

## Product Overview

-Black Hawk- face thermometer camera is powered by face recognition and infrared temperature measurement technology, which can scan the forehead intelligently and dynamically, measuring the temperature accurately. In the process of temperature measurement, only the forehead temperature of the human face is detected, and the system will not measure the temperature of hair, other body parts nor other objects, which can effectively avoid the temperature error caused by other environment or objects.

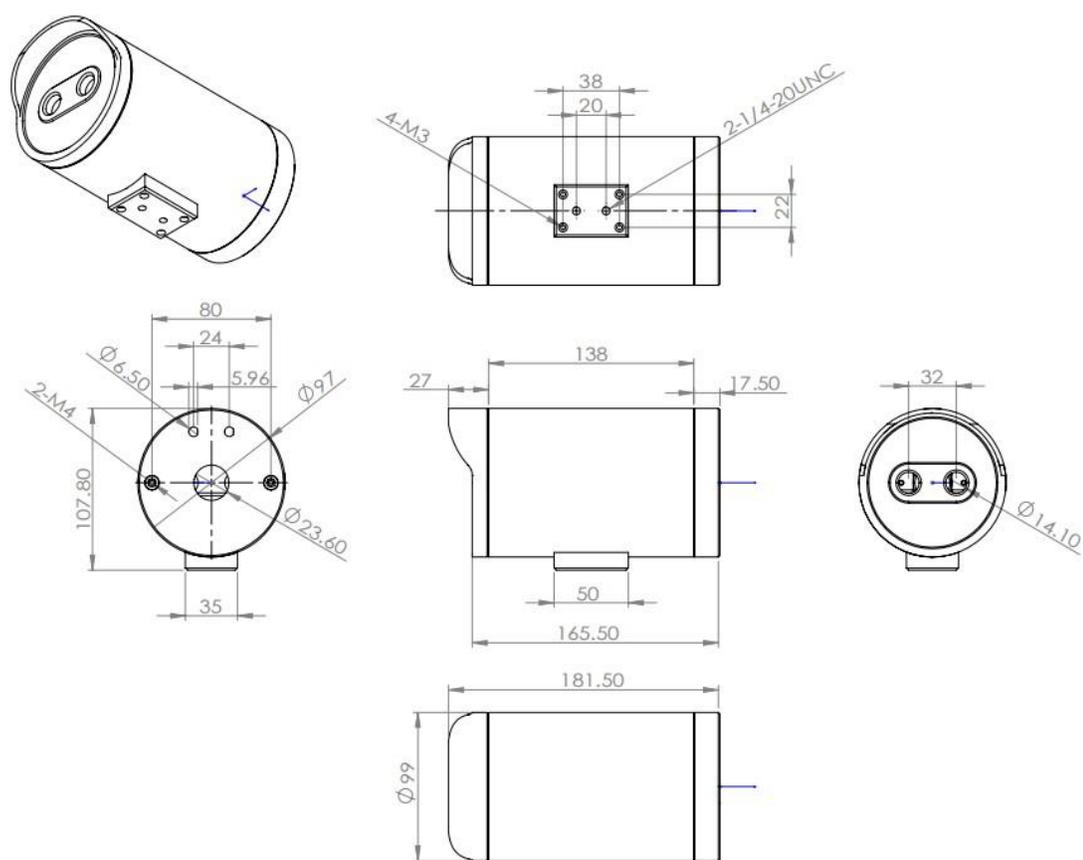
## Product Features

- 1、 Intelligent dynamic face tracking temperature measurement technology, only measure forehead on the face :
- 2、 the system automatically recognizes the face and measures the temperature.within 5 meters,
- 3、 one-key calibration temperature technology, no need for black body :
- 4.No need to connect to a computer, it can work with a display device .
- 5、 The system fails to recognize the face and appears in the face box, the system does not measure the temperature
- 6、 Data management: supports one-click deletion of all temperature measurement data, and supports optional deletion of facial data with abnormal body temperature :
- 7、 display the face and temperature of abnormal body and the statistics of people with abnormal temperature :
- 8、 display the total number of temperature measurement,face and temperature statistics
- 9、 support a variety of displays, HDMI interface, optional large and small screens,
- 10、 Over-temperature alarm mode: the frame of the face turns red and the alarm sound is triggered :
- 11、 This machine is stand-alone version, data cannot be connected to the Internet

## Product Parameter

<b>thermal imaging resolution</b>	206*156
<b>applicable system</b>	Android 7.1
<b>temperature measurement distance</b>	support 5.0m temperature measurement, and the best distance is within 4m
<b>temperature measurement accuracy</b>	±0.3o
<b>temperature measurement speed</b>	s0.1s
<b>calibration temperature model</b>	Temperature measuring system , one-key temperature calibration
<b>Data storage</b>	supports 50,000 face information storage
<b>W1F1</b>	2.4GHz
<b>Number of people measuring temperature simultaneously</b>	20
<b>CPU</b>	RK3288 4-coreprocessor
camera	sony 2 million pixel
<b>HDM1</b>	1080P HDMI 2.1
<b>UsB cable</b>	one micro UsB
output power	12V/3A
input power	AC100---240V
<b>working temperature</b>	-20C~40C
<b>Working humidity</b>	10%~90%

