

# **ES18B Operation Instructions**

High Security Electronic Lock, Model ES18B electronic lock system composed of the Model ESK18B keypad and Model ESL18B lock.

The ES18B is also identified as FK1 and is referred to FK1 in this document.

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## 1.0 Installation

#### 1.1 Lock and Keypad Installation

Carefully tuck the excess lock cable into the cavity on the back of the Keypad and install the Keypad on the shoulder bolts.



Be careful not to crimp or damage the lock cable upon Keypad installation.

Included within your installation kit are shoulder bolts and lock mounting bolts. Install the shoulder bolts on the safe door in the pre-drilled holes above and below the spindle hole.

Now insert the lock cable (attached to the Keypad) through the spindle hole.

On the backside of the safe door you will see the lock mounting plate and the pre-drilled lock mounting holes. Connect the lock cable to the lock body and position the lock body appropriately on the lock mounting plate.



Ensure that the lock cable is positioned so that it lies in the channel on the back of the lock. This channel is provided to protect the lock cable from damage or crimping during installation.

Using the provided lock bolts, secure the lock body to the mounting plate.



#### 1.2 Installing/Removing the Battery

Connect the battery terminal clip to the 9V battery (it is required to use standard alkaline batteries).



Position the battery so that the terminals are in the upward position and push the battery into the battery compartment.



**Removing the Battery** 





Pinch your fingers as shown

Pull gently as indicated by the arrow

#### 1.3 Code Length

FK1 allows you to enter the password length of 6 to 8 digits.

Note: Because FK1 has 32 users, it is recommended to use 8-digit password. After entering the password, Press "Menu/OK" key to save or unlock. It applies to all security lock operators ID01 to ID32, which meets the requirement of 1 million unique UL password code.



## 2.0 Manager Code ID01 and ID02

## 2.1 Opening the Lock and Accessing Menu

The safe lock system has default code installed as follows: Manager Code (ID01) 123456

**STEP 1:** When the screen is off, Pressing the up and down select and return keys is invalid.

**STEP 2:** Enter the 6-8 digit code and Press "Menu/ OK" key and the Lock will open. The display will read:



The lock will relock after 3.5 seconds.

Note 1: Time to relock is hard coded and cannot be changed. During unlocking period 2, the following will be displayed:



At this point, use the up and down keys to browse the menu, Press "Menu/OK" key into the following 2.2 ~ 2.13 permissions.

Note 2: When the cable is not connected with the lock body, the following will be displayed:



The LCD will display "invalid code" when the input password is wrong, then return to the standby state after 2 seconds. When the wrong password is input more than 4 times, the system locks for 4 minutes and display will flash every 15 seconds. Countdown starts and the following will be displayed:

ES18B	9.	OV	0000
Lo	cke	ed	
01	:4	5	

#### 2.2 Encryption Key Set

The FK1 sends and receives data to the lock in an encrypted form. This is a security measure to ensure that all data is protected. The Encryption Key is set during the manufacturing process with a default encryption key value. This value can be changed using the Encryption Key Set menu selection.

Note: If the Encryption Key is changed from the default setting, this value must be maintained, as it is a vital element to communicate with the lock inside the safe.

ES18B	9.	OV	
Se	leo	et	
M	enι	1	

STEP 1: Enter a valid code

**STEP 2:** Using the ▲ or ▼ scroll to the "Encryption Key Set" and Press "Menu/OK."

ES18B	9.	0V	
Encr	yp	tio	n
Ke	y S	Set	

**STEP 3:** Display will read "Enter Code." Enter existing Encryption Key (60612000). Press "Menu/OK."





**STEP 4:** Display will read "New Code." Enter new Encryption Key value.



**STEP 5:** Display will read "Repeat." Repeat new Encryption Key value, Press "Menu/OK."



STEP 6: Display will read "Code Saved."

#### 2.3 System Info

(View the system information)

STEP 1: Enter a valid code

**STEP 2:** Using the ▲ or ▼ scroll to the "System info" and Press "Menu/OK"; the screen will display Information about the system, the following will be displayed:



#### 2.4 Change Code

STEP 1: Enter a valid code.

**STEP 2:** Using the ▲ or ▼ scroll to the "change code" and Press "Menu/OK."



**STEP 3:** The display will show the message "Set code of ID XX" (current user #) to be changed.



STEP 4: Enter the new 6-8 digit code and Press "Menu/OK."



