24GMilimeterwave Biosensing Radar

R24DVD1-Human existence Tuya ZigBee application manual

Please read the product instruction carefully before use and keep it properly V1.0

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contents

1.Device distribution routine steps

(The prerequisite for using Tuya zigbee radar equipment: Tuya zigbee gateway is required)

1、Download through the app store: Tuya Smart APP

Tuya smart

2、Click the "red plus sign" in the upper right corner to enter the product category selection page (Figure 2)

Figure 2

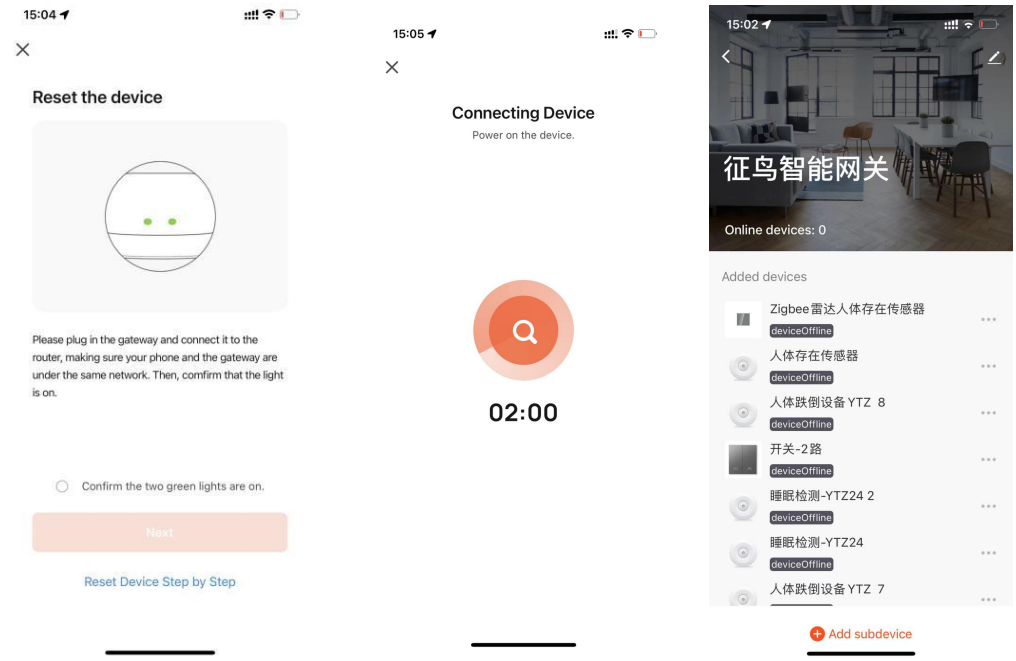
Figure 3

3、Select the "wired gateway"/"wireless gateway" product in the "gateway central control" category to enter the network configuration

page , and configure the network according to the type of gateway you have . (Figure 3)

4、Press and hold the button on the gateway until the two LED lights are always on, click Next to enter the gateway to automatically search for pairing. After pairing, follow the prompts to add a gateway to successfully configure the network.

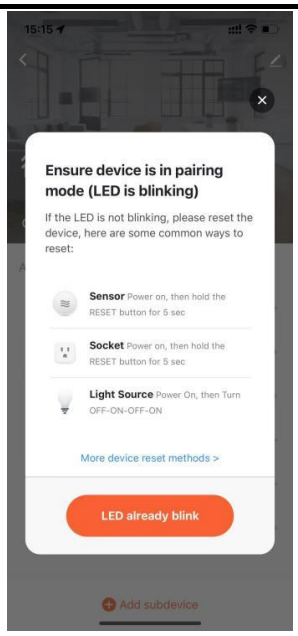
(Note: If it is a wired gateway, the mobile phone needs to be connected to the wifi under the router connected to the gateway to connect successfully)



(Picture 4)

5、After the gateway is paired and connected successfully, you can click the gateway to enter the gateway, and click [Add Sub-device] to add Tuya zigbee devices (Figure 5)

