



Face Recognition Access Control & Attendance System

User Manual

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Caution : The functions please refer to the actual product; the contents shown in the figures could be different from the actual product.

Please forgive us to simplify some words because of the limited display screen, such as:

Admin. refers to Administrator;

Recog. refers to Recognition;

No. refers to Number.

Product Summary

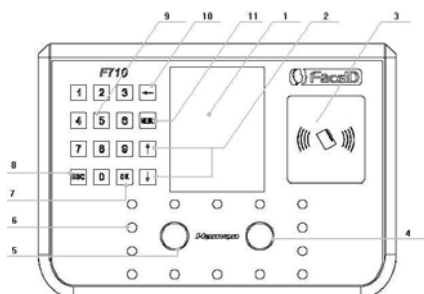
General Introduction

Hanwang technology Co., Ltd. has engaged in mode recognition field for more than ten years. Since 2008, Hanwang technology had broken the technology monopoly on abroad, developed a series of face recognition technology and related products.

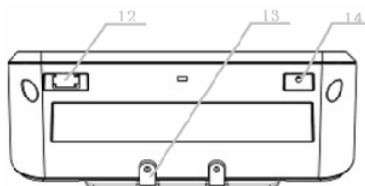
Face ID F710 is an embedded face recognition product with “double lens”. It adopts the recognition algorithm “Dual SensorTM V2.0” which Hanwang has the completely independent intellectual property rights, to make recognition fast, more accurate, and cannot be influenced by environment lights. It is special designed for the offline access control & attendance management in some enterprises or public institution. It adopts 600MHz TI high-speed DSP, 3.5 inch TFT color screen, particular slope design, and phonic broadcast to make the access control & attendance management work well. It supports TCP/IP communication and USB flash driver for uploading and downloading the information, it is very convenient for the access control & attendance management in enterprises and public institution.

Device Installation and Connecting

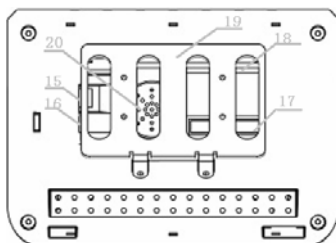
Device Ports and Keys



Front View Figure



Elevation View Figure



Back View Figure

① TFT Color LCD

Display the function menu and user Images.

② Direction Key

Press \uparrow/\downarrow keys to select the function that you want to perform in the menu.

③ Area for Brushing ID Card

You can brush your ID card in this area.

④ Left Lens

Capture the images.

⑤ Right Lens

Capture the images.

⑥ LED Lights

Located around the lens, provide enough light for lens to capture the images.

⑦ OK-Confirmation key

If there is prompt information popup or options need to be confirmed, press OK to confirm the operation.

⑧ ESC----Return/Cancel key

Under the selection prompt or input states, press ESC to cancel the operation. When the system is in the sub-interface, press ESC to exit the current interface, and return to the upper interface.

⑨ Index/Number key

Index list key : Under the menu state, each number corresponding to each option in the menu, press any number key to select and operate the corresponding function in the menu.

Number key : Under the input state, the number key 0~9 are

used for inputting numbers.

⑩ Backspace key

Under the input state, press this key to delete a number, the cursor will go back a space.

⑪ MENU key

Press MENU key to shift to the Administrator Verifying interface, you can operate the system as an administrator after verified by the system.

⑫ USB port

Connect with USB flash driver, after verified as an administrator, you can import or export data by using the USB flash driver.

⑬ Device installation backboard

It is used for fixing the device onto the wall.

⑭ Reset restoration hole

The device will be restarted by pressing the key in this hole.

⑮ Net cable jack

Insert net cable in the net cable jack, the device will be connected with the management software in PC client for transmitting data.

⑯ Power adapter jack

Standard power adapter jack

⑰ Access controlling signal line connecting port

Connect the access controlling signal line and power adapter line with the device.

