YouFores

Standalone Access Control

User Manual

Please read this User Manual carefully before installation & operation

Chapter 1 Overview

1.1 Overview

This series are standalone access control, has a built-in relay. It supports access by Admin super code, card, pin or multi-users. It also supports Visitor Users (temporary visitors). It can be also set as Wiegand reader.
Note: Admin super code is not Admin code. (see details 4.7)

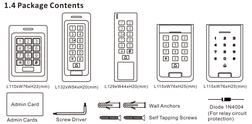
1.2 Features and Benefits

> Weatherproof housing, confirms to IP67, anti-vandal
> Managed by Admin card or keypad
> Wiegand input/output, can be set as card readers
> Supports 5 Visitor Users, who can be authorized access for 1 – 5 times
> Supports 2 Anti-duress Users
> The user data can be copied into other devices
> Supports door contact, inter lock
> Can add proximity card user rapidly with sequentially card number.

1.3 Specifications

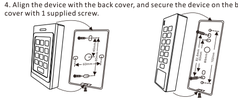
Power Input	DC12-24V
Standby Current	≤45mA
Working Current	≤120mA
User Capacity	3000
Supported Card	EM, Mifare, EM+Mifare
Card Presenting Frequency	125KHz or 13.56MHz
Mifare Card	DESFire/PLUS/NFC/Ultralight/S50/S70/Class/Pro etc. comply with ISO/IEC 14443A
Wiegand	Wiegand 26-44bits, 56bits, 58bits, 64bits, 66bits
Keypad Output	4bits/ASCII Bbits/Virtual Card Number
Read Range	≥ 30mm
Lock Output Load	≤ 2A
Alarm Output Load	≤ 500mA
Operating Temperature	-40℃ ~ +60℃(-40℉ ~140℉)
Operating Humidity	0~98%RH

1.4 Package Contents



Chapter 2 Installation

Install without Gang Box
1. Take off the back cover from the device with screw.
2. Draw the holes at the installation position according to the mounting holes on the back cover. Drill holes and secure the back cover on the wall with 4 supplied screws.
3. Route the cable through cable hole of the back cover, and connect to corresponding external devices' cables. For the un-used cables, please separate them with insulating tape.
4. Align the device with the back cover, and secure the device on the back cover with 1 supplied screw.



Chapter 3 Device Wiring

3.1 Terminals Description

The terminals contain power input, alarm input, Wiegand input/output, and door lock.

Function	Color	Name	Description
Power Input	Red	+12V	10-24V DC power supply
	Black	GND	Ground
Wiegand	Green	Data0	Wiegand Data0
	White	Data1	Wiegand Data1
Door Lock	Orange	NC	Relay NC
	Purple	COM	Relay COM
	Blue	NO	Relay NO
	Yellow	OPEN	Exit Button Wiring
	Brown	D_IN	Door Contact
Alarm	Grey	ALARM-	Alarm Negative
Door Bell	Pink	BELL	External Bell
	Pink	BELL	External Bell

3.2 Sound and Light Indication

Operation Status	Light	Buzzer
Standby	Red light bright	
Enter into programming mode	Red light shines	
In the programming mode	Orange light bright	
Open lock	Green light bright	One beep
Operation failed		3 beeps

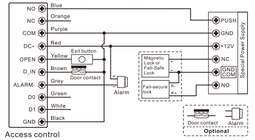
3.3 Factory Reset and Add Admin Card

a) Connect the exit button. Connect one terminal of the exit button to the yellow cable of the access control, and the other terminal to the GND of power supply.
b) Power off, press and hold the push button, power on, release the push button after hearing two beeps from the access control. The LED light flash alternatively red and green. Swipe Amin Card twice, then hearing a long beep, the device enters standby mode. Factory reset successfully.
Note:
1) The user data will not be deleted after factory reset
2) There is one Admin Card in the factory packaging, which has added into the access control. If it was lost, you can add a new Add Card into the device during the factory reset, the original Admin Card will be deleted automatically. One device can be only set one Admin Card. If you do not want to add Admin Card into the device, you should press and hold the exit button for 5s, and release it after hearing a long beep.
3) Amin Card is only used for adding/deleting card users. If you want to add/delete the pin users, you should do it by Admin Code.

