Fingerprint Control
User Manual

1. Introduction

It supports fingerprints and EM RFID card. The performance has been greatly improved.

The product uses the precise electron circuit and good productive technology, which is the metal structure machine of fingerprint & card access. It is widely used in business organization, office, factory, housing district etc.

The product uses remote controller or Admin fingerprints for programming, support fingerprints and EM 125Khz card, easy to install and program.
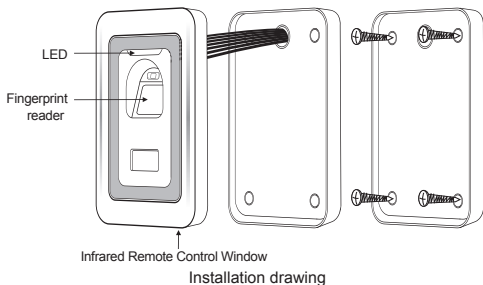
2. Feature

Feature	Description
Metal Shell	Durable, anti-vandal
Ultra-low Power Consumption	Long-lived, performance stable, standby current is less than 30mA
Touch Sensor activated	Fingerprint recognition is very fast
Capacity	200 fingerprints & 500 cards (1000 fingerprints & 2000 cards can be selected)
Used as a Card Reader	Can be used as a card reader with Wiegand26 output
Used as a Standalone Controller	Can connect external EM/Mifare/HID wiegand26 card reader

3. Installation

Drill the hole according to the size of the product and fix the bottom shell with the equipped screws. Thread the lead wire out of the outlet hole of the bottom shell, connect the lead wire according to the function required, and wrap the unused wires to avoid short circuit. After wire connected, fix the front shell to the bottom shell and turn the screws well, installation is finished.

(see figure below)

Note: After all wires are connected, please check carefully whether they are connected correctly, then turn on the electricity after confirmation.
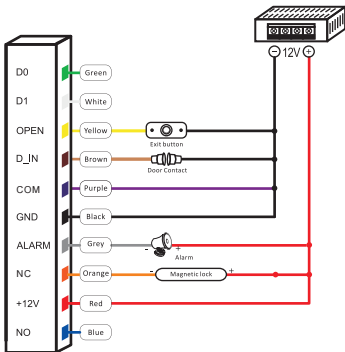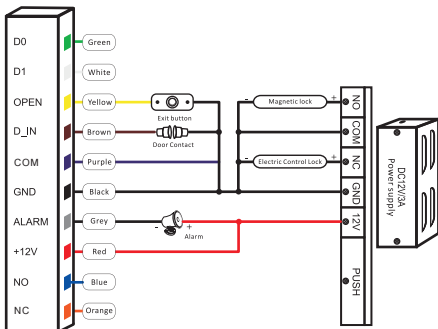

Installation drawing

4. Wiring

No.	Color	Function	Description
1	Green	D0	Wiegand Output D0
2	White	D1	Wiegand Output D1
3	Grey	Alarm	Alarm Negative
4	Yellow	Open	Request to Exit Button
5	Brown	D_IN	Door Contact
6	Red	+12V	(+) 12VDC Positive Regulated Power Input
7	Black	GND	(-) Negative Regulated Power Input
8	Blue	NO	Relay NO
9	Purple	COM	COM
10	Orange	NC	Relay NC
11	Pink	GND	One Terminal of Factory Default Setting
12	Pink	RESET	The other Terminal of Factory Default Setting

5. Connection Diagram

5.1 Common Power Supply

D0	Green
D1	White
OPEN	Yellow
D_IN	Brown
COM	Purple
GND	Black
ALARM	Grey
NC	Orange
+12V	Red
NO	Blue

Exit button
Door Contact
Alarm
Magnetic lock
12V

5.2 Special Power Supply

D0	Green
D1	White
OPEN	Yellow
D_IN	Brown
COM	Purple
GND	Black
ALARM	Grey
+12V	Red
NO	Blue
NC	Orange

Exit button
Door Contact
Alarm
Magnetic lock
Electric Control Lock

NO
COM
NC
GND
12V
PUSH

DC12V/3A
Power s supply

7. Admin Operation

7.1 Enter into Programming Mode

Press `*` `Admin Code` `#`   Factory default: 888888

Remark: All of steps below(7.2-7.9) must be done after entering into programming mode.

7.2 Revise Admin Code

Press `0` `New Admin Code` `#` `New Admin Code` `#`

Remark: Admin code is 6~8 digital No.

7.3 Add Users
7.3.1 Add Users Continuously

Press `1` `User Fingerprint twice` `#` or `card` `#` or `the Card No (8 digit)` `#` … `#`

Remark: 200 fingerprint users, ID is 3-200, 500 card users, ID is 1001-1500, ID is produced automatically and automatic accumulation.

Note: Select 1000 fingerprints & 2000 cards, Fingerprint user ID is 3~1000, Card user ID is 1001~3000,ID is produced automatically and automatic accumulation.

7.3.2 Add Users by Appointed ID No

Press `1` `ID No` `#` `User Fingerprint twice` `#` or `card` `#` or `Card No (8 digit)` `#` … `#`

Remark: ID 1 is Admin Add Fingerprint, ID 2 is Admin Delete Fingerprint, pressing # in the process of operating means confirmation, the final # means closing setting mode, pressing * means exiting programme mode.

