UBTECH RAD001 Sensor Controlled Safety Sign User Manual

RAD001 Sensor Controlled Safety Sign
User Manual

Contents

Introduction

- Thank you for purchasing sensor-controlled safety sign equipment from UBTECH ROBOTICS CORP LTD. This user manual is only applicable to the operation of the Sensorcontrolled safety sign.
- In order to ensure safe use of Sensor-controlled safety signs and quickly grasp the usage method, please read this manual carefully.
- Children under 12 years old should use this product under the guidance of adults.
- This manual is for the user's reference and guidance only, and the description may not be detailed enough. If you encounter problems that cannot be solved, please contact our company for technical support.
- This manual will be updated from time to time, and the latest user manual will add the latest content and pictures without further notice.
- The model approval code of this product is displayed in the form of a "product nameplate label". The nameplate label is affixed to the lower part of the back of the robot.
- This product contains a wireless Bluetooth module. This module is an integrity module and has FCC certification. The model approval code is FCC ID: *****-RAD001.

Part 1 Product Overview

Package List

- UVC sensor-controlled safety sign (Door Sensor) *1
- User manual *1

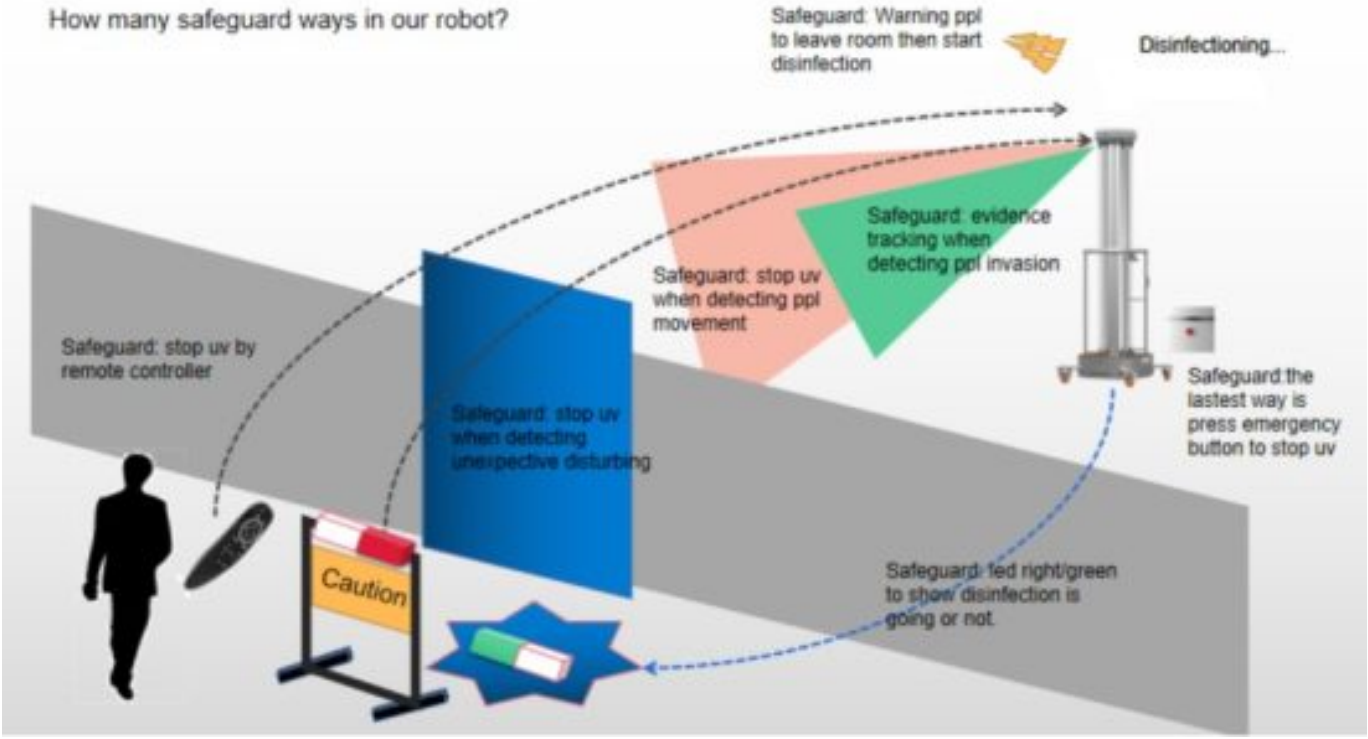
NOTE:

- sensor-controlled safety sign use AA battery *8

Product View

- Front LED *2 Caution Slogan
- Back Power On button Mode button
- Side Battery cover

System Framework



Part 2 Safety Information

Please read the following information carefully, the company will not be responsible for direct or indirect losses caused by improper use of the product.
Note: To ensure safety, it is strongly recommended that users follow the following safety regulations when operating the robot.
This manual does not guarantee to cover all possible situations.
The “ADIBOT” and “equipment” (“it”, “its”) referred to in this manual are Sensorcontrolled safety sign equipment, and “you” (“your”) refers to the user.

