

# FacePass Pro

## User Manual

(V1.0)

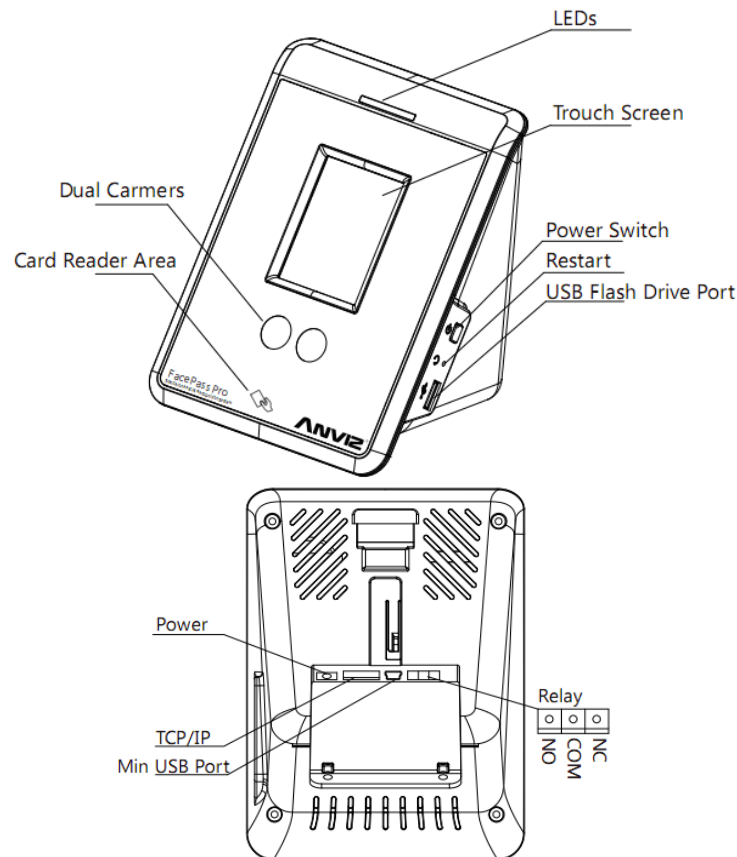
# 1. Product Overview

## 1.1. Product Description

FacePass Pro is a breakthrough innovative product. Its highly improved algorithm, powerful hardware platform, and abundant interface port ensures it provides rapid and accurate recognition, stable and convenient upgrade process, and perfect system integration performance. The multi-point infrared light source and dual infrared cameras can achieve fast identification in different environments. What's more, the elegant appearance also adds much beauty to this device.

FacePass Pro attendance system with friendly user GUI interface, voice prompt, touch screen operation, convenient WEB server management software as well as 7\*24 working endurance, is the best partner for enterprise users. Furthermore, active auxiliary illumination technologies make the systems strongly robust against light-changing environments, USB import/export, face/Card recognition mode, and built-in powerful attendance management software; it provides a "Convenient and Effective" attendance management solution.

The following is structure of FacePass Pro:



## 1.2. Product Features

- Latest face recognition algorithm

Multi-level gray-scale can show better performance contours of the face, and prominent features point for face recognition. Even if in the strong light it can also capture and identify the face immediately. Multi-point processing not only multi-point acquisition facial feature points, but also converts feature point to data directly, to ensure the face recognition speed and accuracy, which reduces the recognition false accept rate.

- **Advanced infrared light source design**

The advanced infrared light source design makes the terminal with superb adaptability for changing illumination, suitable for different complexion, gender, facial expression and beard, hair style.

- **24/7 continuously working**

Human-harmless non-visible auxiliary light technologies, good performance regardless of day or night environment.

- **Stable performance, low power and energy conservation**

High performance, low power ARM processors, sheer standalone operation, keep stable after long time working, auto-standby mode supported, energy saving, and environment friendly.

- **Easy to use, friendly user interface**

TFT touch screen, user friendly GUI and WEB management software, local operation supported, real-time display, and vivid voice provided.

- **Terminal intelligence updates**

Automatically synchronizes time, capture face images. Template self-studying is also built in that makes face template database keep updating along with dynamic changes of hair style, complexion, and age, and so on. It always stores the most updated version of user information to make correct recognitions.

### 1.3. Packing List

1. **TERMINAL**



2. **FIXING FRAME**



3. **CAT. 5 UTP CABLE**



4. **POWER SUPPLY (12V1A)**



## 5. OPERATION MANUAL

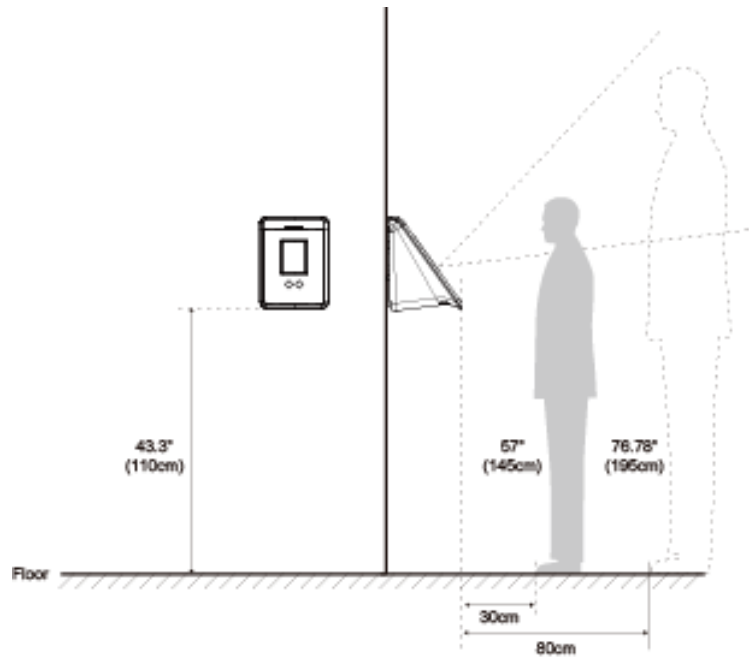


### 1.4. Terminal Parameters

Item	FacePass Pro
Camera	Dual-Cameras
Recognition Mode	Face, ID+Password, Card
Maximum User	400
Recognition Speed	$\leq 1s$
Recognition Rate	$\geq 99\%$
Failure Rate	$\leq 0.1\%$
Anger Range	Horizontal: $\pm 20^\circ$ , Vertical: $\pm 20^\circ$
Fitting Height	145-195CM
Recognition Distance	30-80CM
Records Supported	100,000 records
Relay	1 relay supported simple switch signal output
USB Flash Drive	Supported
Offline User Profile Edit	Supported
Network	Support TCP/IP (RJ45 Interface with signal light)
Built-in Web server	Supported
Tamper Alarm	Supported
RTC	Built-in RTC, Network time synchronization (SNTP)
LCD	TFT, 2.8 Touch Screen LCD 320*240
Function Key	Up to 10 function keys are supported
Signal Light	Red (Alarm/Failed); Green (Running/Successful)
Prompt	Supported (Voice, LED)
Environment Requirement	Illumination: 0-20000LUX;
Working Temperature	20%~80%
Working Humidity	-20~45°C
Dimension	175*110*145mm
Installation	Desktop / Wall Mounting

## 1.5. Installation Environment Requirements

The recognition distance of the FacePass Pro is about 30-80cm. So the terminal mounting or put at proper height is very important. The recommend installation height is about 57" (110cm). Please refer to the following Figure.



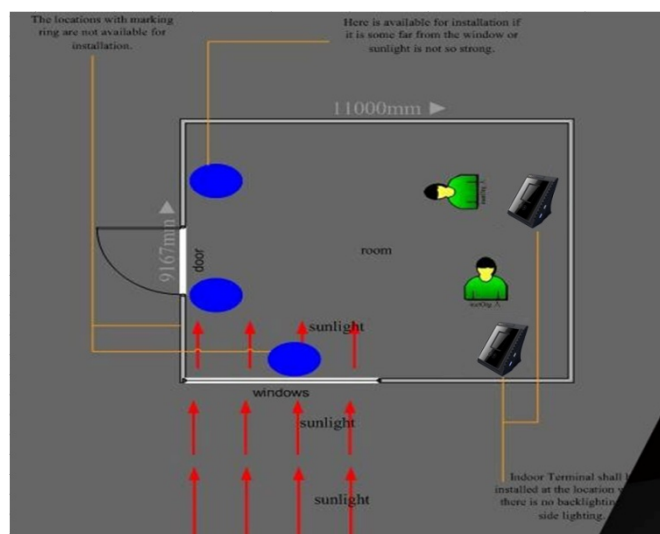
Installation Heights

**Notice:** The direct sunlight would cause great impact on the face recognition performance, so both terminal and user's face are not allowed to be under direct sunlight.

The following are scenes for product:

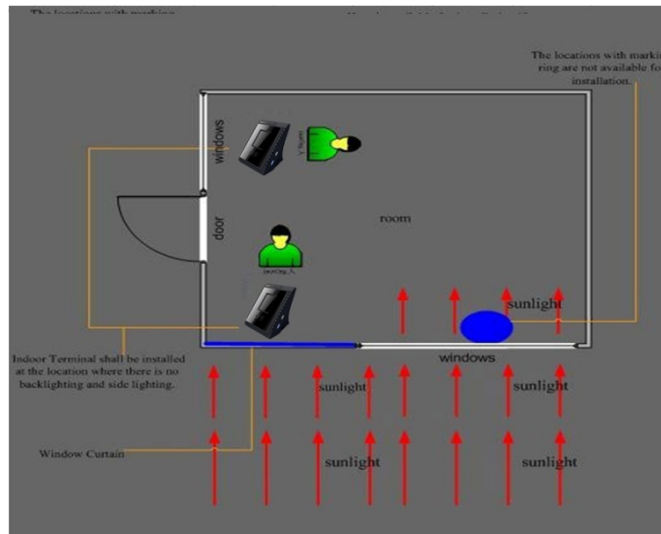
### Environment 1: Sunlight shines into the room.

As the picture shows, locations with marked blue ring are not good for terminal installation. It shall be installed at the places where there is no sunlight interference.



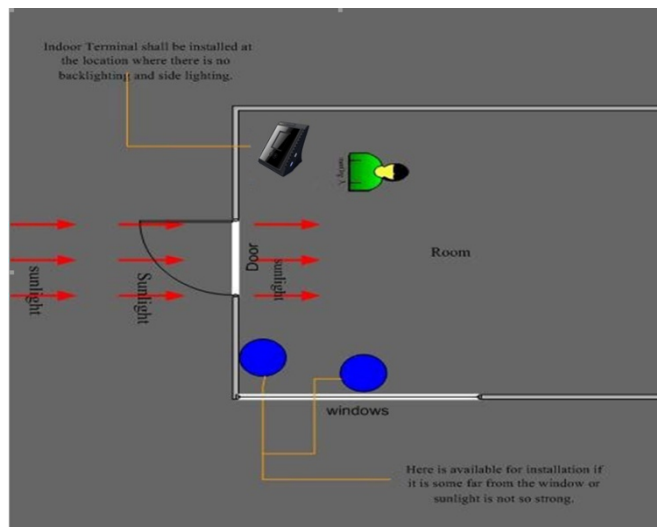
**Environment 2: The room is surrounded by glass wall.**

Window curtain is necessary to shelter from sunlight. The terminal shall be installed at the place where sunlight is sheltered.



