Fingerprint Access Control Integration Host

User's Manual

V1.1.3

Table of Contents

Important Safeguards and Warnings

Please read the following safeguards and warnings carefully before using the product in order to avoid damages losses and body injuries. After reading, please well keep this user's manual.

Note:

- Please change user default password after being armed.
- Do not install the device at position exposed to sunlight or in high temperature. Temperature rise in device may cause fire.
- Do not expose the device to lampblack, steam or dust. Otherwise it may cause fire or electric shock.
- The device must be installed on solid and flat surface in order to guarantee safety under load and earthquake. Otherwise, it may cause device to fall off or turnover.
- Do not drop or splash liquids onto the device, and do not place container with full liquid on the device to prevent liquid spilling from entering the device.
- Do not block air vent of the device or ventilation around the device. Otherwise, temperature in device will rise and may cause fire.
- Use the device only within rated input and output range.
- Do not disassemble the device without professional instruction.
- Please transport, use and store the product under appropriate temperature and humidity.

Warning:

- Please use battery properly to avoid fire, explosion and other dangers.
- Please replace used battery with battery of the same type.
- Do not use power line other than the one specified. Please use it properly within rated range. Otherwise, it may cause fire or electric shock.
- Please use power supply matching SELV requirements, and IEC60950-1 Limited Power Source. Power supply shall follow requirements on device label.
- For I-type structure product, connect it to power supply plug with GND protection.
- If you use power plug or appliance coupler as disconnecting device, please maintain the disconnecting device available to be operated all the time.

Privacy Protection Notice

As the device user or data controller, you might collect personal data of others' such as face, fingerprints, car plate number, Email address, phone number, GPS and so on. You need to be in compliance with the local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures include but not limited to: providing clear and visible

identification to inform data subject the existence of surveillance area and providing related contact.

About the Manual

- The Manual is for reference only. If there is inconsistency between the Manual and the actual product, the actual product shall prevail.
- We are not liable for any loss caused by the operations that do not comply with the Manual.
- The Manual would be updated according to the latest laws and regulations of related regions. For detailed information, see the paper User's Manual, CD-ROM, QR code or our official website. If there is inconsistency between paper User's Manual and the electronic version, the electronic version shall prevail.
- All the designs and software are subject to change without prior written notice. The product updates might cause some differences between the actual product and the Manual. Please contact the customer service for the latest program and supplementary documentation.
- There still might be deviation in technical data, functions and operations description, or errors in print. If there is any doubt or dispute, please refer to our final explanation.
- Upgrade the reader software or try other mainstream reader software if the Guide (in PDF format) cannot be opened.
- All trademarks, registered trademarks and the company names in the Manual are the properties of their respective owners.
- Please visit our website, contact the supplier or customer service if there is any problem occurred when using the device.
- If there is any uncertainty or controversy, please refer to our final explanation.

1 Overview

The Fingerprint Access Control Integration Host integrates card reading, config and execution functions. Its has a neat appearance for medium to high-end clients such as commercial building, corporation and intelligent community.

It has:
- Touch keyboard + LCD display, TCP/IP protocol.
- Support unlock via card, fingerprint, password, card+password, card+fingerprint, card or password or fingerprint.
- Max support 3,000 fingerprints, 30,000 valid cards and 500 super-passwords.
- Max support 150,000 card records and 512 alarm records.
- Door time out alarm, intrusion alarm, duress alarm, and door sensor alarm.
- Ring input.
- Add guest card, duress card, black/white list and patrol card, while support period of validity or times.
- Integrate card reader and single-door controller.
- Support 128 groups of period and 128 groups of holiday period.

Warning:

If this product required external power, please use 12V 0.5A adaptor and the work temperature shall be within -5℃～55℃.

2 Device Structure and Installation

Device appearance and dimension are shown as in Figure 2- 1 and Figure 2- 2.
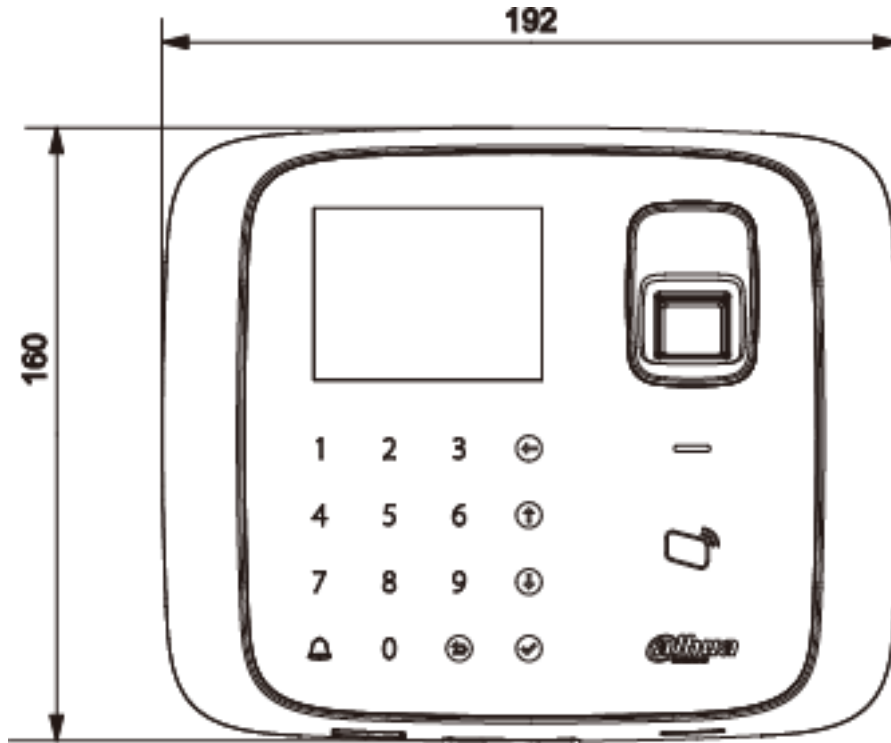Unit is mm.