⑱ SD card inserting groove

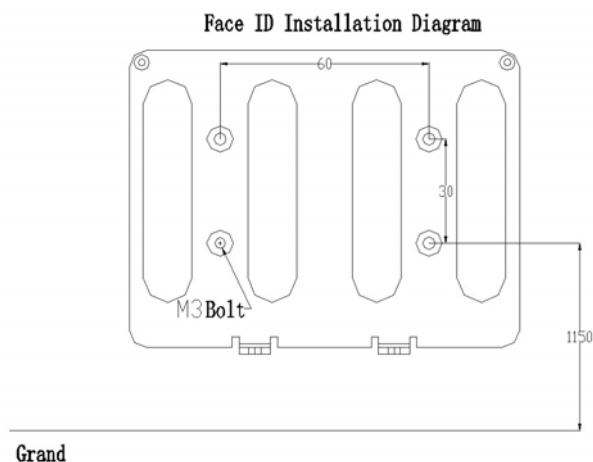
Insert SD memory card in this groove

⑲ Backboard

⑳ Speaker

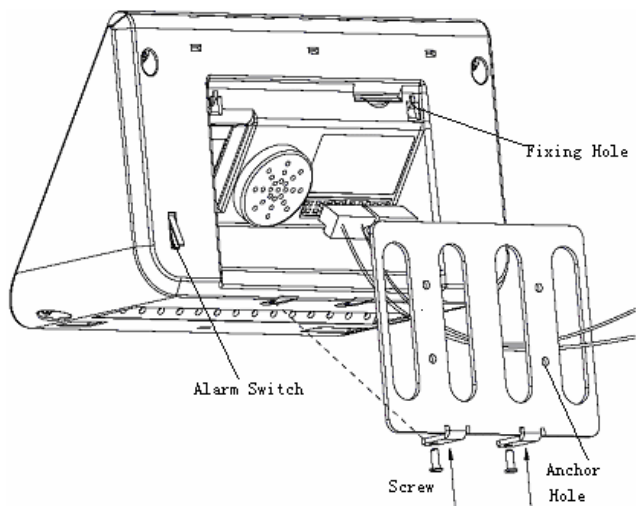
Broadcast system prompt voice or information

Installation Instruction



- Drilling the holes

Please drill four holes on the wall according to the diagram above, and the distance between the below holes and ground could be 1.15m or you can adjust the distance to the suitable height for the most of the stuff;



The Face ID installation diagram

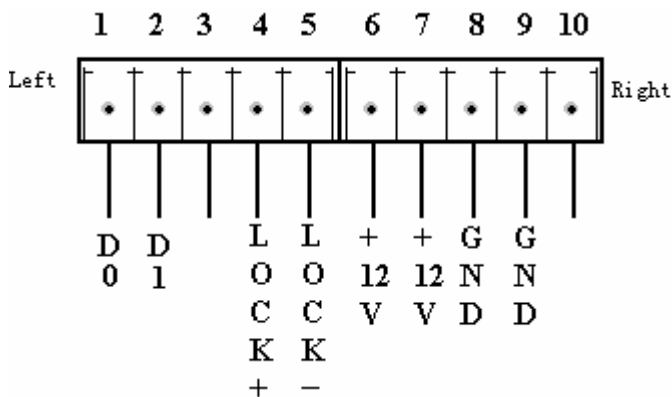
- Unconnected with door controller

Insert the standard power adapter plug into the power jack which is placed at the left groove in the back of device;

- Connected with door controller

You need to induct the power and door controller signal line from the terminal port which is placed in the back of device. Remove the backboard; connect the line with the terminal port through the backboard as the installation diagram shown;

- Plug the RJ45 crystal port of net cable into the net cable jack which is placed at left top side in the back of device;



(Terminal Port Diagram)

D0 : Wiegand 0

D1 : Wiegand 1

+12V : Power

GND : Ground

- Install the backboard, the vertical distance could be 1.15 meters between the two below level holes and ground;
- Fixed the backboard into the wall and please ensure the backboard is level and vertical from the ground, and it need to be jointed with wall;
- Insert the fixing holes at the back of device into the protrude pins which are placed at the backboard, and press it down softly, keep the device hanging on the backboard and joint with the backboard, then fix the screw at the bottom of device.
- Finally, start-up the device.
- Administrator is unset in the default setting, you need to set an administrator when you start to use (Please refer to page 12, Set Administrator);
- Register user(Please refer to page 12, Face Register);

-
- Set access signal, network, data and volume(Please refer to page 25, Set System);
 - Start to use.

