Facial recognition crowd management system

(**MV-FT02**)

User Manual

(Ver A.0)

May, 2020

Catalog

1. Product Overview

1.1. Product Introduction

Based on the infrared thermal imaging technology, the machine can do face recognition and collects human body temperature at the same time, and the captured pictures are uploaded to the management platform. After face recognition, the access control function can be turned on. High temperature warning threshold can be set. If the equipment detection exceeds the warning threshold, you will get a pop-up prompt, and snapshot photos will be uploaded to the management platform. This product has been matched with our cloud platform, or a LAN server. The management platform is a web management software used to manage our company's relevant hardware products. It supports windows, Mac OS, Linux, iPhone, Android and other platform ends to realize device management, authorization management, personnel information management, access record viewing, record import and export through any web browser.

1.2. Product characteristics

- Thermal imaging resolution: 16 * 4.

- Field angle on site: 60 ° * 16 ° .

- Temperature measurement range: 30 ℃ - 45 ℃.

- Temperature measurement accuracy: 0.5 ℃.

- temperature alarm threshold: 35.5 ℃ ~37.5 ℃ by default (support customization).

- Pass mode when the temperature exceeds the threshold: pass or fail.

- Face mode: alarm or no alarm.

- Voice prompt of verification result: supported.

- Face verification accuracy: ≥ 99%.

- Face recognition distance: 0.3m-1m.

- Maximum number of faces: 20000, JPG or JPEG format.

- Maximum number of event records: 100000.

- Camera: 2MP, full hardware dynamic.

- screen: 8 "IPS, 1200*1920

- CPU: Quad Core A17.

- Memory: 2GB.

- Read only memory: 8GB EMMC.

- Operating system: Android 7.1.2.

- I / O port: USB (relay output) for the gate;.

- Communication: wired or wireless network.

- Power input: DC 12V.

- Working temperature: 0 ℃ - 50 ℃ (for temperature measurement), - 10 ℃ - 50 ℃ (only for face recognition).

- Working humidity: < 90% RH.

- Working environment: indoor, no wind, no direct sunlight.

- Deployment mode: support offline operation, or managed by cloud platform and LAN Platform; network management; installation free.

- Working mode: identification mode, only temperature measurement mode, full open identification mode.

  - Identity recognition mode: after the face + body temperature pass, the door will automatically open and pass, and the stranger will automatically alarm and record; after the body temperature is judged successfully, enter the face recognition mode, and the stranger will automatically recognize and upload, which is suitable for recognition and verification scheme.

  - Unique temperature measurement mode: face recognition only measures temperature and records photos of the measurement personnel. It is suitable for large traffic scenarios.

  - Full open recognition mode: full pass, automatic face recognition, temperature measurement. Anyone passing the machine will record their face and body temperature. No platform to use.

- Installation mode: wall mounted, floor type (triangle support, square plate base support), desktop, gate.

2. Instructions for use

- The installation height range of 1.3-1.4 meters (from the ground to the top of the tablet);

- Installation Angle, with an elevation Angle of 5-10 degrees, suitable for people of different heights;

- The temperature measurement distance is in the range of 30-80 cm, the short person is close to the point, the tall person is far away;

- For temperature measuring equipment, it is limited to indoor use (the ambient temperature is about 16~35°C), and sunlight should be avoided.If it is required to be used outdoors, it is necessary to ensure that the temperature measuring camera module of the temperature measuring equipment avoids light and rain, and the temperature measuring camera module is shielded and protected.

- Do not touch or heat the temperature measuring camera module by hand.

- Before use, please check the equipment according to the instruction and make sure there is no damage. If there is any damage, please do not use it.

- This product is only used for personnel identification and infrared temperature test. The test results are for reference only. If any abnormality is found, please seek medical advice in time and follow the temperature test results of professional medical institutions.

