WD-C7808

Facial Recognition Thermometer

User Manual v 1.3

Content

1. Product Application Mode

1.1 Stranger Temperature Measurement – Standalone Version

Once power on, WD-C7808 Facial Recognition Thermometer (referred to as terminal) will automatically enters into stranger temperature measurement application mode. When someone walks into the detection zone, the terminal will automatically capture the human face, the temperature will be displayed on the screen and broadcasted by audio. When the temperature is above 37.3℃, there will be automatic light and audio alarm.

Applicable scenarios include public places with low flow of people, such as tax bureaus, industrial and commercial bureaus and other government service halls, parks, banks, library, exhibition hall, etc.

1.2 Fixed Personnel Temperature Measurement – Standalone Version

In this application mode, the whitelist of personnel should be loaded into terminal in advance. The terminal takes photos while measuring the temperature. The photos are compared with those in the whitelist to determine whether they match, along with the audio broadcast. When the temperature is above 37.3℃, there will be automatic light and audio alarm.

Whitelist import and history record export are supported by USB interface.
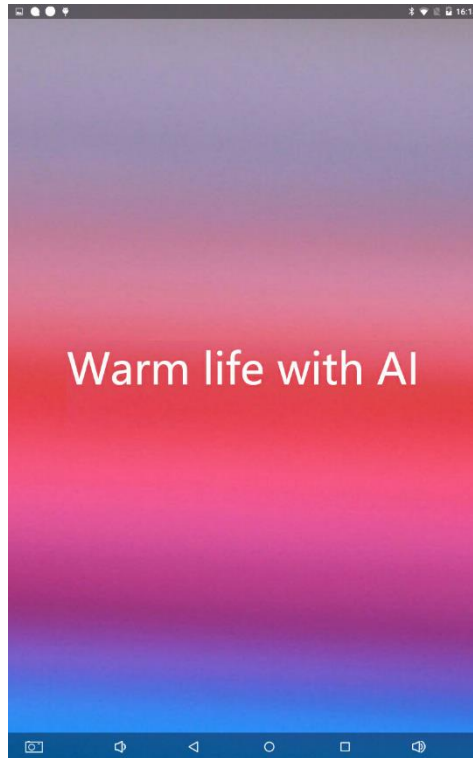
1.3 Online Temperature Measurement

Online temperature measurement application mode requires terminal goes online. When working at this application mode, the terminal will not only export comparison record of whitelist, but also do real-time uploading of stranger recognition records to server.

Online temperature measurement application mode requires a separate private deployment of the management platform developed by Watchdata.
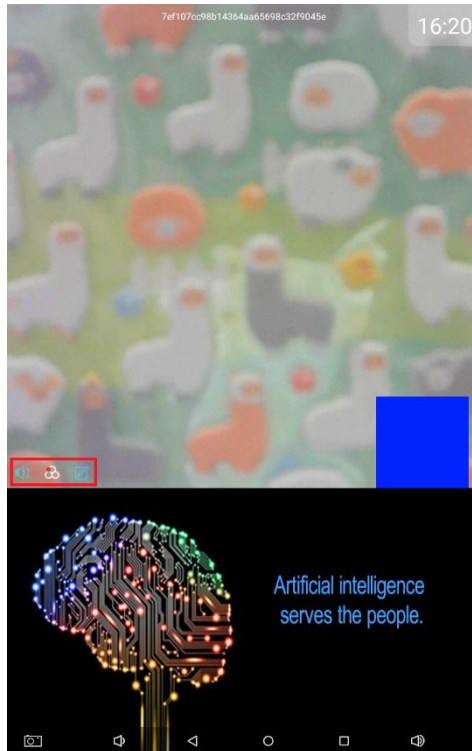
2. Operating Instructions

2.1 Power On

Insert charger in charging port at back side of terminal, the temperature measurement software will be started automatically. It takes about 10 seconds for the boot process, please wait patiently.

After power on of terminal, calibration with ambient temperature is required. It is recommended to wait 10 minutes after power on before use terminal for temperature measurement.

2.2 Main Interface

After power on of terminal, the main interface is the facial recognition and temperature measurement interface. There are 3 ICONS in the lower left corner of the display area, with the following descriptions with their representations and functions.

Sound control - click this icon the volume control bar will pop up, which can be used to adjust system volume.