Startup

Switch on, the device will startup, and you will see the start interface as the following figure shown.

Then standby interface will be shown, and you will see the present data, time, week as the following figure shown. When the device apperceive face image, it will shift to face recognition state automatically.



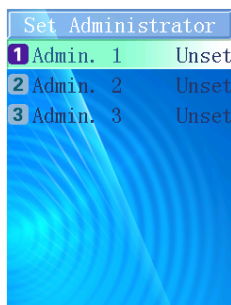
When the record capacity reach to 85%, capacity percent will be shown on the screen, at that moment, the administrator should export and clear all records on the device.

Set Administrator and operation


Set Administrator

Enter to Set Administrator Module

First entrance: When you enter to the system at the first time, the administrator has not been set yet. Press MENU to enter the Set Administrator operation module, the following picture will be shown on the screen.



Press \uparrow/\downarrow keys to choose the corresponding option which you want to select, and then press OK to operate this option, or you also can press the corresponding number key to operate the corresponding function directly.

 **Caution :** Please set at least one administrator when you start to use this device, because all controlling functions are controlled by the administrator.

Normal entrance: After you set the administrator, Press MENU to enter the Administrator Verifying module, the Function Menu will be opened after the verification.

Set Administrator

Number of Administrators

- There are three unset administrators in the system.
- If the administrator is not set, the “Unset” will be displayed at the right side.

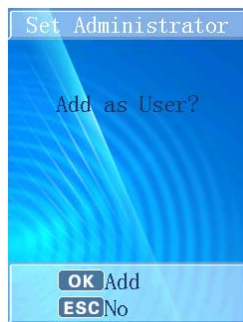
Face Register

- Select any number of an unset administrator to enter to the face register module.
- During the register process, face image collecting interface will be shown on the screen; the white dashed frame will direct user to aim his head at the lens.
- As soon as the face is inspected by the lens, the green line frame will be shown on the screen; the system will mark your face outline, and collect face information automatically.
- The processing strip will be shown at the bottom of screen to display the actual procedure; the prompt information will also be displayed to remind user to “watch lens or adjust the actions”.
- After that, the system will ask: “Add Card Recognition?” as the following figure shown.



Card Recognition

- Press OK to startup "Card Recognition", and request user to brush ID/IC card.
- Press ESC, "Card Recognition" cannot be started.
- The following question will display: "Add as User?" as the following figure shown.



Add as User

- Press ESC to finish administrator setting, the system will return to "Set Administrator" interface.
- Press OK and input job Number, this administrator will be added as a user.

Register Finished

- The register successful information will be shown on the screen.
- After 2 seconds, the system will return to “Set Administrator” interface automatically.

Modify or Delete Administrator

Enter to the “Set Administrator” menu, select an administrator you set before and you can modify or delete this administrator.

Register Again

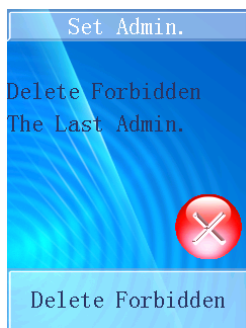
- Select “Register Again” in the menu;
- Collect face images again;
- Press OK to confirm “Add Card Recognition”, and “Finished ”will be shown on the screen, the correct prompt voice can be heard; after 2 seconds, the system will return to “Set Administrator” menu.

Delete Administrator

- Select “Delete Administrator”;
- Press OK to confirm;
- “Finished” will be shown on the screen; after 2 seconds, the system will return to “Set Administrator” menu.



