

 Preface

- Thank you for purchasing HONGDA Shepherd 400 Fingerprint Theft–Proof Door Lock.
- As with many advanced technologies, the use of biometrics for identification involves a learning process. Please read this user manual carefully, so you can simply operate the product. Please keep the manual as reference.
- We can only offer the functions described in the manual.
- The manufacturer will not be responsible for any damages caused by the user’s improper use.

Please write down the serial number for your record. It is located outside of your product box.

SN: _____

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I . Main Characteristic of Shepherd 400 Fingerprint Theft-proof Door Lock

Shepherd series of fingerprint locks are new type of fingerprint locks, which merge optics, mechanics, electricity and algorithm into an organic whole. We develop Shepherd series of fingerprint locks by adopting fingerprint identification, complete IPR algorithm and the most advanced optoelectronic technology in the world.

- Easy installation

Shepherd 400 Lock can be easily installed through tightening up some crews.

- High security

The lock has three directions and multi-points locking up design. It also can lock automatically after closing the door.

- Simple operations

User can just press one button to carry out operations, such as opening the door, closing the door, registering and deleting fingerprints.

- Level management

The system designs with level management function. You can set up a user into his corresponding level according to his identity and operation authority to enforce high security.

- Environmental protection and save energy

The battery (4 AA)) can support 6000 times of operation normally.

- Low battery alarm function

When the lock is in low battery condition, the system will alert users with beeping sound.

- Large user capacity

The system can save 15 users (30 fingerprints)

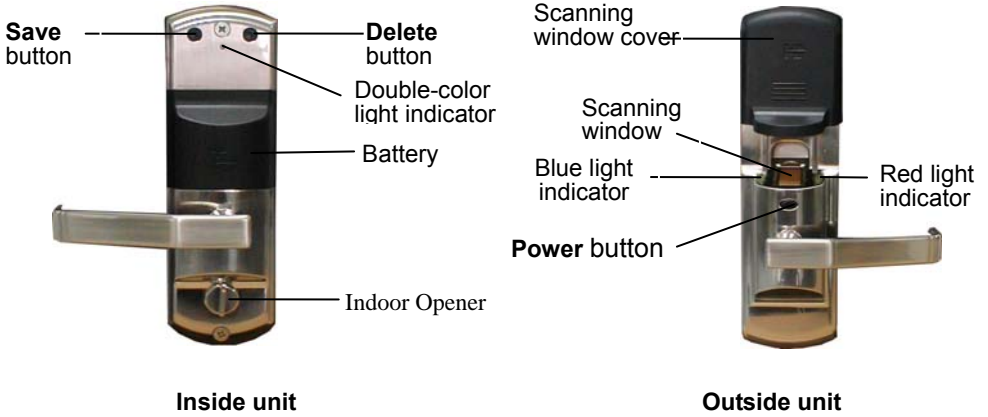
- No disturb function

With this function, the lock will turn off all power and disable entry from the outside.

- Override function

The product comes with own emergent key set. Under emergency condition, users can use emergent key to open the door.

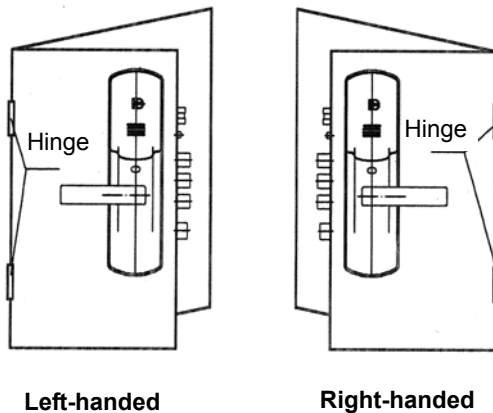
II. The Controls and Functions of Shepherd 400



