

Thermal & Optical Bi-spectrum Network Camera

Quick Instruction Manual



Statement of responsibility

‣ To the maximum extent permitted by law, this manual and the products described (including its hardware, software, firmware, etc.) are provided "as is" and may have defects or errors. The company does not provide any form of express or implied guarantee, including but not limited to guarantees of marketability, quality satisfaction, suitability for specific purposes, etc.; nor does it provide any special, incidental, incidental or indirect guarantees caused by the use of this manual or the use of the company's products Compensation for damages, including but not limited to loss of business profits, system failure, loss of data or documents.

‣ You are aware of the open nature of the Internet. If you connect your product to the Internet, there may be risks such as network attacks, hacker attacks, virus infections, etc. The company will not be responsible for the product abnormality, information leakage and other issues caused by this, but the company will promptly Provide you with product-related technical support.

‣ When using this product, please strictly follow applicable laws and regulations to avoid infringing on the rights of third parties, including but not limited to publicity rights, intellectual property rights, data rights or other privacy rights.

‣ If the content of this manual conflicts with applicable laws, the legal provisions shall prevail.

Safety Instruction

‣ During the installation and use of the product, the electrical safety regulations of the country and use area must be strictly observed.

‣ Please use the power adapter provided by the original manufacturer. It is not recommended to use a third-party non-compliant power adapter.

‣ To reduce the risk of fire or electric shock, do not expose the product to rain or moisture.

‣ Easy-to-use power-off equipment should be incorporated in the building installation wiring.

‣ When installing on a wall or ceiling, make sure that the product is firmly fixed.

‣ If the product does not work properly, please contact the merchant who purchased the product.

‣ Do not disassemble or modify the product in any way. (The company does not assume any responsibility for problems caused by unapproved modifications or repairs).

‣ Please do not drop objects on the product or vigorously vibrate the camera, and keep the product away from places with magnetic interference. Avoid installing the product on places where the surface is vibrated or subject to shocks (ignoring this item may damage the camera).

‣ Do not use the product in extremely hot, cold, dusty, corrosive, high-salt-alkali, or high-humidity environments. For specific temperature and humidity requirements, please refer to the product parameter table.

- › Please do not aim the lens of the product at strong light sources, such as the sun, incandescent lamps and other high-temperature targets, otherwise the lens or thermal imaging detector will be damaged.
 - › Do not place the device in an environment with corrosive gas. The corrosive gas will damage the device.
 - › Avoid placing the product in direct sunlight, poorly ventilated places, or near heat sources such as heaters or heaters (ignoring this may cause fire hazard).
 - › When cleaning the camera lens or shield, please use a soft enough dry cloth or other substitutes to wipe the internal and external surfaces. Do not use alkaline cleaners to clean the camera lens or the housing.
 - › Device access to the Internet may face network security issues, please strengthen the protection of personal information and data security. When you find that the device may have hidden network security risks, please contact us in time.
 - › Please keep all the original packaging materials of the drum machine properly, so that when a problem occurs, use the packaging materials to pack the drum machine.
 - › Return to the manufacturer for processing. Our company does not assume any responsibility for accidental damage during transportation caused by non-original packaging materials.
- Do not place the device in an environment with corrosive gas.

Product Usage Guide

To ensure the correct use of the product, please read this guide carefully before use:

1. The best temperature measurement distance of this product is 2-3 meters. If the distance is too close, it is easy to cause high temperature false alarm;
2. In order to ensure the accuracy of temperature measurement, it is recommended to use it in a constant temperature environment (10~35°C), RH<85% (non-condensing);
3. Please use it in an indoor environment without wind;
4. When using in a new environment, please turn on the device first, and use it for temperature measurement after leaving it for 10 minutes;
5. The temperature measurement environment needs to be stable and cannot be measured in places with large airflows such as fans, air conditioners, and heating outlets;
6. When the temperature measurement object comes from a place that has a large deviation from the temperature measurement environment (for example: entering in a cold winter), you need to stay in the temperature measurement environment for about 10 minutes to measure the temperature, and the accuracy of the temperature measurement has been guaranteed ;
7. The temperature measurement camera has a self-calibration function, if the temperature value fluctuates slightly, it is a normal phenomenon;
8. Do not measure the temperature of other people immediately after measuring extremely high or extremely low temperatures, please wait 10 minutes before measuring;
9. It cannot be used under strong sunlight and direct sunlight;
10. Do not use this equipment in places with strong electromagnetic interference.

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1. Product Introduction

1.1 Product Introduction

This Intelligent AI binocular thermal imaging system is composed of AI binocular temperature detecting and AI thermal imaging screening system. Integrating high accuracy thermal temperature detecting sensor, built-in intelligent face capture algorithm and ISP image processing technology. The device features consist of face detection, temperature detection and face image capturing snapshot. The AI thermal imaging screening system can accurately detect body temperature, capturing face pic and create records for tracking and tracing purposes. It can effectively help to monitor and detect body temperature at entrances or exits which can be widely use at schools, commercial or residential buidlings, and metro or railway stations thus contributing effcent prevention during this epidemic crisis.

1.2 Product Appearance



1.3 Device Interface Function Definition

Interface No.	Interface Name	Functional Indicators
1	Power Interface	12VDC Adapter Port
2	Network Interface	RJ45 Network Interface Port
3	Relay Interface	+ : NO Normally Open Port - : COM Public Port
4	Audio Interface	Reserved
5	HDMI Intertface	HDMI Output

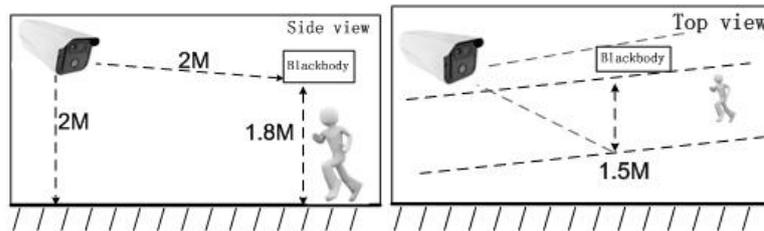
2. Device Installation

2.1 Installation Position

1. The Thermal Imager Camera should be position in front of the aisle facing entrances or facing backwards for exits for temperature screening and image capture snapshots;
2. Installation height recommend 2 meters or higher with an overlook view angle of 0~15°;
3. For better accuracy body temperature screening, recommended distance range is from 1.5 to 2.5 meters which has been strictly tested for optimum results.

