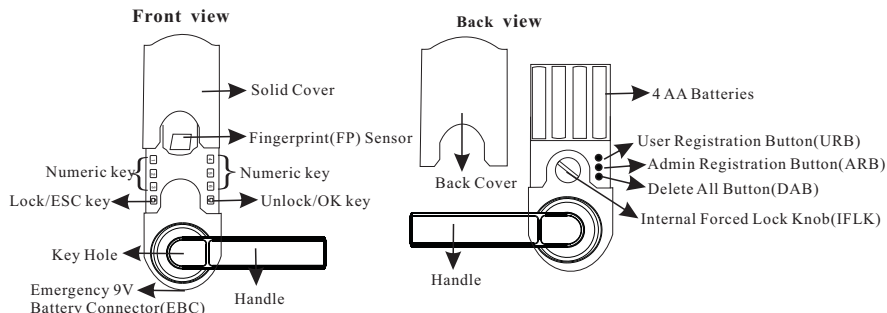


# L100 Fingerprint Lock User Manual

## Features and overview

1. The lock perfectly integrating fingerprint verification technology with passwords obtain higher security.
2. Unlock: by fingerprint(FP) or password(PW).
3. Registration mode : Fingerprint or Password .
4. Different levels of privilege can be assigned.
5. The factory admin password is 123456.
6. All users fingerprints and passwords can be deleted at the same time.
7. External emergency power supply in case of flat batteries(Regardless of positive and negative pole).
8. Door lock can be set to passage mode.
9. There are two levels of battery power management. When the voltage is lower than the first level but higher than the second level, the user is prompted to replace the batteries. When the voltage is lower than the second level, the lock will automatically shutdown.
10. The level handle is designed with Electrical clutch, the level handle can effectively prevent destroys, that make lock invalid.
11. In the event of complete electronic failure, the emergency mechanical key is available to open the door lock.



## How to use

### Start the device

Push up the Solid Cover of the lock to power on, the lock will start working with a beep sound. The lock will shutdown automatically in 8 seconds if no operation occurs in order to save power. The user can press "Unlock Key" to power on the lock.

### Initialize system

After the lock power on, press the "Delete All Button" for more than 5 seconds, the lock will make a short tone to prompt that all users are deleted. The lock will restore factory setting and the PW of administrator will be the default "123456".

### Administrator enrollment

To press the "ARB" after power on the lock, then make the verification of the admin with correct PW or FP at first(The lock will automatically shutdown after 3 times of invalid identification). If the verification is passed, it's able to enroll a new FP or a new PW.

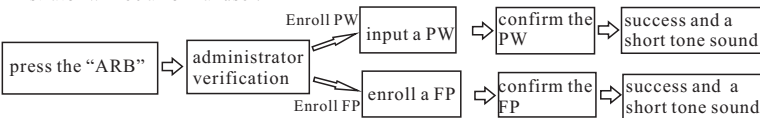
● How to enroll a PW: Input 6 digital numbers then input again after a beep sound. If the twice inputs are correct, a short tone sound to prompt the enrollment succeed(The original admin PW will be covered by the new enrolled PW). Otherwise a long beep will sound to prompt user enrollment failed and to input numbers again.

● How to enroll a FP: Press the finger on the "FP Sensor", and press again after a beep sound to finish the enrollment. If the enrollment was failed, a long beep will sound to prompt user to enroll again. If the enrollment succeed, a short tone will sound, and it's able to enroll the next new finger.

**Note:** 1. The initial usage of equipment is recommended to register a new PW to replace the factory PW.

2. Administrator could enroll a FP or not, but should enroll a PW (6 bit).

3. During the process of FP registration, if the registered finger has been a normal user, the normal user will upgrade to an administrator and the original FP of administrator will be normal user; if an unused finger was registered, it will be an administrator and the original FP of administrator will be a normal user.



### 4. User enrollment

To press the "URB" after power on the lock, then make the verification of the admin with correct PW or FP at first(The lock will automatically shutdown after 3 times of invalid identification). If the verification is passed, it's able to enroll a new FP or a new PW.

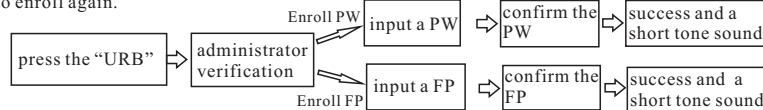
● How to enroll a PW: Input 6 digital numbers then input again after a beep sound. If the twice inputs are correct, a short tone sound to prompt the enrollment succeed(The original PW will be covered by the new enrolled PW). Otherwise a long beep will sound to prompt the enrollment failed and to input numbers again.

● How to enroll a FP: Press the finger on the "FP Sensor", and press again after a beep sound to finish the enrollment. If the enrollment was failed, a long beep will sound to prompt user to enroll again. If the enrollment succeed, a short tone will sound, and it's able to enroll the next new finger.

**Notice:** 1. A FP or a PW will be as a user, a person can enroll many fingerprints.

2. A normal user can enroll one password (6 bit).

3. In FP or PW registration, if the FP or PW is duplication, a long beep will sound to prompt user to enroll again.



### 5. How to use password to unlock

Power on-->Input PW {-->①Correct PW with a short tone-->Unlock(6 seconds)-->lock  
 {-->Invalid PW with a long beep-->2 chances left to unlock {-->①

↳ Shut down※

※**Note:** 1. When power on the unit next time, the unit will remind the user there was invalid operation happened with beep sound interval 2 seconds, the unit will remind total 3 times.

### 6. How to use fingerprint to unlock

Power on-->Press FP {-->①Correct FP with a short tone-->Unlock(6 seconds)-->lock  
 {-->Invalid FP with a long beep-->2 chances left to unlock {-->①

↳ Shut down※

※**Note:** 1. When power on the unit next time, the unit will remind the user there was invalid operation happened with beep sound interval 2 seconds, the unit will remind total 3 times.

## Additional Features

1. How to set Passage Mode(P.M.): Power up the unit and then press "Unlock Key" in 5 seconds after verifying the PW or FP successfully, the unit will beep a short tone to prompt user that "P.M." was set, and then power off.
2. How to cancel P.M.: Power up-->"Locked Key"-->Beep a tone-->Cancelled P.M.-->Power off
3. The user can delete the former numbers by pressing "Locked Key" while inputting PW, and the user can input again.
4. To spin the "IFLK" to horizontal position, the unit is not allowed to unlock the door from outside. And unlock it by turning the knob to 60°.

## Others

1. Any operation of the unit will beep.
2. The unit will shut down after closing the solid cover.
3. Low Battery Intelligent Prompt(LBIP): When battery power is lower than the value of "LBIP", the unit will beep 3 times when unlock by FP or PW everytime to prompt user to change battery. To unlock max 120 times with low battery power. And then battery power is too low for the unit to operate, a long beep sound to remind user changing battery. The user will then need to use the mechanical key or emergency power supply(9V battery) to unlock unit.
4. Low Battery Protection Function: When battery power is lower than the value of battery protection, the unit will shutdown if you push up the slide cover or press the "Unlock Key".

## Technical Specifications:

Power source	4.3 ~7V (4 AA- alkalinity battery)	Capacity	100 fingerprints; 2 groups of passwords(one is for admin and the other is for user)
Battery low alarm value	4.6V	Recognition speed	<= 2 seconds
Operating Current	<130mA. Verify the moment<180mA	Battery service life	open door 3600 times
Standby Current	<20uA	False Rejection Rate(FRR)	< 0.001%
False Acceptance Rate( FAR)	<1%	Temperature range	0~45℃