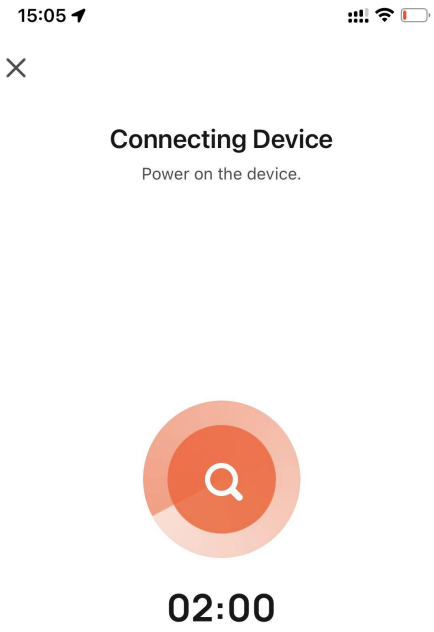
(Picture 5)



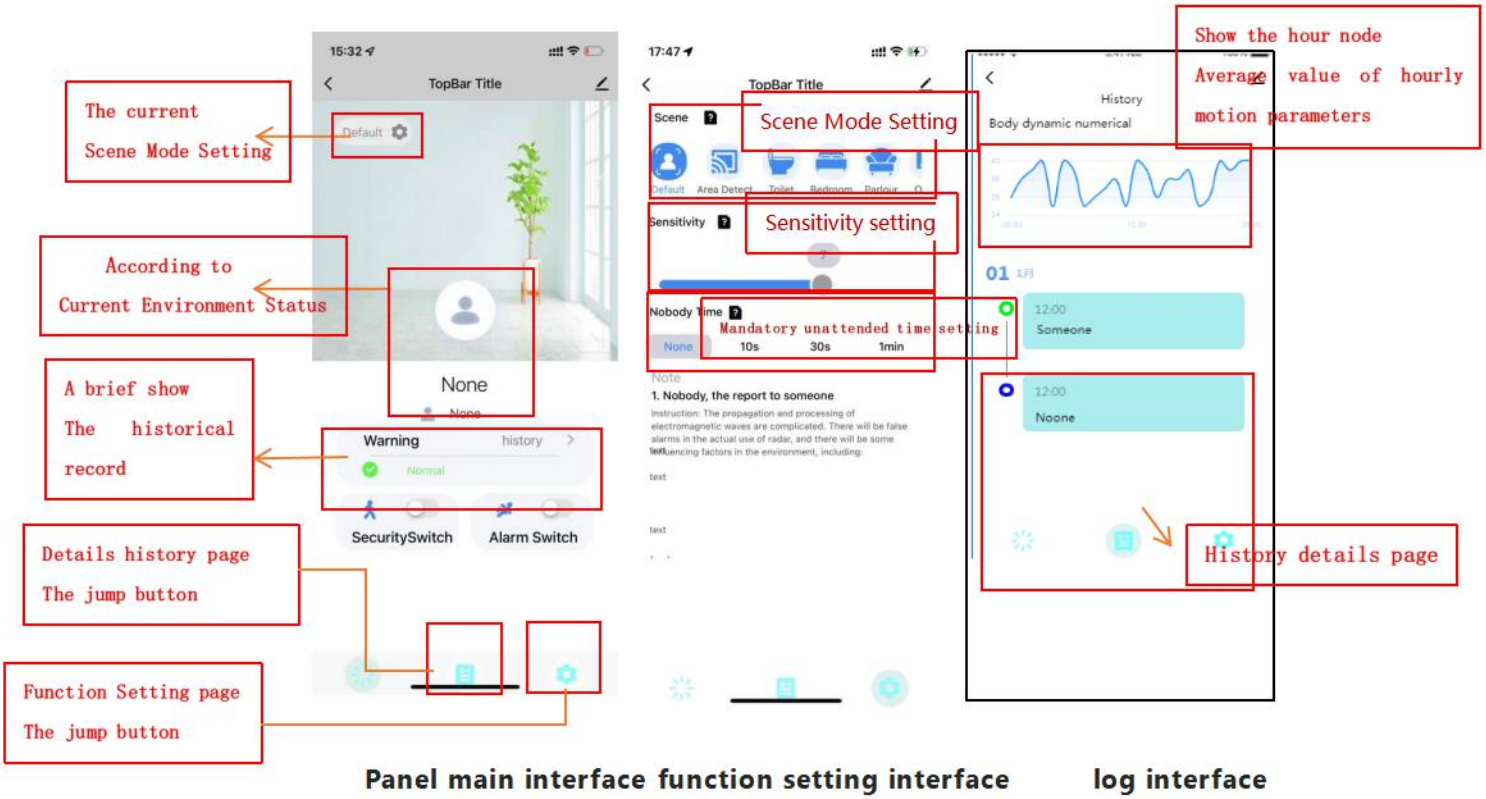
(Picture 6)