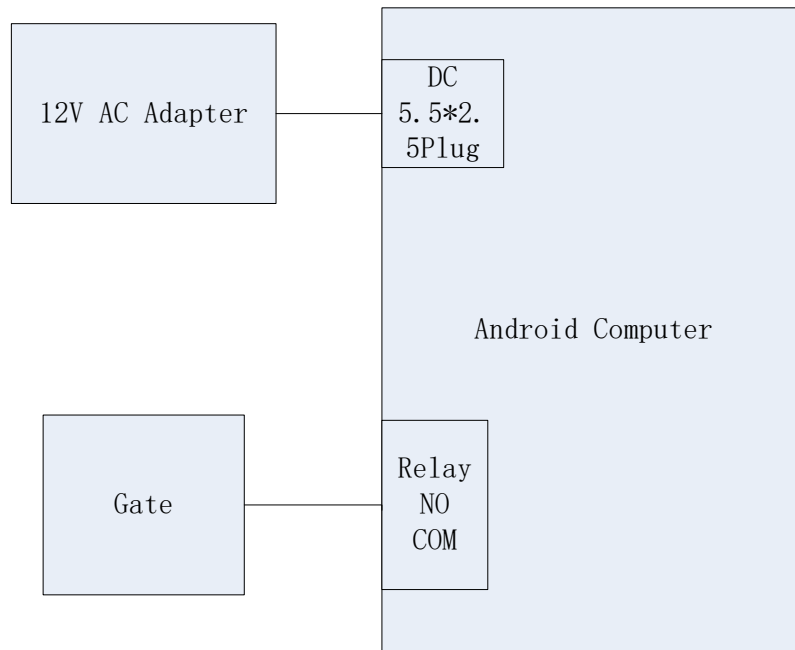- Please follow the instruction strictly.

3. Hardware equipment

3.1. Port definition

3.2. The wiring diagram

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┌──────────────────┐        ┌──────────────────────────┐
│                  │        │  ┌──────────┐             │
│                  │        │  │   DC     │             │
│  12V AC Adapter  │────────│  │ 5.5*2.   │             │
│                  │        │  │ 5Plug    │             │
│                  │        │  └──────────┘             │
└──────────────────┘        │                          │
                            │     Android Computer      │
┌──────────────────┐        │  ┌──────────┐             │
│                  │        │  │  Relay   │             │
│                  │        │  │   NO     │             │
│      Gate        │────────│  │  COM     │             │
│                  │        │  └──────────┘             │
│                  │        │                          │
└──────────────────┘        └──────────────────────────┘
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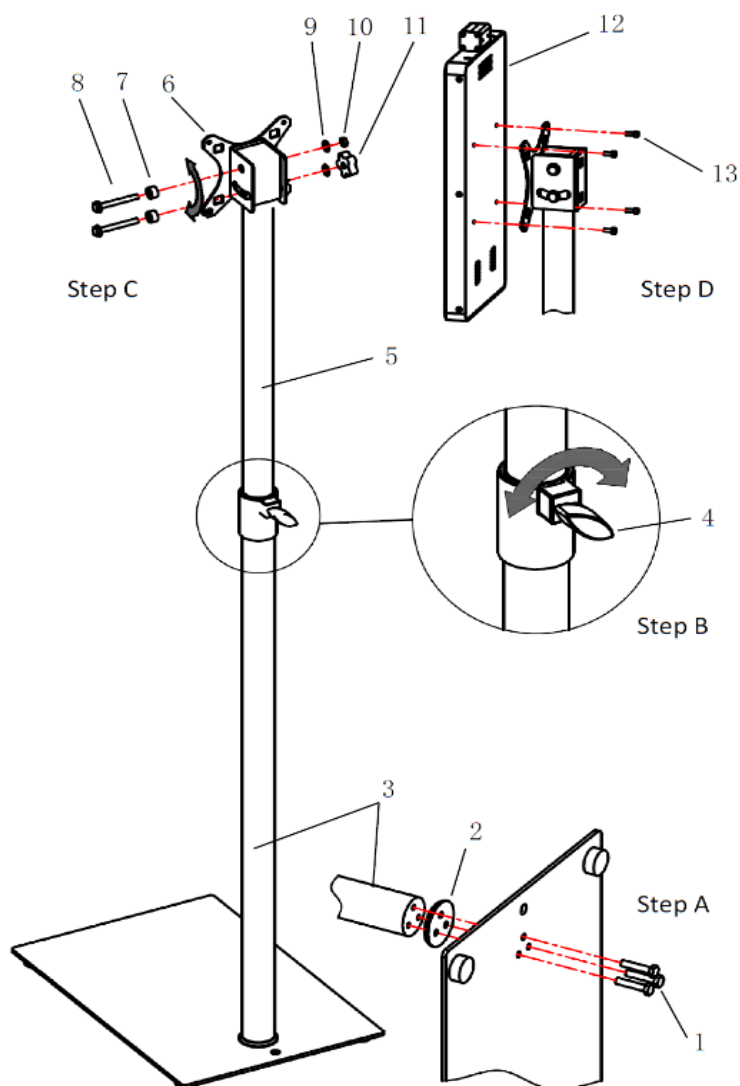
3.3. Install the operating