STEP 5: Repeat the new code and Press "Menu/OK."

ES18B 9.0V IIII Repeat

The New Code has now been saved and is available for use.

#### 2.5 Enrolling New Users

**STEP 1:** Enter a valid code

**STEP 2:** Using the ▲ or ▼ scroll to the "Enroll New User" and Press "Menu/OK."



**STEP 3:** The next available ID position is displayed. To select this ID, Press "Menu/OK"; or to select a different ID position, Press ▲ or ▼ to the desired ID and Press "Menu/OK."

ES18B 9.0V	ES18B 9.0V
Select ID	Set Code
ID:03	of ID 03

STEP 4: Now enter a 6-8 digit code and Press "Menu/OK."

ES18B 9.0V ..... New Code

STEP 5: Repeat new code and Press "Menu/OK."





STEP 6: System will verify that code has been saved

ES18B 9.0V	ES18B 9. 0V 🎹
ID:03	ID:03
Code Saved	Enrolled

The new code is now enrolled and available to be used to open the lock.

If the code entered twice is not the same, the LCD will display "Code Mismatch" and return to the "New Code" interface after two seconds to re-register the user.

If the registered user password has been registered before, the LCD will display "Code is Similar" and return to the "New Code" interface after two seconds to re-register the user.

#### 2.6 Delete One User

STEP 1: Enter a valid code

**STEP 2:** Using the ▲ or ▼ scroll to the "Delete One User" and Press "Menu/OK."



STEP 3: Press "Menu/OK."

**STEP 4:** The system will ask which User Code is to be deleted, Press  $\blacktriangle$  or  $\blacktriangledown$  until the desired USER ID is reached.



**STEP 5:** Press "Menu/OK." This User Code is now deleted from the system.

ES18B	9.	OV	0000>
User	Ι	D:C	)4
Del	et	ed	

#### 2.7 Disable User Code

This feature would be used in order to disable a user code as opposed to deleting it. Disable/Enable user codes options may be when a user's access rights are temporarily revoked (i.e. the user may be on vacation or otherwise away from the business). After the code has been disabled, it can be re-enabled at a later time, following the same process by selecting "Enable User."

STEP 1: Enter a valid code.

**STEP 2:** Scroll ▲ or ▼ to the menu selection "Disable User" and Press "Menu/OK."

ES18B	9.	0V	
Dis	sab	le	
U	se	r	

**STEP 3:** The system will ask which User to disable. Scroll ▲ or ▼ to the desired USER ID and Press OK.

ES18B 9. 0V DIP ID:03User Disable?

STEP 4: The system will verify the User has been disabled.

ES18B	9.	0V	
ID:C	)3U	se	r
Dis	ab	lec	1

#### 2.8 Enable User Code

STEP 1: Enter a valid code.

**STEP 2:** Scroll ▲ or ▼ to the menu selection "Enable User" and Press "Menu/OK."

ES18B	9.	0V	
En	ab	le	
U	sei	r	

**STEP 3:** The system will ask which User to enable. Scroll ▲ or ▼ to the desired USER ID and Press "Menu/OK."

ES18B	9.	OV	
ID:C	)3U	se	r
Ena	ab1	.e?	

**STEP 4:** The system will verify the User has been enabled



#### 2.9 Enable/Disable Dual Mode

STEP 1: Enter a valid code.

**STEP 2:** Scroll ▲ or ▼ to the menu selection "Enable Dual Mode" or "Disable Dual Mode" and Press "Menu/OK."



Dual Mode has now been enabled. Two valid codes will be required to open the safe lock system. Open lock by two Users within 60 seconds.

Note: Enable/Disable Dual Mode - When Enable Mode is enabled this Menu Selection will change to "Disable Dual Mode." Therefore, to Disable mode, follow the same process but select "Disable Dual Mode."

#### 2.10 Delete All General Users

This feature is used to delete all general users from the system. Upton executing this command, all general users (Users 03-32) will be deleted.

STEP 1: Enter a valid code.

**STEP 2:** Scroll ▲ or ▼ to the menu selection "Delete All Users" and Press "Menu/OK."



**STEP 3:** The system will request a confirmation. Press "Menu/OK."



The system will verify that all General User Code have been deleted.



#### 2.11 Show/Hide Code

This feature would be used in order to hide the code as it is entered on the LCD screen.

In normal operation, as the user enters the code, the digit of the code pressed is visible on the LCD until the next digit is entered. The subsequent digit turns to an "\*".