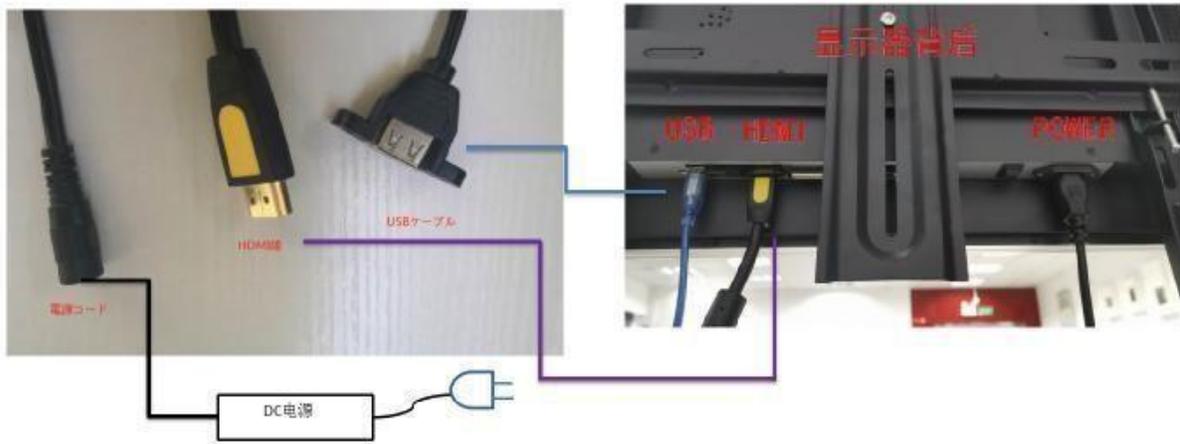
# Product appearance and size



## Equipment Installation

Interface Description:

- 1、 HDMI: Video connection between thermal camera and display。
- 2、 UsB: Use the mouse to operate the thermal camera system。
- 3、 POWER: Power connection of the thermal camera
- 4、 DC Power : The installation sequence of power supply is as follows : (make sure everything is connected, then power the camera.)



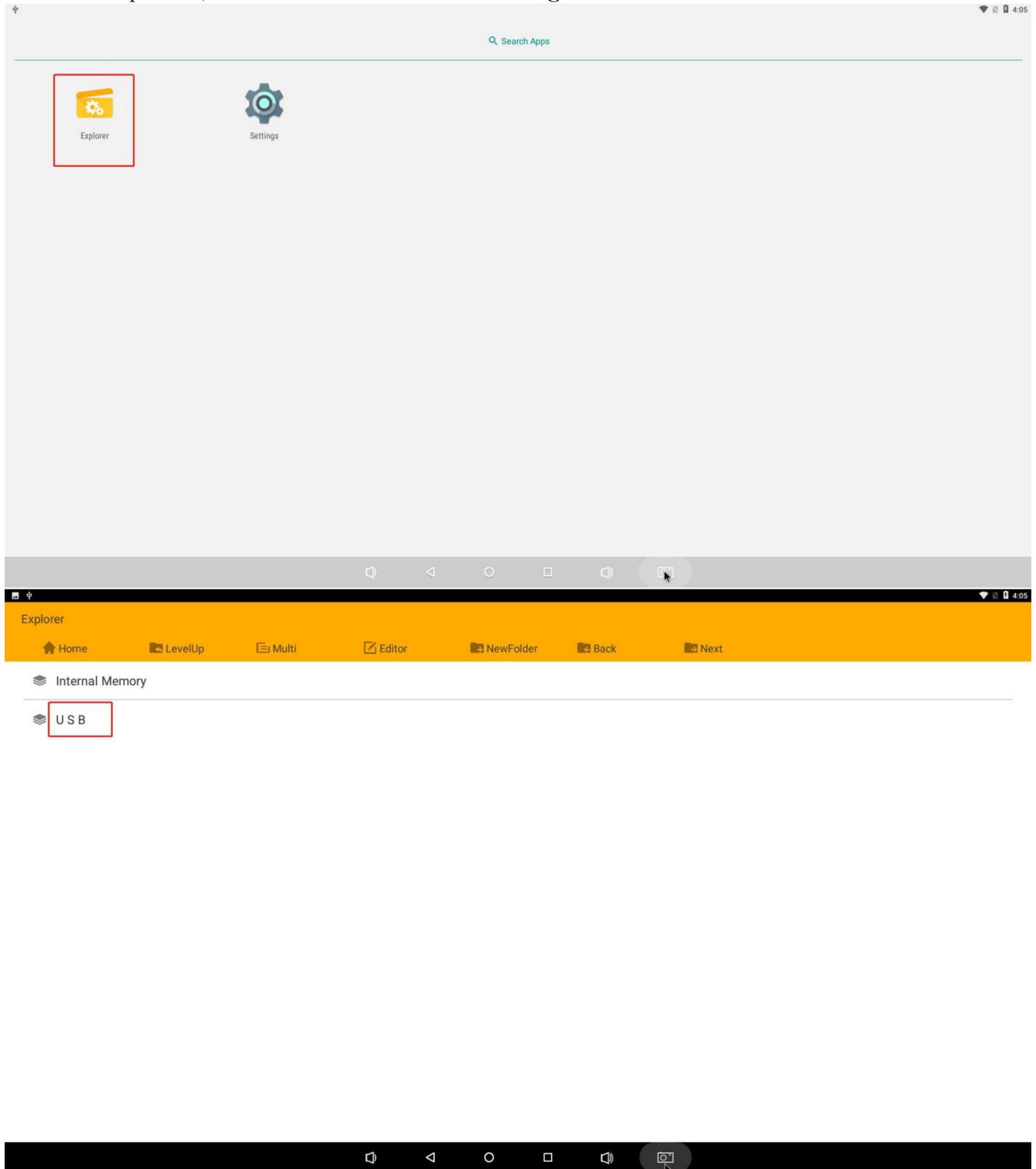
step1: the thermo camera is connected to the power supply, it starts to work

