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1.Introduction

1.1 Features

1.1.1 Model number

Model	GFSB3000-CC
Picture	
Finish	Satin Chrome

1.1.2 Main features

1. Adopt optical fingerprint sensor, CMOS chip. Fingerprint cannot be Duplicated.
2. Cast-steel structure.
3. Three ways to unlock: Code+Fingerprint, Code or mechanical key.
4. Capacity: Maximum 138 fingerprint templates.
5. Fingerprint and code can be programmed directly on the lock. No Computer needed.
6. Passage mode can be set any time.
7. The mortise meets ANSI Standard, 5 latches.

8. With the sensor light and buzzer sound indicators
9. Mechanical key used in emergency
10. Powered by 4 AA alkaline batteries with low voltage alert function
11. Stand alone, suitable for office, meeting room, residential, villa, etc.

2. Installation Instruction

2.1 Door requirement

- 2.1.1. Door type: wooden door.
- 2.1.2. Door thickness: 38-60mm
- 2.1.3. If the door surface is decorated, the distance from the decorative edge to the door frame must be above 110mm.

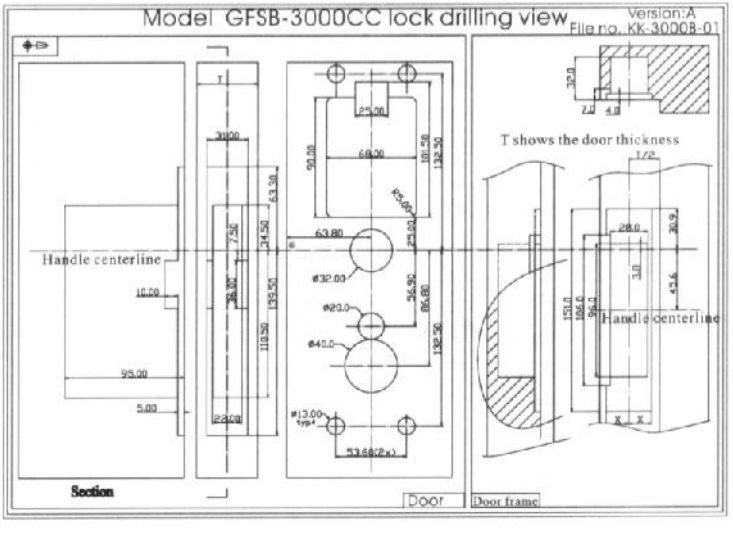
2.2 Tools required when installing

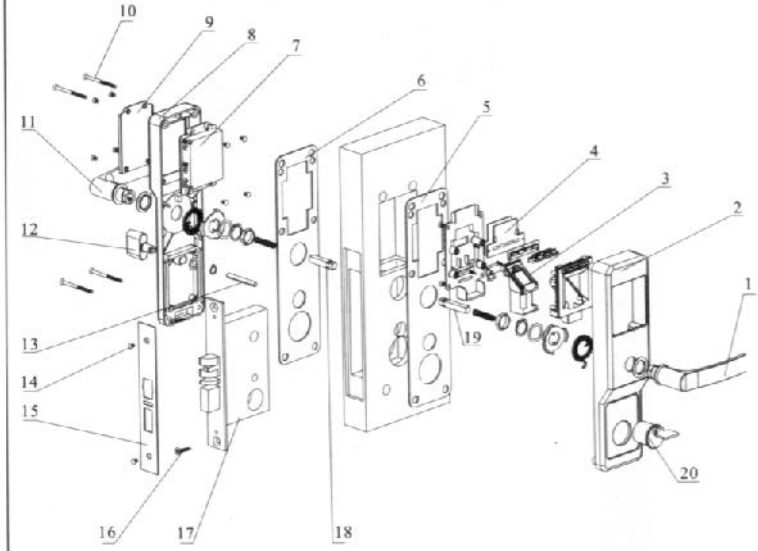
Install the lock the first time. Below mentioned tools are required when installing the lock in the new door.

