Quick Operation Manual For Smart Tablet Camera With

Temperature Detection + Face Recognize

Contents

1 Product Description

1.1 Product introduce

2MP temperature measurement face recognition smart panel machine series products,adopting LCD display screen,Embedded deep learning face recognition algorithm, Integrated high-precision thermal imaging temperature measurement chip,AI intelligent access control products with ISP image processing and other technologies. This product has powerful functions such as face detection, mask detection, face recognition comparison, body temperature detection, living body judgment etc. Accurately captures personal information (such as facial information, identity information, whether wearing a mask, etc.) through the camera's field of view, and body surface temperature. Can effectively help users manage access rights and monitor body temperature status, help prevent epidemics. Users can manage the access rights offline by loading the face database to the device. Can also be used with attendance software to achieve employee attendance management. Can be widely used in residential access control, barrier gate passage, office buildings and other scenarios.

1.2 Appearance

1.3 Device interface definition

Number	Interface name	Interface Description
1	Power interface	12VDC
2	Network interface	RJ45 interface
3	Relay interface	+:NO Normally open port -:COM common port
4	Wiegand interface	1:12VDC

| | | 2:Wigan protocol data portD1 |
| | | 3:Wigan protocol data portD0 |
| | | 4:Signal ground |

2 Device Installation

2.1 Installation location selection

1. The camera is set directly in front of the channel, and the face is captured in front;

2. The recommended height h is about 1.4 meters to 1.6 meters; the recommended camera angle is 0 to 10 degrees;

3. In order to ensure the temperature detection effect, the distance of the device from the personnel collection point is 0.6 meters (range 0.4 ~ 0.7 meters), and the face pixel is not less than 1MP.

2.2 Installation environment specifications

1. Illumination requirements:No backlight, no obvious reflection on the face, uniform light and no shadow. In addition, in order to ensure that the scene lighting is sufficient when capturing human faces, it is recommended that if the human face in the lens picture is not bright enough, additional lighting equipment needs to be added to fill the human face (generally 250 ~ 800 Lux).

2. Light and wind requirements:It is recommended that the device be installed indoors to ensure that there is no wind between the device and personnel, and no direct sunlight, and avoid the temperature measurement that is too low or too high caused by air cooling and direct sunlight.
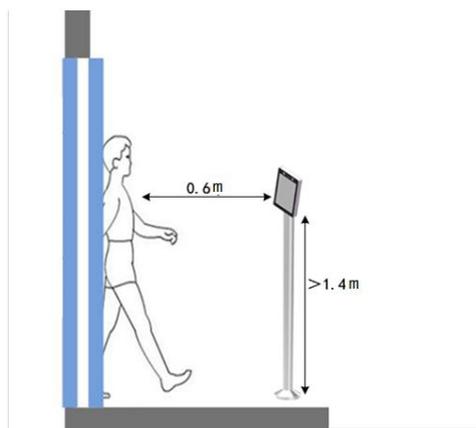

3 Quick Instructions

3.1 Device connection

Connect the device to the PC through a network cable. After the device is

powered on, open the search tool on the computer and search for the device IP address. At the same time, you can also modify the device IP address through the tool.

Note: The default factory IP address is 192.168.1.18
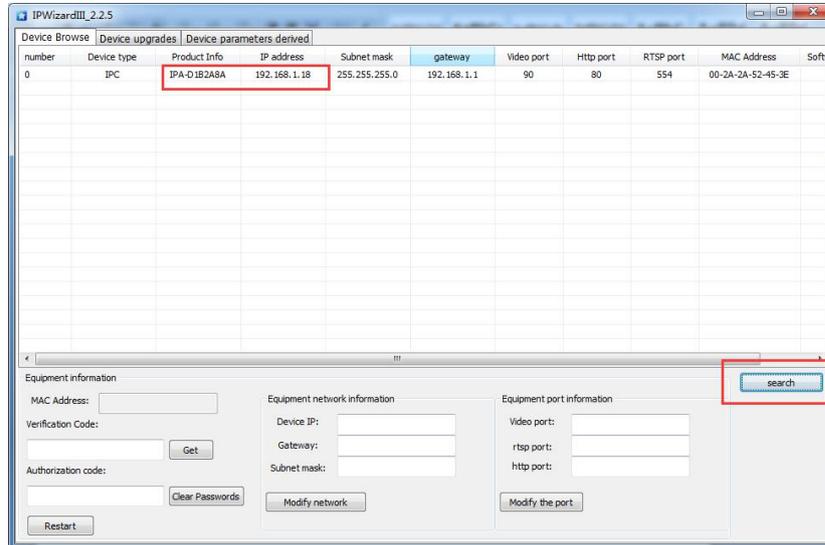
3.2 Intelligent access control management software operation