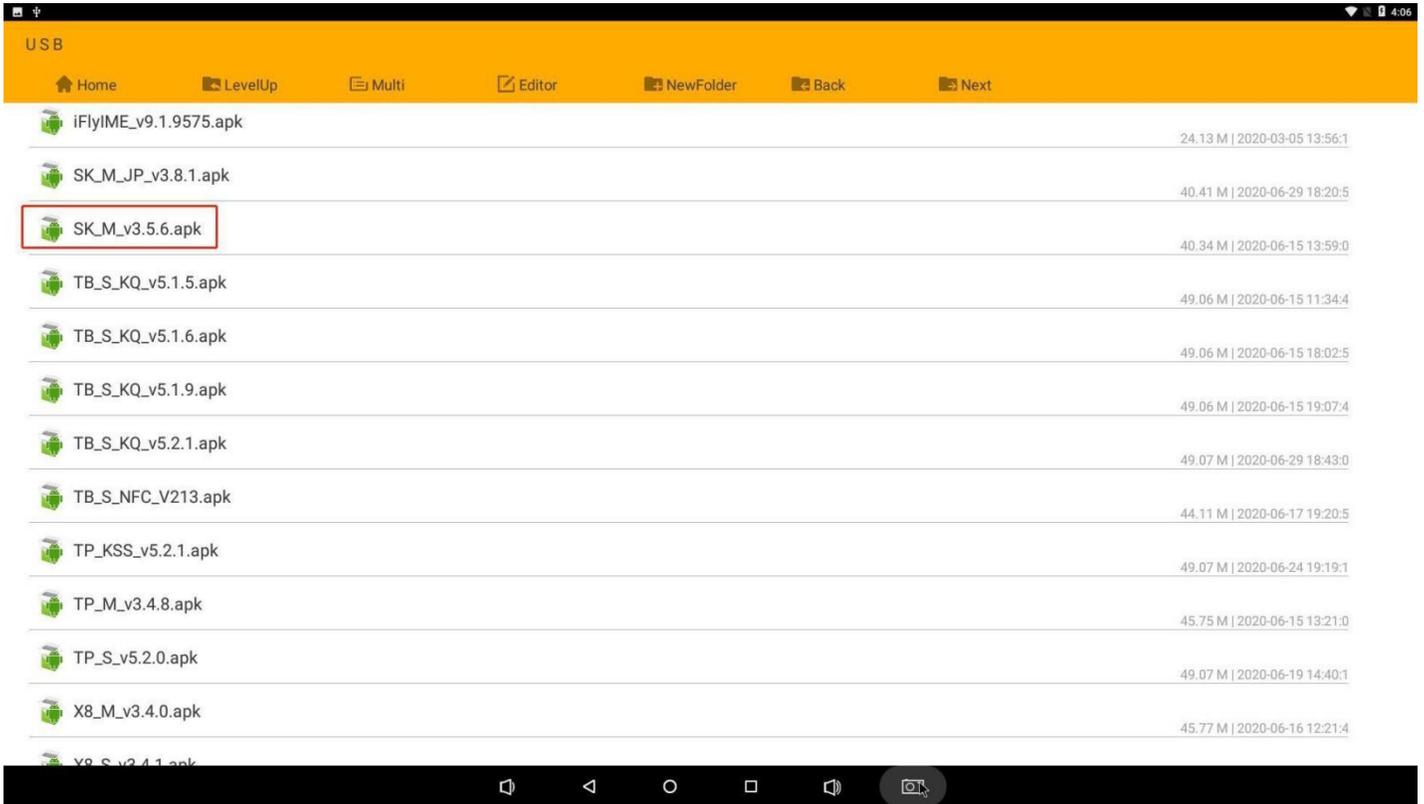
step 2: Connect the thermo camera and the display device through HDMI cable, then the temperature measurement information can be displayed on the screen

step 3: Connect the UsB mouse to perform system debugging operations, please refer to ·system Operation Manual· for details