Hint: If only one administrator remained, it will be deleted forbidden, as the following figure shown, and the wrong voice can be heard. After 2 seconds, the system will return to “Set Administrator” menu.



Administrator Function Menu

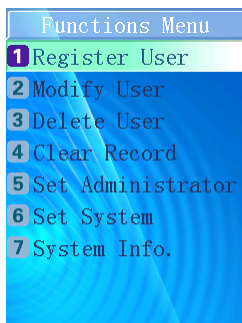
Administrator Verification

- Press MENU, administrator verification will be startup by face recognition or face & card recognition.
- Pass the verification, function menu will be shown on the screen.
- If 5 seconds verification overtime 3 times continuously, "No Authority!" will be shown as the following figure, the wrong hint voice can be heard, after 2 seconds, it will return to the standby state.



Function Menu

There are 7 options in the function menu: Register User, Modify User, Delete User, Clear Record, Set Administrator, Set System and System information. Press \uparrow/\downarrow keys to choose the corresponding option which you want to select, and then press OK to operate this option, or you also can press the corresponding number key to operate the corresponding function directly.



Administrator Function Menu

Register User

Register User Module

Enter to the function menu, press the corresponding number key "1", you can enter to "Register User" module directly.

In this module, press ESC to quit and return to the "Function Menu".

Register User Parameter

Total Capacity: Maximum number is 500 users

Job Number Range: 1-65535

Support Card: ID/IC card

Face Image Model: 18 sheets per person



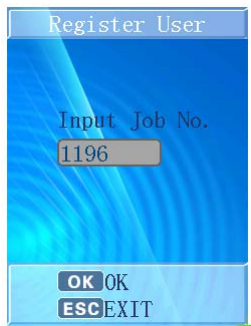
Caution: Job Number is formed by nature number, and it cannot repeat, "0" cannot be used in front of the job number, for example: 0020, it will be recognized as 20.

Register User Operation

- Input Job Number

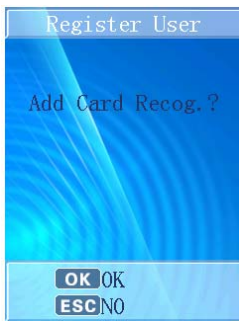
In the "Register User" module, there will be an editing frame shown on the screen, input user's job Number in it as the following figure shown, the device will inspect whether this user

is existed in the database.



Press OK to confirm, and then press ESC to quit and return to the “Function Menu”.

- About Face Register, please refer to page 12, Set Administrator----Face Register.
- Ask user whether to “Add Card Recognition?”



- Press OK to operate, or press ESC to overlap that function.
- Face Register, the system will ask whether to “Permit open door?” as the following figure shown.



- Ask user whether to "Permit Attendance?" press OK to confirm.



- The following information will be shown: "Job Number", "Permit Open Door?", "Permit Attendance?" as the following figure shown, and the correct hint voice can be heard; after 2 seconds, it will return to "Input Job No." interface to register the next user.



Modify User

Modify User Module

- Enter to the function menu; press the corresponding number key “2” to enter the “Modify User” module directly.
- In the “Modify User” module, press ESC to quit and return to the “Function Menu”.

Modify User

Input Job Number

In the “Modify User” module, there will be an editing frame shown on the screen, input user’s job Number in it, the system will inspect the corresponding information in the database automatically, press OK, you will enter the “Modify User” menu; if that user haven’t be registered in the system, you will see the following information “User is not existed, input again”, press OK, you can enter the “Modify User” menu as the following figure shown,



Register Again

Collect user's face information again, and you also can startup "Card Recognition" at the same time, the procedure is the same as referred before.

Modify Authority

Start or cancel face access control and attendance.

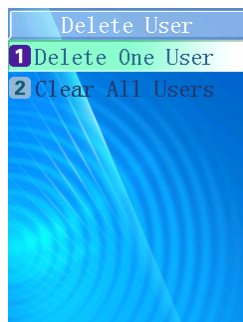
Delete User

Delete User Module

Enter the function menu; press the corresponding number key "3" to enter "Delete User" Module directly.