III. Installation

1. Preparation

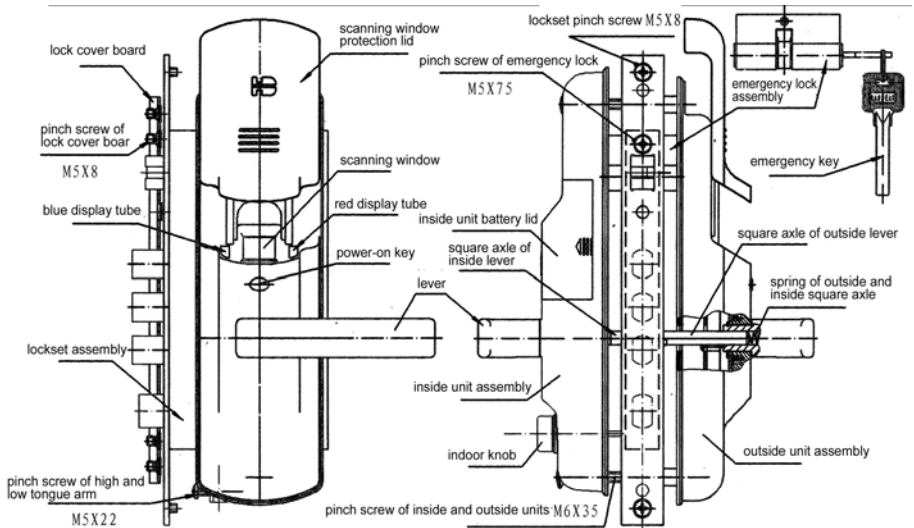
The lock lever direction must correspond to the door left-handed or right-handed. If not, you should ask the seller to exchange for the lock with suitable lever (refer to Figure 1).



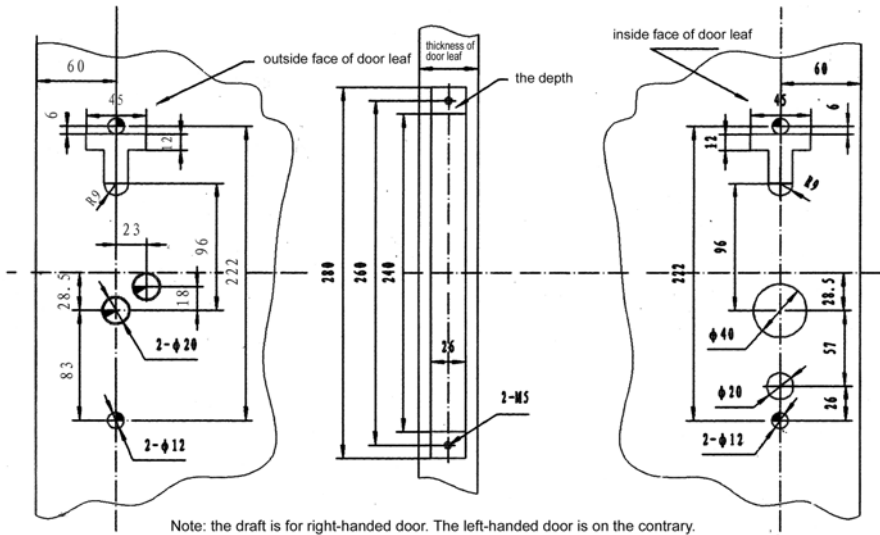
☆ **Tip: How to determine the door opening direction?**

Standing outdoors and facing the door: If the hinge is at the left side of the door, the door is a left-handed door-the left-handed lock should be used. If the hinge is at the right side of the door, the door is a right-handed door-the right-handed lock should be used.