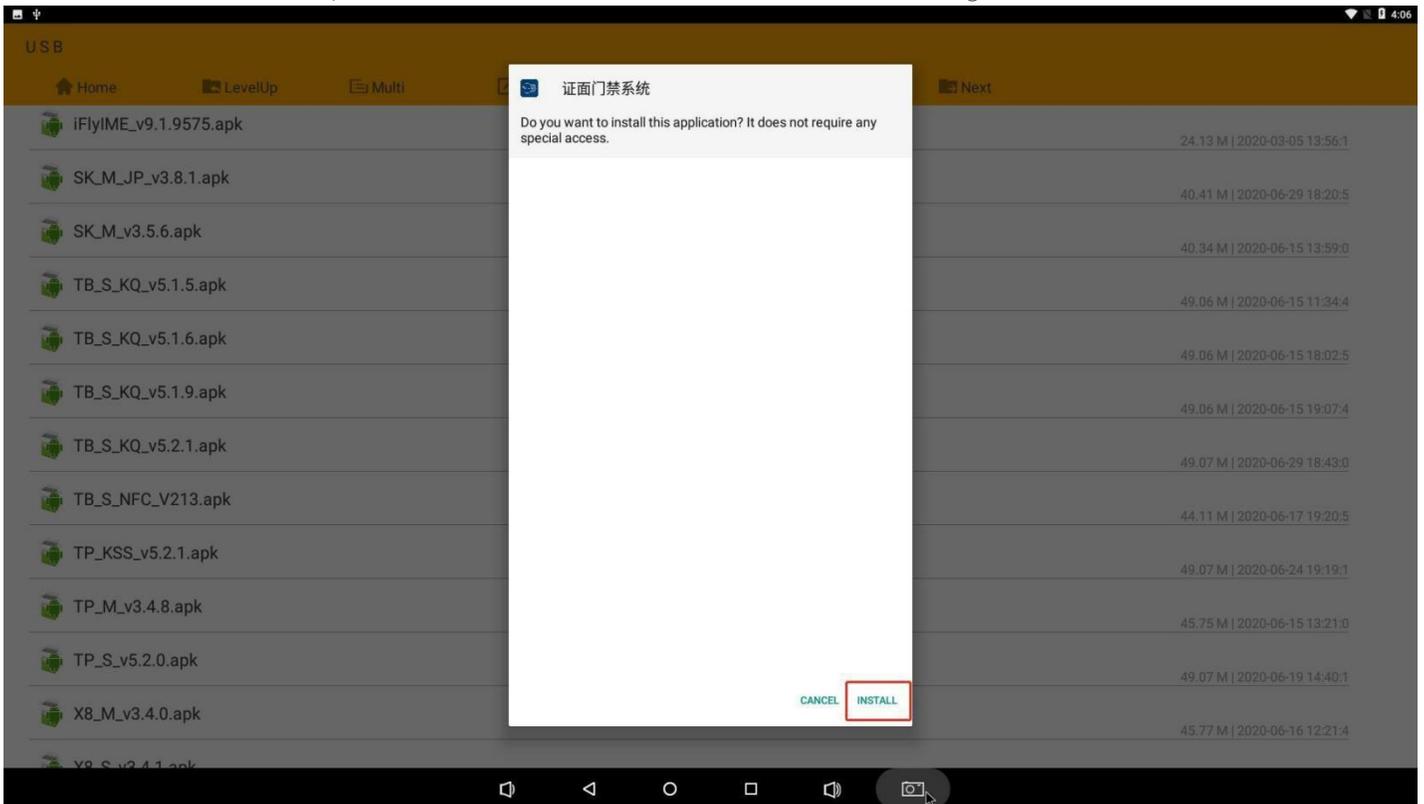
# software installation instructions

1. After inserting the USB memory with the software installation package apk, use the mouse to click to enter the "Explorer" (the button in the red frame in the figure), then click the USB, and click the