With the Hide Code Entry feature, every digit that is entered is displayed as an "\*" immediately upon entry, so that your code is always obscured from view on the LCD.

To hide Code Entry, follow this procedure:

STEP 1: Enter a valid code

**STEP 2:** Scroll ▲ or ▼ to the menu selection "Hide Code" and Press "Menu/OK."



All digit entries will now be display as "\*" immediately upon entry.

To revert from this mode, follow the same process but select "Show Code."



#### 2.12 Set/Cancel Time Delay

Time Delay is a feature used to deter burglary, provided a prospective burglar has knowledge that a Time Delay safe is in use, the likelihood of burglary is greatly reduced.

Time Delay is a feature that requires the User to enter his/ her code, wait a prescribed period of time, and then re-enter a valid code to unlock the safe lock.

STEP 1: Enter a valid code

**STEP 2:** Scroll ▲ or ▼ to the menu selection "Set/Cancel Time Delay" and Press "Menu/OK."

ES18B 9.0V Set/Cancel Time Delay



**STEP 3:** Press the ▲ or ▼ to adjust the Time Delay value (0-99 minutes). Press "Menu/OK."



**STEP 4:** The system will now display the Time Window. This is the preset length of time allowed to enter a valid code after Time Delay has expired. Press the  $\blacktriangle$  or  $\checkmark$  to select the time window value (0-15 minutes) desired.



STEP 5: Press "Menu/OK."

#### 2.13 Pair locks

After a new lock or keypad is connected, the "Pair Locks" operation must be completed to link them together.

STEP 1: Enter a valid code

**STEP 2:** Scroll ▲ or ▼ to the menu selection "Pair Locks."



STEP 3: LCD display "Pair Locks?"



#### STEP 4: Press "Menu/OK." LCD display:

ES18B	9.	0V	
Lo	ock	S	
Pa	ir	ed	

Pair lock is success.

Note:

1. When installing a new keypad on an existing lock, use a default manager code (unless the keypad had a new code programmed) to conduct the "Pair Lock" operation. Once the keypad and lock are paired, the codes are reverted to the codes that existed on the lock before the keypad was replaced.

2. When installing a new lock on an existing keypad, use an existing manager code that was used on the safe to conduct the "Pair Lock" operation. Once the keypad and lock are paired, the codes are reverted to the saved codes in the lock.



## 3.0 General User (ID03-ID32)

#### 3.1 Opening the Lock

**STEP 1:** When the screen is off, Pressing the up and down select and return keys is invalid.

**STEP 2:** Enter the 6-8 digit code and Press "Menu/OK" key and the Lock will open. The display will read:



The lock will relock after 3.5 seconds.

Note: Time to relock is hard coded and cannot be changed.

#### 3.2 System Info

(View the system information)

STEP 1: Enter a valid code.

**STEP 2:** Using the ▲ or ▼ scroll to the "System info" and Press "Menu/OK."



The screen will display Information about the system, including the model number of the FK1 Keypad.

#### 3.3 Change Code

STEP 1: Enter a valid code

**STEP 2:** Using the ▲ or ▼ scroll to the "change code" and Press "Menu/OK."

ES18B	9.	OV	0000>				
Change							
Code							

**STEP 3:** The display will show this message on the display "Set code of ID XX" to be changed.

ES18B	9.	OV	
Set	С	ode	)
of	ID	03	}

**STEP 4:** Enter the new 6-8 digit code.

ES18B	9.	OV	
New	C	ode	<b>;</b>

STEP 5: Repeat the new code and Press "Menu/OK".



The New Code has now been saved and is available for use.



### 4.0 Menus

There is one menu on the FK1.

The sub-menu is accessible by entering a valid code. The menu selections in the menu change depending upon the level of the code entered, Manager codes (ID01 and ID02) have access to the programming menus. General user code has limited menu selections.

#### 4.1 Manager Code Menu (ID01 and ID02)

- Select Menu
- · Encryption Key Set
- System Info (view the system information)
- Change Code
- Enroll New User
- Delete One User
- Enable User
- Disable User
- Enable/Disable Dual Mode
- Delete ALL User
- Show/Hide Code
- · Set/Cancel Time Delay
- Pair Locks (paired the lock)

#### 4.2 General User Code Menu

- Select Menu
- System Info (view the system information)
- Change Code

The ES18B is also identified as FK1 and is referred to FK1 in this document.