6、Press and hold the button on the radar hardware, let go after seeing the red light change from on to off, and see that the red light starts to flash. At this time, the radar enters the network distribution mode. Click [the indicator light is flashing quickly] to go to the next step. . (Picture 6)

7、At this time, the gateway will enter the state of continuously searching for zigbee devices. After a while, the gateway can automatically search for relevant radar devices. Follow the instructions to successfully add zigbee devices.


15:05
Connecting Device
Power on the device.
02:00

2.APP panel interface introduction



Panel main interface function setting interface log interface

3.Introduction to application scenarios and functions of human presence radar

1. Restrictions on human radar installation scenarios:

Human presence radar is only suitable for indoor scenes

·It is necessary to avoid fans, etc., which will vibrate and rotate metals within the radar detection range

2. Main function points of human presence radar:

Someone/Nobody Status Judgment

4.The main functions of the human presence radar are explained in detail:

1. Judgment of someone/nobody status:

- **No Time Test:**

When there is no one in the radar detection range, the radar will detect whether there is no human movement, breathing and other actions within the range for a period of time, and output the unmanned state when it is confirmed that there is no one. (It is normal to enter the unmanned state within 1min in a normal environment)

Test with default sensitivity leave the radar detection area There are no people moving around in the environment and no interference from sources of interference start the timer	When the radar status changes from someone to still - "no one stops for a moment Recording radar into dead time In the range of 90 s ~ 180 s, it means **"pass"**

Example test table format:

Testing frequency	scene mode	Sensitivity	into no man's time	pass
the first time	default scene	3	45s _	pass

- **Trigger distance test:**

When a person within the radar detection range enters the trigger, the radar will instantly display the presence status.

Switch between different scene modes for testing Trigger range according to different scene modes Keep approaching the radar at a speed of at least 0.7m/s	When the radar state changes from no one - "someone stops for a moment Record the distance to the radar Compare and verify with the corresponding data provided If the error is within ±0.5m, it means **"pass"**

Example test table format:

Testing frequency	scene mode	Test direction	document data (radius)	real data (radius)	pass
the first time	default scene	The long side	4.5 m	4.2m _	pass

- **Sitting distance test:**

When the person within the radar detection range remains stationary, the radar will continue to display the stationary state of the person.

Test based on sensitivity "7"	sit still at the corresponding distance

Facing the Radar Sit Test within the Radar Sit Detection Range 5min per test	Record whether the radar can keep the occupant state after sitting for 5 minutes If it can keep the state of people for 5 minutes, it means **"pass"**

Example test table format:

Testing frequency	scene mode	Sensitivity	Test direction	document data (radius)	real data (radius)	pass
the first time	default scene	3	The long side	2.5 m	2.3 m	pass

- **Stateless testing:**

When the detection area is unmanned, the radar will output the unmanned state after a certain period of time judgment.

Leaving the detection range of the selected scene mode No trigger, no interference, keep for a certain period of time after entering the unmanned state Judging radar status	When the radar state Can hold "None" status means **"Pass"**

Example test table format:

Testing frequency	Whether the status is responsive	pass
the first time	Yes	pass

3.Historical version update instructions

Revision	Release Data	Summary	Author
V1.0_0606	2022/6/6	first draft	OF_Frank