Note:
Please guardians to ensure that children under 6 years old stay away from Sensor- controlled safety signs!
Please keep pets away from Sensor-controlled safety signs!

Device Security

General

If you have no experience in operating sensor-controlled safety signs, you need to be especially careful. Because you may not be familiar with Sensor-controlled safety sign operation at first.
Do not use robots to implement operations related to personal safety.

Operation Instruction

Danger
If there is no emergency, it is recommended not to touch it while ADIBOT is performing its task.
Warning
Please ask professional technical personnel or personnel familiar with the product to operate sensor-controlled safety sign.
Do not insert any foreign objects into the gaps in the device, otherwise, it may cause an electric shock or short-circuit failure.
Please keep sensor-controlled safety signs dry, and avoid contact with oil, steam, water vapor, moisture, dust layer, and other substances of the camera driven by the device.

The normal working humidity range of the Sensor-controlled safety sign is 10%-95%. The normal working temperature range of a Sensor-controlled safety sign is 0-40 degrees Celsius (32-104 degrees Fahrenheit).
Please keep sensor-controlled safety signs away from open flames and heat sources, and avoid direct sunlight, so as not to damage the sensor.
Do not cover its door sensor, otherwise, it may affect the communication.
All maintenance work should be carried out under the guidance or supervision of cautious technicians.

Attention
When ADIBOT is working, please do not move the Sensor-controlled safety sign, so as not to affect the correct indication of the working state of the Sensor-controlled safety sign.

If the Sensor-controlled safety sign works abnormally, especially when you detect unusual sounds, smells, or smoke, please take precautions and immediately turn off the power, remove the battery, and contact the technical support center.

Part 3 Device System Operation

When the disinfection equipment is worked indoors, the UV light will cause harm to the human body, so it is necessary to place the Sensor-controlled safety sign outside the room to warn the personnel not to approach. At the same time, as an accessory product, the Sensor-controlled safety sign needs to work with the disinfection equipment, which can intelligently feedback the various states of the disinfection equipment. Use the Sensor-controlled safety sign according to the following steps:
Step 1 Install 8*AA batteries
Step 2 Place the Sensor-controlled safety sign at the door of the room to be disinfected and turn on the Sensor-controlled safety sign switch
Step 3 Through the web software to match the Sensor-controlled safety sign with the designated disinfected equipment
Step 4 After disinfection, close the Sensor-controlled safety sign

Part 4 sensor-controlled safety sign

Services
Basic features

No.	Feature Description		
1	Caution		Sensor-controlled safety signs are used to remind people not to enter the room to be disinfected
2	Switch	Power on	Power on the Sensor-controlled safety sign
		Detection switch	Turn on Intrusion Detection
		Pairing switch	Bluetooth pairing mode switch
3	Disinfection State Indicator	State feedback	Indicate the status of the disinfection device paired with the Sensor-controlled safety sign,

			for example safety, fault and son on
		Intrusion detection	If any intrusion is detected through the movement and dumping of Sensor-controlled safety sign s, the equipment shall be informed to stop disinfect in tim e
4	Sensor-controlled safety sign State Indicator		Through the LED or buzzer to indicate the status of the S ensor-controlled safety sign itself, such as pairing, low po wer, etc
5	Bluetooth pairing		Bluetooth pairing feature on Web

Caution

- Alert people who want to enter the disinfection room with a striking sensor-controlled safety sign “caution, UV infection do not enter!”
- The size of the Sensor-controlled safety sign is “524 (L) * 322 (W) * 752 (H) mm”, which can prevent people from bypassing the Sensor-controlled safety sign and entering the room to be disinfected; the Sensor-controlled safety sign is 2.2kg, and its weight can avoid shaking itself

Switch

The Sensor-controlled safety sign has several switches, which are described as follows:

- sensor-controlled safety sign switch (toggle switch on / off). The switch of the main power supply of the Sensor-controlled safety sign. Power on after opening. At this time, the Sensor-controlled safety sign only indicates the status of the disinfection equipment that has been paired successfully
- Intrusion detection switch (tap switch mode)
  • Press and hold for 3 seconds, and the buzzer will sound three times to turn on the intrusion detection. At this time, the Sensor-controlled safety sign has the ability to send a touch alarm
  • Long press for 3 seconds and the buzzer will sound to turn off the intrusion detection
- Paired mode switch (tap switch mode). Press three times continuously (interval < 0.5s), the Sensor-controlled safety sign will enter the pairing state, and the disinfection equipment will scan, select and match in the setting interface

Intrusion detection and disinfection device state indicator

- Intrusion detection. When the Sensor-controlled safety sign is detected to be moved, UBTECH ROBOTICS CORP LTD the disinfection equipment will be informed in time to stop disinfect. After the disinfection equipment stops disinfect, the status of the equipment will be fed back to the Sensor-controlled safety sign
- The disinfection equipment status includes the nonsafety state of the normal operation of the disinfection equipment, the safe state after the disinfection equipment is shut down, the nonsafety state when the

disinfection equipment fails, and the state of disconnection from the disinfection equipment

