

BSL-0602 Biometric Safe Lock

User's manual



Breakthrough in Biometric Technology



FPC-0601 Biometric Entry Pad

EL-0601 Electronic Swing Bolt Lock

- ①: Fingerprint Reader Window
- **②**: Display Screen
- ③: Digital Pad
- ④: "Reset" Button

SPECIFICATIONS:

- ➤ Fingerprint Sensor : 500 DPI optical sensor
- ➤ Verification Time : <1 second

>Registration Capacity:

30 fingerprints + 30 passwords

- ►FRR : <0.1%
 ►FAR : <0.0001%
- ► Password length : 10-14 digits
- Static current : $< 50\mu A$ (Typical)
- ► Power supply : one standard 9V Alkaline battery
- ► Battery Life Span: About 1 year
- ►Batter Low Voltage: 5.4± 0.2V

Operating Temperature: -10℃ to 65℃

Fingerprint Reader Dimension:

6" (L) X 2-12/16" (W) X 1-11/16" (T) Operating Humidity: 10% - 80%

19. Delete all enrolled fingerprints and passwords

19.1Unlock by the administrator's fingerprint and pass-

word (ID number 01 or 02).

19.2 Do the same steps as 10.2 to 10.4.

20. Display lock info

20.1 Press any key to wake up the lock. 20.2 Push (12*), then press (90*) and hold until 2 beeps sound. The display screen will show $\exists 0$ $\exists n, 00, u9, 20, 02$ and 03, indicating the lock has 30 fingerprint capacity ($\exists 0$, no current fingerprint enrollment ($\exists n$, 00, and the lock version is 9.200203(u9, 20, 02, 03).

Contents

1. Security level classification

Two security levels:

Security level I: the lock can be operated either by by a fingerprint or a password. Factory default setting is security level I;

Security level II: the lock must be operated by a fingerprint and a password. It is a higher security level.

For safety and security reason, when the security level is changed from level I to level II, all fingerprint templates and passwords in the lock will be automatically deleted.

When the security level is changed from level II to level I, all fingerprint templates and passwords in the lock won't be changed and the lock can be operated either by a fingerprint or a password. **dU**, and **D2**. Every 10 seconds passes, the display screen shows **D1**. After 1 minute the display screen shows **5B**, **5B**, ... until **D**. The display screen shows **DP**, and the lock is open.

For example 2:

The time delay is 1 minute. Unlock the lock by the enrolled fingerprint and password (ID No. 03) The blue LED lights up, the display screen shows \Box , $d \Box$, and \Box After 10 seconds the display screen shows \Box , HB, ... until \Box . The display screen shows shows $\Box P$, and the lock is open.

18. Delete an individual fingerprint and password

18.1 Unlock by the administrator's fingerprint and pass-

word (ID number 01 or 02).

18.2 Do the same steps as 9.2 to 9.4.

- 17. Unlock by a fingerprint and a password (Security level II)
- 17.1 If the security level is II, after a fingerprint is verified successfully, the display screen shows the finger ID number followed by P . Enter the password which is bound with the fingerprint. The display screen shows the finger ID number d I , and minutes of Time Delay, and the blue LED lights up. Every 10 seconds, one beep sounds and the display screen shows the remaining minutes of Time Delay, until all minutes of Time Delay has passed. Then the display screen shows $\square \square$, and $\square P$, the lock opens.

For example 1:

The Time Delay is 2 minutes. Unlock the lock by the enrolled fingerprint and password (ID number 03). The green LED lights up, the display screen shows \Box \exists ,

- 2. Enroll the first fingerprint for quick start (Security level I)

2.2 Place your finger with a little pressure on the reader window and hold, while the display screen shows *E*, *E*, *E*, *I*, and *D*, until 2 beeps sound and green LED lights up, indicating the first fingerprint enrollment is successful.
2.3 If display screen shows *E*, the enrollment is not successful. In this case, repeat step 2.2.
2.4 If display screen shows *E*, the fingerprint has already been enrolled.