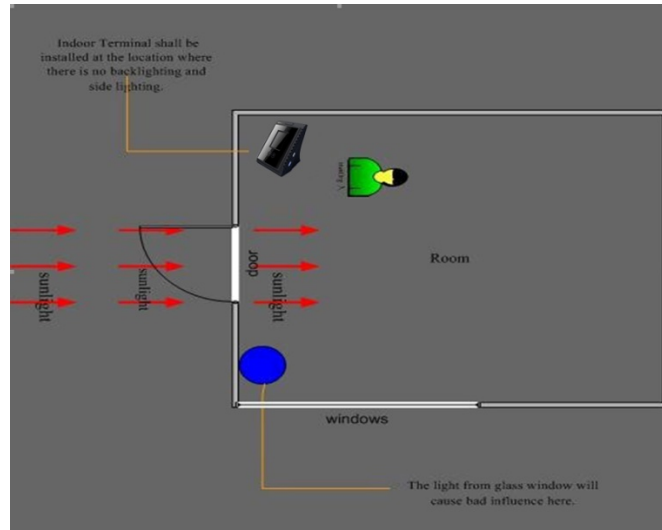
**Environment 3: Sunlight shines into the room from the door.**

Install the terminal at the place where there is no sunlight interference.



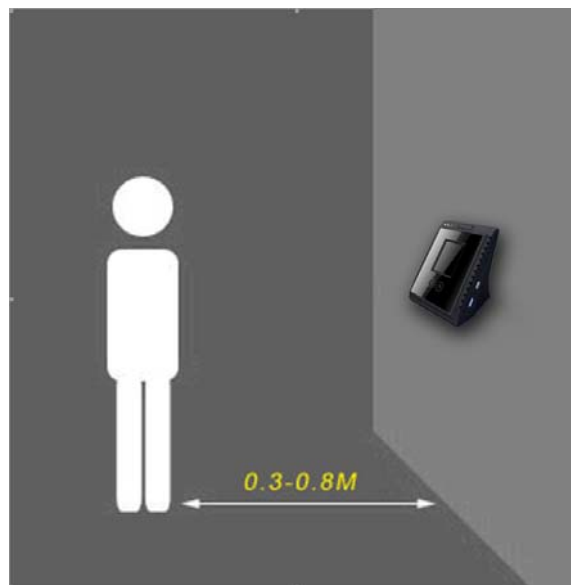
**Environment 4: Sunlight shines into the room from the door and there is glass window on one side.**

Do not install the terminal at the side with glass window.

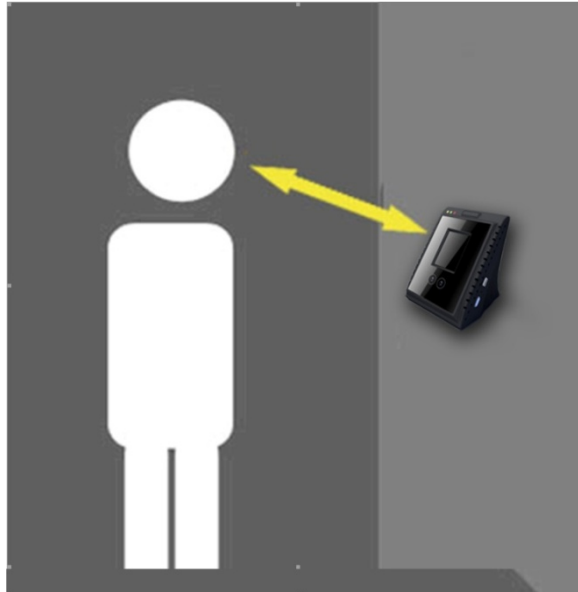


## 1.6. How to Use Enterprise Face Access System

**Step1.** Register Face Template. As the picture shows, stand in front of Terminal, the best distance between terminal and user is 0.3-0.8 meter (depending on the height of user).



**Step2.** Look at the camera and move the face as per the instruction mentioned above, the system will capture the face image and save them into database automatically.



**Step3.** Stand in front of the device and input your user ID, then look at the camera the system will make face verification automatically.

**Step4.** If verification succeeds, green lights and buzzer sounds. "Verification is successful" will be shown on screen.



## 2. Terminal Operation

Power on the FacePass Pro, the terminal will enter “Input Page” and with voice prompt “Welcome”. Keep 10sec without any operation at “Input Page”, the terminal will enter “standby Page”. Please touch screen back to “Input Page”.



Input Page



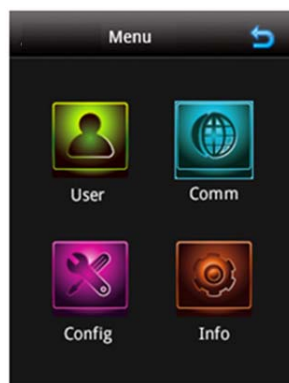
Standby Page



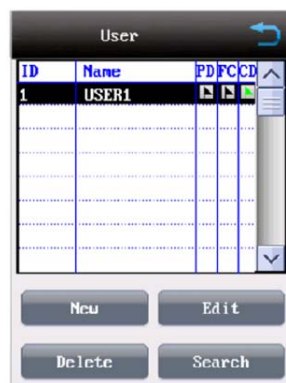
Administrator Verify Page

### 2.1. Main Manage Interface

In the “Input Page”, press **\*/c** three times or click **0/⚙** enter to “Administrator Verify Page”, then input the **default admin password "12345"** and then **#/↩** to click enter “Main Menu Page”.



Main Menu Page



User Manage Page



User Enroll Page

**Note:** When there are more than 1 administrator, you need to input information by following the prompts to enter “Main Menu Page”.


### 2.2. User Enrollment

#### 2.2.1. User Enroll (direct on Facepass method)

Please refer to the following steps to enroll the users directly on Facepass:

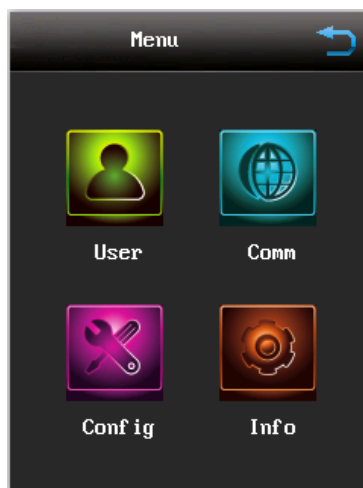
1. Power on the device to enter “Input Page”. Press **0/⚙** or **\*/c** three times to enter “Admin verification page”.



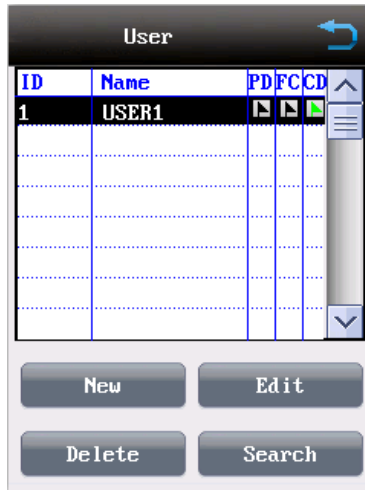
2. Input default password "12345" and press  to enter "Main Menu Page".




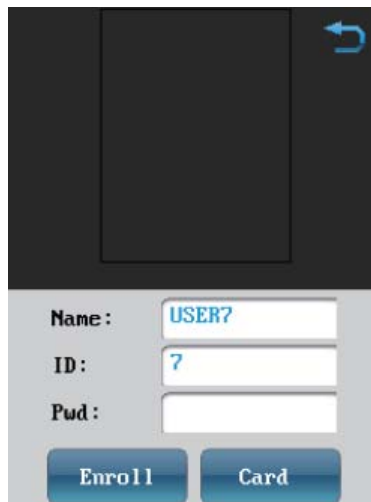
3. Click "User" option to enter "User Manage Page".



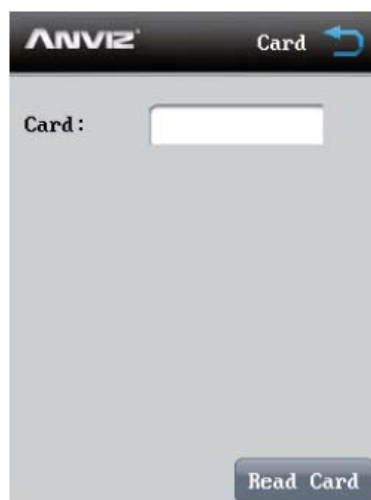
4. Click "New" to enter "User Enroll Page" to register new user.



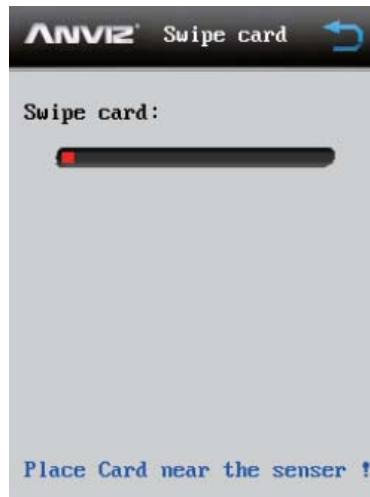
- Click input box to input Name, ID and Password. The device provides letters input when click "Name" and the click  to next enroll steps.



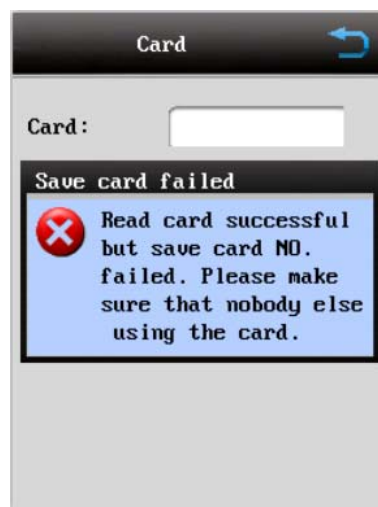
- Press "Card" to "ID card enroll page".



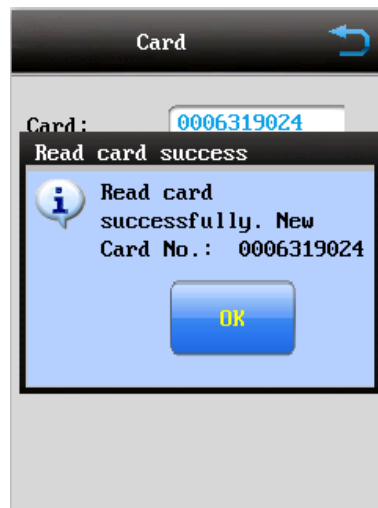
- Press "Read Card", the device waiting for swipe card at the card reader area. Then the Card will display on the device.




The following window will appear when the device fail to save the card Number:

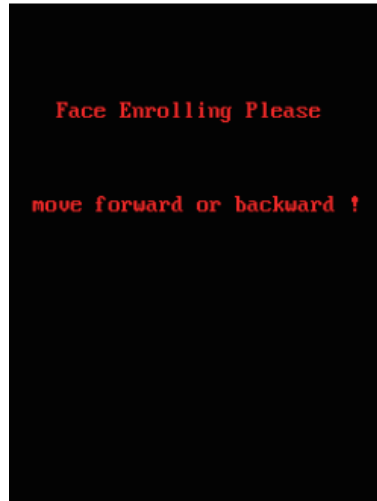


The following window will appear when the device sucessfully save the card Number:



Then press  back to "User Enroll Page".

8. Press "Enroll" to capture user face image. Before capturing user face, the device will prompt on the screen as following:





9. During face image capturing process, please keep your face in the yellow frame and move face forward and backward slightly till enrolling successfully.

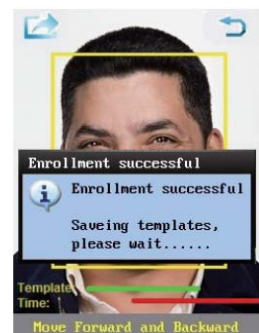
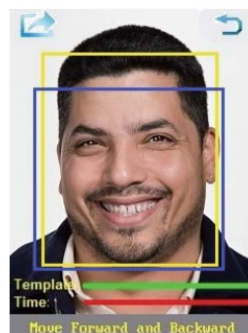
Yellow frame: the valid recognition area;

Blue frame: the valid image capturing area;

Red bar: The duration of the device in capture statues;

Green Bar: The face template capture schedule.

