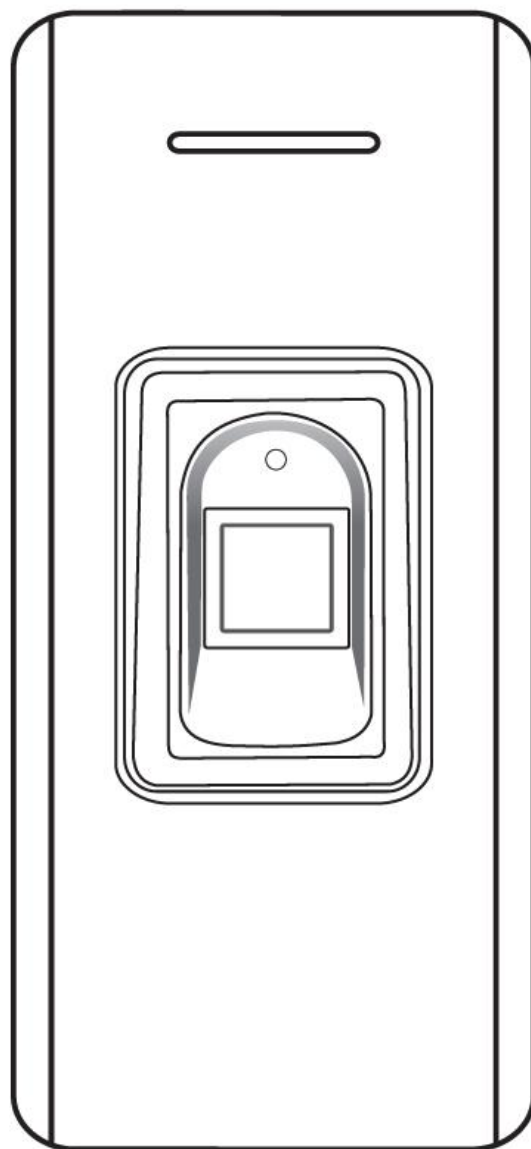# Fingerprint Access Control User Manual

1. Introduction

The series of product is a new generation of multi-functional standalone access control. It adopts new ARM core 32-bit microprocessor design, which is powerful, stable and reliable. It contains reader mode and standalone access control mode etc.. It's widely applied to different occasions, such as office, residential communities, villa etc..
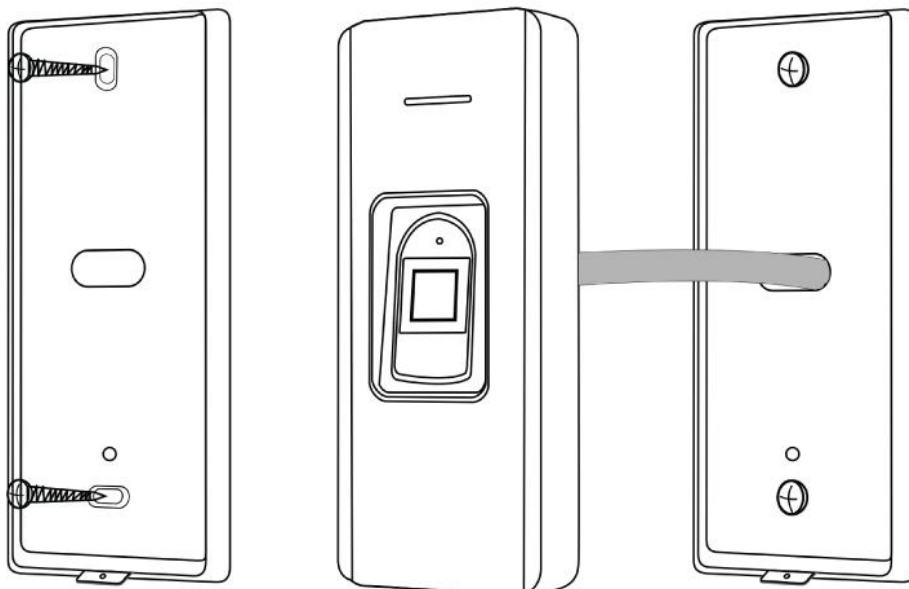
2. Features

