

## 1.Introduction

This series' product is a new generation of multi-function 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, bank and prison etc. .

## 2.Features

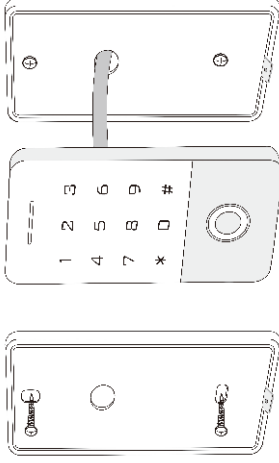
Feature	Specification
Card Type	Read 125KHz EM Card and HID Card (Optional)
	Read 13.56MHz Mifare card and CPU card (Optional)
Keypad Characteristic	Metal backlight keypad
Output Way	Contain reader mode, the transmission format could be adjusted by users
Access Way	Support seven access ways
Admin Card	Support admin add card and admin delete card
User Capacity	10,000 card users and 600 fingerprint users

## 3. Technical Specifications

Operating Voltage: DC 12-24V	Standby Current: ≤35mA
Operating Current: ≤100mA	Operating Temperature: -40℃~60℃
Operating Humidity: 0%-95%	Access ways: Fingerprint, card, code, or multiple combination methods

## 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 1 hole for the cable
- Put the supplied rubber bungs 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. (See the figure below)

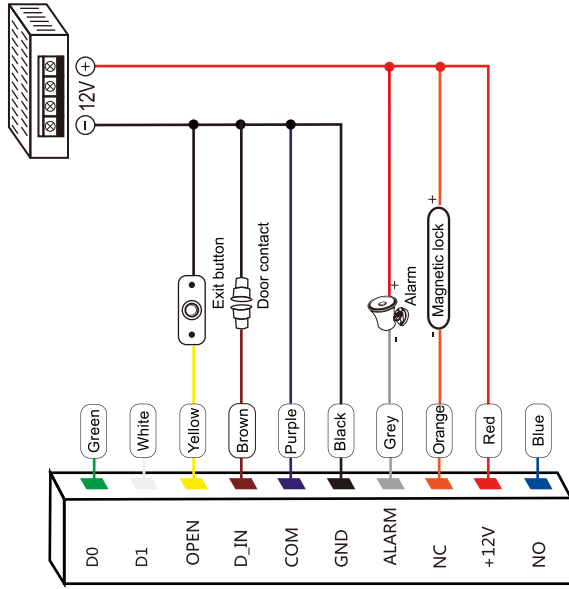


## 5. Wiring

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 or AC power supply end
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

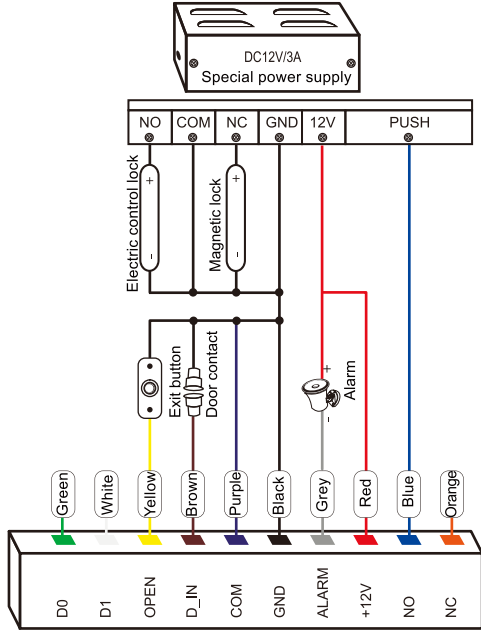
### 6.1 Common Power Supply



Note: The door contact and alarm function are optional

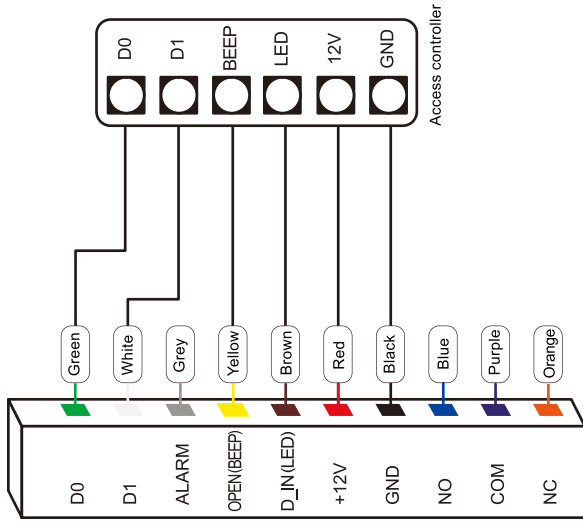
3

### 6.2 Special Power Supply



Note: The door contact and alarm function are optional

4



## 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—
Press access code	Red indicator flash slowly	
Read card under card plus code mode	Red indicator flash slowly	
Read multi user cards	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")	00	New admin code # new admin code #	Change admin code	999999	
	01	Read card / Input a fingerprint twice *	Set admin add card or admin add fingerprint		
	02	Read card / Input a fingerprint twice *	Set admin delete card or admin delete fingerprint		
	03	0# 1# 2#	Reader mode Standalone access control mode Relay toggle mode	1	
	08		WiFi matching	Optional	
	09	Unlocking code # (4-6 digits)	Public code		

