

To Users

Dear Users,

Thanks to choose Ingersoll Rand SEL2.0 electronic anti-burglary lock.

The product series includes two models: **card version** and **fingerprint version**. Please read the instructions relating to the model of product you have purchased and fully understand this user manual prior to formal installation and usage of the product.

If you have any question during installation and usage of the product, please don't hesitate to contact our distributors at any time.

Please refer to the following Parts List to check and confirm the quantity of the articles in your product package.

Parts List

No.	Parts	Quantity	Remark
1	Outside Escutcheon Assembly (outdoors)	1	Including weather seal
2	Inside Escutcheon Assembly (indoors)	1	Including weather seal
3	Key	3	3 keys in standard package
4	Mifare Card (only for card version)	4	2 standard cards and 2 non-standard cards(Mifare A type)
5	User Manual, Certificate of compliance and Template	1	
6	Lock Case	1	
7	Strike Plate and Strike Box	1+1	
8	Screw Package	1	

Note: This manual contains Part A and B. Part A is product installation manual and Part B is user manual.

A

Product Installation Manual

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A-1 Product Exploded View

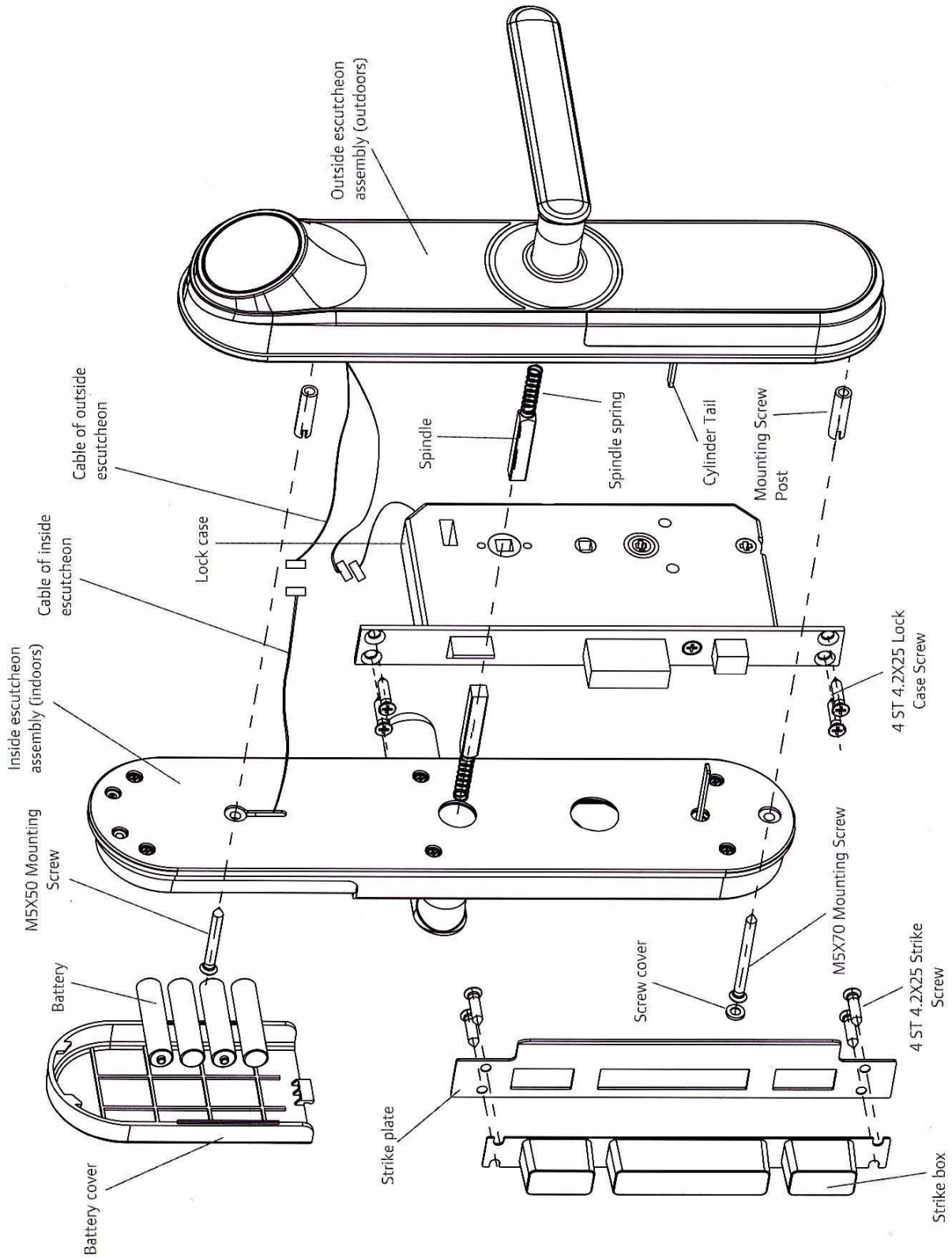


Fig.1

A-2 Determine Direction of Door-Opening

- ▶ 2-1 As illustrated in Fig. 2, check the direction of door-opening.