Server connection status – if the dot in the icon is red, it indicates that server is not connected; otherwise, if the dot in the icon is green, it indicates that server is connected.
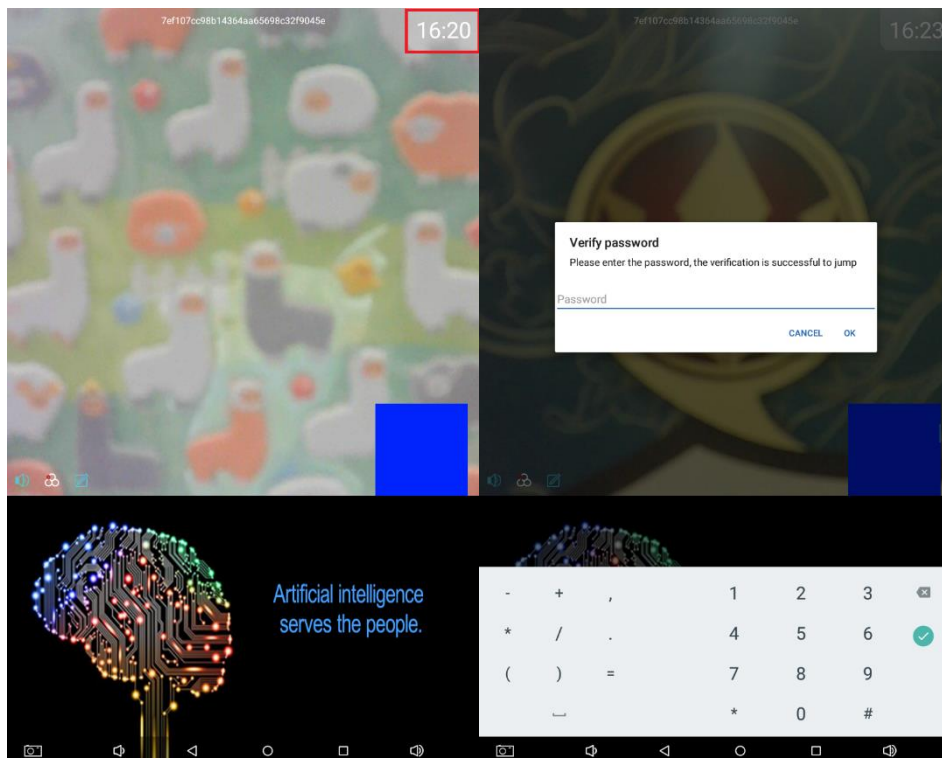
Organization code modification - click to modify organization code, organization code equals to company brand.

2.3 Terminal-related Settings

For fixed personnel temperature measurement mode and online temperature measurement mode, terminal carries out the personnel list import and identify record export.
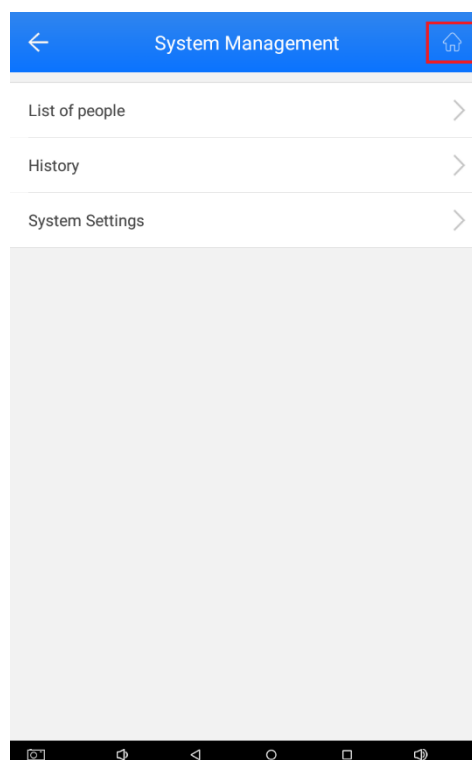
2.3.1 Enter System Management Interface

In the main interface of terminal, click the button in the upper right corner of the main interface for 5 times in a row. There shows a window to enter password.
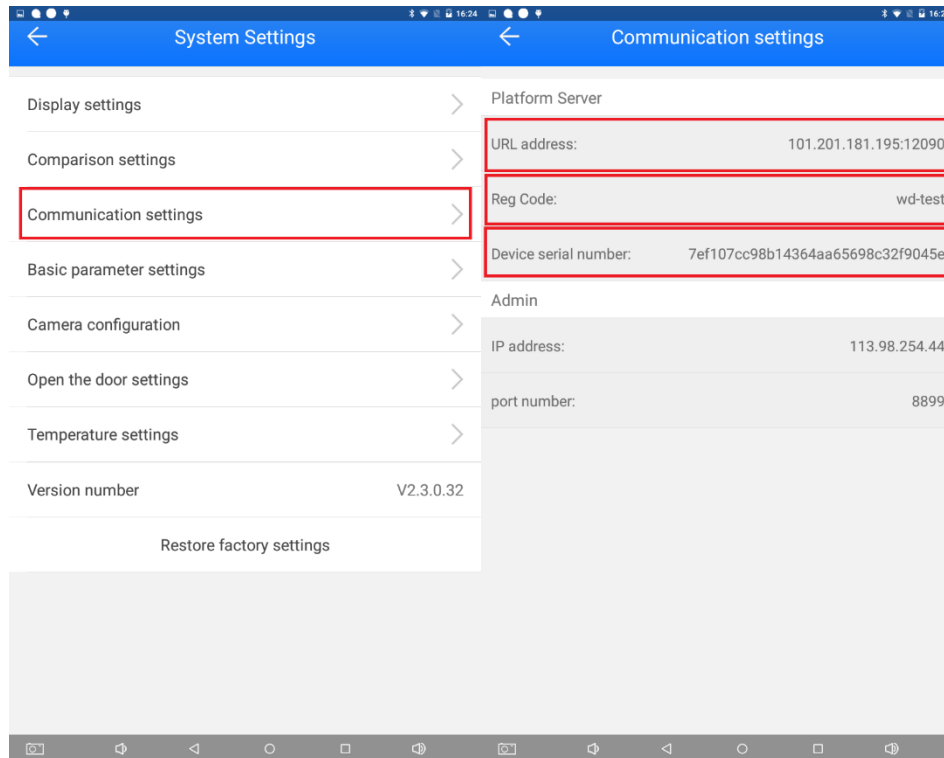
Enter password "6116" (default password) in the input box, click "OK" button, it should enter the system management interface, which is displayed as below.