Figure 2- 1

Figure 2- 2

Fingerprint Access Control Integration Host installation is shown as in Figure 2- 3.
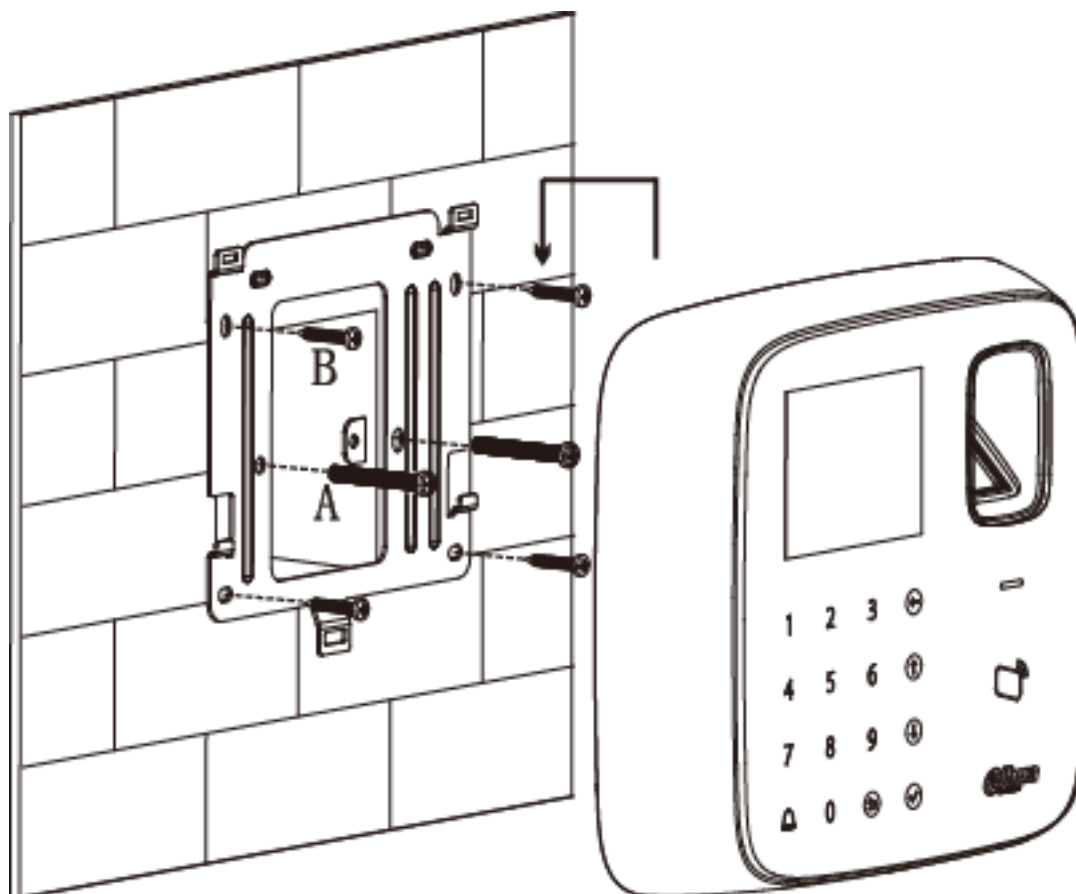

Figure 2- 3

Installation step:

Step 1.   Fix installation bracket in the hole on 86 box via screw A as to fix the bracket on wall (if no 86 box or you cannot fix it well, then use screw B to fix the bracket on wall, but you must embed expansion nut at the corresponding position in wall before doing so).

Step 2.   According to installation map, hang the device on bracket hook.