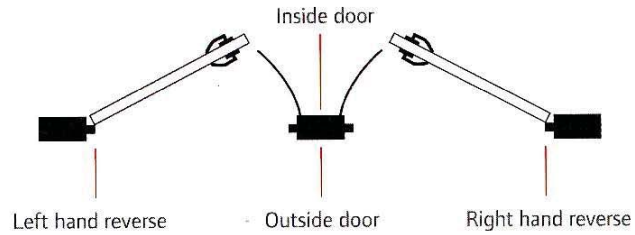


Fig.2

A-3 Change Latch Direction (if necessary)

- ▶ 3-1 Firstly check if latch direction suits the direction of door closing. If not, make the change as below.

3-1-1 As illustrated in Fig. 3, insert the lever spindle from the side marked with the character “外(outside)”, and turn the spindle counter-clockwise about 45° with a pair of needle-nose pliers to eject the dead bolt out.

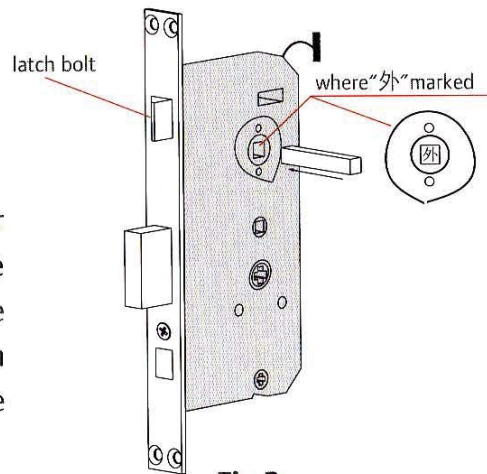


Fig.3

3-1-2 Align a slotted screwdriver to the slot at the end of the latch bolt and push the latch bolt out in the arrow direction shown in Fig. 4.

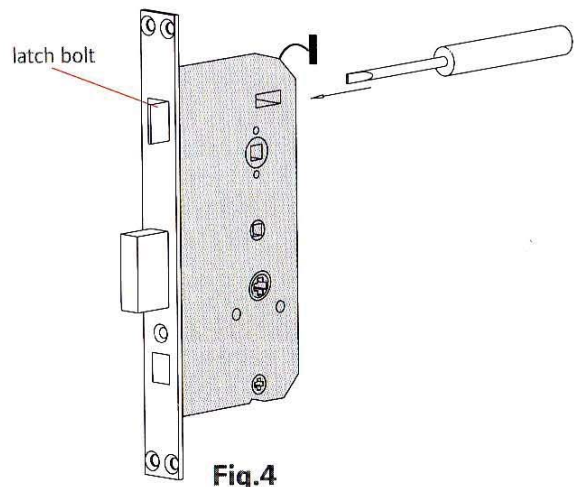
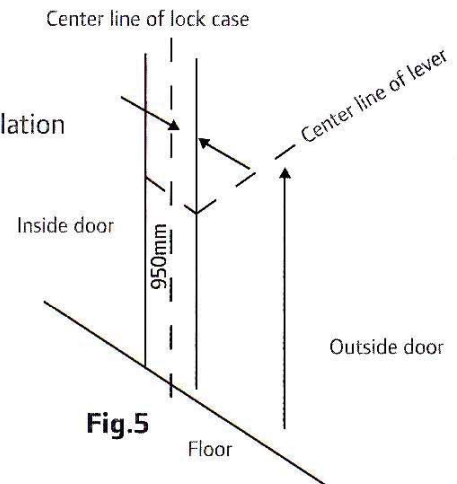


Fig.4

3-1-3 Turn the slotted screwdriver clockwise 180° and the latch bolt will be retracted automatically. Direction changing is finished.

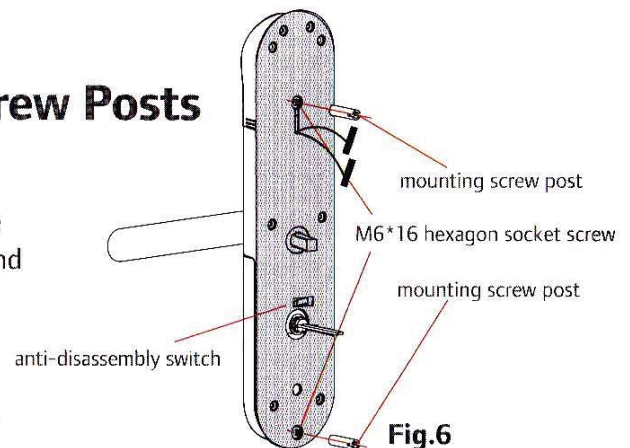
A-4 Door Preparation

- ▶ 4-1 Prepare tools Electric drill, Drill bit $\Phi 35, 12, 25, 45\text{mm}$, Cross screwdriver, Wood chisel, Pencil, Ruler, Needle-nose pliers
- ▶ 4-2 Mark datum lines on the door according to the installation template as shown in Fig. 5 (A distance of 950mm between the center line of the lever and the floor is recommended)
- ▶ 4-3 Perforation
 - 4-3-1 Mark hole position on the door according to the installation template.
 - 4-3-2 Drill holes for lock case.
 - 4-3-3 Drill holes for escutcheon assembly.
 - 4-3-4 Drill holes for strike box and strike plate.
 - 4-3-5 Door preparation completed