Click the icon in the upper right corner to quickly enter the android settings interface for related operations.

2.3.2 Server Address Setting

After entering system management interface, select the "communication settings" as shown in the following figure.

URL address - management platform address, the default is Watchdata management platform address: 101.201.181.195:12080

Reg Code - the organization code is used to identify the company to which the device belongs. The default value is wd-test.

Device serial number - device serial number cannot be changed by the user.

Note: the Reg Code here is consistent with the Organization code modification in the main interface.

2.3.3 Device Name Setting

After entering system management interface, select the "basic parameter settings" as shown in the following figure.

Device name - user-defined device name, if user need to have multiple devices connect to the server, device name is used for distinction.
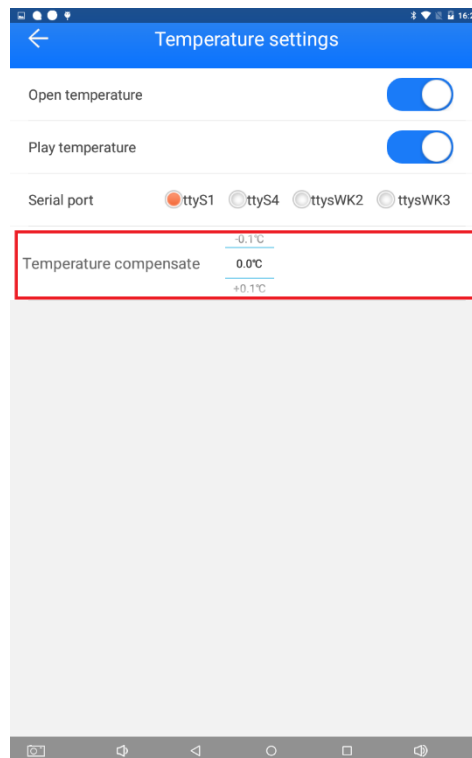
Device gate - the default value is "Entrance", it can be set according to the actual installation environment as Entrance, Exit or Entrance /Exit.

Installation address - equipment installation address defined by user.

2.3.4 Temperature Compensate Setting

Terminal has function of temperature compensation by certain manual calibration using a more accurate temperature measuring device, such as a mercury thermometer.
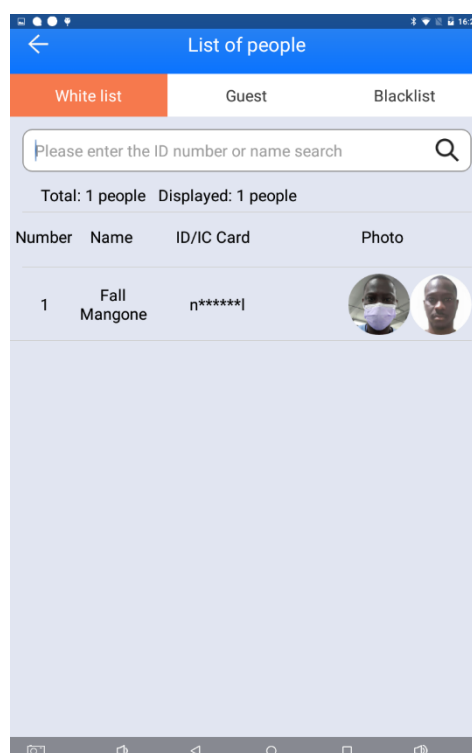After entering system management interface, select the "temperature settings" as shown in the following figure.

Calibrate the temperature value by sliding up and down with finger for temperature compensation.
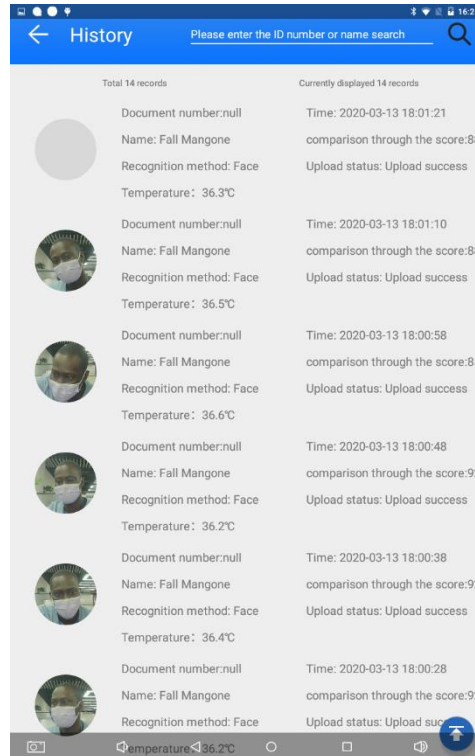
2.3.5 List of People

After entering system management interface, select the "List of people" to view the list of people in the terminal, including white list, guest and blacklist.

