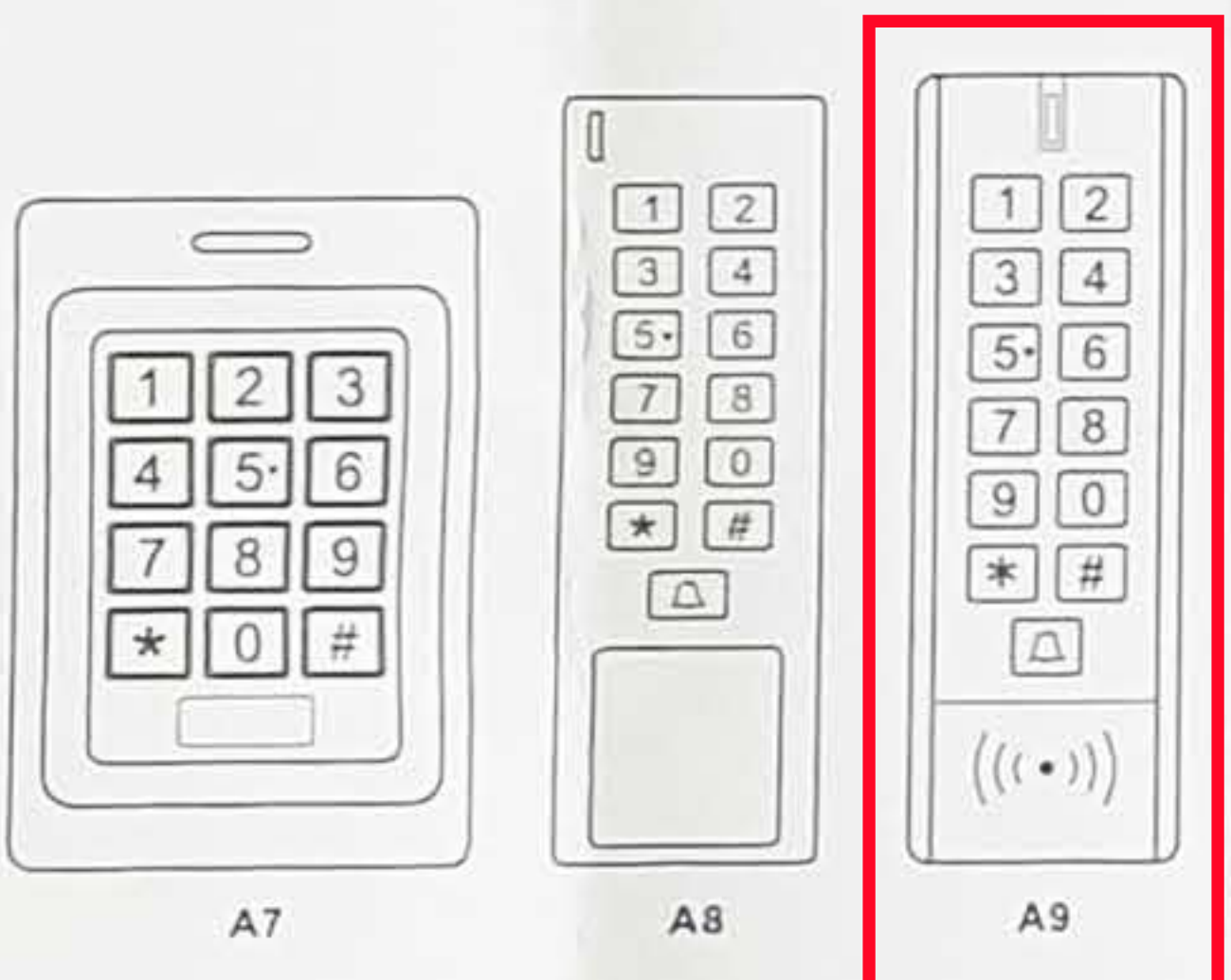


Stand-alone Access Control/Reader

SDC-612N-1-M



User Manual

INTRODUCTION

This product is a Keypad standalone access control. 1500 user capacity and supporting 13.56MHz Mifare card (UID 7 bytes, 4 bytes, Plus). It can be access by card, PIN, card + PIN. It also equipped with admin add/delete cards, door detection, external alarm and Wiegand input/output interface.

