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ekoo

ONE FINGER RULES ALL

## BioKing K1

### User Manual

Thank you for purchasing this product  
Read this manual thoroughly before use  
Keep this manual for the convenience of future reference

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## **Copyright Note**

All contents of this Manual, including texts and images related to the door locks products and the micro-computer programs, are copyright of our company, and any imitation and copy is an act of tort.

## **Upgrade Description**

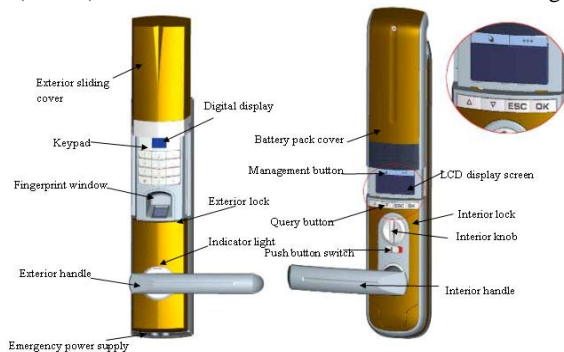
As the continuous improvement and development of technology, our company will continuously upgrade the product functions to meet the market demand. Any difference between the purchased product and the Manual is subject to change without notice. In case of doubt, please contact directly with our company for the latest product information.

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## Chapter 1 Operating Instructions

This fingerprint lock features of three kinds of functions, i.e. fingerprint + password + key, and can store 100 fingerprints (00--99). The surface structure is shown in the following figures:



Function introduction of exterior lock set of fingerprint lock

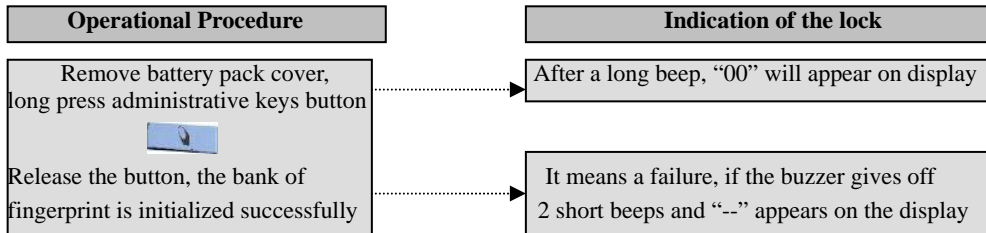
Figure 1

Function introduction of interior lock set of fingerprint lock

Figure 2

## 1.1 Delete all fingerprints before start

Before the normal use, the bank of fingerprints should be emptied, the operation is as following:

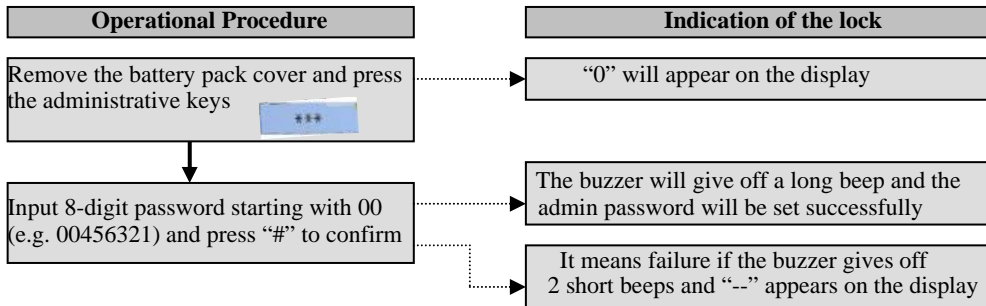


Note: After being emptied, all the fingerprints in the lock will be deleted, and all the access fingerprints will have to be registered again, so this operation needs very cautious consideration.

## 1.2 Setting the administrative password

Administrative password (made up of 00 and a 6-digit password) is not used to unlock the door but to set and delete other user passwords and user fingerprints.

*Note: Factory default administrative password is **00123456***



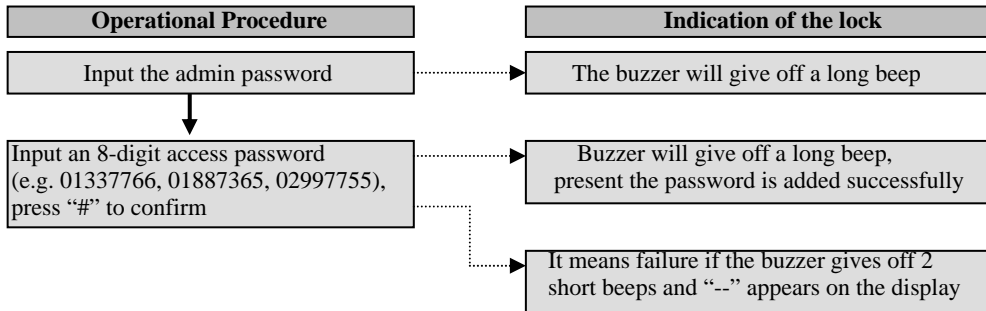
*Note: this operation can cover the admin password set before, and the former one will be unavailable.*

### 1.3 Set up access password

The 8-digit access password is made up of 2 parts; Group Number + six random numbers. The first 2 numbers are the “Group number” (from 01~09), and the other six numbers are “random numbers” (from 1~9).