Chapter 4 Stand-alone Mode

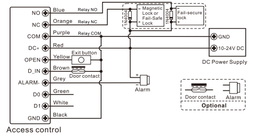
4.1 Wiring Diagram

4.1.1 Make Wiring with Special Power Supply for Access Control



Access control

4.1.2 Make Wiring with Common Power Supply



Access control

Note: The diode 1N4004 should be connected into the wiring when use common power supply. Otherwise, the access control will be damaged. The terminal with white loop of the diode connect to the positive of electric lock, and the other connect to the negative of electric lock.

4.2 Admin Card

4.2.1 Add Card Users by Admin Card (in standby mode)

No.	Operations
1	Access control standby, Swipe admin card **once**, green LED light will flash slowly
2	Swipe one card or many cards you want to add
3	Swipe the admin card once again to finish adding, Device return to standby.

4.2.2 Delete Card User by Admin Card (in standby mode)

No.	Operations
1	Access control standby, Swipe admin card **twice**, orange LED light bright
2	Swipe one card or many cards you want to delete
3	Swipe the admin card once again to finish deleting. Device return to standby.

Note: One access control can only have one Admin Card. When your access control has two frequencies, 125KHz and 13.56KHz, the Admin Card in factory packaging is 125KHz card. But you can replace it with a 13.56MHz Admin Card through Factory Reset (see details 3.3)

4.3 Admin Code

To set up the access control, you must enter programming mode. The factory default Admin Code is 123456, for safety, please change it and keep in mind.

4.3.1 Enter Programming Mode and Change Admin Code

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Change Admin Code	0#new Admin Code#new Admin Code#	Orange Bright
Exit Program Mode	*	Red Bright

Note: The length of Admin Code is 6 digits, the Admin should keep it in mind. Otherwise, it should be factory reset to restore it to 123456. All settings will be restored or deleted except user data. (see details 3.3)

4.4 Add Users

4.4.1 User ID added automatically

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Add Card by: Swiping card	1# Swiping card ...#	Orange Bright
Add Card by: Inputting Card number	1# Inputting card number# ...#	
Exit Program Mode	*	Red Bright

4.4.2 User ID assigned by Admin

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Add Card by: Swiping card	1 # ID # Swiping card ...#	Orange Bright
Add Card by: Inputting Card number	1 # ID # Inputting card number# ...#	
Add Pin User:	1 # ID # 4~6 digit pin # repeat the pin# ...#	
Add Card Rapidly with Sequential Card Number	95 # input the first ID # the first card number # total cards #	Orange Bright
Exit Program Mode	*	Red Bright

Note:
1) When Admin has not appointed the User ID, the User ID will be added into access control automatically. And it will search for the unoccupied ID number from small to large digit.
2) The common user ID is ranged from 1 – 3000. Anti-duress ID is 3001, 3002. Visitor User ID is ranged from 3005 – 3009.
3) Cannot set same pin.
4) If add card users rapidly with sequential card number, the user IDs should be sequential and not occupied, otherwise it will fail.

4.4.3 Add Visitor User

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Add Visitor User	96#ID# (1~5) #Swipe Card or Input 4~6 digit pin#	Orange Bright
Exit Program Mode	*	Red Bright

Note: The visitor user can only access 1~5 times. And visitor user ID is ranged from 3005 – 3009.

4.5 Delete Users

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Delete by: Swiping card Delete by: Input card number Delete by: Input user ID Delete All Users	2# Swiping Card ...# 2# Inputting Card Number# ...# 2#ID#...# 2#0000#	Orange Bright
Exit Program Mode	*	Red Bright

Note: The admin super code cannot be deleted when you delete all users.

4.6 Change User Pin

Description	Keystroke Combination	LED Light
Operate it in Standby	*ID # old pin # new pin # repeat new pin #	Red Flash
Exit Program Mode	It will exit programming mode automatically	Red Bright

Note: It is not need to enter programming mode to change pin. And it cannot set same pin, if input same pin, it will remind error. And the user pin cannot be the same as admin super code.

