	Contact: $\pm 8$ kV Air $\pm 2$ kV, $\pm 4$ kV, $\pm 8$ kV, $\pm 15$ kV	Contact: $\pm 8$ kV Air $\pm 2$ kV, $\pm 4$ kV, $\pm 8$ kV, $\pm 15$ kV	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	$\pm 2$ kV for power supply lines $\pm 1$ kV for input/output lines	Not applicable Not applicable	Mains power quality should be that of a typical home healthcare environment.
Surge IEC 61000-4-5	$\pm 0.5$ kV, $\pm 1$ kV line(s) to line(s) $\pm 0.5$ kV, $\pm 1$ kV, $\pm 2$ kV line(s) to earth	Not applicable Not applicable	Mains power quality should be that of a typical home healthcare environment.

<b>Manufacturer's declaration-electromagnetic immunity</b>			
The QardioArm 2 (Model No.: A200) Wireless Blood Pressure Monitor system is intended for use in the electromagnetic environment specified below. The customer or the user of the QardioArm 2 Wireless Blood Pressure Monitor system should assure that it is used in such an environment.			
<b>Immunity test</b>	<b>IEC 60601 test level</b>	<b>Compliance level</b>	<b>Electromagnetic environment-guidance (for home healthcare environment)</b>
Voltage Dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	Voltage dips: 0 % UT; 0,5 cycle 0 % UT; 1 cycle 70 % UT; 25/30 cycles  Voltage interruptions: 0 % UT; 250/300 cycle	Voltage dips: Not applicable Not applicable Not applicable  Voltage interruptions: Not applicable	Mains power quality should be that of a typical home healthcare environment. If the user of the QardioArm 2 Wireless Blood Pressure Monitor system requires continued operation during power mains interruptions, it is recommended that the Wireless Blood Pressure Monitor system be powered from an uninterruptible power supply or a battery.
Power frequency (50, 60 Hz) magnetic field IEC 61000-4-8	30 A/m 50 Hz or 60 Hz	30 A/m 50 Hz and 60 Hz	The QardioArm 2 Wireless Blood Pressure Monitor system power frequency magnetic fields should be at levels characteristic of a typical location in a typical home healthcare environment.

Manufacturer's declaration-electromagnetic immunity Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment							
The QardioArm 2 (Model No.: A200) Wireless Blood Pressure Monitor system is intended for use in the electromagnetic environment specified below. The customer or the user of the QardioArm 2 (Model No.: A200) Wireless Blood Pressure Monitor system should assure that it is used in such an environment.							
Test frequency (MHz)	Band <sup>b)</sup> (MHz)	Service <sup>a)</sup>	Modulation <sup>b)</sup>	Maximum power (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)	Compliance LEVEL (V/m) (for home healthcare)
385	380 – 390	TETRA 400	Pulse modulation <sup>b)</sup> 18 Hz	1,8	0,3	27	27
450	430 – 470	GMRS 460, FRS 460	FM <sup>c)</sup> ±5 kHz deviation 1 kHz sine	2	0,3	28	28
710	704 – 787	LTE Band 13, 17	Pulse modulation <sup>b)</sup> 217 Hz	0,2	0,3	9	9
745							
780							
810	800 – 960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation <sup>b)</sup> 18 Hz	2	0,3	28	28
870							
930							
1 720	1 700 – 1 990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation <sup>b)</sup> 217 Hz	2	0,3	28	28
1 845							
1 970							

Manufacturer's declaration-electromagnetic immunity Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment							
The QardioArm 2 (Model No.: A200) Wireless Blood Pressure Monitor system is intended for use in the electromagnetic environment specified below. The customer or the user of the QardioArm 2 (Model No.: A200) Wireless Blood Pressure Monitor system should assure that it is used in such an environment.							
Test frequency (MHz)	Band <sup>b)</sup> (MHz)	Service <sup>a)</sup>	Modulation <sup>b)</sup>	Maximum power (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)	Compliance LEVEL (V/m) (for home healthcare)
2 450	2 400 – 2 570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation <sup>b)</sup> 217 Hz	2	0,3	28	28
5 240	5 100 – 5 800	WLAN 802.11 a/n	Pulse modulation <sup>b)</sup> 217 Hz	0,2	0,3	9	9
5 500							
5 785							
NOTE If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000-4-3.							
<sup>a)</sup> For some services, only the uplink frequencies are included. <sup>b)</sup> The carrier shall be modulated using a 50 % duty cycle square wave signal. <sup>c)</sup> As an alternative to FM modulation, 50 % pulse modulation at 18 Hz may be used because while it does not represent actual modulation, it would be worst case.							

<b>Manufacturer's declaration-electromagnetic immunity</b>			
<b>Recommended separation distance between portable and mobile RF communications equipment and the QardioArm 2 (Model No.: A200)</b>			
The QardioArm 2 (Model No.: A200) is intended for use in an electromagnetic environment (for Professional healthcare environments) in which radiated RF disturbances are controlled. The customer or the user of the QardioArm 2 (Model No.: A200) can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the QardioArm 2 (Model No.: A200) 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		
	150 kHz to 80 MHz $d = 1,2 \sqrt{P}$	80 MHz to 800 MHz $d = 1,2 \sqrt{P}$	800 MHz to 2,7 GHz $d = 2,3 \sqrt{P}$
0,01	N/A	0,12	0,23
0,1	N/A	0,38	0,73
1	N/A	1,2	2,3
10	N/A	3,8	7,3
100	N/A	12	23
For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (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.			
NOTE1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.			
NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

## NOTES

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Patents assigned and pending.

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US 2.2.6 – 5340, 5356, 5364, 5371