Features and Benefits

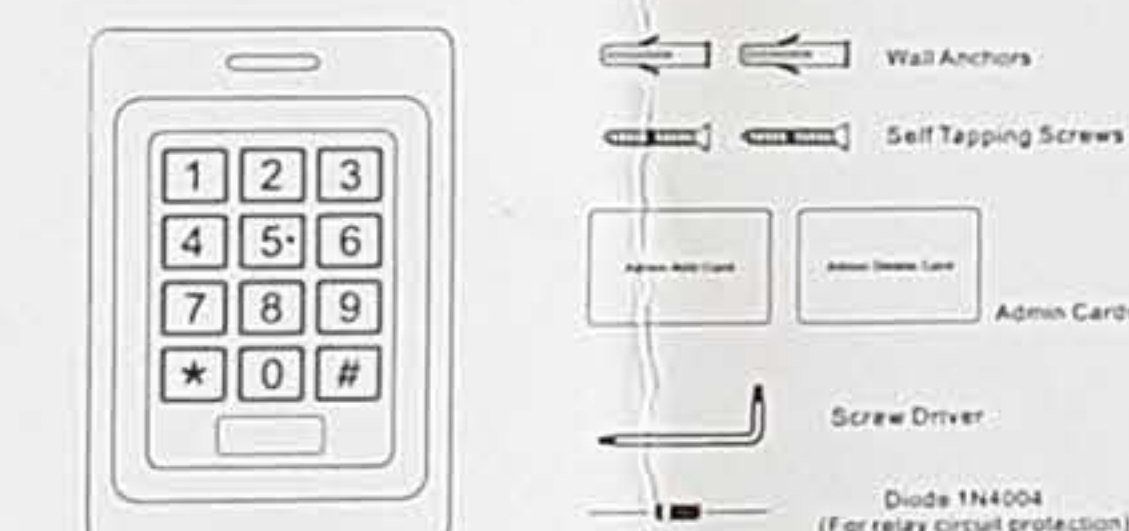
- > A7,A8 Zinc-alloy housing, A9 ABS shell
- > Waterproof, conforms to IP67
- > With Wiegand input & output, it can be used as not only standalone, but also slave reader or access controller.
- > Equipped with admin cards, which can add/delete users quickly.
- > Pulse Mode or Toggle Mode
- > Door Bell button (A8,A9)

Specifications

Operating Voltage	10-24V DC
Idle Current	<45mA
Active Current	<80mA
Waterproof	IP67
User Capacity	1500
Frequency	13.56MHz
Card type	Mifare (UID 7 bytes, 4 bytes, Plus)
Read Range	<6cm
Wiegand Interface	Card: Wiegand 26 bits or 34 bits, PIN: 4 bits
Lock Output Load	<2A
Alarm Output Load	<500mA

Operating Temperature	-40°C ~ +70°C, (-40°F ~ +158°F)
Operating Humidity	10% ~ 98%RH
Dimensions	A7: L110x76x22mm A8: L129x44x20 A9: L134x48x25mm
Unit Weight	A7: 445g, A8: 350g, A9: 175g
Shipping Weight	A7: 510g, A8: 412g, A9: 338g