3 System Structure

3.1 System Structure

The device and card reader, alarm device, access control PC and etc. compose a system as in Figure 3- 1.
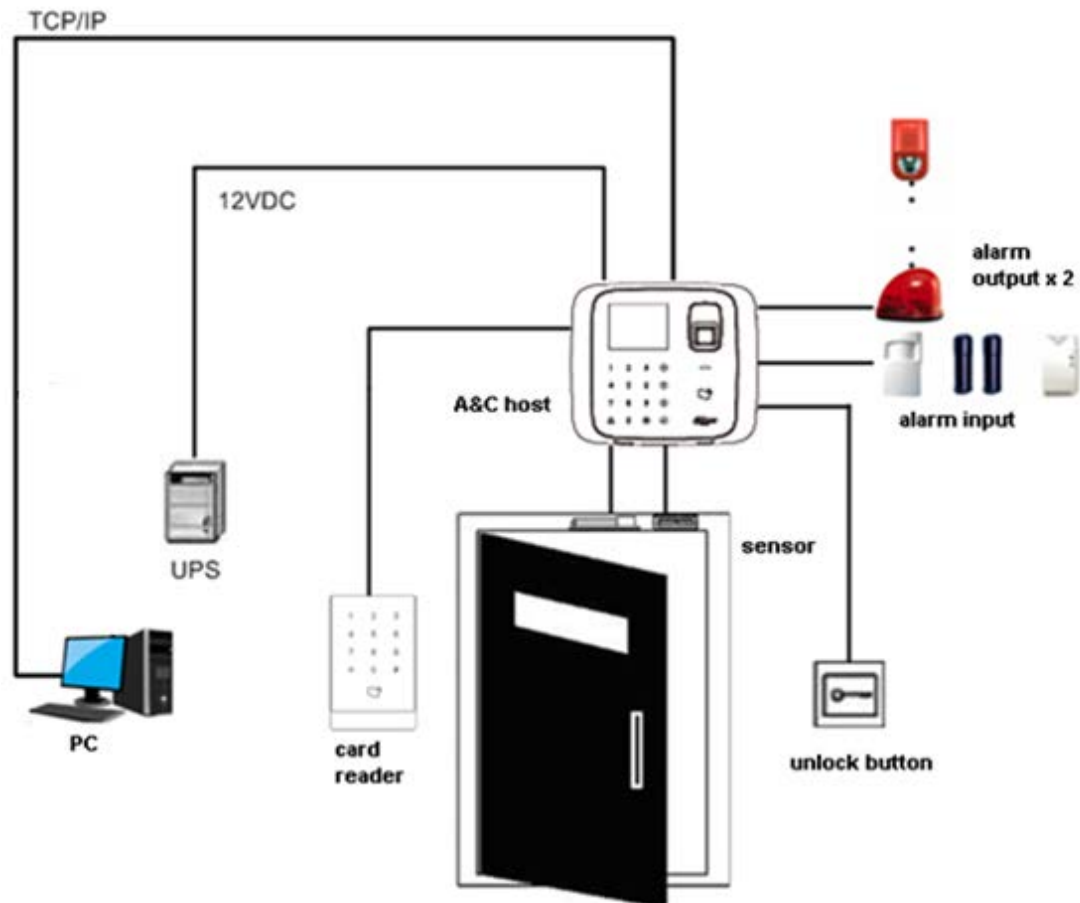
Figure 3- 1

3.2 Device Port

Device port of the host is shown in Figure 3- 3.
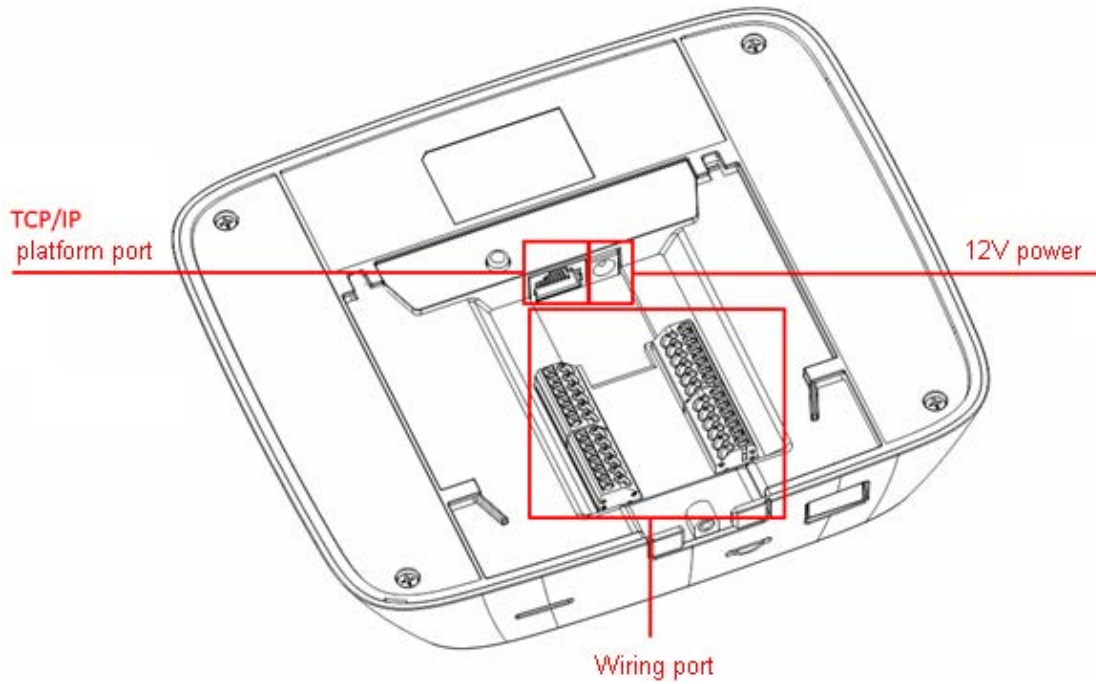
Figure 3- 2
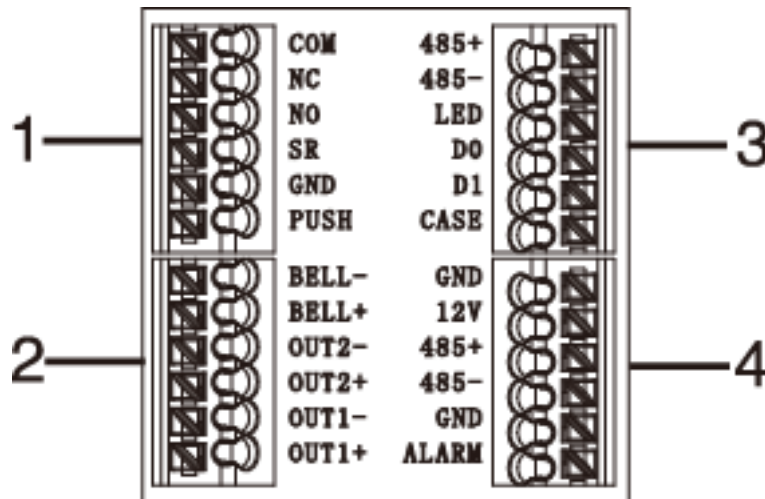
Figure 3- 3