2.3.6 Historical Record Review

After entering system management interface, select the "History" to view the history recognition data in the terminal, which is shown as follows.

The history comparison record is displayed on the interface. Double-click to view the details of the record.

Note: only the identification records of people on the whitelist are recorded. The identification records of strangers are not kept.

2.3.7 Open/Close navigation bar

After entering system management interface, select the "Basic parameter settings" interface, then "Swipe up and down to display the navigation bar" to choose whether enable this function.

2.3.8 Networking Settings

Swipe up on the lower side of the screen to display the navigation bar and enter the android desktop.
Use android desktop Settings button to go to WIFI Settings or Ethernet Settings. This setting is the same as for a universal android device.
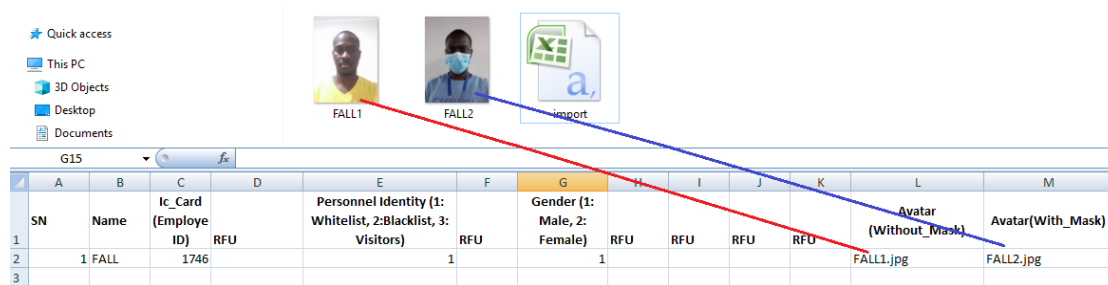
3. Data Import/Export with USB Device

For WD-C7808 to work at *Fixed Personnel Temperature Measurement – Standalone Version* as mentioned in section 1.2, data of pre-set personnel should be imported and exported by USB port, as illustrated as follow.

3.1 Data Import

To support the function of *Fixed Personnel Temperature Measurement – Standalone Version*, three kinds of files need to be imported into the terminal in advance.

1) Import.csv: personnel information file
2) Pictures of each person without mask: both picture format "jpg" and "png" are acceptable, picture size: 15K ~ 300K
3) Pictures of each person with mask: both picture format "jpg" and "png" are acceptable, picture size: 15K ~ 300K

All files need to be placed in the same directory, including the "import.csv" personnel information file, and pictures of each person contained in the information file, as showed below.

3.1.1 Import file Preparation

Use EXCEL to open the template document of "import.csv" (see the inserted data package at the end of the document for the template information) and fill in the relevant information.

Here are the instructions about filling the import file with each column (from A to M) stated in the chart as follow.
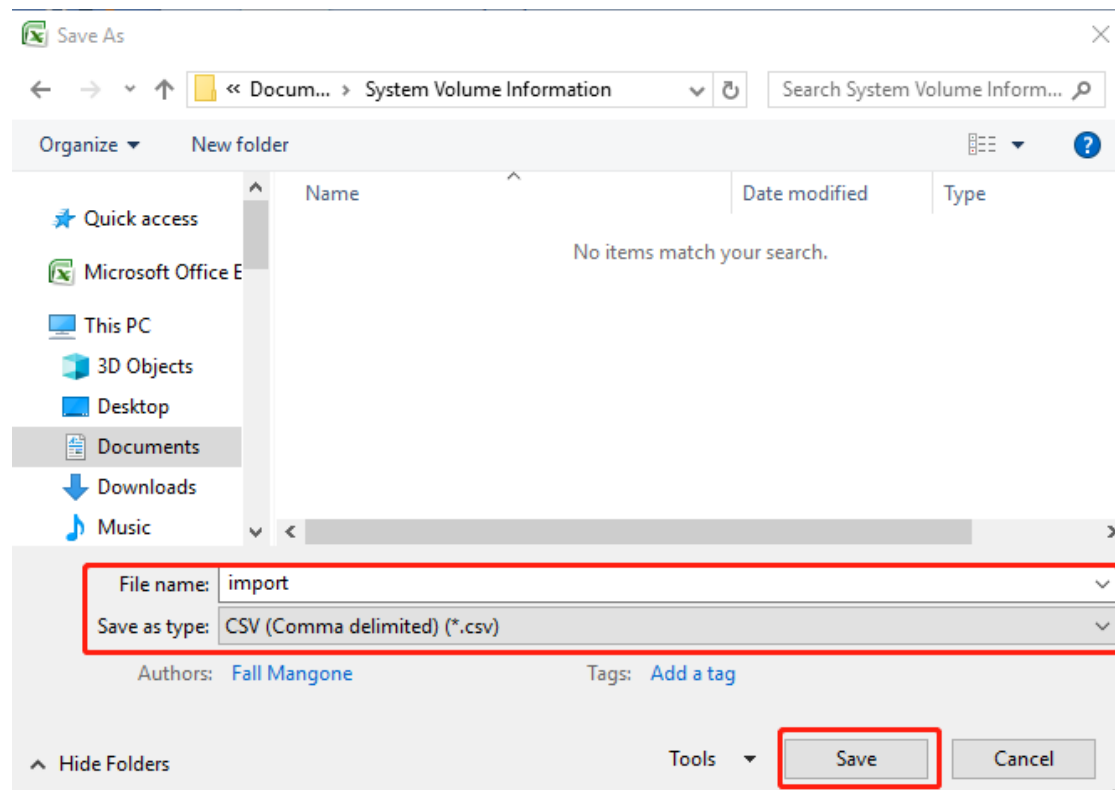
M: Mandatory
O: Optional