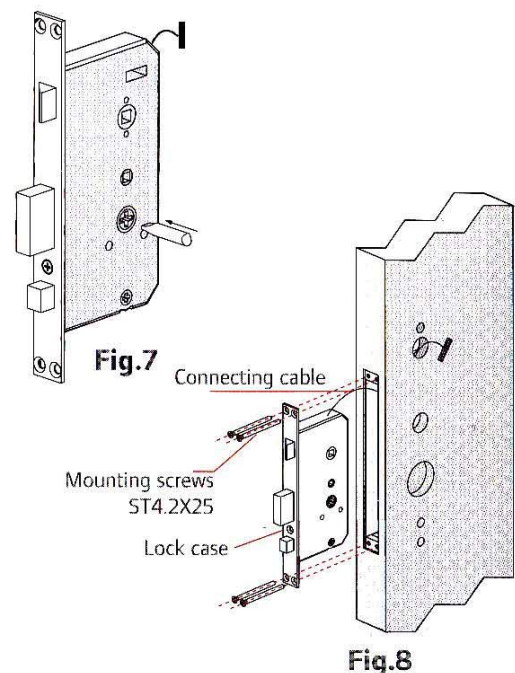
A-5 Installation of Mounting Screw Posts

- ▶ 5-1 As illustrated in Fig. 6, fix mounting screw posts on the hexagon socket screws on the outside escutcheon assembly (outdoors) and then use slotted screwdriver in the slot of mounting screw posts to tighten it up.



A-6 Installation of Lock Case

- ▶ 6-1 As shown in Fig.7, check whether the cross recess is at zero position with a slotted screwdriver. If not, please adjust it to zero position (you can feel a slight block at zero position).
- ▶ 6-2 As shown in Fig.8, install the lock case into the slot (avoid putting it upside down) and fix it with screws.
- ▶ 6-3 Take the connecting cable of the lock case through the hole on the outside of the door.



A-7 Installation of Escutcheon Assembly

► 7-1 Installation of the outside escutcheon assembly (outdoors)

7-1-1 Connect the cable of lock case with the cable of outside escutcheon.

7-1-2 As illustrated in Fig. 9, firstly insert spindle into the corresponding hole of lock case. Spindle spring is in outside direction.

7-1-3 Secondly, clamp spindle spring using tools like needle-nose pliers and insert it into the corresponding hole on the outside escutcheon.

7-1-4 In the same time, insert the cylinder trail into the slot of lock case.

7-1-5 Installation of the outside escutcheon (outdoors) is completed.

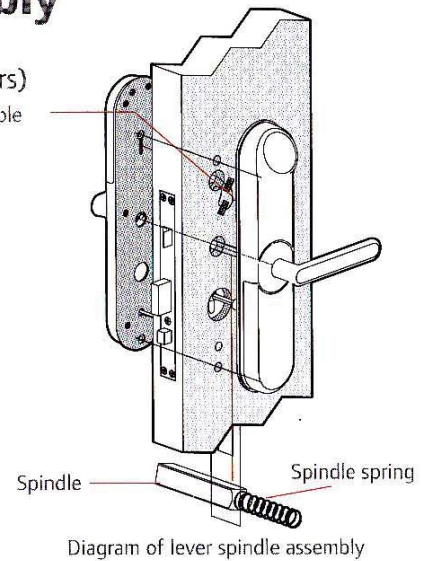


Fig.9



Note

• In the process of installing inside/outside escutcheon assembly, please make sure the anti-disassembly switch pressed to avoid alarming sound after installing the battery. See Measures for Warning of Disassembly-Preventing Switch on page 18 for removing alarming method.

► 7-2 Installation of inside escutcheon assembly (indoors)

7-2-1 Connect the cable of inside escutcheon with the cable of outside escutcheon.

7-2-2 Firstly, insert spindle into the corresponding hole of lock case. Spindle spring is in outside direction.

7-2-3 Secondly, clamp spindle spring and insert it into the corresponding hole on the inside escutcheon.

7-2-4 Insert the knob trail into the lock case (make sure safety bolt status in align with symbol. Fig. 10 illustrates the locked status).

7-2-5 Tighten up the mounting screws (the screw behind the battery cover is M5X50mm and the other is M5X70mm). Fig. 11 shows the position of screw hole after removing battery cover.

7-2-6 Paste the screw cover.

7-2-7 Installation of the inside escutcheon is completed. Operate the lever, lock cylinder, and thumb turn to ensure their smooth movement.

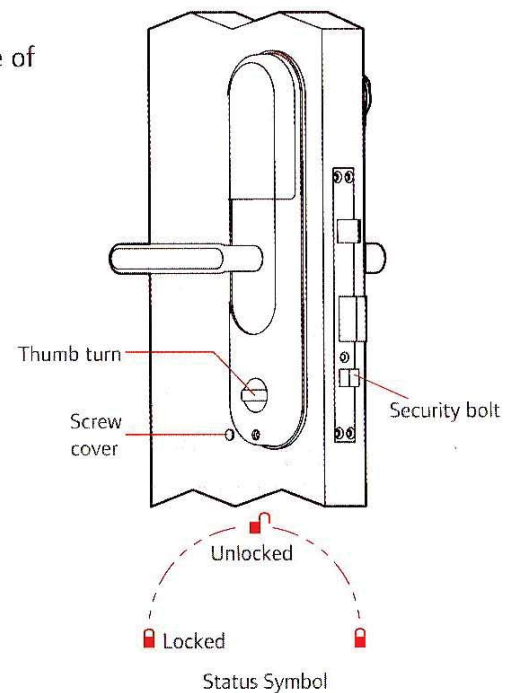


Fig.10

A-8 Installation of Battery and Battery Cover

- ▶ 8-1 As shown in Fig. 11, remove the battery cover (press the marked position in Fig. 11 and push it upward)
- ▶ 8-2 Place batteries and install battery cover.