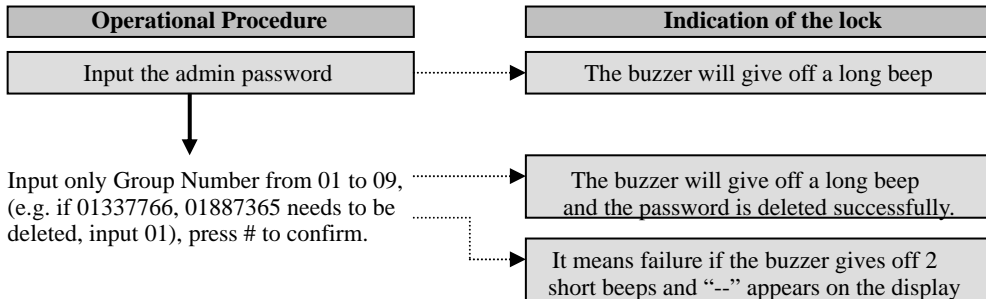
*Note: The lock can only set up 9 groups.*

#### Add access password



## Delete access password by Group

*Note: The access password can only be deleting by group.*



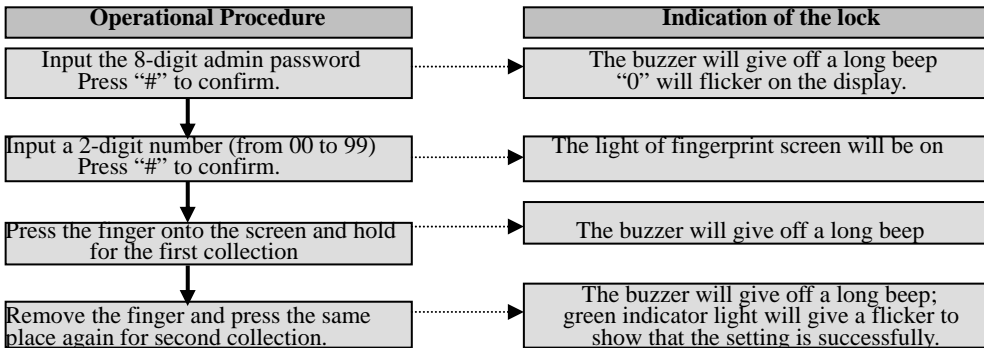


## 1.4 Set up access fingerprints

There are two ways to add fingerprint on the lock.

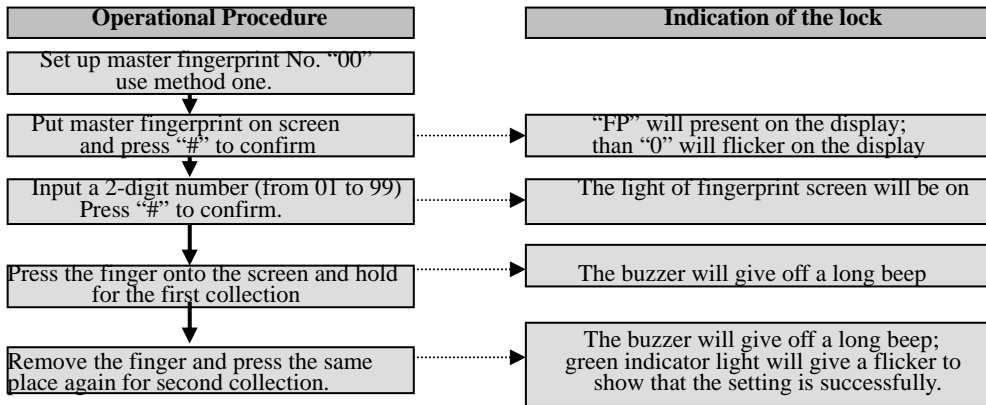
### Method one: adding the fingerprint through administrative password

*Note: all the number of fingerprint can't be repeated. Number "00" is the master fingerprint number.*



