Body Temperature Measurement System Quick Installation & User Guide
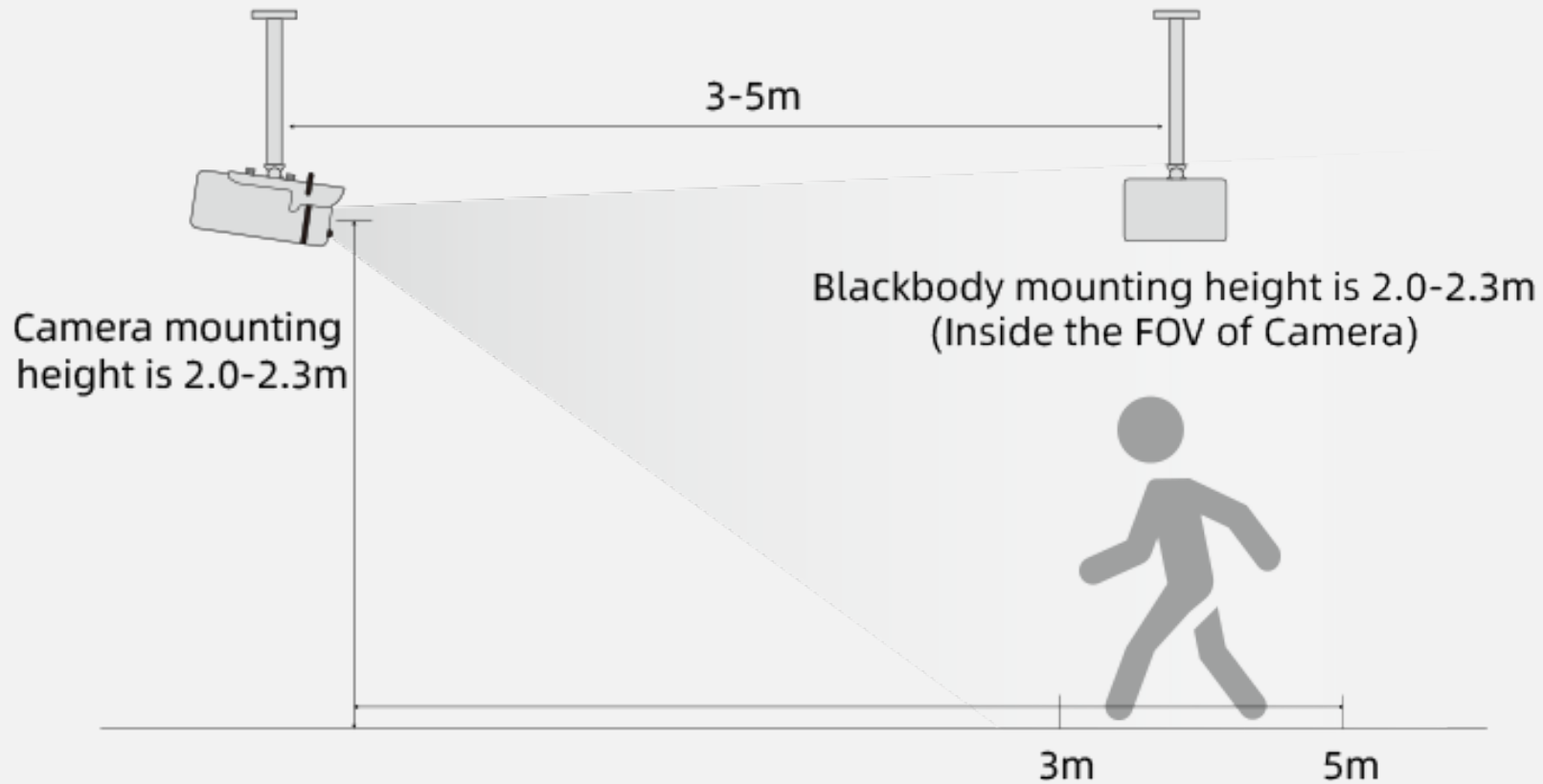
Installation
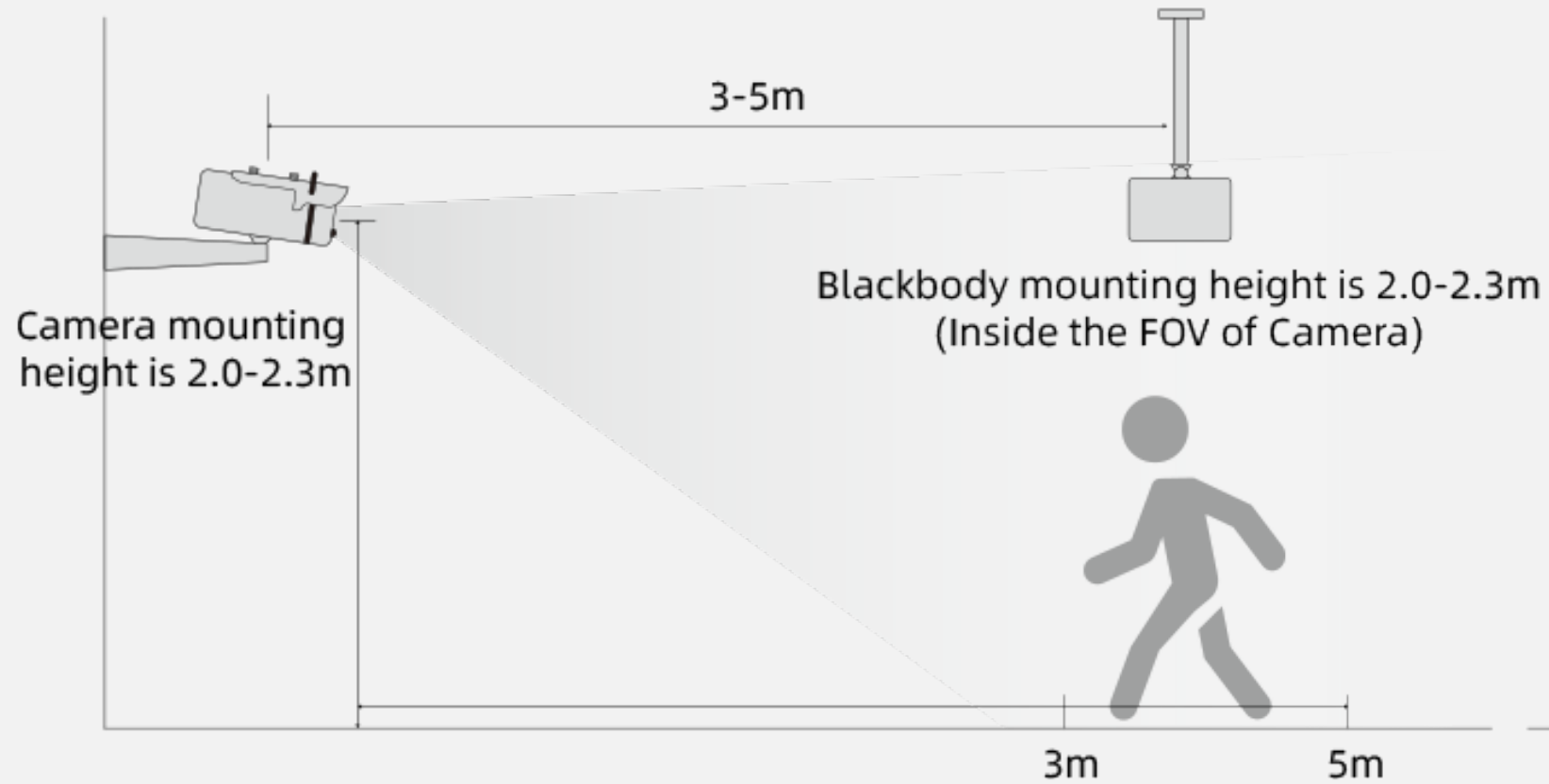