Feature	Specification
Card Type	Read 125KHz EM Card and HID Card (Optional)
	Read 13.56MHz Mifare card and CPU card (Optional)
Keypad Characteristic	Operate by infrared remote
Output Way	Contain reader mode, the transmission format could be adjusted by users.
Access Way	Support multi access ways: Card+Fingerprint, multi cards or multi fingerprints
Admin Card/Fingerprint	Support admin card/admin fingerprint
User Capacity	10,000 card users and 300 fingerprint users
Unlocking Signal	Relay NO/NC/COM output

3. Technical Specifications

Operating Voltage: DC 12-24V	Standby Current: ≤ 35mA
Operating Current: ≤100mA	Operating Temperature: -20℃~60℃
Operating Humidity: 0%~95%	Electric lock signal relay contact current：≤1A
Alarm signal MOS tube output current: ≤1A	Unlocking time: 0~300s adjustable

4. Installation

- Remove the back cover from the keypad using the supplied special screw driver
- Drill 2 holes on the wall for the self-tapping screws and hole for the cable
- Put the supplied rubber bungs to into the two holes
- Fix the back cover firmly on the wall with 2 self-tapping screws
- Thread the cable through the cable hole
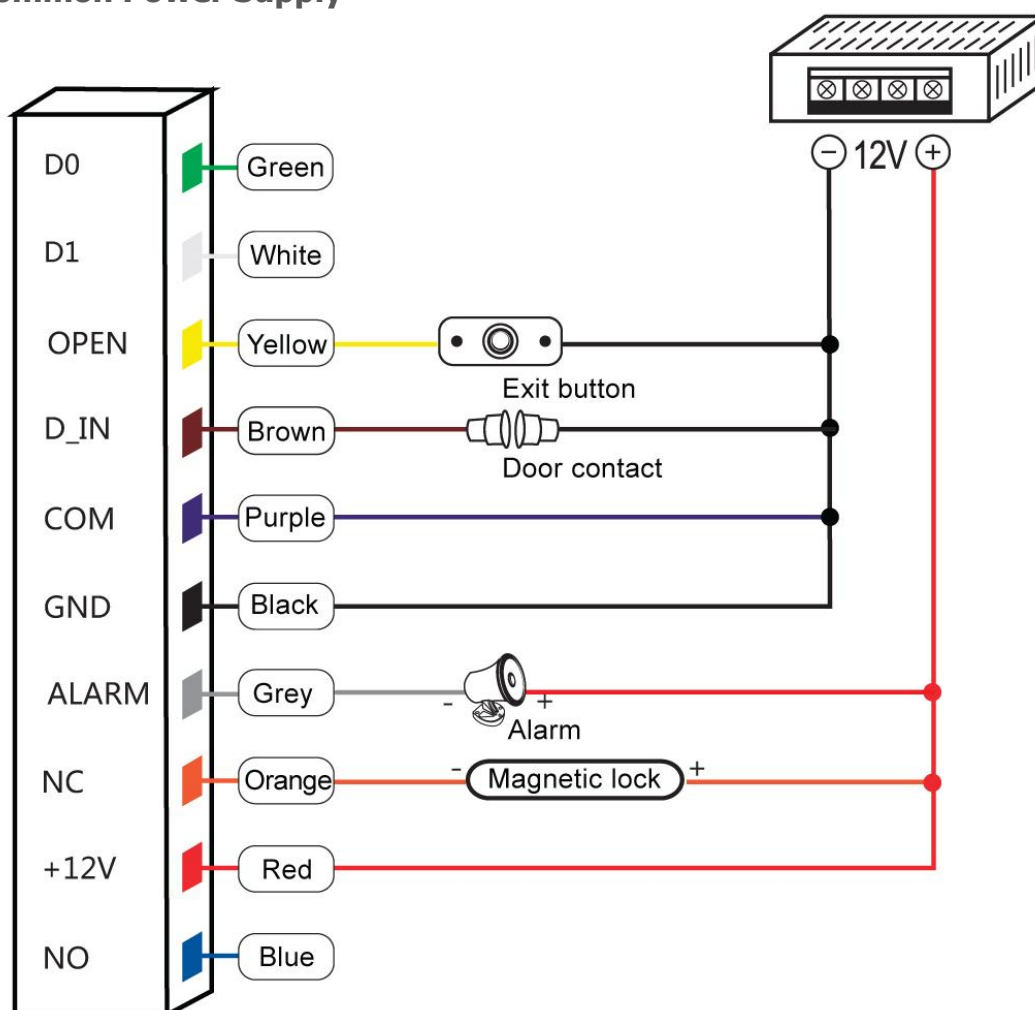- Attach the keypad to the back cover. (as following illustration)