2. Parts composition



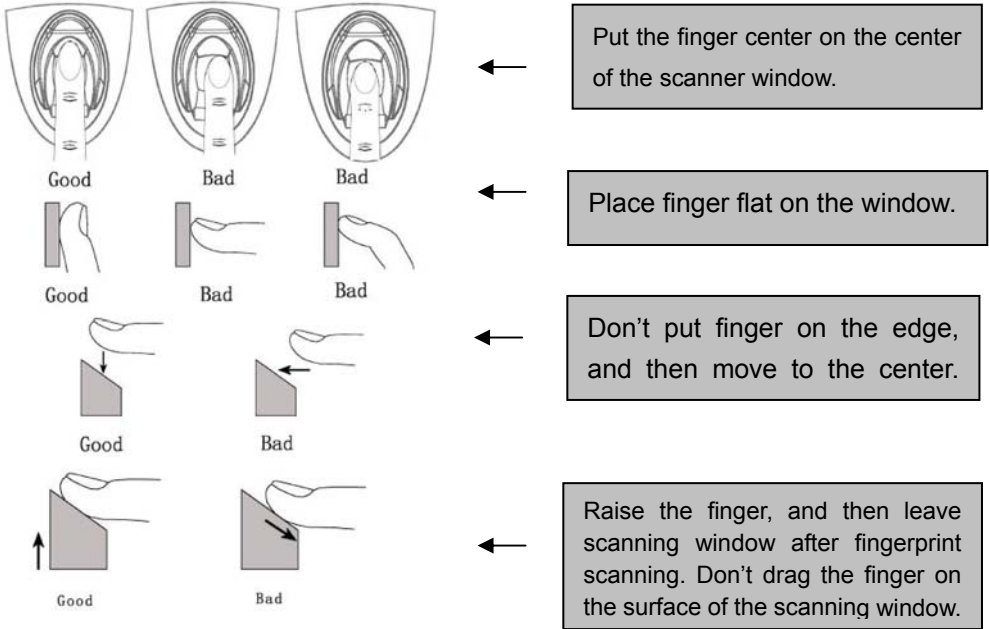
3. A diagram for door holes



IV. Preparation before Setup

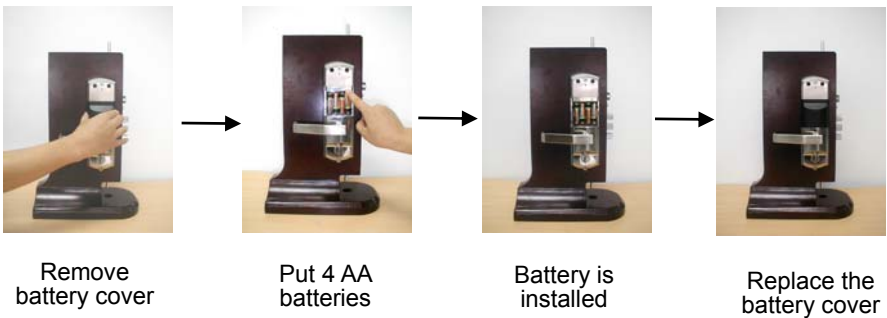
1. How to get good fingerprint

Generally, the center of the vortex of the fingerprint pattern is the key data point; ideally, it is placed in the center of the small glass window in a consistent way. Your finger should be flat, motionless and held with firm pressure in the same way each time. A very firm pressure when placing a finger gives the best image, but the finger must not move during scanning. Please refer to the flowing figures for correctly scanning fingerprint.



2. Battery installation

Pull battery cover out, put 4 AA batteries with the correct polarity. Then replace the battery cover tightly.



Note: When the batteries are low, the red light of the outside unit twinkles 6 times and lock makes beeping sounds to alert users to change batteries. When the system is in low battery condition, it can still lock or unlock the door until the batteries are used up. However, the system can not operate registering or deleting function. Please change battery as soon as possible.

V. Setup and Operation

The system provides two management levels: 2 Administrators and 13 general users (the capacity of the system is 15 users in total, but the system can store 2 fingerprints for each user).

Following table indicates the authority for two levels users:

Authority/name	Manager	User of user-level
Register/delete administrator fingerprint	√	
Register/delete user fingerprint	√	
Lock/unlock the door	√	√

A. Registering Fingerprint



①

Slide up the scanning window cover before operating. There is no fingerprint in the lock from manufactory.