After the device is powered on, use the intelligent access control management software to set up the face database, preview real-time video, display real-time comparison results, read device logs, and configure device parameters.

3.2.1 Homepage introduce
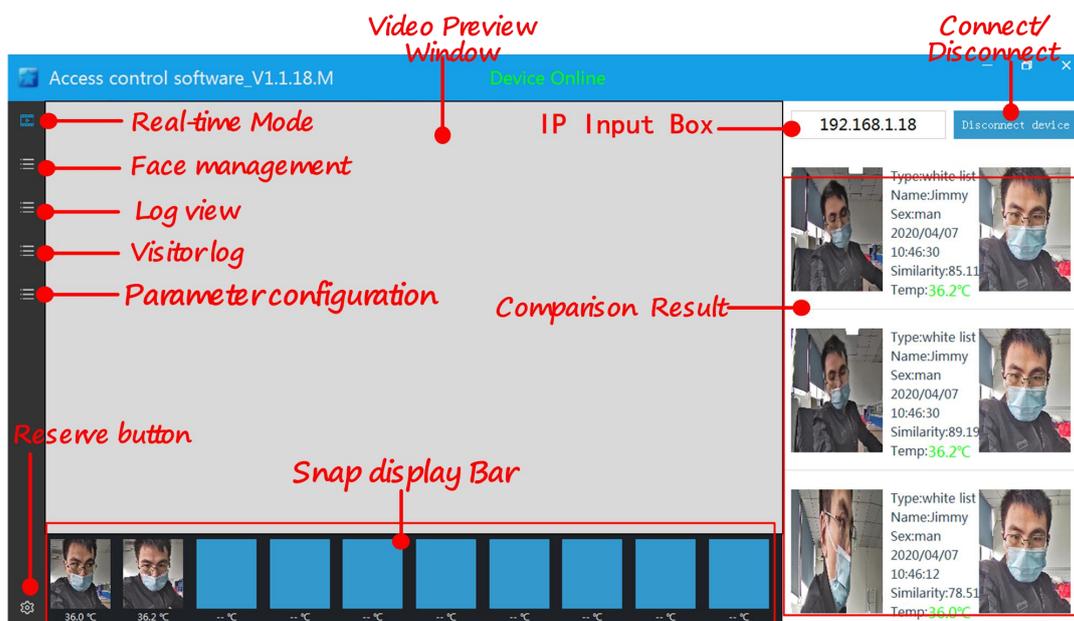
【**Video preview window**】:After connecting the device, play live video from the camera.

【**IP input box**】:Enter the IP address of the device.

【**Connect / disconnect device button**】:Click [Connect Device] to connect to the device, you can

view the preview real-time video, upload real-time snapshot pictures, display

recognition results, etc.

Click [Disconnect Device] to disconnect and close the preview.

【**Comparison result**】:When the captured face matches the face database in the device, it will

be displayed here, and basic information, similarity, temperature and other

information of the face will be displayed. If the face database is not matched, it

will not be displayed.

【**Snap display bar**】:In the video preview mode, the captured face picture of the current screen

and the body surface temperature are displayed.

【**Face management**】:Click to enter the face database management interface, you can add,

subtract, delete, check, change and other operations on the face database.

【**Log view**】:View and export the face recognition record information saved by the device, and

generate a staff attendance record form.

【**Visitor Log**】:View and export the visitor information saved by the device, and generate a staff

attendance record form.

【**Parameter configuration**】:Device face recognition key parameter configuration interface, you

can modify parameters in this interface.

【**Reserve button**】:Functions are not defined yet, software setting functions will be added later.