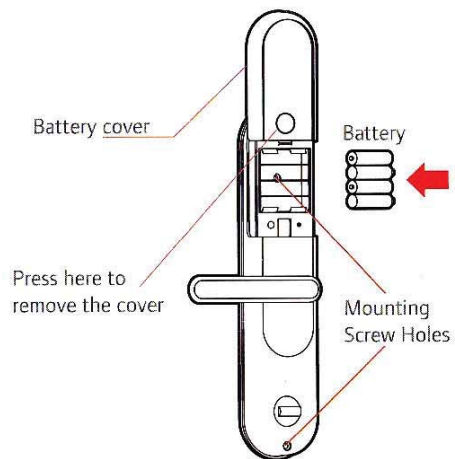


Fig.11

A-9 Installation of Strike Box and Strike Plate

- ▶ 9-1 As illustrated in Fig. 12, align the center line of the strike plate to the center line of the lock case, mark the installation position and drill holes (using the template). Fix the strike plate with screws.
- ▶ 9-2 Installation of strike box and strike plate is completed.

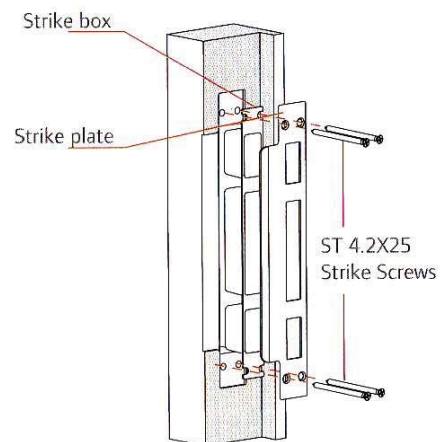
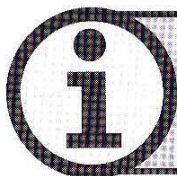


Fig.12

A-10 Testing of Product Functions

- ▶ 10-1 Perform function testing with reference to *User Manual* and if no problem, installation is completed.



When leaving factory, the protective sliding cover of the outside escutcheon, the battery cover and the panel behind the battery cover of SEL2.0 Electronic Anti-burglary Lock are covered with transparent film. Remove the film after completion of the installation to make the lock brighter and more textured.

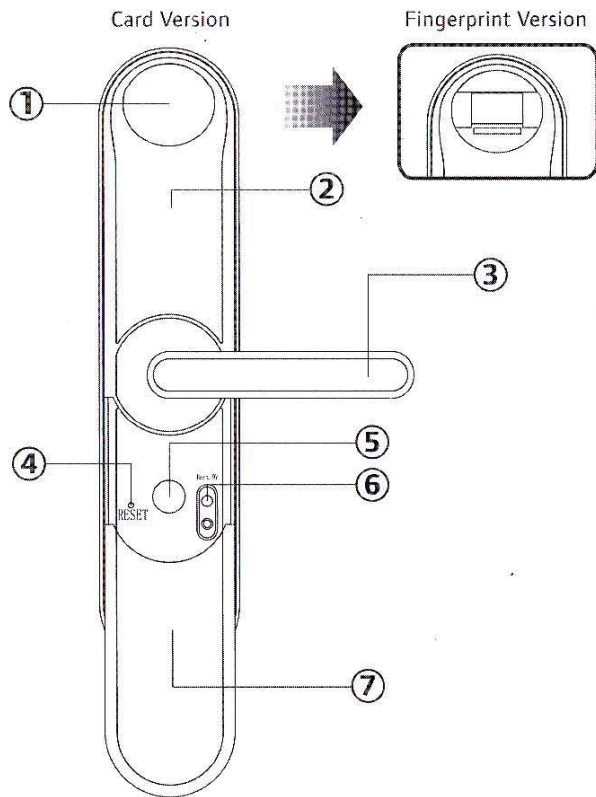
A large, bold, black letter 'B' with a textured, grid-like pattern inside, serving as a decorative element for the manual title.

B User Manual

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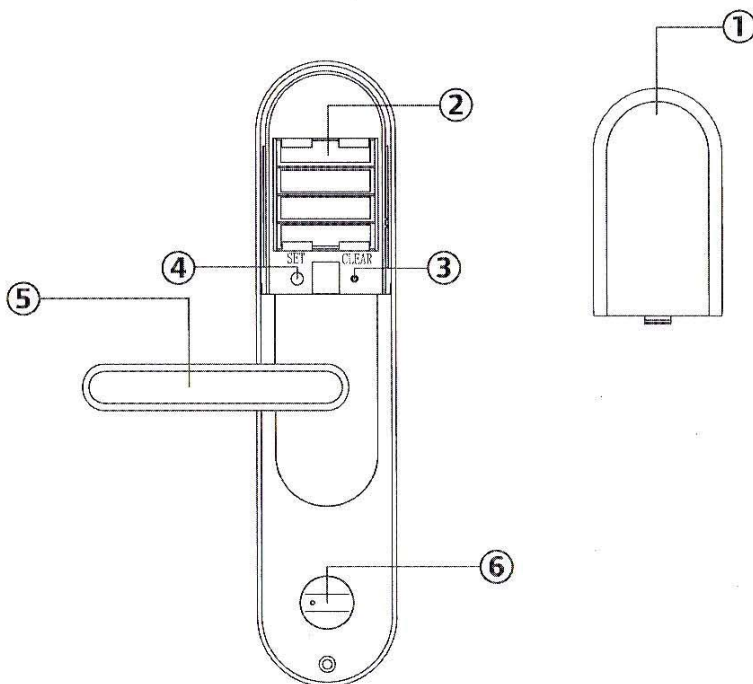
B-1 Diagram of Product Structure