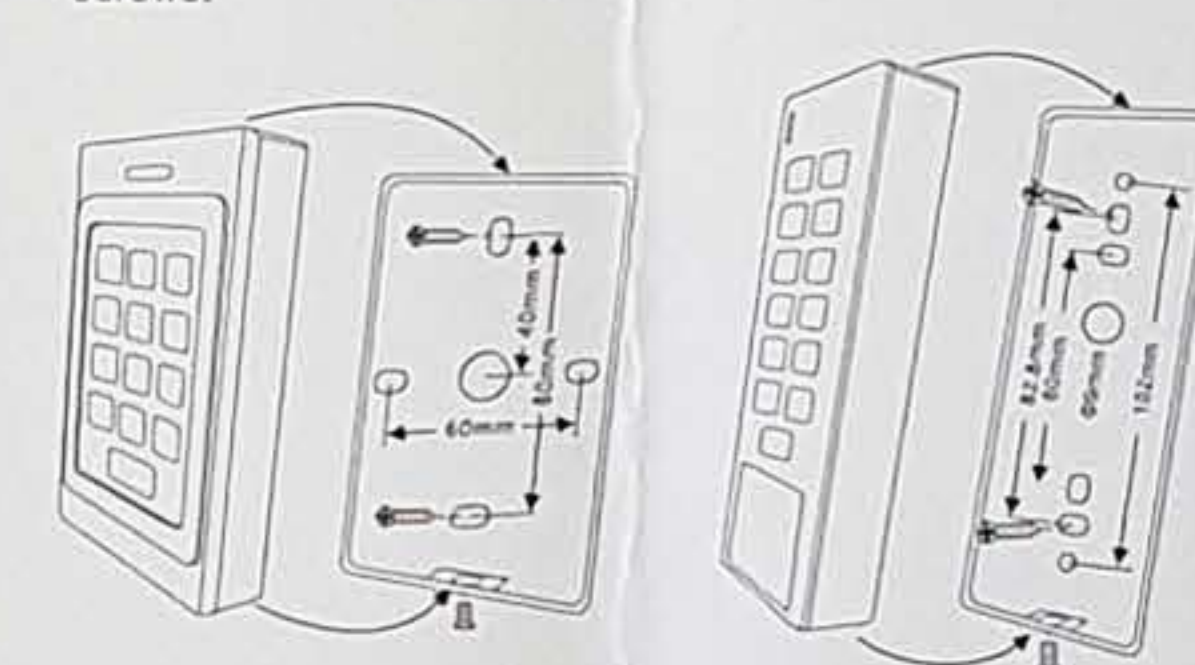
Packing List



INSTALLATION

1. Remove the back cover from the unit with screw.
2. Drill hole on the wall according to the back size of the machine and fix the back cover on the wall.
3. Thread the cable through cable hole, connect related cable. For the un-used cable please separate with insulating tape.

4. After wiring, install front casing and fix the back cover well with screws.



Wiring

Wire Color	Function	Notes
Orange	NC	Relay NC
Purple	COM	Relay COM
Blue	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 output/input Data0
White	D1	Wiegand output/input Data1
Grey & Black	BELL	External BELL
Yellow & Black	BELL	External BELL

Sound and Light Indication

Operation Status	LED	Buzzer
Stand by Mode	Red light bright	--
Enter program Mode	Red light shines	--
In the Program Mode	Orange light bright	--
Open lock	Green light bright	One beep
Operation failed	--	Three beeps

Modify Admin Code

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) # (Factory default is 777777)	Red shines
Modify Admin Code	0 (New Admin Code) # (Repeat New Admin Code) #	Orange bright
Exit Program Mode	*	Red bright

Note: Admin should enter Program Mode, then the settings can be set or reset. For security, you must change the Admin Code and then keep in mind.

Factory Default Setting and Add Admin Cards

power off, press exit button, power on, release it until hear two beeps, then the red LED will be orange. It means the device is under the status of waiting for adding admin cards. 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 and the red light bright. Resets to factory default setting add admin cards are successful.