3-5m

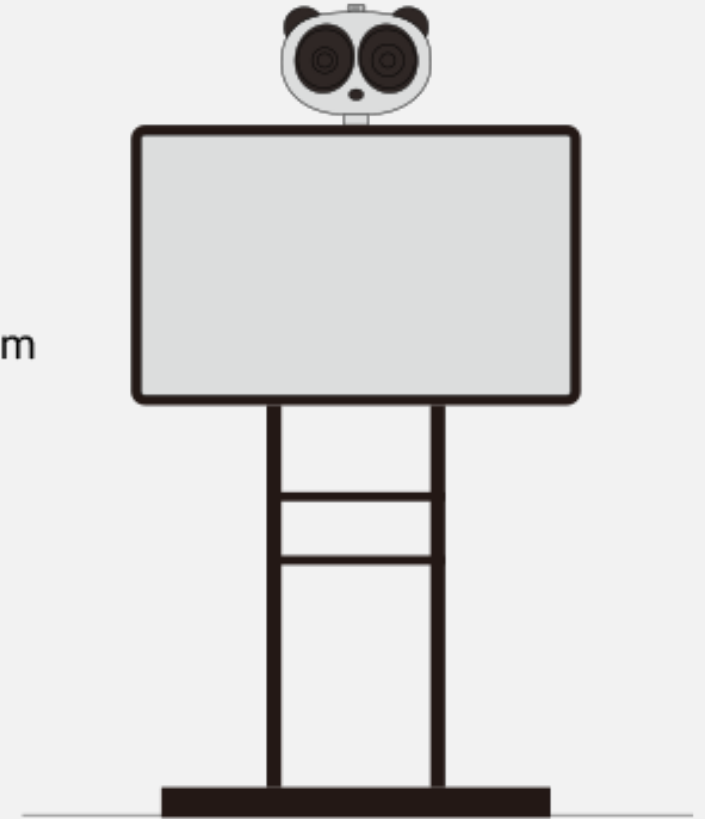Blackbody mounting height is 2.0-2.3m
(Inside the FOV of Camera)

Camera mounting
height is 2.0-2.3m

3m   5m

Ceiling Mount
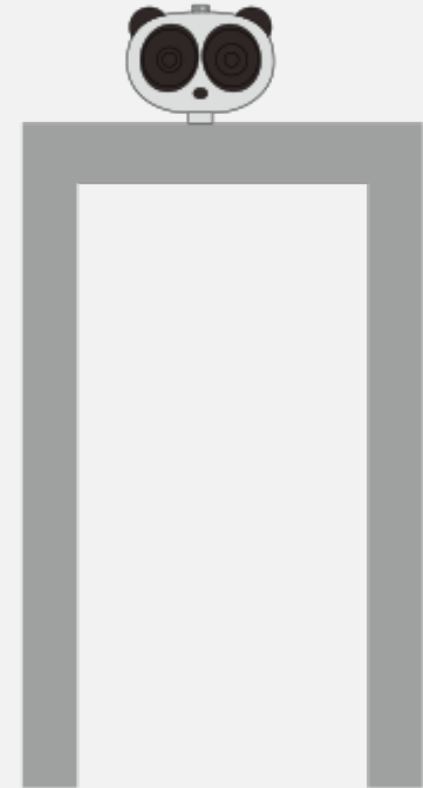
**Installing on the
Security Gate**

Installation

3-5m

Blackbody mounting height is 2.0-2.3m
(Inside the FOV of Camera)