- 2.5 Use the first enrolled fingerprint to unlock:
 - A. Place the enrolled finger on the reader window and hold in position.
 - B. The reader window lights up red while the display screen shows
 - C. If fingerprint verification is successful, the display screen shows , 2 beeps sound, and the green LED lights up. The lock is open.
 - D. If the display screen blinks with in and the red LED lights up, the fingerprint verification is not successful. Remove the finger and repeat step A.

3. Enroll the second fingerprint (Security level I)

3.1 Unlock the lock by the first enrolled fingerprint.
3.2 When the display screen shows , press , press and hold until the display screen shows .

- a. After the verification is successful, the lock gets into time delay process. When the time delay process completes, the lock will open. If you place an enrolled finger on reader window to unlock again during this process, the time delay period will restart counting.
- b. After the original time delay is changed successfully, the time delay for the first time unlocking the lock by an enrolled fingerprint and password is the same as the original. The new time delay will be effective afterwards.
- c. During the changing process of time delay, any interruption which may be caused by power off or other special reasons will discontinue the process and the lock will keep the original time delay.

passwords (ID number **D 1** and **D 2**) are administrators'. Now you can use them to add or delete additional fingerprints and passwords.

15. Enroll additional fingerprint and set a password

bound with this fingerprint (Security level II)

16. Set time delay

16.1 Unlock the lock by administrator's fingerprint and password. The green LED lights up, the lock is open.

16.2 Do the same steps as 5.2.

Attentions on Time Delay operations 18

3.3 The display screen shows $F = \begin{bmatrix} F & I \end{bmatrix}$, and $\Box Z$
, and 2 beeps sound and green LED lights up, indi-
cating the second fingerprint enrollment is success-
ful.
3.4 If display screen shows $\mathbf{E} \mathbf{D}$, the enrollment is not
successful. In this case, repeat step 3.1.
3.5 If display screen shows E , the fingerprint has
already been enrolled.
3.6 Use the second enrolled fingerprint to unlock: Fol-
low steps in 2.5
Note: The first fingerprint and second fingerprint are adminis-
trator's fingerprints. Now you can use them to add or delete
additional fingerprint and passwords individually.
4. Enroll additional fingerprints (Security level I)
4.1 Unlock the lock by the first or second enrolled fin-
gerprint.
4.2 When the display screen shows $\Box = 1$ or $\Box = 2$,

7

press (1_2) and hold until the display screen shows $F \cap$

4.3 Do the same as outlined on step 3.3.

5. Set time delay

- 5.1 Unlock the lock by administrator's fingerprint. The green LED lights up, the lock is open.
- 5.2 When green LED lights up, push and release immediately, and then the display screen shows and hold until the display screen shows and hold until the display screen shows and hold until the display screen shows and indicating the lock has 0 minute of Time Delay. Push and for to scroll up or down to select time delay you want to set. (Time Delay can be 0 to 99 minutes. 0 indicates that the lock has no time delay.) Press and hold.
 Note: If the fingerprint is verified successfully, the display screen will show the time delay. The lock will open when

13.5 Use the first enrolled fingerprint and password to unlock:

- A. Place the enrolled finger on the reader window and hold in position. Then, the display screen shows the finger ID number followed by P_{-} .
- B. Enter the password which is bound with the fingerprint. The display screen shows the finger ID number again and the lock is open.
- 14. Enroll the second fingerprint and a password bound with this fingerprint (Security level II)
- 14.1 Unlock the lock by the first enrolled fingerprint and bounded password. The display screen shows the finger ID number .
 14.2 Press and hold until the display screen shows En. Do the same as steps 13.2 to 13.4.
 Note: The first and second enrolled fingerprints bound with

30 Un, **00**, **49**, **20**, **02** and **03**, indicating the lock has 30 fingerprints capacity (**30**), no current fingerprint enrollment (**Un**, **00**), and the lock version is 9.200203(**U9**, **20**, **02**, **03**).

- 13.2 Place your finger with a little pressure on the reader window and hold, while the display shows the finger ID number I followed by I.
- 13.3 Enter a desired password (10-14 digits). Press and hold ⁹•• until the display screen shows **P**2.
 Re-enter the password. Press and hold until the display screen shows the ID number.
- 13.4 The password has been successfully set and bound with this new enrolled fingerprint. If the password is not successfully set, this new enrolled fingerprint will be automatically deleted. In this case, repeat steps 13.1-13.3

the time delay completes.