5. Wiring

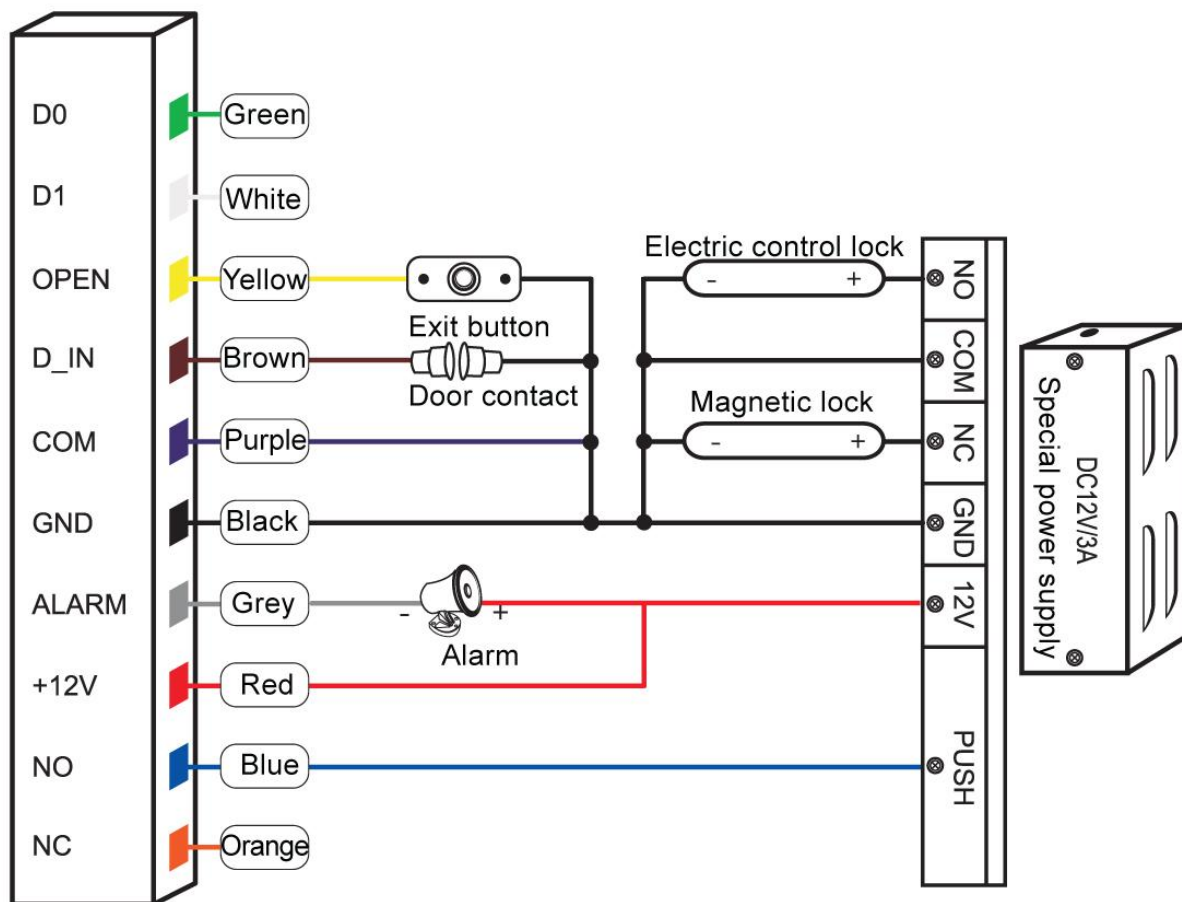| No.	Color	Marks	Description
1	Green	D0	Wiegand input (Wiegand output as reader mode)
2	White	D1	Wiegand input (Wiegand output as reader mode)
3	Grey	ALARM	Alarm signal MOS tube drain output end (optional)
4	Yellow	OPEN/ BEEP	Exit button input end (Beeper input as reader mode)
5	Brown	D_IN/ LED	Door contact switch input end (LED input as reader mode) (optional)
6	Red	+12V	Positive power supply
7	Black	GND	Negative power supply
8	Blue	NO	Relay NO end
9	Purple	COM	Relay COM end
10	Orange	NC	Relay NC end

