



Fingerprint Safe

— *POLYSECU-FS2000*



After-sales Service

0592-5310833

Warranty Period: One Year (from the date of purchase)

【 Preface 】

Dear users, thank you very much for selecting our product! Our product has adopted state-of-the-art technologies: ---Fingerprint recognition technology, computer communication technology and micro-electronics technology.

It is the product of electronics, optics and computer communication technologies.

Before using the product, please read this user's manual carefully, understand all the relevant functions, master the basics of debugging, maintenance, application and administration, so as to ensure the proper usage.

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◆ Product Introduction

◆ Basic Features

- Easy-to-Use: To unlock with your finger only;
- Fingerprint Lock: No need for keys or passwords, which is more secure;
- One-to-Many Verification Mode: Fast capturing (0.5-1.0 second), small size and low cost;
- Memory up to 30 fingerprints
- Unrivaled high-tech and low-price product;
- To be supported with high performance AA batteries, automatic buzzing alarm at low battery, and guarantees several uses after low battery alarm;
- The bolts of steel door are driven by a highly-reliable, durable and energy-efficient micro motor;
- The body and door of safe are to be made of high-quality carbonized steel;
- The system has adopted micro power waste and energy-efficient technology, which hibernates automatically when idle.

◆ Must Read before Use

- Copy rights reserved, no unauthorized duplication is permitted;
- Damages result from deliberate sabotage or improper use are not subject to compensation.

◆ Product Warranty

- User service and support center;
- On-line technical support;
- One-year repair & maintenance service and renew within six months;
- The warranty period starts from the date of purchase.

◆ Installation of Batteries

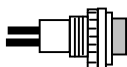
- Open the battery cover to install the batteries;
- 4 1.5V high performance AA batteries, the electrodes of battery should be in strict accordance with the marks;
- When the batteries are low, there will be eight consecutive buzzing sounds to prompt the change of batteries;
- Guaranteed several uses after the low battery alarm, but the batteries should be changed as soon as possible.

◆ Parts Names and Functions

■ Inner Side of the Door

Battery Box: Open the cover to change the batteries;

Green button for registration, and red button for deletion;



■ **Outer Side of the Door (As illustrated in the following figure)**

Red LED: Unsuccessful user operation;

Green LED: Successful user operation or the fingerprint lock is on the “Open” status;

Fingerprint scanner prism: To capture and verify fingerprints;

Outer side handle: The user can pull open the door after the fingerprint has been verified;


Start Button

Emergency Power Supply Socket, POLYSECU mark plate;

Emergency Key Hole



◆ System Setup

 **Fingerprint Registration (Unlock the safe door before registration, then lock it after the door is opened)**

 **A fingerprint should be captured twice**

1. Start the Registration Program: Press down the GREEN registration button and hold it, then press the start button, the green LED indicates that the system is ready for fingerprint registration;
2. Fingerprint Registration: After one buzzing sound, and the red LED on, fingerprint scanner light is on, place one of your fingers on the prism (Please refer to the Precautions of Fingerprint Capturing on P12), take your finger away after the red LED is off, and the following three blinks of green LED indicate the first successful capturing of fingerprint;
3. Fingerprint Verification: After two more buzzing sounds, and the red LED on, fingerprint scanner light is on again, place the same finger on the prism again, take away your finger away after the red LED is off, the blinking of green LED indicates the successful verification of fingerprints. The green LED will be off after a long buzzing sound, and the system returns to hibernation.
4. The blinking of red LED and four buzzing sounds indicate the failure of registration. Please repeat the above steps for registration.

✧ **Important Notice: Take away your finger after first successful capturing, and press your finger on the prism again for second once. That means for successful registration, the two places of fingerprint capturing should not be the same.**

✂ **Delete Fingerprints of All Users(Unlock the safe door before deletion, then lock the bolts after the door is opened)**

1. Press down the red delete button, and press the start button, the red LED indicates that the system is ready for fingerprint deletion;
2. After one buzzing sound, the red LED will blink three times in a few seconds, and the following long buzzing sound indicates the successful deletion of all fingerprints.

ⓘ Note: this operation will delete under all circumstances all fingerprints stored in the memory, so please be prudent to use this function.

ⓘ Precautions of System Setup

- If there is no registered fingerprint, the door can be opened by pressing start button only. So the system should be set up in a timely manner to prevent the existence of any insecurity.
- Please make sure that all the operation buttons have been reset after the system setup is completed.
- Please test the system after fingerprint registration, so as to ensure the correct setup.
- Take out the battery and plug in outer backup power supply, test

the system with fingerprint so as to verify the effectiveness of outer power supply.

Operation of the Safe

Open the Door

1. Press the start button, wait for one buzzing sound and the red scanner light on.
2. Promptly press the registered finger on the fingerprint scanner prism, and take the finger away after the red scanner light turns off;
3. If the fingerprint matches, the micro motor will drive the bolts open. The red and green LEDs will both be on, and the scanner light will be off after a buzzing sound, then pull the handle to open the door.


Close the Door

After closing the door, press the start button, the red and green LEDs will both be on, and the motor will drive back the safe bolts, and a buzzing sound indicates the door has been locked.