7.3.3 Add Users by Admin Fingerprint or Admin Card

Press `Admin Add Fingerprint` or `Admin Add Card` , `1st User Fingerprint Twice` `2nd User Fingerprint Twice` or `1st card` `2nd card` or `Admin Add Fingerprint` or `Admin Add Card` , exit programme mode.

7.4 Delete Users
7.4.1 Delete Users by Fingerprint/Card/Card No

Press `2` `User Fingerprint twice` `#` or `card` `#` or `the Card No (8 digit)` `#` … `#`

7.4.2 Delete Users by Appointed ID No

Press 2 ID No 1 # ID No 2 # ... #

7.4.3 Delete All Users
Press 20000 #

Remark: All of fingerprints and user will be deleted, but Admin Card won't be deleted, please use it prudently.

7.4.4 Delete Users by Admin Fingerprint or Admin Card
Press Admin Delete Fingerprint or Admin Delete Card, 1st User Fingerprint Twice 2nd User Fingerprint Twice ... 1st card 2nd card ... Admin Delete Fingerprint or Admin Delete Card , exit programme mode.

7.5 Set Facility Code
Press 3 0~255 #

Remark: If used as a card reader, please set it. Facility code and ID No make up virtual card No, data will be transmitted by wiegand26 when inputting fingerprint. For example, if facility code is 255, fingerprint ID No is 3, then virtual card No is 255,00003. The function only applies to ID No of simulate 8 digit decimalism, and the virtual card No is displayed on the machine with wiegand26 format.

7.6 Set Door Relay Time
Press 5 0~99s # Factory default: 5 seconds

7.7 Set Alarm Time
Press 9 0~3m # Factory default: 1 minute

7.8 Set Door Open Detection

7.8.1 Disable the function (Factory default setting)
Press 6 0 #

7.8.2 Enable the function
Press 6 1 #

When enable this function

7.8.2.1 If open the door normally,but don't close it after 1 minute, the inside Buzzer will alarm automatically, the alarm will stop after closing the door.

7.8.2.2 If the door is opened forcibly, or the door isn't opened within 120 seconds after lock is released, the inside Buzzer and outside alarm will be activated.

7.9 Set Security Mode

7.9.1 Normal Mode(Factory default setting)
Press 7 0 #

7.9.2 Locked Mode
Press 7 1 #
The device will be locked for 10 minutes if input 10times invalid fingerprints or cards continuously within 10 minutes.

7.9.3 Alarm Mode
Press 7 2 #
Inside beep and outside alarm will be activated if input 10times invalid fingerprints or cards continuously within 10 minutes.

8. User Operation

8.1 Open the Door by Fingerprint
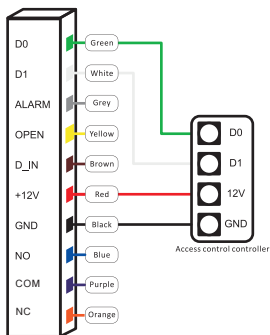Press User Fingerprint Valid fingerprint to open the door.

8.2 Open the Door by Card
Read User card Valid card to open the door.

8.3 Remove Alarm
Press Valid User Fingerprint or Card or Admin Fingerprint or Card or Admin Code # ,then alarm is removed.

5.3 Used as a Card Reader

D0	Green
D1	White
ALARM	Grey
OPEN	Yellow
D_IN	Brown
+12V	Red
GND	Black
NO	Blue
COM	Purple
NC	Orange

D0
D1
12V
GND
Access control controller

6. Reset to Factory Default

Power off, press the RESET key (SW14) continuously on the PCB, then power on, release it until hearing short beeps twice.

Note: If Waterproof devices, power off, pink wire connects pink wire, then power on, take apart it until hearing short beeps twice.

The LED turns orange, then read any two EM cards, the first one is Admin Add Card, the second one is Admin Delete Card, old Admin cards are covered by new one, or without setting Admin cards within 10 seconds, then the LED turns red flash, it means factory default setting is successful.

Remark: Reset to factory default setting, the users' information enrolled are still retained.

9. Sound and Light Indication

Operation Status	LED Color	Fingerprint Sensor	Buzzer
Reset to Factory Default setting	Orange	Off	Short Ring twice
Sleeping Mode	Red Slow	Off	
Stand by	Red Slow	On	
Valid Keys			Long Ring once
Enter into Programming Mode	Red	Off	Long Ring once
Exit Programming Mode	Red Slow	On	Long Ring once
Wrong Operation			Short Ring 3 times
Open the Door	Green	Off	Long Ring once
Alarm	Red Quick	Off	Alarm

10. Technical Specification

Operation Voltage	DC+12V±10%
Idle Current	≤20mA
Standby Current	≤80mA
Card Reading Distance	≥2cm
Operating Temperature	-20 ~ +50℃
Operating Humidity	20%RH-95%RH
Resolution	450 DPI
Fingerprint Input Time	<1S
Identification Time	<1S
FAR	<0.0000256%
FRR	<0.0198%
Structure	Zinc Alloy

11. Packing list

Article	Model	Quantity	Remark
Fingerprint Access Control		1	
Infrared Remote Control		1	
Admin Card	Add/Delete	2	Admin Delete Card &Delete Card
User Manual		1	
Security Screws (Φ3*7.5mm)		1	To fix the device to the back cover
Special Screw Driver	Φ20mm×60mm	1	
Self tapping screws	Φ4mm×25mm	4	Used for fixing
Pastern stopper	Φ6mm×28mm	4	Used for fixing