No.	Port	Note
1	COM	Door lock COM end
	NC	Door lock NC end
	NO	Door lock NO end
	SR	Door sensor detection
	GND	Connect to GND
	PUSH	Press unlock button
2	BELL-	Door bell output
	BELL+	
	OUT2-	Alarm output 2（5V level switch），connect

No.	Port	Note
	OUT2+	to voltage not over 12V
	OUT1-	Alarm output 1（5V level switch）, connect
	OUT1+	to voltage not over 12V
3	485+	RS485+, 485 card reader
	485-	RS485-, 485 card reader
	LED	LED_OUT, Weigand card reader
	D0	D0, Weigand card reader
	D1	D1, Weigand card reader
	CASE	Card reader protection alarm
4	GND	Connect to GND
	12V	12V power output, power supply of card reader
	485+	RS485+
	485-	RS485-
	GND	Connect to GND
	ALARM	Alarm input

4 Function Setting

4.1 Login

Login interface step:

Step 1. Plug in power, device is going to boot up.

Step 2. Press 【√】 button, screen displays admin password.

Step 3. Input admin password, and press 【√】 button to enter homepage.

Default password is "88888888".

You can select to enter user management, A&C setting, system setting and local info as main menu.

- Press 【↑】 button to move up.
- Press 【↓】 button to move down.
- Press 【√】 button to enter or confirm.
- Press 【⤺】 button to return or exit.
- Press 【←】 button to backspace.

- Press 【🔔】 button to ring.

4.2 User Management

You can add or delete card, password.

You also can add user as you add card or fingerprint, and you can bind card and fingerprint.

Card type includes general, VIP, guest, patrol, black list and duress.

Please refer to Chart 4- 1.

Card Type	Note
General card	General user card. When you add card, system will ask if set card password, period and term of validity.
VIP card	VIP user card. It warns service personal when cardholder enters. When you add card, system will ask if set card password, period and term of validity.
Guest card	When you add guest card, you need to set usage times. So when it exceeds this limit, the card becomes invalid.
Patrol card	Patrol card can only swipe card at patrol spot but cannot unlock. When you add card, system will ask if set card password, period and term of validity.

Card Type	Note
Black list	When you swipe card on black list and enters, it wanrns service personal. When you add card, system will ask if set card password, period and term of validity.
Duress card	Duress card becomes valid after you set duress alarm. You can swipe this card to unlock, but an alarm will be send to center.

Chart 4- 1

Note:
All of these cards will be sent to center, management platform will process according to card type.
Password user represents user who input password in setup to enter.

Note:
● Card user has not set password, and you shall set unlock mode to card, card or password or fingerprint in order to enter.
● Card user set card password, and you shall set unlock mode to card, card + password, card or password or fingerprint in order to enter.
● Card user set fingerprint, but before entering, user shall set unlock mode to card, card + password, card or password or fingerprint.
● User, who set period, can only unlock door within designated period.
● Password user, shall set unlock mode to password, card or password or fingerprint in order to enter.