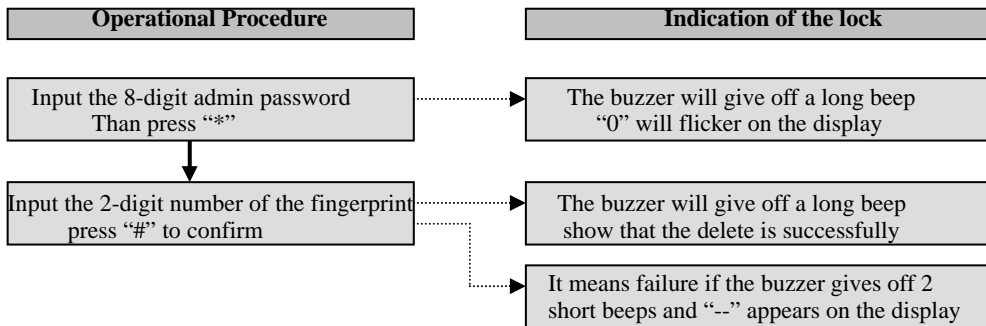
### Method two: Adding other fingerprint by Master Fingerprint number “00”

*Note: Master fingerprint no. “00” has the authority to add and delete other fingerprint. Master fingerprint No. “00” can only be added and deleted by administrative password.*

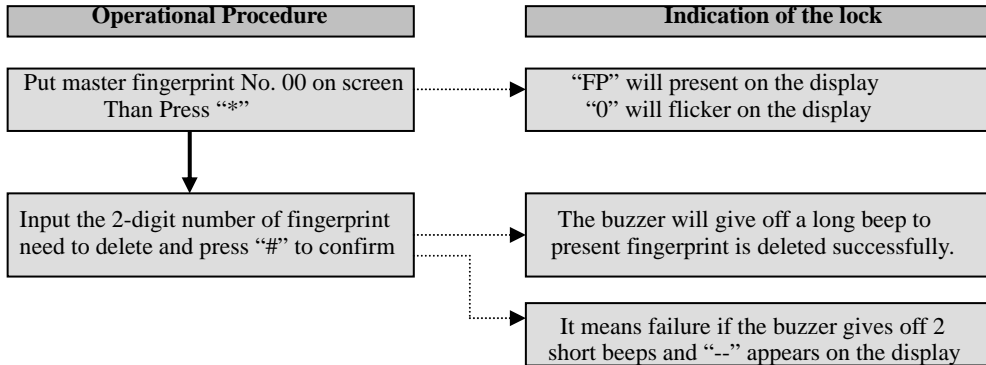


There are two ways to delete fingerprint on the lock.

**Method one: Deleting the fingerprint by admin password**



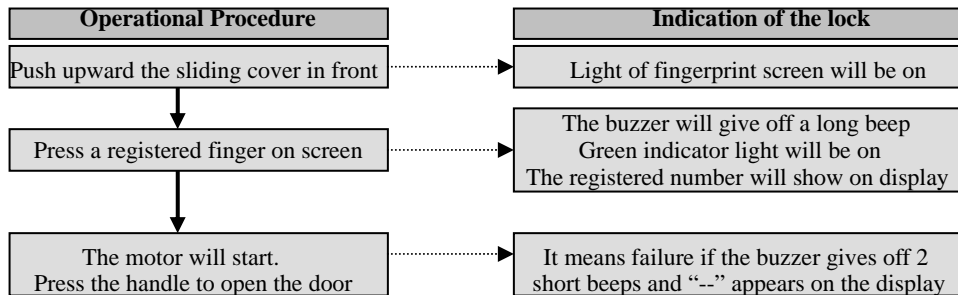
**Method two: deleting the other fingerprint by master fingerprint No. “00”**



## 1.5 Normal use by users to unlock the door

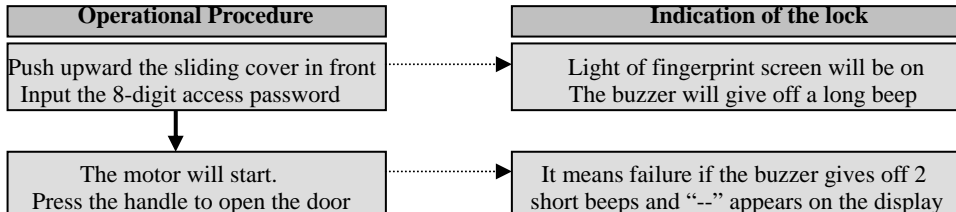
There are three methods to unlock the door: fingerprint, password and mechanical Key.

### Method 1: unlock the door with fingerprint



*Note: when the sliding cover is opened, the fingerprint screen can be activated by pressing “#” on the keypad. If the registered finger is injured or desquamated, it may be unable to be verified, and the door can't be unlocked. So it is suggested to register more than one fingerprint with both hands.*

## Method 2: unlock the door with a password



*Note: the lock is equipped with function of pseudo code; several numbers can be input in front of the password, and the door can only be opened by inputting the correct 8-digit password. If more than 32 digits are input without the correct password, the keypad will be locked for 15 minutes.*

## Method 3: unlock the door with the mechanical key

1. Open the sliding cover on exterior handle and insert the mechanical key into the key hole.
2. Rotate the key and press the handle downward to open the door.