In the "Delete User" module, press ESC to quit and return to the "Function Menu".

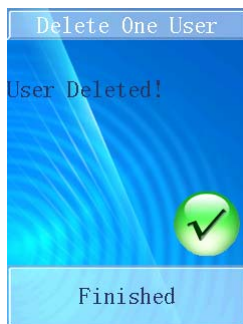
Delete User



Delete One User

Input a Job Number, if the number is existed, it will be deleted; otherwise, that information: "User is not existed" will be shown on the screen and it will quit automatically.

Press OK to confirm, "Confirm Delete?" will be displayed, and utter the hint voice, press OK again to delete the selected user.



"User Deleted!" will be shown on the screen and the correct hint voice can be heard, the system will return to the "Delete User" menu automatically.

Clear All Users

The caution information will display on the screen to remind administrator “Cannot Recover!” as the following figure shown:



Press ESC to cancel and the system will return to “Delete User” menu; press OK to startup this function, all users will be cleared and “Clearing..., please wait...” will display on the screen.

After that, “Finished” will display and the correct hint voice can be heard, after 2 seconds, the system will return to “Clear User” menu automatically.

Clear Record

Clear Record Module

Enter the function menu; press the corresponding number key “4” to enter the “Clear Record” module.

In the “Clear Record” module, press ESC to quit and return to the “Function Menu”.

Clear Record

The system will prompt user “Cannot Recover!” and the hint voice can be heard; press ESC to return to the “Function Menu”.

Press OK, the record will be cleared, the hint information will display as the following figure shown.



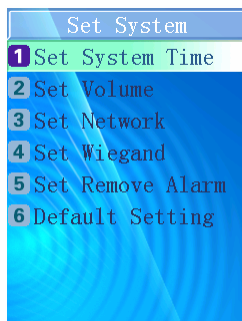
After that, “Finished” will display, the correct hint voice can be heard, after 2 seconds, the system will return to the “Function Menu” interface.

Set System

Set System Module

Enter the function menu, press the corresponding number key “6” to enter Set System module directly;

In Set System module, press ESC to quit and return to the “Function Menu” interface.



Set System

Set System Time

Input combined numbers in y/m/d frames respectively, cursor will jump to the next frame when you finished in the last frame, cursor will wink in which it locate, and inspect the number's validity automatically.

When you finished, press OK to confirm the time you set, the system will utter the correct hint voice, it will return to the "Set System" menu after 2 second. Choose ESC, you will quit modification about the time and return to the "Set System" menu.

Set Volume

Press the corresponding number key to choose "High, Middle, Low" level, or press \uparrow/\downarrow keys to shift the options, then press OK to confirm your selection, the device will utter the correct hint voice(in the last set volume level), it will return to the "Set System" menu after 2 seconds. Choose ESC, you will quit modification about the volume setting and return to the "Set System" menu.

Set Network

According to the direction of networking administrator in your company to set IP address, mask code and gateway address.

Press OK to confirm your setting, the complete networking information will be shown on the screen; it will utter the correct hint voice and restart the device automatically.



Hint : When you are setting system, press OK to confirm your setting, and you can set continuously; if you press ESC, the setting will not be saved and the system will return to the “Set System” menu.

Set Wiegand

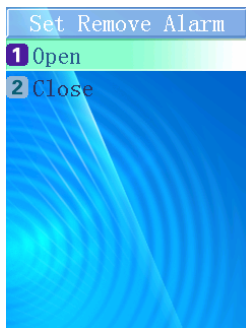
According to the direction of access controlling engineer to set the format of the access controller port in the device, it can support the following setting: Wiegand 26 and Wiegand 34 as the following figure shown.



Press OK to confirm your setting, the information of access controlling signal will be shown on the screen, it will return to the “Set System” menu after 2 seconds; press ESC to quit modification and return to the “Set System” menu.