4.2.1 Add User

To add user:
Step 1. In homepage, press 【↑】or【↓】 key to select user management, press 【√】 key.
Step 2. Press 【↑】or【↓】 key to move up or down, select add user and press【√】key.
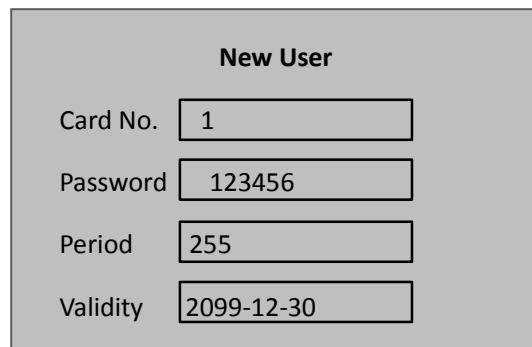
New User

Card No.

Card Type   Normal

Use Time   255 （Guest）

Step 3.　Use key to input card no. or place card at swiping area to scan.

Step 4.　Press【√】key to select card type.

Step 5.　Press　【←】key to delete default data, input use time, and press　【√】.System shows added password and period interface as follows.

```
                  New User

    Card No.   ┌─────────────────┐
               │ 1               │
               └─────────────────┘
    Password   ┌─────────────────┐
               │  123456         │
               └─────────────────┘
    Period     ┌─────────────────┐
               │ 255             │
               └─────────────────┘
    Validity   ┌─────────────────┐
               │2099-12-30       │
               └─────────────────┘
```

Note:

Use time if for guest card only.

Step 6.　Press　【←】key to delete default data, input user password, period and validity, and press　【√】key. System asks if you want to record fingerprint.

Step 7.　According to actual condition, select "yes" or "no".

● If you select YES, system will instruct you to place finger.

● If you select NO, system will inform the info input is successful.
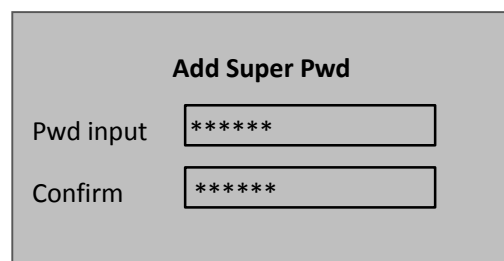
4.2.2 Add Super Password

To add super password:

Step 1.　In user management, press【↑】key or【↓】key to move up and down, and select add super password. Press　【√】　key.

System shows add new super password interface.

Step 2.　Input super password no. and press　【√】.

Step 3.　Input super password and confirm. Press　【√】　key as follows.

```
                Add Super Pwd

    Pwd input   ┌─────────────────┐
                │ ******          │
                └─────────────────┘
    Confirm     ┌─────────────────┐
                │ ******          │
                └─────────────────┘
```

4.2.3 Delete User

You can delete a single user, or all users.

To delete a single user:

Step 1.　In user management interface, press【↑】or【↓】　key to select delete user, and

press 【√】 key.

Step 2.   Press【↑】or【↓】 key, to move up or down, select single card and press【√】
key.

Step 3.   Input no. of card to delete, place the card at swiping area, and press【√】key.

Delete User

User Card No.   [   ]

System asks if to delete it or not.

Step 4.   Select OK and press 【√】key to delete single card.

To delete all users:

Step 1.   In delete user interface, move up or down to select all users, and press 【√】key.
System asks if to delete all or not.

Step 2.   Press 【√】key to confirm. System says deleted successfully.

4.2.4 Delete Password User

You can delete a single super password or delete all super passwords.

To delete a single password user:

Step 1.   In delete user interface, press 【↑】or 【↓】 key to select delete super password,
and press 【√】 key.

Step 2.   Press 【↑】or【↓】 key to move up or down, select delete single super password
and press【√】key.

Step 3.   Input no. of super password to delete, and press【√】key.

Delete Super Pwd

Super Password   [   ]

System asks if to delete it or not.

Step 4.   Press OK and press【√】key to delete.

To delete all super passwords:

Step 1.   In delete super password interface, press 【↑】or 【↓】 key to select delete all
super passwords, and press 【√】 key. System asks if to delete all or not.

Step 2.   Press 【#】key to delete.

Step 3.   Select OK and press 【√】key. System says deleted successfully

4.2.5 Add More Master Card

By adding more master card, user can quickly add card user. Before adding master card, user shall add master card first, please refer to Ch 4.3.2.

To add more master card:

Step 1.   In user management interface, by pressing 【↑】 or 【↓】 key to move up and down, select add more master card, and press 【√】 key. System prompt user to swipe the card.

Step 2.   Place master card on swiping area and scan. System prompts master card mode.

Step 3.   Place card to add one by one at the swiping area to scan. System says added successfully.

4.3 A&C

4.3.1 Period

You can set unlock period, including card swiping period, holiday period, mode period and NO period.

4.3.1.1 Card Swiping Period

Card swiping period can be 0~127, a total of 128 periods. In each period, you need to set schedule for each day of week. When a new card is added, and set card swiping period, then user swipe card to unlock. Access control will judge if current time is within set period. For example, set period 1, and the Monday to Sunday setup are in Chart 4- 2.