Electric drill	Connector socket	Auger bit
Measure	File	Cut-off knife

Screwdriver	Chisel	pencil
Hammer	Auger	Tape measure

2.3 Drilling view for installation





Item	Description	Qty
1	Outside handle	1
2	Front plate	1
3	Sensor	1
4	PCB	1
5	Front plate gasket	1
6	Back plate gasket	1
7	Battery box	1
8	Back plate	1
9	Battery box cover	1
10	Fixing screw(M5*49)	4
11	Inside handle	1
12	Deadbolt knob	1
13	Long spindle	1
14	Screw(M4*6)	2
15	Side plate	1
16	Tapping Screw(M4*25)	2
17	Mortise	1
18	Short square spindle(42.5mm)	1
19	Long square spindle(54mm)	1
20	Cylinder	1

2.5 Installation steps

1. Draw the handle centre line for installation on the door, the recommended height for it is 1 metre above the ground.

2. Mark the both sides of the door with drilling holes as per provided installation template. Make sure the edges of both installation template and door are superposition, and the template should be held like right figure.

3. Drill and mend the holes as per the marks on the door. To avoid breaking the door, drilling into half door thickness from both sides of the door is recommended.

4. Lengthen the handle centre line to the door side, mark the door side with side plate groove as per the drilling chart.

5. Mark the mortise hole on the door side as per the drilling chart.

6. Drill the mortise hole, make sure the depth of the hole is more than 95mm.

7. Chisel the side plate groove according to the marks made. Mend the mortise hole with a chisel. The sideline of the side plate should be straight, the groove should less than 5 mm.

8. Put the mortise into the mended mortise hole, and fix it into the door with 2 screws (M4*25).

9. Screw the cylinder slightly into the cylinder hole on the door till the cylinder surface is 6mm deeper than the front plate surface.

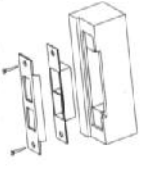
10. Make the front plastic gasket through the 4 screw holders on the front plate. Insert the end with gutters of the long square spindle into the square hole on the mortise to locate the outside handle. Insert the long square spindle into the hole for the outside handle slightly to install the front plate. Connect the motor wire with the front plate.

11. Assemble the back plastic gasket on the back plate. Insert the long spindle into the hole on deadbolt knob, make sure when the deadbolt stretches out the deadbolt knob must be vertical. Insert the end with gutters of the short square spindle into the square hole on the mortise, the other end into the hole for the inside handle. Connect the power wire with the front plate. Fix the back plate with 4 screws (M5*49).

12. Adjust the cylinder with mechanical key to make the key slot horizontal, then fix the cylinder with the screw at the side of mortise. Fix the side plate with the 2 screws provided.

13. Stretch out the deadbolt, push the door to close the door frame, fix the position for strike on the door frame as per the position of latches and deadbolt to decide the upper and lower lines for the strike.

14. Cut the grooves for both strike and strike plate on the door frame as per the drilling chart. Put the strike into the groove, cover it with the strike plate, fix the strike with 2 screws (M4*25).



15. Test the lock step by step: Turn the mechanical key to check whether it works freely; Rotate the handles to check their flexibility; Turn the deadbolt knob to check if the deadbolt could stretch out and back properly; Whether the motor and clutch works well; The enrollment and deletion of fingerprint are excellent; The indicator and the buzzer work normally.

16. Installation completed.

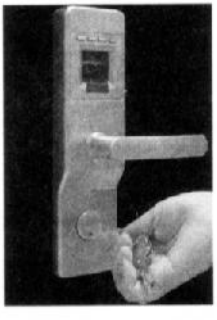
3.Operation Instruction

3.1 Operation with a mechanical key

There are two pieces of mechanical keys in the accessory bag, and they are also called emergency keys. If the motor circuit in the lock doesn't work normally, you can unlock the door with the mechanical key.