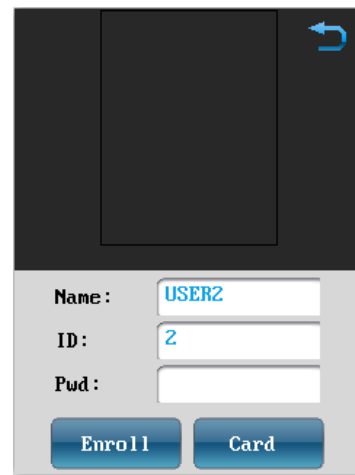
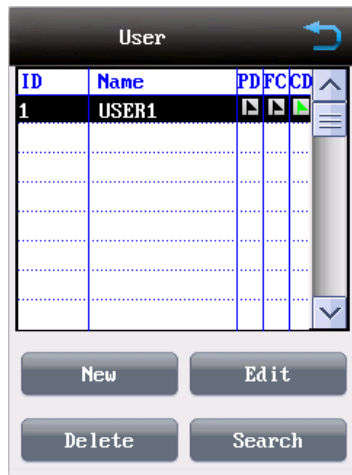
The  button use to change the camera image display on the LCD. The  button use to cancel the face image capturing process.



**Note:** During face template capturing process, please keep face in the yellow frame and move face forward and backward slightly.

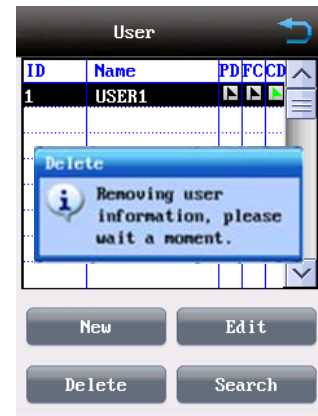
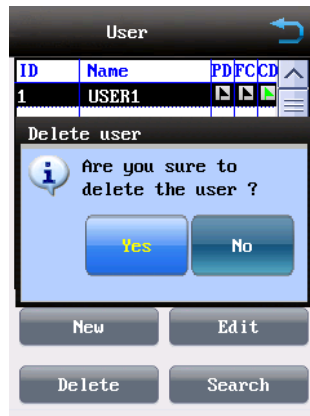
## 2.2.2. Modify User

In the “User Mange Page”, please click “Edit” to modify registered user information and re-registration user face. The detail operations please refer to **2.2.1 User Enroll.**



### 2.2.3. Delete User

In the “User Manage Page”, select the user to be deleted in users list and click “Delete”. Press “Yes” to delete the user information.



### 2.2.4. User Recognition

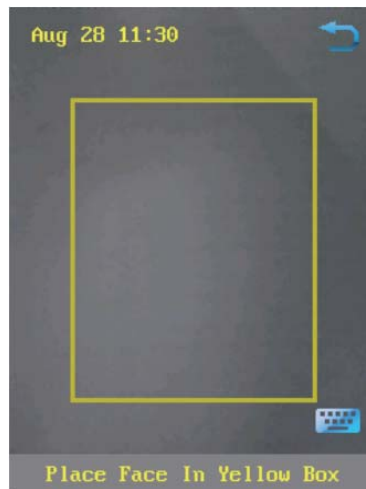
There are 3 ways to pass recognition:

#### Face Recognition

1. In the “Input page” click  to enter “Face Recognition Page”.



2. If enable body induction in the device it will automatically switch to “Face Recognition Page” when user stands in front of the device.




3. According to the device instruction please keep your face in the yellow frame.

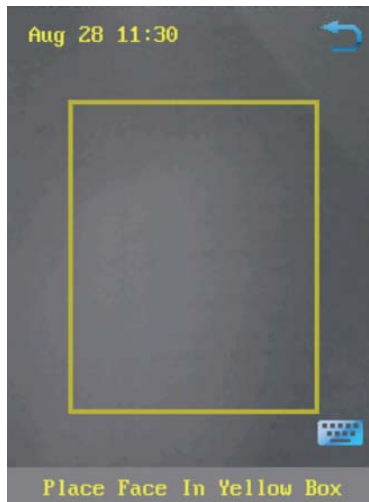


4. Face verification succeed.





### ID Recognition

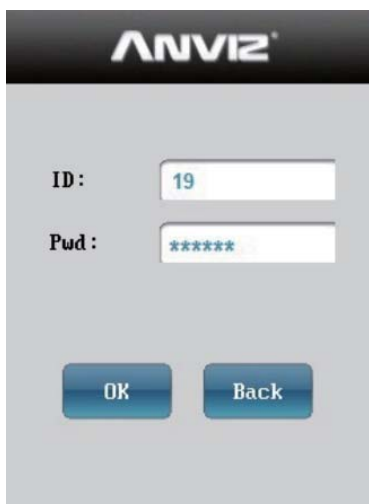
1. There is a  button in the “Face Recognition Page”. Press it to “ID Recognition Page”.



2. Input User ID and Password in the input box.



3. Press  to verify the User ID and Password. Or press  to cancel verification and back to "Input page".



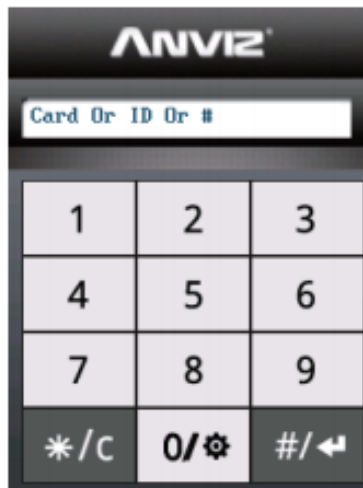
4. ID and Password verification succeed. The camera captures a current image display on the LCD.



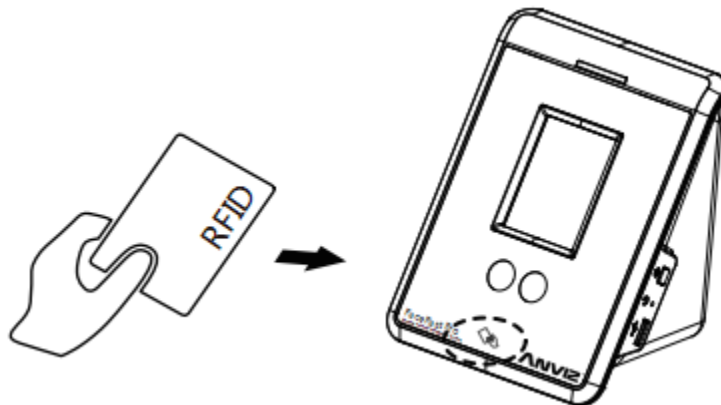


### Card Recognition

1. The Card Recognition, the device must stay on the "Input page".



2. Swipe the registered card on the card reader area.



3. ID and Password verification succeed. The camera captures a current image display on the LCD.



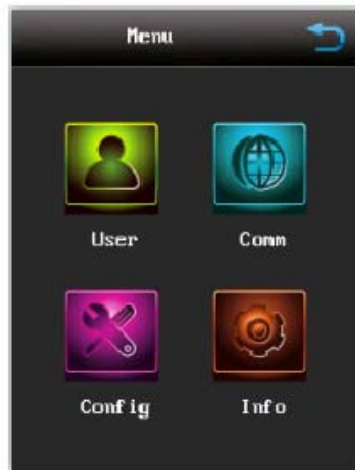
### 2.2.5. Search User

In the "User Mange Page", click "Search" to search specific user based on user ID.

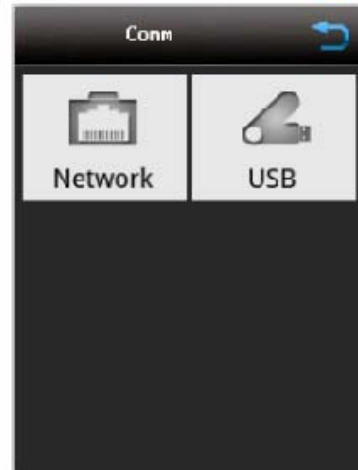


### 2.3. Communication Setting

In the FacePass Pro main menu, please press "Comm" to enter "Communication Setting Page".



Main Menu



Communication Setting Page

### 2.3.1. Network Setting

Click "Network" option to set IP address, Mask, Gateway and Port (Communication Port). Contact you IT Dept. for required values.



### 2.3.2. USB Manage Setting

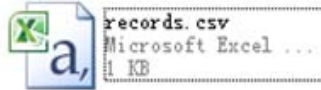
The USB Manage is for USB Flash Drive import/exporting of data. Please plug in a USB Flash Drive to the terminal then access admin menu and click "USB Manage" option to enter "USB Manage Page".



**Download Records:**

Download time attendance records (do NOT use data encryption method). After download record you can find a “record.csv” in the USB Flash Drive.

To view the records take the USB flash drive to your computer. You can view the records in Microsoft Excel or a better option is to import the records into the ClockReportsXE software for processing and time sheet calculating.



1.



2.



3.

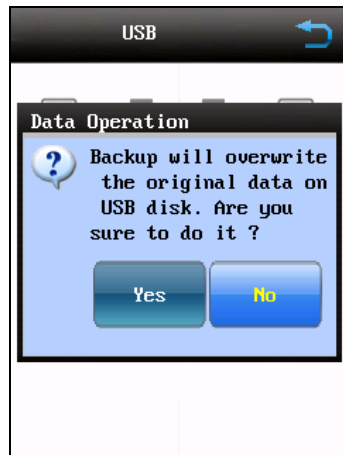


4.

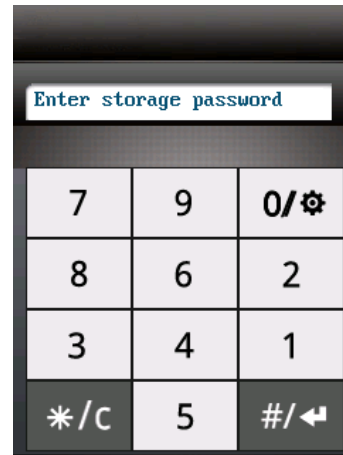
**Download User:** Export user information including face features data. After download there is a “USER” folder in the USB Flash Drive. The USER folder includes users face features data.



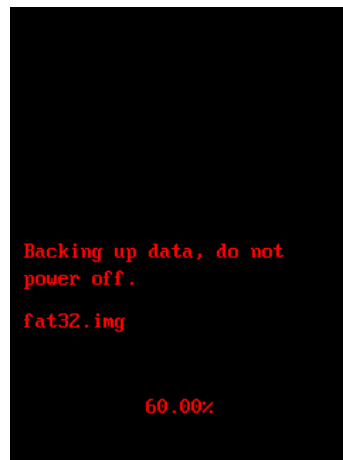
**Data Backup:** Backup data and save information into the USB pen drive. Please input storage password if necessary for this operation. The default storage password is “8”.



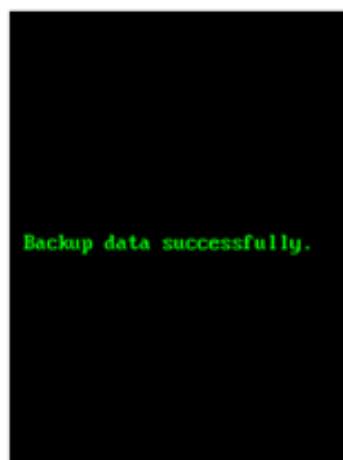
1.



2.

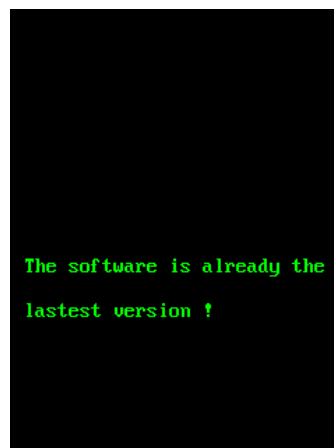
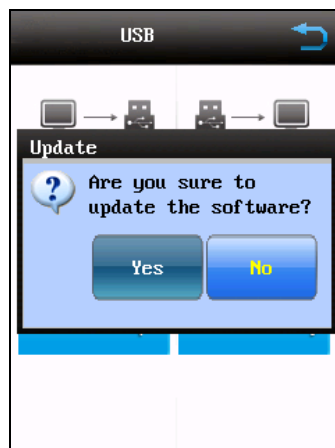


3.