2.2 Installation Environment Standard

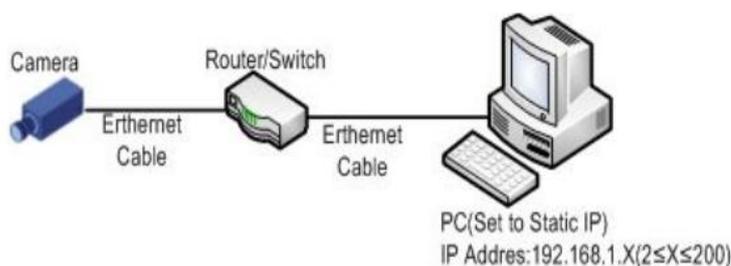
1. Illumination Enviroment Requirements: Postion camera to ensure no backlight, light refecton on human face, or shadows for better face capturing results. If the face image snapshot is not bright or sharp, it is recommeded to increase or reposition the Thermal Imager camera (General Suggested 250~800 Lux) .
2. Light and Wind Enviroment Requirements: The Thermal Imager Device is suggested to be installed indoor, ensuring there is no wind current between device and human. Avoid direct sunlight or high temperature devices to prevent screening temperature inaccuracy.



3. Device Connection With PC Software Quick Instructions

3.1 Device Connection

Power the Thermal Imager camera and connect with RJ45 network cable to the LAN port available on PC or Laptop. Log in to software, User Name is Admin with default password 123456. Click “connect” at top right corner software interface (Diagram 2). The Thermal Imager camera dafault IP address is **192.168.1.18** thus if software does not detect the camera, please check if the computer IP address is 192.168.1.1. If IP address amendment is required, open the search tool application available in the computer to make amendment to the current IP Address. Camera can be directly connected to a computer, or connected to a network as the figure below, then connect the power adaptor and power-on.



×

Login

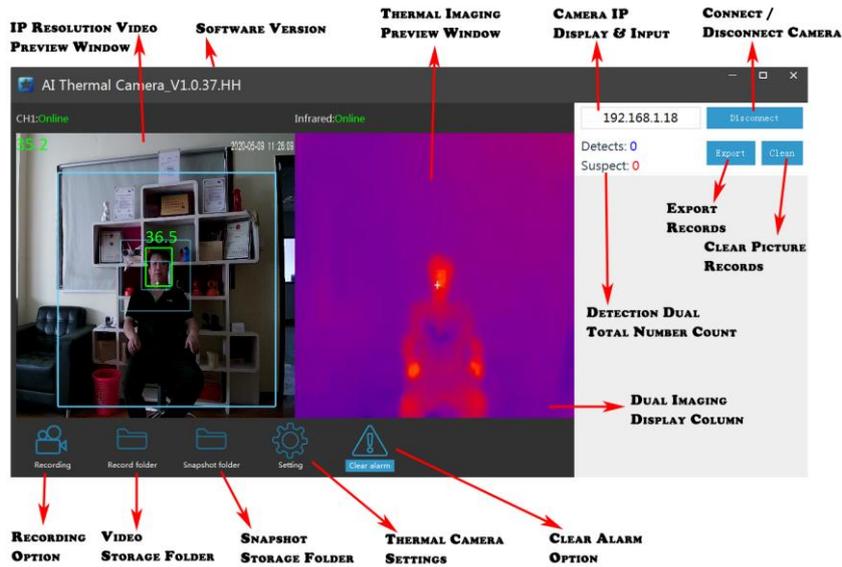
User Name:

Password:

3.2 AI Thermal Imaging Screening System

User can use AI thermal imaging screening system software to connect device, preview, setting, alarm clean, snapshot pic preview, export records, etc operation.

3.2.1 Main Interface Introduction



【Video Preview Window】 : Dual screen view (Optical and Thermal imaging)

【IP Display & Input Box】 : Input device's IP address. Default IP address is 192.168.1.18;

【Connect/Disconnect Device Button】 : Connect or Disconnect Thermal Camera option;

【Export】 : Export counting records and saved as excel file;

【Clean】 : Clear the total records.

【Detection Total Number Count】: Counting the total numbers of face capture and suspect;

【Dual Imaging Display Column】 :Snapshot & Temperature record display;

【Recording Option】 & 【Recording Storage Folder】 : Record Video option & Folder;

【Snapshot Storage Folder】 : Click the snapshot folder to check saved captured face;

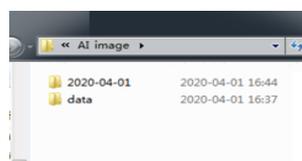
【Camera Settings】 : Modify the settings for face capture and Cancel Alarm option;

【Detects】 : Total numbers counts of face capture and shows;

【Suspect】 : Total number counts above high temperature limit setting;

3.2.2 Snapshot Folder

To click the **【Snapshot Folder】** , snapshots of all captured face pics. The folder filed by date.