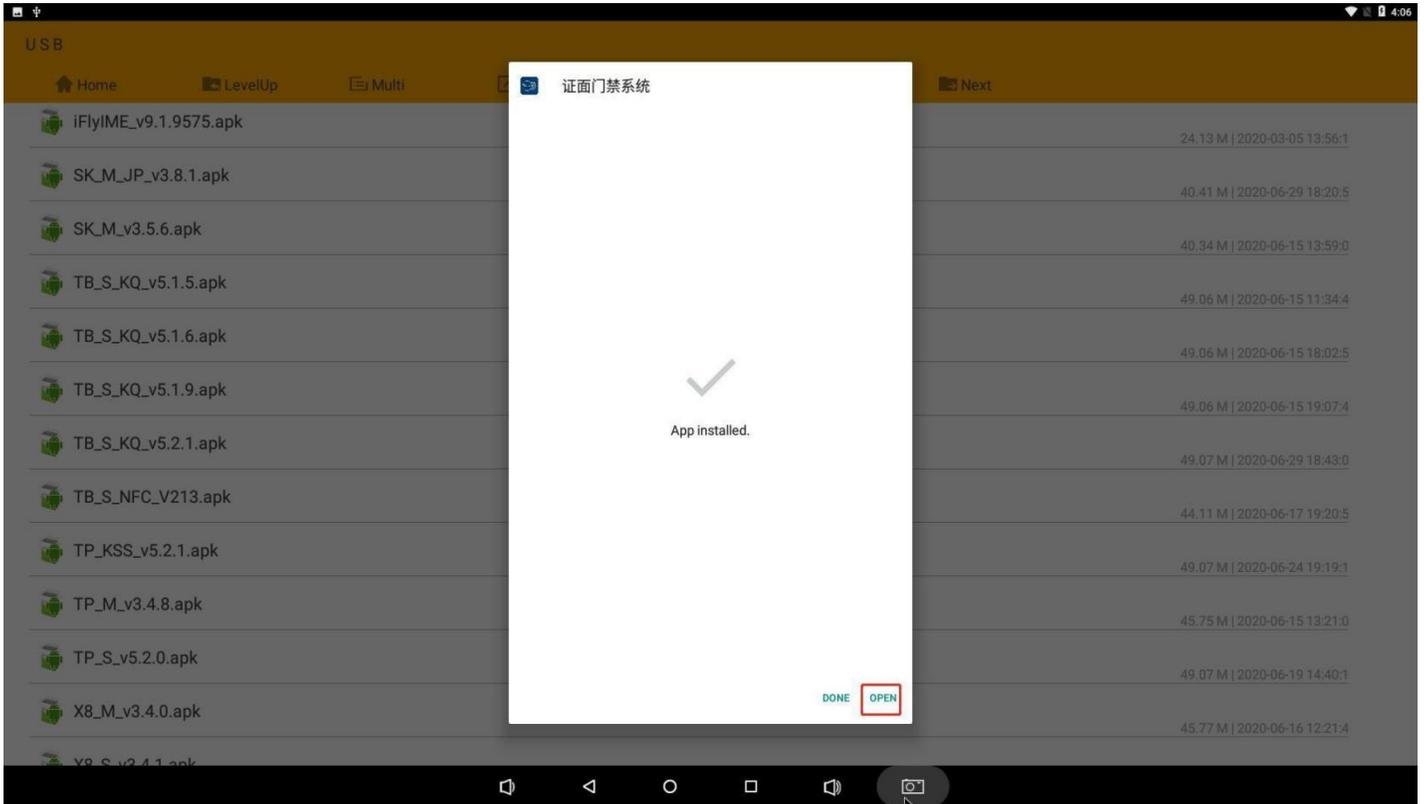




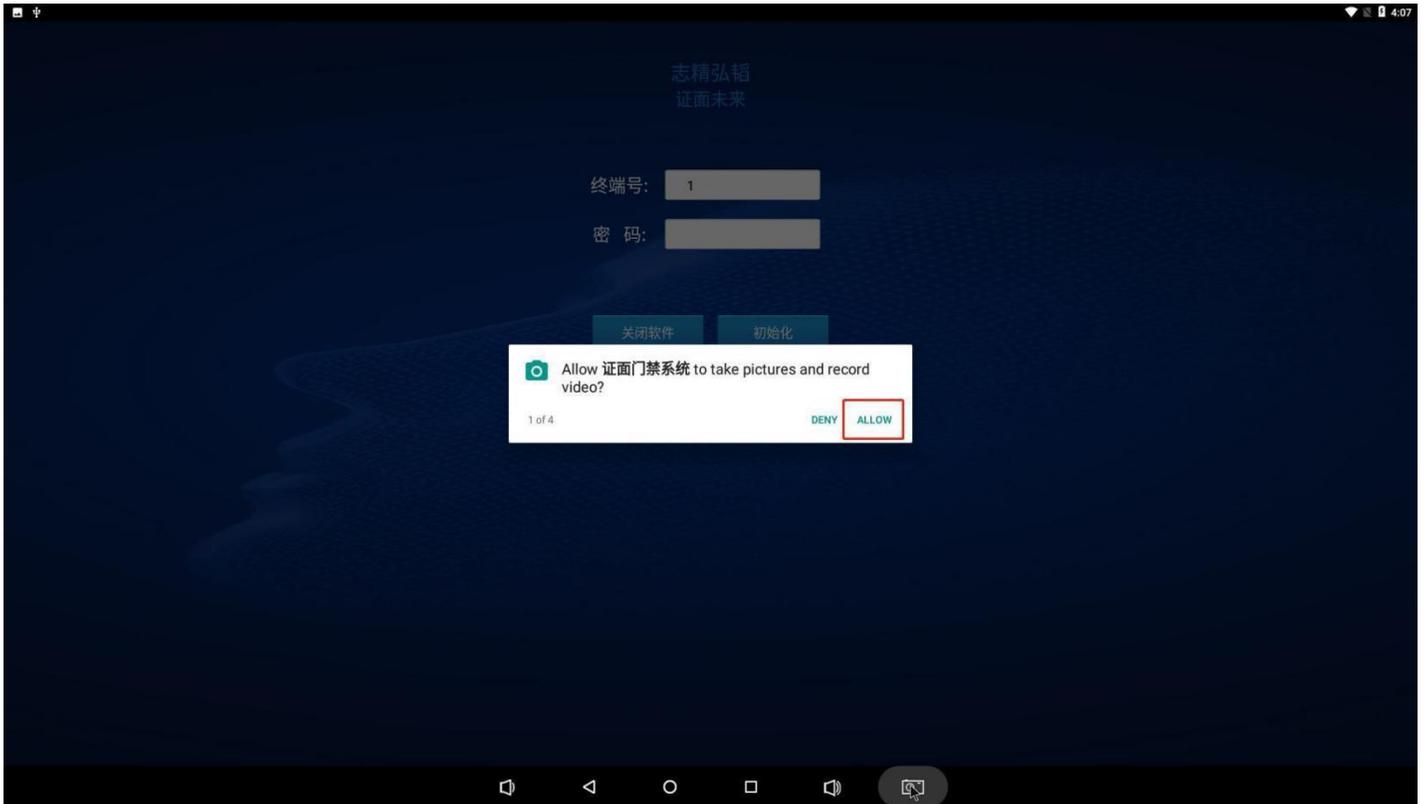
2. Install the software, click the button "install" in the lower right corner