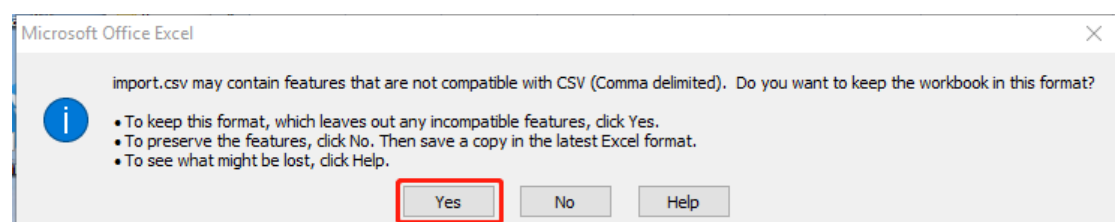| Column	Description	Necessity	Remark
A	Serial Number	M	Enter the serial number in column A of the import file (add up from 1)
B	Personnel Name	M	Enter the name of the person in column B of the import file
C	Employee ID	O	Enter the Employee ID in column D of the import file
D	RFU	O	Reserved for use
E	Personnel Type	M	Enter the type of personnel in column E of the import file. (1 is the white list (for internal company employees), 2 is the black list (for non-access personnel), 3 is the visitor (for temporary visitors)
F	RFU	O	Reserved for use
G	Personnel Gender	O	Enter the gender of the corresponding person in column G of the import file. (1 for Male and 2 for Female).
H/I/J	RFU	O	Reserved for use
K	RFU	O	Reserved for use
L	Photo Name (Without Mask)	M	Enter the file name of photo of the corresponding person **without a mask** in column L of the import file
M	Photo Name (With Mask)	M	Enter the file name of the corresponding person **with a mask** photo in column M of the import file

An example of import file is showed as below.
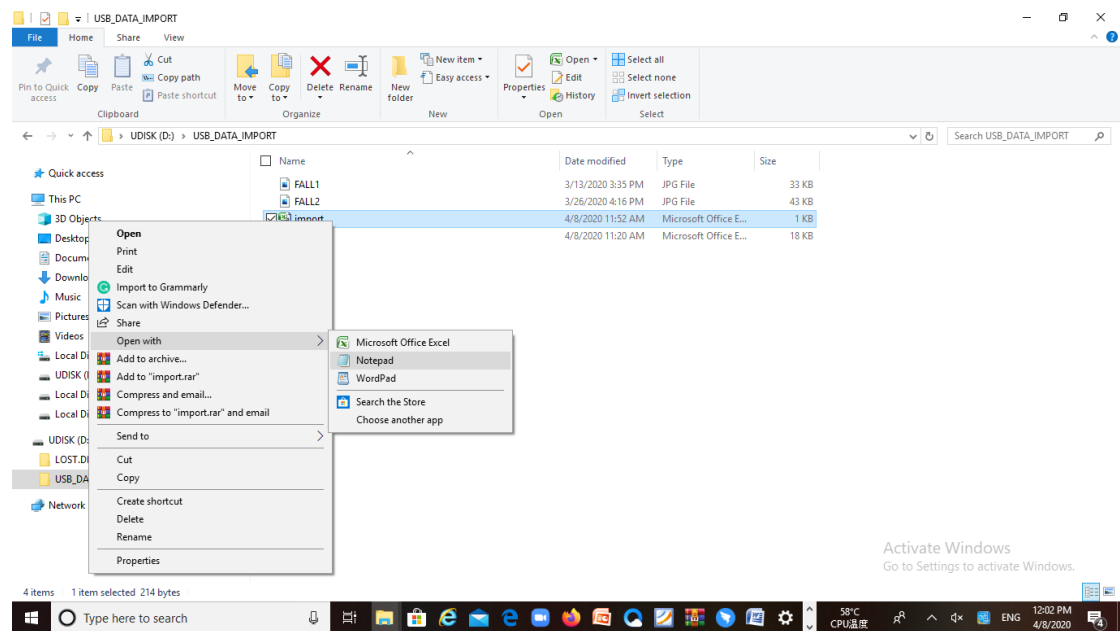