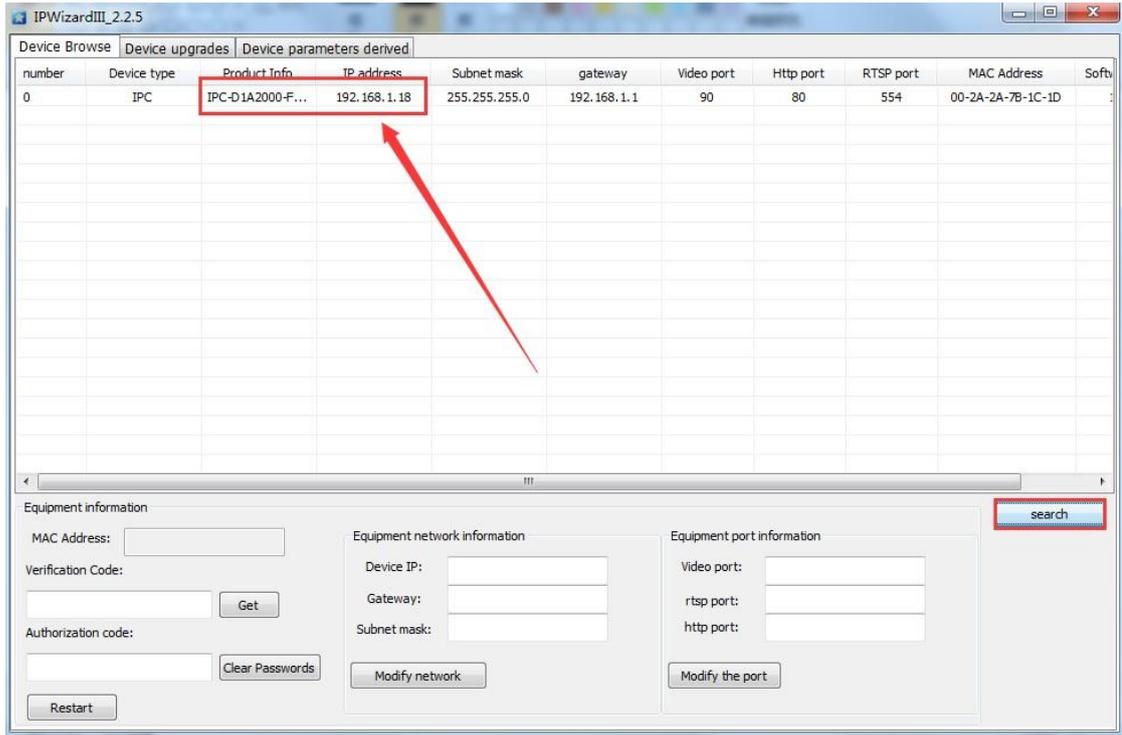


4. HDMI Thermal& Optical Bi-spectrum Network Quick Instructions

4.1 Device Search

Power the Thermal Imager camera and connect with RJ45 network cable to the LAN port available on PC or Laptop. Open the search tool [IPWizardIII_2.2.5\(English\)](#) click the search button, You can use the search tool to modify the IP address also.

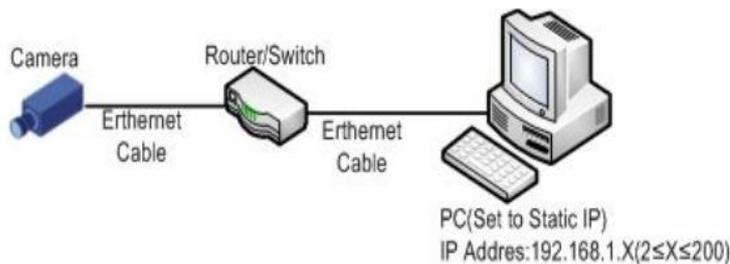
The Thermal camera default IP address is **192.168.1.18**.



4.2 Web Brower Access And Parameter Settings

The following settings are based on IE browser.

In the first, please check if the computer IP address is 192.168.1.X. If IP address amendment is required, open the search tool application available in the computer to make amendment to the current IP Address. Camera can be directly connected to a computer, or connected to a network as the figure below, then connect the power adaptor and power-on.



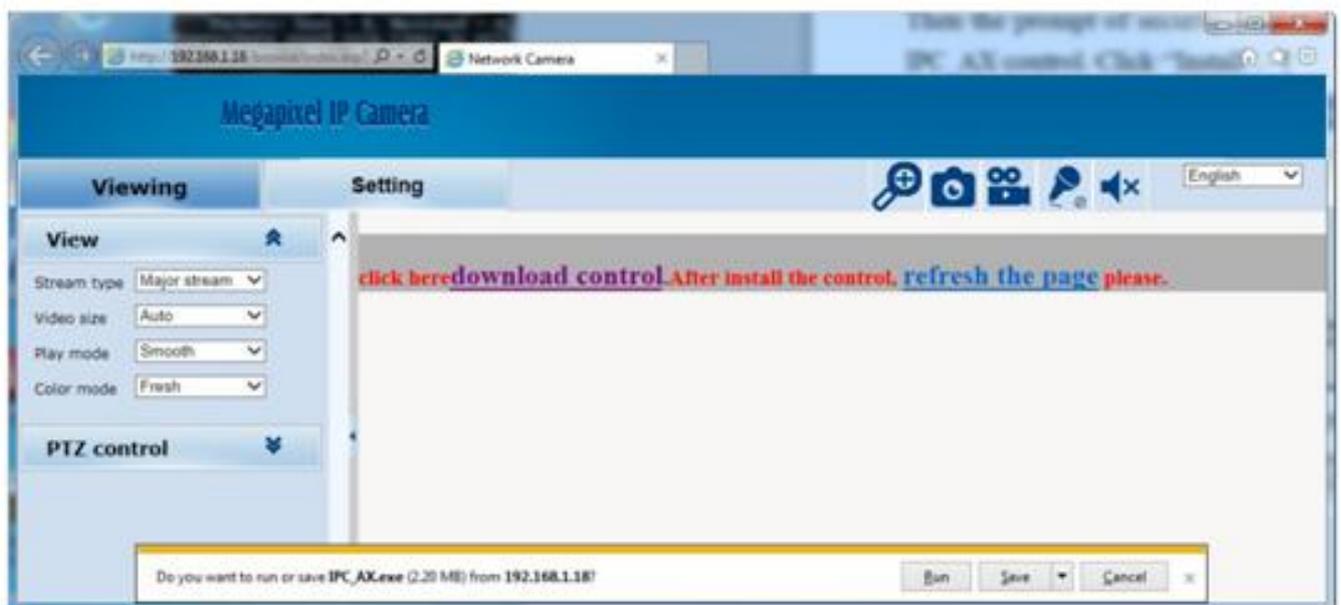
4.2.1 Device Login

Enter the IP address 192.168.1.18 in the IE address bar and click Enter. Do login the system with the default super user for the first time to run the software. The system default Super User is admin (password: null). Input the correct user ID and password and then press “OK” button to login the system.