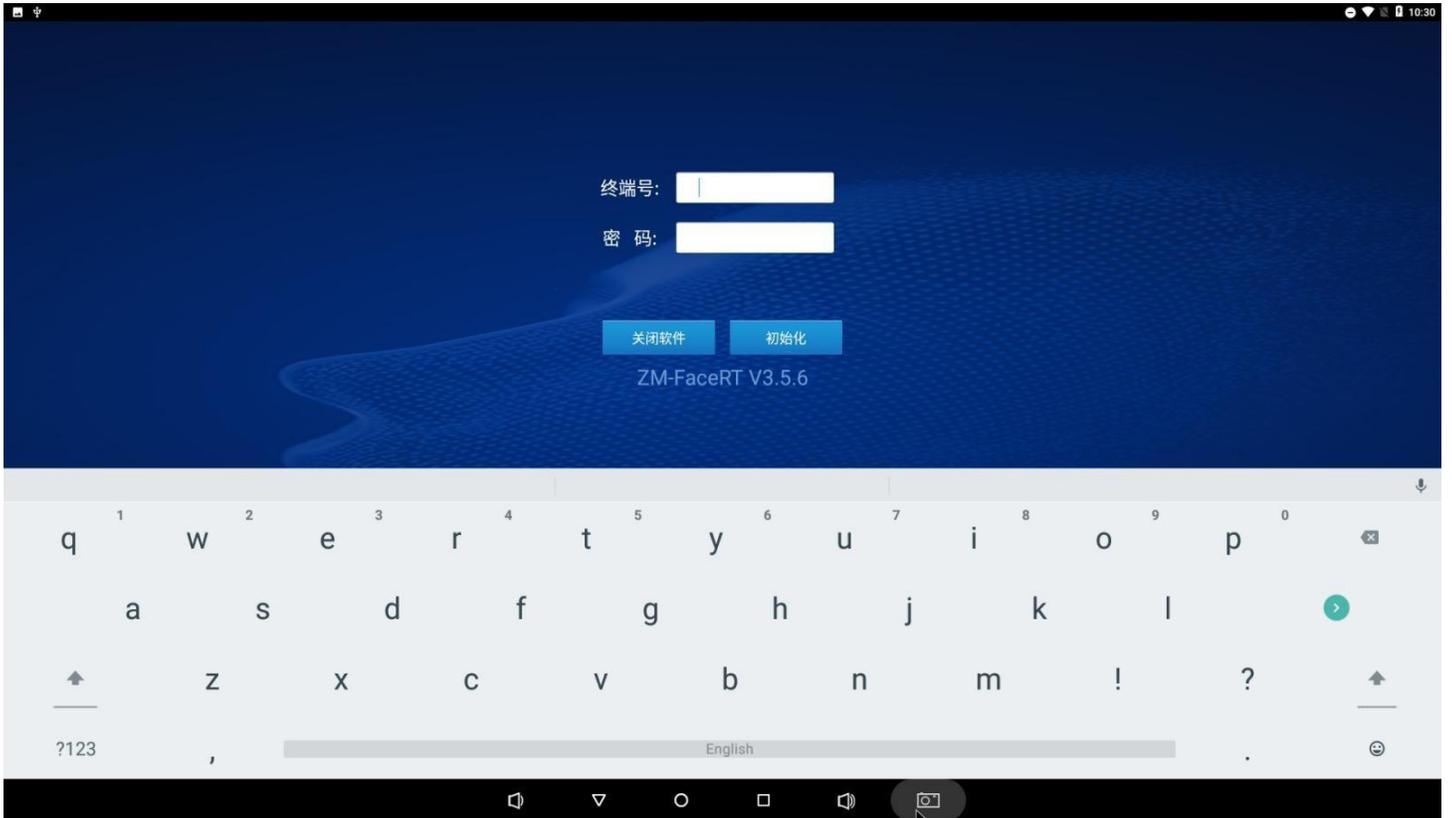
3. After the installation is complete, click the button "Open" in the lower right corner"



4. To allow the permissions required by the software, click "Allow"



5. . Enter the software interface



6. Enter the account number and password, click the button "initialize" on the right to enter the software interface



# software instructions

## 1. Interface and key description.

After all connections, installations and erection are completed, connect the power supply, and the temperature measurement screen will automatically open after the device is turned on.



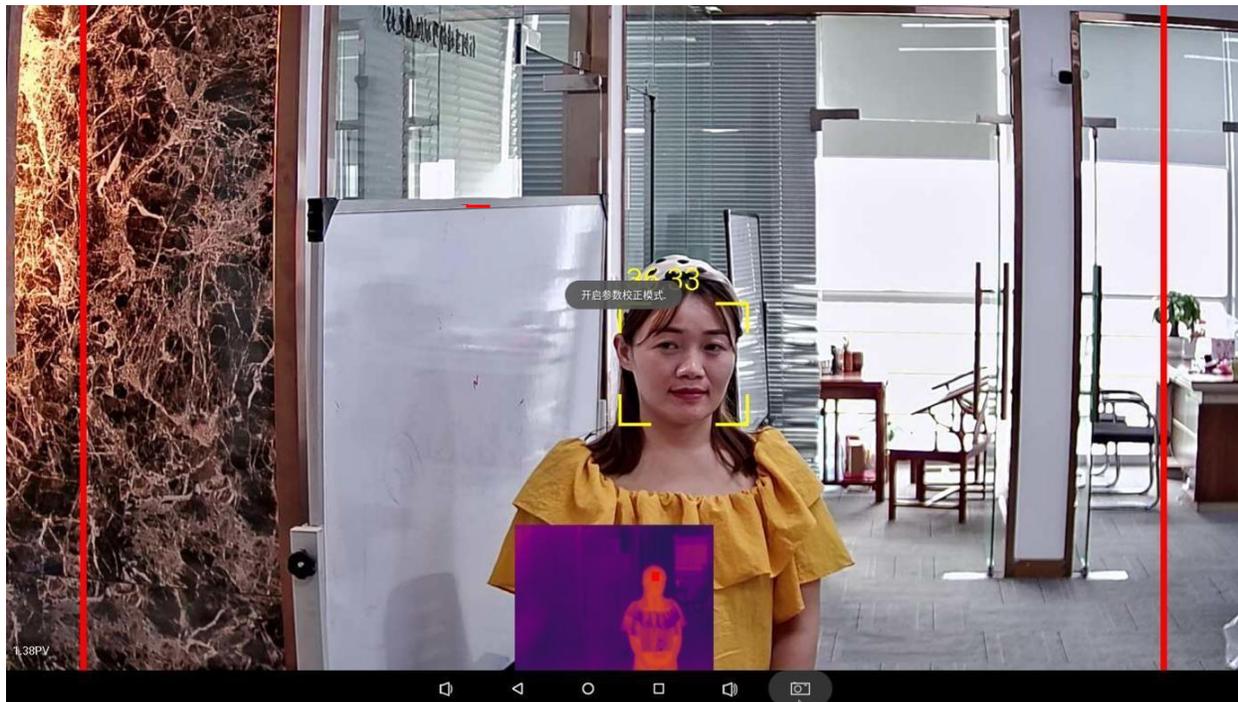
- 1、 Cancel key: If you don't need to save when calibrating temperature, you can press blank to cancel.
- 2、 Display area for infrared test.
- 3、 Calibration temperature save key: when calibrating temperature, "calibration, please wait" appears and press this blank to save.
- 4、 Temperature calibration button: Press three times in the red frame area, and "Enable parameter calibration mode" will appear.
- 5、 Direction keys: up, down, left, and right control, when installing new system software, correct the adjustment of infrared alignment to the face and forehead. (This button is the project setting mode, the user does not need to operate)