Day	Period
Monday	0800-2200 (valid period: 08:00 to 22:00)
Tuesday	0800-2200 (valid period: 08:00 to 22:00)
Wednesday	0800-2200 (valid period: 08:00 to 22:00)
Thursday	0800-2200 (valid period: 08:00 to 22:00)
Friday	0800-2200 (valid period: 08:00 to 22:00)
Saturday	0800-2200 (valid period: 08:00 to 22:00)
Sunday	0800-2200 (valid period: 08:00 to 22:00)

Chart 4- 2

To set card swiping period:

Step 1.   In homepage, press 【↑】 or 【↓】 key to move up or down, select A&C setup, and press 【√】 key.

Step 2.   Press 【↑】 or 【↓】 key to select time period, and press 【√】 key. Enter time setup

interface.

Step 3. Press 【↑】 key or 【↓】 key , select card swiping period, and press 【√】 key.

Step 4. Input time period, and press 【√】 key. Input any number between 0~127. Screen displays period.

<div style="border:1px solid;">

Card Period Setup

Mon.

Tue.　　　　00: 00 – 23: 59

Wed.　　　　00: 00 – 23: 59

Thu.　　　　00: 00 – 23: 59

Fri.　　　　00: 00 – 23: 59

Sat.

Sun.

</div>

Step 5. Modify period and press 【√】 key.

Step 6. Set other periods. System asks if save it or not.

Step 7. Press 【↰】 key, system asks if to save config or not.

Step 8. Select YES, and press 【√】 key. System says saved successfully.

When new card set period 1, and user use it to unlock door. According to time period set, system judge if it is within unlock period. Other periods cannot unlock door.

Note:

Default period is full periods.

4.3.1.2 Holiday period

Holiday period can be 0~127, a total of 128 periods. When time is any period in 0~127, all cards or passwords cannot unlock door.

To set holiday period:

Step 1. In time period setup page, press 【↑】 or 【↓】 key to select holiday period, and press 【√】 key.

Step 2. Input period, and press 【√】 key. Input any number between 0~127, such as 1.

Step 3. Modify start time, end time and swiping period, and press 【√】 key.

<div style="border:1px solid;">

Holiday Period Setup

Holiday Start：　[2015-03-25]

Holiday End：　[2015-03-25]

Card Period：　[255]

</div>

System prompts

4.3.1.3 Mode Period

Mode period has four periods per day, from Monday to Sunday, 7 days a week.

To set mode period:

Step 1.   In time period setup interface, press 【↑】 or 【↓】 key, select mode period, and press 【√】 . System displays periods of Monday to Sunday.

Mode Period Setup		
Mon.		
Tue.	00: 00 – 23: 59	Ca/Fw/Fp
Wed.	00: 00 – 23: 59	Ca/Fw/Fp
Thu.	00: 00 – 23: 59	Ca/Fw/Fp
Fri.	00: 00 – 23: 59	Ca/Fw/Fp
Sat.		
Sun.		

Step 2.   For example select Monday, and press 【√】 key.

Step 3.   Config period, press 【√】 to select unlock mode of the period

Step 4.   Config Tuesday to Sunday periods.

Step 5.   Press 【↰】 key. System asks if save or not.

Step 6.   Select YES, and press 【√】 key. System says saved successful.

After completion, A&C unlock method will be managed according to the four periods.

4.3.1.4 NO Period

After user set NO period, A&C will be open during this period.

To set NO period:

Step 1. In time setup interface, press 【↑】 or 【↓】 key to move up and down, select NO period, and press 【√】 key.

Step 2. Input period no., and press 【√】 key as follows.

NO Period Setup	
Period No.	255

System prompts setup is successful. Period no. is the no. set in card swiping period setup.

4.3.2 Master Card

You can modify or add master card.

Step 1.   In A&C setup interface, press 【↑】 key or 【↓】 key to select master card setup, and press 【↓】 key.

Step 2.   Press 【←】 key to delete old card no., and input modified card no., or directly place the card at swiping area for scanning, and press 【√】 key, as follows.

Master Card Setup

Card No. | FFFFFFFF |

System prompts setup is successful.

4.3.3 Unlock Mode

Unlock mode includes card, password, fingerprint, card+password, card+fingerprint, card or password or fingerprint.

To set:

Step 1.   In A&C interface, press 【↑】 or 【↓】 key to move up or down, select unlock mode, and press 【√】 . Enter unlock mode setup page.

Step 2.   Press 【↑】 or 【↓】 key to select mode to set, and press 【√】 key. When it is selected, there will be a ⌀next to the mode.