## 1.6 Passage Mode Function

The lock can be set on passage mode, where the door can be opened only by pressing the handle downward directly.

- How to set the function of constant opening:  
When the knob of interior lock set at the back of lock is rotated to the mark “ON”, the green part of the push button will appear and the lock is in the state of constant open.
- How to quit the function of constant opening:  
When the knob of interior lock set at the back of lock is rotated to the mark “OFF”, the red part of the push button will appear and the lock is out of the state of constant open.

*Note: the function of constant open can only be carried out when the password control and fingerprint control are all working normally.*

## 1.7 Function of back locking

The lock is equipped with function of back locking inside and outside the door

- Lift the handle upward inside and outside the door and the function of back locking can be started.

- The door can be locked inside by rotating the interior knob by 90°, after that the door can't be unlocked from outside by any means.

## **1.8 Low voltage alarm**

When the power of battery is running out, the speaker of the door will give off warning tone of “tick...tick...tick...” every time the door is unlocked to indicate the user to change the battery promptly.

*Note: Under “low battery” condition, the old batteries should be exchanged promptly to avoid the inconvenience caused by power-off.*

## **1.9 Emergency Power Supply**

If, for any reason, the batteries are not changed promptly and the power is out. The lock can be powered by connected to the 2 9-voltage jacks at the bottom of the front lock.

*Note: After unlocking the door with an emergency power, the old batteries need to be changed promptly.*



## 1.10 Audit Trail Function

At the back of the lock, under the battery pack cover, there are four keys and a LCD. Press any key, the LCD can be started and the following menu can be entered.

- Door record
- Clear record
- Set clock
- fp\_pw\_select

*Note: the functions of the four keys at time stage are: ①page up ②page down ③ESC ④OK*

### Check Door Access Record

1. Press the keys of “Page up” and “Page down” to select the item of menu
2. Select “door record”, and press “OK” to confirm and
3. The last 200 records of opening the door will be listed.

Samples of the record:

PW01 0902261232 (Password Group 01 unlocked the door at 12:32 February 26, 2009)  
FP08 0902280828 (Fingerprint Group 08 unlocked the door at 8:28 February 28, 2009)

### **1.11 Clear record**

Select “clear record” and the screen will give the following direction:

Clear record

Y/N

Press “ESC” to quit the deleting menu and press “OK” to delete all the door record.

### **1.12 Set clock**

Select “set clock” and press ok to confirm

00-00-00 (year-month-date)

00-00-00 (hour-minute-second)

- Press “OK” and the tens place of the year number will flicker, press Page up or Page down to increase or decrease the number and choose the right one.
- Press OK again and unit of the year number will flicker, press Page up or Page down to increase or decrease the number and choose the right one, and press OK again to confirm; other parts of the numbers can all be modified in this way.

### **1.13 Setting and deleting password of fingerprint (fp\_pw\_select)**

- Select “fp\_pw\_select” and press “OK” to enter---PASSWORD: 000 will flicker.
- Press key of “Page up” and “Page down” to enter the 8 digital administrative passwords.
- Than this will show on screen:

## Fingerprint

### Password

1. Select “Fingerprint” and press “OK”  
Use “Page up” and “Page down” to choose the fingerprint number from 00~99  
*Note: if 99 \* is presented, it means fingerprint No 99 has existed in the lock*  
Than this will show on screen:  
Set (set)  
Del (delete)  
Select “Del” and “OK” to delete the fingerprint
2. Select “Password” and press “OK” to edit the password.  
Than this will show on screen:  
Set (set)  
Del (delete)

## How to Set

Choose Set to set up a password, press “OK” to confirm

Use “Page up” and “Page down” to choose group number from 00~09, press “OK” to conform.

Use “Page up” and “Page Down” to set up the other 6 digital number and use “OK” to confirm.

E.g. 09-123456 will be set as an access password

Select “Password” and “OK” to confirm

Select “09” and press “OK” to confirm

Use “Page up” and “Page Down” to input number 1,2,3,4,5,6

Press “OK” to confirm

When screen show 0 9 \* OK, it means the access password has been set successfully.

### **How to Delete**

Choose “Del” to delete the whole group of password, press “OK” to confirm

Use “Page up” and “Page down” to choose group number from 00~09, press “OK” to conform delete.

### **1.14 Latch bolt alarm**

If the door is not properly closed, and the latch bolt is pressed into the lock set, the buzzer will give off warning tone in 3 seconds and the tone will last 10 seconds, and the red light will flicker to remind the user to close the door properly.

### **1.15 Tamper alarm**

If the exterior lock set outside is damaged by outside force, the buzzer will give off continuous beep for alarming, and the red light will keep flickering till the damage is eliminated.