● Outdoors



- ① Card reading area [card version]
Reading card to unlock the door
- Sliding cover of fingerprint module [fingerprint version]
Scan fingerprint to unlock the door
- ② Touch button
Activate touch buttons by touching more than two numbers in the same time
- ③ Exterior lever
Rotate the lever downwards to unlock the door after inputting the right password or card or fingerprint
Rotate the lever upwards to lock the door
- ④ Reset button
Restart the system
- ⑤ Mechanical keyhole
- ⑥ Contact of external power
Connect 9V square battery for emergency power supply
- ⑦ Protective sliding cover

● Indoors



- ① Battery cover
- ② Battery box
4 sets of AA Alkaline battery
- ③ Use this button together with set button to restore the system to factory settings
- ④ Set button
- ⑤ Interior lever
Rotate the lever downwards to unlock the door
Rotate the lever upwards to lock the door
- ⑥ Security thumb turn
Security function is active when the red point is on the left or right side

B-2 Initial Settings

▶ 2-1 Settings Description

- 1) The system can store one administrator password. **The initial administrator password is "123456"**
- 2) Administrator password, general user password and guest user password all feature 6-10 digits.
- 3) General user's and guest user's password, card /fingerprint information are managed in different zones as follows:

	Administrator password: 1	Used for lock settings and unlocking the door
Zone 1	General user password: 10	Used only for unlocking the door
	General user card: 50 [card version]	
	General user fingerprint: 50 [fingerprint version]	
Zone 2	Guest user password: 10	
	Guest user card: 50 [card version]	
	Guest user fingerprint: 50 [fingerprint version]	

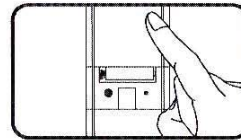
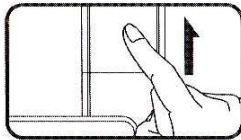


Note

- Please make changes according to the User Settings before using the product, and carefully keep them confidential.
- The cards in product package are blank cards, which should be registered according to the User Settings before using them to unlock the door.
- All the consequences caused by divulging password and losing card should be assumed by consumer.

▶ 2-2 Restore to Factory Default Settings

- 1) Press the lower part of the battery cover and push it upwards, thus taking off the cover
- 2) Install 4 AA alkaline batteries (pay attention to positive and negative electrode)



- 3) Insert a nib-like object into the hole marked with CLEAR and press the button.
- 4) Press SET ● [Set button] at the same time for about 3-4 seconds and then release SET ● [Set button].
- 5) Release CLEAR button after hearing the voice indication "CLEAR DONE", now the product is restored to factory settings.



Note

- **When you use this product for the first time**, please restore the product to its factory settings according to the above procedures before starting the next step of settings



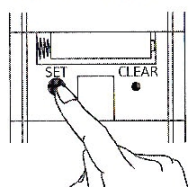
This product adopts voice indication to guide all of its settings, please set and operate the product based on each voice indication and the following instructions. The operation of each step should be completed in 5 seconds.

B-3 User Settings

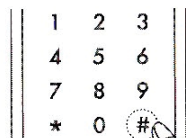
► 3-1 Set Password

3-1-1 Add administrator password for initial application

- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Input administrator password and then press # button



After taking off the battery cover, shortly press ● [Set button] beneath SET



Use touch keypad to input administrator password (6-10 digits) and then press # button

- Note**
- After completion of password setting, the password will be displayed again, which means successful setting and exiting the setting mode.
 - In case of forgetting administrator password, the product must be restored to factory settings before making further settings.
 - The operation of each step should be completed in 5 seconds, otherwise the voice indication system will be closed and the setting operation has to be restarted.
 - Keep the door open when setting password so as to avoid mistake or timeout etc.

3-1-2 Change Administrator Password

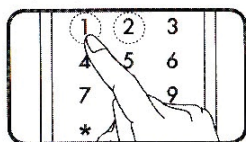
- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Press 3 → input administrator password → press #
- 3) Input new administrator password → press #



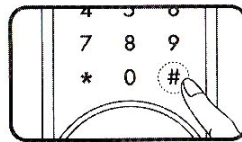
- New administrator password is not allowed to be same as the previous one, otherwise the password would be invalid.

3-1-3 Add general user or guest user password

- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Press 1 → press 1 → input administrator password → press #
- 3) Input partition number (press 1 or 2)
- 4) Input password → press #



- Press 1 for general user
- Press 2 for guest user



Input general user password or guest user password (6-10 digits) and then press #

- 5) Press * → add another password
- Press # → exit operation



- It is prohibited to add two same passwords to the system when adding user's password.