Camera mounting
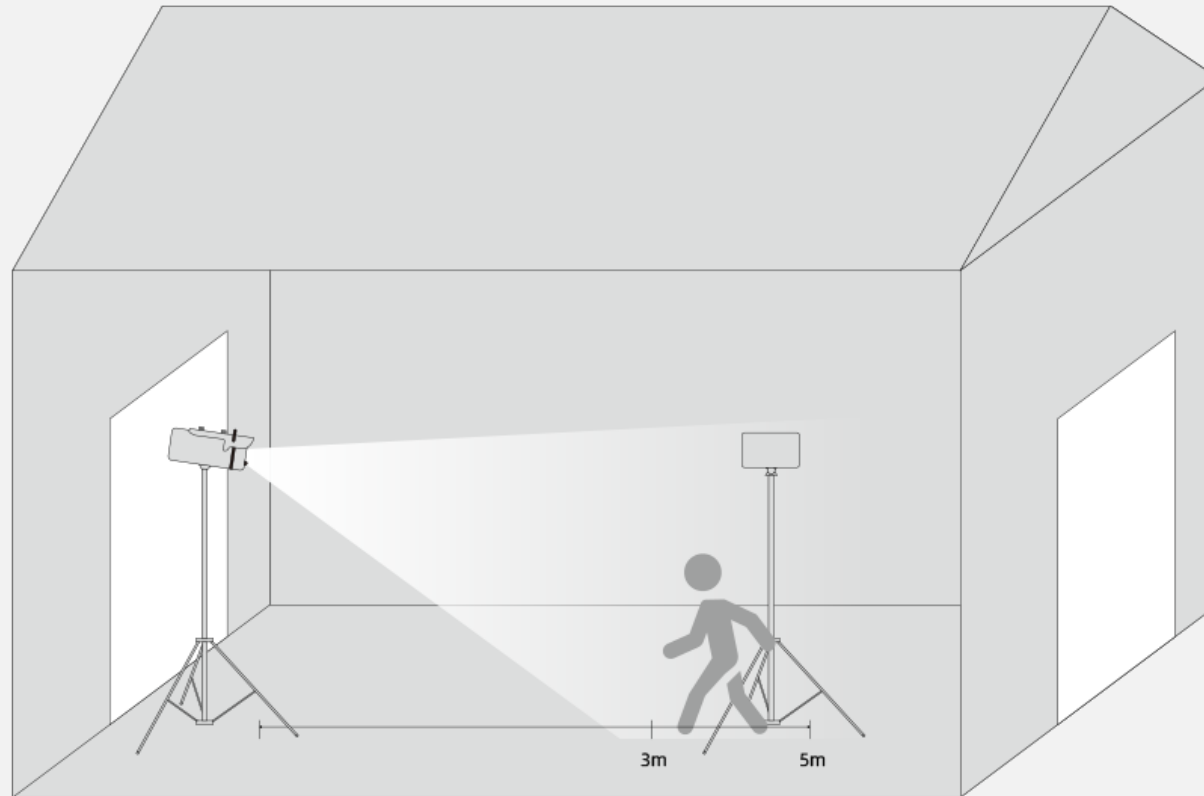height is 2.0-2.3m

3m   5m

Wall Mount
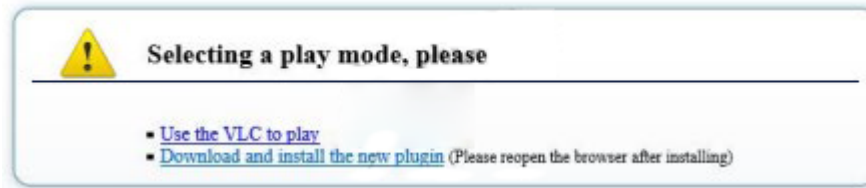
Pedestal Mount

Installation

Outdoor Installation

Due to the big influence of an outdoor environment, please put up a tent as an enclosed conditions to ensure the accuracy.

Attentions

1. The camera can be accessed via the IE browser. Please set the parameters according to the actual scene.

2. The default IP address is 192.168.0.121,and default account and password are both admin.

3. The camera is POE supported.

4. The recommended installation environment is an airless aisle, please ensure the monitoring field is far away from any objects that could produce airflow, high temperature, reflection, please do not install opposite to a door, air conditioner or any place in sunshine. To ensure the accuracy and ensure the measure result closer to the real temperature, please install the camera indoor or in stable environment. The measurement might diverge from the actual temperature if the camera is installed in an open-air environment.

5. Please put up a tent or build a closed environment to ensure the accuracy if outdoor installation is inescapable.

6. Due to the principle of infrared thermal imaging, it is necessary to perform body temperature measurement within a preset temperature measurement range, otherwise there will be deviations. The best horizontal distance from a face to the camera is 4m, recommended distance should be 3-5m.

7. Blackbody should be installed opposite to the camera (where the camera can see it). The best horizontal distance is 4m, recommended 3-5m.

8. For camera, the vertical installation height is 2-2.3m, to ensure the depression angle to a face is less than 25°.

9. Install the camera straightly to human face to have the best effect (ensure the side face angle is less than 35° on both side).

10. Please keep any objects that could cause reflect and high temperature away from the camera monitoring field.

Plugin Installation

Selecting a play mode, please

- Use the VLC to play
- Download and install the new plugin (Please reopen the browser after installing)

1. Enter the web page and download the newest plugin first. If the newest plugin is not installed correctly, you are not able to configure the parameter even if you can see the video.

2. Before installing the plugin, it is recommended to temporarily exit the anti-virus software and close the browser.

3. If you have already installed the old version plugin, please cover the previous plugin and install again.

Parameter Configuration
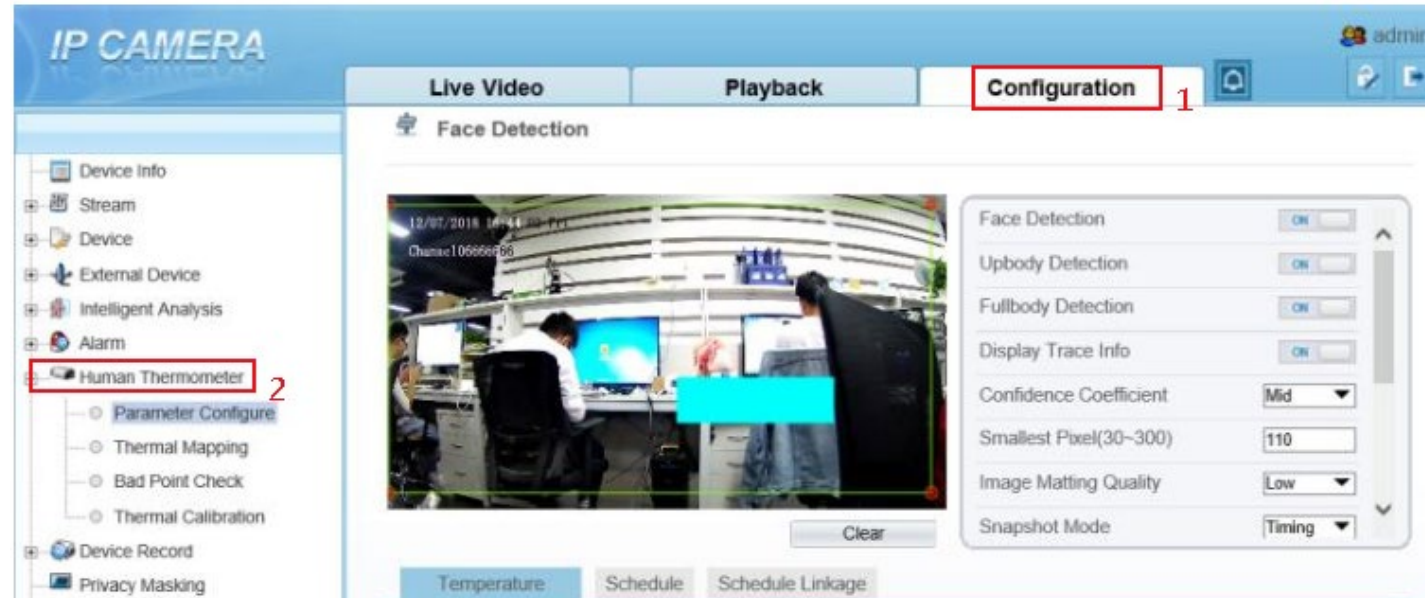
1. Parameter configuration interface: Configuration(Mark 1)->Human Thermometer(Mark 2).