3.1.2 Saving Format of Imported File

After all necessary elements are filled in the import file, save the file in .csv format under the name of *import*, as showed below in the illustration.
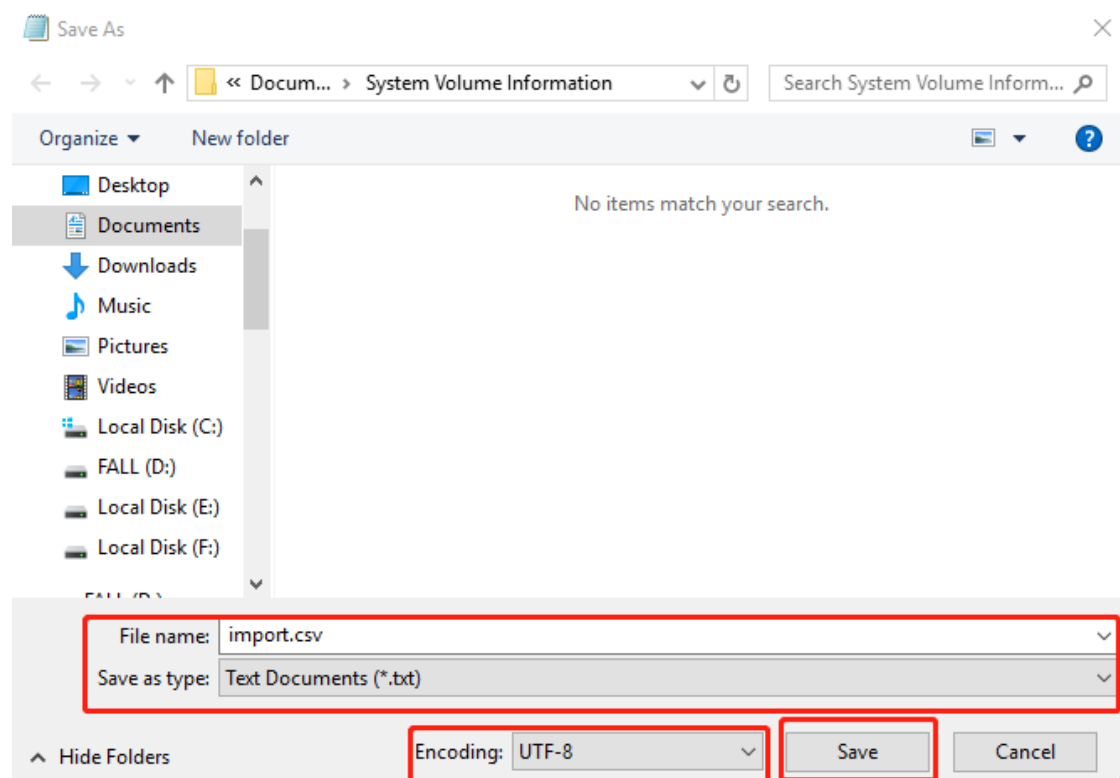
Select "Yes" to continue saving.

Then the import file shall be transformed into UTF-8 encoded format by following operations. Open the import file with Notepad. Open the Import File with Notepad.
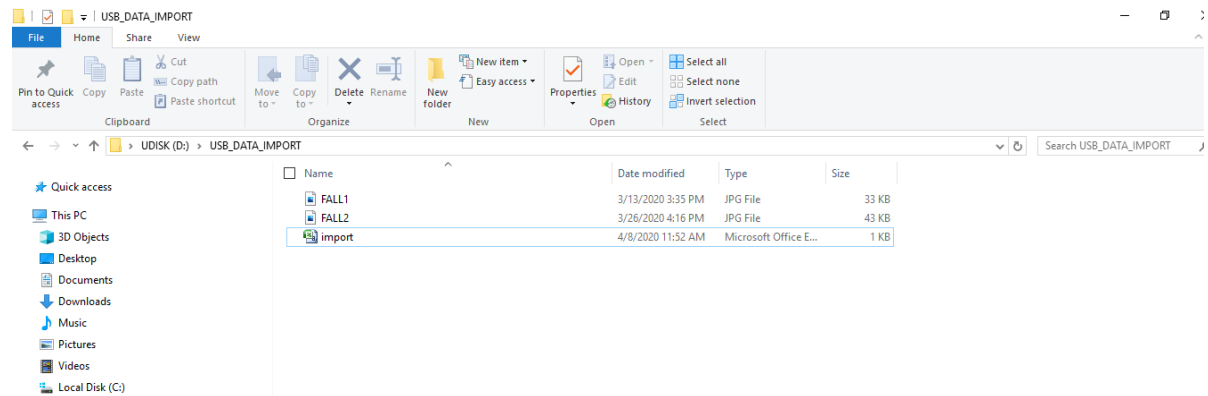
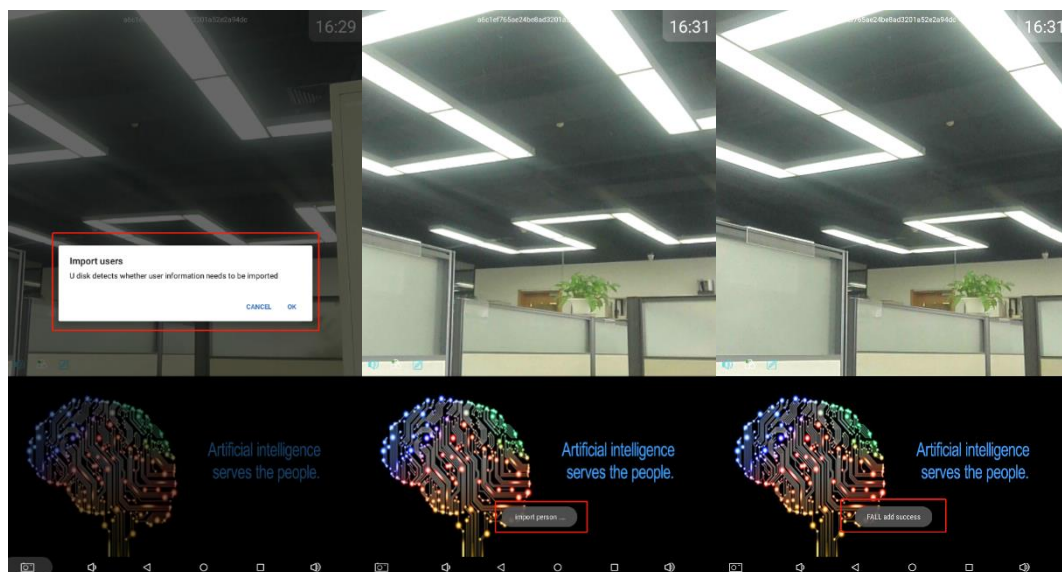After that, please save the import file as UTF-8 encoded file.