3-1-4 Delete a single general user's or guest user's password

- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Press 1 → press 2 → input administrator password → press #
- 3) Press 1 → input the password to be deleted → press #
- 4) Press * → delete another password
- Press # → exit operation

3-1-5 Delete a zone of general users' or guest users' passwords

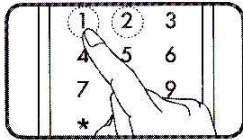
- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Press 1 → press 2 → input administrator password → press #
- 3) Press 2 → input the zone number to be deleted (press 1 or 2)
 - Press 1 to delete general user zone
 - Press 2 to delete guest user zone

▶ 3-2 Set Card (only for card version)



3-2-1 Add general user's or guest user's card

- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Press 2 → press 1 → input administrator password → press #
- 3) Input partition number (press 1 or 2)
- 4) Scan card
- 5) Press* → add another card
Press # → exit operation



- Press 1 for general user
- Press 2 for guest user

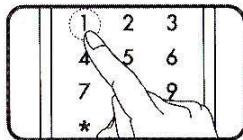


Note

- Voice will indicate an ID number for the registered card. General user's card will be stored at location 1-50 and guest user's card will be stored at location 51-100.
- **The user should record the ID number** of his/her card so as to delete the card using such number when the card is lost.
- The card acquired by yourself should be Mifare A-type card (e.g. transportation card), which is applicable to this product.
- For the purpose of security, a card can only be added successfully for one time, and cannot be added repeatedly.
- Keep the door open when setting card so as to avoid mistake or timeout etc.

3-2-2 Delete a single general user's or guest user's card

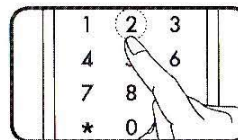
- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Press 2 → press 2 → input administrator password → press #
- 3) ▲ Delete the card: press 1 → scan card



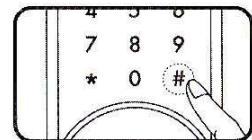
Voice will indicate "card## deleted" after successful deletion



- ▲ Delete the card ID number: press 2 → input ID number → press #



After pressing 2, input card's ID number and then press #.



- 4) Press* → delete another card
Press # → exit operation



Note

- The user should record the ID number when adding the card so as to implement this function (see 3-2-1)

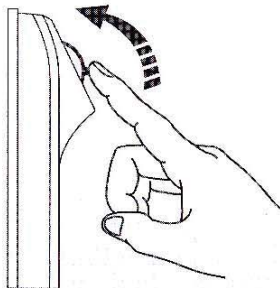
3-2-3 Delete a zone of general user's or guest user's cards

- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Press 2 → press 2 → input administrator password → press #
- 3) Press 3 → input the zone number to be deleted (press 1 or 2)
 - Press 1 for deleting general user zone
 - Press 2 for deleting guest user zone

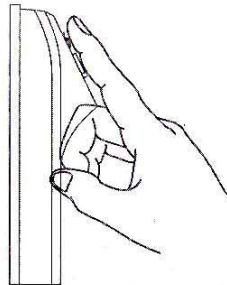


Fingerprint version

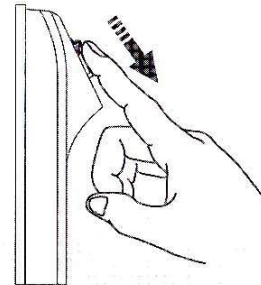
How to use fingerprint



① Push up the sliding cover of the fingerprint module



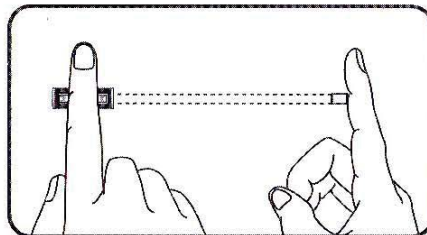
② Push the cover up to the top of the fingerprint module



③ slowly sweep downwards when the indicator light turns on

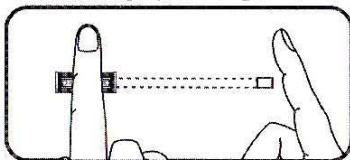
How to collect and verify fingerprint correctly

① Correct press of finger

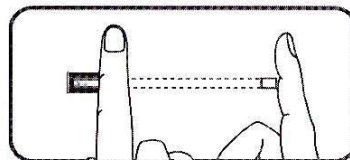


② Incorrect press of finger

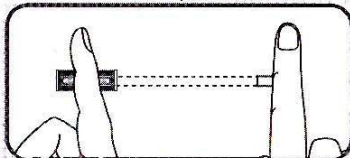
Too large press angle



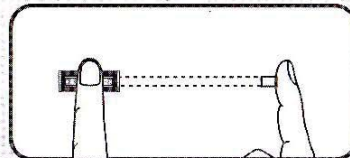
Press too close to the side



Slant press



Press too low

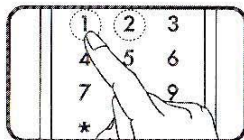


▶ 3-3 Set Fingerprint (only for fingerprint version)

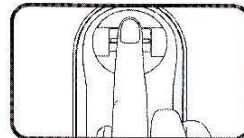


3-3-1 Add general user's or guest user's fingerprint

- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Press 2 → press 1 → input administrator password → press #
- 3) Input partition number (press 1 or 2)