4.

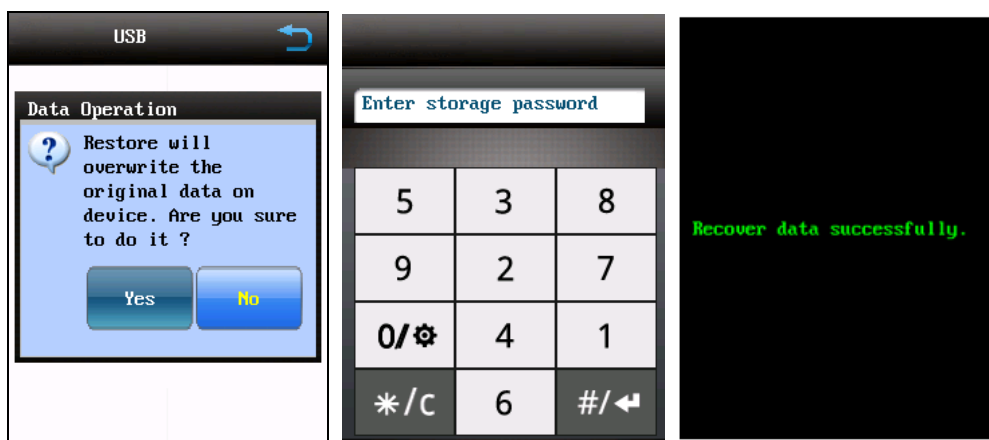
**Upgrade Firmware:** When there is a system firmware file in USB storage pen drive, the terminal will reboot automatically after successful upgrade. System upgrade pop up window will be shown as follow:



**Upload User:** Upload user information including face features data from the USB flash pen drive to terminal.

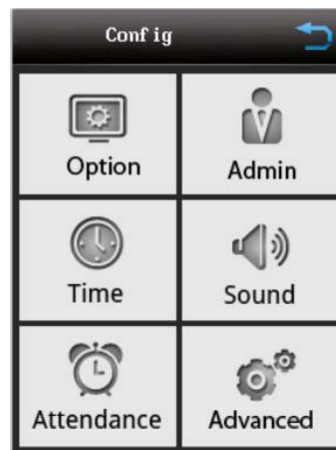


**Data Recovery:** When there is backup data in the USB storage pen drive, data recovery operation can be performed to retrieve all of the backed up data.



## 2.4. System Setting

In the FacePass main menu please press “Config” to enter “Configuration Page”.



### 2.4.1. Option

Click “Option” can set terminal language, relay delay and body induction functions for the terminal:



**Language:** Click combo box to chose system language. The optional languages are English, Spanish, Postuguese.

**Delay:** It is the relay output response time.

**Sensitivity:** It is the sensitivity adjuster for Body Induction. Value: 0-5; Slow---Fast

**Tamper Alarm:** This function use to trigger built in alarm siren when the FacePass Pro terminal is removed from wall without proper rights.

**Disorder keypad:** Select this option to make keyboard number positions switchable

**Default:** Click “Default” the terminal will prompt & the terminal will default the values. Press “Yes” to continue. “No” to cancel.

## 2.4.2. Admin

Click “Admin” for setting the terminal Administrator. The terminal has a default Administrator and the default password is “12345”. The default Administrator cannot be deleting in the terminal. But you can modify the password and enroll face via the “Edit” option. The FacePass Pro device can enroll up to 10 administrators.

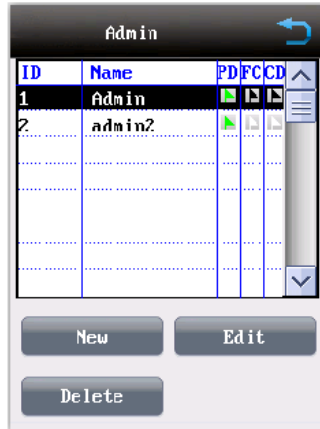
Click “New” to add a new Administrator. The “Name” and “ID” are fixed fields in the terminal. You can input password and enroll your face.

Click “Edit” option to modify the Administrator password and enroll face.

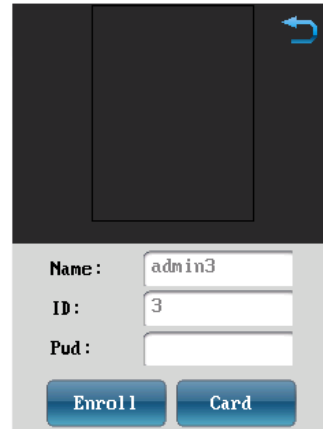
Click “Delete” option to delete Administrator.

The details enroll operation step please refer to the “2.2.1 User Enroll” chapter.





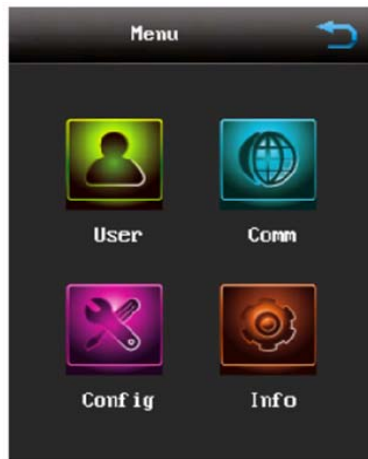


Admin Management

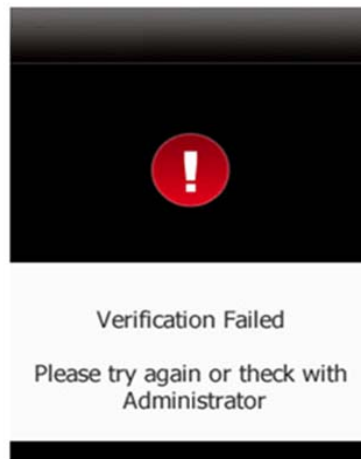


Input Page

After enroll administrator when input  three times or click  at "Input page" to enter "Administrator Verify Page". Need input new Administrator ID, "Face Recognition Page" will be shown. If the captured face matched with the specific template, the verification process will succeed. After input administrator password or face verification is successful, "Main Menu Page" will be shown. If failed, system pop-up will be given.



Main Menu Page



Verification Failed Page

### 2.4.3. Time

If syncing over a network connection with ClockReportsXE then the PC time can be used automatically to set the facepass time and date. To manually configure in the facepass menu Click "Time" option for setting terminal's time and date:



**Time Zone:** Time Zone setting. Please select local time zone in the terminal.

**Date:** Set the date.

**Date Display Format:** Choose the appropriate format of the date.

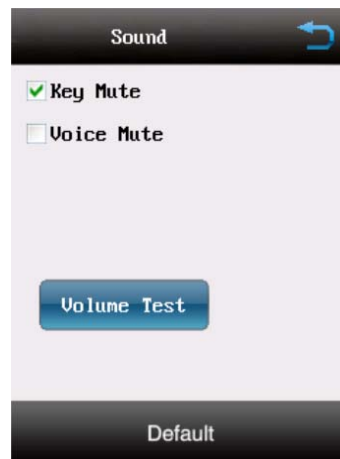
**Time:** Setting the hour for the time. Time format is: hh:mm.

**Act as NTP-SERVER:** Active Network Time Protocol Server use to synchronize the terminal time via network server.

**Sync with NTP-SERVER:** Input NTP Server IP address.

#### 2.4.4. Sound

Click “Sound” option to enter “Sound Setting” Page.



**Key Mute:** Enable/Disable the key sound.

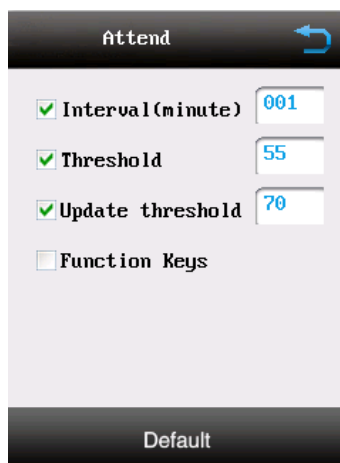
**Voice Mute:** Enable/Disable terminal prompt tone.

**Volume Test:** Test terminal current setting speaker volume.

**Default:** Click “Default” the terminal will prompt the terminal will back to default mode. Press “Yes” to continue. “No” to cancel.

#### 2.4.5. Attendance

“Attendance” option is for terminal time attendance setting:



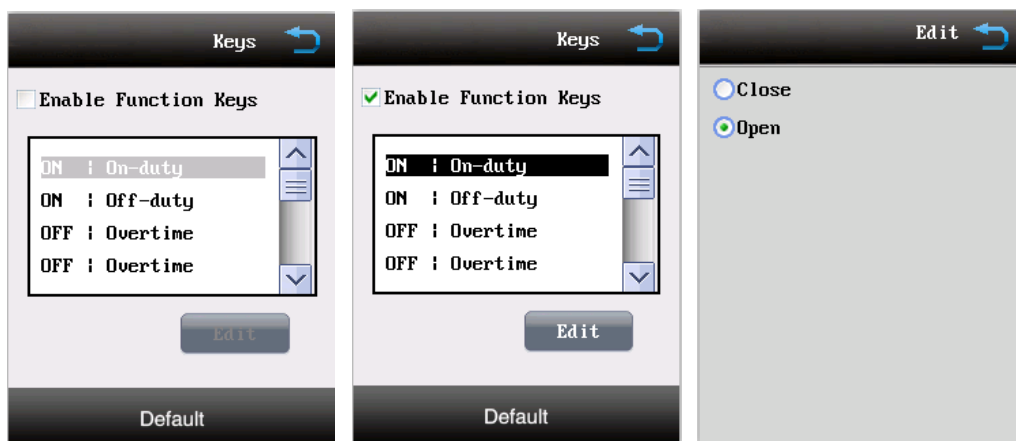
**Interval (Time):** This is the repeated attendance interval time. In interval time range only record one attendance record. The recommended value is 1 min.

**Threshold:** The higher the threshold value is the better the accuracy of verification will be however the verification speed will be slower. The recommended value is 55.

**Update threshold:** System will replace the template in database automatically with current face image if its likeness is higher than this threshold value. Default setting is 70.

**Function key:** Setting the attendance status options in the terminal.

Choose "Function Keys" to enter "Keys" Page. Select "Enable Function Key" to active function keys list. There are 10 keys (Default 6 keys "On-duty", "Off-duty", "Overtime On-duty", "Overtime Off-duty", "Out" and "Back" and 4 user defined keys) in the terminal. Select the status key which you need and click "Edit" to "Close" or "Open" the function key. The Timesheets in ClockReports software can show these statuses to help identify what a user was punching in or out for.



After active the function key the "Function Key Select Page" would be displayed before face recognition in the terminal.



**Default:** Click “Default” the terminal will prompt the terminal back to default mode. Press “Yes” to continue. “No” to cancel.

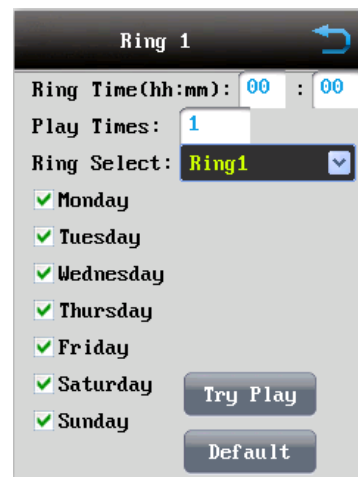
## 2.4.6. Advanced

There are “Timing Ring”, “Power Saving”, “Touch Panel Calibration” and “Reset” functions in the “Advanced” Page.



### 2.4.6.1. Timing Ring (output as shift change bell)

Timing Ring: The terminal support 5 groups ring time. Select “Enable” and click “Config” to setting the “Ring Time”.