Set Removing Alarm

Select OPEN, the alarm will startup automatically when the device is removed by anyone else; select Close, the device won't alarm when it is removed.



Default Setting

The caution information will display as the following figure shown.



Press ESC to cancel the operation and return to the "Set System" menu; if you press OK, the system will be recovered to the default setting and "Clearing..., please wait..." will be shown on the screen.

After that, "All Data Cleared!" will be shown and the correct hint

voice can be heard, the system will be restarted automatically.



Hint: “Default Setting” means the system will clear all users’ information. All attendance records and pictures, all administrators and all setting will be recovered to the default setting.

System Information

System Information Module

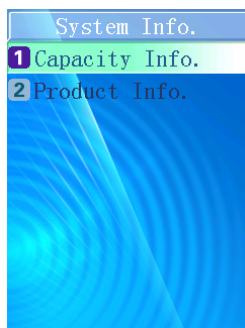
- Enter the “Function Menu”, press the corresponding number key “7” to enter the “System Information” module directly.
- In this module, press ESC to quit and return to the “Function Menu” interface.

System Information

Capacity Information: Display the capacity of user, record and pictures.

Display format: Current Quantity/Total Capacity

Product Information: Display the IP address, Mask code, Net gate, “MAC”, “SN” and Version, press ESC to quit and return to the “System Information” menu.





Hint: When a user registered successfully, the user quantity in capacity information will add one, at the same time, the photo quantity will also add one.

USB Import or Export

USB Import or Export Module

- Under the system standby interface, insert USB flash driver, the system will startup administrator verifying function automatically, after the verification, you will see the USB flash driver function menu as following figure shown.



- Remove the USB flash driver or press ESC, the system will return to the standby interface.



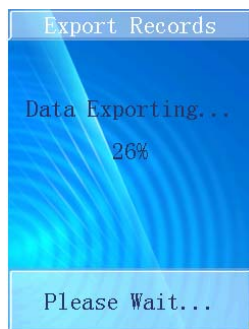
Caution : Due to the capability of chip is limited, a few models

of USB flash drive or card readers could not be compatible with this device.

USB flash driver operation

Export records

Press number key “1” to export all attendance records and access records from the device, the procedure percent will be shown on the screen; the data exported will form a new file named TIME.TXT in the USB flash driver.



After that, there will be successful prompt information display, and utter the correct hint voice. After 2 seconds, system will return to the “Function Menu”.

Export Part Users

Press number key “2” to export the selected user’s information and face images files, input his Job Number and press OK to confirm, and then input the next one’s Job Number. Press ESC to finish your selection, the system will export the information and face images files you had selected before.

During the exporting process, the procedure percent will be shown on the screen. There will be successful prompt information display when it finished, and utter the correct hint voice. After 2 seconds, the system will return to the “Function Menu”. The data

exported will form a new file named TIME.TXT in the USB flash driver.

Export All Users

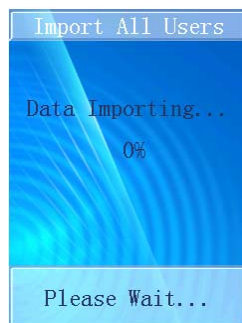
Press number key “3” to export all users’ information and face images files. During the exporting process, the procedure percent will be shown on the screen. There will be successful prompt information display when it finished, and utter the correct hint voice. After 2 seconds, system will return to the “Function Menu”. The data exported will form a new file named TIME.TXT in the USB flash driver.

Import Part Users

Press number key “4” to import the users’ information and face images saved in USER.TXT file from the USB flash driver to the database in the device. During the importing process, the procedure percent will be shown on the screen. The imported data will add up or cover the former data according to the Job Number. There will be successful prompt information display when it finished, and utter the correct hint voice. After 2 seconds, system will return to the “Function Menu”.