Indicates the disinfection device status

State	LED	Buzzer
The disinfection equipment is in a safe state	: Green LED long and bright	/
Disinfection equipment in disinfection state (unsafe)	: Blue LED long and bright	/
Disinfection equipment failure (unsafe)	: Red LED long and bright	Periodic sound, once every 5 seconds
Lost disinfection device connection, try to restore the connection	: Orange LED long and bright	Periodic sound, once every 5 seconds

Sensor-controlled safety sign State Indicator

In the Bluetooth pairing process between the Sensor-controlled safety sign and the disinfection device, the status of low power and access control board is indicated:

State	LED	Buzzer
Enter Bluetooth pairing status	: blue quick flashing	/
Pairing complete	: blue goes out and returns to working state	/
Low battery	Any color light, periodic slow flashing (3S)	/
Turn on door sensor detection	/	Three buzzers
Turn off door sensor detection	/	Buzzer 1 sound
Sensor-controlled safety sign is touched (under nonsecurity state)	The indicator light remains unchanged	Make a long sound until the Sensor-controlled safety sign stops moving

Bluetooth pairing (Web)

As the peripheral equipment of disinfection equipment, the Sensor-controlled safety sign should be paired through Bluetooth. The [peripheral] tab of [system settings] provides the pairing of Sensor-controlled safety signs.

- One disinfection device allows multiple Bluetooth sensor-controlled safety signs
- The communication distance of the Sensor-controlled safety sign is not less than 20 meters, which can block a conventional room door (such as a hotel or hospital room door)
- Users can upgrade firmware via Bluetooth OTA
- Pairing steps of Sensor-controlled safety sign:

• When it is not paired, it will prompt “there is no pairing sensor-controlled safety sign”

• Find the Bluetooth device and list the devices that can be found after searching for a period of time

Note: the Bluetooth MAC address is pasted on the body of the caution for user identification. At the same time, the interface prompts the user that “the Sensor-controlled safety sign should open the pairing mode”.

• Start pairing and select any sensor-controlled safety sign. If it is successful, it will prompt “the selected sensor-controlled safety sign is paired successfully!” Otherwise, it will prompt “matching of the selected sensor-controlled safety sign failed!”

• If the pairing is successful, the information of the paired sensor-controlled safety sign will be displayed. At the same time, the paired disinfection devices

broadcast voice

• Continue to add sensor-controlled safety signs, up to 4 at present. Or you can cancel the pairing with the Sensor-controlled safety sign

Part 5 Transporting, Clean and Storage

1. Transportation

   If you need to transport ADIBOT, please put it in the box.
2. Maintenance

Warning:
Do not use abrasives, aerosols, alcohol-containing liquids, or other liquids to clean the Sensor-controlled safety sign, because they may contain flammable substances or may damage the plastic shell, cloth and printed characters on the cloth. Do not spray or spray the Sensor-controlled safety sign with water or other liquids. Please keep the Sensor-controlled safety sign dry.
Follow the steps below to ensure safety and avoid damaging the Sensor-controlled safety sign:

1. Press the power button on the side of the main control box to close the caution sign;
2. Open the back cover of the main control box and take out the battery to ensure that the access plate is completely powered off;
3. Clean the outside of the Sensor-controlled safety sign with a soft damp cloth;
4. Wipe the outside of the Sensor-controlled safety sign thoroughly with a soft dry cloth;
5. Check whether the Sensor-controlled safety sign is dry.

   Note: take out the battery when the Sensor-controlled safety sign is not used for a long time. It is found that there is no indication after the Sensor- controlled safety sign is opened. Please make sure that the battery has power.

Part 6 Reference

Device Specification

Dimensions	
Size	524(L) * 322(W) * 752(H) mm
Weight	2.2kg
Operating temperature	0°C-40°C
Operating humidity	10 to 85% relative humidity (indoor use only)
Storage temperature	-40°C-60°C
Storage humidity	195% (non-condensation indoor only)
Device Body Material	Stainless steel, PC+ABS
Device System	
Main Processor	Nordic nRF52833, 512KB Flash, 128K Ram
Wireless Module	Bluetooth 5.0
Acoustics	lx 2W Buzzer
LED	LED* 2
Button	Mode Button * 1
Switch	Power Switch * 1
Power Supply	
Input Voltage	6V DC
Current	20mA

Replacement Parts

Description	Part #
Warning label cloth	
AA Battery *8	
User Manual	

FAQ/Troubleshooting

Question	**Solution**
The Sensor-controlled safety signs cannot be	-Check whether the switch key on the side of the control box is loose, abr
activated	-Check whether the battery socket in the control box is loose, abnormal, c ontact product technical support center.
Sensor-controlled safety sign connectio n failed	-The distance between the entrance guard and disinfection equipment is t dd multiple Sensor-controlled safety signs.

Part 7 Declaration of Conformity

FCC compliance statement

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

FCC Radiation Exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance e 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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Documents / Resources

	UBTECH RAD001 Sensor Controlled Safety Sign [pdf] User Manual RAD001, 2AHJX-RAD001, 2AHJXRAD001, RAD001 Sensor Controlled Safety Sign, RAD001, Sensor Controlled Safety Sign