4.2.2 Install And Run Control

The prompt message as below will come out in live view window after a successful login. Click the link “download control” to run, or store the exe file, then run it.





If the installation fails, check whether there is video viewed through other IE window or page. You should close the video or the IE window directly. If it succeeds, click refresh, you can view the live video.

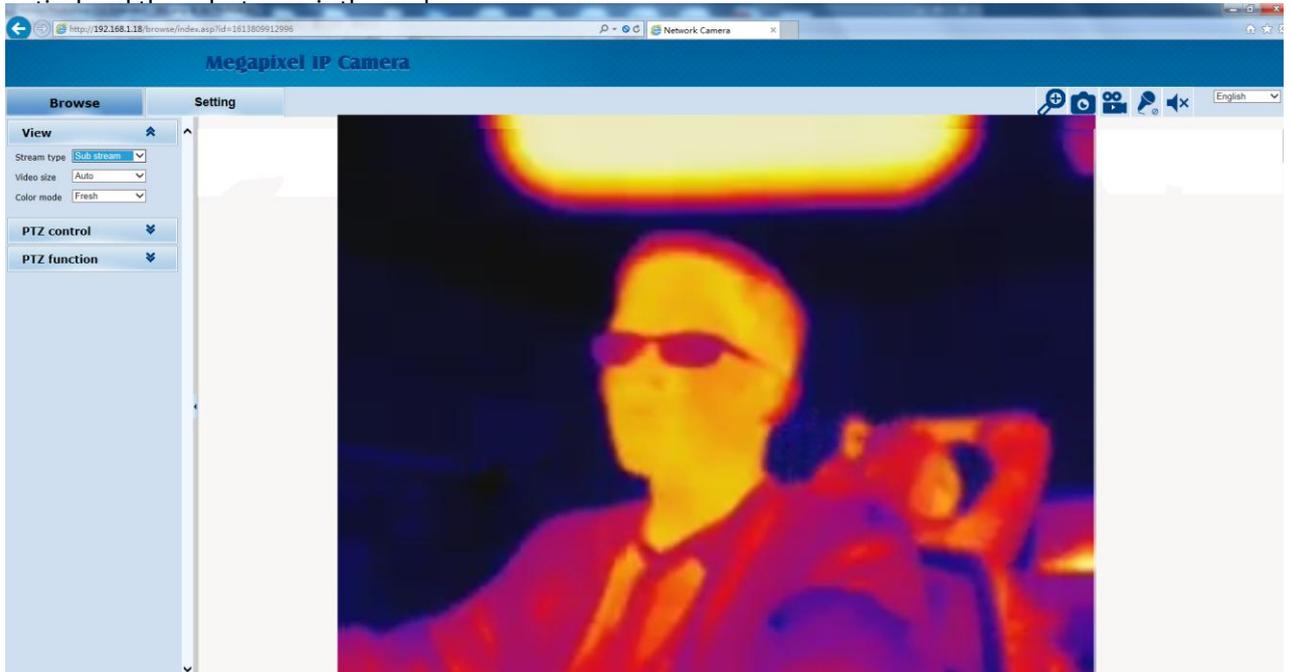
Note:

If IPC_AX control installation fails, the live video won't display. Then, you should change the IE security level.

1. Select "Tool" in the menu bar, and then select "Internet Options" from the drop-down menu.
2. Select "Security" in the pop-up Internet options.
3. Click "Internet" icon and then click "Custom Level".
4. Select "Enable" or "Prompt" in the options of "Download unsignedActiveX controls".
5. Click Privacy in the "Internet", clear "Block pop-ups", then redraw the screen and install control as per the prompt. The live video will display. By now, the IE browser setting for image viewing comes to an end.

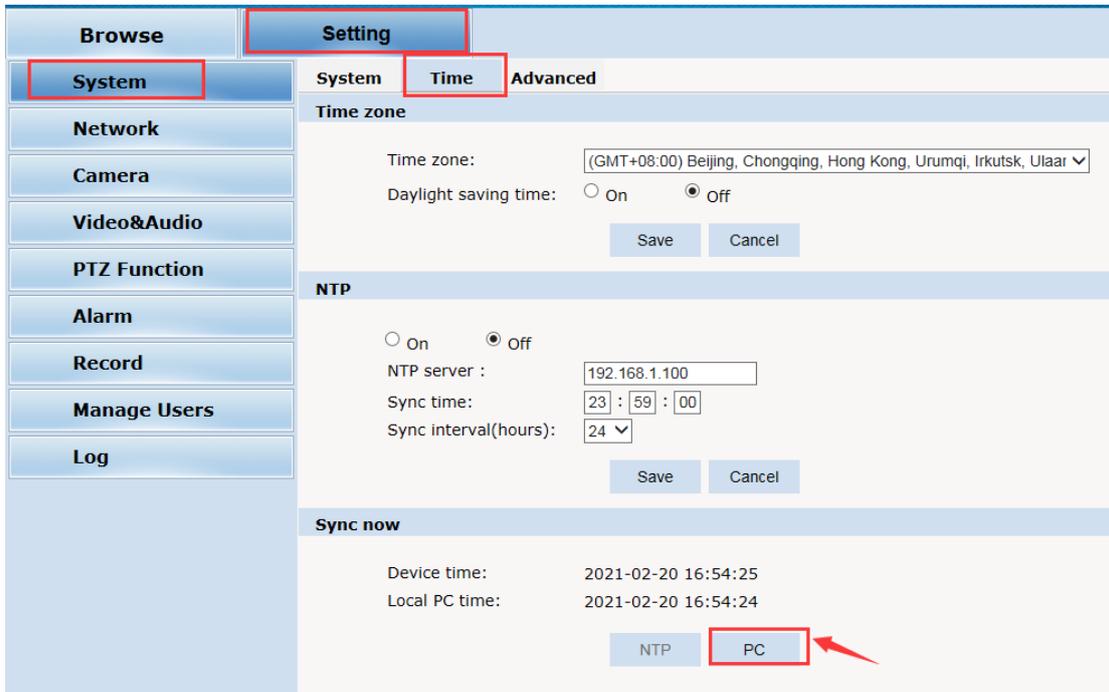
4.2.3 Video View

After the browser control installed, you can get the video view interface. The main stream is



4.2.4 Sync Time

Enter Setting → System → Time → PC, ffff The time of the camera will be synchronized.