**Ring Time (hh:mm):** Setting Ring Time;

**Play Times:** Ring replay times;

**Ring Select:** There are five ringtone types in the terminal;

**Week:** Select which day you need to schedule the ring;

**Try Play:** Play the ring voice;

**Default:** Click “Default” the terminal will prompt the terminal will back to default mode. Press “Yes” to continue. “No” to cancel;

### 2.4.6.2. Power Saving

Power Saving is for automatic turning on/off of the terminal at a set time to save power.

“Power Saving Time Set”: Select option to enable the power saving function.

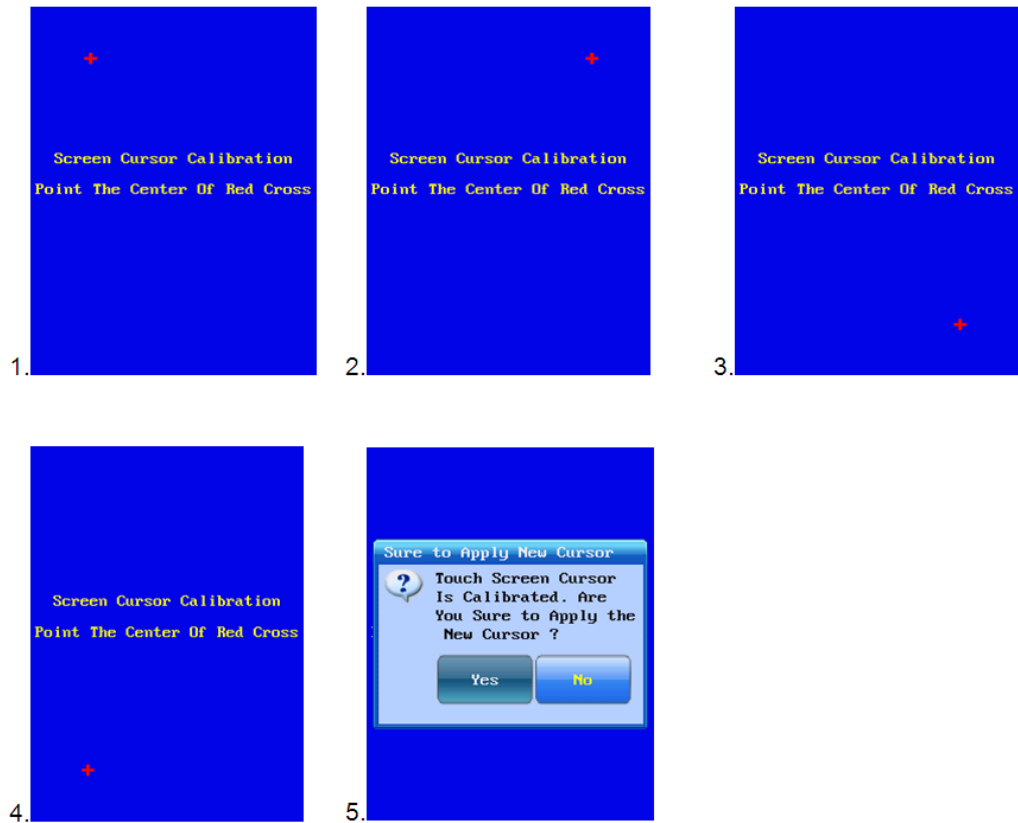
Set the “Start Time” and “End Time”. You can set four times in the terminal.

The following is “Power Saving Page”:



### 2.4.6.3. Touch Panel Calibration

When the touch screen pinpoint deviates from the actual position a screen calibration could be performed “Touch Panel Calibration”. Follow the instruction shown and click the Red Cross on the screen repeatedly to calibrate the touch screen.



#### 2.4.6.4. Clear User Data


Click “Clear User Data” to reset the terminal to factory mode. This function will empty all the setting and user information in the terminal. Please be careful not to reset the terminal by mistake!

The following is “Clear User Data” Page. Click “Yes” to delete all user information.



#### 2.4.7. Info

The “Info” option will display terminal information. Such as “SN”, “Total user” “Storage Capacity” and “Firmware Version”.

```
Info   
SN: 0560100013400002  
Total User  
  Max      : 400  
  Current   : 2  
  Face     : 2  
  Card     : 0  
  Password  : 1  
Total records  
  Max      : 100000  
  Current   : 3  
Version: 2.2.8
```

### 3. Webserver Software Instruction

Network connection is required for web server. Please ensure IP address of terminal is in the same LAN as client-end PC before you run the software.

Please enter the IP address of terminal from IE, for example, the terminal IP is 192.168.0.218, please input Http:// 192.168.0.218 and click Enter, then login Client-end software by User name and Password.

**Note:** The default IP of terminal is 192.168.0.218. The default user name is **admin** and password is **12345**

#### 3.1. Home Page

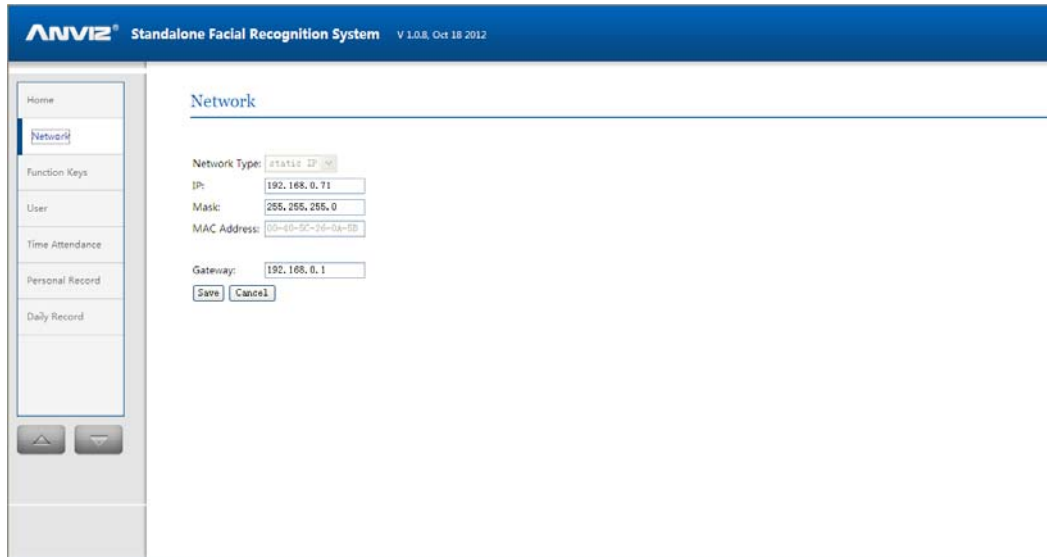


The administrator can set the Network, Time Attendance, and inquire records of attendance, attendance statistic, etc. Through webserver software, the administrator can also perform software upgrade, gateway reboot, password change, etc.

#### 3.2. Network Setting

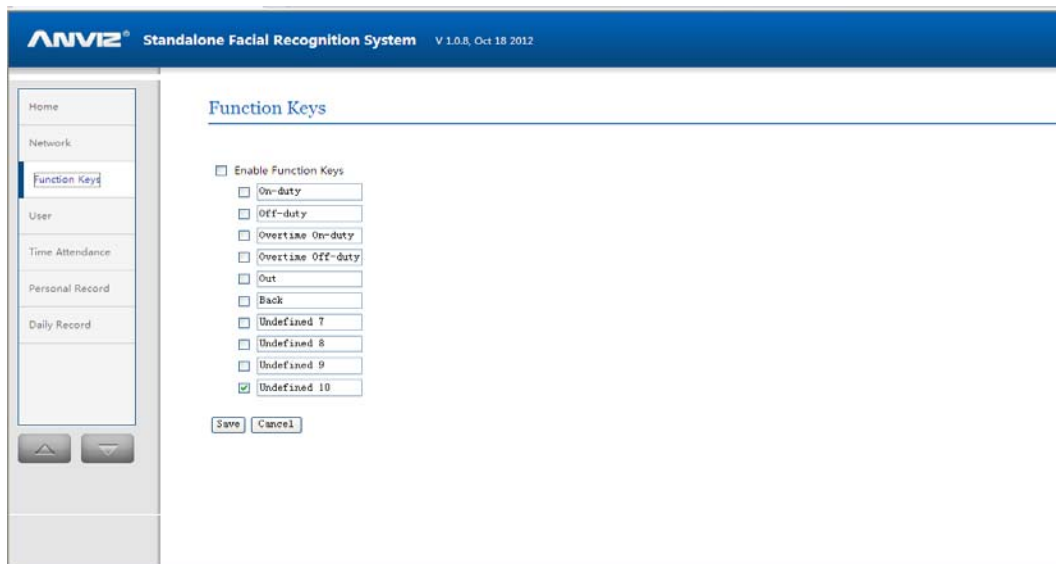
Check and change the network, IP address, Subnet Mask and Gateway.





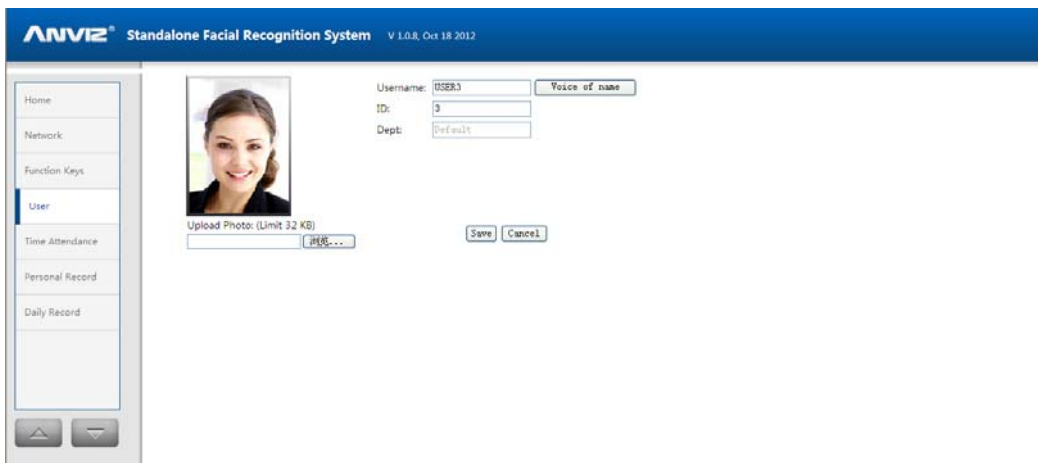
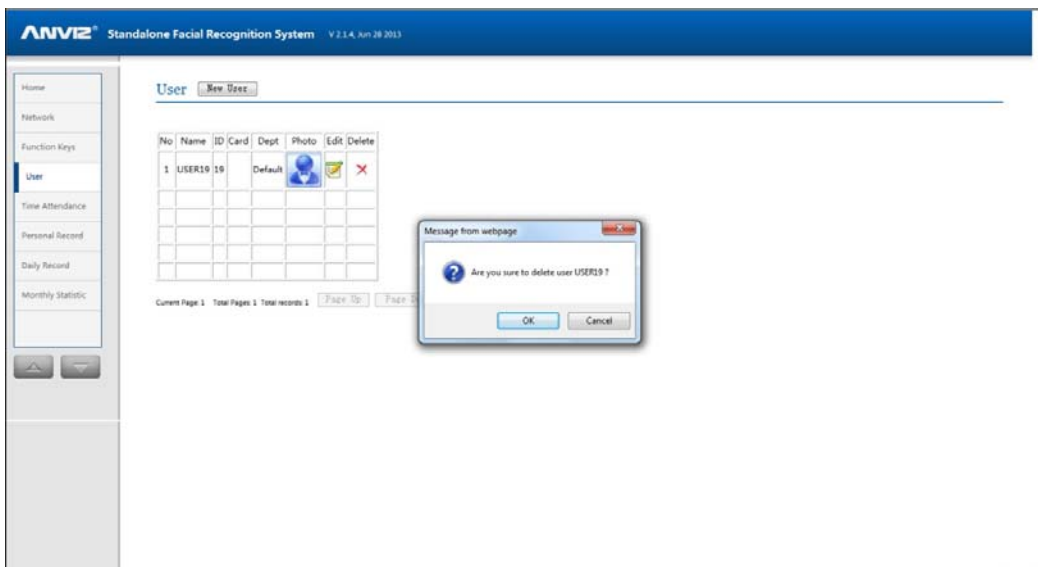
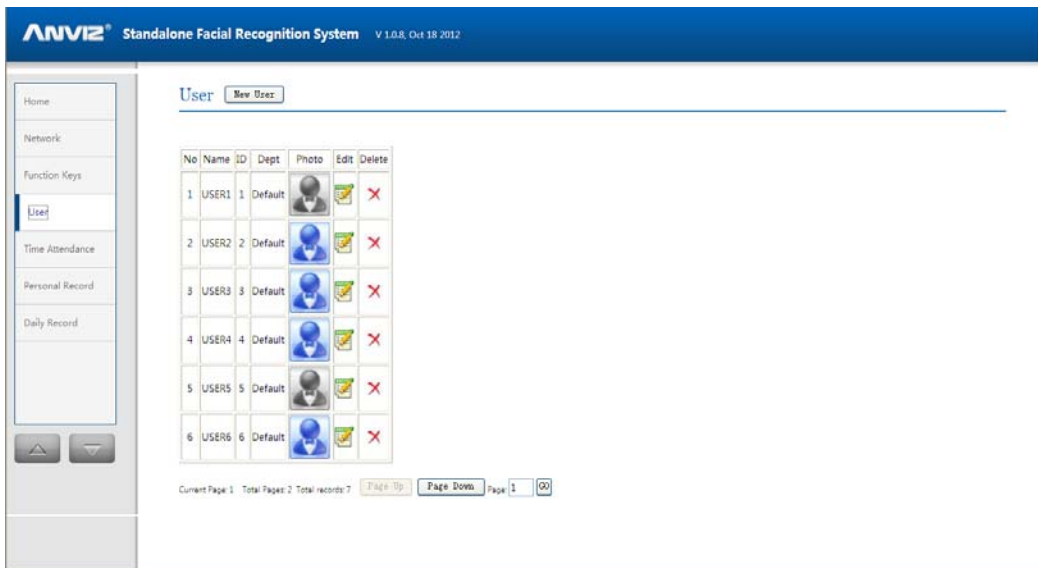
### 3.3. Function Keys