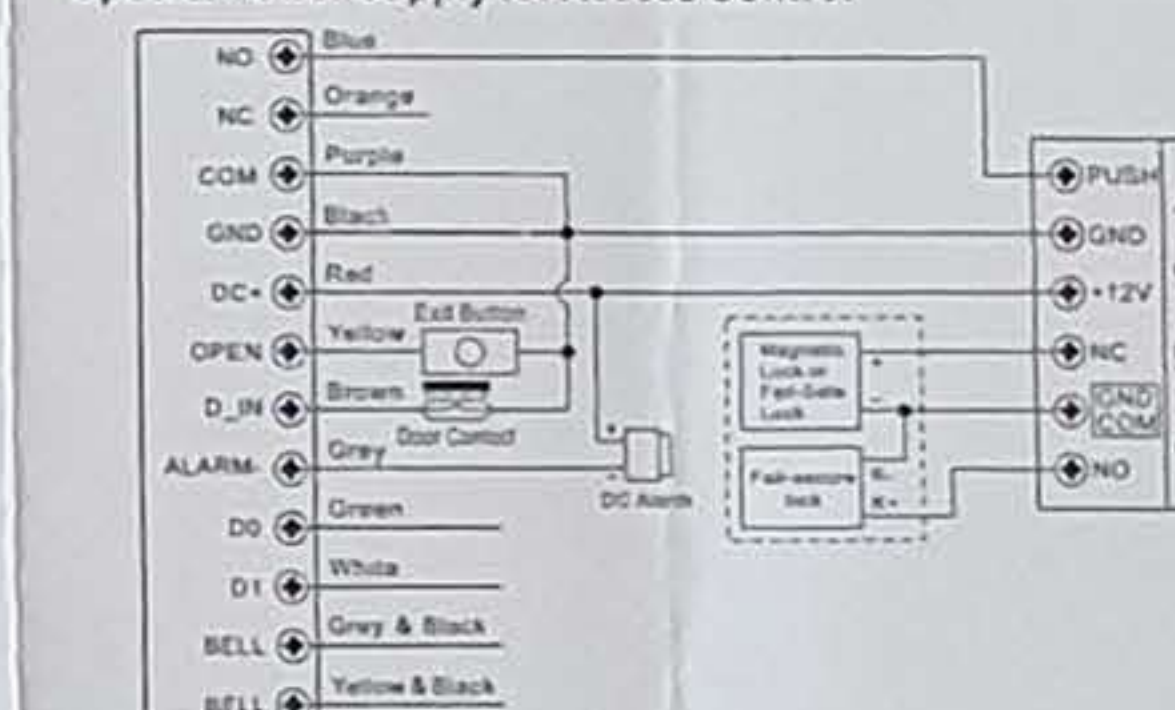
If you don't need to add admin cards: Press * *, power on, hold it for more than 10 seconds.

Note: Reset to factory default, the users' information won't be deleted.