2、 set and adjust the temperature measurement point (adjust when installing or updating the software. users generally do not need to adjust)

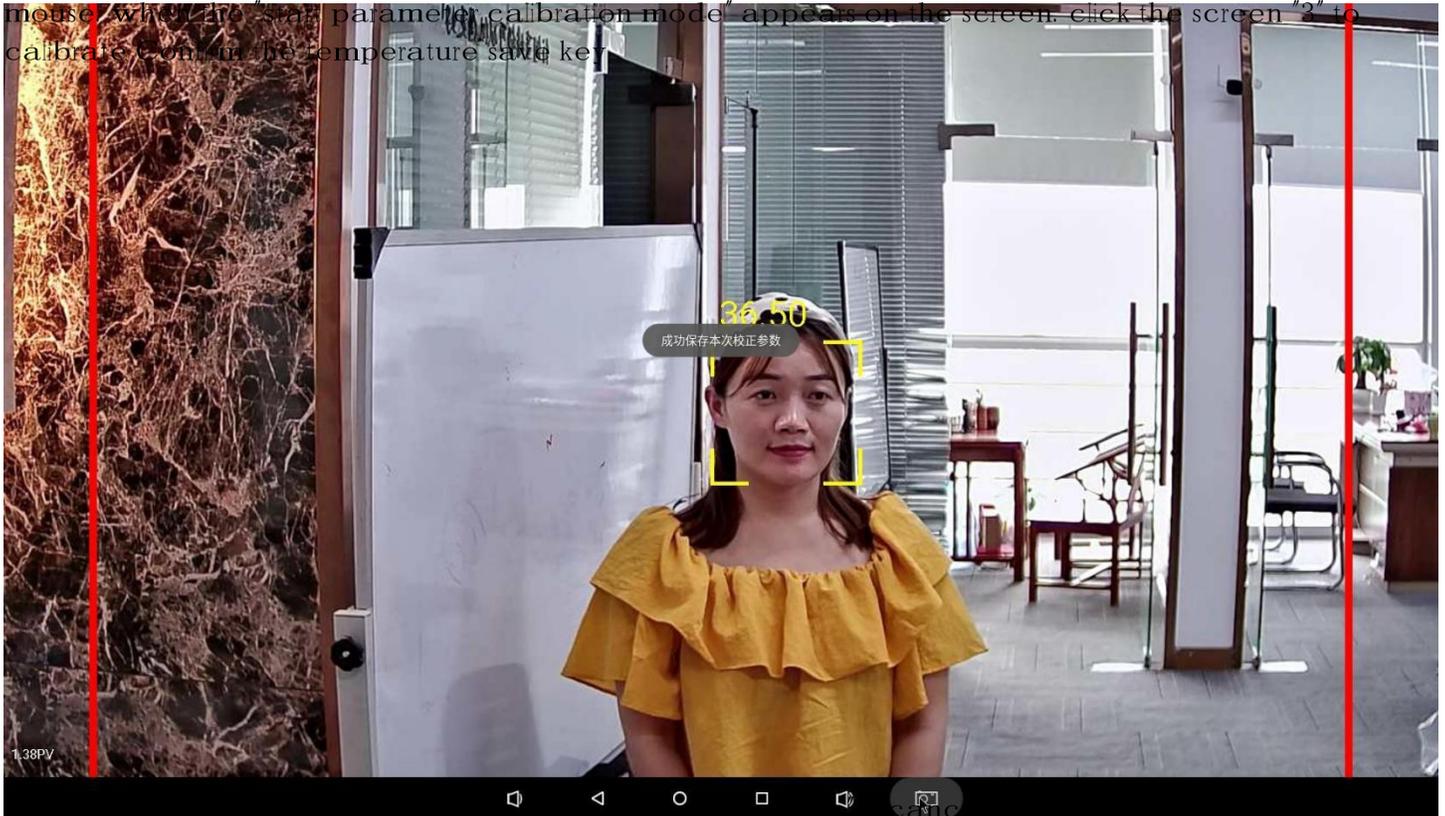


Debugging environment: Keep a distance of 1.5-2 meters between the face and the camera.