4.2.5 Temperature Setting

Enter Setting→Video&Audio→temper.

Pixmin: set the min face pixel size limit, click and drag the frame to delimit the face size.

Pixmax: set the max face pixel size limit, click and drag the frame to delimit the face size.

Detection Area: Set the temperature measurement area, if not set, the default is full-screen temperature measurement. To delineate the temperature measurement area, it is necessary to use the scene according to the time and avoid the background high temperature objects to delimit the temperature measurement area.

Face Show: The default is off, the video stream displays the face frame and temperature information, temporarily turning it on is invalid.

Respirator: The mask detection function can be turned on or off. After the mask detection function is changed, the device needs to be powered off and restarted to take effect.

Temperature Mode: Supports switching display between Celsius and Fahrenheit.

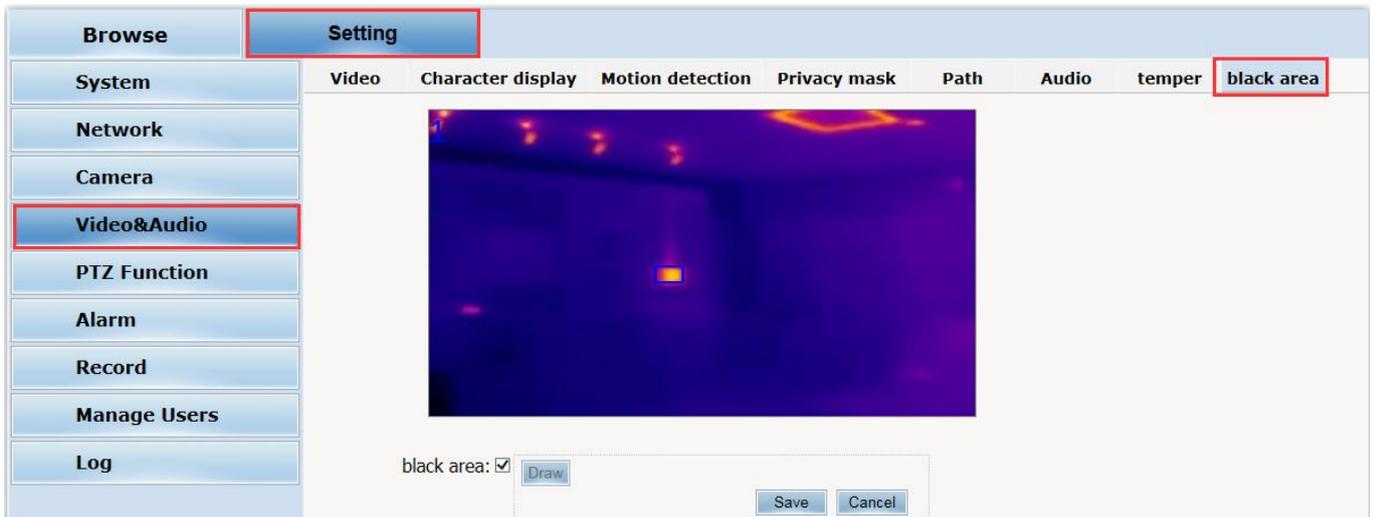
Temperature Mode: Support auto mode, manual mode, and black body mode. The default is auto mode, you can switch between manual mode and black body mode.

Temperature Coent: Set the compensation temperature value, in automatic mode, no need to modify. In other temperature measurement modes, the compensation value can be modified according to the actual temperature value.

Alarm Temperature: Set the alarm temperature, alarm when the temperature is higher than it. The default is fixed at 37.3°C, setting other parameters is invalid.