2. Three main configuration parameters, "parameter configure, thermal mapping, and thermal calibration".

Face Parameter Configuration

1. Clicking "parameter configure" to enter the interface.

2. The face detection parameter configuration area in on the left side, and the temperature detection parameter configuration in below area.

3. Firstly, open the face detection and display detection area in the face detection function area.

4. Confidence Coefficient: the default value is recommended.

5. While being used, we can set up to 8 detection areas according to actual situation. The area ID is the number of detection area. Generally, we only need to set one detection area. Specially, when we need multiple areas, the setting method is to draw a frame by several dots in the video.

Face Parameter Configuration

6. Smallest pixel: the default value is recommended.

7. Image Matting Quality : It refers to the quality of the face image that needs to be uploaded, and different values can be selected according to the real situation.

8. Snapshot mode :

   a. Timing : Means to upload a certain number of images in a certain time .

   b. Optimal : Means uploading one or more images with good picture quality within 5 seconds.

9. Leave other options at their default values.

Detection Parameters

1. Enable: on.

2. Temperature Unit: Celsius is default.

3. Ambient temperature: only need to be set in extreme scenario.

4. Cavity temperature : Keep defaults .

5. Correction coefficient : Keep defaults.

6. Mount Distance: the horizontal distance between the device and the target area, which is set according to the actual situation.

7. Clicking "Apply "to save settings.

Thermal Mapping
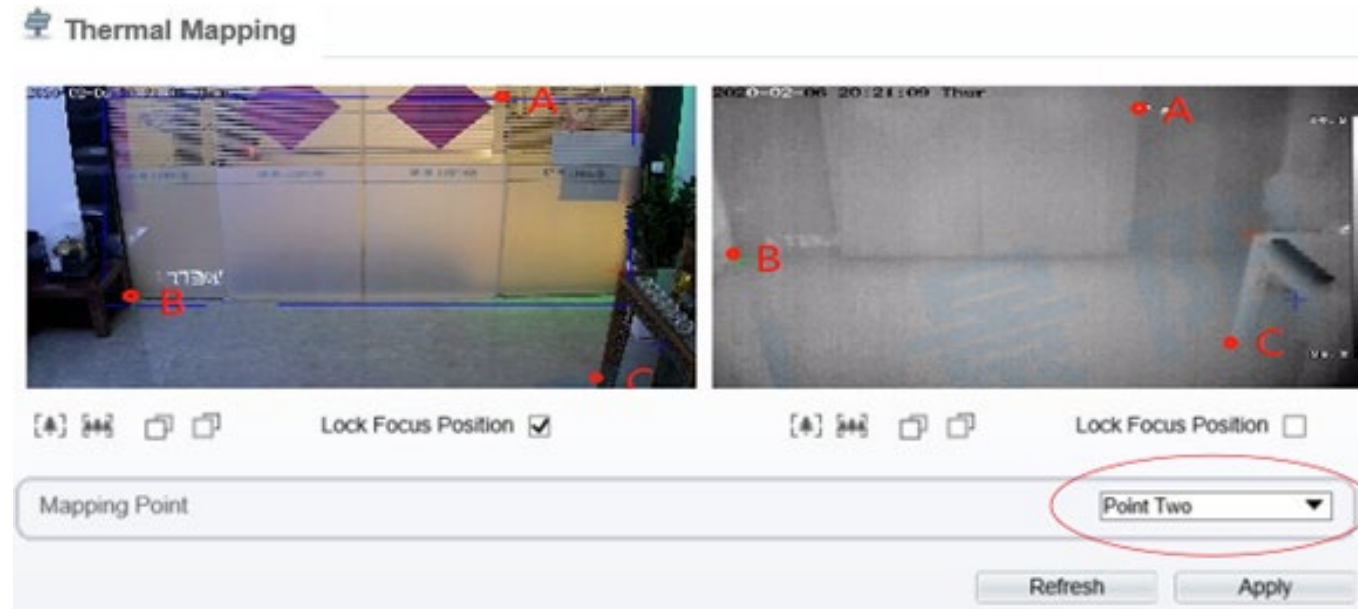
1. The purpose is to overlap the visible image and thermal image, which directly determines the accuracy of temperature detection.

2. During mapping, three obvious points A, B and C can be found in thermal imaging, and the three points can be selected in turn by selecting the drop-down list "point 1, point 2 and point 3" and then the three points can be found in the visible image, they also can be selected in turn by selecting "point 1, point 2 and point 3". Finally, click "apply" in the lower right corner to save.

3. These three points is recommended to be selected by the largest triangle in the video, and the X and Y coordinates of any point cannot coincide. It is recommended to stand three people in the row on the left, middle and right until the face frame in the thermal image can accurately locate the face.

Thermal Calibration

Note: When using the blackbody, it necessary to configure here.