Unlock Mode Setup

Card

Password

Fingerprint

Card/Fwd/FP

Card+Pwd   ⊘

Card+FP
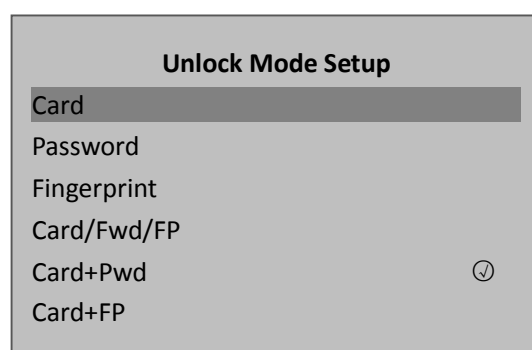
4.3.4 Door Lock Time

Door lock time setup includes hold time and over time setup.

Step 1.   In A&C setup, press 【↑】 key or 【↓】 key, select door lock time setup and press 【√】 key.

Step 2. Press 【←】key to delete original data, input hold time and over time, press 【√】
key.

<div style="border:1px solid #000; text-align:center;">

Door Lock Time Setup

Hold Time： | 2000 | MS

Over Time： | 60 | S

</div>

System prompt setup is successful.

Door lock hold time is the time door remains open after user swipe card. If the door remains open exceeding "over time", it will send alarm.

4.3.5 Alarm

User can enable or disable alarm, system alarm includes intrusion, anti-pass back, duress card, door sensor and door timed out. Please refer to Chart 4- 3.
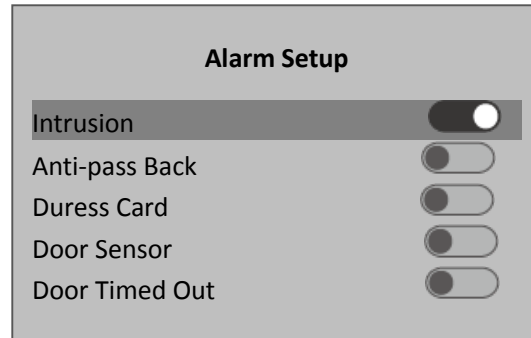
Alarm Type	Note
Intrusion	Enter without valid card swiping or password, it will generate an alarm.
Anti-pass back	Must swipe card when enter/exit, otherwise it will generate an alarm.
Duress Card	Enter with duress card, it will generate an alarm.
Door Sensor	When A&C device is damaged, it will generate an alarm.
Door Timed Out	When A&C open time is over Door Over time, it will generate an alarm. Door timed out alarm requires setup of door over time, please refer to Ch 4.3.4.

Chart 4- 3

To set alarm:

Step 1. In A&C interface, press 【↑】key or 【↓】key, select alarm setup, and press 【√】
key. Enter alarm setup interface.

Step 2. Press 【↑】key or 【↓】key, select alarm to turn ON, and press 【√】key as follows.

```
                        Alarm Setup

  Intrusion                                    ⬤
  Anti-pass Back                               ⬤
  Duress Card                                  ⬤
  Door Sensor                                  ⬤
  Door Timed Out                               ⬤
```

Press 【√】 key again to close the alarm.

4.3.6 Door Status Setup

You can set A&C status to normal, NO or NC.

Step 1.　In A&C setup interface, press 【↑】key or 【↓】key, select door status setup, and press 【√】key to enter door status setup interface.

Step 2.　Press 【↑】key or 【↓】key, select needed A&C status, and press 【√】key as follows.

```
                    Door Status Setup

  Normal

  NO

  NC                                          ⊘
```
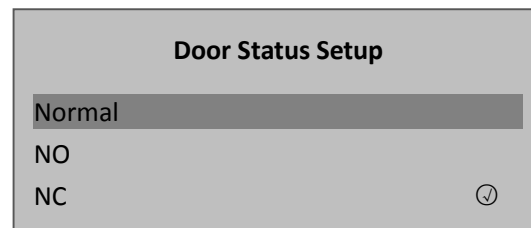
After selection is successful, a ⊘will shown next to door status.

4.4 System Settings

4.4.1 Local Setup

You can set data, admin password and voice mail. You also can export all data, restore default settings.
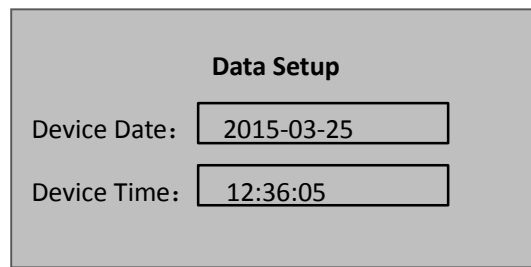
4.4.1.1 Date Setup

It sets current system date and time.

Step 1.　In system settings page, press 【↑】or【↓】key, select date setup, and press【√】key.

Step 2.　Press 【↑】key or 【↓】key, select local setup, and press 【√】key.

Step 3.　Press 【↑】key or 【↓】key, select date setup, and press 【√】key.

Step 4. Input device date and device time, and press 【√】 key as follows.

Data Setup

Device Date： 2015-03-25

Device Time： 12:36:05

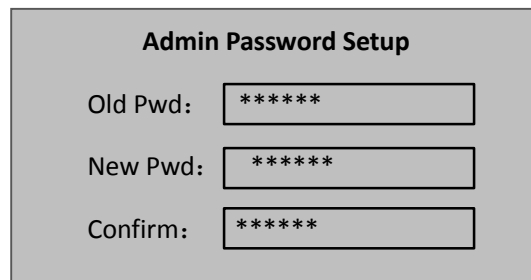System prompts setup is successful.