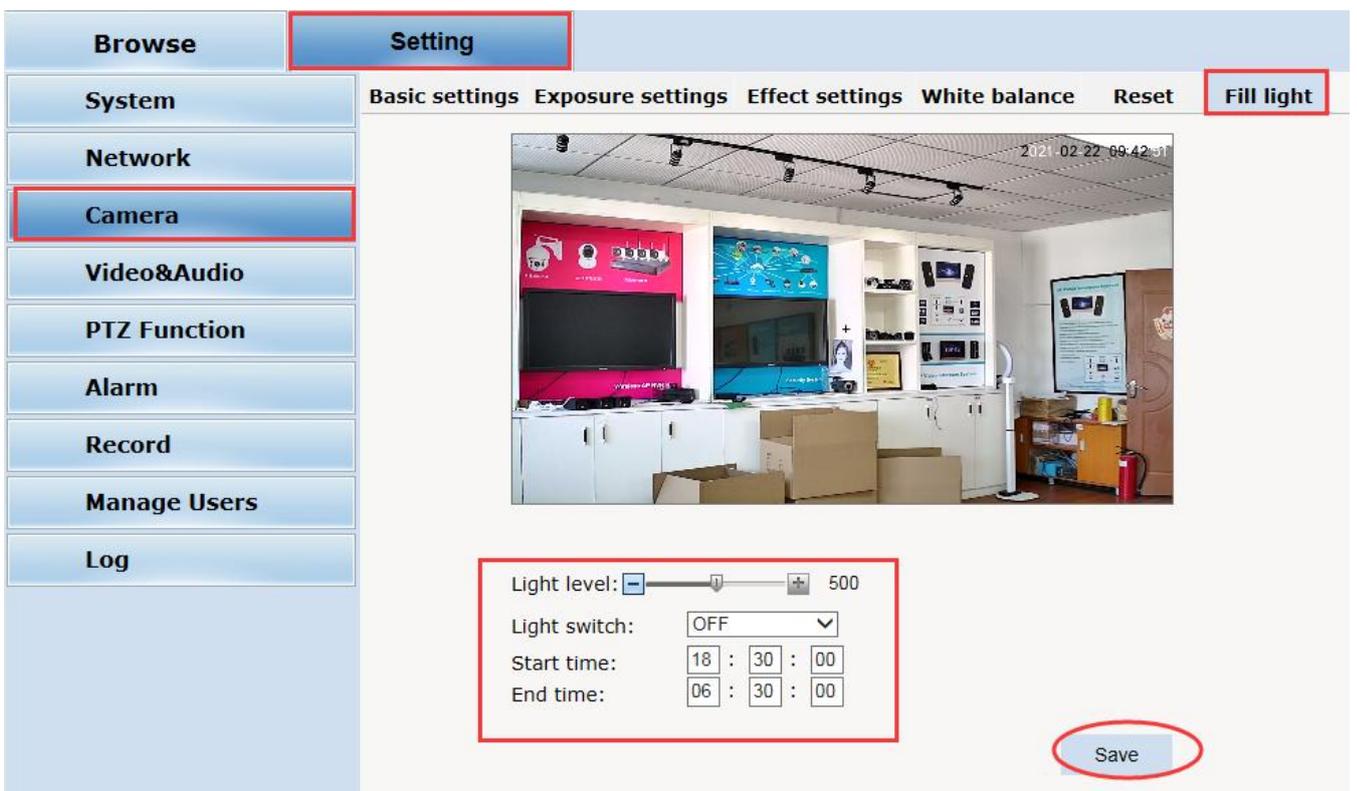
4.2.6 Black Body Setting

In the black body setting interface, mark the black body position by dragging the frame. After the black body position is marked, the positions of the black body and the camera remain fixed. If there is a moving position, the black body position needs to be re-marked before use.