1. Firstly, enable this function.

2. Display Area Info: It means displaying the temperature of blackbody.

3. Target Temperature: temperature set on the blackbody (VS temperature).

4. Emission Rate: the thermal radiation emissivity of the blackbody. The default value is 0.98.

5. Distance: the distance from the blackbody to the device.

6. Draw a square to cover the radiation mission surface of blackbody in the thermal image.
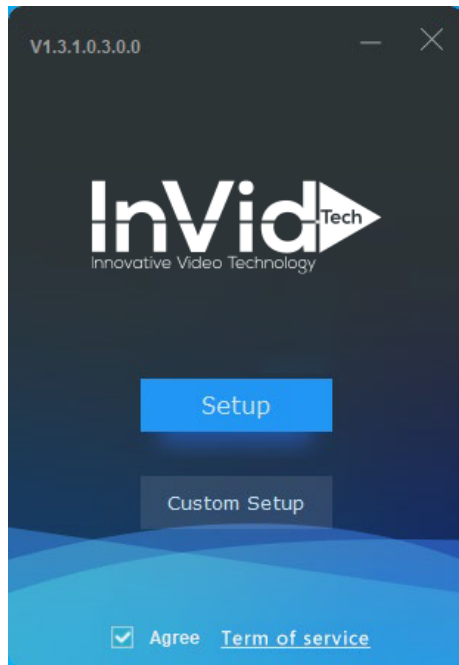
7. Click "Apply "to save settings.
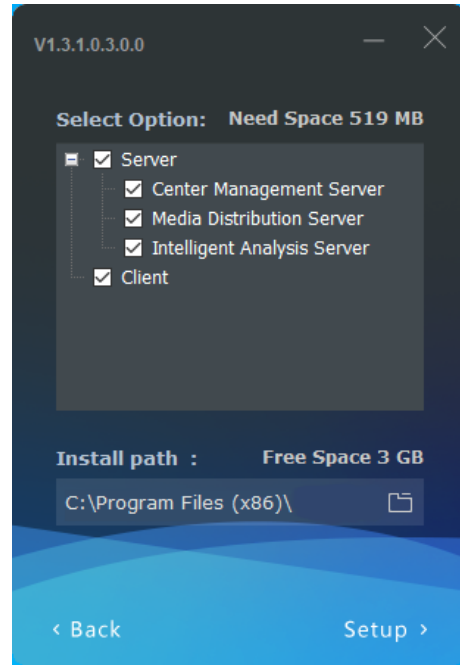
System Installation


Diagram 1

Diagram 2

1. Right-click on the installation file and select 'Install as administrator'. Then the installation window shown in Diagram 1 will pop up.

2. The software has one-click installation and custom installation. After checking and agreeing to the terms of service, you can choose according to your needs.

3. It is recommended to choose a custom installation. It is not recommended to install it on the C drive.

4. In the case of single point deployment or only one server, three modules: the central management server, media distribution server, and intelligent analysis server can be installed and run on the same server. And the client can be installed on the same server.

5. When deploying on multiple servers in a large project, the media distribution server and intelligent analysis server can be installed on multiple servers. The central management server is installed on the central management server. Through the central management server module, media distribution server and intelligent analysis server will be managed.

6. Click to start the installation. Then configure the system.

Client Login
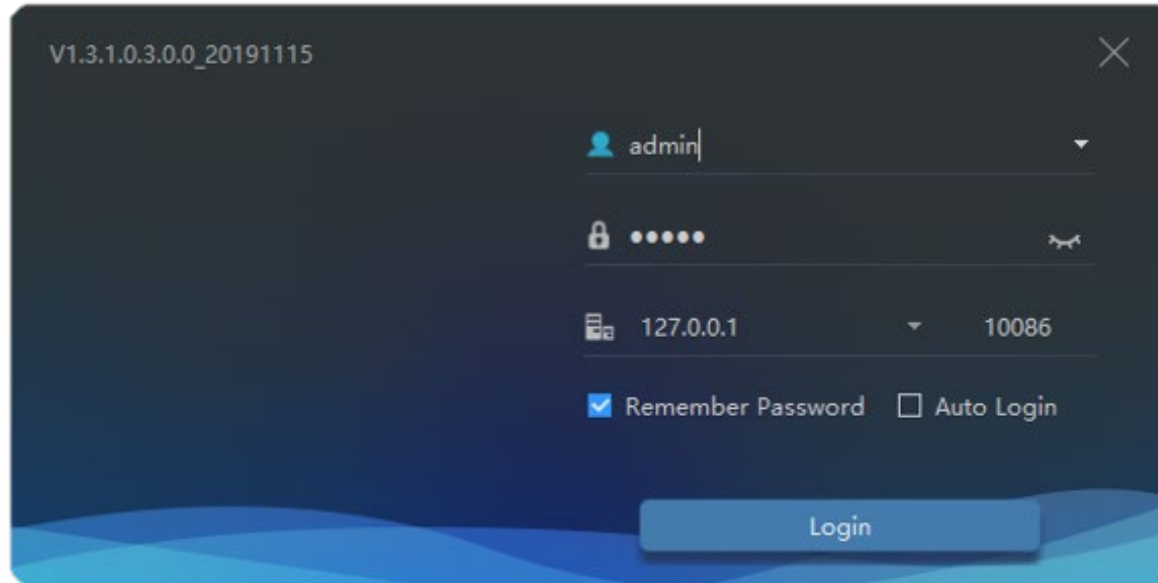
1. Both default account and password are admin.

2. Default IP address: 127.0.0.1，or enter the IP address of central management server. If the central management server is deployed in another server, please input the server IP address.

3. You can choose to remember the password or log in automatically according to the user's preference. Then press the login to enter the platform interface.