3.1.3 Data Import Operation

Copy the .cvs import file and photos to the same directory of USB flash disk.
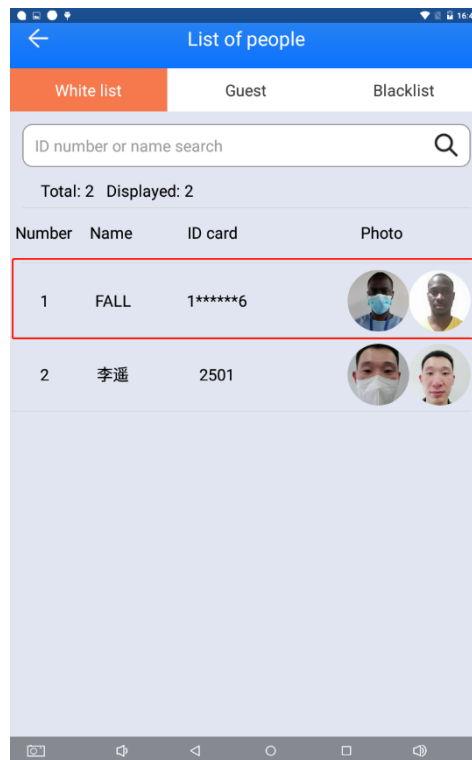

Then insert USB flash disk to WD-C7808 to import data.

After inserting USB flash disk into WD-C7808, the following prompts are displayed in order on the touching screen of terminal.

After the data import operation is complete, personnel information can be seen in list of people.
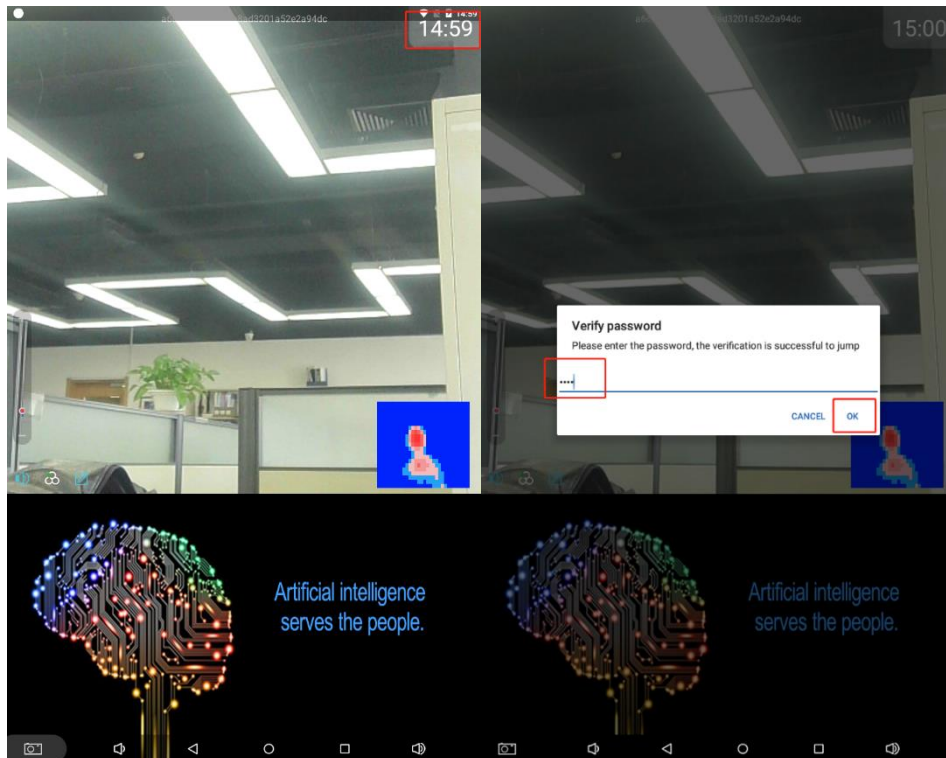
3.2 Data Export
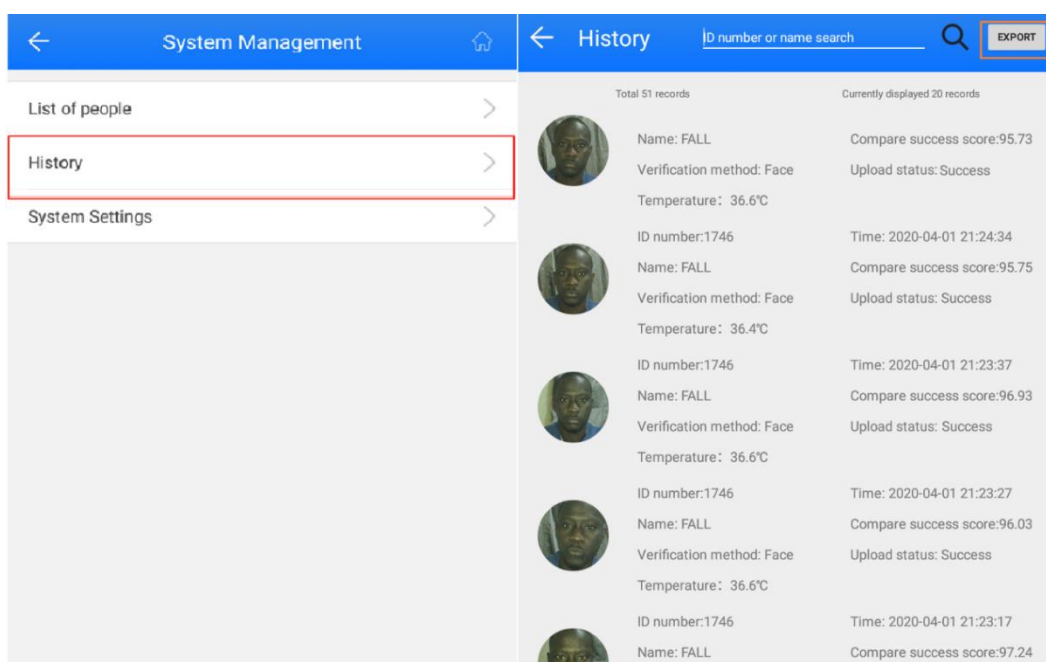
3.2.1 Insert a USB Flash Disk

