

# Installation & Quick Start Guide

## 2.8" Touch Screen AC Terminal

---

Version: V1.0

Date: June 2014

## **About This Manual**

- All design and specification declared are subject to change without notice in advance.

# Contents

<b>Contents</b> .....	<b>I</b>
<b>1. Safety Precautions</b> .....	<b>1</b>
<b>2. Packing List</b> .....	<b>2</b>
<b>3. Overview of Operation Panel</b> .....	<b>2</b>
<b>4. System Structure</b> .....	<b>3</b>
<b>5. Installation</b> .....	<b>4</b>
5.1 Installation of Device .....	4
5.2 Connect with peripheral equipment .....	5
5.3 Test and examine after installation .....	7
5.4 Reset and Tamper Switch .....	7
<b>5. Quick Start Guide</b> .....	<b>9</b>
6.1 Communication Setting .....	9
6.2 System Setting .....	9
6.3 Access Setting .....	10
6.4 User Management .....	11
6.5 Verification .....	14
6.6 Data Management .....	14
6.7 U Disk Management .....	15
6.8 View Access Report .....	15
<b>7. Others</b> .....	<b>16</b>
Statement on Human Rights and Privacy .....	17
Environment-Friendly Use Description .....	18

# 1. Safety Precautions

Thank you for using our products. Please read this manual carefully before using this product for a comprehensive understanding so as to avoid causing unnecessary damages to the product.

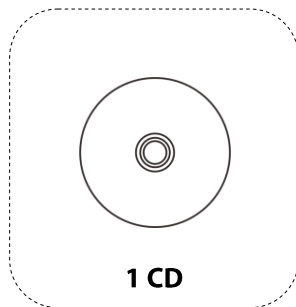
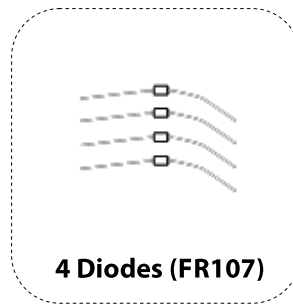
## ● Important Notes

- Do not place the device under strong light.
- Use regulated 12V DC power source (separately purchased and recommend using Uninterrupted Power Supply with backup battery option considering of power failure).
- Do not place the device in a vulnerable location where it might be subjected to vandalism.