Step A: install the base (take out 3 bolts 1, plastic pad 2 and support column 3) and tighten them as shown in the figure above.

Step B: adjust the height of the telescopic rod 5. After knob 4 loosens the screw, adjust the height of the telescopic rod to ensure that the total height of the support frame is 1.3-1.4 meters (the distance from the ground to the top of the tablet);

Step C: install the equipment connection plate 6, (take out the thick plastic pad 7, long screw 8, thin iron pad 9, nut 10, plum nut 11), and install it according to the schematic diagram.

Step D: install the face recognition temperature measuring device 12, align the installation hole on the back of the device with the hole on the connection plate of the device, and then install and tighten 4 M4 screws 13.Proper adjustment of equipment elevation Angle (or vertical placement) after tightening the bolts to complete the installation;
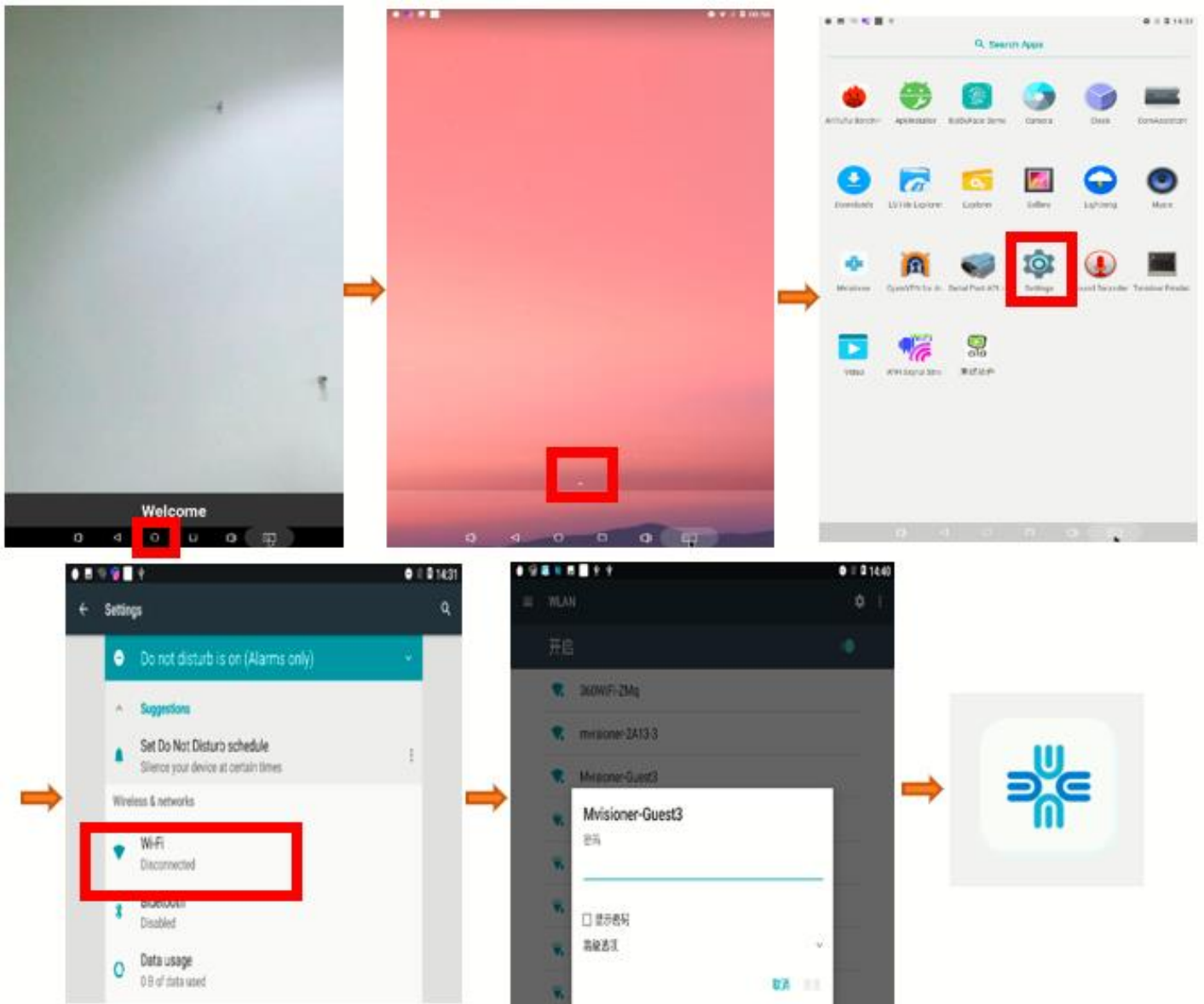Finally, after the power is connected, it can enter the face recognition temperature measurement system.