Check and change the setting of different function keys, and save the changes.



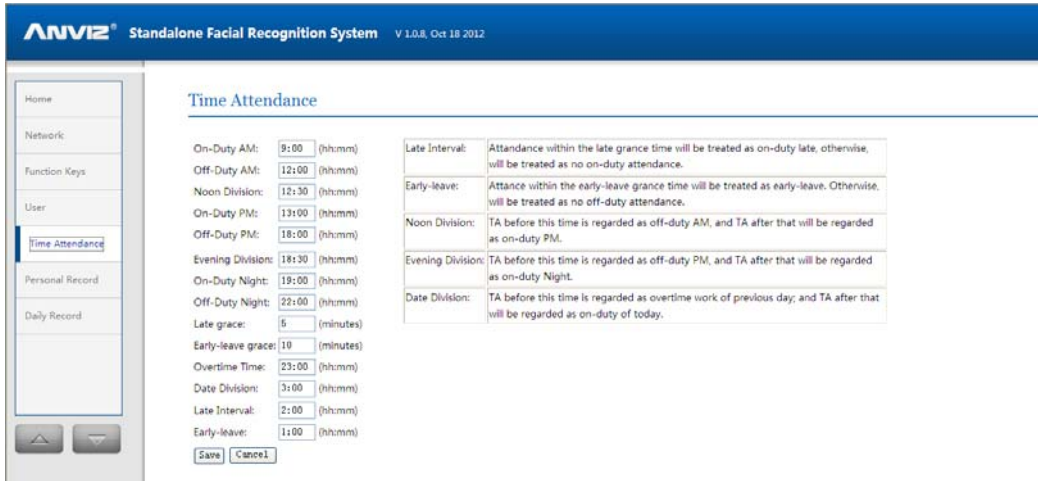
### 3.4. User Management

Create new user, browse, edit and delete existing user



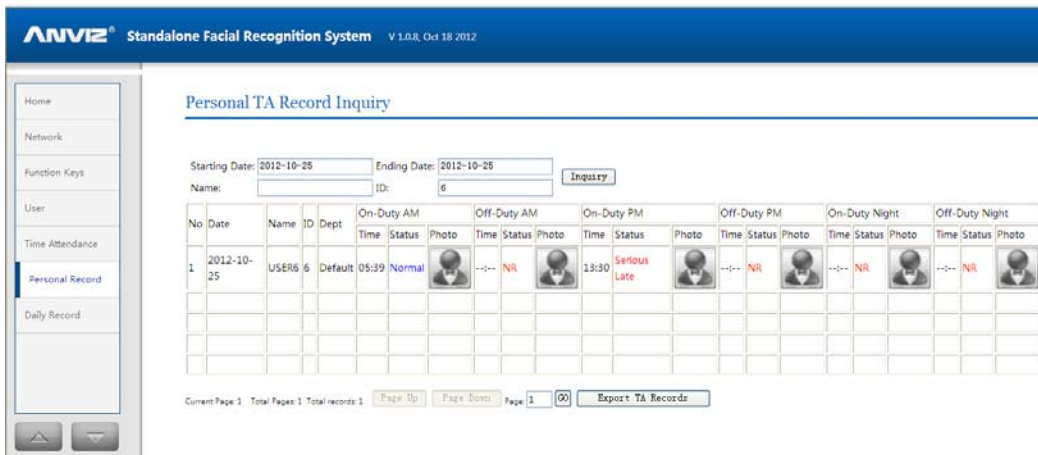
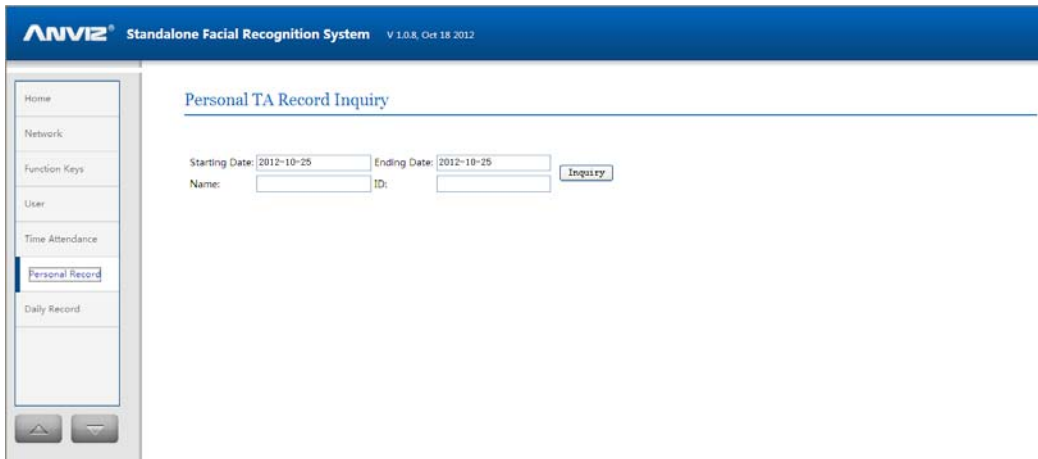
### 3.5. Time Attendance Setting

Set attendance time.

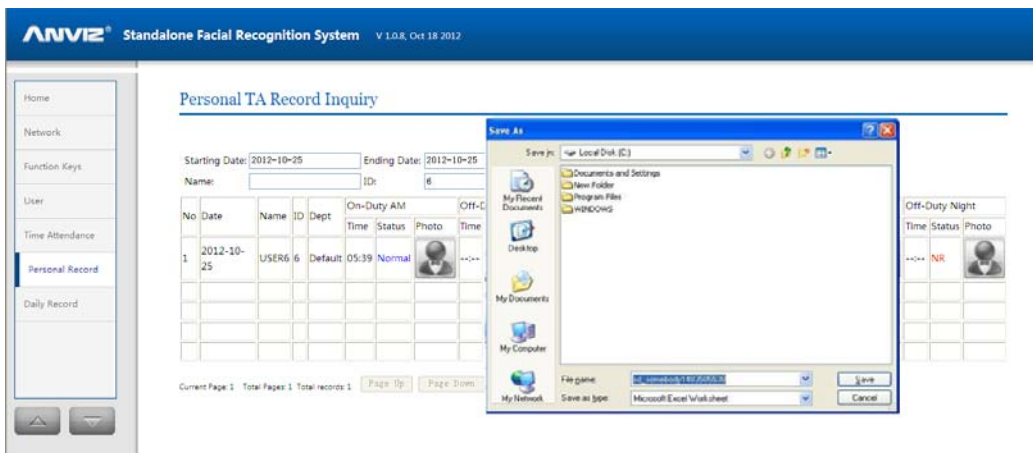
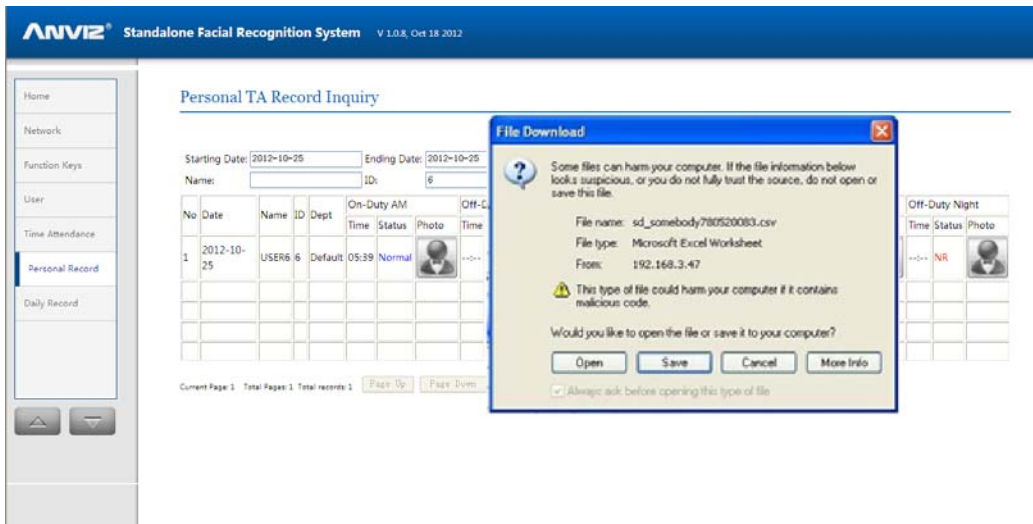


### 3.6. Personal Attendance Record

Inquire the records of attendance by Time, Name or ID No.