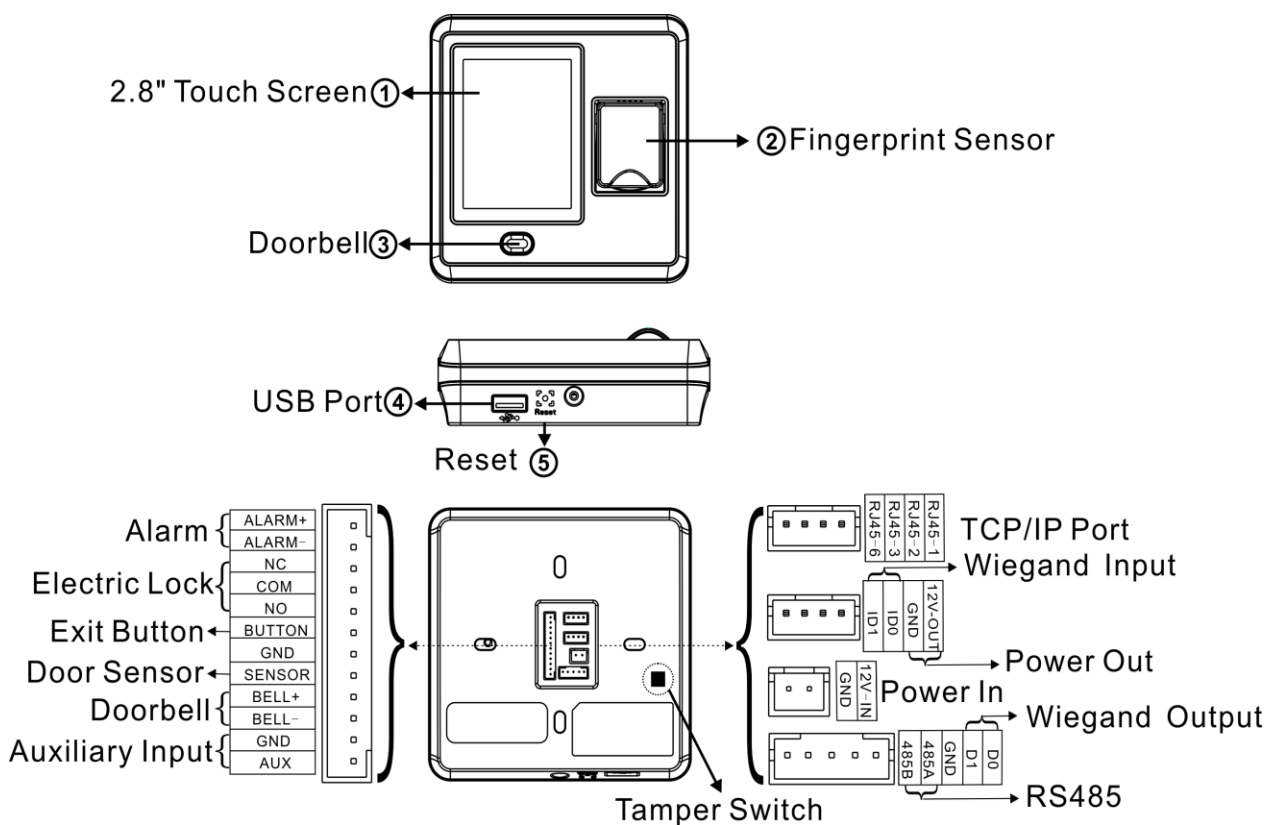
## ● Before Installation

1. Prior to beginning installation, cut off all power to prevent personal injury and damage to the device and peripheral equipment.
2. Connect the ground wire first, in order to prevent electro-static damage to the device.
3. Connect 12V DC power supply to the device at last. If the device does not operate properly, always cut off power to it before examining/dismantling. Be advised that wiring the device while power is on may cause damage to the terminal. Possible resulting damage from not powering off the device prior to wiring is not covered by manufacturer's warranty.
4. Mount the device at a comfortable height, typically between 1.4~1.5 meter from the ground.
5. After installation, remove protective film from the device display and fingerprint sensor.
6. To prevent being accidentally locked out while testing the exit button, keep a person on the inside of the door.
7. Run the auto-test function to confirm that installation is successful.
8. In order to maximize the life of the device, use the auto-sleep functions, sleep time could be set in the system parameter menu.
9. The rated voltage of the device is DC 12V, and the rated current is 300mA. If the incorrect voltage is used, the device may be damaged or may not operate the electric door lock (if attached).
10. Improper wiring may cause the device's main circuit board and fingerprint sensor to burn out. Resulting damage from improper wiring is not covered under manufacturer's warranty.
11. Only use supplied transformer and cord. Do not attempt extending the cord by cutting and splicing.
12. If using RS485 mode of communication with PC, use specialized RS485 cables and powered RS232/485 converter. If the RS485 cable length exceeds 100 meters, we recommend using a 120 $\Omega$  terminator.
13. Refer to the user handbook and operating instructions for further information.

## 2. Packing List

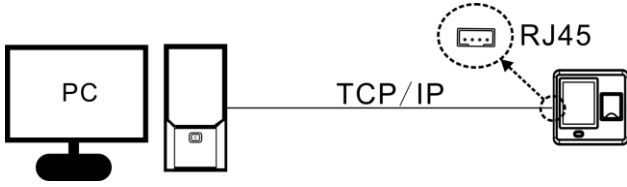


## 3. Overview of Operation Panel

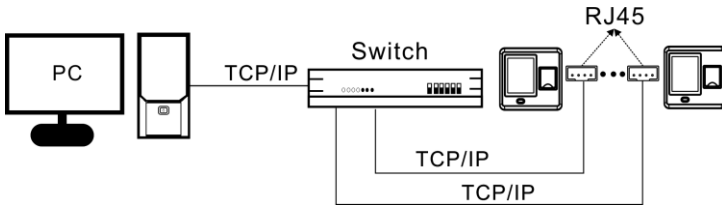


# 4. System Structure

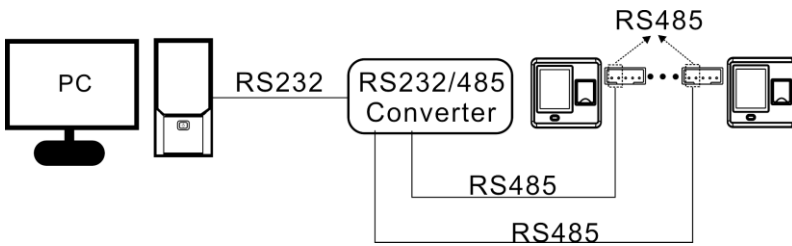
- Directly connect with PC through TCP/IP



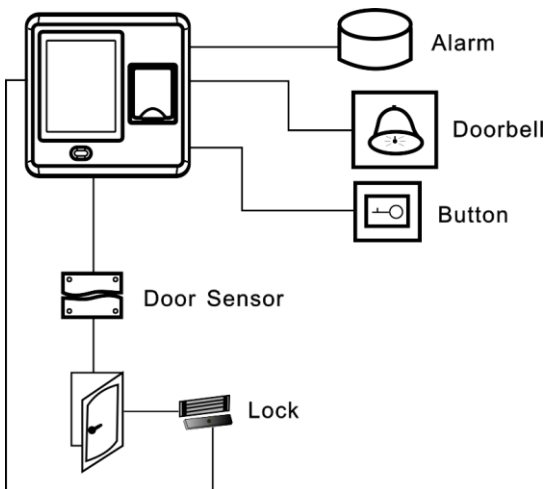
- Connect with PC through TCP/IP network