3.2.2 Face database management

Users can perform operations such as adding, subtracting, deleting, checking, modifying,

importing and exporting the face database on this interface.
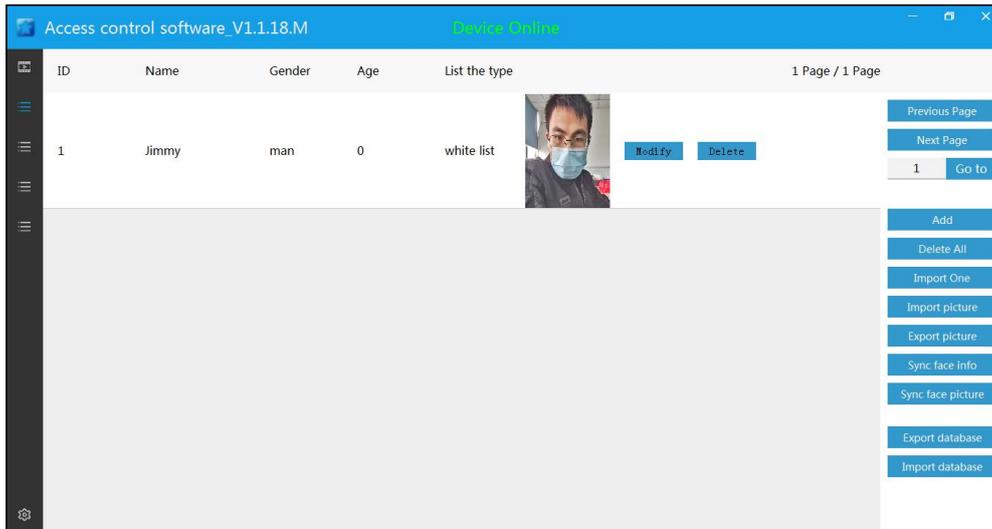
【**Add** 】: Add face library to the device by snapshot

【**Delete all**】:Click the button to delete all face libraries in the device

【**Import one**】:Import a single picture to the device face library

【 **Import picture**】:Batch import multiple photos to device face library

【**Sync face info**】: Click button to automatically upload the basic information of the device face database

【**Sync face picture**】:Device uploads face library picture to PC software

【**Export database**】:Export the face library to PC for backup from device

【**Inport database**】: Inport the backup face library to device

【**modify**】:Modify the personal attribute information of the current face

【**delete**】:Delete the current face database information from the device

3.2.2.1 Add operation

Click the **[Add]** button to enter the interface. Face is directly facing the camera. Click the [Capture Picture] button to capture the face picture and enter the personnel information. Click the [OK] button to prompt the formal entry of the face successfully.
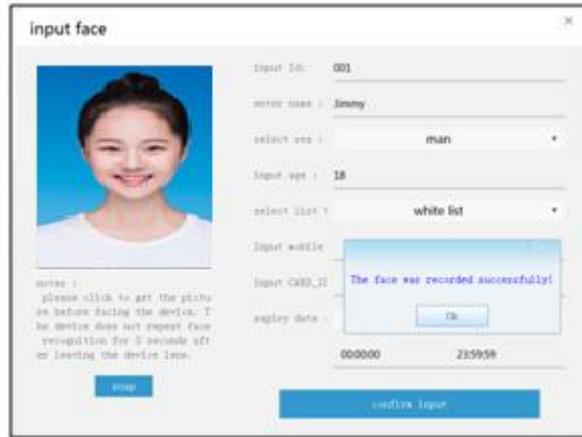
3.2.2.2 Import one face database operation

Click [Import one] to pop up the input face interface, click [Select Picture], select the facepicture file, enter the personnel information, and click [Enter] to complete the singleface import.
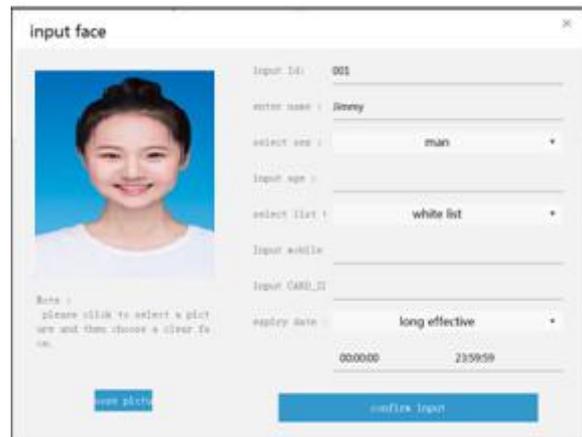

3.2.2.3 Import picture face database operation

Click [Import picture], pop-up interface, click [Choose Directory], select the face picture folder,and click [Start Importing]. The import progress bar will complete the batch import of faces.