Import All Users

Press number key “5” to import the users’ information and face images saved in USER.TXT file from the USB flash driver to the database in the device. During the importing process, the procedure percent will be shown on the screen. The imported data will add up or cover the former data according to the Job Number.



There will be successful prompt information display when it finished, and utter the correct hint voice. After 2 seconds, system will return to the “Function Menu”.



Caution: The imported file must be USER.TXT or USERALL.TXT which is exported from the device, and the contents must not be modified, unless there will be a default.

For Common User

Face Recognition

- After all users registered, Face ID can be used.
- When a user step towards the device about 0.5 meter, the device will apperceive and startup face recognition function automatically, face recognition interface will be shown on the screen, it will be the color figure, there is a green sector brush go around deasil continuously and the green circle line frame will direct user to aim at lens.
- Face inspected successfully, the green line frame will display on the screen, and a green stick will scan your image from top

to bottom for recognizing your face.

- Face recognition and user searching will be finished at the same time.
- If face recognizing has continuous failed taken over 30 seconds, system will return to the standby state interface.
- During the recognizing process, the system will provide some prompt information for user, such as: "Please Get Closer", "Please Get Farther" and "Adjust Your Action".
- If the recognizing process has taken over 5 seconds, system will prompt user "Please Try Again!"

Recognized Successfully

- If recognized successfully, the system will utter the correct prompt voice;
- In face attendance module, system will save current recognition time automatically;
- In face access controlling module, the system will output the corresponding access controlling signal to control the access, according to the setting of access controlling;
- The job Number and current recognizing time will be shown on the screen; "Access & Attendance" will be shown according to the user register setting.



- After 1 second, the system will return to the standby interface or face recognition interface to wait for recognizing the next user.

Face & Card Recognition

- If you select the “Face & Card Recognition” function, you can register your card first and register face to contrast the recognition, so that the user will be recognized more easy;
- When you passed the recognition, a “click” voice can be heard, which the device is taking a photo for a user, and this face picture will be saved in the device.

Appendix

Technology Specification

- User Capacity : 500 Users
- Record Capacity : 200,000 Access Control Records
- Image Capacity : 70,000 Images
- Security Image Capacity : 1GB SD Card
- Recognition Algorithm : Dual Sensor™ V2.0
- Lens : Specialized double lens
- Verification Method : Face Recognition, Card & Face Recognition
- Card Recognition : ID/IC card
- Verification Speed : Less than 1 Second (500 Users)
- Keyboard : 4*4 Touch Keyboard
- LCD :3.5 inch TFT Color Screen ,65,000 Bright Color ,320*240 Resolution
- Communication Method : Standard TCP/IP、USB Flash Drive
- Security Alarm : Removing Alarm
- Output for Access Control System : Standard Wiegand 26/34、Relay On/Off Signal
- Power : 12V DC, Working Current 500 mA
- Environment Light : 0-5000Lux
- Working Distance : 30-80cm
- Working Temperature : 0°C - 40°C
- Working Humidity : 20% - 80%
- Size : 200* 95* 115 mm
- Weight : 505g
- Installation Method : Wall Hanging

Attention

- Restoration and restart

When the system halted and cannot quit, you can remove the adapter to restore and restart the system, or you also can press RESET to restart the device.

- Restore to default setting

Restore all parameter to the default setting.

- Non-Waterproof

The device is non-waterproof, please keep away from water.

- Prevent from Falling

The parts in this device are friable; please prevent the device from dropping, smashing, bending and high pressure.

- Cleaning

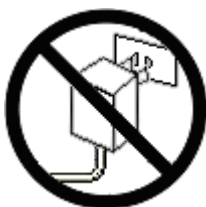
Please use soft cloth or the other similar material to clean the screen and faceplate, please avoid cleaning with water and cleanser.

- Low Temperature Environment

The working temperature for screen and the main parts in this device are the normal indoor temperature. The performance of this device will get worse, if the working temperature extend this temperature range.



Please prevent the screen from oil or any sharp things.



Please use the equipped adapter for the device, the other unknown adapters will burn out the device.