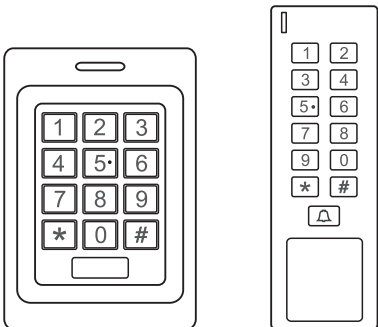


## Access Control/Reader



User Manual

### INTRODUCTION

This product is a contactless EM proximity card standalone access control. It adopts zinc-alloy case, anti-vandal and anti-explosion, 2,000 user capacity and supporting access by card, card + PIN, card or PIN. Wiegand 26 Output/Input.

### Features and Benefits

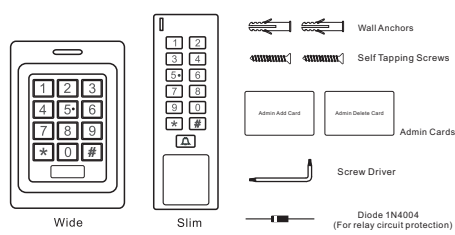
- > Zinc-alloy housing, anti-vandal, anti-explosion
- > Waterproof, conforms to IP67
- > User capacity: 2000
- > Length of PIN: 4 – 8 digits
- > Wide voltage input: DC 10-24V
- > Supporting block enrollment with cards sequentially numbered
- > Pulse Mode, Toggle Mode
- > Wiegand 26 Output/Input, PIN Viual card number output
- > Admin can add/delete admin cards, making add/delete cards rapidly.

### Specifications

Operating Voltage	10-24V DC
Idle Current	≤40mA
Working Current	≤80mA
Weatherproof	IP67
Read Range	≤6cm
User Capacity	2000
Card type	EM Card
Card Frequency	125KHz
Lock Output Load	≤2A
Alarm Output Load	≤1A
Operating Temperature	-40°C ~ +70°C, (-40°F ~ 158°F)
Operating Humidity	10% ~ 98%RH
Dimensions	L110xW76xH22mm(Wide) L129xW44xH20mm(Slim)
Unit Weight	460g (Wide), 350g (Slim)
Shipping Weight	520g (Wide), 410g (Slim)

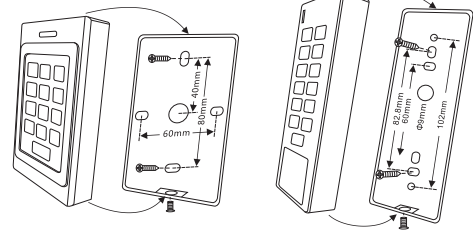
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### Packing List



### INSTALLATION

- > Remove the back cover from the unit with screw.
- > Drill hole on the wall according to the back size of the machine and fix the back cover to the wall. (or fix the back cover firmly to the 86cm×86cm box)
- > Thread the cable through cable hole, connect related cable. For the un-used cable please separate with insulating tape.
- > After wiring, install front casing to the back casing and fix well.



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### Wiring

Wire Color	Function	Notes
Green	NC	Relay NC
Brown	COM	Relay COM
White	NO	Relay NO
Black	GND	Negative Pole
Red	DC+	10-24V DC Power Input
Yellow	OPEN	Request to Exit Button
Brown	D_IN	Door Contact
Grey	ALARM-	Alarm Negative
Green	D0	Wiegand 26 output/input
White	D1	Wiegand 26 output/input
Grey & Black	BELL	External BELL (Slim mode)
Yellow & Black	BELL	External BELL (Slim mode)

### Sound and Light Indication

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

### Factory Default settings and add admin cards

Power off, press exit button, power on, release it until hear two beeps. Swiping two cards, the first card is "Admin Add Card", the second card is "Admin Delete Card", then the device will be in standby mode. Resets to factory default setting and adding admin cards are successful.

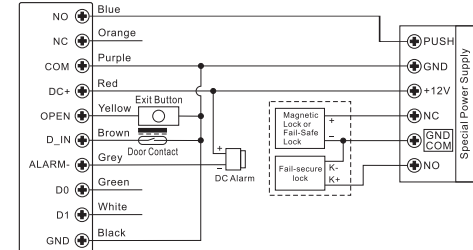
If you don't need to add admin cards: Power off, press exit button, power on, release it until hear two beeps, and the orange LED turn on. Waiting for ten seconds, there is a beep and it will be in standby mode. Resets to factory default setting is successful. Reset to factory default, the users' information won't be deleted.

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### STANDALONE MODE

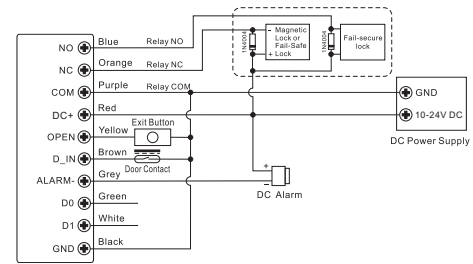
#### Connection Diagram

Special Power Supply for access control system



#### Common power supply

Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the reader might be damaged. (1N4004 is included in the packing).