- Press 1 for general user
- Press 2 for guest user



- 4) Scan fingerprint (twice)

- 5) Press * → add another fingerprint
Press # → exit operation

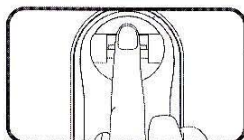
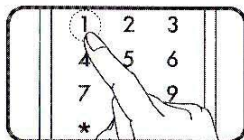


Note

- Voice will indicate an fingerprint ID number after successful adding. General user's fingerprint will be stored at location 1-50 and guest user's fingerprint will be stored at location 51-100.
- **The user should record the ID number** of his/her fingerprint so as to delete the fingerprint against such number.
- **Keep finger dry, clean and clear of foreign matter** when scanning fingerprint so as to ensure the effect of fingerprint identification.
- Keep the door open when setting fingerprint so as to avoid mistake or timeout etc.

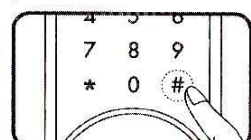
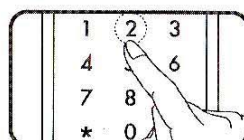
3-3-2 Delete a general user's or guest user's fingerprint

- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Press 2 → press 2 → input administrator password → press #
- 3) ▲ Delete the fingerprint: press 1 → scan fingerprint



Voice will indicate "fingerprint## deleted" after successful deletion

- 3) ▲ Delete the fingerprint ID number: press 2 → input ID number → press #



After pressing 2, input fingerprint's ID number and then press #.

- 4) Press * → delete another fingerprint
Press # → exit operation



Note

- The user should record the ID number when adding fingerprint so as to implement this function (see 3-3-1)

3-3-3 Delete a zone of general user's or guest user's fingerprints

- 1) Shortly press SET ● [Set button] and operate according to voice indication
- 2) Press 2 → press 2 → input administrator password → press #

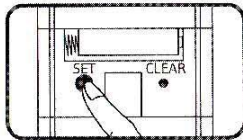


- 3) Press 3 → input the zone number to be deleted (press 1 or 2)
 - press 1 for deleting general user zone
 - press 2 for deleting guest user zone

▶ **3-4 Set Holiday Mode**

[one-time prohibition/activation of the door-opening authority of all general users' and guest users' passwords, cards/fingerprints]

1) Keep pressing SET ● [Set button] and operate according to voice indication



After taking off the battery cover, keep pressing ● [Set button] beneath SET for about 3 seconds

2) Input administrator password and then press # button

After inputting administrator password and pressing #, all the users' passwords, cards/fingerprints are prohibited to be used.



Note

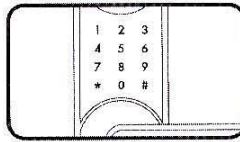
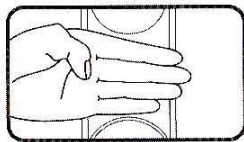
- The default status of the system is normal mode, under which all users' passwords, cards/fingerprints are activated.
- Repeat the above-mentioned operation to activate users' passwords, cards/fingerprints, and the activation is successful when the voice indicates "normal mode".
- Under the holiday mode, the door can be opened only by administrator password or mechanical key. All user's passwords, cards/fingerprints are prohibited.

B-4 Operation Instructions

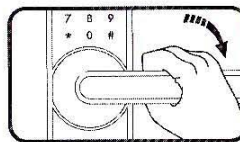
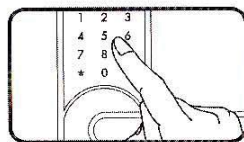
▶ **4-1 How to Unlock the Door**

4-1-1 Use password to unlock the door

1) Close four fingers and place them on the touchpad to turn on the touchpad light



2) Input password and then press # (press * to clear the password that has been input). Turn the lever to unlock the door within 5 seconds after the buzzer ticks



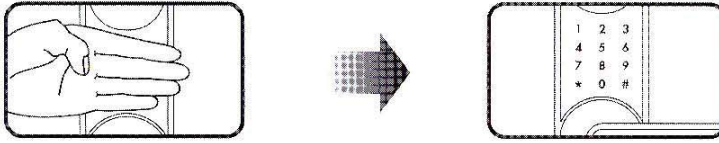
Note

- If 3 consecutive operation errors occur within 3 minutes when using password to unlock the door, the system will automatically make warning sound for 10 seconds and then turn into locked state, under which, no operation can be performed. After 3 minutes, the system will restore to normal state for operation.
- When inputting password, **the user may input several interfering digits before the right password** so as to avoid divulging the right password in public place.