### **1.16 Notes for use**

- The lock needs 8 AA (1.5V) high-energy alkaline batteries
- When the batteries are installed, it deserves attention to coincide the polarity with the labels on the battery box; if the alarm is given when the door is unlocked with fingerprint, only the batteries of fingerprint need to be changed; and if the alarm is given when the door is unlocked

with password, only the batteries of password need to be changed.

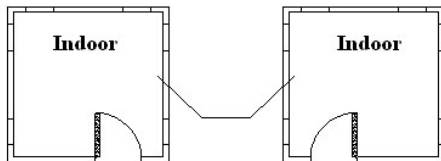
- During fingerprint acquisition, the finger shall be flattened against the fingerprint acquisition window a little stronger.

## Chapter 2 Installation instruction

### 2.1 Left & right hand

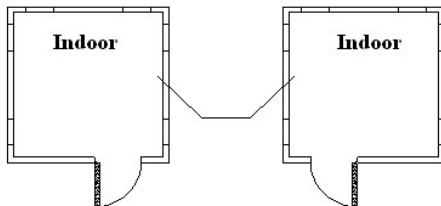
*Note: Consider a person outside the door as reference*

- **Left hand door (push inward):** If a person stands in front of the door, the hinge of the lock is on the left and the person can enter the room only by pushing the door.
- **Right hand door (push inward):** If a person stands in front of the door, the hinge of the lock is on the right and the person can enter the room only by pushing the door.
- **Left hand door (push outward):** If a person stands in front of the door, the hinge of the lock is on the left and the person can enter the room only by pulling the door.
- **Right hand door (push outward):** If a person stands in front of the door, the hinge of the lock is on the right and the person can enter the room only by pulling the door.



**Left hand (push inward)**

**Right hand (push inward)**



**Left hand (push outward)**

**Right hand (push outward)**

## 2.2 Installation Conditions

- Wooden door, fire-proof door
- Requirement of thickness:
- The handle is about one meter high over the floor.

model	Smart fingerprint lock series
Minimum range	35mm
Maximum range	80mm

To ensure a smooth installation, please make sure if the thickness of the door can meet the condition of thickness.

## 2.3 Hole dimension

Please see below

Figure 1 the hole of smart fingerprint lock series (door)

Figure 2 the hole of fingerprint lock (Door jamb)



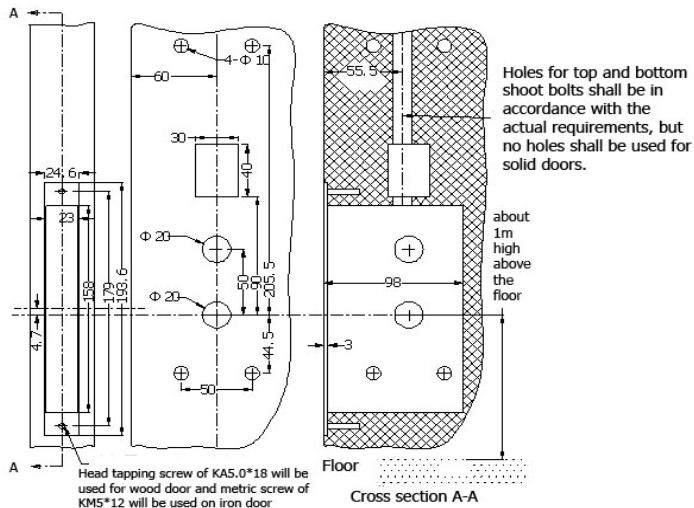


Figure 1

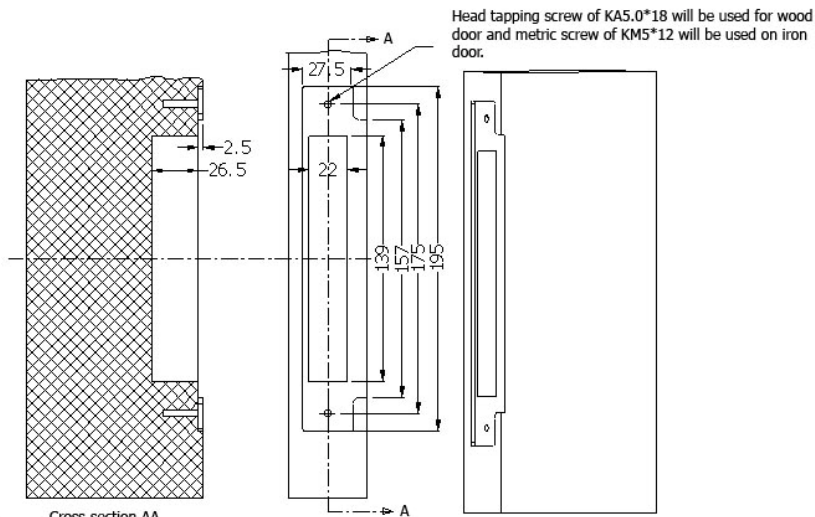
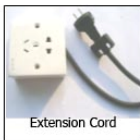
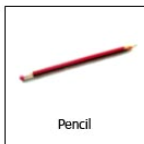