4. Device local settings

4.1. Configure WiFi

Use the mouse to configure the wireless network, click the bottom of the face recognition machine interface to return to the desktop, click desktop "^" , enter the interface, select "Settings", select "WiFi", select WiFi and enter the password, and then click "connect" to save the WiFi. The device will automatically get the IP address and connect to neteork , and then click the icon to enter the software.

5. Use under management platform

5.1. Log in to the cloud platform

1. Open the browser, enter the cloud platform (http://120.196.129.210:18843/), and enter the corresponding account password to log in to the platform. (login temperature terminal software: payment account and password after installation)
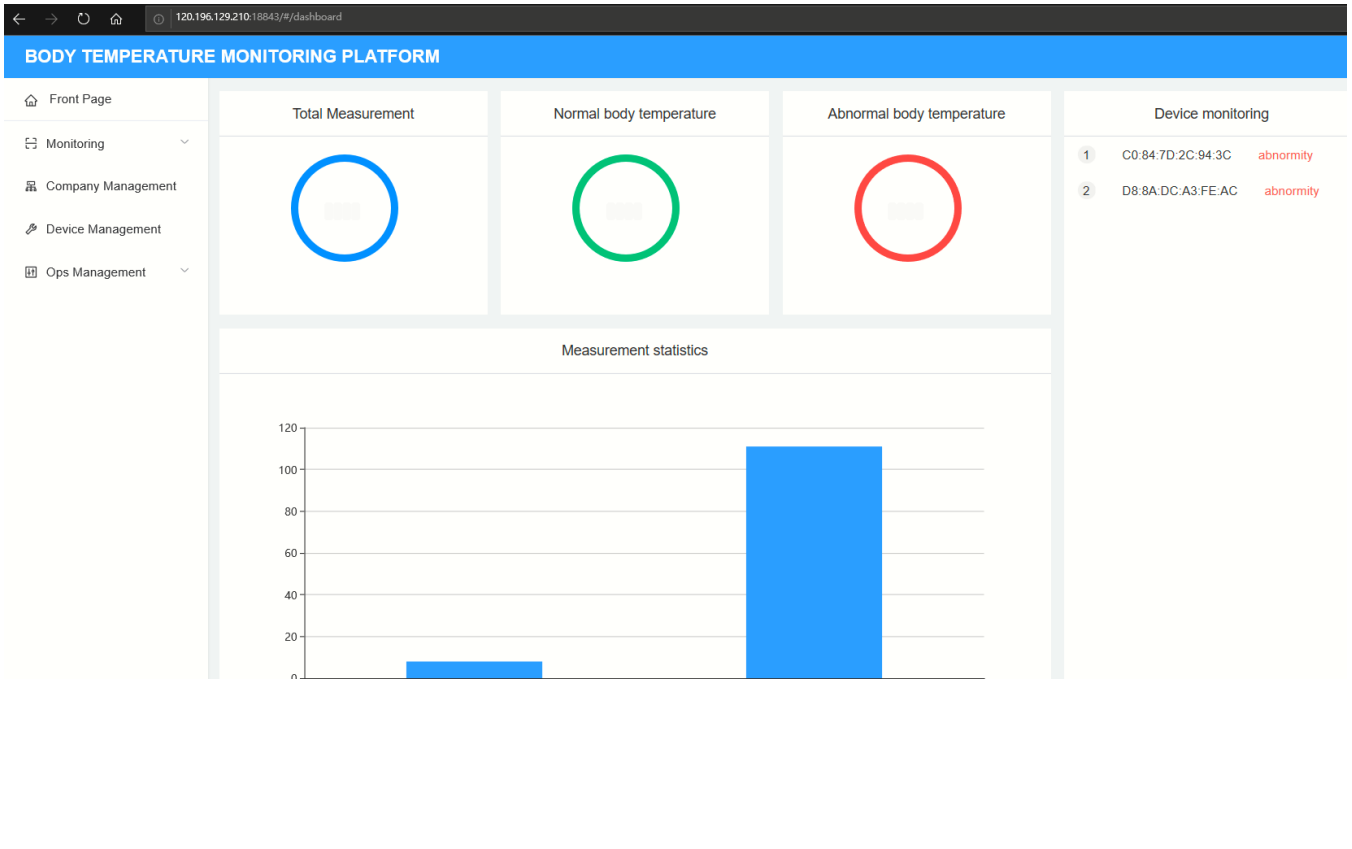