- Connect with PC through RS485 network

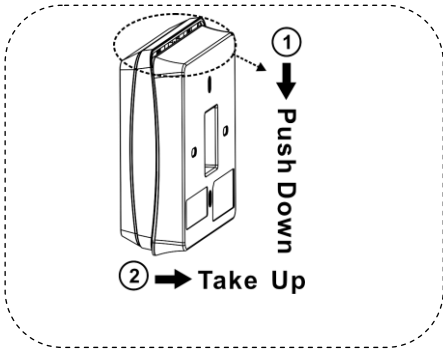


- The diagram of system construction

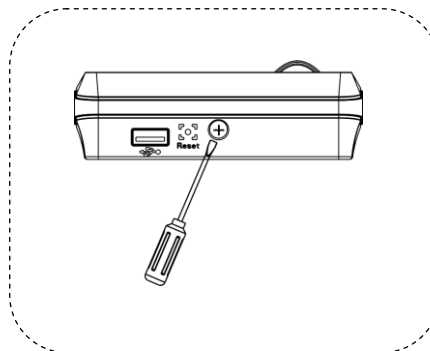


# 5. Installation

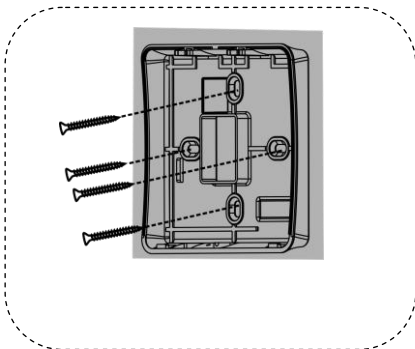
## 5.1 Installation of Device



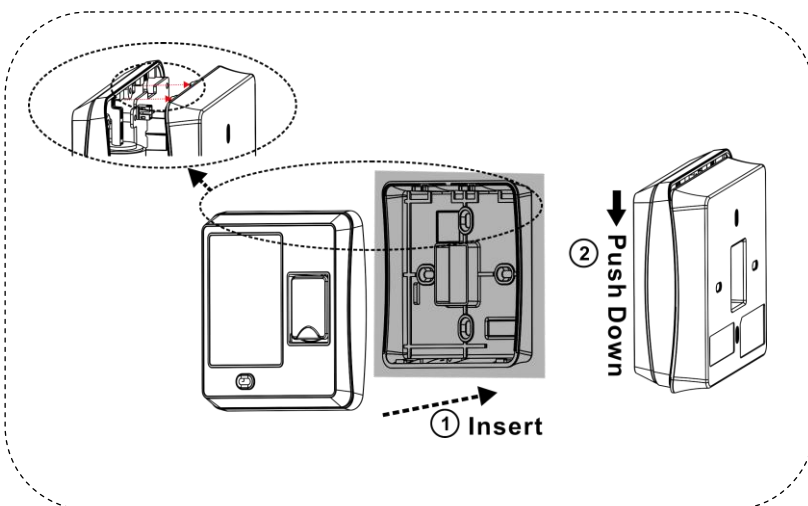
2. Take out the *Back Cover*.



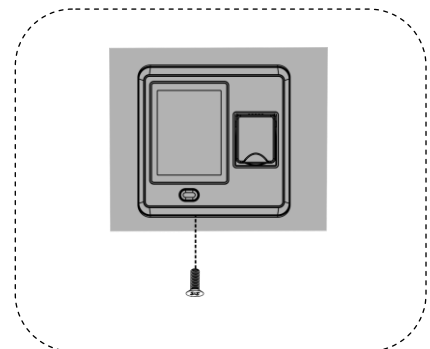
1. Remove the bottom screw.



3. Fix the *Back Cover* on the wall with screwdriver.



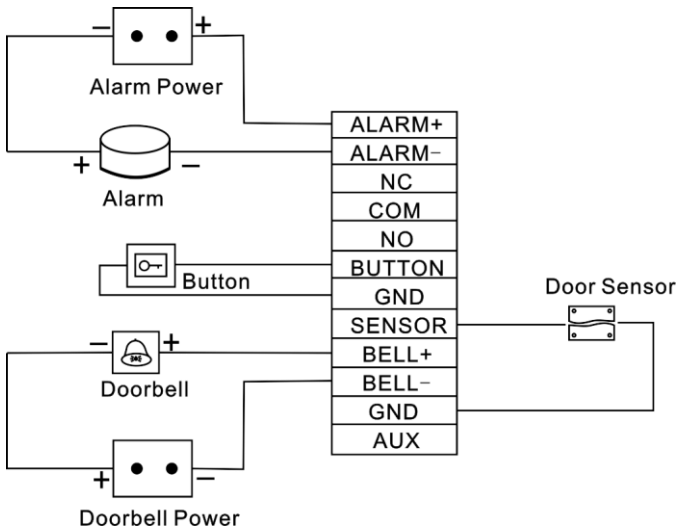
4. Fix the device on the *Back Cover*.



5. Tighten the bottom

## 5.2 Connect with peripheral equipment

**Caution:** Please make sure the power is cut off before wiring; otherwise it is possible to damage the device.



- 1). Door Sensor Connection
- 2). Button Connection
- 3). Alarm Connection
- 4). Doorbell Connection
- 5). Lock Connection

**Selecting door lock:** The choice of lock depends firstly on the door-electric strikes or bolts, magnetic locks, turnstiles or barriers are all options depending firstly on the architecture-and secondly on the required resistance to attach. Please consult your supplier for more info.