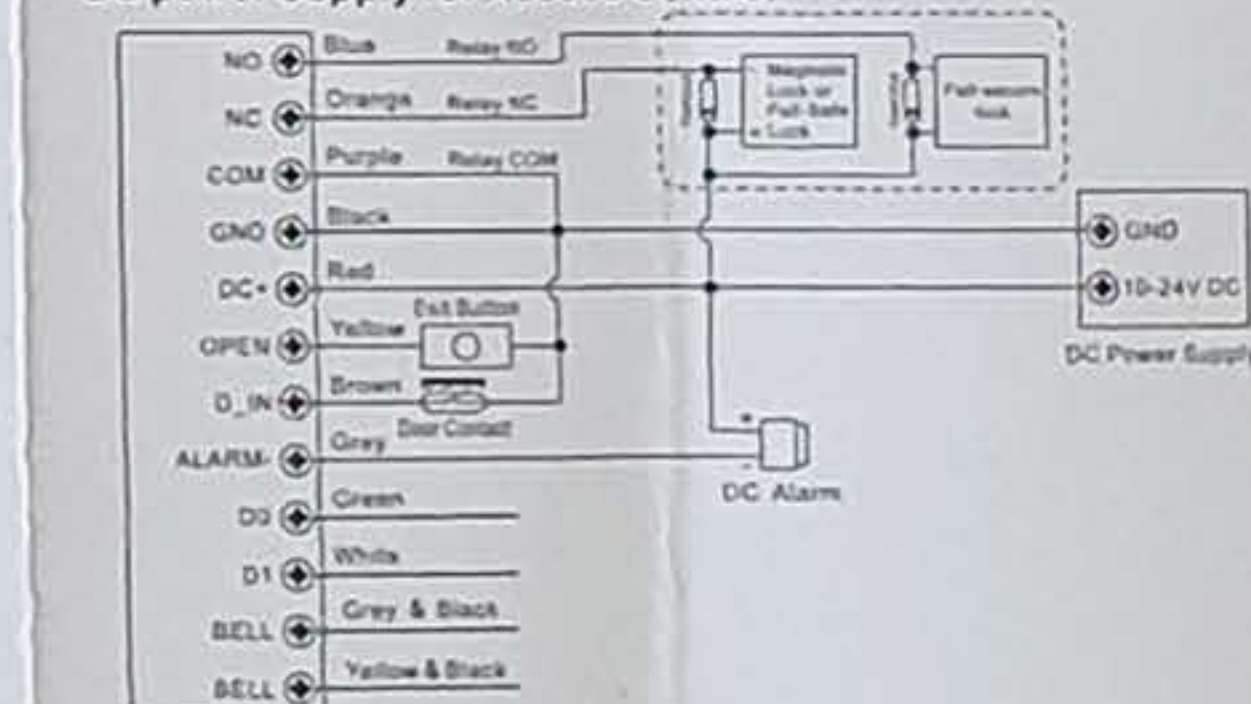
STANDALONE MODE

Connection Diagram

Special Power Supply for Access Control



DC power Supply for Access Control



Note: The electric locks must be connected with diode (1N4004), otherwise the device might be damaged. The white end of the diode is connected to positive pole of electric lock and the other end is connected to negative pole of the electric lock.

Add/Delete Users by Admin Cards (in standby mode)

Operation	Steps
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	*

Add Users (ID number: 1-1500)

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Add Card User		
Add Card: By Card OR	1 (Read Card) #	
Add Card: By ID number	1 (Input ID number) # (Read Card)	Orange bright
OR		
Add Card: By Card number	1 (Input 8/10 digits Card number) #	

Simplified Instruction

Function Description	Operation
Enter the Programming Mode	* (Admin Code) # then you can do the programming (777777 is the factory default Admin code)
Change the Admin Code	0 - New Code - # - Repeat the New Code - # (code:6 digits)
Add Card User	1 - Read Card - # (can add Cards continuously)
Add PIN User	1 - User ID# - PIN - # (ID number:1-1500)
Delete User	2 - Read Card - # for Card User 2 - User ID - # for PIN or Card User (ID number:1-1500)
Exit from the Programming Mode	*
How to release the door	
Open door by card	(Read Card)
Open door by User PIN	(Users PIN) #
Open door by user card + PIN	(Read Card) (Users PIN) #

Add PIN users		
Add PIN User	1 (Input ID number) # (4-6 digits PIN) #...	Orange bright
Exit Program Mode	*	Red bright

- Note: 1. When swiping cards to add users, the ID number is from small to big.
2. When adding card users, an attached PIN 1234 will be added in automatically. This PIN cannot be 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.

Delete Users

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Delete Card: By Card OR	2 (Read Card) #	
Delete Card: By ID number OR	2 (Input ID number) #	Orange bright
Delete Card: By Card number OR	2 (Input 8/10 digits Card number) #	
Delete All User	2 0000 #	Orange bright
Exit Program Mode	*	Red bright

Access Time Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Time Setting	3 (1-99) #	Orange bright
Set Toggle Mode	3 9999 #	Orange bright
Exit Program Mode	*	Red bright

- Note: 1. Access time range: 1-99 seconds, factory default is 5 seconds.
2. Pulse Mode and Toggle Mode, you can only choose one.
3. **Pulse Mode:** The door will be closed automatically after opening the door for a while.