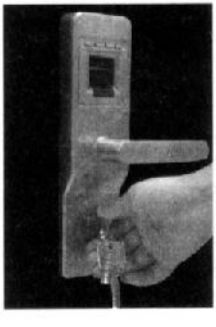
3.1.1 Unlocking with a mechanical key

Step 1: Take out the cylinder cover with cylinder cover opener. (figure 3-1)



3-1

Step 2: Insert mechanical key into the keyhole, turn the mechanical key (90 anticlockwise if right handed lock, 90 clockwise if left handed lock.) (figure3-2)



3-2

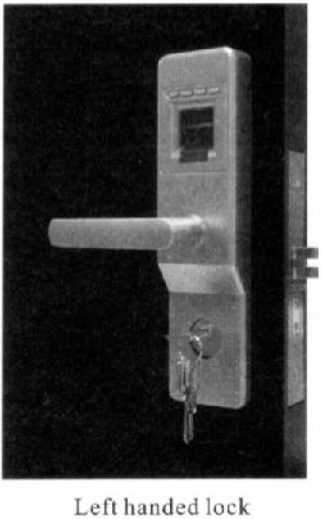
Step 3: Rotate the outside handle to unlock the door. (figure 3-3)

3-3

NOTE: Mechanical key can unlock the door at any time.

3.1.2 Closing with a mechanical key

Rotate the mechanical key in the keyhole (90 anticlockwise if right handed lock, 90 clockwise if left handed lock) till the mechanical key is vertical, draw out the mechanical key. The door is locked. (figure 3-4)



Left handed lock

Right handed lock

3-4

3.2 Operation with code

3.2.1 Unlocking code

A code with a combination of 11 digits can unlock the door. The default unlocking code is 1,2, 3, 1, 2, 3, 1, 2, 3, 1, 2.

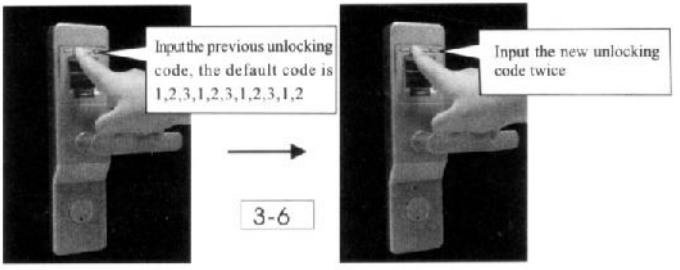
3.2.2 Changing of unlocking code

Since anybody can unlock the door by inputting the unlocking code, you are recommended to change default unlocking code for higher security by following below steps:

Step 1: Press digit "3" and hold it for 6 seconds till you hear a beep. (figure 3-5)

3-5

Step 2: After a beep is heard, input the previous unlocking code continuously (the default code is 1,2,3,1,2,3,1,2,3,1,2), a long beep is heard. Immediately input the new unlocking code twice continuously, (figure 3-6) **Caution: For the new unlocking code, the initial digit must be "1" and end at "2", total 11 digits. You can fill any digits of 0,1,2,3 in the middle 9 digits. For example you can choose 1,3,3,3,3,3,3,3,3,3,2.** If the new code is input twice correctly, a long beep will be heard and green indicator flashes, which confirms the success of the operation.

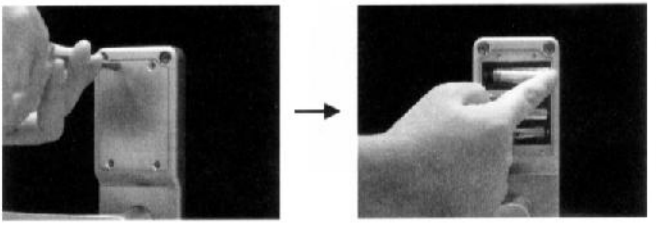


3-6

3.2.3 Restoring the default unlocking code

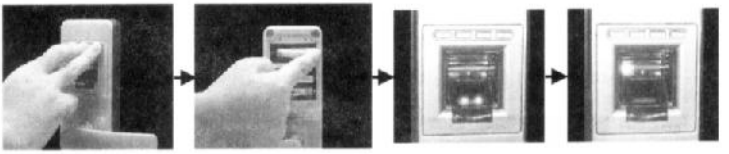
(1,2,3,1,2,3,1,2,3,1,2) is the default unlocking code for GFSB-3000CC, if you forget the new unlocking code you have modified, you can restore the default unlocking code by following steps as below:

Step 1. Uncover the battery box, with screwdriver take out 1 AA battery (no need to take all the batteries out).(figure 3-7)



3-7

Step 2. Press and hold the digit "0", "1", "2", "3" **together** and replace the battery being taken out. You will hear a beep within 10 seconds, release the digit keys after the red and green indicator flashes, (figure 3-8) **Caution: this operation will delete all enrolled fingerprints saved in the lock. You have got to re-enroll your fingerprint.**



3-8

Note:

1)If you input the incorrect unlocking code 4 times continuously, the keypad will be locked automatically. There will be no reaction if you press the keypad within 3 minutes.

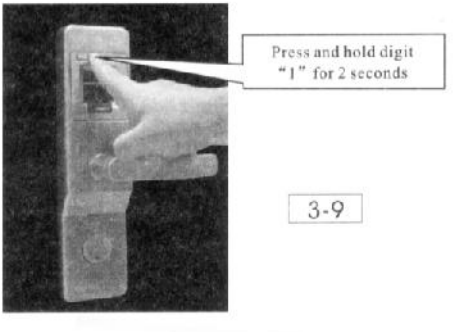
2)Make sure the interval between 2 presses is shorter than 8 seconds, otherwise, you have to input the code again from the beginning.

3)If you pressed wrong key while changing any codes, no need to exit the operation. Please press and hold digit "3" till you hear a beep, then continue the following operation.

For example, you want to change the default unlocking code 12312312312. If you pressed any wrong key during the operation, you just need to press and hold digit "3" for 6 seconds till you hear a beep. Then continue Step 2 in 3.2.2

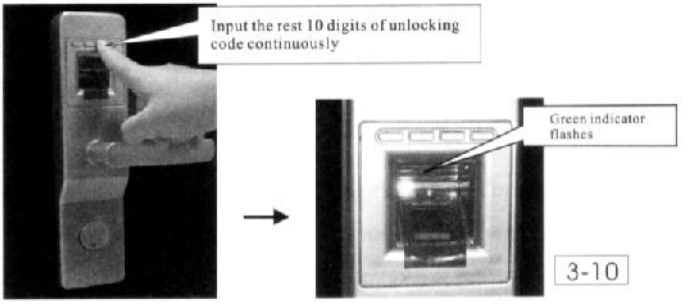
3.2.4 Unlocking with code .

Step 1: Press and hold digit "1" for 2 seconds till you hear a beep. (Figure 3-9)



3-9

Step 2. Input the rest 10 digits of unlocking code continuously(2,3,1, 2,3,1,2,3,1,2 if default unlocking code), if the code is input correctly, the green indicator flashes.(figure 3-10)



3-10

Step 3. Rotate the handle to unlock the door. 5 seconds later the door will lock automatically. (figure 3-11)

3-11

3.3 Operation with fingerprint

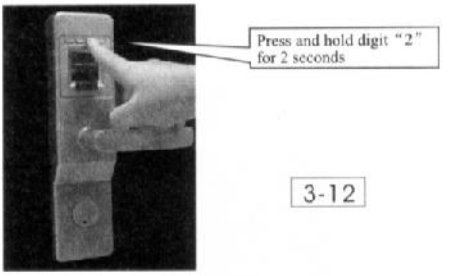
3.3.1 Fingerprint enrollment code

A code with a combination of 11 digits for fingerprint enrollment. Its order reverses from unlocking code. For example, the default unlocking code is 12312312312, then the default fingerprint enrollment code is 21321321321. **Caution: Fingerprint enrollment code can not be changed directly, if you change the unlocking code, the fingerprint enrollment code will be changed accordingly.**

3.3.2 Fingerprint enrollment

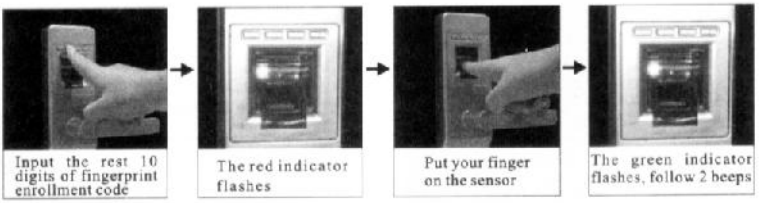
Before you can use your fingerprint to open the door, you need to enroll your fingerprints into the lock firstly. The lock can store 138 pieces of fingerprints maximum. We advise you to enroll one fingerprint twice in order to enroll qualified ones.

Step 1. Input correct fingerprint enrollment code(Let us take the default enrollment code 21321321321 for example). Press and hold digit "2" for 2 seconds till you hear a beep, and green indicator flashes.(figure3-12)



3-12

Step 2. Input the rest 10 digits of fingerprint enrollment code continuously (1321321321 if default fingerprint enrollment code), a beep will be heard, red indicator flashes, then put your finger on the sensor for enrollment. Do not move away the fingerprint till you hear 2 beeps, the green indicator flashes, which indicates the success of the enrollment.(figure 3-13)



3-13

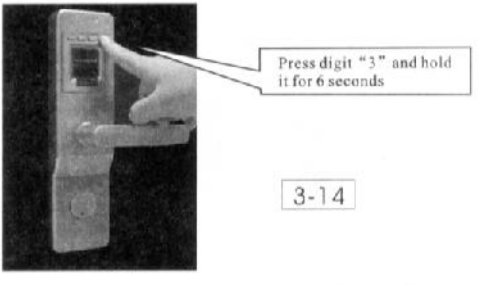
3.3.3 Steps of unlocking with enrolled fingerprint.

◊ 3.3.3.1 Wake up code

Normally, the fingerprint sensor "sleeps" till it is "waken up" by inputting correct code. Before unlocking the door with fingerprint, one should input valid code to "wake up" the sensor so that it can authenticate the enrolled fingerprints. The default wake-up code is "0,1,2,3".

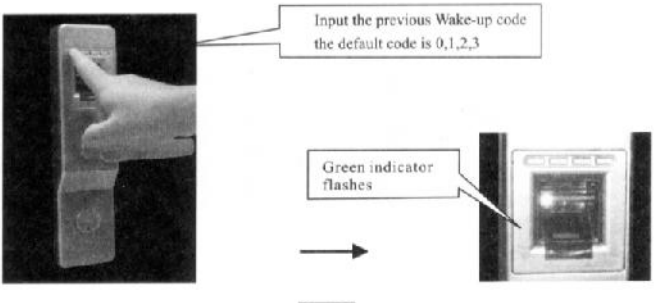
◊ 3.3.3.2 Changing of wake-up code

Step 1. Press digit "3" and hold it for 6 seconds till you hear a beep.(figure 3-14)



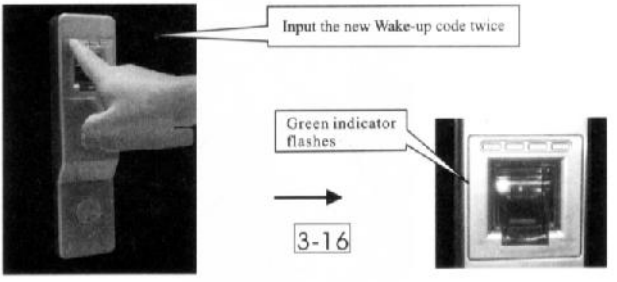
3-14

Step 2. Input the previous Wake-up code continuously (the default code is 0,1,2,3), a long beep is heard and green indicator flashes once.(figure 3-15)



3-15

Step 3. Immediately input twice the new Wake-up code continuously. **Caution : The initial digit of Wake-up code must be " 0" . For example, you can choose (0,0,0,0), or (0,2,2,2) etc. But do remember the wake-up code begins with "0" and it must include 4 digits.** If the new code is input correctly twice, a long beep will be heard and green indicator flashes indicating the success of the operation. (figure 3-16).



◊ 3.3.3.3 Restoring the default wake-up code

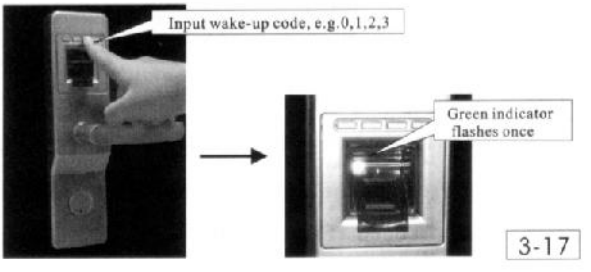
The same operation with 3.2.3

Note: The keypad will not be disabled when continuously inputting the code incorrectly four times.

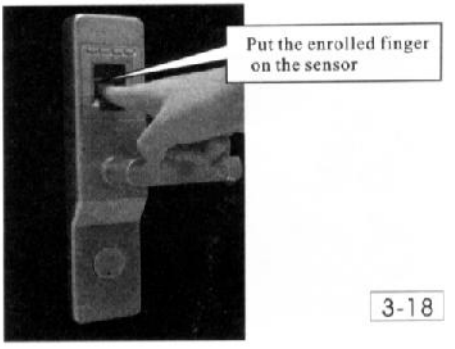
◊ 3.3.3.4 Unlocking with enrolled fingerprint

Now you could unlock the door with the successful enrolled fingerprint.

Step 1: Input 0,1,2,3 continuously if the default wake-up code, a long beep will be heard, green indicator flashes once, red sensor indicator flashes. (figure 3-17)



Step 2: Put the enrolled finger on the sensor immediately while the red sensor indicator is flashing. Motor driving will be heard. During any step of authentication, if the red indicator flashes after moving away the finger, the second authentication will be needed. Repeat the above steps. (figure 3-18)



3-18

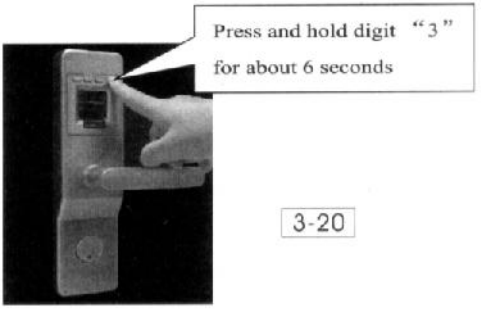
Step 3: Move away the finger and rotate the outside handle to unlock the door, 5 seconds later the door will be locked again automatically. (figure 3-19)

3-19

- 3.3.4 Deletion of enrolled fingerprints

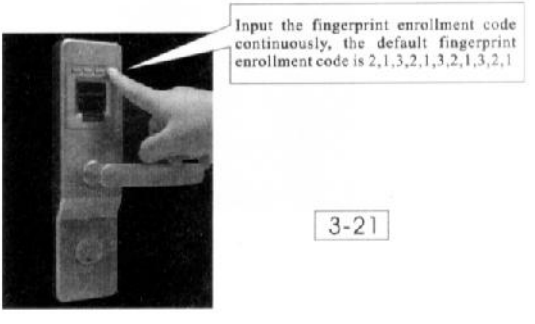
Caution: This action will delete all the enrolled fingerprints.

Step 1: Press and hold digit "3" for about 6 seconds till you hear a short beep. (Figure 3-20)



3-20

Step 2: Input the fingerprint enrollment code continuously. (The default fingerprint enrollment code is: 2,1,3,2,1,3,2,1,3,2,1. If it has been changed , then input the new one), a beep will be heard, the second beep will follow in 5 seconds, the green indicator flashes, which shows the successful operation, all enrolled fingerprints are deleted. (figure 3-21)



3-21

3.4 Passage mode

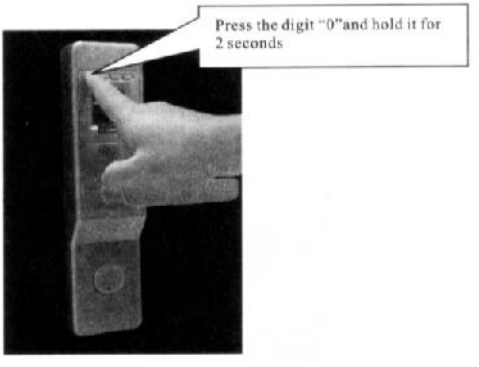
3.4.1 Definition of passage mode

The lock is in open status all time. One can rotate the handle and unlock the door at any time without inputting the unlocking code or enrolled fingerprint. This operation is suitable for office or meeting room.