②

Press **Power** button and then the door will unlock automatically.

1. Registering Administrator Fingerprint



①

Press **Power** button.



②

Press the **Save** button and hold it for 3 seconds. After hearing a beep and the red light is on, the system enters into registering state.



③

Administrator places his finger on scanning window center, until red light goes off. When you hear a short beep, remove the finger and reposition his finger quickly for a second scan.



④

After you see the blue light and hear 2 beeps, the fingerprint is saved successfully. If you hear 3 beeps, the second scan was not accepted and you need to repeat the two scans again.

Note: The lock maximizes both security and battery life by automatically powering off if no action is taken for 3 seconds in operation, which the user will hear as a motor noise inside the lock. During the fingerprint registration and other programming functions, the time out function requires you to move quickly in the programming sequence. Delaying too long will mean you must start over in the sequence.

On the first two registrations, there is no need to assign management levels as they will be assigned Administrators automatically. After each Administrator fingerprint was saved successfully, the system will be forced to turn off the power. When Administrator turns on the power, the system will ask for a successful verification of Administrator fingerprint, in order to access registering or deleting operation.

Procedure for Verify Administrator Fingerprint



①

Press **Power** button to power on the system.



②

When the red light is on, place finger firmly on the scanner window exactly as you did during registration and wait.



③

When you see the blue light and hear 2 beeps, the door is unlocked to indicate that your fingerprint is saved successfully. When you see red light, fingerprint is not saved correctly or misplaced.



④

After the Administrator fingerprint is recognized, the system enters into the operational state. If no action is taken in 6 seconds, the system will power off automatically.

2. Registering User Fingerprint

Note: An Administrator must first gain access to the lock with his fingerprint.



①

Press **Power** button to power on the system.



②

Administrator places finger firmly on the scanner window.



③

After you see blue light, and hear 2 beeps, the door will unlock for about 10 seconds



④

After you have ten seconds to proceed, press **Save** button for 2 seconds. You will hear a beep and see the red light, and then the system enters into the operational state.



⑤

After hearing a beep, user places his chosen finger on the scan window for first scan, until the red light goes off. When you hear a short beep and the red light is on, remove and reposition your finger quickly for a second scan. After you see the blue light and hear 3 beeps, the user's fingerprint is saved successfully.



⑥

Before the system times out, firmly press **Save** button and hold for 3 seconds, and see red light blinks, the system enters into the operational states again.



⑦

Others can be saved by repeating step 5 or follow the procedure at 1-5. After the memory is full, you will hear 3 beeps.

Suggestion: After the user fingerprint is saved, verify the fingerprint first. Follow the “Procedure for Verifying Administrator Fingerprint”. If the fingerprint is recognized, then continue to register other user fingerprint.

B. Deleting Fingerprint

1. Deleting individual fingerprints

Note: An Administrator must first gain access to the lock with his fingerprint.



①

Press **Power** button to power on the system.



②

An Administrator places his finger firmly on the scanner window.



③

After you see blue light and hear 2 beeps, the door will unlock for about 10 seconds



④

Press the **Delete** button firmly.



⑤

Until you hear 2 beeps and see the blue light, release the button, the last saved user fingerprint is deleted.



⑥

Others can be deleted by repeating the procedure 4-5.



⑦

After hearing 3 beeps, all of user fingerprints have been deleted.

2. Mass Delete User Fingerprints.



①

Press **Power** button to power on the system.



②

An Administrator places his finger firmly on the scanner window.



③

After you see the blue light and hear 2 beeps, the door will unlock and remain active for about 10 seconds.



④

Press **Save** and **Delete** buttons simultaneously for about 3 seconds, until you hear 2 beeps. That means all users been deleted.

3. Deleting the Administrator Fingerprint (Special Start up Delete)



If only one or two Administrators have been registered and no other Users, both Administrator can be deleted by simply pressing and holding **Power** and **Delete** buttons until you hear 2 beeps and see blue light blinks twice. This returns the lock to its start up condition and is for the convenience of first time users during the training period.