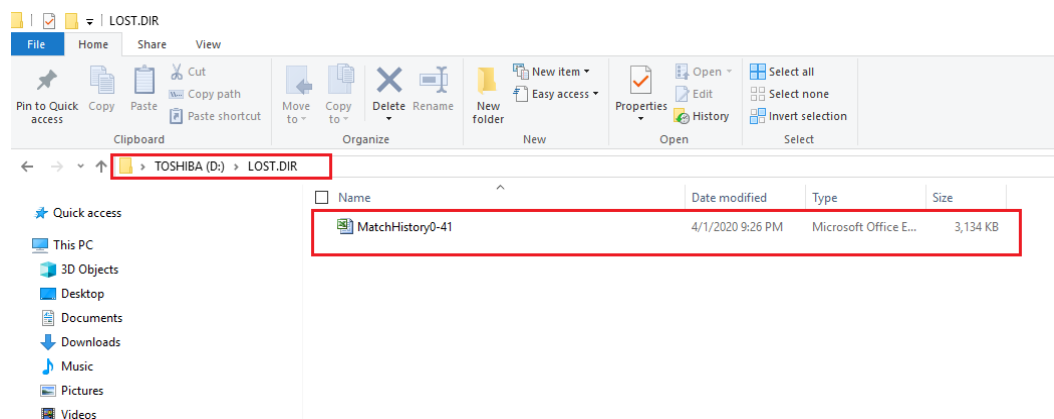## 3.2.2 Export Historical Temperature Measurement Data

To export historical temperature measurement data, first please enter the facial recognition and temperature measurement application, click the time button five times in a row, and enter "6116" on the verification password interface.

Click History in System Management interface, and then click the "EXPORT" button in History interface to complete the export process.

The saving path of export file is as follow in the USB flash disk.

Here is an example of file exported from WD-C7808, which can be opened by EXCEL.

Name	Gender	ID	ICCard	Time	Similarity	Result	Comparison method	Category	Face image	Template image	Device name	Temperature
FALL	Male		4244	2020-04-14 14:58:44	97.39	Check success	face recognition	White list			WD ACCESS SYSTEM	36.6℃
Yao	Male		5396	2020-04-08 10:31:30	99.44	Check success	face recognition	White list			WD ACCESS SYSTEM	36.7℃
FALL	Male		4244	2020-04-07 17:09:24	92.12	Check success	face recognition	White list			WD ACCESS SYSTEM	36.2℃

4. Terminal Mounting Methods - Desktop

Terminal of WD-C7808 has three ways of placing, providing a great convenience for customer of variety scenarios.

Figure 3.1 Desktop, On the Wall and On the Gate

With additional base in the package, terminal of WD-C7808 can be placed on table, desk and similar positions. The additional base is suitable to place a contactless reader inside.
The following 3 steps show how to install terminal with desktop method.

Step 1: Drop the main engine on the base and move it back from the front

Step 2: Put the host on the surface of the base and push it until host and base completely stuck, and cannot move back, as shown in the figure.

Step 3: As the hexagon screws at the bottom of the host can be seen from the through hole on the back of the base, use the hexagon tool with the equipment to screw out the screws 3 to 4 times counterclockwise to fix the base and the host in front and back positions

Hexagon Screw Position