4.7 Add/Delete Amin Super Code

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Add Admin Super Code	91 # Admin Super Code # input the Admin Super Code again #	Orange Bright
Delete Admin Super Code	91 # 0000#	
Exit Program Mode	*	Red Bright

Note:
1) The Admin Super Code should be 6 digits, cannot be the same as user pin.
2) Only 1 Admin Super Code for one access control. If you add new Admin Super Code, the old one will be deleted automatically.
3) The Admin Super Code can open door in any Access Mode.
4) Admin Super Code is not Admin Code. Admin Code is used to manage the access control, cannot open door. Admin Super Code is like a user pin, but belongs to Admin.

4.8 Pulse Mode and Toggle Mode

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Pulse Mode	3 # ID ~ 120 #	Orange Bright
Toggle Mode	3 # 9999 #	
Exit Program Mode	*	Red Bright

Note:
1) Pulse Mode: The door will be closed automatically after opening for a while.
2) Toggle Mode: The door won't be closed automatically until next valid user swiping card or inputting pin.
3) The factory default is Pulse Mode, and the door opening time is 5s. The door opening time is ranged from 0 ~ 120s. In fact, 0 means 100ms. It is usually used for electric rim lock. Because the current is very high for this kind of lock, short opening time can protect the power supply.

4.9 Access Mode

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Swiping Card to Access Inputting pin to Access Swiping Card + Inputting pin to Access Swiping Card or Inputting pin to access Multi Users to Access	4 # 0 # 4 # 1 # 4 # 2 # 4 # 3 # 4 # 4 # (2~5) #	Orange Bright
Exit Program Mode	*	Red Bright

Note:
1) The factory default is Swiping card or inputting pin to access.
2) If set multi users to access. The time remain for Swiping card or inputting pin should be ≤10s, otherwise the access control will exit program mode. It cannot swipe same card (or input same pin) repeatedly, otherwise the door won't open.

4.10 Alarm Duration

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Disable Alarm	5 # 0 #	Orange Bright
Alarm Duration	5 # (1 ~ 3) #	
Exit Program Mode	*	Red Bright

Note:
1) The alarm duration can set 1 – 3 min, if set 0, means no alarm. The factory default is 1 min.
2) There are 5 kind occasion will active the alarm: forget to close the door, destroy the access control, destroy the door, anti-duress alarm, Safe Mode-5Alarm Mode (see detail 4.11).
3) Swiping valid card, inputting valid pin, or inputting Admin Code can stop alarm. Also, it will stop alarm since run out of time.

4.11 Safe Mode.

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Disable Safe Mode	6 # 0 # (Factory Default)	Orange Bright
Lockout Mode	6 # 1 #	
Alarm Mode	6 # 2 #	
Exit Program Mode	*	Red Bright

Note:
1) Lockout Mode: If swiping invalid card or inputting invalid pin for 10 times within 3 min, the access control will be lockout for 1 min.
2) Alarm Mode: If swiping invalid card or inputting invalid pin for 10 times within 3 min, the access control will "beep ~ ", at the same time, the external alarm will be activated.

4.12 Detect Door Status

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Disable Detect Door Status	9 # 0 # (Factory Default)	Orange Bright
Enable Detect Door Status	9 # 1 #	
Exit Program Mode	*	Red Bright

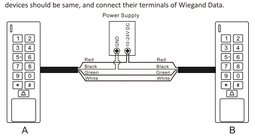
Note:
1) To enable the door status monitoring function, the magnetic door sensor must be integrated into the access control system.
2) If the door remains open after 1 minute by an authorized user, the device will initiate an alarm(beep). The alarm shall cease when the door is closed, valid credentials are presented, or the alarm timer elapses.
3) In the event of unauthorized forced entry, the device and external siren will activate an alarm. The alarm shall terminate upon valid credential authentication or when the pre-set alarm timer elapses.

