F1 Fingerprint Access Control User Manual

1. Introduction

F1 is a metal shell standalone fingerprint access control, using the America Atmel's MCU, with precise electron circuit and good productive technology.
This unit apply world advanced fingerprint identification technology, safe and reliable, which is an ideal choice for occasions demand high security, wildly used in business affairs organization, office, factory, housing district etc.
Its programming is done by the infrared remote control or master fingerprint. It can store 1,000 fingerprints, includes 2 master fingerprints, 998 user fingerprints, and each fingerprint has one ID number.

2. Functions

2.1 Sleeping function
High environmental awareness energy-saving control system, with auto sleeping and waking up function, and the sleeping power consumption is less than 0.20W.

2.2 Master fingerprints operation function
This device can add/delete users' fingerprints by master fingerprints quickly and easily.

2.3 Lock driving function
With NC, NO and COM, the control time is 0~99s (0s is 50ms actually)

2.4 Anti-tamper alarm function
When the unit is disassembled illegally, the buzzer will sound a consecutive alarm, and it will remove automatically after 1 min.

2. Intramural Interface Circuit

The unit has a built-in relay, the NO, COM and NC wires are isolated from the inner electro circuit. The contactor's current is 2A, showed as diagram 1.

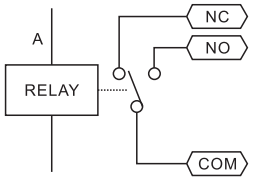


Diagram1 relay output interface

4. Installation, Wiring and Fix

4.1 Installation

1. Remove the back cover using the supplied security driver
2. Drill 4 holes on the wall and fix the back cover
3. Thread the wires through the wire hole
4. Attach the front cover to the back cover, same as diagram 2

Notice: please check wiring again after it finished, then power on.

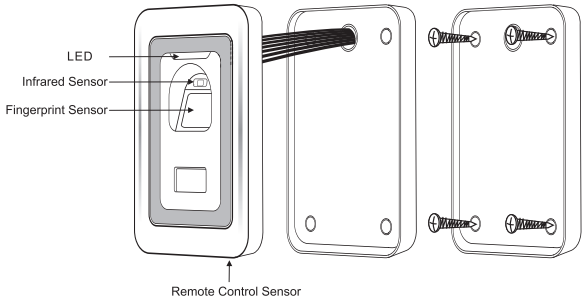


Diagram 2 Installation Diagram

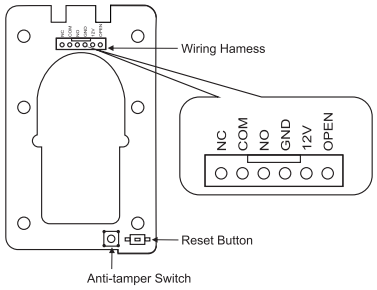


Diagram3 Circuit Board

10 Sounds and Lights

Operation Status	Indicator Light Color	Finger Sensor Light	Buzzer Description	Buzzer
Power On	Slow Shine in Red	Bright	Long Ring	Di -
Sleeping	Slow Shine in Red	Goes Out		
Voided Key			Short Ring	Di
Enter Programming	Red	Goes Out	Long Ring	Di -
Programming	Orange			
Input Fingerprint successful	Green		Long ring	Di ---
Input Fingerprint Failed			3 short Rings	Di Di Di
Unlock the Door	Green	Goes out	Long Ring	Di -
Alarm	Quick Shine in Red	Bright	Continuous Long Ring	Di—·····

11 Packing List

Name	Model	Qty	Remark
Fingerprint Access control	F1	1	
Infrared Remote Control		1	
User Manual	F1	1	
Screw Driver		1	Special Screw tool
Diode	IN4004	1	
Self Tapping Screws	Φ4mm×25mm	4	Fix and installation
Rubber Bungs	Φ6mm×25mm	4	Fix and installation

8. To unlock the door

Under stand by state, press user fingerprint , correct fingerprint, door will open.