Client Login
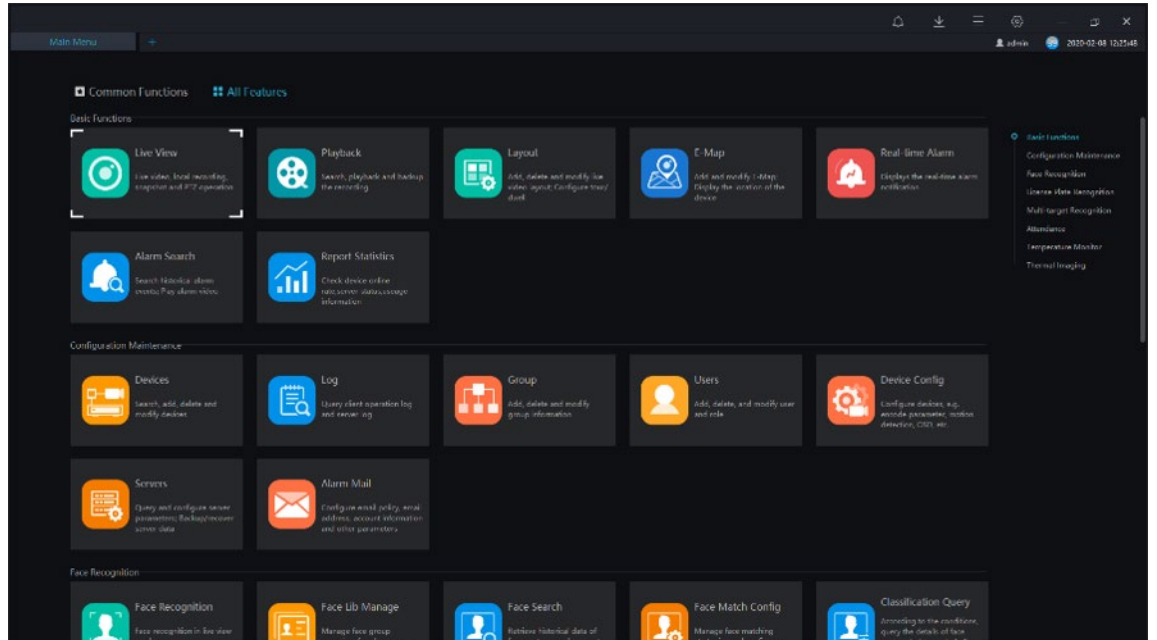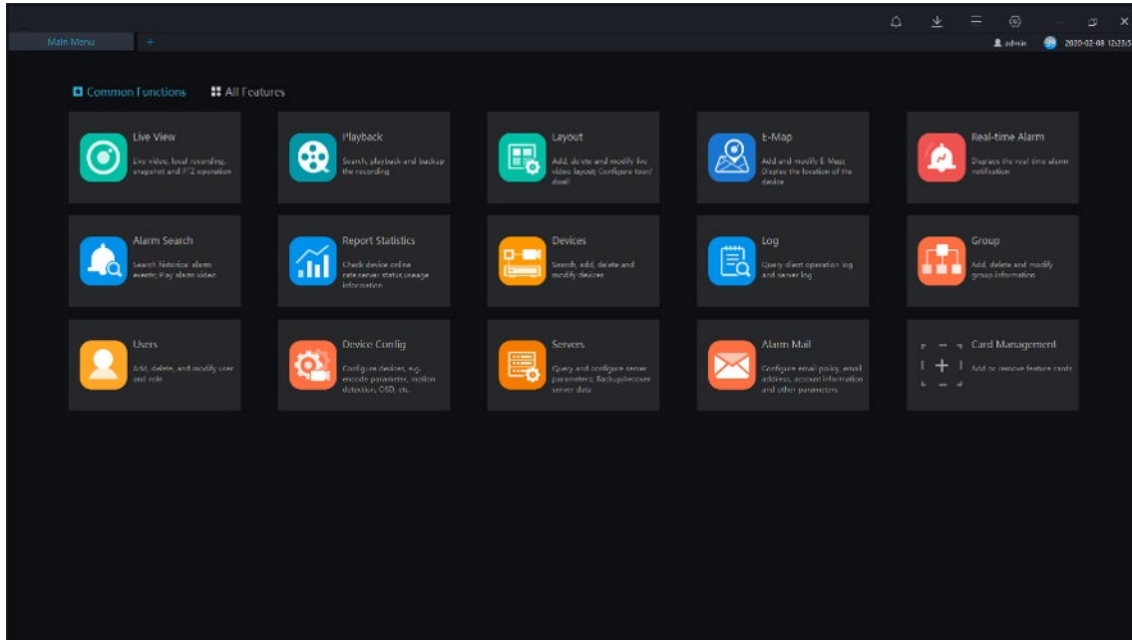
1. CMS is a comprehensive platform. Human body temperature measurement is one of the functions. You can use card management to set temperature-related functions to the 'common functions' page.

2. Click 'Card Management' to manage all the functions.

3. Click the 'face recognition' to enter the temperature measurement interface.
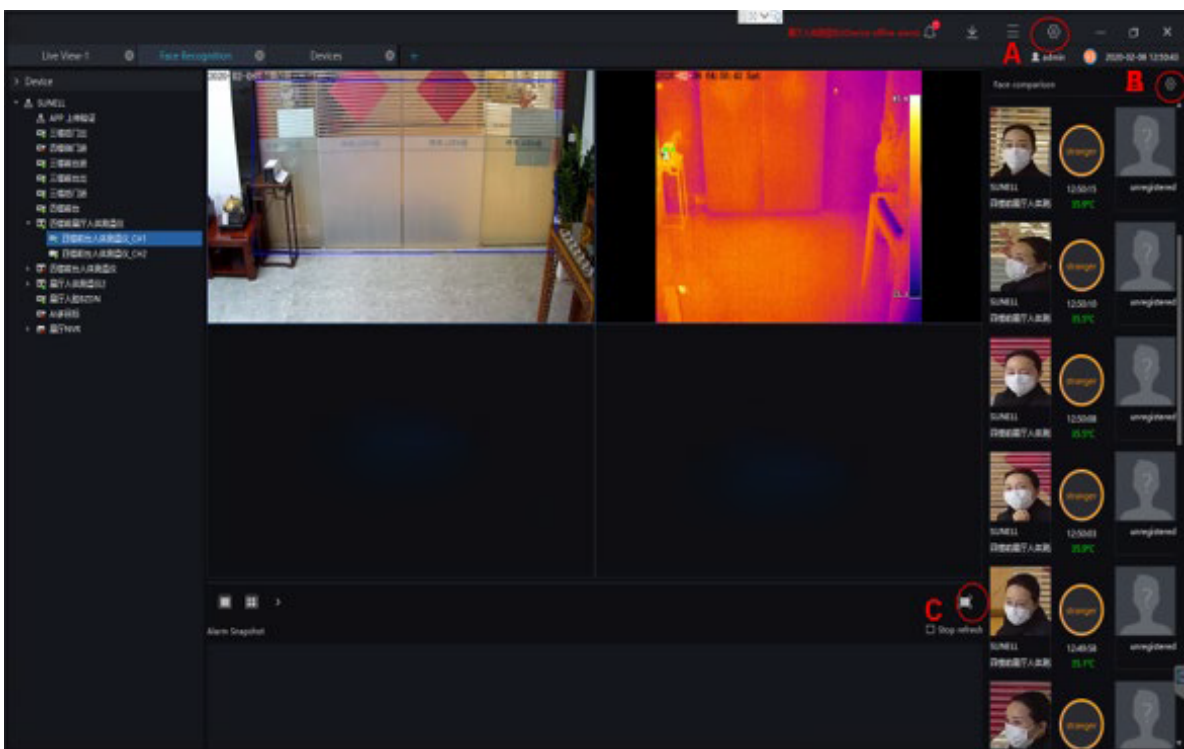
Interface Brief