Importe faces

Rules:
1."name.jpg"
2."ID_name.jpg"
3."ID_name_gender.jpg"
4."ID_name_gender_age.jpg"
5."ID_name_gender_age_phonenumber.jpg"
6."ID_name_gender_age_phonenumber_IdNumber.jpg"
7."ID_name_gender_age_phonenumber_CardNumber.jpg"

Select the image path of face to be imported:

Select directory

0%   0/0

Start importing
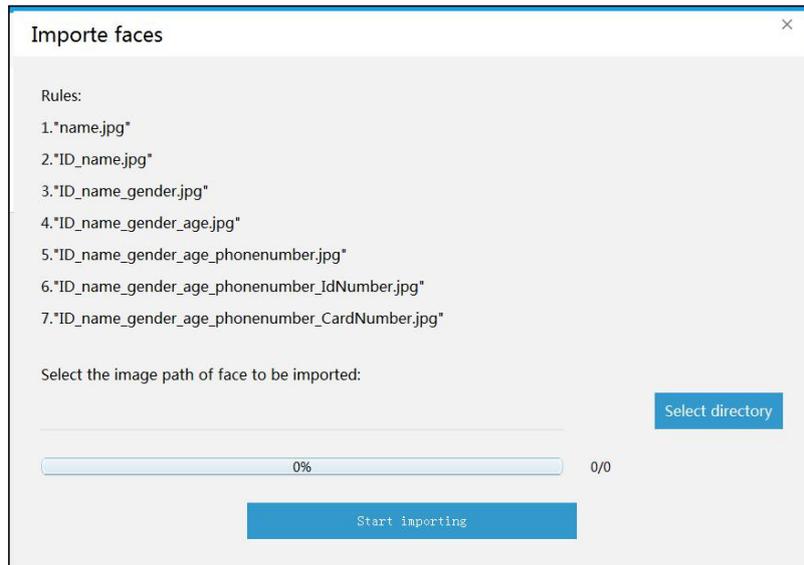
3.2.2.5 Sync face info operation

Click the [Sync face info] button to synchronize the basic information of the face database, and you can view the statistics of the number of entered faces.

Tip
Synchronous operation will change local data, ok?
Ok   Cancle

The query for face information was successful. The query quantity on this page is : 1 !
Ok
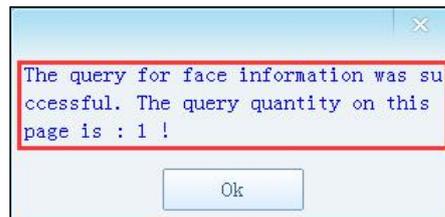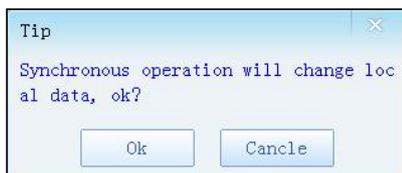
3.2.2.6 Sync face picture operation

Upload the face database from the device to the management software. After replacing thenew device, you must first manually sync the face database. Otherwise, the personnel information on the management software and the device's face database may be inconsistent, resulting in incorrect display of the identification comparison information.

Running...