Toggle Mode: Under this mode, after opening the door, the door won't be closed automatically until next valid user input. 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 only by card	4 0 #	
OR		
Open door by card + PIN	4 1 #	Orange bright
OR		
Open door by card or PIN	4 2 # (Factory default)	
Exit Program Mode	*	Red bright

Door Detection Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
To disable door detection	5 0 # (Factory Default)	Orange bright
To enable door detection	5 1 #	Orange 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.

Safe Mode Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Close safe mode	6 0 # (Factory default)	
Lockout mode	6 1 #	Orange bright
Alarm mode	6 2 #	
Exit Program Mode	*	Red bright

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.
Alarm Output: If swipe card/input PIN with invalid users for 10 times in 1 minute, the device will alarm.

Add anti-duress users (1501-1510)

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Add anti-duress Card	7 (Read Card)	Orange bright
Add anti-duress PIN	7 ID# (4-6 digits PIN)#	Orange bright
Exit Program Mode	*	Red bright

Note: If under threat, swiping the Anti-duress card or input Anti-duress PIN, the door will open, but the external alarm will activate to inform your friend to help you.

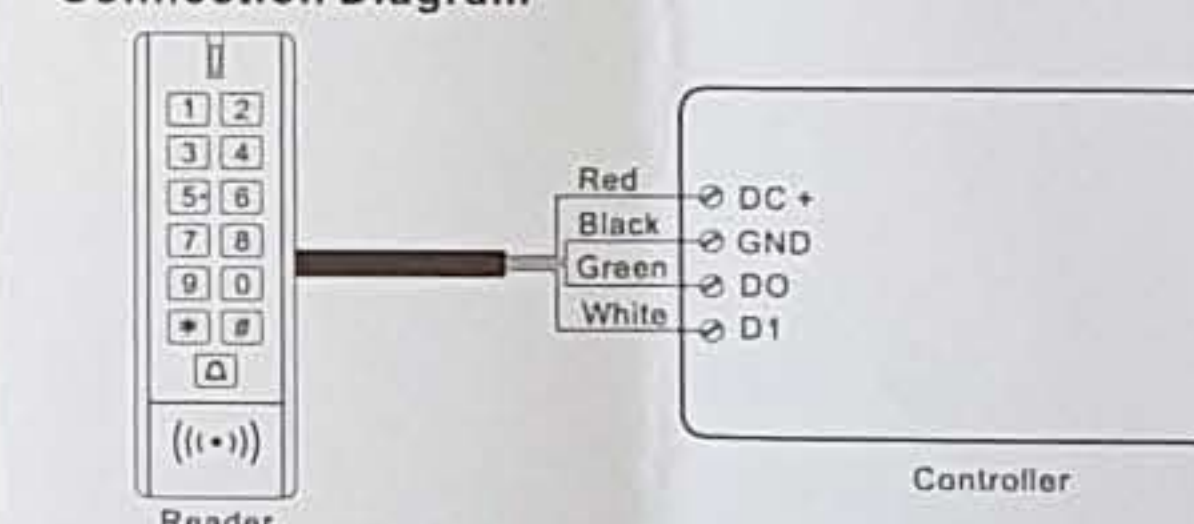
Alarm output time setting (factory default is 1 minute)

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Time Setting	8 (0-3) #	Orange bright
Exit Program Mode	*	Red bright