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### Quick Start and Operation

Quick Settings	
Enter the Programming Mode	<b>* - Admin Code - #</b> Then you can do the programming (Factory default is 777777)
Change the Admin Code	<b>0 - New Code - # - Repeat the New Code - #</b> (New Code: any 6 digits)
Add Card User	<b>1 - Read Card - #</b> (Cards can be added in continuously)
Add PIN User	<b>1 - User ID - # - PIN - #</b> (ID number: 1-2000)
Delete User	<b>2 - Read Card - #</b> (for Card User) <b>2 - User ID - #</b> (for PIN User)
Exit from the Programming Mode	<b>*</b>
<b>How to release the door</b>	
Open door by card	(Read Card)
Open door by User PIN	(Users PIN) #
Open door by user card + PIN	(Read Card) (Users PIN) #

### Add/Delete Users by Admin Card

Using Admin Cards to add delete card users	
Add users	Step 1: Read Admin Add Card Step 2: Read user cards (Repeat step 2 for additional user cards) Step 3: Read Admin Add Card again to end
Delete users	Step 1: Read Admin Delete Card) Step 2: Read user cards (Repeat step 2 for additional user cards) Step 3: Read Admin Delete Card again to end

### Enter and Exit Program mode

Programming Step	Keystroke Combination
Enter Program Mode	* (Admin Code) # (Factory default is 777777)
Exit Program Mode	*

For safety, the Admin must change the Admin code.

### Modify Admin Code

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Update Admin Code	0 (New Admin Code) # (Repeat New Admin Code) # (Admin Code is any 6 digits)	Orange bright
Exit Program Mode	*	Red bright

The length of the admin code is 6 digits, the admin should keep it in mind.

### Add Users by Keypad (ID Number:1-2000)

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines

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### Add Card User

Add Card: by Card	1 (Read Card) #	Orange bright
OR		
Add Card: by ID number	1 (Input ID number) # (Read Card) #	
OR		
Add proximity cards sequentially numbered	8 (ID number) # (8/10 digits card number) # (The number of cards)#	Orange bright
Add PIN users	1 (ID Number) # (4-8 digits PIN)	
Exit Program Mode	*	Red bright

**Note:** 1. When swiping cards to add users, the user ID will be added in automatically, and ID number will be from small to big, ranged from 1 – 2000.

2. When adding card users, an attached PIN 1234 will be added in automatically. This pin cannot used to open door. If you want to open door by card + PIN, you should first change the old PIN 1234, method referring to Change PIN.

3. Before add the proximity cards sequentially numbered, the ID number should be sequential and empty.

### Delete Users by Keypad

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Delete Card User-Common		
Delete Card - By Card	2 (Read Card) #	Orange bright
OR		
Delete Card - By ID number	2 (Input ID number) #	Orange bright
Delete All User	2 0000 #	
Exit Program Mode	*	Red bright

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### Pulse Mode and Toggle Mode Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Pulse Mode	3 (1-99) #	Orange bright
Toggle Mode	3 0 #	Red bright
Exit Program Mode	*	Red bright

**Note:** 1. Factory default is **Pulse Mode** and the access time is 5 seconds. When set the access time to "0", the device will be in Toggle Mode.

2. **Pulse Mode:** The door will be closed automatically after opening the door for a while.

3. **Toggle Mode:** Under this mode, after opening the door, the door won't be closed automatically until next valid user input. That is to say, whether open or close the door, you must swipe valid card or input valid PIN.

### Access Mode Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Open door by card	4 0 #	Orange bright
OR		
Open door by card + PIN	4 1 #	
OR		
Open door by card or PIN	4 2 # (Factory default)	Orange bright
Exit Program Mode	*	

### Alarm Output Time Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Set alarm time	6(1-3) #	Orange bright
Exit Program Mode	*	Red bright

**Note:** 1. Factory default is 1 minute.

2. Alarm output time includes: the alarm time of anti-vandal, safe mode and closing reminder.

3. Swipe valid card or Input valid PIN can remove the alarm.

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### Set Safe Mode

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Normal Mode	7 0 # (Factory default)	Orange bright
OR		
Lockout Mode	7 1 #	
OR		
Alarm output Mode	7 2 #	Red bright
Exit Program Mode	*	

**Note:** **Lockout Mode:** If swipe card/input PIN with invalid users for 10 times in 1 minute, the device will be lockout for 10 minutes. When the device repowered, the lockout will be canceled.

**Alarm Output Mode:** If swipe card/input PIN with invalid users for 10 times in 1 minute, the buzzer built-in will be activated.

### Door Detection Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
To disable door detection	9 0 # (Factory Default)	Orange bright
To enable door detection	9 1 #	Red bright
Exit Program Mode	*	Red bright

**Note:** After enable the door detection function, you must connect the detection switch into the wiring. There will be two detection status:

1. The door is opened by valid user, but not closed in 1 minute, the device will beep.

How to stop the warnings: Close the door/valid user/ Automatically stop when the alarm time is up.

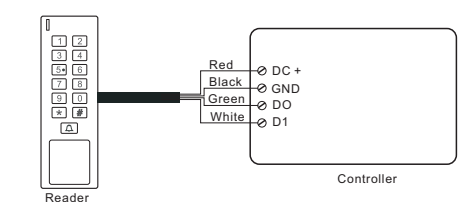
2. If the door opened by force, the device and external alarm will activate.

How to stop the alarm: Valid user/Automatically stop when the alarm time is up.

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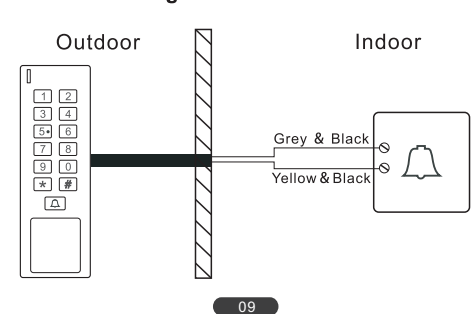
### WIEGAND READER MODE

#### Connection Diagram



**Note:** When the device is used as salve reader, the Wiegand output format of the card is 26 bits; the format of PIN is virtual card number output.

### Doorbell Wiring



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