0%   0/1
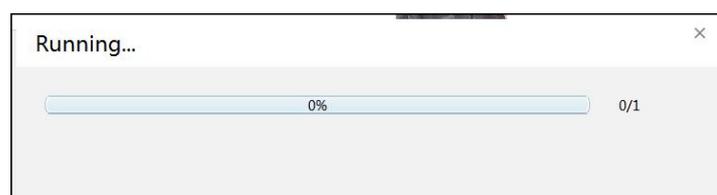
3.2.2.7 Export database

Export the face library to PC for backup from device

3.2.2.8 Import database

Export the face library to PC for backup from device

3.2.3 Log View & Attendance Record

Click [Log View], enter the interface to select the search start and end time, and click the [🔍] button to search the log.
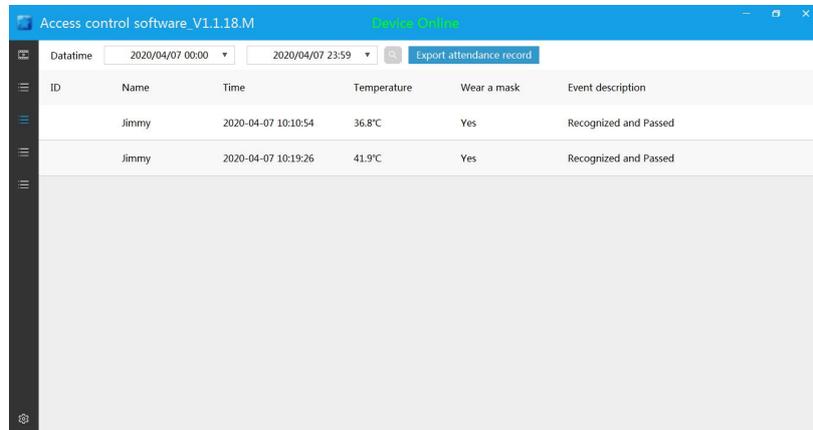
[Export Attendance Record]: Click the button to select the save path to automatically export the attendance record to save EXCEL.


3.2.4 Visitor log

Click [Visitor Log], enter the interface to select the search start and end time, and click the [🔍] button to search the log.

[Export visitor Record]: Click the button to select the save path to automatically export the visitor record to save EXCEL.

3.2.5 Parameter configuration

You can set the key parameters of face capture as shown below.

Capturing interval: Set the face capture interval to avoid repeated snapping of pictures in a short time.

Snap picture quality parameters: Set the quality of the captured picture. 0 is the worst and 1 is the best.

Blur parameter: Set the sharpness of the captured picture. The range is 0-1. The smaller the

value, the clearer it will be..

Living-body threshold : Set the face recognition biometric threshold, 0-1. The larger the value, the stricter and more secure the biometric detection.

Face recognition: Set the threshold for face recognition matching, compare the captured face picture with the face database, and the similarity exceeds this threshold, that is, the same person is identified. The threshold is recommended to be set above 70. The greater the matching, the higher the similarity requirement. , The safer

Identified times: Set the number of times that the face is repeatedly recognized within the camera recognition range. After this number of times, the face is no longer recognized. You need to exit the camera's field of view and re-enter the screen to continue recognition.

Recognition distance threshold: Configure distance for start face recognition.

Face export threshold: Set the brightness of the face capture image, the default is 50.

Software version: The factory default configuration version number is displayed and cannot be revised.

TEMP compensation coefficient: In the harsh environment, increase the compensation temperature to improve the temperature measurement accuracy.

Switch delay time: The pulse time (unit: 100ms) of the switch output, The default is set as 2(200ms).

Normal TEMP threshold: Set the temperature alarm value. If the temperature is higher, it indicates that the temperature is abnormal. If the temperature is lower, the temperature is normal.

Black and white list comparison switch: Turn on or off the function of   face comparison. If it is off, face comparison will not be performed.

Face recognition association relay: Config the relay action with the face recognition result. When turned on, the face comparison is successful and people is in white list, the relay would close.

Face recognition voice broadcast: Configure the speech broadcast mode of recognition results, including three modes: broadcast, no broadcast and only broadcast exceptions.

Broadcast: if the comparison result is a white list, please pass the voice broadcast. If the

comparison result is not a list, then u and voice broadcast are not recognized;

No broadcast: do not broadcast the results of comparative recognition;

4 Device Program Upgrade

Users can use the browser or PC tools to upgrade the program;

Note: Browser upgrade package suffix is .ifu, PC tool upgrade package suffix is .bin

4.1 Web upgrade program:

Note:The browser can only use IE browser, QQ browser and 360 secure browser. IE Edge browser and 360 fast browser cannot be used.

Step 1: Open the browser, enter the device IP address, and enter the username admin and password admin.

Step 2: Click Settings-> System-> Maintenance in order to enter the upgrade interface.

Step 3: Click Browse to select the app.ifu upgrade package.

Step 4: Click the [Upload] button to start the upgrade. Wait for the upgrade to complete

and the web page will refreshautomatically.