**Connect with electric lock:** After the user verified the identity, the device will output the unlock signal. The device supports NO (Normally Open) LOCK and NC (Normally Close) LOCK.

**NO LOCK:** the door is normally open at power on, so it closes the door at power off.

**NC LOCK:** the door is normally closed at power on, so it opens the door at power off.

The device can supply power directly to a door lock, please refer to **Figure 1, 2.** (Ensure that proper voltages are applied to the lock terminals and check on the current ratings of the locks.)

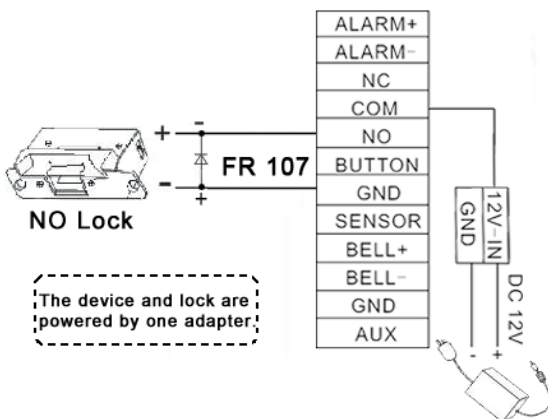


Figure 1

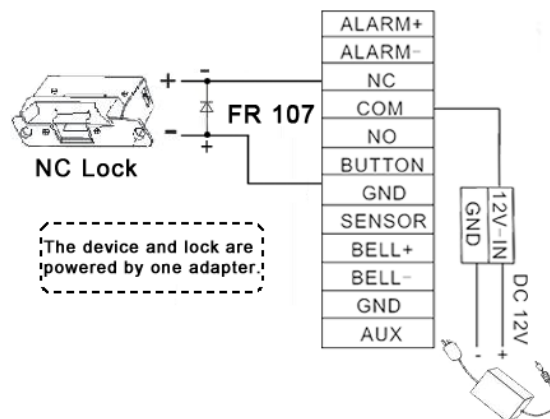
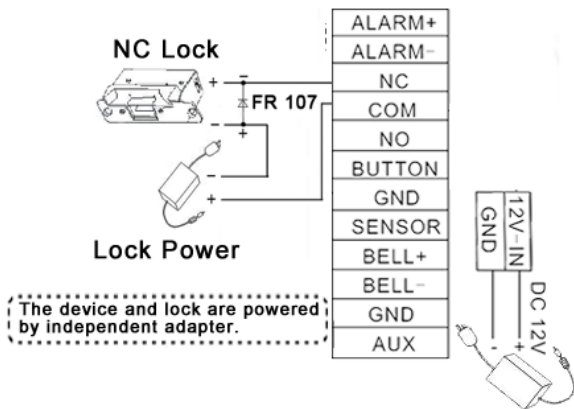


Figure 2

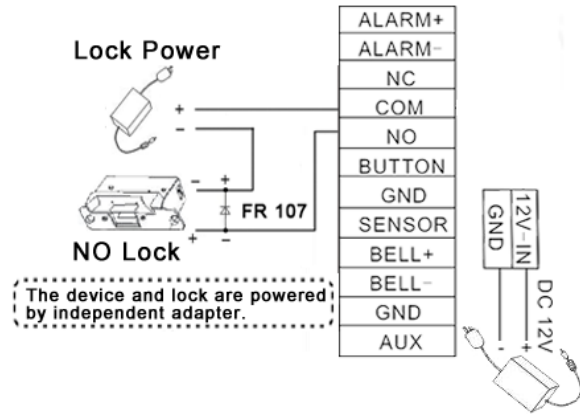


However, in the following three scenarios, it is recommended that the door lock has an independent power source, and is NOT powered by the device. Show as **Figure 1, 2**.

- If the door lock voltage is not **12V DC** then provides separate power to the door lock.
- If the door lock runs on **12V DC**, but requires more than **1A** (amp), then provide separate power to the door lock.
- If the distance between the device and door lock is greater than **15 feet**, then provide separate power to the door lock.



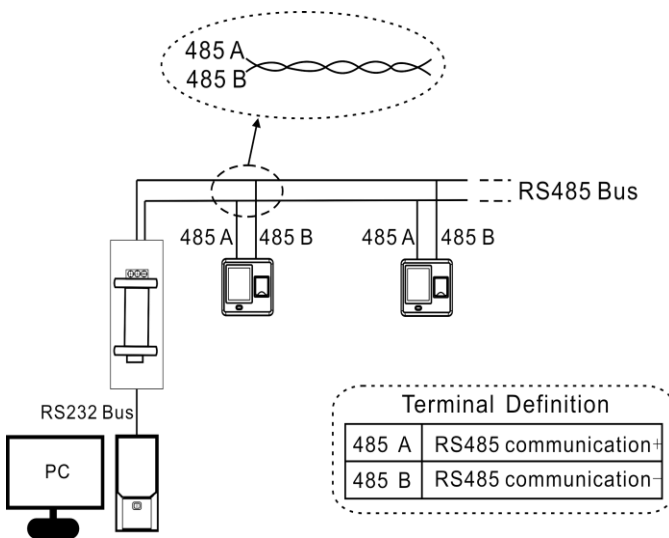
**Figure 3**



**Figure 4**

### 6). RS485 Connection

RS-485 systems using a bus structure configuration connect the driver to the receiver.