5.2. Enter the system

The interface is divided into menu bar on the left and content display area on the right, as shown in the following figure:
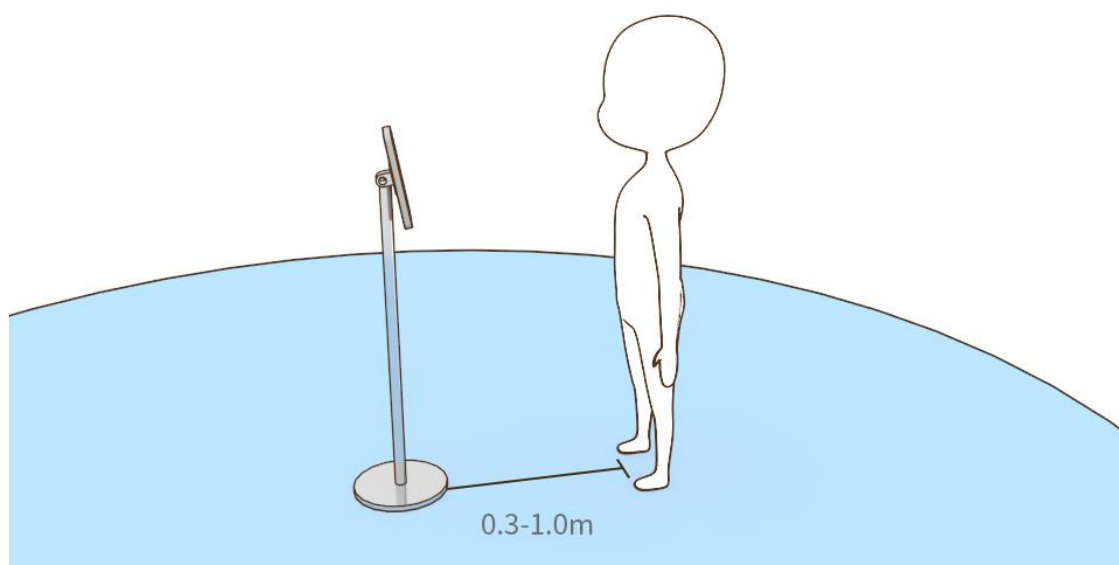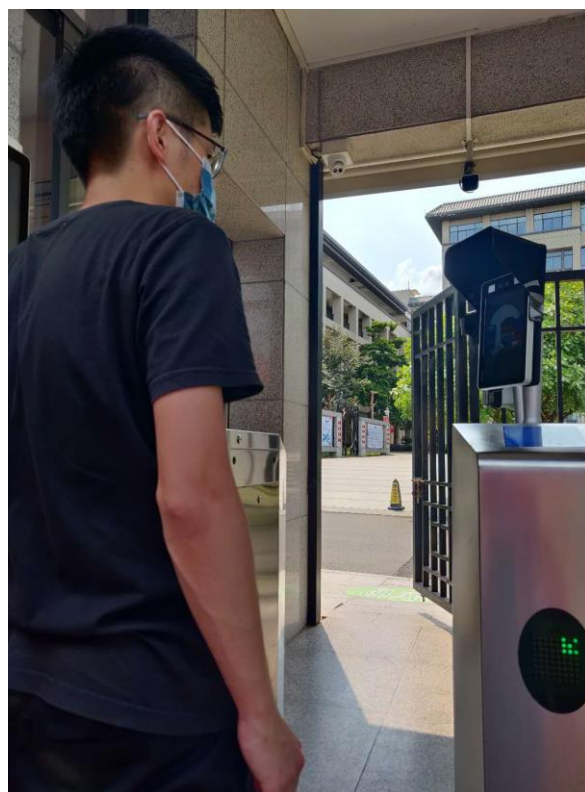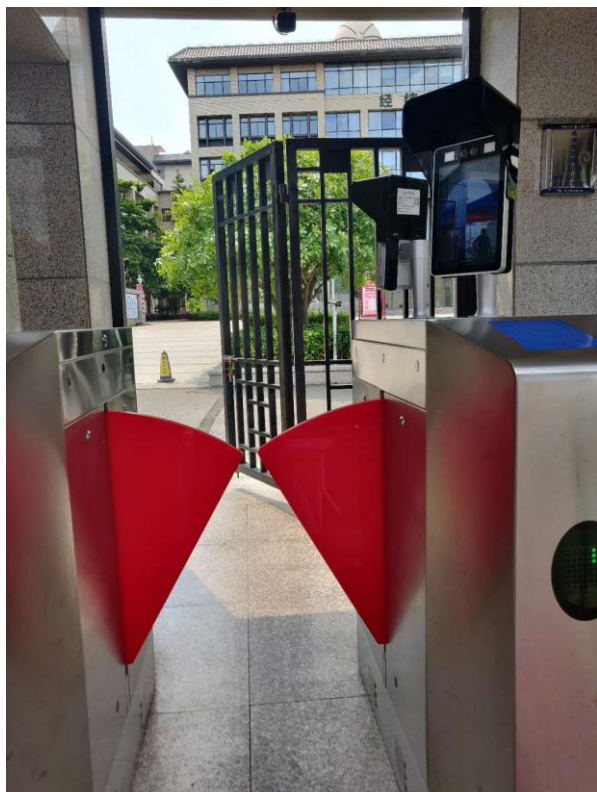
6. Deployment scenario

6.1. Distance

It is recommended to draw a yellow line on the ground, 0.3-1m away from the device.

6.2. Deployment sample

FCC Warnning:

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.