Diagram 1

1. The left side of the Diagram 1 is the device list, the upper middle area is the live video window, the lower middle is the capture area, and the right side is the face comparison and temperature display area.

2. The button "A" in the Diagram 1 is use for turn on the pop-up window of the over-temperature alarms, and the button "B" in the Diagram 1 is use for turn on the voice broadcast setting function menu.

3. The button "C" in the Diagram 1 is use for switched to the full screen mode. In the full screen mode, the face temperature measurement method is displayed by a rolling card swipe method, and the measured personnel information and temperature information are broadcasted by voice.
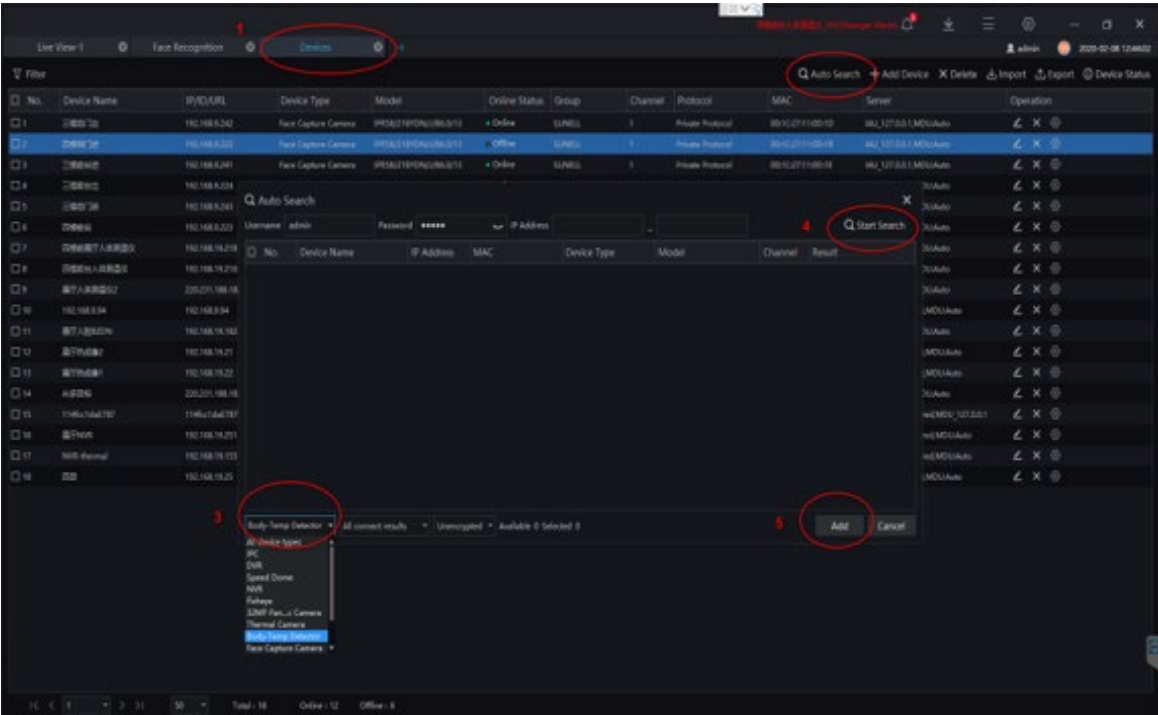
Add Device

Diagram 1

1. On the function page, click the device management card to enter the device add interface, as shown in Diagram 1.

2. At the 2 position in the Diagram 1, click the automatic search to pop up the device search interface.

3. In position 3 in the Diagram 1, select the Body-Temp Detector.

4. At the 4 position in the Diagram 1, click to start searching for the Body-Temp Detector. After the device is found, select it.

5. Then at the 5 position in the Diagram 1, click Add to complete the equipment addition.

Temperature Configuration

1. On the function page, click the temperature configuration card to enter the temperature configuration interface, as shown above.

2. In the temperature configuration, there are 4 items of data that need to be filled in according to actual needs. The low temperature threshold value is the lowest temperature measurement threshold. Body temperatures below this temperature value are considered invalid body temperature and will not be recorded or displayed. The default value is 35°C.

3. The high temperature threshold is the upper limit of the temperature measurement. A body temperature higher than this temperature value is regarded as an invalid body temperature and will not be recorded or displayed. The default is 45°C.

4. Alarm interval, which is the interval between two consecutive alarm times, the default is 60 seconds.

5. Normal temperature is the normal body temperature interval. The temperature in this interval will not be alarmed. If the temperature exceeds this interval, an alarm will be issued. The default normal body temperature is 36.5°C to 37.8°C.