6. Diagram

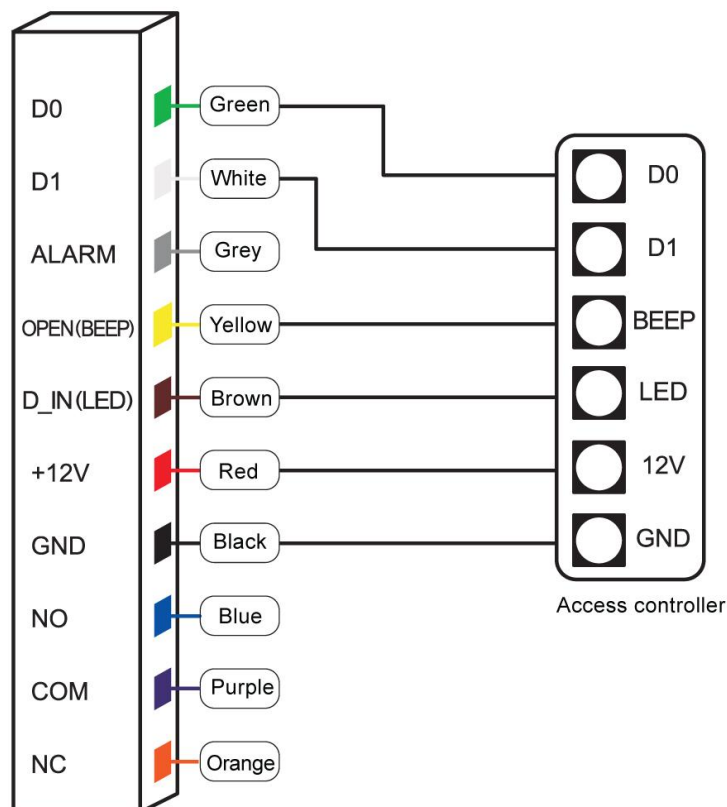### 6.1 Common Power Supply

Note: The door contact and alarm function are optional

6.2 Special Power Supply

Note: The door contact and alarm function are optional

6.3 Reader Mode

7. Sound and Light Indication

Operation Status	Light indicator	Buzzer
Stand by	Red	
Operation successful	Green	Beep—
Operation failed		Beep-Beep-Beep
Admin card enter programming		Beep-Beep
Admin card exit programming		Beep—
Press digital key		Beep
Press * key		Beep—
Read card under fingerprint + code mode	Red indicator flash slowly	
On process of reading multi user card	Red indicator flash slowly	
Enter programming mode	Red indicator flash slowly	
Enter setting status	Orange	
Unlocking	Green	
Buzzer alarm	Red indicator flash quickly	Alarm

8. Admin Menu

8.1 Standalone Mode Settings

Device Management

Enter programming	Menu	Operation steps	Description	Default value
Press * Admin code # (Default admin code is "999999")	0	New admin code # new admin code #	Change admin code	999999
	1	10001# Read card / Input a fingerprint twice *	Set admin add card or admin add fingerprint	
		10002# Read card / Input a fingerprint twice *	Set admin delete card or admin delete fingerprint	
	2	10001# *	Delete admin add card or admin add fingerprint	
		10002# *	Delete admin delete card or admin delete fingerprint	
	3	11 #	Standalone access control mode	11
		12 #	Relay toggle mode	
		13 #	Reader mode	
		(26-58) #	Wiegand 26-58 bits output	
	8	8 #	WIFI matching	Optional

Add and Delete Users

Enter programming	Menu	Operation steps	Description	Default value
Press * Admin code # (Default admin code is "999999")	1	Read card / Input a fingerprint twice... *	Add card users or fingerprint users continuously	"…" means repeating the previous operation, Press * key to exit.
		Press 8 or 10 digits card number # ... *	Add card users by card number	
		Press ID number # Read card / Input a fingerprint twice … *	Add card users or fingerprint users by specific ID number	
		Press ID number # Press 8 or 10 digits card number # … *	Add card users by specific ID number and card number	
	Delete users			
	2	Read card / Input a fingerprint once … *	Delete card users by reading card / Delete fingerprint users by inputting fingerprint	"…" means repeating the previous operation, Press * key to exit.
		Press 8 or 10 digits card number #… *	Delete card users by card number	
		Press ID number # … *	Delete users by ID number	
		0000#	Delete ALL users	