## Add and Delete Users

Enter programming	Menu	Operation steps	Description	Default value		
Press * Admin code # (Default admin code is "999999")	11	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			
	12	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			
	13	Press ID number # press 8 or 10 digits card number # ...	Add an independent user code by specific ID number			
		Read user card, input the first fingerprint twice, input the second fingerprint twice...	Match fingerprints to a card (Maximum 2 fingerprints)			
	Delete users	Press ID number # press 8 or 10 digits card number # ...	Add conductive number card			
		Read card / input a fingerprint once ... *	Delete card users by reading fingerprint			
	21	Press 8 or 10 digits card number # ... *	Delete fingerprint users by inputting fingerprint			
		Press ID number # ... *	Delete card users by card number			
	20	0000#	Delete users by ID number			
					Delete all users	

## Access Ways

Enter programming	Menu	Operation steps	Description	Default value
Press * Admin code # (Default admin code is "999999")	31	0 #	Forbidden opening door	4
		1 #	Entry by code only	
		2 #	Entry by card only	
		3 #	Entry by card+ code or fingerprint + code	
		4 #	Entry by card, fingerprint or code	
		5 #	Entry by fingerprint only	
		6 #	Entry by fingerprint + card	
7 #	Entry by multi-fingerprint / multi-card			
32	1 #	Set door open by 1 user card/user fingerprint	1	
	2-10 #	Set door open by 2-10 user cards/user fingerprints		

## Advanced Settings

Enter programming	Menu	Operation steps	Description	Default value
Press * Admin code # (Default admin code is "999999")	41	(0-300) #	Door opening time range: 0-300S 0 equals to 50minS	5
		0 #	Alarming time sets OS, means no alarm	0
	42	(1-99) #	Alarming time range: 1-99 min	
		0#	Normal working mode	
	61	1#	The external alarm and built-in buzzer will work if wrong operations are over 5 times.	0
		2#	The device will be locked out for 10 min if wrong operations are over 5 times.	
		0#	Disable light indicator	
	62	1#	Enable light indicator	1
		0#	Disable the keypad backlight	
	63	1#	Enable the keypad backlight	1
		(2-99) #	Time of keypad backlight: 2-99 sec	
	64	0#	Disable buzzer	1
		1#	Enable buzzer	

## 8.2 Reader Mode Settings

Enter programming	Menu	Operation steps	Description	Default value	
Press * Admin code # (Default admin code is "999999")	00	New admin code # new admin code #	Change admin code	999999	
	01	Read card / Input a fingerprint twice *	Set admin add card or admin add fingerprint		
	02	Read card / Input a fingerprint twice *	Set admin delete card or admin delete fingerprint		
	03	0# 1# 2#	Reader mode Standalone access control mode Relay toggle mode	1	
	11	Input a fingerprint twice, ... *	Add fingerprint users continuously	"..." means repeating the previous opera- tion. Press *	
Press * Admin code # (Default admin code is "999999")	21	Press ID number # input a fingerprint twice ... Input a fingerprint once, the 2 <sup>nd</sup> fingerprint ... *	Add fingerprint users by specific ID number Delete fingerprint users continuously Delete users by the specific ID key to exit		
	20	0000#	Delete ALL users		
	42	0# (1-99)#	Alarming time sets 0S, means no alarm (1-99)min	0	
	51	(0-255)#	Alarming time range: 1-99 min	0	
	52	(26-58)#	Wiegand output: 26-58 bits	26	
	53	0#	Keypad transmission format: 4 bits	Keypad transmission format: 8 bits Virtual card number output	0
		1# 2#	Keypad transmission format: 8 bits		

## 9.Admin Card Operation

### 9.1 Add Card

Read admin add card | Read the 1<sup>st</sup> user card | Read the 2<sup>nd</sup> user card ... | Read admin add card

**Note:** The admin add card is used to add card users continuously and quickly. When you read the admin add card 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 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 Card

Read admin delete card | Read the 1<sup>st</sup> user card | Read the 2<sup>nd</sup> user card ... | Read admin delete card

**Note:** The admin delete card is used to delete card users continuously and quickly. When you read the admin delete card 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 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.User Operation

### 10.1 Change the User Code

#### Change the user code by card

Press \* | Read card | Old code # | New code # | New code #

**Note:** The default code "1234" of matching card can't open the door unless revising other codes.

#### Change the user code by fingerprint

Press \* | Input fingerprint | Old code # | New code # | New code #

**Note:** The default code "1234" of matching fingerprint can't open the door unless revising other codes.

#### Change the user code by ID number

Press \* | ID number # | Old code # | New code # | New code #

**Note:** ID number has to be known from admin before changing the code, user code can't be default code "1234".

## 11 Other Operation

### 11.1 Remove Alarm

Read admin card | Read valid user card | Input valid fingerprint | Press admin code #

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

### 11.2 Reset to Factory Default

Power off, press and hold the # key or the exit button continuously, power on, release the # key or the exit button until hearing beep sound twice, the admin code has been reset to 999999, factory default settings are successful.

#### Touch series as below

Power on, press # key when LED light turns orange, then release it quickly, the factory default settings are successful until hear short beep sound twice.

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