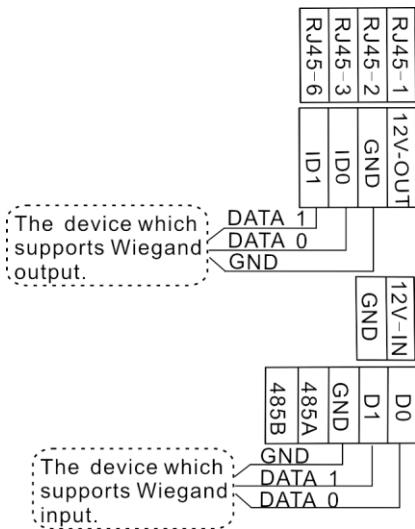
### 7). Wiegand Function

**Wiegand Output:** This device provides standard Wiegand 26 output, which can be used as reader. The distance from the controller to device cannot be more than 15 meter (If the signal must be transferred much further or there is a strong interference around, please adopt a Wiegand signal amplifier. For detail, please see **Figure 6**.)

**Wiegand Input:** The device has Wiegand input function, can connect the external card reader. Device and card reader can be installed respectively inside and outside of the door, control the lock together, control out & in. (For detail, please see **Figure 5**.)

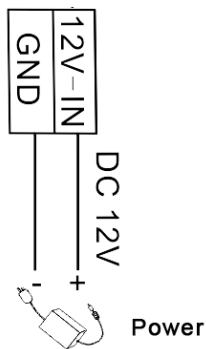
**Note:** No matter the device is powered by access controller or not, the ground ports of them have to be

properly together to ensure the Wiegand transfer reliable.



**Figure 5**

#### 8). Power Connection :



### 5.3 Test and examine after installation

Make a test and examine prior to power on, inspect whether the lock driver is OK or not.

1. The green LED begins to glitter after power up.
2. Enter **[Main menu] > [System] > [Auto Test]**.
3. Enter **[Main menu] > [User Mng] > [New User] > [FP]**, enroll a fingerprint, and use the fingerprint to test access system and door lock.
4. If there is no any problem, please delete this enrolled fingerprint.

### 5.4 Reset and Tamper Switch

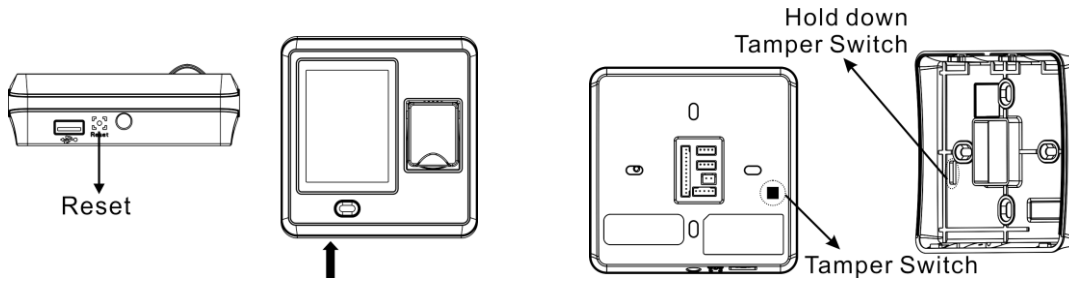
**Reset:** Due to operation error or other accidents, which leads the device failed to work, you can restart device through reset button.

To reset the device use a small tool (e.g., pin or paperclip) to push in the reset button (labeled **Reset**, shown as **Figure 6**) located on the underside of the device.

**Note:** It does NOT erase any stored data (i.e. templates, transactions, settings). This information will be available as soon as power is restored.

**Tamper Switch** is located on the back of the device (**Shown as Figure 7**), when the device detects it is being “tampered” with, it will send an alarm signal.


If the administrator was lost, you can wait about 30 seconds (there is a short beep tip) after the device is disassembled from the wall, then press the tamper switch three times to access the device menu.



**Figure 6**

**Figure 7**

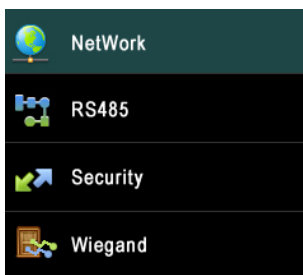
## 6. Quick Start Guide

Press  to enter Main Menu, include User Management (User Mng), Access Setting (Access), Communication Setting (Comm.), System Setting (System), Data Management (Data Mng) and U Disk Management (U Disk).



### 6.1 Communication Setting

Press [Comm.] button in Main Menu to enter the Communication Setting (Comm.) Interface.



**Network:** Set IP address (The default value is 192.168.1.201), **Subnet Mask** (The default value is 255.255.255.0) and **Gate Way** (The default value is 192.168.1.254) for device.

**RS485:** Set the baud rate for the communication between the device and PC.

**Security:** Set Device ID and password for the connection between the device and PC. The default password is 0 (that is, no password).