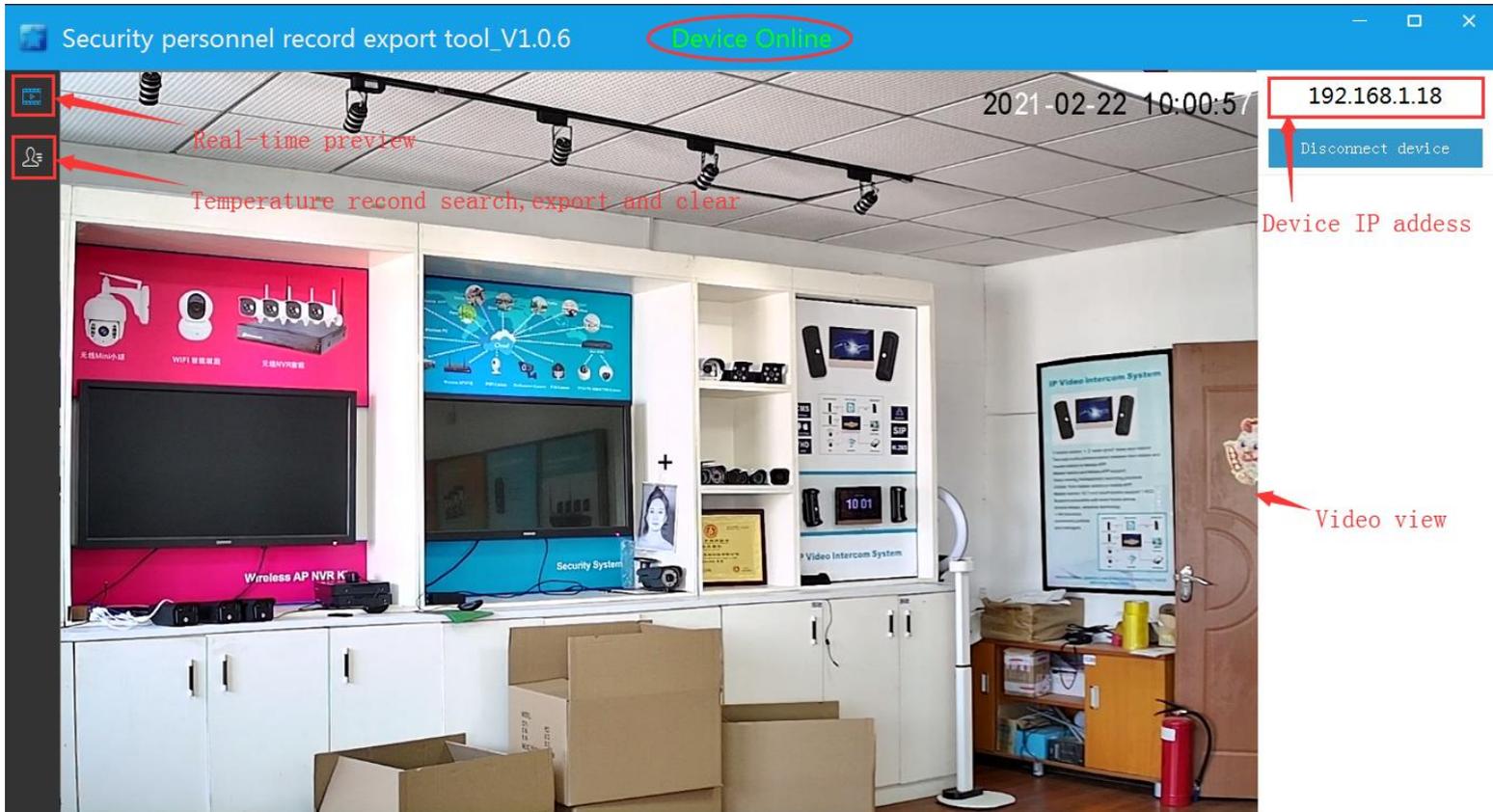
4.2.7 Fill Light Setting

Enter Setting → Camera → Fill light



4.2.8 Temperature Measurement Record Search,Export And Clear

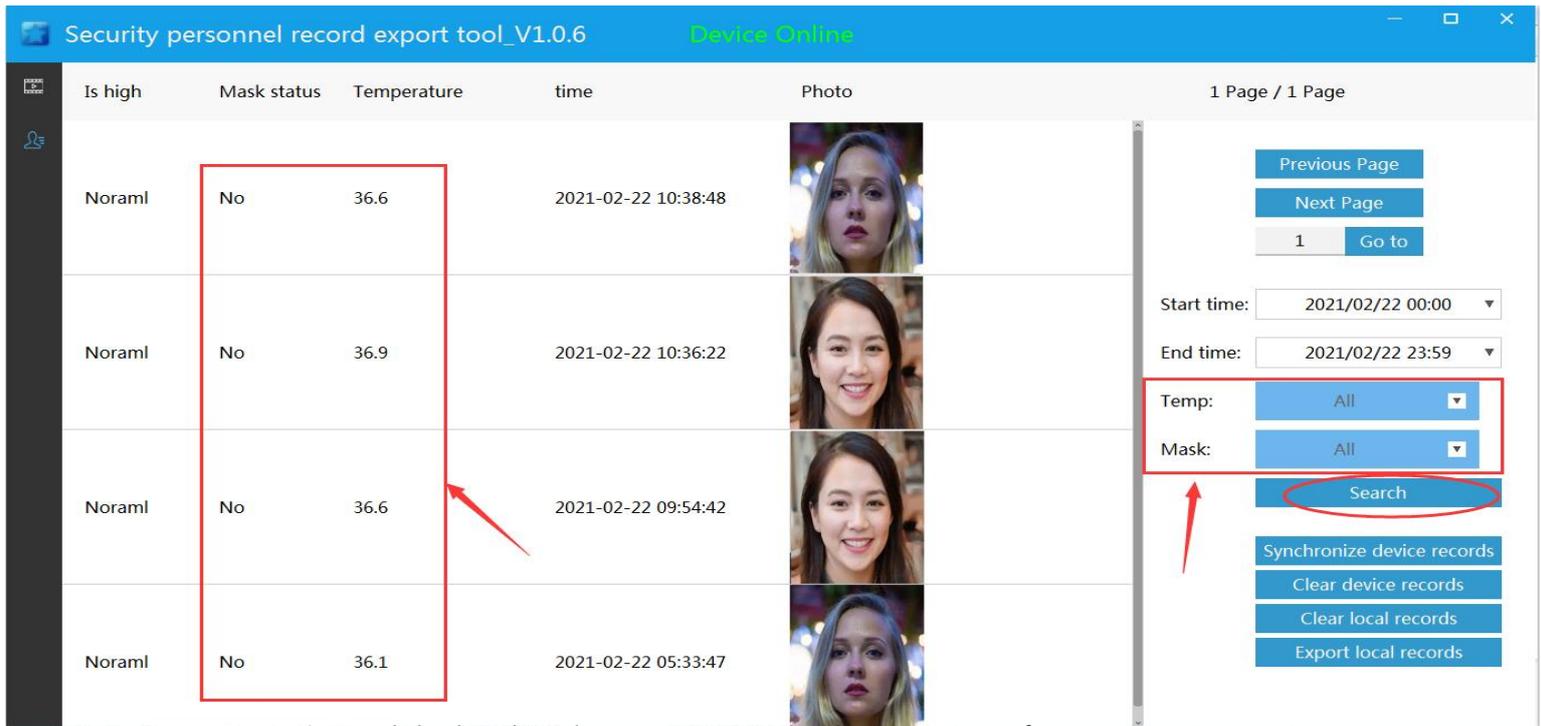
Device Built-in 16GB memory chip, temperature measurement record query,export and clear can use the **Security personnel record export tool**.



Security personnel record export tool_V1.0.6 Device Online

Is high	Mask status	Temperature	time	Photo	1 Page / 1 Page
Noraml	No	36.6	2021-02-22 10:38:48		<input type="button" value="Previous Page"/> <input type="button" value="Next Page"/> <input type="text" value="1"/> <input type="button" value="Go to"/>
Noraml	No	36.9	2021-02-22 10:36:22		Start time: <input type="text" value="2021/02/22 00:00"/> End time: <input type="text" value="2021/02/22 23:59"/> Temp: <input type="text" value="All"/> Mask: <input type="text" value="All"/> <input type="button" value="Search"/>
Noraml	No	36.6	2021-02-22 09:54:42		<input type="button" value="Synchronize device records"/> <input type="button" value="Clear device records"/> <input type="button" value="Clear local records"/> <input type="button" value="Export local records"/>
Noraml	No	36.1	2021-02-22 05:33:47		

Notice:In the first ,need check the time of device and click "Synchronize device records"Button.