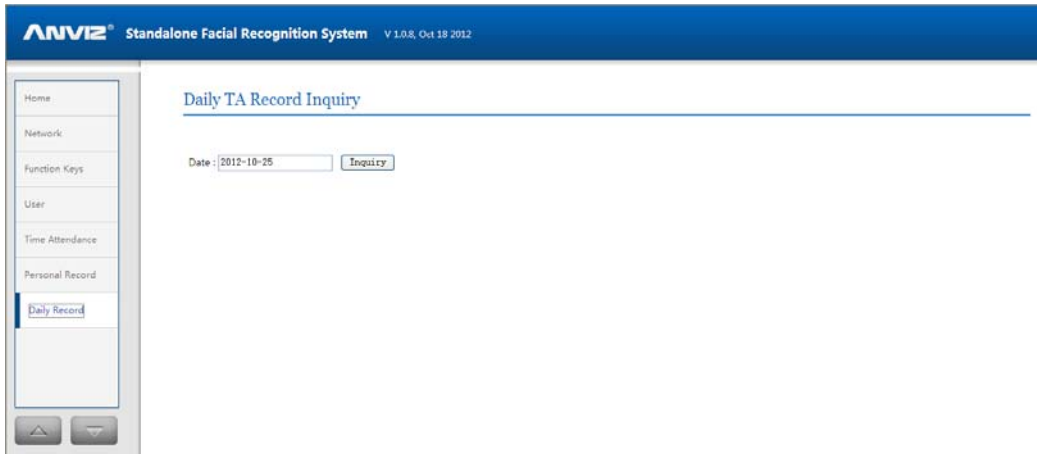
Click "Export TA Records" and save as CSV file:



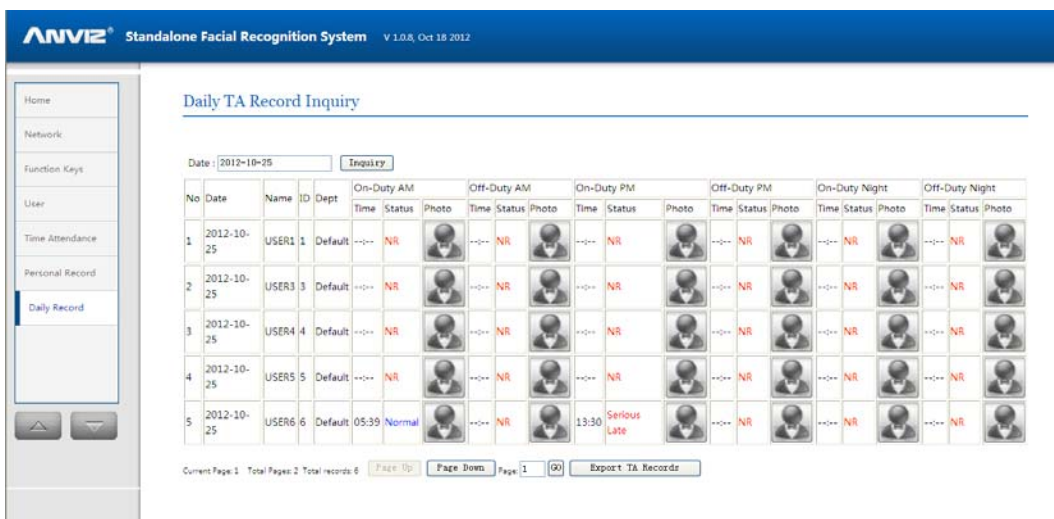
No	Date	Name	ID	Dept	On-Duty AM	Status	Photo	Off-D	Off-Duty PM	Status
1	2011-3-10	USER13	13	Default		NR				
2	2011-3-11	USER13	13	Default		NR				
3	2011-3-14	USER13	13	Default		NR				
4	2011-3-15	USER13	13	Default		NR				
5	2011-3-16	USER13	13	Default		NR				

### 3.7. Daily Attendance Record

Inquire the daily attendance records of all employees

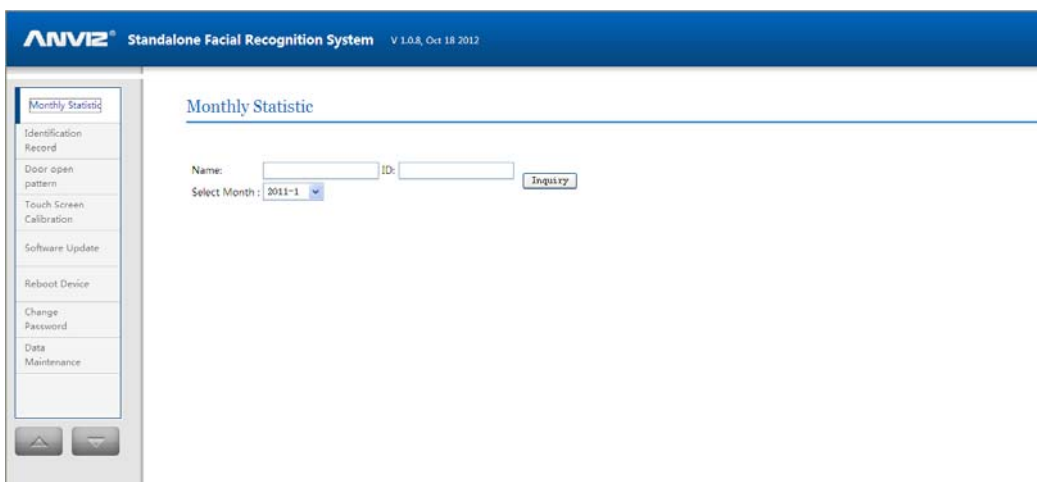


The following window will appear:

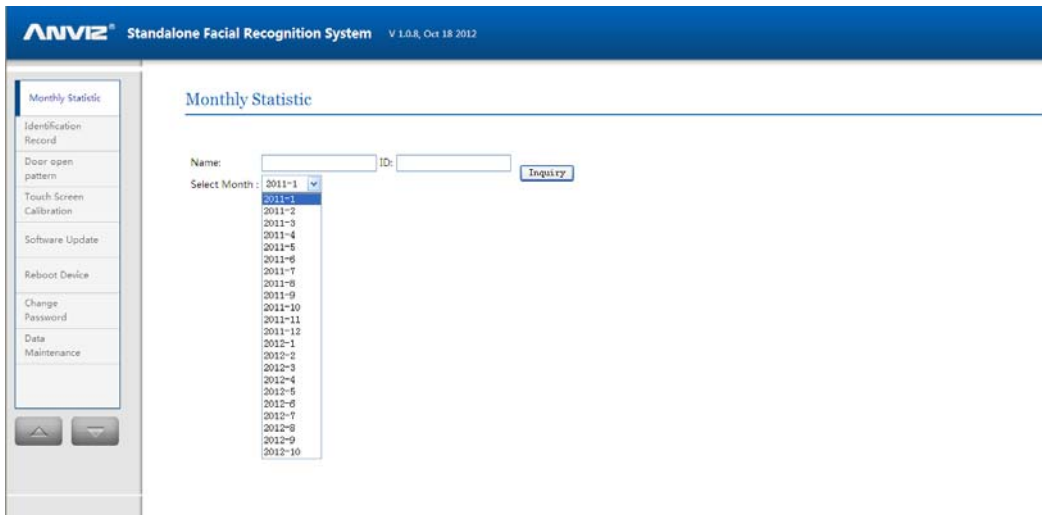


### 3.8. Monthly Attendance Record

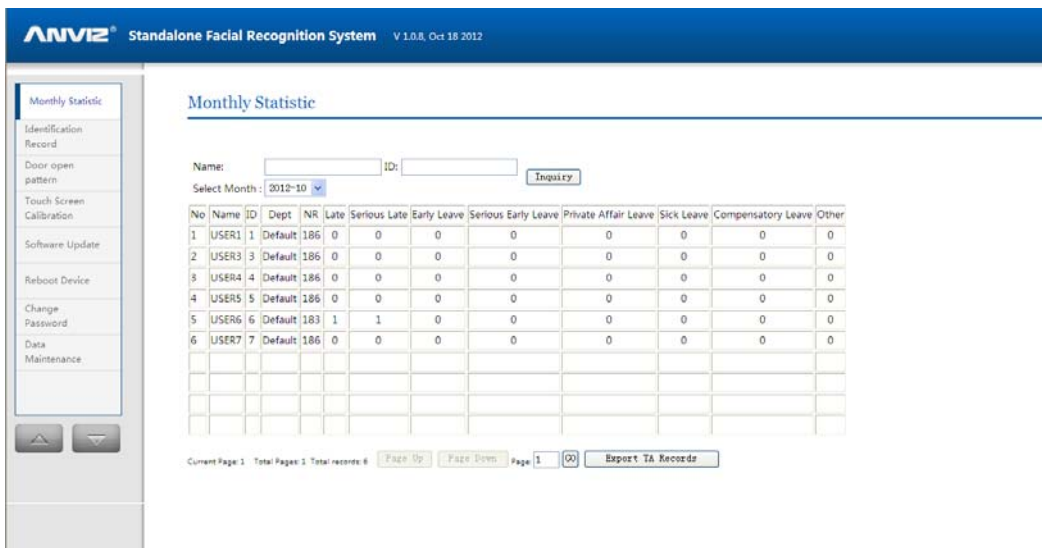
Inquire the monthly attendance records of all employees. Support the inquiry of personal monthly attendance statistic by Name or ID No.



Choose the month:



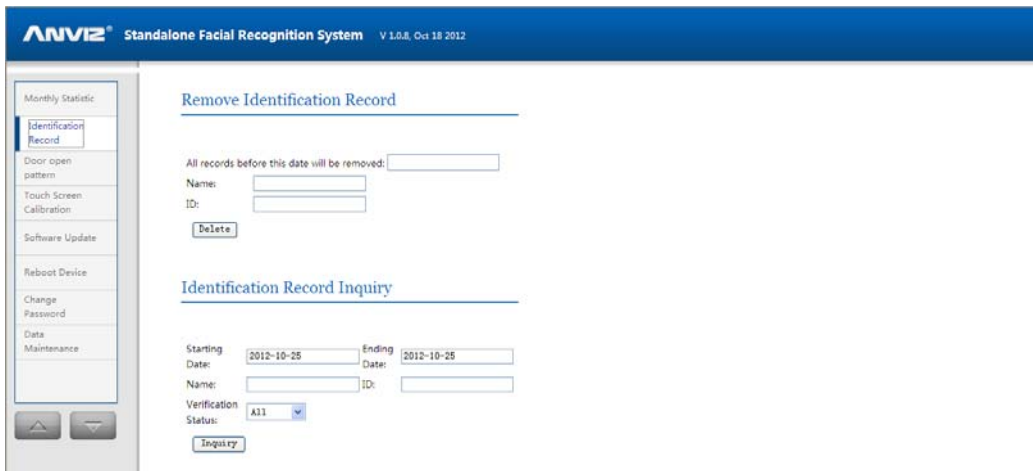
The following window will appear:



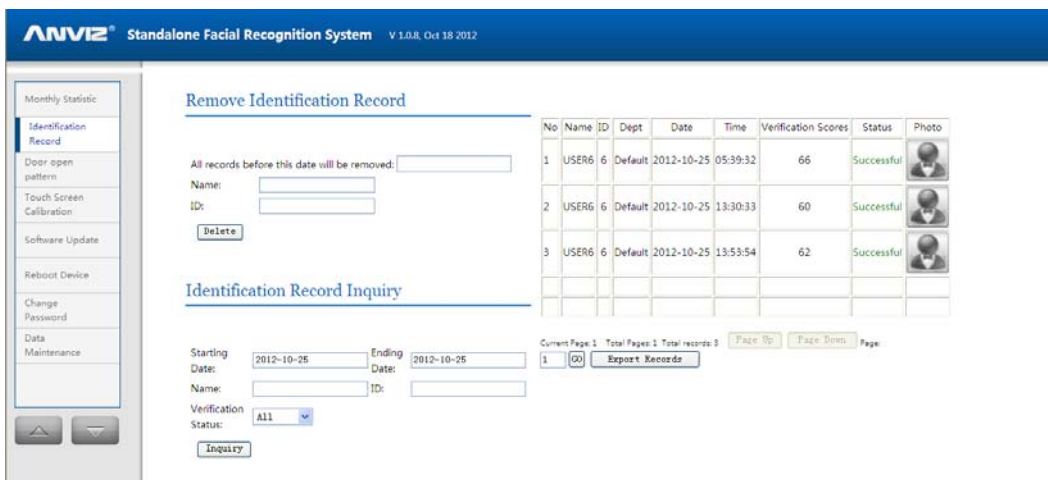
### 3.9. Identification Record

Inquire all identification records by time and date. Support conditional inquiry as per Name, ID, Card No, and status.