**Wiegand:** To configure Wiegand Function.

### 6.2 System Setting

Press [System] button in Main Menu to enter the System Setting (System) Interface

**Sys Parameter:** Set Threshold (1:1), Match Threshold (1:N), Date Format, Sleep time, whether enable Key tones/Voice and adjust Volume as required.

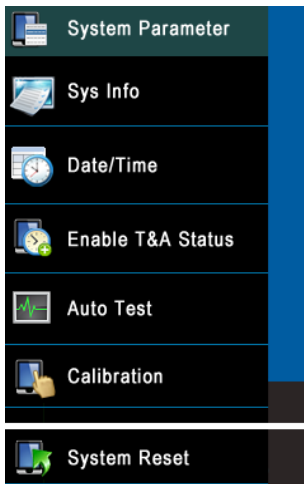
**Date/Time:** Set device's Date and Time as required.

**Enable T&A:** Enable/Disable T&A Status and Auto Switch function as required. In additional, you can set the auto switch time for each status.

**Auto Test:** TFT Test, Sensor Test and RTC Test.

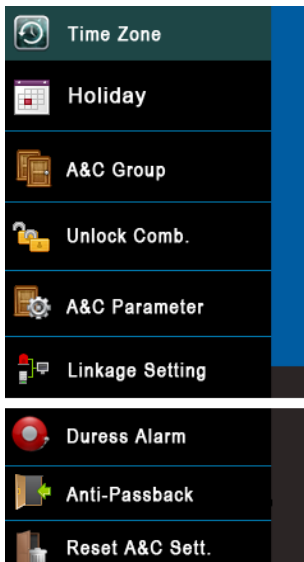
**Calibration:** To Calibrate the Touch Screen.

**System Reset:** Restore all system parameters to factory default settings.



## 6.3 Access Setting

Press [**Access**] button in **Main Menu** to enter the **Access Setting (Access)** Interface.



**Time Zone:** Add **Time Zones** for device. The device controls access according to the Time Zones.

**Holiday:** Add access holiday, and select Access Time Zone for it.

**A&C Group:** Access Group refers to one selected Time Zone or several selected Time Zones that can be opened by verification. (**Note:** The A&C Group must be set under **Access Setting**.)

**Unlock Comb.:** Add Unlock Combination for device.

**Note:** The total number of users in the access group must be equal to or smaller than **5**.

**A&C Parameter:** Set **Lock(S)**, **Door Sensor Delay(S)**, **Door Sensor Mode** (Open, Close or No), **Alarm Delay(S)**, **Alarm Count** (times), **Close/Open Time Zone** and whether **valid holidays**.

**Linkage Setting:** The specific setting method, please see **Linkage Setting**.

**Duress Alarm:** Set the duress alarm delay time as required.

**Anti-Passback:** Set anti-passback function for device.

**Reset A&C Sett.:** Reset all the Access Setting to factory defaults and then restart device automatically.

## ● Linkage Setting

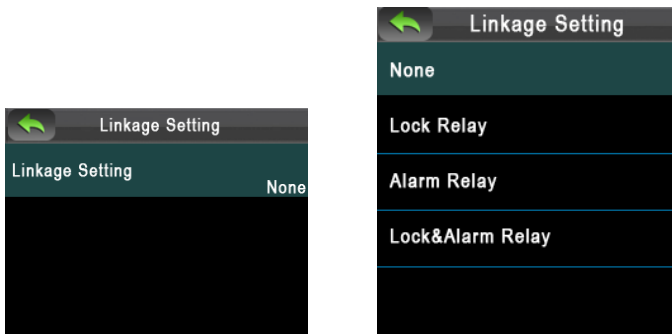
The device has Auxiliary Input function. On receiving the linkage signals, the device will perform related linkage operations according to the linkage operation type in the linkage settings.

Press [Linkage Setting] in Access Setting to enter the Linkage Setting interface; shown as Figure 5. Press [Linkage Settings] to select linkage type, shown as figure 5.


**Lock Relay:** The lock is opened after the device receives the linkage signal.

**Alarm Relay:** An alarm is triggered after the device receives the linkage signal.

**Lock & Alarm Relay:** The lock is opened and an alarm is triggered after the device receives the linkage signal.

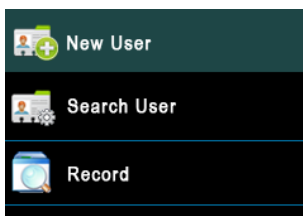


## ● Cancel Linkage

Press  to enter Main Menu. The *Cancel linkage?* message is displayed on the screen. Press [OK] to confirm and cancel linkage.

## 6.4 User Management

Press [User Mng] Button in Main Menu to enter the User Management (User Mng) Interface, shown as Figure 7.



**New User:** Input ID NO (The max length is 9) and Password (The maximum length is 6), set The role of users (user or administrator), enroll card.


**Search User:** Input ID NO., press [OK] to start searching, you can also edit and delete the user, and set the user's access.