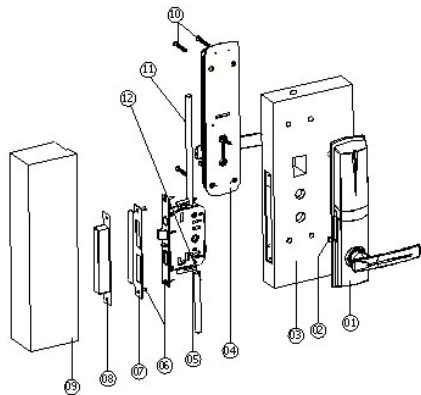
Figure 2

## 2.4 Tools for installation



## 2.5 Installation

*Note: The installation procedure takes right hand door (push outward) for example*



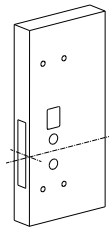
01 exterior lock set	02 big square shaft
03 wood door	04 interior lock set
05 mortice lock set	06 countersunk head self-tapping screw
07 striking plate	08 striking box
09 door jamb	10 cross recessed raised countersunk head screws
11 top shoot bolt	12 bottom shoot bolt

## 2.6 Installation process

### 1. Mark lines and drilling locations on door

Mark a level line a certain distance from the bottom (e.g.100cm) as the horizontal center line

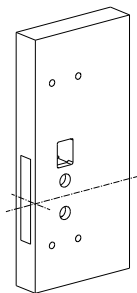
of the handle, and point the jag of the center line of the handle hole paper plate to the center point of the hole, and the edge of the paper plate should coincide with the edge of the door; draw the position line inside and outside the door (including the frame and center line of the hole), then extend the line to the side face to draw the side plate and the frame of the lock (as shown in the figure below)



### Sketch map of lines of fingerprint lock

#### 2. Opening the Hole

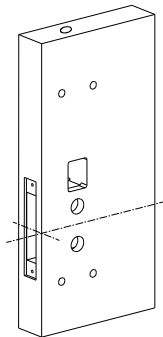
Drill holes through the door. Drill the diameter holes about half way through door, and then finish drilling from other side to prevent splintering. When drilling the square hole, drill at the centerline with a hole first, and then to saw the hole to be square with a curve sawing in accordance with the outline.



**Sketch map of hole of fingerprint lock**

### **3. Slotting**

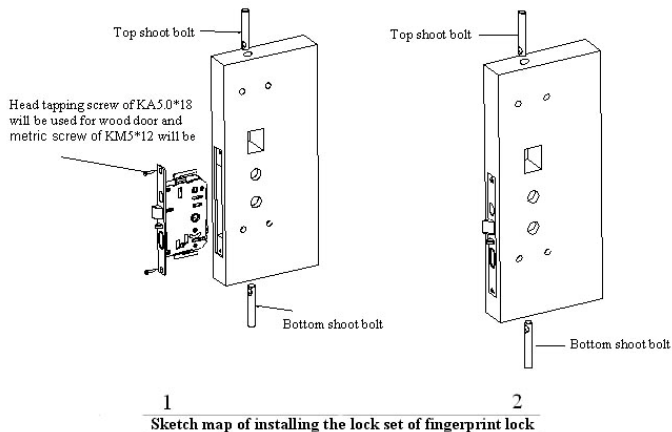
Slot the side-panel hole and lock set hole in door edge with chisel and drill in accordance on hole dimension.



**Sketch map of slotting of fingerprint lock**

#### **4. Installation of lock set**

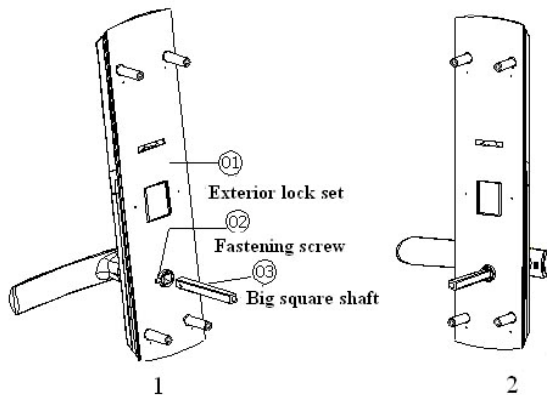
Insert the lock set into the wood door and use a countersunk head tapping screw (KA4x25mm) for securing it into the wood door, and ensure that the latch bolt can extend and retract properly.