6. After configured each value, click Apply to save.

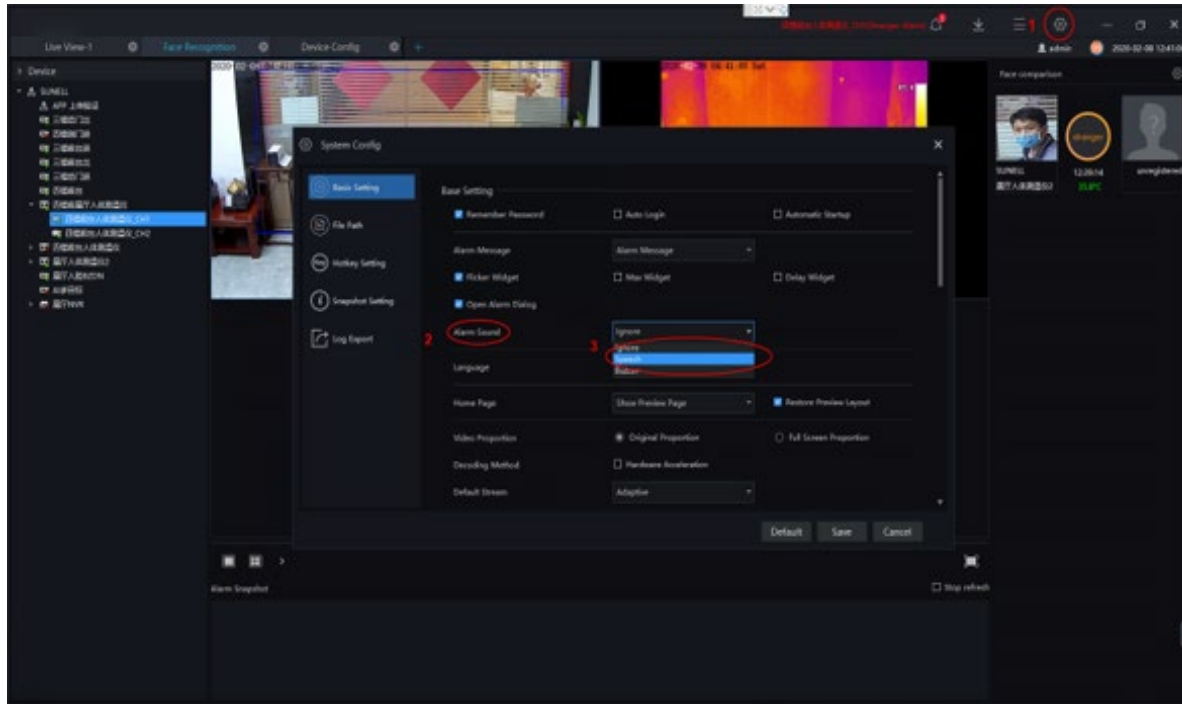# Over Temperature Alarm Pop-up Configuration

Diagram 1

1. Click the button 1 in the diagram 1, enter the system configuration interface, then set the alarm pop-up window and alarm sound.

2. At position 2 in the diagram 1, tick the auto popover function, then It can realize the function of auto popover prompt when alarm.

3. At position 3 in the figure, this function is only useful when the camera has a sound playback function. There are three options. If you choose ignore, there will be no voice prompt for alarm. When you choose voice broadcast, corresponding voice prompt will be played, Broadcast content can be customized，When selecting the buzzer, the alarm sound is beeping.

4. Click the save button in the lower right corner to save the configuration.
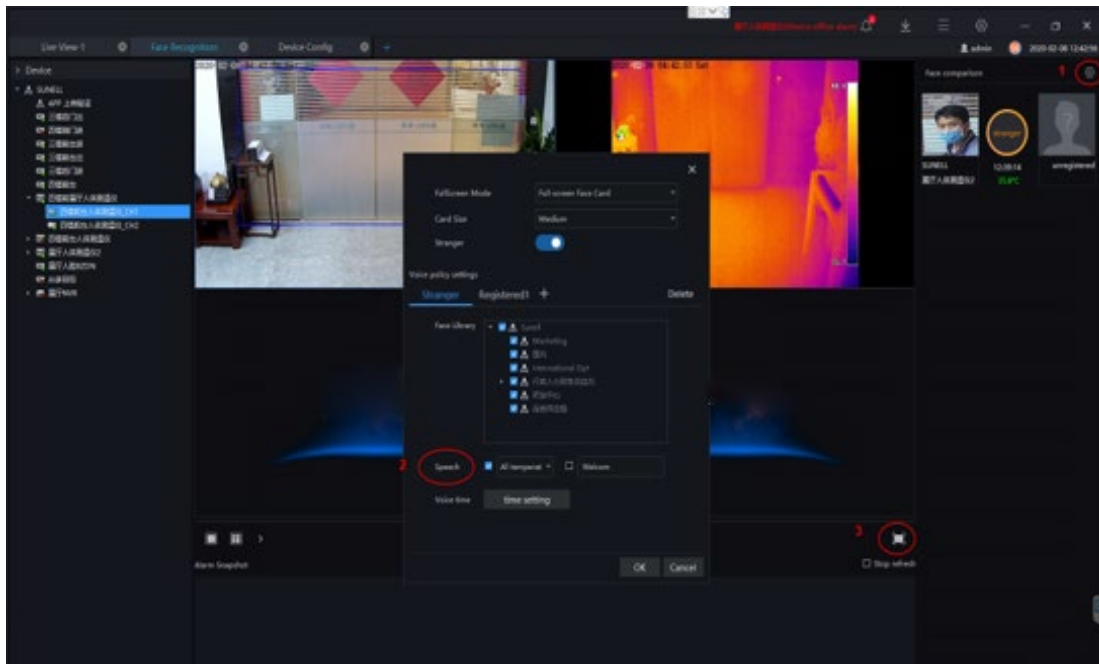
Full Screen Card Display and Voice Broadcast

Diagram 1

Diagram 2

1. Click on the mark 1(on Diagram 1), go to full screen face card mode configuration.

2. At mark 2（Speech）position to set voice broadcast in full screen mode. Report all the temperatures, broadcast only the over temperature information, and broadcast with a custom greeting 3 modes can be chosen as you need. Click OK to Save Settings.

3. Click the button in mark 3 on Diagram 1, Go into full screen card mode, as shown in the Diagram 2.

Note：1. The installation methods provided in this document are for reference only. Please select the best installation method according to the actual situation according to the project environment.

2. The equipment and system provided in this document are fast-use methods. For reference only, project deployment and commissioning, please read the instruction manual in detail.

More details please access to the website: http://www.invidtech.com