Attentions on Time Delay operations

- a. After the fingerprint's verification is successful, the lock gets into time delay process. When the time delay process completes, the lock will open. If you place an enrolled finger on reader window to unlock again during this process, the time delay period will restart counting.
- b. After the original time delay is changed successfully, the time delay for the first time unlocking the lock by an enrolled fingerprint is the same as the original one. The new time delay will be effective afterwards.
- c. During the changing process of time delay, any interruption which may be caused by power off or other special reasons will discontinue the process and the lock will keep the original time delay.

16

6. Unlock by an enrolled fingerprint with time delay enabled (Security level I)

- 6.1 Place the enrolled finger on the reader window.
- 6.2 If verifying is successful, the green LED lights up.

The display screen shows the enrolled finger ID number, \blacksquare , and minutes of Time Delay, and the green LED lights up. Every 10 seconds passes, one beep sounds and the display screen shows the remaining minutes of Time Delay, until all minutes of Time Delay has passed. Then the display screen shows \blacksquare , and \blacksquare , the lock opens.

For example 1:

The Time Delay is 2 minutes. Unlock the lock by the enrolled fingerprint (ID number 03). The green LED lights up, the display screen shows \Box , $d \Box$, and \Box . Every 10 seconds passes, the display screen shows \Box . After 1 minute the display screen shows

than 1 minute, the display screen shows the seconds left in every 2-second interval. After the counting down finishes, the lock is ready to use.

12. Set security level

- 12.1Unlock by administrator (ID number is 01 or 02).
 Push
 Push
 Push
 Push
 Press
 Press
 Press
 Press
 Push
 Push <
- 13. Enroll the first fingerprint and a password bound with this fingerprint for quick start (Security level II)
- 13.1 Install a 9 V battery. The display screen will show,

10.2 Press and and at the same time and hold until 2 beeps sound and display screen shows
10.3 Press and hold until 2 beeps sound and the display screen shows the ID numbers being deleted one by one.

10.4 Wait until the display screen shows **A** again. The deletion is now completed.

11. Wrong try penalty

- 11.1 Four consecutive invalid passwords entries starts 4 minute delay period, which means the lock will be shut down and no operation is permitted.
- 11.2 At the beginning of the delay period, the display screen first shows **EP**, and then the counting down time.
- 11.3 When the remaining time is over 1 minute, the display screen shows the minutes left in every 10second interval. When the remaining time is less 14

58, **56**, ... until **D**. The display screen shows **B**, and the lock is open.

For example 2:

7. Set passwords (codes) by enrolled fingerprints

- 7.1 Unlock with the first or second fingerprint (ID number 01 or 02)
 7.2 Press and hold until the display screen shows
- 7.3 Place the enrolled finger, which you want to set a password for, on the reader window.

- 7.4 If fingerprint verification is successful, the display screen shows the finger ID number followed by
- 7.5 Enter a desired password (10-14 digits).
 7.6 Press and hold until the display screen shows
 P 2
- 7.7 Re-enter the password. Press **9** and hold until the display screen shows the ID number.
- 7.8 This password has been set.

8. Use passwords (codes) to unlock (Security level I)

- 8.1 Press any key to wake up the lock.
- 8.2 Enter a correct password. The display screen shows the ID number, and minutes of Time Delay. When the display screen shows and and and a P , the lock opens.
- 9. Delete an individual fingerprint and password

9.1 Unlock by the administrator's fingerprint or password (ID number 01 or 02). 9.2 Press 678 and hold until 2 beeps sound and display screen shows $\mathbf{d}\mathbf{E}$ followed by an enrolled ID number except the ID number used for unlocking. 9.3 Push 345 or 675 to scroll up or down the ID number) and select the ID number you want to delete. 9.4 Press **9**.* and hold until 2 beeps sound and the display screen shows the deleted ID number followed by *dE*, indicating the individual fingerprint and password are deleted.

10. Delete all enrolled fingerprints and passwords

10.1Unlock by the administrator's fingerprint or pass-

word (ID number 01 or 02).