4.4.1.2 Admin Password Change

You can modify admin password.

Step 1. In local setup interface, press 【↑】 or 【↓】 key, select admin password setup, and press 【√】 key.

Step 2. Press 【↑】 key and 【↓】 key, select date setup, and press 【√】.

Step 3. Input old password, press 【√】 key as follows.

Admin Password Setup

Old Pwd： ******

New Pwd： ******

Confirm： ******

System prompts setup is successful.

4.4.1.3 Talk Volume

You can set device audio volume.

Step 1. In local setup interface, press 【↑】 key or 【↓】 key, select talk volume setup, and press 【√】 as follows.

Talk Volume Setup

Step 2. Press 【↑】 key or 【↓】 key, you can adjust volume.

4.4.1.4 Default

To restore default settings:
  Step 1. In local setup interface, press 【↑】 or 【↓】 key, select default, and press 【√】 key.
      System asks if to restore or not.
  Step 2. Select YES and press 【√】 key to restore.

4.4.2 Communication Setup

It sets current access control communication.(Only IP for now)
Step 1. In system settings interface, press 【↑】 or 【↓】 key, select communication setup, and press 【√】 .
Step 2. Press 【↑】 or 【↓】 key, select IP setup, and press 【√】 .
Step 3. Modify IP, subnet mask, gateway, and press 【√】 as follows.

IP Setup	
IP：	172.7.10.33
Sub Mask：	255.255.255.0
Gateway：	172.7.0.0

System prompts setup is successful.

4.4.3 Mode

The device suppers two work mode, including "this device as controller" and "this device as card reader".
● This device as controller: the device is used as an A&C controller for unlock operation.
● This device as card reader, the device is used as a card reader, if you need to control door unlock, then it must be connected to an A&C controller before it can be used.
To set device mode:
Step 1. In system setup interface, press 【↑】 key or 【↓】 key, select mode setup, and press 【√】 key.
Step 2. Select work mode, and press 【√】 .
Step 3. Press 【↑】 key or 【↓】 key, select work mode, and press 【√】 key as follows.

```
                    Work Mode

This device as controller
This device as card reader
⊘
```
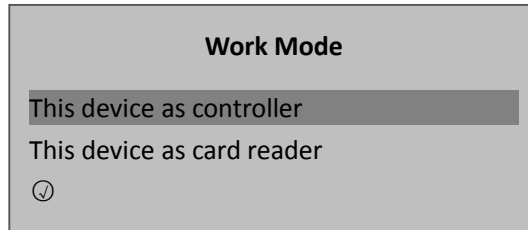
After selection is successful, a √ will be shown next to work mode.

4.4.4 Reboot System

To reboot the system:

Step 1.   In main interface, press 【↑】or【↓】key, select system reboot, and press【√】. System asks if to reboot or not.

Step 2.   Select YES, and press【√】key to reboot.

4.5 System Info

You can view device card swiping info, alarm info and local info.

4.5.1 Card History

To view card swiping record:

Step 1.   In homepage, press 【↑】key or 【↓】key, select system info, and press 【√】key.

Step 2.   Press 【↑】key or 【↓】key, select card history, and press 【√】key.

Step 3.   Press 【↑】key or 【↓】key, user can view card swiping history, including swiping time, card no., method, status and etc.

```
                    Card History

     Time       Card No.     Mode      State
   10-12 08:00    12470      Card        OK
   10-12 08:43    15700      Card        OK
   10-12 08:36    15760      Finger      OK
   10-12 08:43    15604      Card        Fail
   10-12 08:45    13420      Card        OK

       Total 5 records          Page 1/1
```

Note:

Max can display 512 records of history.

4.5.2 Alarm History

To view alarm history:

Step 1.   In system info interface, press 【↑】 or 【↓】 key, select alarm history, and press 【√】 key.

Step 2.   Press 【↑】 or 【↓】 key, user can view alarm history, including alarm type, alarm time and etc as follows.

Alarm History

Alarm Type	Alarm Time
Duress	10-12 08:00
Door Sensor	10-12 08:43
Anti-pass	10-12 08:36
Anti-pass	10-12 08:43
Duress	10-12 08:45
Total 5 records	Page 1/1

Note:
Max can display 512 records of history.

4.5.3 Local Info

To view local info:

Step 1.   In homepage, press 【↑】 or 【↓】 key, select local info, and press 【√】 key. You can view version, MAC, IP, Card Quantity, Super Password Quantity, Card History and Alarm History in the shown interface.

Note:
- **This manual is for reference only. Slight difference may be found in user interface.**
- **All the designs and software here are subject to change without prior written notice.**
- **All trademarks and registered trademarks are the properties of their respective owners.**
- **If there is any uncertainty or controversy, please refer to the final explanation of us.**
- **Please visit our website or contact your local service engineer for more**

information.