VI. Open the Door

Open from Outside:



①

Slide up cover.
Press **Power**
button to power
on the system.



②

When the red light is on, user
places finger firmly on the
scanner window exactly as
you did during registration.
After you hear 2 beeps and
see the blue light, the door is
unlocked.

Open from inside:



Turn inside unit
latch, the door is
unlocked.

(Note: Under unexpected situation, if the fingerprint lock cannot be

unlocked, please adopt emergency mode.

VII. Lock the Door

The door will automatically lock, after the door is closed.

VIII. No Disturb Function

Using no disturb function disables entry from the outside.

□



□

Turn indoor opener away from the door hinge, the indoor locking deadbolt is out. The lock is in no disturb status.

Two ways to return the system back to normal operation.

①



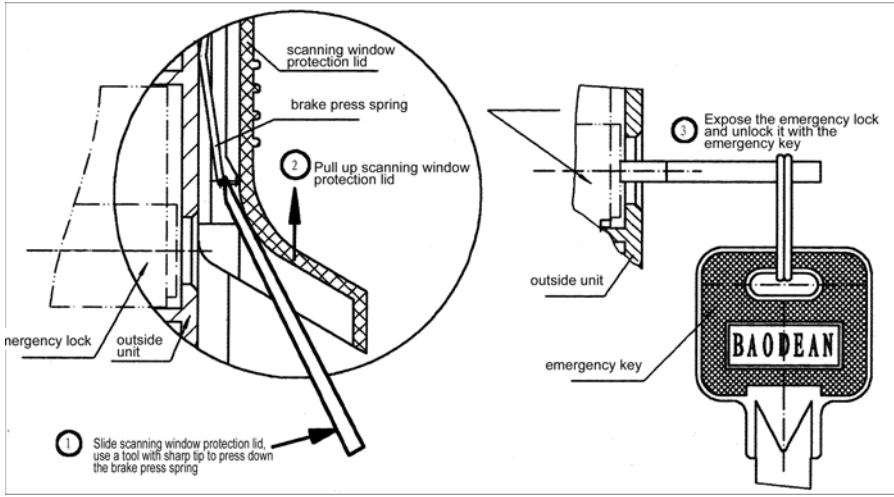
②



Turn indoor opener toward the door hinge, the indoor locking deadbolt goes in. The system returns to normal operation.

Turn inside unit level, the indoor locking deadbolt goes in. The system returns to normal operation.

IX. Unlocking with Emergency Key



X. Maintenance

- Please keep the scanning window clean. If there is stain or fingerprint trace on the scanning window, please wipe it clean gently.
- Please protect the scanning window from injury and damage caused by sharp and hard materials.
- After the system alerts for low battery, please change the batteries immediately.

XI. Specifications

Fingerprint Management Unit	
1. Size of fingerprint scanning window:	1/2" x 5/8"
2. Fingerprint capture type	Pressure sensor
3. Scanning time:	<1 second
4. Fingerprint recognition and match time:	<0.2 seconds/each
5. Log-in fingerprint input times:	2 times
6. False Accept Rate (FAR):	< 0.0001%
7. False Reject Rate (FRR):	< 2 %
8. Translation tolerance:	< ±3mm
9. Rotation tolerance:	< ±15°
10. User Capacity:	15 persons, 30 fingerprints
11. System power supply:	4 AA batteries
12. Battery life-span:	To support over 6000 times of operation
13. Working environment temperature:	-10°C—55°C (Normal temperature) -30°C—60°C (Wide temperature, custom)
14. Working environment humidity:	-10%--85%
15. Dimensions :	Outside unit: 10" x 3 1/8" x 1/3"
	Inside unit: 10" x 3 1/8" x 1/3"
	Lock tongue: 11" x 1" x 2 1/4"
16. Weight :	10 lbs
17. Suitable door thickness:	1 1/2"—2"