

Fingerprint Lock

USER MANUAL



Model:FTL-02A

060520

- Thank you for choosing ADEL- a professional manufacturer of fingerprint lock.
- Please read this manual carefully before operation.
- Please keep this manual for later reference.

Safety & Attention Notice

1. Keep the lock away from any corrosive material which may damage the lock surface.
2. Proper installation is vital for the lock's working. Please make sure the lock is installed properly and professionally.
3. Please refer to "Quick Starter Guide" on the following page.
4. Do not tear off the little label on the inside of the front plate, do not take apart the lock plates without authorization. Such attempt will result immediate expiration of the warranty from the manufacturer.
5. Please read the above information carefully before installation and operation on the lock. Any questions, please contact us freely by email: info@adelfingerprint.com

Quick Starter Guide

1.Find the buttons

There are two buttons at the back of the battery panel. The two buttons are right above the batteries. (refer to the picture in 2.2). There are two hexagon screws, which is protecting the buttons. Use the 2 hexagon screwdrivers (provided in the package) to open the screws, then press both buttons at the same time.

2.Create a master fingerprint

Press both buttons at the same time, then there is a long beep, the sensor and the LED lights are flashing. Place you finger on the sensor immediately, once hear a successful enrollment (a long beep), lift up the finger and then put on the sensor again. (Hint: for each successful enrollment, the lock will take two fingerprint templates, between the two templates you have to lift up you finger in between. The process is very fast therefore you have to do it quickly) If you hear 2 short beeps, it means failed enrollment, please start again.

3.Create a entry fingerprint (enroll a user's fingerprint)

Setting state: Place the master finger on the sensor, a long beep will be heard, the red and green LED light will flash and two digital numbers "00" will show on the display. A successful recognition will set the lock into a setting state. (A setting state means that the lock is ready to add and delete fingerprints or change entry code)

To add a fingerprint: let's say the user number is 01.

In the setting state, press "+" then you will hear a long beep, the display shows a number "0" flashing. Press "#" to confirm the first number "0" (show on the display) and then press "+" (to increase the second number) once and followed by "#" (to confirm the second number "1"), after the user number is confirmed, the lock starts enrolling number "01" fingerprint. Now you can enroll fingerprint "01".

4.To delete fingerprint: number “01”

Set the lock into setting state: put the master finger on the sensor. While the lock is in the setting state, press “-”, then followed by “#” (This step is to confirm that the master wants to delete users) you will see a “0” on the display, press “#” to confirm the number, and then press “+” (increase the second number to “1”) followed by “#” to confirm the second number. Now you will hear a long beep, which means that you have successfully deleted the fingerprint user “01”.

5.Key pad description, when enrolling fingerprint

“+” Means to enroll fingerprint, it also have the feature of increase the number from 0 to 9

“-“ Means to delete fingerprint, it also have the feature of decrease the number from 9 to 0

“*” Means to cancel current operation

“#” Means to confirm

6.Keypad description, in normal state

“+” Means to increase the number from 0 to 9

“-“ Means to decrease the number from 9 to 0

“*” Means to set the lock to passage mode

“#” Means to wake up the sensor

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1.Introduction

1.1 Feature

● 1.1.1 Model number

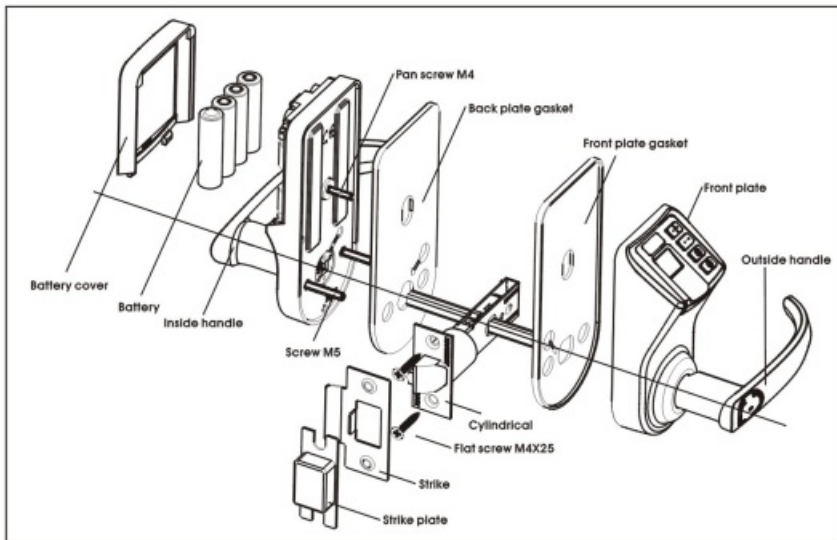
Model	FTL-02A
Picture	

● 1.1.2 Main features

- 3 ways to unlock: Fingerprint, PIN and Mechanical key;
- Adopts LCD (Liquid Crystal Display) technology ;
- Embedded Infrared detector will detect the finger automatically;
- Fingerprint capacity: 100 fingerprints max;
- Each fingerprint has its number, from 00 to 99 ;
- Master fingerprint is authorized to add or erase single fingerprint;
- Module type structure, only one wire to connect, easy installation;
- Low voltage alert.
- With the sensor light and buzzer sound indicators.
- Stainless steel single latch, easy to install.

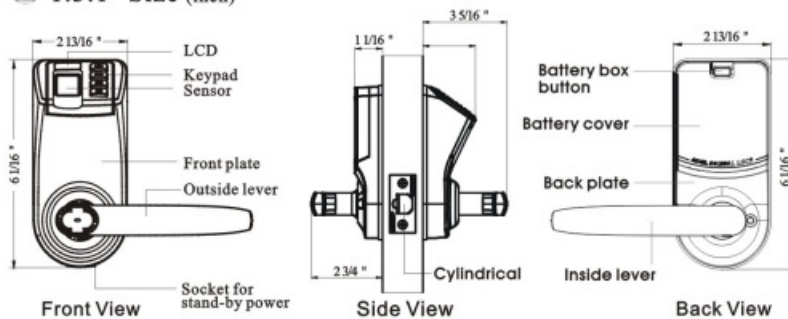
- Mechanical key used in emergency.
- Powered by 4 AA alkaline batteries with low voltage alert function. In case of low voltage, simply use a 9V battery as external power.
- Stand alone, suitable for office, meeting room, residential, villa, etc.

1.2 Structure & Components



1.3 Size & Weight

1.3.1 Size (inch)



1.3.2 Weight

Parts	Net Weight
Front plate	2.14 lb.
Back plate	1.45 lb.
Cylinders	0.27 lb. X 2pcs
Accessories	1.1 lb.
Total	5.23 lb.

1.3.3 Operation features

1. Under normal operating voltage, users can unlock with PIN or fingerprint, or mechanical keys.
2. When battery voltage is too low, users can unlock with a 9V battery (not provided) as external power (refer to 2.9) ,

1.3.4 Operating Environment

Indoor Temperature	-8°C-50°C
Outdoor Temperature	-10°C-50°C
Humidity	15%RH-95%RH

2.Operation instruction

2.1 Operation instruction

2.1.1 Function of buttons

- 1.Button “+” To enroll user fingerprint & 0 ~9 number up;
- 2.Button “-” To erase user fingerprint & 0 ~ 9 number down;
- 3.Button “*” To set /cancel passage mode;
- 4.Button “#” To enter, also to active the lock.

2.2 How to set Master fingerprint

No.00 is the default no. for Master fingerprint. Only ONE Master fingerprint can be set in each lock, the Master fingerprint can only be used to authorize to enroll user fingerprint but CANNOT be used to unlock.

1. Uncover the battery box, screw off the 2 pcs of hexagon screws with provided hexagon screwdriver (refer to below picture);
2. Press the 2 setup buttons that is hided under the 2 screws with the 2 hexagon screwdrivers provided at the same time, a beep will be heard, the indicator flashes, the LCD flashes with number “00” , the red light under sensor flashes, which shows the lock is waiting for setup;
3. Place the finger that you wish to be the Master finger on the sensor, LCD shows “00” , a beep will be heard, the green indicator flashes, when the red light under sensor goes out, remove the Master finger from the sensor;
4. The red light under sensor flashes again, place the same finger on the sensor immediately for second enrollment, the buzzer beeps once, the green indicator and red light under sensor goes out, the LCD stops displaying, which shows the successful setup of Master fingerprint.



NOTE:

1. The finger with good quality fingerprint (e.g. Thumb)is recommended to be set as Master fingerprint;
2. When the red indicator flashes, follows 2 short beeps, which indicates the failed setup;
3. Once the Master fingerprint was set, it cannot be erased, but could be covered with a new one. The newly set Master fingerprint will cover the old one automatically. If the Master fingerprint was changed, ALL the user fingerprints enrolled under old Master fingerprint would be erased. User needs to reenroll his finger under the new Master fingerprint.

2.3 How to set the Emergency PIN?

The emergency PIN must be 8 digits, and a combination of numbers “0” ~ “9” . Each lock has only ONE emergency PIN, it is the ONLY PIN to unlock.

1. Uncover the battery box, screw off the 2 pcs of hexagon screws with provided hexagon screwdriver (refer to below picture);
2. Press the 2 setup buttons that is hided under the 2 screws with the 2 hexagon screwdrivers provided at the same time, a beep will be heard, the indicator flashes, the LCD flashes with number “00” , the red light under sensor flashes, which shows the lock is waiting for setup;
- 3.Press “+” or “-” , all indicators go out, LCD flashes with number “0” ;
- 4.Select the first digit of the user number by pressing “+” or “-” , press “#” to enter, set the rest 7 digits in the same way, press “#” to enter the last digit, a beep will be heard, the green indicator lights, the emergency PIN that is just set would display on the LCD quickly. Later on, the green indicator and LCD goes out, which indicates the successful setup of emergency PIN.



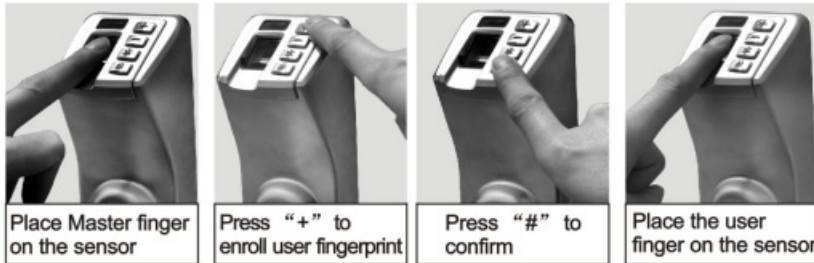
NOTE:

1. When the red indicator flashes, follows 2 short beeps, which indicates the failed setup;
2. Once the emergency PIN was set, it cannot be erased, but could be covered with a new one.
3. Button “*” could be used to cancel current operation at any time;
4. While setting the emergency PIN, the confirmed digit will move to fore digit automatically, the flashing digit is the digit to be selected and confirmed.

2.4 How to enroll user fingerprint?

User fingerprint must be enrolled after the authorization of Master fingerprint. Let's take fingerprint No. “01” as example (Refer to Appendix 1. Fingerprint No. & User name list).

1. Place the Master finger on the sensor, the embedded infrared detector would detect the finger and activate the sensor automatically, (or press “#” , the green indicator lights, the red light under sensor flashes, place the Master finger on the sensor);
2. While the green indicator flashing, the LCD shows No. “00” , press “+” once, the green indicator goes out, number “0” is flashing on LCD;
3. Press “+” or “-” to select digit “0” , press “#” to enter; Press “+” or “-” to select digit “1” , press “#” to enter; The LCD shows fingerprint No. “01” , the green indicator lights, the red light under sensor flashes;
4. Place the finger you wish to be No. “01” on the sensor, a beep is to be heard, green indicator lights, remove the finger from the sensor;
5. The red light under sensor flashes again, place the same finger on the sensor for second enrollment. The buzzer beeps once, the green indicator and red light under sensor go out, the LCD stops displaying, which indicates the successful setup of user fingerprint No. “01” .



NOTE:

1. Fingerprint No. “00” is used ONLY for Master Fingerprint, cannot be used as user fingerprint No.;
2. Fingerprint No. “01 ~ 99” are used for user fingerprints;

3. Each fingerprint No. can only be used for one user fingerprint, if the user fingerprint No. is already used, the red indicator flashes once and the buzzer beeps once to alarm the occupation of this user fingerprint Number.

2.5 How to erase the user fingerprint?

To erase one user fingerprint, you must be authorized by Master fingerprint, also you need to know the fingerprint No. for this user. Let's take fingerprint No. “01” as example.

1. Place the Master finger on the sensor, the embedded infrared detector would detect the finger and activate the sensor automatically, (or press “#” , the green indicator lights, the red light under sensor flashes, place the Master finger on the sensor);
2. While the green indicator flashing, the LCD shows No. “00” , press “-” once, the green indicator goes out, number “0” is flashing on LCD;
3. Press “+” or “-” to select digit “0” , press “#” to enter; Press “+” or “-” to select digit “1” , press “#” to enter; The LCD shows fingerprint No. “01” ;
4. The buzzer beeps once, the green indicator flashes once, which indicates the successful erasion of user fingerprint No. “01” .



NOTE:

To erase one user fingerprint No. will just erase the SINGLE user, the other user fingerprints save in the lock remain valid.

2.6 Three ways to unlock

2.6.1 To unlock with user fingerprint

1. Place an enrolled user finger on the sensor, the lock is activated after the embedded infrared detector detects the finger. (or press “#” , the green indicator lights, the red light under sensor flashes, place the enrolled user finger on the sensor);
2. The green indicator lights, the inside motor is activated,
3. Rotate the outside lever to unlock.

NOTE:

1. After the inside motor is activated, if you didn't rotate the outside lever to unlock within 5 seconds, the door will be locked again automatically;
2. If invalid finger was used 10 times continuously, the sensor will be locked, valid user fingerprint and emergency PIN can cancel the locked status, or the locked status will be deleted in 1 minute automatically.

2.6.2 To unlock with emergency PIN

1. Press “+” or “-” , number “0” will flash on LCD, enter the 8 digits emergency PIN digit by digit (Remember to press “#” to confirm every digit you selected);
2. The buzzer beeps once, the green indicator lights, the inside motor is activated;
3. Rotate the outside lever to unlock.

NOTE:

1. If the wrong emergency PIN was input, the buzzer will double beep, and red indicator lights.
2. If invalid PIN was entered 3 times continuously, the keypad will be locked. Any valid user fingerprint or emergency PIN can cancel the locked status, or the locked status will be deleted in 1 minute automatically.
3. If invalid user fingerprint and emergency PIN were used one after the other, then you have to wait till the locked status be deleted in 1 minute automatically.

2.6.3 To unlock with mechanical key

When you failed in unlocking with finger or PIN, you can unlock with provided mechanical keys.

1. Take off the cylinder cover with provided cylinder cover opener;
2. Insert mechanical key into the keyhole, turn the key (90° anticlockwise if right handed lock, 90° clockwise if left handed lock)
3. Rotate outside lever to open.

NOTE:

Mechanical key can unlock the door at any time. Keep them properly.

2.7 Passage mode

Definition:

The lock is in open status all the time. Anybody can rotate the handle to get access at any time. This mode is suitable for office or meeting room.

2.7.1 How to set the lock into passage mode?

Step 1: Unlock the door with emergency PIN or enrolled user fingerprint, but do not rotate the outside lever to open:

Step 2: Within 5 seconds after unlocking the door with either finger or PIN, press and hold “*” for 2 seconds, a long beep is heard then release “*”, the green indicator flashes regularly, which indicates the successful setup of passage mode.

2.7.1 How to cancel the passage mode?

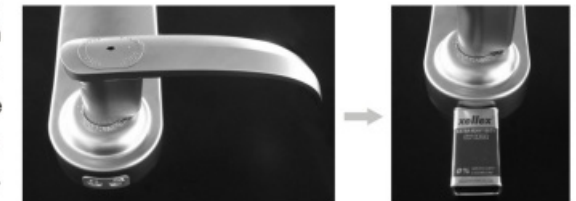
Unlock the door with either valid fingerprint or emergency PIN, a short beep is heard , the lock comes back to locked mode.

2.8 Changing batteries

When the operating voltage is less than 4.8V, the red indicator for low voltage alarm turns on. In this case the buzzer would beep when unlocking. Please change the batteries as soon as you can. Make sure the anode and cathode are correct.

2.9 External power supply

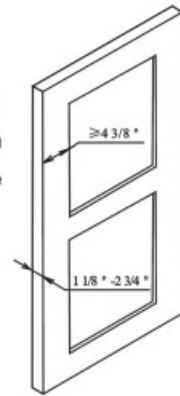
If the operating voltage is not high enough to continue the operation, a 9V battery (not provided) could be used as power supply for emergency operation. The anode of 9V battery should be on the left, the cathode should be on the right of the front lock plate (as shown in below picture). But please change the batteries as soon as you can.



3. Installation

3.1 Door requirement

- Wooden door with thickness from 1 1/8 " - 2 3/4 " ;
- If the door surface is decorated, the distance from the decorative edge to the door frame must be above 4 3/8 " .



3.2 Cylindrical size

Unit: inch

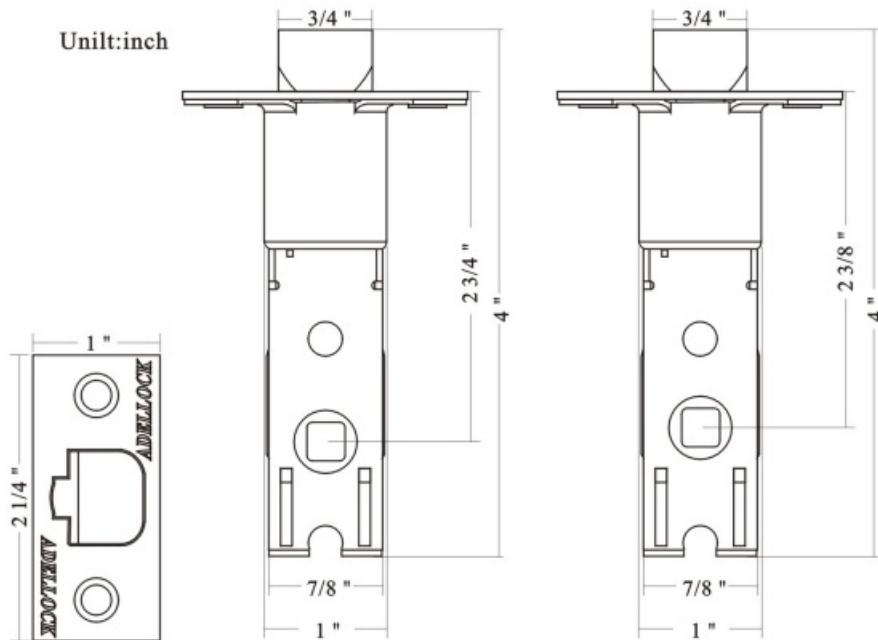













Figure A

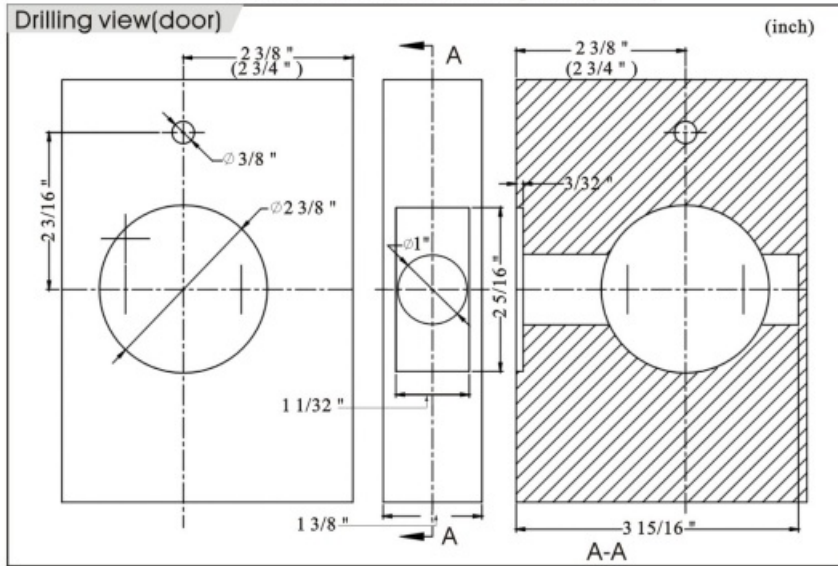
Figure B

3.3 Tools required when installing

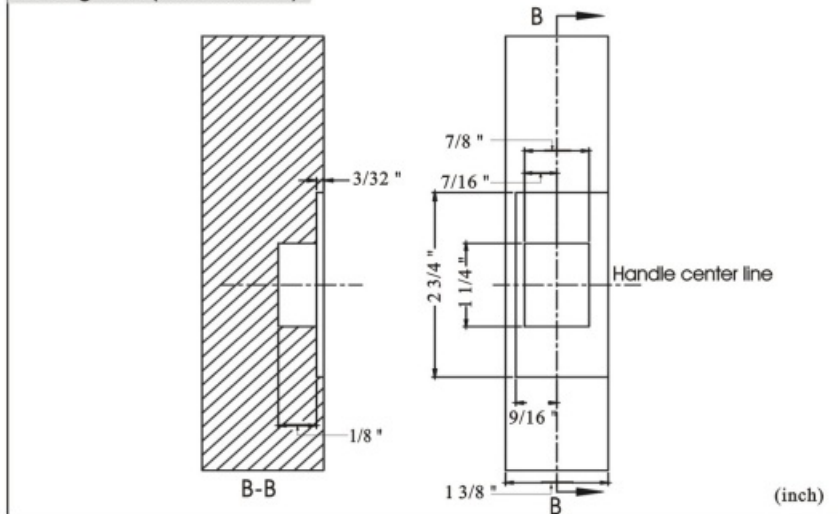
		
Electric drill	Auger bit	Measure
		
File	Cut-off knife	Screwdriver
		
Chisel	Pencil	Hammer
		
Auger	Tape measure	

3.4 Installation template






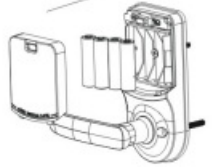


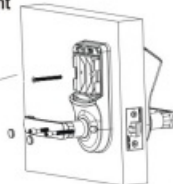
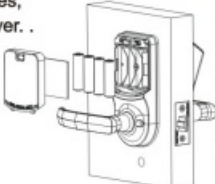
Model FTL-02A lock drilling view(door)

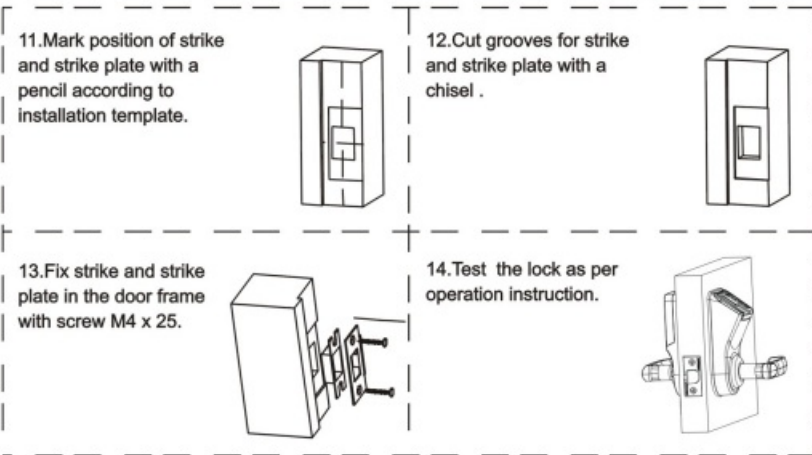


Drilling view(door frame)



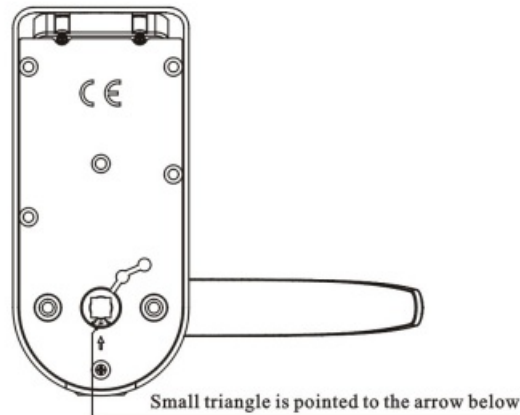
3.5 Installation steps

<p>1. Draw handle center line as your request, the recommended height for it is 1m above the ground.</p> 	<p>2. Mark the door for drilling hole with a pencil according to installation template.</p> 
<p>3. Drill the door from both sides of the door with electric drill.</p> 	<p>4. Drill the latch cavity and side plate groove.</p> 
<p>5. Put the latch into latch cavity, fix the side plate in the door with screw M4 x 25.</p> 	<p>6. Take apart the battery cover, take out the batteries.</p> 
<p>7. Fix front plate on the door.</p> 	<p>8. Make the square spindle through the hole of latch then into the front plate.</p> 
<p>9. Fix back plate with front plate by screw M5.</p> 	<p>10. Put in the batteries, close the battery cover.</p> 



3.6 Tips for installation

1. Before you fix the front plate on the door, make sure the protuberant spot on the back of front plate is in the position as below:



2. After the square spindle was put into the clutch of front plate, DO NOT turn the square spindle;
3. Please rotate the inside handle when tighten the screw under the handle to avoid scratching the back finish.

4. Maintenance

4.1 Daily maintenance

- A. Keep away from corrosive material.
- 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 from being burglaried.

4.2 Troubleshooting

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

5. Aftersales service

5.1 Warranty Policy

1. Do not tear off the little label on the inside of the front plate; do not take apart the lock plates without authorization. Such attempt might result expiration of the warranty from the manufacturer.
 2. 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.
 3. 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 4.warranty period. In this situation Ideal bears return shipping cost.
- If repair 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 Fingerprint Technology Co., Ltd. online or over the phone: Please contact the manufacturer's service centre by sending email to: marketing@adellock.com or adellock@globalsources.com. The following info 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 Packing List

No.	Items	Quantity
1	Front plate(including rubber gasket)	1pc
2	Back plate(including rubber gasket)	1pc
3	Single latch(2 3/8 ")	1pc
4	Single latch (2 3/4 ")	1pc
5	Mechanical keys	2pcs
6	Cylinder cover opener	1pc
7	Strike	1pc
8	Strike plate	1pc
9	Installation template	1pc
10	Accessories pack	1sets
11	User manual	1pc
12	Quality certificate	1pc
13	AA alkaline battery	4pcs








6.2 Technical parameters

No:	Item	Technical parameters
1	Fingerprint sensor	Optical sensor
2	Sensor resolution	500 dpi
3	Antistrike ability of sensor surface	Remain good condition after being jabbed with a 4H pencil at a 20cm's 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	Twice to get one fingerprint template
10	Fingerprint template saved	All enrolled fingerprint template will be saved while replacing the batteries
11	User capacity	100 max
12	Light jam	Sunlight resistable
13	Sensor surface	Optical glass with PVD coated
14	Operating voltage	4 AA alkaline batteries,DC 4.5~6.0v or 9V stand-by power.
15	Battery life	Approx 12 months
16	Temperature for storage	-10℃-50℃
17	Static current	<30 μ A
18	Dynamic current	100mA~220mA

6.3 Fingerprint number & user name list

Fingerprint No.	Name	Fingerprint No.	Name	Fingerprint No.	Name	Fingerprint No.	Name
00	Master	25		50		75	
01		26		51		76	
02		27		52		77	
03		28		53		78	
04		29		54		79	
05		30		55		80	
06		31		56		81	
07		32		57		82	
08		33		58		83	
09		34		59		84	
10		35		60		85	
11		36		61		86	
12		37		62		87	
13		38		63		88	
14		39		64		89	
15		40		65		90	
16		41		66		91	
17		42		67		92	
18		43		68		93	
19		44		69		94	
20		45		70		95	
21		46		71		96	
22		47		72		97	
23		48		73		98	
24		49		74		99	

6.4 Accessories

		
Mechanical key (2pcs)	Strike (1pc)	Cylinder cover opener (1pc)
		
Square spindle (1pc)		Strike plate (1pc)
		
Pan screw M4×L2 (1pc)		Tapping screw (M4 X 25) (4pcs)
		
Screw connector A(2pcs) B(1pc)	Fixing screw M5×L1(2pcs)	Hexagon screwdriver (2pcs)

6.5 Handle orientation of the lock

Left handed: Standing out of the door, if the hinge is on the left, it is Left handed lock.

Right handed: Standing out of the door, if the hinge is on the right, it is Right handed lock.

