

# Wireless Sensor Unit AR2016 User Manual

## (Draft)

**Safety Guide:** **First read this before you start !**

Before using this product, read warning and caution described later in this user's manuals and understand correct usage. Incorrect handling of this product possibly result in personal injury or physical damage. The manufacturer assumes no responsibility for any damage caused by mishandling that is beyond normal usage defined in this manual.

### **System Overview**

The AR2016 is a general purpose wireless sensor product sensing temperature, humidity, movement, and sound. With small ellipse shape with 0.35inch height AR2016 becomes versatile applications such as wearable, environmental monitoring, nursing care and so on.

AR2016 use Bluetooth Low Energy with low power System On Chip (SoC) which enables long life time with one coin battery.

### **Applications**

Wearable

Environmental Monitoring

Nursing care

### **Smartphones applicable**

Bluetooth version 4.0

Android version 4.3 or above

### **Operating Conditions**

Battery

Only use full charged CR2032 3V

Be sure + or - signs of battery are correctly inserted

There is no power on/ off switch. To switch off AR2016, pull the battery off the plastic enclosure.

### **Environment**

0 to +40degree C

Avoid water or use below dew point

## **Liability disclaimer**

The specification is subject to change and You I Rob has right to make changes without further notice to the product to improve reliability, function or design.

By using or allowing others to use this product you accept all responsibility and absolve and indemnify You I Robo from any liability related to its use or misuse. If you do not accept this as a legally binding agreement, do not use the equipment in any way.

## **Life support applications**

You I Robo's products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. You I Robo customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify You I Robo for any damages resulting from such improper use or sale.

## **Contact details**

You I Robo Co., Ltd

Office: 4-31-2 NishiGotanda, Shinagawa-ku, Tokyo, Japan

Postal Code: 141-0031

Mail Address: [youirobo@gmail.com](mailto:youirobo@gmail.com)



## **FCC Compliance**

This device complies with Part 15 of the 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 operation.

## **FCC WARNING**

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, 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.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.
- You are cautioned that any modification, misuse, or use of untested cable may void user's authority to use this equipment.

### How to Use

1. Download an application from App Store and install into your smart phone.
2. Click its icon. YIR2016 shows up. Right after you click the connect button, AR2016 is connected to your phone and the application will start.

### How to Change Battery

1. With a screw driver unscrew, open the battery cover. Pinch the battery and take the battery off.
2. Insert a new battery correctly, close the cover with the screw and the screw driver. Do not force to insert the battery.

### Basic Specification

Part number	AR2016-xxxx
Bluetooth Specification	Bluetooth Low Energy 4.2
Smartphone Version	Android version 4.3 or above
Propagation Distance	Approx. 9 yard (8m)
Environmental Condition	32 ~ +104° F (0 ~ +40° C) 20 ~ 85%RH
External Dimensions	1.6 (39.7) W 1.1 (27.6) D 0.35 (9.0) H inch (mm)
Weight	0.28 oz (8 g)
Accessory	Strap Lithium battery CR2032 1 unit Screw driver

The specification is subject to change.

Bluetooth and Bluetooth log are trademark of SIG.Inc.

## Warning:

Warning define that incorrect usage may cause of death, injury, or damage of things.

- Inserting the battery incorrectly will damage the product instantly which is not covered under warranty.
- There are holes on the plastic enclosure for sensing humidity and sound. Therefore, the product is not water proof and such incident are not covered under warranty.
- Use special caution with babies, children, and pets. If they swallow it, immediately call your doctor. Attach the strap to the plastic enclosure which help preventing such incident.
- Take the battery off the plastic enclosure if any problems occur.
- Do not use this product in the hospital, clinic, airplane, or near patients with heart pace makers.
- Do not disassemble and modify the product. The plastic enclosure is sealed by adhesive and not only causing damages but also it is against the law.

## About Battery

- Battery must be stored carefully. Avoid places where babies or children can reach. If they swallow it, immediately call your doctor.
- Never heat the battery or leave it in high temperature environment.
- Do not charge the battery. This battery is not rechargeable.
- Take the battery off the plastic enclosure in case of airplane boarding or in hospitals or clinics.
- Only the coin battery called CR2032 is suit for this product. Do not use any other types of battery.
- Choose a right battery. There are batteries that may not last longer or may cause problems such as leakages.
- Obey the local laws on disposing the battery.

## Caution:

Caution define that incorrect usage may cause of injury or damage of things.

- This product is approved for its radio frequency usage in the U.S. and Japan. Do not use it in any other countries.

- Use the strap which is to prevent the product dropping or moving away from the intended location.
- Keep this product away from babies, children, and pets when it is not in use.