Note: Alarm time range: 0-3 minutes

WIEGAND READER MODE

Connection Diagram

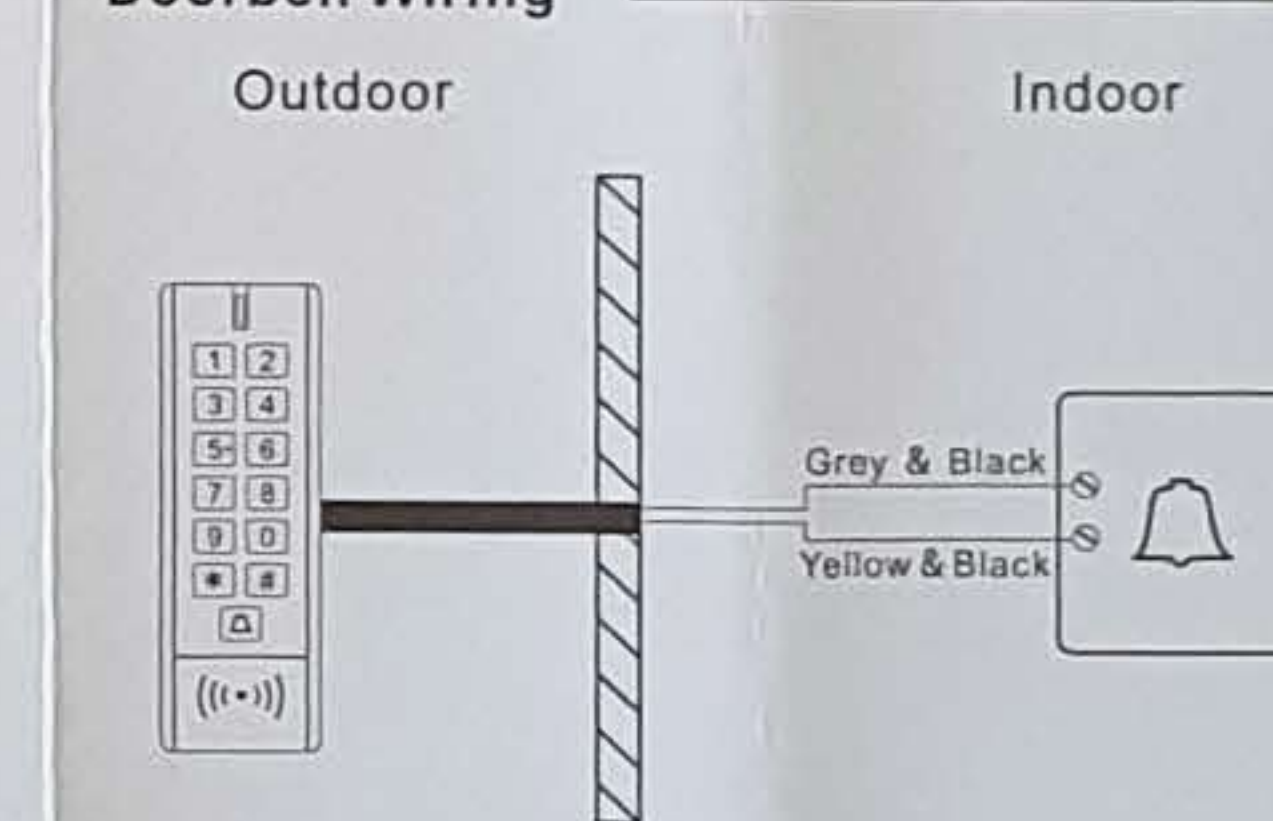


Note: When the device is used as slave reader, the Wiegand output format of the card is 26 bits or 34 bits; the format of PIN is 4 bits output.

Set Wiegand Output Formats of Card

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Wiegand 26	9 0 # (Factory default)	Orange bright
Wiegand 34	9 1 #	Orange bright
Exit Program Mode	*	Red bright

Doorbell Wiring



User Operation

Change PIN

Programming Step	Keystroke Combination
Change independent PIN	* (ID number) (old PIN) # (New PIN) # (Repeat New PIN) #
Change PIN which attached to the card users	* (Read Card) # (old PIN) # (New PIN) # (Repeat New PIN) #

Note: The PIN cannot be "1234", and the PIN attached to the card is only used for card+PIN access mode.

How to Release the Door

Programming Step	Keystroke Combination
Open door by r card OR	(Read Card)
Open by PIN OR	(Input PIN) #
Open door by card + PIN	(Read Card) (Input PIN) #