**Record:** Input ID NO. and month, press [Search] to search and check the records of this user in this month.

## ● Enroll FP(Fingerprint)

1. Press [FP] in **New User**, the **Enroll Fingerprint** interface is displayed.

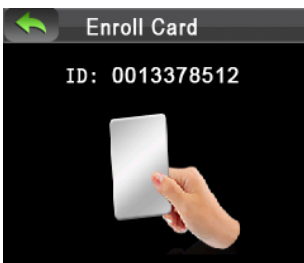
2. According to the operation prompt information, place finger on the Fingerprint Sensor properly three times until enrollment succeeds, and then return to the **New User** interface automatically.

3. Press  to exit, save user information according to the operation prompt box.



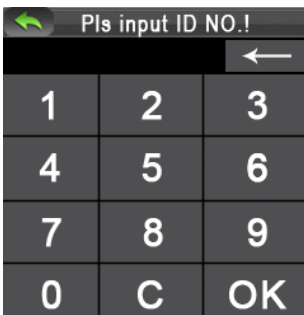
### ● Enroll Card

1. Press [**Card**] in **New User**, the **Enroll Card** interface is displayed.
2. According to the operation prompt information, punch card at the punch area (at the Fingerprint Sensor; after enrollment succeed, return to the **New User** interface automatically).
3. Press to exit, save user information according to the operation prompt box.

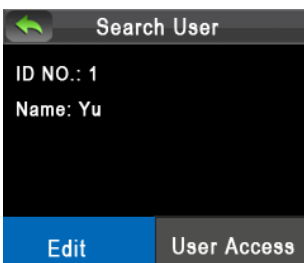


### ● Search User

1. Press [Search User] button in Use Mng.

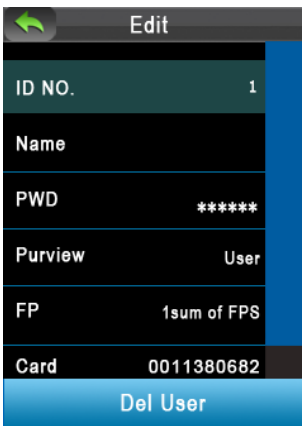


2. Input ID Number. (Note: You can press or [C] to modify or delete the incorrect input.)
3. Press [OK] to search the user you have input.



### ● Edit User

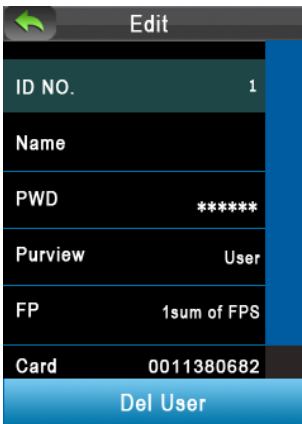
Edit the added user. (**Note:** In the **Search User** interface, press [**Edit**] to enter the **Edit** interface, the specific operations are same as **New User** (Add User).



- **Delete User**

1. Press [**Del User**] in **Edit**.

2. Press [**Del User**] to enter the **Del User** interface, then select delete type (Delete Password, Del ID Card only, Delete Fingerprint or Delete User), and then press [**OK**] to confirm and carry out the corresponding delete operation.



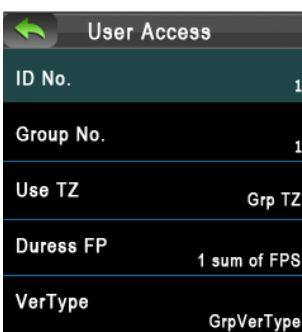
**Note:**

- (1) Based on the information registered by a user, the device displays the optional operation types. For example, if the user does not register the password, the option *Delete Password* is not available.
- (2) If *Del User* is selected, the user's fingerprint, password, and ID card information will be deleted.

- **User Access**

1. Press [**User Access**] in **Search User**.

2. Set the Group No., Use Time Zone and select Duress FP as required.

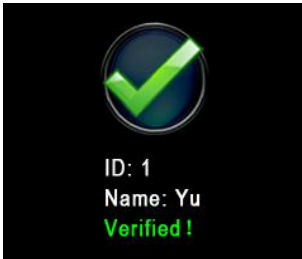




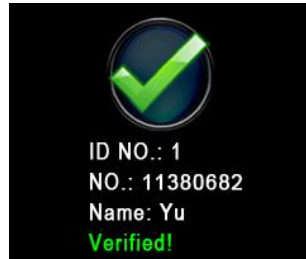
## 6.5 Verification

- **Verification by Fingerprint or Card**

Place finger on the Fingerprint Sensor properly or punch card in the punch area (at the Fingerprint Sensor); after verification succeed, the interface shown as **figure 1** (Fingerprint Verification), **figure 2** (Card Verification).




**figure 1**



**figure 2**

- **Verification by Password**

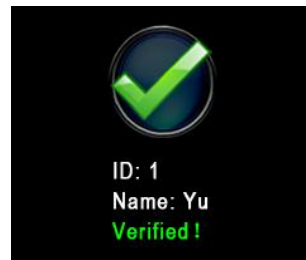
1. Press  to Input ID NO.. (The specific input method, please see **Search User**), shown as **Figure 3**.
2. Press **[OK]** to input password.
3. Input the correct password ( same as inputting ID Number), shown as **figure 4**.
4. Press **[OK]** to confirm the password, shown as **figure 5**.