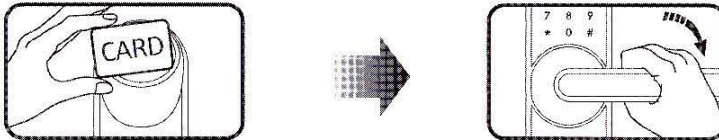
4-1-2 Use card to unlock the door(only for card version)



- 1) Close four fingers and place them on the touchpad to turn on the touchpad light



- 2) Place registered card in the card-reading area, and then turn the lever to unlock the door within 5 seconds after the buzzer ticks

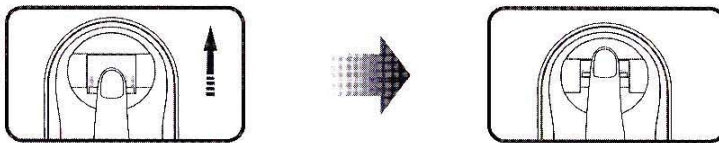


- If 3 consecutive operation errors occur within 3 minutes when using password or card to unlock the door, the system will automatically make warning sound for 10 seconds and then turn into locked state, under which, no operation can be performed. After 3 minutes, the system will restore to normal state for operation.
- If the card is not Mifare A-type card, there will be no indication

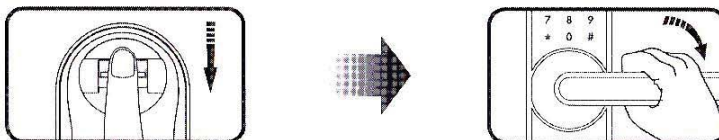
4-1-3 Use fingerprint to unlock the door(only for fingerprint version)



- 1) Push up the sliding cover of the fingerprint module (see Description of Usage of Fingerprint on page 13 for specific method)



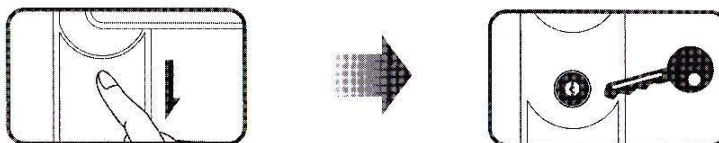
- 2) Scan the registered fingerprint and turn the lever to unlock the door within 5 seconds after the buzzer ticks



- If fingerprint scan fails for 5 consecutive times within 3 minutes, the system will automatically make warning sound for 10 seconds and then turn into locked state, under which, no operation can be performed. After 3 minutes, the system will restore to normal state for operation.

4-1-4 Use key to unlock the door

Under any circumstances, the user can open the door with a key. Turn the lever to unlock the door.



4-1-5 Emergency opening

When the battery becomes low or exhausted, the user may connect a 9V square battery with connecting pins under the sliding cover and unlock the door with password or card.

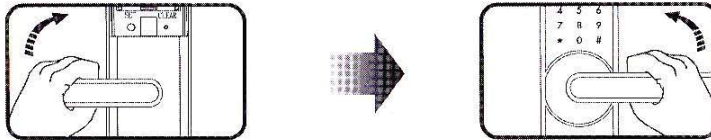


• Please timely replace the batteries inside the lock after unlocking the door with emergency power supply.

▶ 4-2 How to Lock the Door

4-2-1 Rotate the lever upwards to lock the door

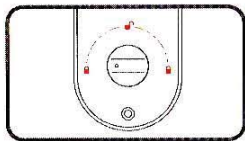
Rotate the lever upwards to lock the door after closing the door



• Even if the user doesn't rotate the lever upwards after closing the door, the door is locked. No entry from outside the door is allowed.
• To ensure your safety, please remember to rotate the lever upwards when closing the door.

4-2-2 Forced lock mode inside the door

Turn the security thumb turn to activate the security function when the red point is on the left or right side.



• The security thumb turn can only be turned 90° towards the left or right side. The turning direction depends on the opening direction of the door.
• The door cannot be opened by password or card or fingerprint or mechanical key when the security function is active. Turn the security thumb turn to vertical position to disable the security function.

Precautions



Don't dismantle the product without permission

This product is composed of complicated components. Therefore, unpermitted disassembly is prohibited so as to avoid the product's abnormal work or other usage risks. In case of necessary disassembly, you must contact professional personnel.



Choose cleaning manner carefully

Please use dry cloth to clean this product. Don't wash the lock with water so as to avoid failure of circuit board.



Measures for low and exhausted battery

▶ **Normal Battery Life**

This product uses 4 AA alkaline batteries (1.5V), which can support normal use of the product for more than 1 year assuming unlocking the door for average 10 times per day.

▶ **Indication of Low Battery**

The system will prompt "low battery, please replace the battery in time" by voice indication during operation, in which case the door can still be unlocked for over 50 times. Please replace the battery in time.

▶ **Indication of Exhausted Battery**

Please use mechanical key to unlock the door when password, card/fingerprint fail to work, or use external 9V alkaline AA battery to supply power. Please replace the battery immediately after opening the door.



Measures for loss of card (only for card version)

- ▶ Please delete the information of such card immediately if you remember its ID number.
- ▶ Please delete immediately the information of all cards in the zone where the lost card is located and then add card information again if you forgot card ID number but remember the zone it belongs to.
- ▶ Please restore immediately the product to its factory settings, clear all the information and then add card information again if you forgot card ID number and the zone it belongs to.



Measures for removing alarming sound caused by consecutive operation errors

- ▶ In case of consecutive operation errors to make alarming sound and then turn the system into lock state during usage of the product, please deal with the situation in compliance with the following steps:
Step 1: remove the battery cover.
Step 2: insert a nib-like object into the hole marked with CLEAR and press the button to unlock the system.



Measures for warning of disassembly-preventing switch

- ▶ In case of rendering the anti-disassembly switch(see Fig.6 on page 05)to make alarming sound during installation or usage of the product, please deal with the situation in compliance with the following steps:
Step 1: make sure the anti-disassembly switch pressed.
Step 2: press CLEAR button to stop the alarming sound.