## 5. Installing the lock

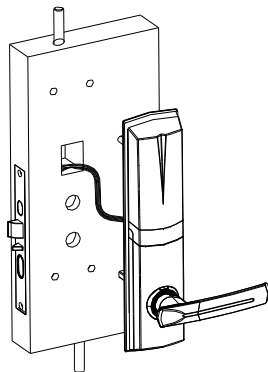
- 1) Adjust the distance between the surface of the lock and the lower part of nut according to the thickness of the door. (see the figure below)





Sketch map of installing the square shaft of fingerprint lock

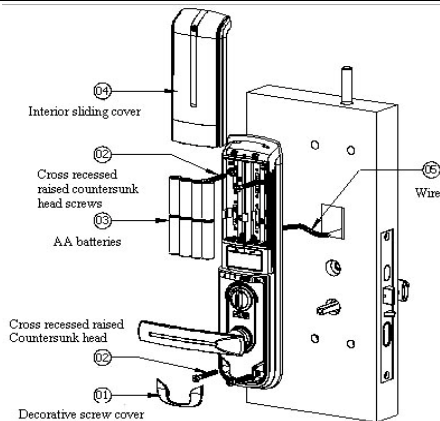
- 2) Make the wire on the lock set through the door and connect it to the corresponding jack on lock surface, as shown in the figure



**Sketch map of wiring of fingerprint lock**

## **6. Installing the interior lock set**

Remove the bolt of sliding cover, interior sliding cover, decorative screw cover and batteries on the interior lock set and finish wiring as shown in the figure below



Sketch map of installing the interior lock set of fingerprint lock

## 7. Fix the exterior and interior lock set

- First, install the screws into the right holes, as shown in the following figure 1.
- Second, tighten the screws with a cross screwdriver (keeping the Exterior and Interior Lock set a little loose)

- Then, set up the Exterior and Interior Lock set (keeping the Exterior and Interior Lock set to be symmetric, the lock side shall be parallel with the door side, and the handle and latch bolt shall move properly); after setting up the Exterior and Interior Lock set and tighten the screws (keeping the Exterior and Interior Lock set tightened);
- Finally, install the batteries and interior sliding cover to the Interior Lock set, as shown in the figure 2 below.

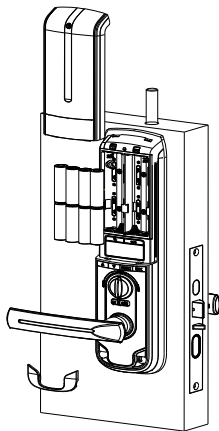


Figure 1

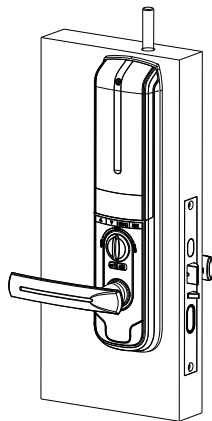


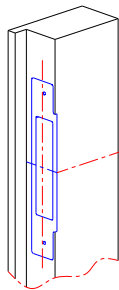
Figure 2

### Sketch map of fixing the exterior and interior lock set of fingerprint lock

#### 8. Locate the hole positions for door striking plate and striking box

Put the door close to the door jamb and mark the handle centerline on the door jamb, and mark the

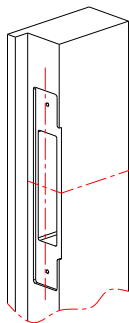
outlines of door striking plate and striking box in accordance with the hole size on hole dimension.



**Sketch map of door jamb of fingerprint lock**

## **9. Drilling holes for door striking plate and striking box**

Drilling holes for door striking plate and striking box in accordance with the specific size and trim with a chisel.



**Sketch map of drilling holes for door jamb of fingerprint lock**

**10. Install the door striking plate and striking box**

Install the door striking plate and striking box into the door jamb, and tighten them with screws

Head tapping screw of KA5.0\*18 will be used for wood door and metric screw of KM5\*12 will be used on iron door.



**Sketch map of installing the door striking box and door striking plate of fingerprint lock**

## **11. Test the door lock**

Test the door lock according to the contents in Chapter 1 Operation Instructions



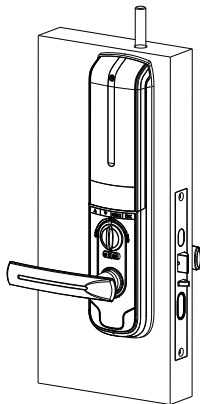


Figure 3

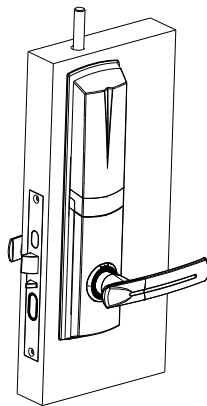


Figure 4

### Sketch map of testing of fingerprint lock

## 2.7 Attentions for installation

1. Check to see whether the door thickness is in accordance with the corresponding thickness limit before installation.
2. During installation, the door lock should be moved with care to avoid scratching the surface and

damaging the wires.