Access Ways

Enter programming	Menu	Operation steps	Description	Default value
Press * Admin code # (Default admin code is "999999")	3	0 #	Entry by card or fingerprint	0
		1 #	Entry by card + fingerprint	
		2-10 #	Entry by multi-card / multi-fingerprint	

Advanced Settings

Enter programming	Menu	Operation steps	Description	Default value
Press * Admin code # (Default admin code is "999999")	4	(0-300) #	Door opening time range: 0-300S 0 equals to 50mS	5
	5	(0-99) #	Alarming time range: 0-99 min.	0
	6	Read user card, input the first fingerprint twice, input the second fingerprint twice...*	Match fingerprints to a card (Maximum 2 fingerprints)	
	7	Press ID number # press 8 or 10 digits card number # input card quantity #	Add conductive number card	
	8	0#	Normal working mode	0
		1#	The external alarm and built-in buzzer will work if wrong operations are over 5 times.	
		2#	The device will be locked out for 10 min if wrong operations are over 5 times.	
		3#	Disable light indicator	4
		4#	Enable light indicator	
		5#	Disable buzzer	6
		6#	Enable buzzer	

8.2 Reader Mode Settings

Enter programming	Menu	Operation steps	Description	Default value
Press * Admin code # (Default admin code is "999999")	0	New admin code # Repeat new admin code #	Change admin code	999999
	1	10001# Read card / Input a fingerprint twice *	Set admin add card or admin add fingerprint	
		10002# Read card / Input a fingerprint twice *	Set admin delete card or admin delete fingerprint	
	2	10001# *	Delete admin add card or admin add fingerprint	
		10002# *	Delete admin delete card or admin delete fingerprint	
	1	Input a fingerprint twice... *	Add fingerprint users continuously	"..." means repeating the previous operation, Press * key to exit.
		Press ID number # Input a fingerprint twice ... *	Add fingerprint users by specific ID number	
	2	Input a fingerprint once... *	Delete fingerprint users	
		0000 #	Delete ALL users	
	3	(26-58) #	Wiegand 26-58 bits output	26
	5	(0-99) #	Alarming time range: 0-99 min	0
	9	(0-255) #	Device number	0

9. Admin Operation

9.1 Add Users

Read admin add card / Input admin add fingerprint , Read the 1st user card / Input the 1st fingerprint twice Read the 2nd user card / Input the 2nd fingerprint twice ..., Read admin add card / Input admin add fingerprint

Note： The admin add card / admin add fingerprint is used to add card / fingerprint users continuously and quickly. When you read the admin add card / input the admin add fingerprint at the first time, you will hear short "BEEP" sounds twice and the indicator light turns orange, it means you have entered into add user programming, when you read the admin add card / input the admin add fingerprint at the second time, you will hear long "BEEP" sound once and the indicator light turns red, it means you have exited the add user programming.

9.2 Delete Users

Read admin delete card / Input admin delete fingerprint , Read the 1st user card / Input the 1st fingerprint twice Read the 2nd user card / input the 2nd fingerprint once ..., Read admin delete card

Note：The admin delete card / admin delete fingerprint is used to delete card / fingerprint users continuously and quickly. When you read the admin delete card / admin delete fingerprint at the first time, you will hear short "BEEP" sounds twice and the indicator light turns orange, it means you have entered into delete user programming, when you read the admin delete card / admin delete fingerprint at the second time, you will hear long "BEEP" sound once, the indicator light turns red, it means you have exited the delete user programming.

10. Other Operation

10.1 Remove Alarm

Read valid card or Input valid fingerprint   or Press admin code#

Note : When the alarm is activated, users can remove the alarm by reading a valid card or inputting valid fingerprint or pressing valid admin code.

10.2 Reset to Factory Default

Users can reset to the factory default when the admin code is forgotten, or the default settings have been modified disorderedly, operations as below:
Power off, press and hold the exit button continuously, power on, release the exit button until hearing beep sound twice, the admin code has been reset to 999999, factory default settings are successful.

Note: Registered user data won't be deleted when reset to factory default.