**figure 3**



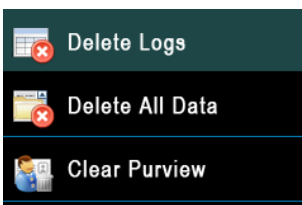
**figure 4**



**figure 5**

## 6.6 Data Management

Press **[Data Mng]** in **Main Menu** to enter the **Data Management (Data Mng)** interface.



**Delete Logs:** Delete all attendance logs.

**Clear All Data:** Delete all attendance logs, user information, and Time Zone, Holiday, A&C Group, Unlock Combination settings.

**Clear Purview:** Set all the administrators to ordinary users.

## 6.7 U Disk Management

Press [**U Disk**] button in **Main Menu** to enter the **U Disk Management** interface.



**Download Attlog:** Download all attendance logs to the U Disk. And then import logs into the **Access 3.5** software through **Import Data From USB disk** function, and then view Access Report as required.

**Download User:** Download all user information to the U Disk.

**Upload User:** Upload user information (stored in U Disk) into the device.

**Update:** You can upgrade the device firmware through this menu; an upgrade file is needed in the U Disk.

## 6.8 View Access Report

1. Connect the device to the network.


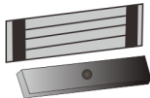
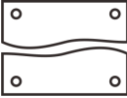
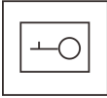

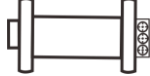
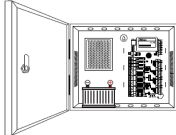


2. Run **Access3.5** software.

3. Add the device to the software, download logs from device (you can use the U Disk to download logs too), and then analyze logs and view the access report as required.

Bundled *Access3.5 Security System* is unique software. For detailed operations, refer to **Access3.5 software user manual** in the CD.

## 7. Others

The following equipments are needed for an access control system but are not included in the standard package.

Name	Picture	Name	Picture
PC		Lock	
Door Sensor		Button	
Alarm		485 Converter	
Access Control Panel		Ethernet cable	
Doorbell			

## Statement on Human Rights and Privacy

Dear Customers:

Thank you for choosing the hybrid biometric products designed and manufactured by us. As a world-renowned provider of biometric technologies and services, we pay much attention to the compliance with the laws related to human rights and privacy in every country while constantly performing research and development.

We hereby make the following statements:

1. All of our fingerprint recognition devices for civil use only collect the characteristic points of fingerprints instead of the fingerprint images, and therefore no privacy issues are involved.
2. The characteristic points of fingerprints collected by our products cannot be used to restore the original fingerprint images, and therefore no privacy issues are involved.
3. We, as the equipment provider, shall not be held legally accountable, directly or indirectly, for any consequences arising due to the use of our products.
4. For any dispute involving the human rights or privacy when using our products, please contact your employer directly.

Our other police fingerprint equipment or development tools will provide the function of collecting the original fingerprint image of citizens. As for whether such a type of fingerprint collection constitutes an infringement of your privacy, please contact the government or the final equipment provider. We, as the original equipment manufacturer, shall not be held legally accountable for any infringement arising thereof.

**Note:** The law of the People's Republic of China has the following regulations regarding the personal freedom:

1. Unlawful arrest, detention or search of citizens of the People's Republic of China is prohibited; infringement of individual privacy is prohibited.
2. The personal dignity of citizens of the People's Republic of China is inviolable.
3. The home of citizens of the People's Republic of China is inviolable.
4. The freedom and privacy of correspondence of citizens of the People's Republic of China are protected by law.

At last we stress once again that biometrics, as an advanced recognition technology, will be applied in a lot of sectors including e-commerce, banking, insurance and legal affairs. Every year people around the globe suffer from great loss due to the insecurity of passwords. The fingerprint recognition actually provides adequate protection for your identity under a high security environment.

## Environment-Friendly Use Description



The Environment Friendly Use Period (EFUP) marked on this product refers to the safety period of time in which the product is used under the conditions specified in the product instructions without leakage of noxious and harmful substances.

The EFUP of this product does not cover the consumable parts that need to be replaced on a regular basis such as batteries and so on. The EFUP of batteries is 5 years.

### Names and Concentration of Toxic and Hazardous Substances or Elements

Parts Name	Toxic and Hazardous Substances or Elements					
	Pb	Hg	Cd	Cr6+	PBB	PBDE
Chip resistor	×	○	○	○	○	○
Chip capacitor	×	○	○	○	○	○
Chip inductor	×	○	○	○	○	○
Chip diode	×	○	○	○	○	○
ESD components	×	○	○	○	○	○
Buzzer	×	○	○	○	○	○
Adapter	×	○	○	○	○	○
Screws	○	○	○	×	○	○

○: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.

×: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials for this part is above the limit requirement in SJ/T11363-2006.

Note: 80% of the parts in this product are manufactured with non-hazardous environment-friendly materials. The hazardous substances or elements contained cannot be replaced with environment-friendly materials at present due to technical or economical constraints.

ZK Building, Wuhe Road, Gangtou, Bantian, Buji Town,  
Longgang District, Shenzhen China 518129

Tel: +86 755-89602345

Fax: +86 755-89602394

[www.zkteco.com](http://www.zkteco.com)