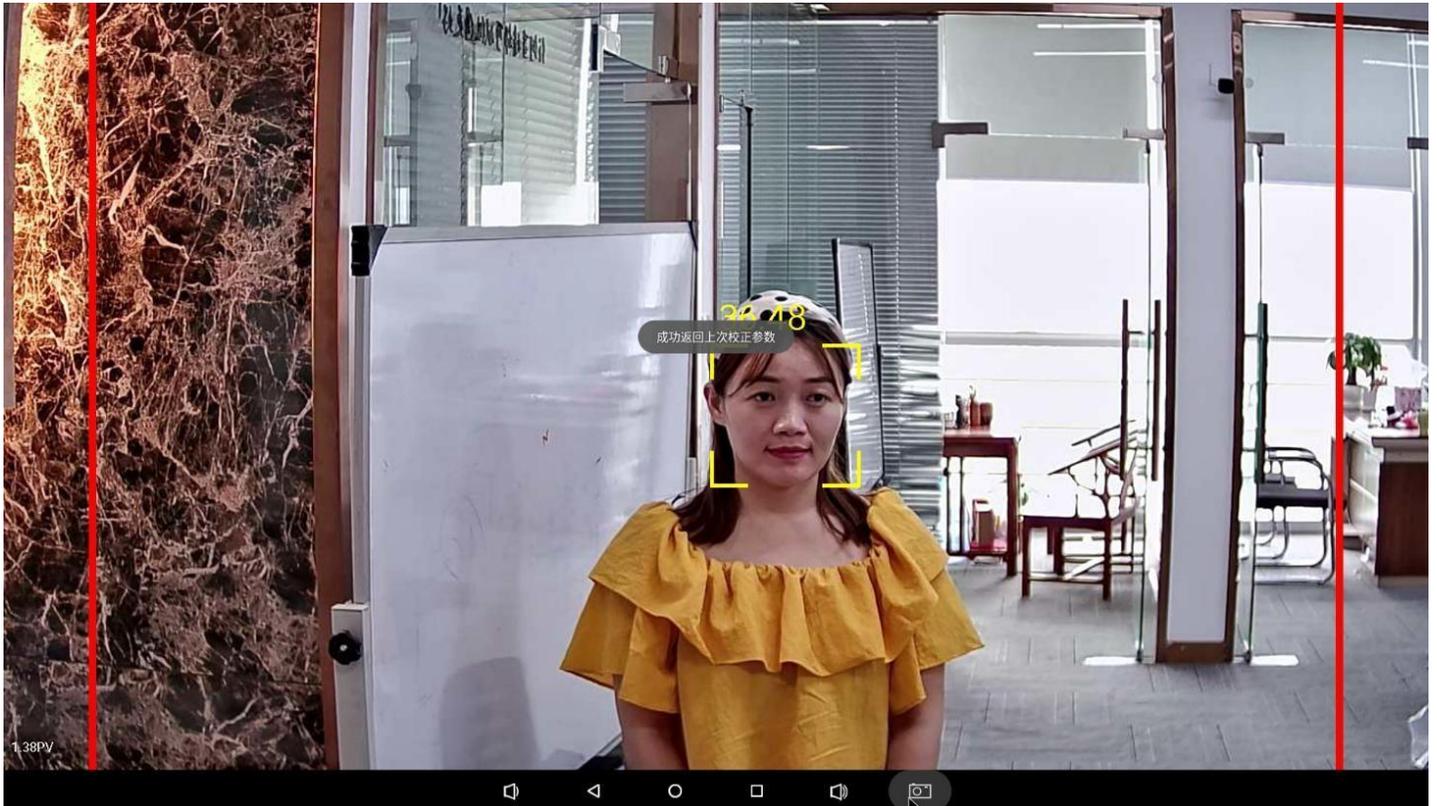
Method: use the left button of the mouse to quickly click the "4" temperature calibration button 3-10 times (if there is no slight change of position, click several times). the following screen appears. Note: Only one human face can appear on the screen during adjustment, and it must be static and unable to move.



when the infrared thermal image appears, the red card square should be in the center of the eyebrow of the face. If it is not in the center, you can adjust the direction by clicking the "5" arrow key with the mouse, when the "stop parameter calibration mode" appears on the screen, click the screen "3" to calibrate. On the temperature save key



cancel the saving (return to the last calibration parameter) screen to cancel the saving, that is.



4. set the calibration reference temperature. (Calibration is only required when the ambient temperature fluctuates greatly, and it is recommended to calibrate it once a day before use) Method: use the left button of the mouse to quickly click the "4" temperature calibration button for 3-10 times (if it does not appear to change the position slightly, click a few more times). the "calibration, please wait" screen appears. 5 seconds It is automatically saved afterwards. Note: Only one face can appear on the screen during calibration, and the person must be still and cannot move.

# Precautions

1. The face part should be more than 2/3 of the face area to be recognized; otherwise, the temperature measurement is invalid.
2. when calibrating the temperature, only one person is allowed in the screen, otherwise the calibration fails.
3. All external devices (such as UsB and HDMI) do not support hot unplugging.  
If unplugging occurs during work, the camera should be powered off and started again; otherwise, the temperature measuring system fails.
4. The UsB cable of the camera can be connected to the touch screen, wired or wireless mouse. The touch screen and mouse cannot be used simultaneously.
5. When using the mouse, all left button operations are click.
6. The HDMI cable is version 2.1 (gold-plated metal case). Please note that version 1.4 or below cannot be used when replacing the cable.
7. The system is recommended to be used indoors. it must be protected from water if it is used outdoors.

## FCC Statement

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.

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.

### Caution

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

### FCC Radiation Exposure Statement

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.