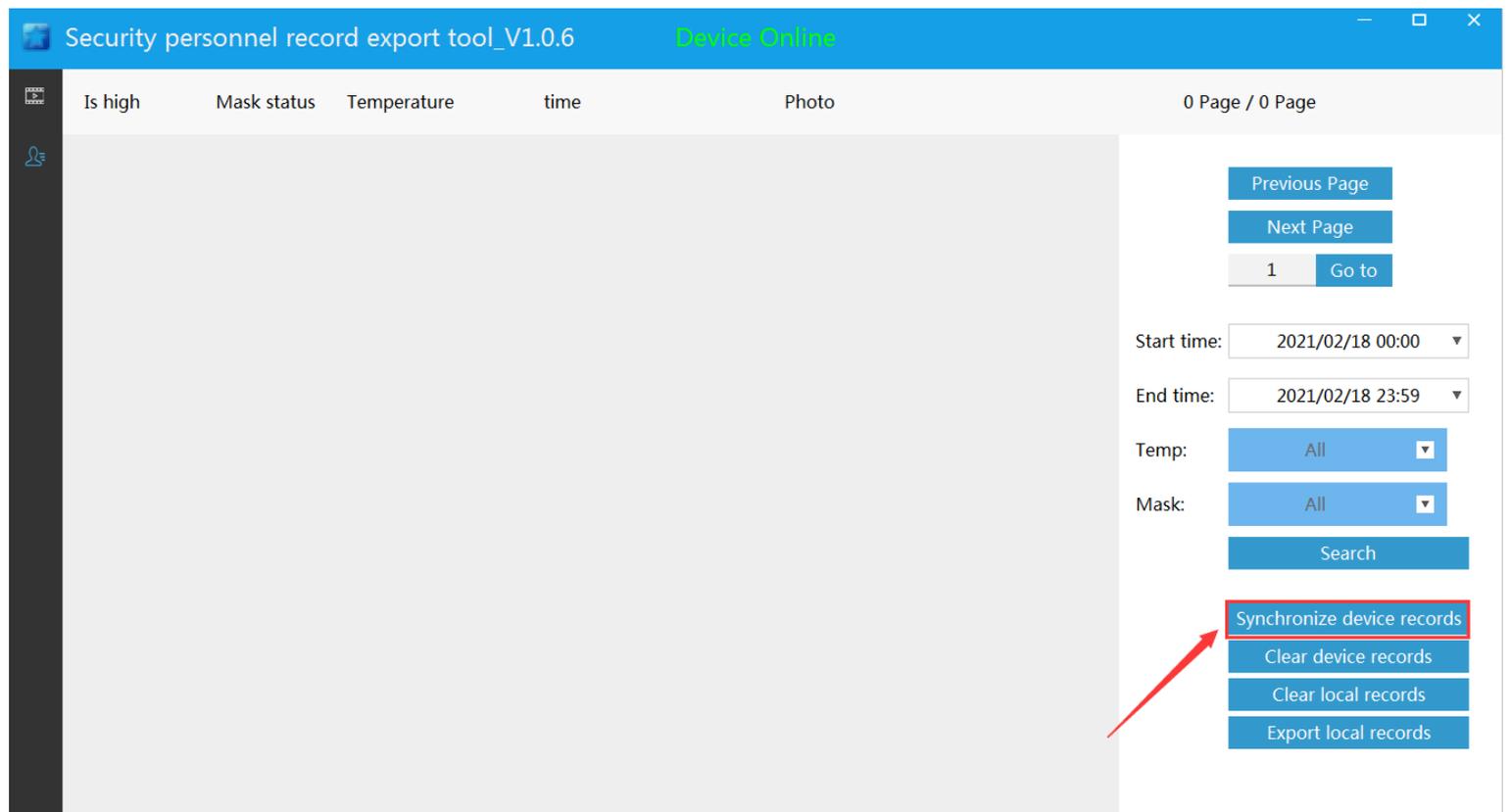
Start time: Click the drop-down menu to set the start time for querying temperature measurement records.

End time: Click the drop-down menu to set the end time for querying temperature measurement records.

Temp: Click the drop-down menu to select normal temperature, high temperature, all filters, and query the specified temperature measurement records.

Mask: Click the drop-down menu, you can choose to wear a mask, not to wear a mask, all filters, and query the specified temperature measurement records.

Search: Perform screening based on synchronization of equipment records to local temperature measurement records and query specified temperature records.



Synchronize device records: Click this button to synchronize the temperature measurement records in the device to the computer client.

Clear device records: Click the button again to clear the temperature measurement records in the device. Careful operation is required. It is not recommended to clear the records unless there are special circumstances, which will cause the previous temperature measurement records to be unable to be traced back and cannot be retrieved after clearing.

Clear local records: Click this button to clear the local temperature measurement records in the computer. In the pop-up prompt box, click OK to clear the local temperature measurement records.

Export local records: Click this button, select the export folder in the pop-up box, and click OK to export the local temperature measurement records of the computer to an Excel table.

Is high	Mask status	Temperature	time	Photo
Noraml	No	36.6	2021-02-22 10:38:48	
Noraml	No	36.9	2021-02-22 10:36:22	
Noraml	No	36.6	2021-02-22 09:54:42	
Noraml	No	36.1	2021-02-22 05:33:47	

5. Device Upgrade

Users can use browser or PC tool for upgrade;

Notice: Browser upgrade package suffix is .ifu. PC tool upgrade package suffix is .bin

5.1 Web Upgrade

Notice: Only IE browser, QQ browser, and 360 security browser is workable; IE Edge browser, 360 speed browser are not able to use.

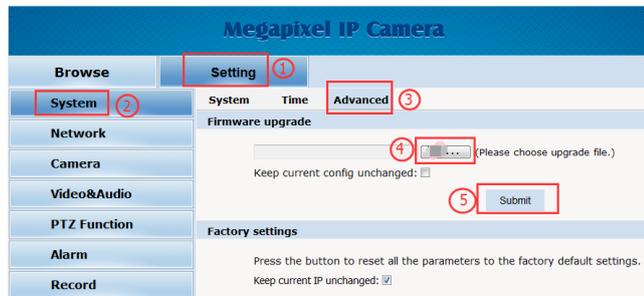
Step 1: Open Browser, input device IP address, and input the user name "admin" and no password.



Step 2: Click "setting"- "Setting"- "Maintain" to enter into the upgrade interface;

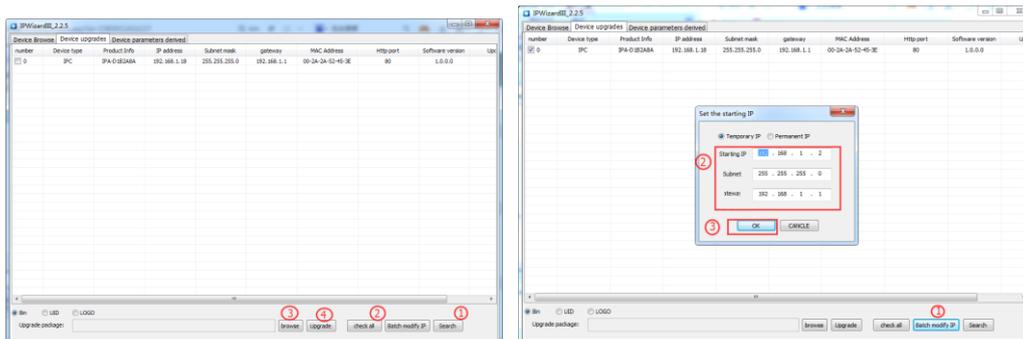
Step 3: Click "Browse" to choose "app.ifu" upgrade file;

Step 4: Click "Upload" button to start upgrading, after upgrade completed, the web page will auto-refresh.



5.2 Tool Upgrade Program

Step 1: Open the PC to search tool **IPWIZARD** and above version, select the device and upgrade directly for single device;



Step 2: For multi-devices batch upgrade, user need to modify the default IP address to different one to avoid IP address collision. Take a example as below pic shows: