&　Preface

l　Welcome to use LP-803 fingerprint lock by Linkmath.

l　For your convenience of skillfully using LP-803 fingerprint lock, we prepare detailed manual for you. Please read it carefully and keep it.

l　The functions of the product go in conformity with those described in the instruction.

l　The manufacturer will never be responsible for the loss caused by customers' wrong operations.

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※  Please fill in the product serial
number：
   SN：_____
   Serial NO：On the side face of the
external packing
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Contents

V0.07

1. Main features of LP-803 fingerprint lock

LP fingerprint locks are developed with our own intellectual property right of fingerprint identification arithmetic combining the most advanced photo-electronic technology nowadays in the world, which is a new type of fingerprint lock harmonized with optics, mechanics, electronics and arithmetic.

Nowadays the feature of the fingerprint products in the market is of complicated design and high price. However, the products are mostly focused on the high-consumption people, and the valuable selling limit of the products makes it become aristocratic gradually, of which the result is that fingerprint products cannot be sweepingly manufactured and the industrialization process of the products is slowed down. In order to speedily popularize the fingerprint products and make the products applied to the middle and low income consumers diffusely, Linkmath Biotech designs and produces a low-priced and popularized LP-803 single-tongue fingerprint lock, with simple structure, elegant appearance and easy operation, saving energy and durable.

l Easy to install

LP-803 fingerprint lock is designed with elegant appearance and easy to install. The whole installation only needs fixing 4 screws.

l Easy to operate

It's easy to unlock the door, lock the door , make registration and deletion.

l Simple management

LP-803A system provides two ranks to users, viz. administrators(2)and common users(13)

LP-803B system provides two ranks to users, viz. administrators(3) and common users(97)

l Energy saving

Only 4 pieces AA alkali batteries can make 3000 times normal unlocking available.

l Warning of lacking power

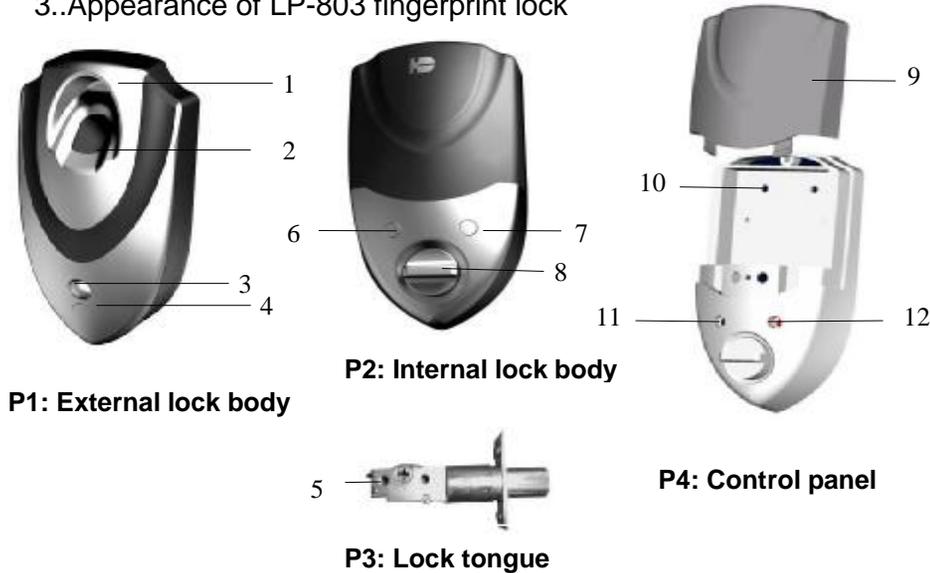If the batteries are low, the system will beeps 6 times with 6 red flashes meanwhile as the low power warning.

l Mechanical emergency

There is emergency key for the product, which will be applied while the system doesn't work properly.

V0.07

2. Application of LP-803 fingerprint lock

The lock is adapted to family, office and business, etc..
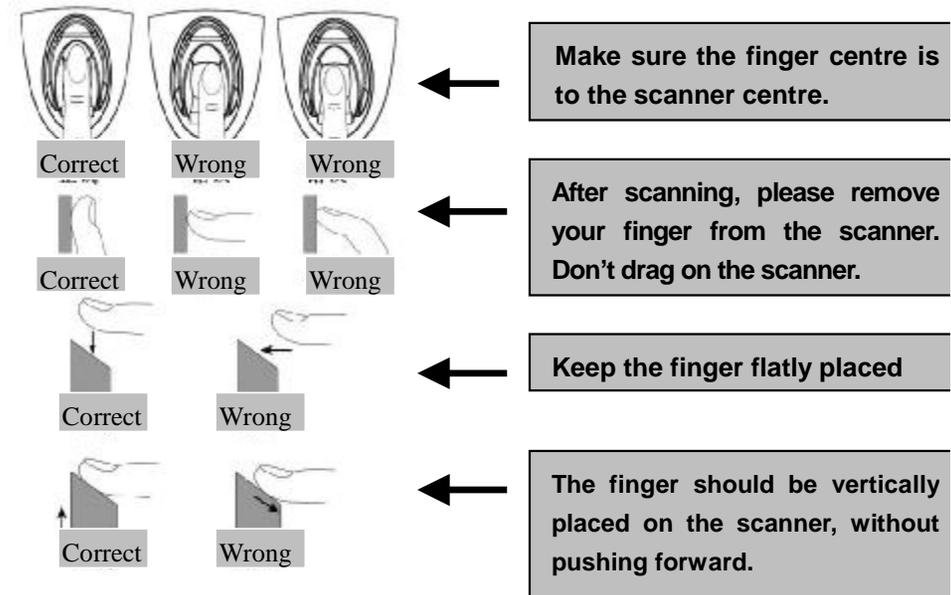
3..Appearance of LP-803 fingerprint lock

P1: External lock body

P2: Internal lock body

P3: Lock tongue

P4: Control panel

1、2 Color LED	8、Indoor knob
2、Fingerprint Scanner	9、Battery Cover
3、Power button(Outdoor lock button)	10、Battery Box
4、Emergency key hole	11、Registering button(ADD button)
5、Lock tongue	12、Deleting button (DEL button)
6、Screw Hole	
7、Screw Hole	

4. Preparations before setting and unlocking setting

1)How to register fingerprints

During registration and identification, put your finger on the scanner naturally, forcing centrally. And you should make your fingerprint right to the scanner centre, for most impressed information points are contained on the fingerprint center. Please see the correct fingerprint collection as follows:

Correct　　Wrong　　Wrong

Make sure the finger centre is to the scanner centre.

Correct　　Wrong　　Wrong

After scanning, please remove your finger from the scanner. Don't drag on the scanner.

Correct　　Wrong

Keep the finger flatly placed

Correct　　Wrong

The finger should be vertically placed on the scanner, without pushing forward.

2) Unlocking setting of LP-803：

Unlocking setting of LP-803.The factory setting of the lock was for the right side unlocking. "ADD button +power button" is for right-side setting; "DEL+Power button"is left; If it's successfully operated, the lock tongue will pop up automatically.

V0.07

3) Battery installation and Change

Push up the battery cover. Put in 4 pieces of AA batteries to the battery box following the right battery polarity and then push the cover back.

%Notice：

The shiny red LED of the scanner window after the system has powered up reminds you of the low battery, which will stop the operation of registration and deletion. Please change the battery asap.

The system won't show any warning of low battery if there is not fingerprint kept in.

The system can still work with locking and unlocking in the condition of low battery till the power is used up
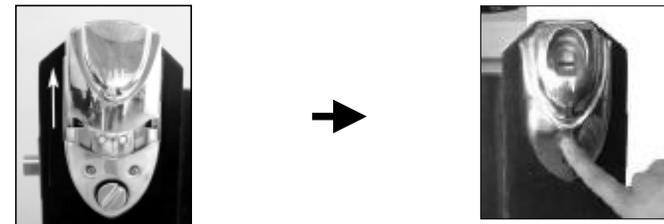
5. Setting and operation of LP-803A

The LP-803A fingerprint lock provides two ranks to users:2 administrators and 13 common user, in all 15 users capacity.

The authority for different rank users are illuminated as follows：

Authority/ Title	Administrators		Users
	Administrator1	Administrator 2	
Registering and deleting the common user's fingerprint		√	
	√		
Registering and deleting the common user's fingerprint		√	
	√		
Unlock and lock the door	√	√	√

1)Registering fingerprints

Notice: If the door is unlocked, please press the power button at first, then you can do other operations in the power-off condition. On the other hand, for the fingerprint scanning time is very short, if the red LED of the scanner shines during operation, please put your finger soon onto the scanner, so as not to miss the scanning and then lead to an un-efficient fingerprint collection.
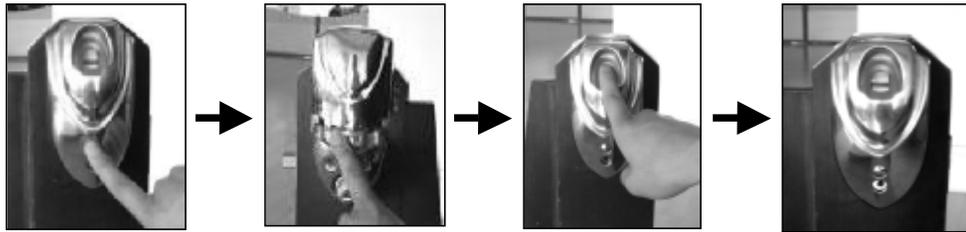
There is no fingerprint saved in the system memory when it left the factory. Push up the inner side battery cover of

Press the power button, and the lock will start automatically.

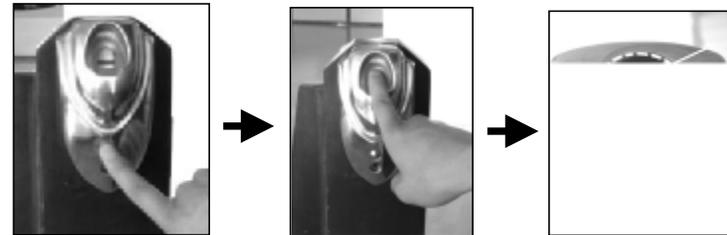## 1))The fingerprint registration for administrators

(1) Registering administrators'fingerprints

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1.When the lock is off, push the **power button** and the wink of the green LED light indicates the automatic start.

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2.Push the **gistrating button** for 3 seconds and the system will be turned into the fingerprint registering state.

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3.when the red LED light is on, the administrator can put the finger onto the central part of the scanner and register the fingerprint. The finger can leave the scanner after the red LED off. If the light shines once again, put the finger back for verification. If the green LED light shines twice, the fingerprint is successfully stored.

"

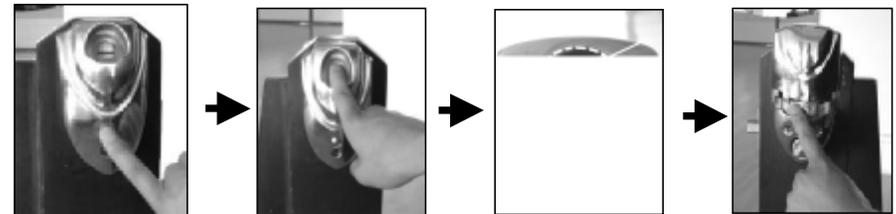4.After the successful registration of the administrators' fingerprints, the system will automatically power off.

　　*__The first and second user will be defaulted as the administrators (administrator A and administrator B). After every administrator's fingerprint is successfully registered, the system will forcibly power off and require the fingerprint verification. The registration and deletion operation can only be processed when the fingerprint verification has passed.__

(2) Verify the administrator's fingerprint

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Press the power button and the system starts

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The administrator should put the finger on the central scanner for verification.

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The shiny green LED indicates successful registration. Whereas, the red LED indicates registration failure.

1)　Register common users'fingerprints

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Press the power button and the system starts

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The administrator should put the finger on the central scanner for verification.。

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The shiny green LED indicates the successful verification of the administrator fingerprint.

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Press the **registering button** for 3 seconds before the system is power off and the system will turn into fingerprint registration state.

...

The common user should put his finger onto the scanner centre while the red LED is on and remove the finger while off. Then when the red LED shines again, put the finger on the same position once again for verification. Two winks indicates successful registration (The still shining red LED indicates regitration failure.
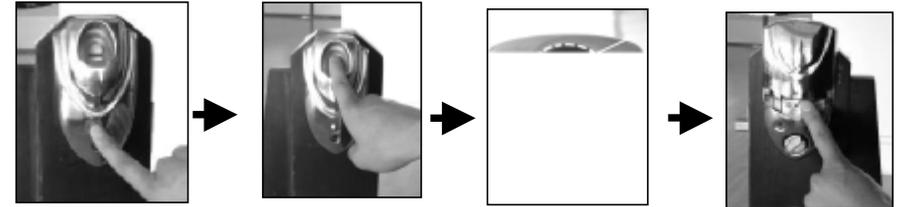

†

Here the system is still on. Push the **registering button** The shiny red LED light indicates the system is in the registration state.

‡

Repeat the steps above for other common users' registration. The 3 winks of the red LED light indicate the system memory is used up.

Recommendation: After registration, the user should drop out of the system immediately and then log in once again to check whether their fingerprints are valid. After then, processing other fingerprints can be available.

1.Deleting fingerprints

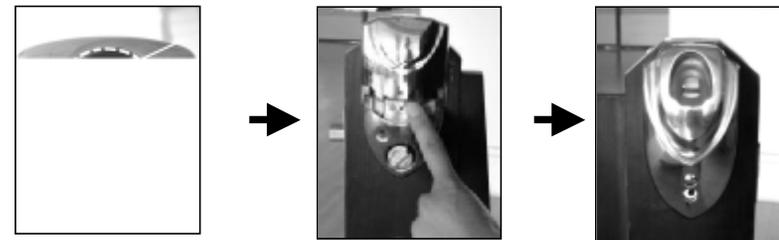1. Deleting users'fingerprints one by one

●

Press the power button and the system starts with the red LED light on.

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The administrator should put the finger on the central scanner for verification.

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With the green LED light on, the administrator's fingerprint is registered. And the system turns into the state of operation.

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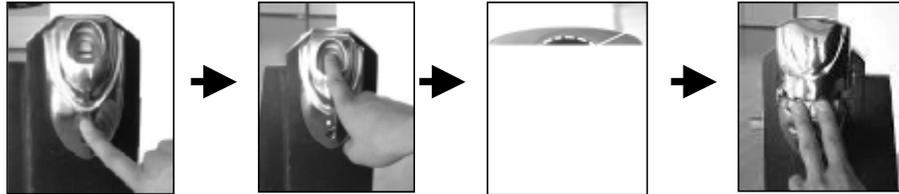Press the deleting but for 3 seconds.

...

Two winks of the green LED light indicate the successful deletion of the last two fingerprints in the system memory.

†

If you continue pressing the deleting button the system will delete the fingerprints one by one in reverse order.

‡

2 winks of the red LED light indicate all the fingerprints in the system have been deleted.

V0.07

2. Fast deletion of the user's fingerprint

• Press the power button and the system starts with the red LED light on.

, The administrator should put the finger on the central scanner for verification.

ƒ With the green LED light on, the administrator's fingerprint is registered. Meanwhile the system turns into the state of operation.

" Press the registering button and deleting button at the same time for 3 seconds. Two winks of the green LED light indicate all the common user's fingerprints in the system memory have been deleted.

II. Deleting the administrator's fingerprint

If the lock is power off, push the power and deleting button at the same time to delete all administrators' fingerprints if there are only administrators' fingerprints in the system memory. Two winks of the green LED light indicate all the administrators' fingerprints have been deleted. The system will be back into the factory setting again after the power off.

6. Setting and operation of LP-803B

The LP-803B fingerprint lock provides two ranks to users:3 administrators and 97 common users, in all 100 users capacity.

The authority of different rank users are illustrated as follows:

Authority/ Title	Administrators			Users
	Administrator 1	Administrator 2	Administrator 3	
Register and delete administrators'finerprints	√	√	√	
Register and delete common users'finerprints	√	√	√	
Unlock and lock	√	√	√	√

1)Registering fingerprints

• There is no fingerprint saved in the system memory when it left the factory. Push up the inside battery cover of the lock till the control panel is visible before the operation.

, Push the power button and the system will start automatically

V0.07

(1) Administrators' fingerprints

(1)　Registering the administrator's fingerprint(01)

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②

③

Press the registering button for 3 seconds. With a beep, the scanner turns on, which indicates the system turns into the registration state**.**
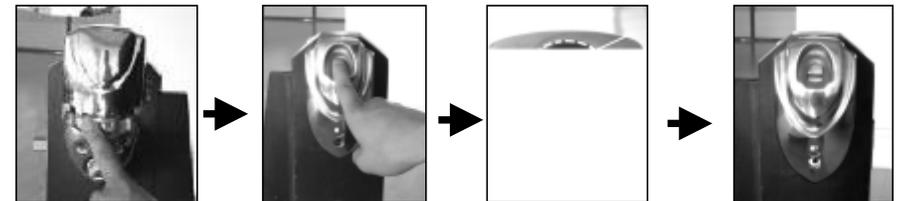
Put your finger to the scanner centre. With the light in the scanner off, the scanning is well made. Then remove the finger. Later put your finger once again for verification after a beep and shiny light in the scanner.

With a long beep, the administrator's fingerprint is successfully registered(The 3 beeps and shiny red light indicate the registration failure.

The first three registrations are administrators'fingerprints, in turn administrator 1, administrator2 and administrator 3.On each successful fingerprint registration, the system will make signs for request of verifying the administrator's fingerprint. Only after the verification other registration operation and deletion can be done.

(2) Registering the administrator's fingerprint(02 & 03)

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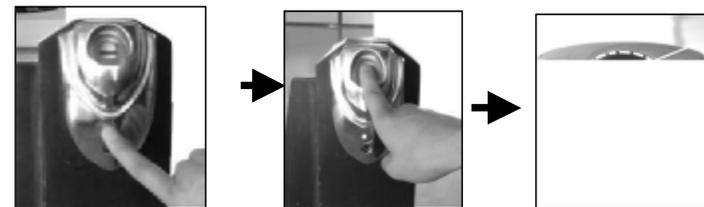Keeping pressing the registering button for 3 seconds, the system starts.

With the scanner light on, put the fingerprint of administrator 01 onto the scanner for verification. After the verification passes, the scanner light turns on again.

Put the finger to the scanner centre. If the scanner light turns on, scanning has been successfully done, then remove the finger. With a beep, the scanner light turns on again, at this condition, you should put your finger on once again for verification.

With a long beep the fingerprin registration come through; if the re light shines, th registration fails.

(3) Verification of administrators'fingerprints

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Press the power button, then the system starts.

With the red LED on, the administrator should put the finger onto the scanner centre for verification.

With the green LED on, the lock starts. And a beep indicates the administrator's fingerprint is successfully registered. Whereas, shiny red light indicates registration failure.
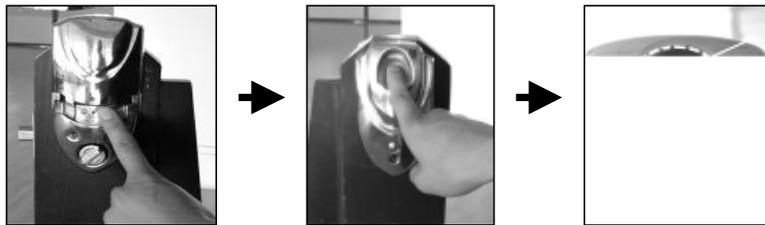
V0.07

2. Registering common users'fingerprints

The operation of registering common users' fingerprints is the same as that of administrators (02,03)

Recommendation: After the fingerprint registration, please immediately drop out of the system and then log in once again to check whether the fingerprints are valid. After then, registration of other users can be made.

3. Deleting fingerprints

(1) Deleting fingerprints
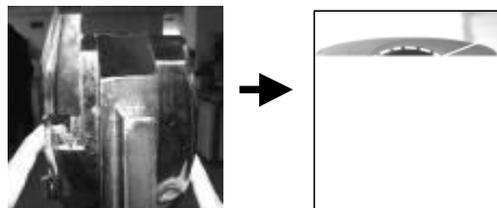

• 　　　　　　　　　, 　　　　　　　　　*ƒ*

Keep pressing the deletion button for 3 seconds. Then the scanner light turns on.

The administrator should put the finger on the central scanner for verification.

After the verification passes, with the green light on, the last fingerprint is deleted by the system.

(2) Deleting the administrator's fingerprint (canceling all the fingerprints)

Press the registering and deleting button at the same time, then the power button.

With 3 seconds pressing, remove the finger while the red light turns on. And after 3-4 seconds, a beep indicates the successful deletion.
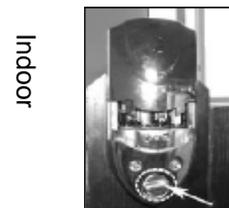
7.Unlock

Outdoor

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With the lock power off, press the power button, then the system starts.

With the red LED light on, put your finger onto the scanner center for fingerprint collection. If the green light turns on, the tongue starts. If the red light shines, the fingerprint verification fails, so please re-settle.

Indoor

Turn the indoor knob to start the tongue.

Outdoor emergency

Take off the emergency cover.

Plug in the emergency key to the keyhole, then turn the key to unlock the door.

Notice: When the door cannot be unlocked with the fingerprint accidentally, please use the emergency key (namely the key)

8. Lock the door

Outdoor

Indoor

After closing the door, press the power button. With the lock tongue popping out, the tongue is locked.

Turn the indoor knob, then the tongue is locked.

Notice: If the lock is not rightly installed, or the tongue cannot properly pop up or draw back, the system will beep 8 times with 8 red flashes.

9. System maintenance and malfunction settlement

1）.System maintenance

l　The functions of the products are described as the function settings in the instruction.

l　The manufacturer will not be responsible for the damage caused by the customer's wrong operation.

l　Protect the scanner from being scratched by sharp and hard objects or other damage.

l　Please change the battery in time on the 6 beeps for low battery warning.

l　Keep the scanner clean. If there is dirty or apparent fingerprint,

please rub up gently.

l　The fingerprint lock is a hi-tech product, the application environment of which is crucial to its proper use, in particular the dust and highly caustic objects in the air, so we recommend you install the door lock after the house fitment, which will do good to the normal running and life durability of the lock.

As a hi-tech product, the right installation or not of the fingerprint lock will directly influence the normal operation.

V0.07

（2）.Malfunction settlement

Some malfunctions will occur and influence the normal running of the lock if it's wrongly operated. By this the malfunctions which usually occur are listed as follows for your reference.
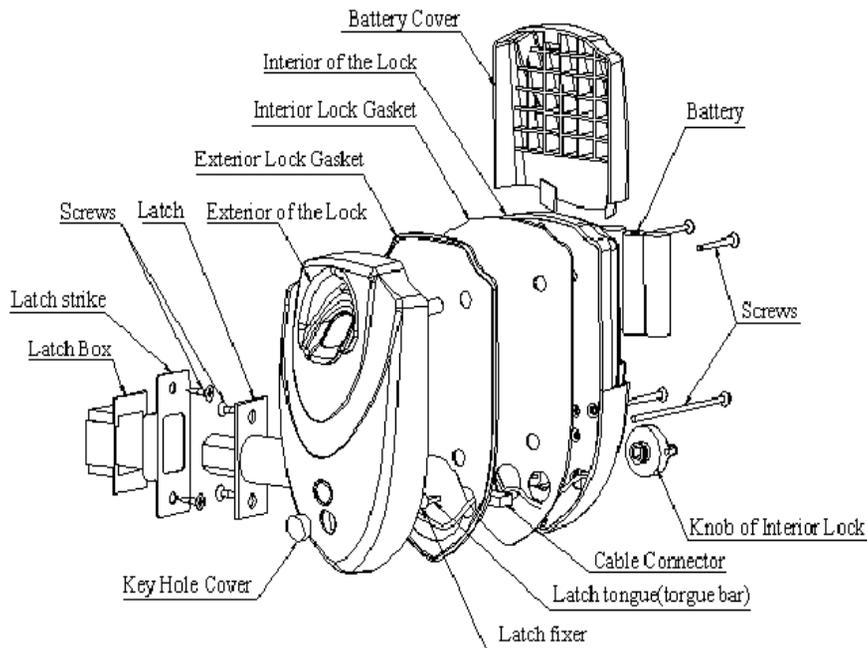
NO.	Malfunction	Reason	Solution
1	While unlocking, the red light in the system scanner often shines with beeps	．Too low battery ．The plug-ins are not well connected ．The circuit parts are damaged	．Change batteries ．Check the plug-ins ．Examine and repair the electronic part
2	The system doesn't start while pressing the power button	．Too low voltage ．The electronic parts are damaged	．Change batteries ．Unlock the door with the key system and examine the electronic part
3	The fingerprint doesn't always work in unlocking the door	．The fingerprint is bad for verification	．Input another fingerprint
4	The fingerprint cannot be deleted	．Two low voltage ．Wrong input of the administrator's fingerprint ．Bad connection to the deleting button	．Change batteries ．Re-operate ．Examine and repair the circuit parts
5	The tongue cannot normally draw back after the lock installation	．Wrong unlock direction ．The fixing hole is not wide enough for the lock body, causing the deviation of the hole.	．Change the direction ．Fix the hole; examine and repair the mechanical part of the lock core.
6	Fingerprint input failure	．Two low voltage ．Bad connection of the setting button ．Wrong placement of the administrator's fingerprint	．Change batteries ．Check the circuit part ．Make sure that the administrator's fingerprint is rightly placed.
7	The fingerprint cannot pass verification after starting the system	．Two low voltage of the battery ．The battery is damaged	．Change batteries

10.Main technical index and specification of the LP-803 fingerprint lock

Main technical index	
1.：Scanner size	＞12mm×16mm
2.：Fingerprint sensor	Optical
3.Scanning time	≤1 second
4.Identification and Verification time	≤2 seconds
5.Fingerprint registration time	Twice
6.Fingerprint verification error:	＜0.0001%
7.Fingerprint verification refusal:	＜2%
8.Fingerprint moving tolerance	＜±3mm
9.Fingerprint turning tolerance	＜±15 degree
10.Fingerprint capacity of LP-803A	15 人
11.Fingerprint capacity of LP-803B	100 人
12.System power	4pcs AA alkali battery
13.Battery life	More than 3000 times unlocking
14.Working temperature	-10℃——55℃
15. Working humidity	10%——85%

Specification		
16.Dimension（mm）	External：150 × 83 × 36	
	Internal：150 × 83 × 32	
	Lock body：83 × 25.5 × 57	
17.Weight（kg）：	1.6kg or so	
18.Adapted door thibkness：	35mm—50mm	

V0.07

11.LP-803 Installation Guide
(1). Anatomical atlas of the　lock body axis-side

(2).Installation Guide

How to prepare the Fingerprint Door Lock for Installation

LP803 Step-by-Step Installation Installation

1.Measure to find the lock location

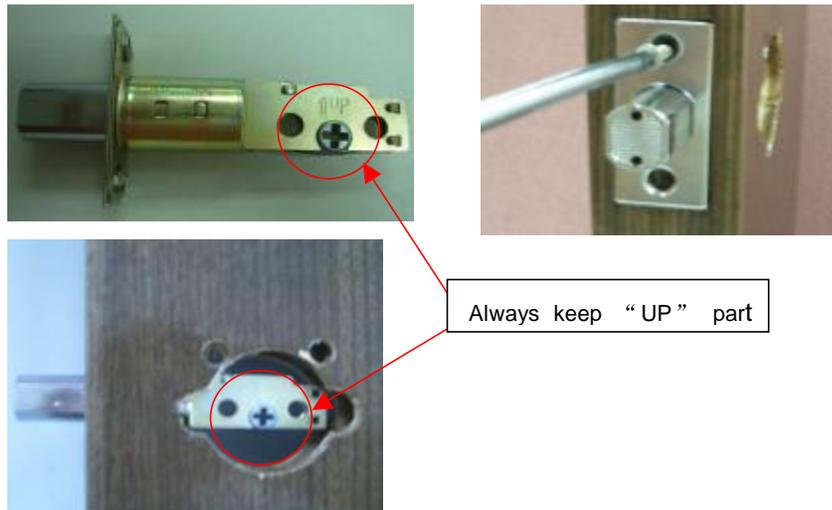Tape the cardboard template, supplied with the lockset, onto the door. Then meausre the holes to install LP-803.

Tape the template onto the door to mark down the hole position.

2.Drill the holes according to the measurement provided on the template.
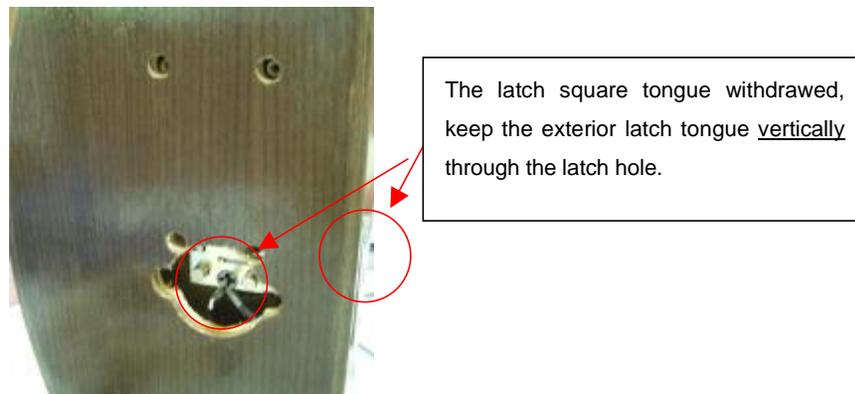
V0.07

3.Insert the latch through the latch bolt hole on the edge of the door. Secure the latch into the door with the screws provided with the lockset. Keep the "UP" mark on the latch always upside.

Always keep "UP" part

4.Attach the exterior portion of the lock,

On the condition that the door is open (ie. With the latch tongue withdrawed), attach the exterior portion of the lock into the corresponding holes on the door , insert the driver thru. The latch, and the cable connector through the door .

The latch square tongue withdrawed, keep the exterior latch tongue <u>vertically</u> through the latch hole.

Please adjust the length of the torque bar (or lock tongue) during the installation of LP-803.

If the tongue (torque bar) was too long or too short, the lock would fail to function properly. Please pay attention to the following notes.

1. This is the standard torque bar (tongue) of the lock without any cutting.

Lock Tongue (Torque bar)

Photo 1

2、Attach the exterior part of the lock on the door. (Press the lock against the door, and check the length of the torque bar is the same as the thickness of the door（The standard of the torque bar: the lengthen of the torque bar is the same as the door thickness or 0-3mm less is also acceptable.）
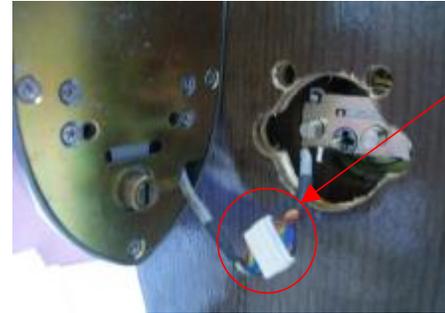
Photo 2

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5 .Firmly plug in the cable connector from the outside body to the upper PCB board of the inside body. Only when the knob of the interior part of the lock keep downside could the transmission shaft be connected with the exterior part of the lock. Pls note to keep the interior side and exterior side of the lock flat and aligned on the door.

3. Cut the longer part of the torque bar.

Photo 3

Firmly plug in the cable connector from the outside body to the upper PCB board of the inside body！

4. Only when the torque bar adjusted could the proper installation be carried on.

Photo 4

Keep the knob of inside part of the lock downside and the transmission shaft be connected with exterior lock tongue.

V0.07

6. Install the lock body aligned with the door and fasten the screws. If the lock and door are not aligned properly, the lock will not function properly.

7. Insert 4 AA size alkaline batteries and close the battery cover.

8. Installation is finished and test the lock with the Users' Guide. If the lock fails to function properly, pls check every installation details.

Insert the batteries correctly！

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