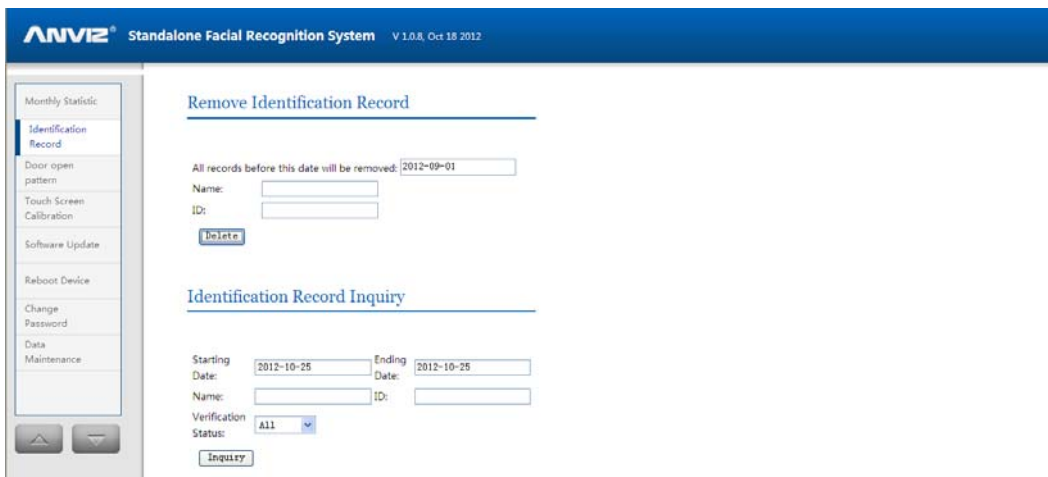
Click “Identification Record”, the following window will appear:

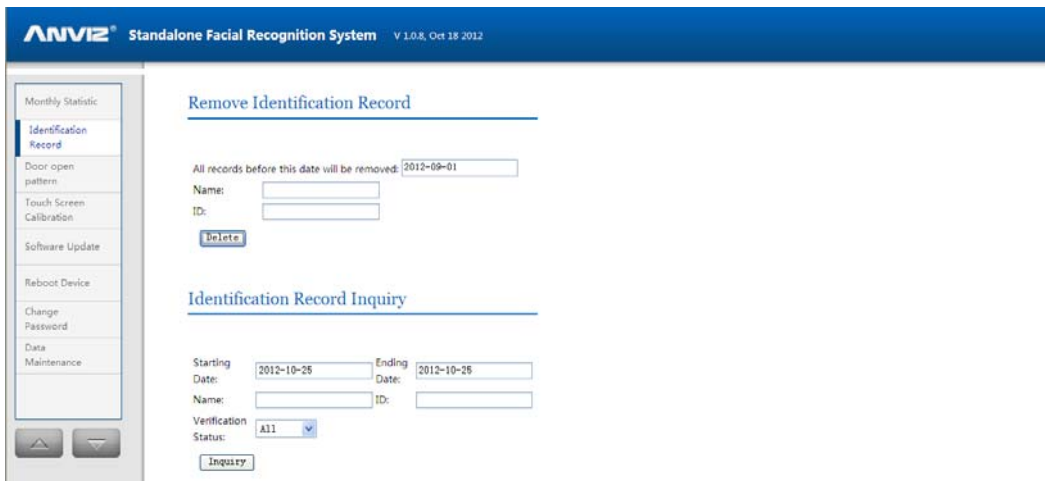
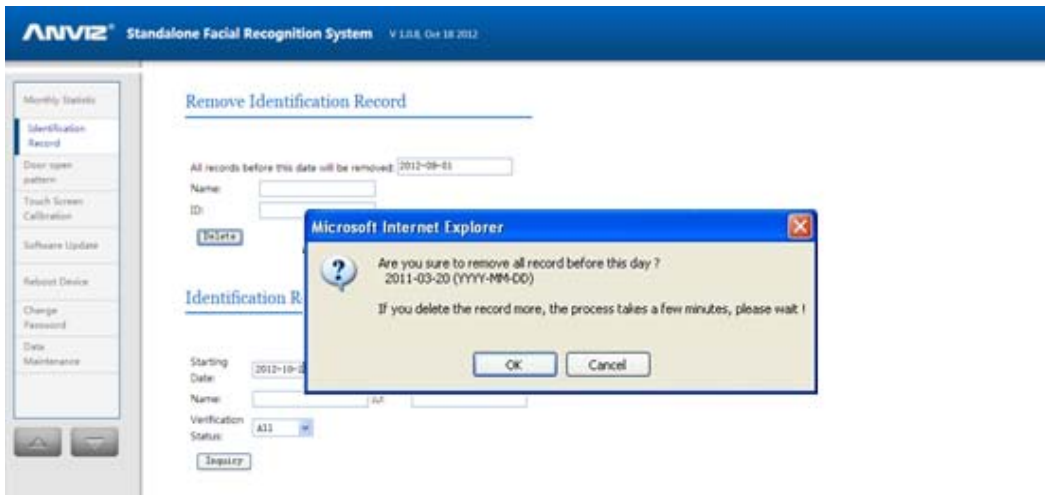


Inquiry the records by date:



Remove identification records:





### 3.10. Touch Screen Calibration

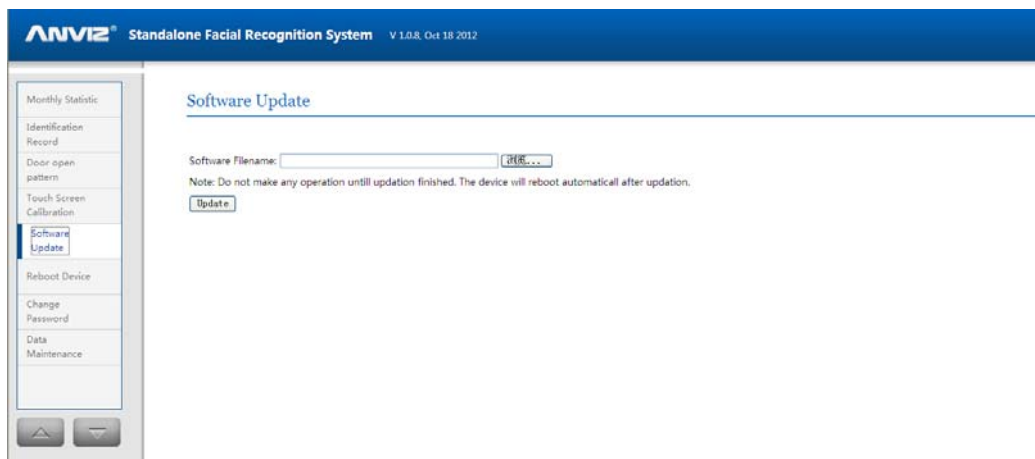
Activated the screen calibration mode





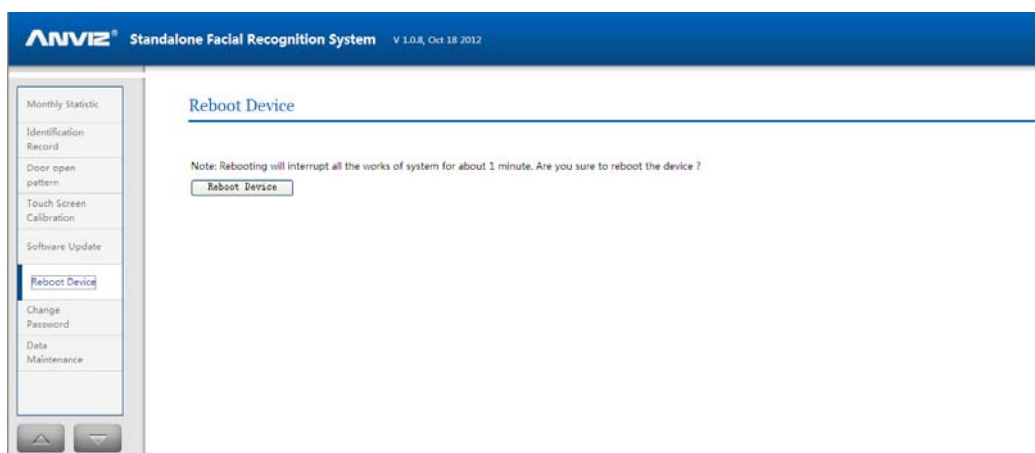
### 3.11. Software Upgrade

Start TFTP server and put the software to be upgraded into the TFTP folder. Then enter the IP address and the name of the software as Picture blow, click “upgrade”.



### 3.12. Reboot

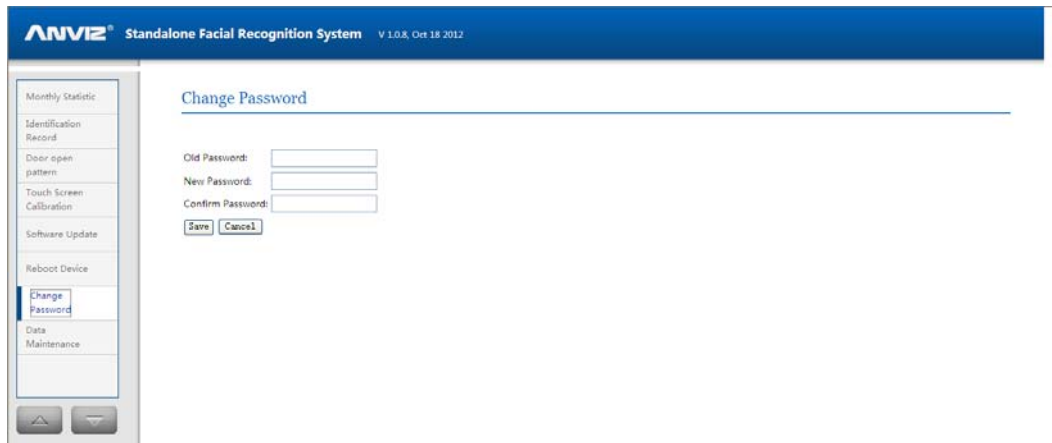
Reboot the terminal:



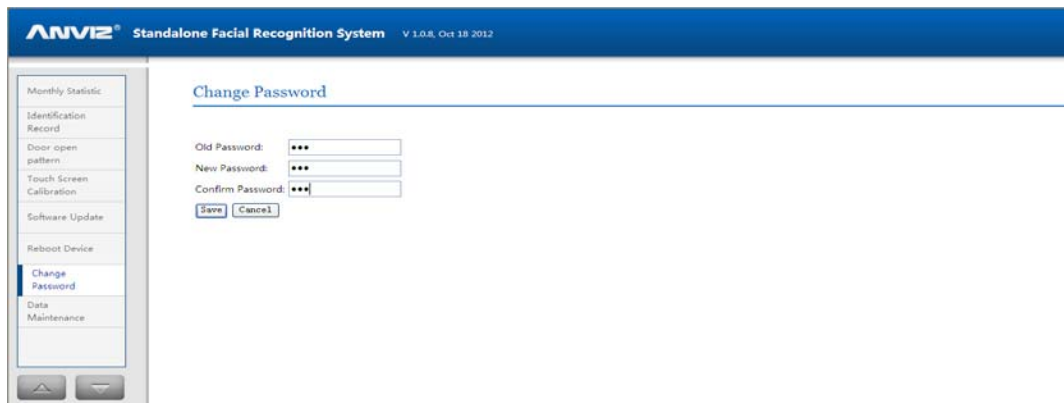


### 3.13. Change Password

Change the login password of the software.



Input the old, new , confirmed password, and save it.



### 3.14. Data Maintenance

The face feature templates of the same person created by a different version system are somehow different; it will put an impact on the actual recognition performance. Regarding the switch of a different system version, “Data Maintenance” function is provided. After software upgrade task, we recommend user to activate “Re-extract Features” manually so that optimized performance is ensured.

- Monthly Statistic
- Identification Record
- Door open pattern
- Touch Screen Calibration
- Software Update
- Reboot Device
- Change Password
- Data Maintenance

### Data Maintenance

---

Re-extract Features