3.4.2 Passage mode setting

Step 1: Unlock the door with unlocking code or enrolled fingerprint first refer to 3.2 or 3.3;

Step 2: Within 5 seconds after unlocking the door with fingerprint or unlocking code, press the digit "0" and hold it for 2 seconds, a long beep is heard and then release the press. After a long beep is heard, the lock has been set into passage mode. You can open the door by rotating the handle any time till you cancel the setting. (figure 3-22)



3.4.3 Passage mode cancelling

There are two ways:

A: Input the valid wake-up code and the lock comes back to the close state. Or

B: Input the valid unlocking code and the lock comes back to close state.

3.5 Initialization of the lock

Step 1: Open the battery cover.

Step 2: Take out one of the batteries. Then replace the battery again after 3 seconds. Press and hold the digits "0", "1", "2", "3" at the same time while replacing the battery. Release the digits after the red and green indicator flashes and a long beep and a short beep are heard. **CAUTION: The operation will delete all enrolled fingerprints.** Please make sure you want to do that.

4. Maintenance

4.1 Daily maintenance

A. Keep away from corrosive matter.

B. Do not hang anything on the handle.

C. Keep the sensor surface clean and dry. Wipe it with soft and dry cloth if any stain on it.

D. When the batteries are running down, the red indicator flashes to alert low voltage. Although you still can unlock the door 20-30 times, you should replace the batteries as soon as possible.

E. Keep the mechanical keys carefully to prevent them from being burglarized.

4.2 Troubleshooting

Problem	Possible reasons	solution
When you put your fingerprint on the sensor to unlock, red indicator flashes and follows two short beeps, the door can not be opened.	1. Invalid fingerprint key. 2.Your fingerprint has already been deleted.	Unlock the door with valid fingerprint key.
When you put your valid enrolled fingerprint on the sensor to unlock, red indicator flashes and follows two short beeps, the door can't be opened.	1.Your fingerprint position is quite different from where you first enrolled. 2. Bad quality fingerprint.	Put your finger on the sensor again, try to put it on where you first enrolled.

5. After Sales Service

5.1 Warranty policy

1. We warrant ADEL fingerprint lock against defects in material or workmanship under normal use for a period of twelve months from the date we shipped your product.
2. We may repair or replace the defective part(s) or units with a new part(s) or unit or at our option with a refurbished part or unit that is not new but has been functionally tested at no cost to client within the warranty period. In this situation Ideal bears return shipping cost.
3. If repairing is required after warranty period, we can do that for client, but cost of parts and return freight will be charged.

5.2 What is not covered by this warranty?

1. Damage caused by improper installation or maintenance.
2. Damage from misuse, abuse, accident (such as dropping), fire, flood, or acts of nature.
3. Damage from service other than an authorized ADEL distributor.
4. Labor, cost and shipping charges for the removal and replacement of defective parts beyond the initial 12-month warranty period.
5. Any transportation and shipping charges.

5.3 How to obtain warranty service?

1.If you purchased your lock from Shenzhen Ideal Microelectronics Co., Ltd. online or over the phone: Please contact the manufacture's service centre by sending email to: adellock@globalsources.com or adellock@vip.163.com . The following information required: A. Lock model number, B. The date of purchase and installation, C. Your detailed address and valid email add, D. A clear description of the problem, E. Your request.

2.If you purchased your lock from Ideal's distributor: Please contact the distributor.