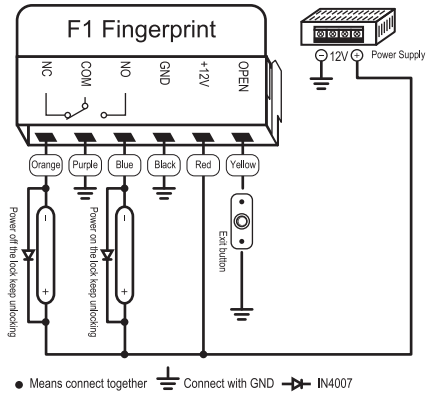
9. Technical Specification

Article	Data
Input Voltage	DC 12V±10%
Sleeping Current	≤20mA
Idle Current	≤80mA
Door Relay Contact Load	2A
Operating Temperature	-20℃-50℃
Operating Humidity	20%RH-95%RH
Fingerprint Capacity	1000
Resolution	450 DPI
Fingerprint Input Time	<1S
Identification Time	<1S
FAR	<0.0000256%
FRR	<0.0198%
Structure	Zinc Alloy
Dimension	115mm×70mm×35mm
Weight	500g

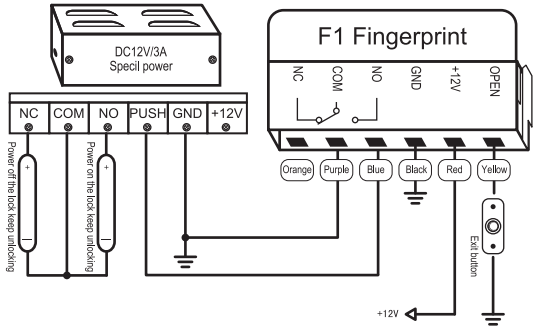
4.2 Wiring Defintion

OPEN	Yellow	Exit Button
+12V	Red	+12V power input
GND	Black	GND
NO	Blue	Relay output NO
COM	Purple	Relay output COM
NC	Orange	Relay output NC

4.3 Diagram



DC12V Common Power Standalone for Singer Door Mode Diagram



● Means connect together Connect with GND IN4007

DC12V Specail Power Standalone for Single Door Mode Diagram

5. Reset to Factory Default

To reset to factory default, power off, press “RESET” button on the PCB, hold it and power on, release it until hear three short beeps, means to reset to factory default successfully.
Remark: Reset to factory default, the users' fingerprints enrolled is still retained.

6. Programming Guide

6.1 To Enter the programming mode
press [*] [master code] [#] 9999 is the factory default master code
To Exit the programming mode
Press [*]
Note: All the steps below must be done after entering into programming mode

6.2 To change master code
press [0] [new code] [#] [new code] [#] the master code is any 4 digits

1. Introduction

6.3 To add Fingerprint
press [1] [ID code] [#] [input fingerprint] … [#]

ID code range: 1～1000. ID code 1 is master add fingerprint, ID code 2 is master delete fingerprint, ID code 3～1000 are users fingerprints. Each ID code can add 1 fingerprint, master fingerprints must be added by ID code.
Notice: when the LED light up, input fingerprint, same fingerprint input twice. It gives short ring “Di” when input fingerprint first time, release the fingerprint, input the same fingerprint, gives long ring “Di-“, turns to green light, it means the user s added successfully. When failed to add the fingerprint, it gives three short ring “Di Di Di”, we can input fingerprint again. In order to improve success rate, please put middle of the finger on the middle of the induction Area.

6.4 To Delete fingerprint
Press [2] [ID code] [#] ⋯ [#]

6.5 To delete all fingerprint
press [2] [0000] [#]
Notice: This process will delete all users data, so use with care.

6.6 To Set door open time
press [4] [0～99] [#]
Notice: unit of time is second, default is 5s, when set 0, door open time is 50ms.

6.7 To Add Users Continuously
press [7] [1st user fingerprint twice] … [Nth user fingerprint twice] [#]
When add fingerprint users, ID will be generated auto, from 3 to 1000.

6.8 To Delete Users Continuously
press [8] [1st user fingerprint] … [Nth user fingerprint] [#]
Each fingerprint inputs onetime, press “*” to exit program.

6.9 Add/delete users by master add/delete fingerprint

6.9.1 To add fingerprint users
Press [master add fingerprint] [1st user fingerprint twice] .. [Nth user fingerprint twice] [master add fingerprint]

6.9.2 To delete fingerprint users
Press [master delete fingerprint] [1st user fingerprint] .. [Nth user fingerprint] [master delete fingerprint]
Each fingerprint inputs one time

7. To release tamper alarm

When this unit is removed illegal, then continuous alarm, keep 1 minutes alarming, or we can release the alarm by follow operation.
Press [master fingerprint] or [user fingerprint] or [master PIN]