① Precautions of System Operation

- If the fingerprint verification fails, the red LED is on and there are four buzzing sounds. Please check whether the fingerprint has been registered or whether the finger has pressed correctly on the prism, then try again.
- After the system is started, if there are eight consecutive buzzing sounds, the batteries are low and should be changed as soon as possible.
- If the door is not closed within 30 seconds after it is opened, there will be an alarming buzzing sound at every 5 seconds interval.

⚡ Disposal of Emergencies

If the inner power supply fails, please plug 6V outer power supply into the outer power supply socket , and verify the  fingerprint to unlock.

◆ System Maintenance and Trouble Shooting

A. System Maintenance

Daily maintenance of the lock will help to prolong its life cycle, reduce the failure rate, and improve the reliability. Hereinafter are some maintenance tips for your reference:

- 1) Please change the batteries immediately after the system has given low battery alarm.
- 2) Please use the high-performance alkaline batteries.
- 3) When changing the batteries, please make sure that the electrodes of battery are in strict accordance with the marks, and avoid the circumstances of short circuit, grounding or wrong electrode group.

B. Trouble Shooting

Improper use or operation will cause failures that may adversely influence the normal use of lock. The following is a table of common failures and corresponding solutions for your reference.

No	Trouble	Root Cause	Solution
1	Do not lock	1. Low battery 2. Micromotor damaged 3. Electronics damaged	Change the batteries Repair the motor Repair or renew the electric parts
2	While unlocking, the fingerprint scanner light keeps “ON”, with buzzing sound	1. Low battery 2. Bad contacts of the plug-in parts 3. Electric parts damaged	Change the batteries Check the plug-in parts Repair the electric parts
3	System keeps restarting	The start button is not reset	Press the start button to reset it
4	No response when pressing the start button	1. No battery 2. Electric parts damaged	Unlock with the key and change the batteries Repair the electric parts
5	Sometimes the fingerprint does not work	The fingerprint is not clear enough for easy verification	Register another fingerprint
6	Cannot delete the fingerprint memory	1. Low battery 2. Error in the fingerprint registration and administration 3. Electric parts damaged	Change the batteries Try again Repair the electric parts
7	Unsuccessful fingerprint registration	1. Low battery 2. Bad contact of the setup button 3. Wrong placement of finger	Change the batteries Check the electric parts, verify the administration fingerprint, and place the finger correctly
8	Cannot verify the fingerprint	1. Low battery 2. Batteries worn out	Change the batteries

◆ Appendix

Technical Specifications (subject to change without notice)

Item	Content
Registration Memory	30 fingerprints
FRR (False Rejection Rate)	0.01%
FAR (False Acceptance Rate)	0.0001%
Response Time	0.5-1 second
Lock Control Mode	Electric Micromotor
Dynamic Power Consumption	60mA—190mA
Static Power Consumption	<30UA
ESD Voltage Resistance	>15000V
Battery Life	2000 operations
Power Supply	6V battery
Material	High-quality carbonized steel
Working Temperature	-10 ~50
Working Humidity	20%--80%

Precautions of Fingerprint Capturing

1 . Selection of Finger

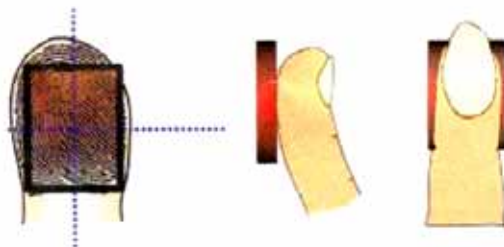
- Please select the finger with clear fingerprint and without tearing or peeling-off skin for registration
- Under normal circumstances, it is better to use forefinger, thumb or middle finger for registration.
- If the fingers are all of poor fingerprints, please try all ten fingers and select the best suitable finger for registration.

2 . Registration of Fingerprint

- Please press the finger on the central part of the scanner prism;
- Press the finger on the prism as if you are pressing the doorbell button;
- The finger should be moderately humid, breathe upon the finger if it is dry.
- Wet or sweating finger will cause the loss of fingerprint information, so please dry the finger under such circumstances;
- If the surface of fingerprint scanner prism is stained, it cannot read the fingerprint information correctly. So the surface of prism should be cleaned regularly to ensure the top-performance.
- Dirty finger will cause problems in capturing the fingerprint. So please keep the finger clean while doing the registration.
- While registering the fingerprint, press the finger on the prism as soon as the scanner light turns on; take away the finger after the light is off.

3. Correct Method to Press the Finger

* Correct Method



* Incorrect Method



- When pressing on the finger, it should be on the central part of prism, and press as if you are pressing the doorbell button.
- The finger should be moderately humid. Wet or sweating finger will cause the loss of fingerprint information, so please dry the finger under such circumstances; and breathe upon the finger if it is dry.

Fingerprint Registration Form

No.	Name	Fingerprints
		Left : Thumb Forefinger Middle Finger Third Finger Little Finger Right : Thumb Forefinger Middle Finger Third Finger Little Finger
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