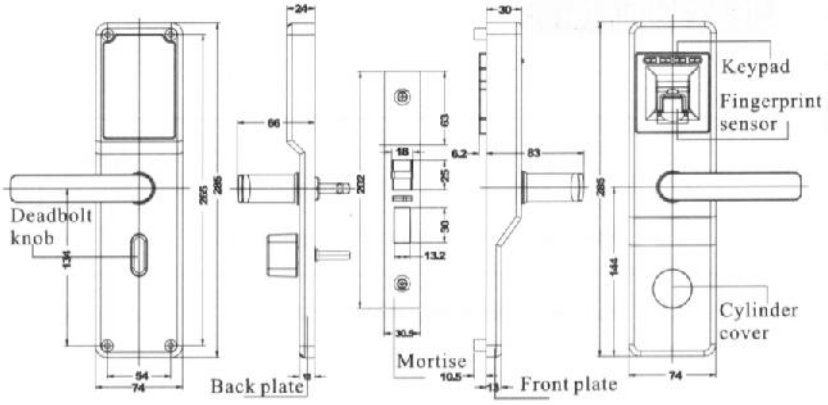
3.If you purchased your lock from another retailer: The retailer's policy applies.

6.Appendix

6.1 Technical parameters

No.	Item	Technical parameters
1	Fingerprint sensor	Optical sensor
2	Sensor resolution	500 dpi
3	Antis trike ability of sensor surface	Remain good condition after being jabbed with a 4H pencil at 20cm distance
4	Authentication speed	<1 second
5	Authentication methods	1:N or 1:1
6	FRR	≤1%
7	FAR	≤0.0001%
8	Angle for putting finger	Any angle
9	Fingerprint scanning	Once to get one fingerprint template
10	Fingerprint template saved	All enrolled fingerprint templates will be saved while replacing the batteries
11	User capacity	Max.138
12	Light jam	Sunlight resistible
13	Sensor surface	Optical glass with PVD coated
14	Operating voltage	4 AA alkaline batteries, DC 4.5~6.0V
15	Battery life	Approx. 12 months
16	Temperature for storage	-25℃~85℃
17	Static current	<10 uA
18	Dynamic current	110mA~180mA

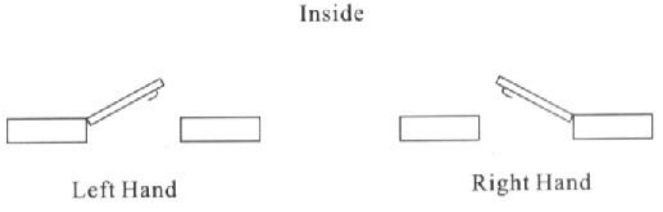
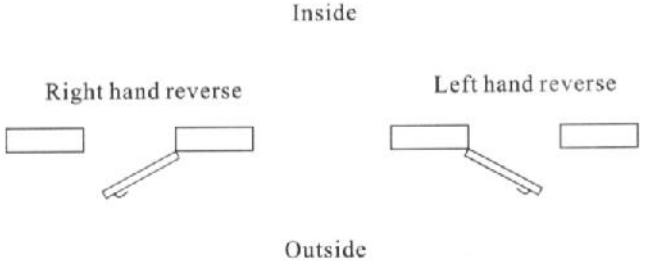
6.2 Size & Weight



6.3 Accessories

Mechanical key (2pcs)	Strike (1pc)	Screw cover opener (1pc)
Square spindle (1pc)	Strike plate (1pc)	Fixing screw(M5×49) (4pcs)
Tapping screw(M4×25) (4pcs)	Short square spindle (1pc)	Long square spindle (1pc)

6.4 Packing list

No	Item	Quantity
1	Front plate (including rubber gasket)	1 pc
2	Back plate (including rubber gasket)	1pc
3	ANSI Mortise	1pc
4	Strike Plate	1pc
5	Strike	1pc
6	Side plate	1pc
7	Cylinder cover	1pc
8	Cylinder cover opener	1pc
9	Mechanical key	2pcs
10	Accessaries	1set
11	User manual	1pc
12	Quality certificate	1pc

6.5 Handle orientations