4.13 ON/OFF Sound, Light, and Tamper Detection

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Sound OFF	92 # 0 #	Orange Bright
Sound ON	92 # 1 # (Factory Default)	
Standby LED OFF	92 # 2 #	
Standby LED ON	92 # 3 # (Factory Default)	
Keypad Backlit OFF	92 # 4 #	
Keypad Backlit ON	92 # 5 # (Factory Default)	
Tamper Detect OFF	92 # 6 # (Factory Default)	
Tamper Detect ON	92 # 7 #	
Exit Program Mode	*	Red Bright

4.14 Copy User Data into Other Access Control

Operate on the device who stored user data. The Admin Code for both of the devices should be same, and connect their terminals of Wiegand Data.



Description	Keystroke Combination
Enter Program Mode	*Admin Code#
Copy User Data	6 # 5 # (Green LED light is intermittent)
Exit Program Mode	When finished copying, it will exit automatically

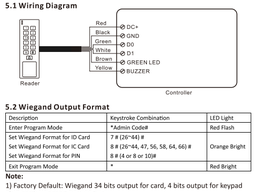
4.15 Set Standalone Mode or Wiegand Reader Mode

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Standalone Mode	6 # 6 # (Factory Default)	Orange Bright
Wiegand Reader Mode	6 # 7 #	
Exit Program Mode	*	Red Bright

Note:
1) Standalone Mode: only supports Wiegand 26 bits and 34 bits input/output
2) Wiegand Reader Mode: the yellow wire terminal is for buzzer, and the brown wire terminal is for green LED.

Chapter 5 Wiegand Reader Mode

5.1 Wiring Diagram



5.2 Wiegand Output Format

Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Set Wiegand Format for ID Card	7 # (26~44) #	Orange Bright
Set Wiegand Format for IC Card	8 # (26~44, 47, 56, 58, 64, 66) #	
Set Wiegand Format for PIN	8 # (4 or 8 or 10)#	
Exit Program Mode	*	Red Bright

Note:
1) Factory Default: Wiegand 34 bits output for card, 4 bits output for keypad
2) ID card: Wiegand 26 ~ 44 bits.

3) IC card: Wiegand 26 ~ 44 bits, 47 bits, 56 bits, 58 bits, 64 bits, 66 bits. And 32 bits, 56 bits, 64 bits without check code.
4) PIN: 4 bits, ASCII (8 bits), 10-digit virtual card number. Virtual card number output is to converts the pin into a 10-digit decimal card number, then output. Pin length is 4 ~ 6 digit.

5.3 Instruction of Wiegand Output Format for PIN

1) 10 Digits Virtual Card Number Output: Input 4-6 digits pin end with "#", it will output a 10-digit decimal card number. For example, input pin 999999, it will output card number 0000 9999 99.
2) Each Digit Sends 4 Bits Data
1 (0001), 2 (0010), 3 (0011)
4 (0100), 5 (0101), 6 (0110)
7 (0111), 8 (1000), 9 (1001)
*(1010) 0 (0000) # (1011)
3) Each Digit Sends 8 Bits Data
1 (11100001), 2 (11010010), 3 (11000011)
4 (10110100), 5 (10100101), 6 (10010110)
7 (10000111), 8 (01111000), 9 (01101001)
*(01011010), 0 (11110000), # (01001011)

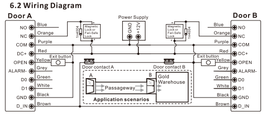
Chapter 6 Interlock for Two Door

Interlock for two doors, is often used in the place or area with high security requirement. There are two doors (Door A and Door B) with access control. If you enter door A, you cannot enter door B until door A closed. That is to say, both of the doors are closed, then you can enter one of them.

6.1 Interlock Setting

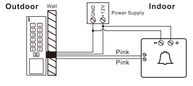
Description	Keystroke Combination	LED Light
Enter Program Mode	*Admin Code#	Red Flash
Disable Interlock	92 # 8 # (Factory Default)	Orange Bright
Enable Interlock	92 # 9 #	
Exit Program Mode	*	Red Bright

6.2 Wiring Diagram



Appendix I External Doorbell

Doorbell Wiring



Appendix II How Does User Open Door

Open Door by Card	Swiping Card
Open Door by Pin	Inputting User Pin #
Open Door by Card + Pin	Swiping Card + Inputting User Pin #
Open Door by Multi Users	Swiping Card/Inputting User pin...#