3. Before installing square shaft of the exterior lock set, check to see if the spring of square shaft is installed.
4. When tightening the Exterior and Interior Lock set, do not get the internal connection wires under any thing.

## 2.8 Other attentions

1. Standard 1.5V alkaline batteries are required for computer door lock. Do not use acid batteries to avoid corrosion of the door lock.
2. The computer door lock should be installed after the indoor decoration to avoid pollution and damage.
3. Install the door closer and door stopper before installing the door lock to avoid damaging the handle and bolts (deadbolt).
4. Protect the handle with protecting jacket before being put to use.
5. Prohibit the illegal operation with foreign bodies to avoid damage to the communication contacts.

## Chapter 3 Exception Handling

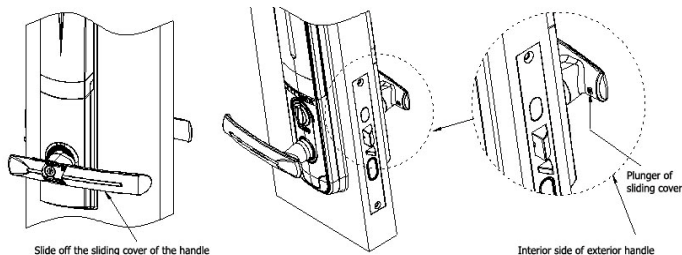
### ☆ Battery replacement

If there are beeps of “tick, tick, tick...” after the door being opened, and the red indicator light flashes, which means the batteries are flat. Although the lock can still work for several time, it is recommended to replace the batteries in time.

### ☆ Mechanical key

There is a set of mechanical keys among the door lock accessories as emergency key.

1. On the rear side of the handle is a movable plunger, push it downward when it's a right hand opened door and upward when it's a left hand opened door, don't release the plunger of sliding cover on the reverse side of the handle and then slide the handle cover out of the slide rail. (See the figure below)



2. Insert

Slide off the sliding cover of the handle

Sketch map of removing the sliding cover of handle of fingerprint lock

Interior side of exterior handle

Plunger of sliding cover

the

mechanical key into the hole vertically as shown in figure 3, Rotate the key by 90° (clockwise for right handed door and counterclockwise for the left handed door), and the current key is in level condition and the door is open. (See the following illustration) , and the key is at level position as shown in figure 4. Now the lock is unlocked and the door can be opened by rotating the handle downward by about 45°. (See the figures below)

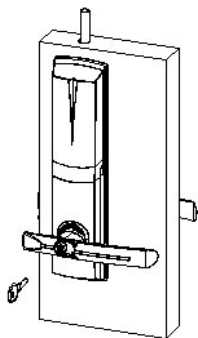


Figure 3

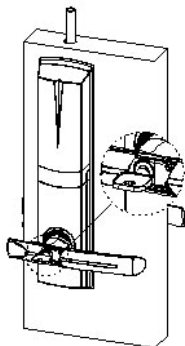


Figure 4

Sketch map of testing the lock of fingerprint lock

## Chapter

## 4

## Maintenance

- Lock surface cleaning

To keep the lock surface smooth, please wipe the lock surface with soft, clean and dry cloth regularly. In order to avoid damage or corrosion, water, alcohol or other chemicals are not applicable to wipe the lock surface.

- Oil the lock

---

If the lock can not be turned freely or can not maintain correct position, professionals should be invited to add some mechanical lubricants to the lock cylinder.

- Replace the lock face and handle

If the lock face and handle have been scratched, new ones can be purchased from our company for replacement

**Appendix 1: Packing List**

Item and name	Quan	unit
Exterior lock set	1	set
Interior lock set	1	set
Lock set	1	set
Striking plate	1	
Striking box	1	
QC inspection tag(general)	1	
Exterior shim plate	1	
Interior shim plate	1	
AA batteries	8	
Cross recessed raised countersunk head screws (adaptation)	4	grain
Big square shaft 8x8xL(adaptation)	1	grain
Flat head tapping screw	4	grain
Mechanical keys	1	set
Operation Manual of fingerprint lock	1	copy
Template	1	sheet
Warranty card	1	sheet
Certificate of Quality	1	sheet

**Appendix 2: Accessories**

Product accessories are the product related parts necessary for the use of the product

Door Striking Box	Door Striking plate	Flat head tapping screw KA5*18 Flat head metric screw KM5*12 adaptation	Mechanical keys
Settled spindle	Cross recessed raised countersunk head	Big Square shaft	Big square shaft spring
AA batteries	Exterior shim plate	Interior shim plate	Template



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