

INTRODUCTION-

The device is a single door standalone access control with Wiegand input & output. It uses Atmel MCU assuring stable performance. The operation is very user-friendly, and low-power circuit makes it long service life.

The device supports 1,000 users (990 common users + 10 visitor users) It supports multi access modes in card access, PIN access, card + PIN access, or multi cards/PINs access.

The device with Bluetooth-enabled. People can install the Bluetooth APP to easily access the door with their smartphone. (APP operation can refer from APP manual)

- > Waterproof, conform to IP66 > Vandal resistant metal enclosure
- > PIN length: 4~6 digits
- > Card Type: 125KHz EM Card/13.56MHz Mifare Card (optional)
- > Wiegand 26 bits output, Wiegand 26/34bits input automatic identification > Card block enrollment > Tri-color LED status display

- > Pulse mode, Toggle mode > Low temperature resistance (-40°C)

Specifications	

	Wiring Connections	Relay Output, Exit Button, Wiegand Input, Wiegand Output
	PIN Length	4~6 digits
	Proximity Card Reader Radio Technology Read Range	EM or Mifare 125KHz / 13.56MHz 2~6 cm
	Operating Voltage Working Current Idle Current	12~18V DC ≤150mA ≤60mA
	User Capacity Common User Visitor User	1000 990 10

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One (NO, NC, Common) Adjustable Relay Output Time 0~99 Seconds (5 seconds default) Lock Output Load 2 Amp Maximum Wiegand 26 bits output Wiegand 26/34bits input automatic Wiegand Interface Outdoor (Meets IP66 Operating Temperature -40°C ~ 60°C (-40°F ~ 140°F) 0%RH~98%RH Physical Zinc-Allov Enclosure Silver & Black Diameter 73mm,Thickness 20mm(Round L69 × W105 × D20mm(Ellipse) Unit Weight Shipping Weight

Carton Inventory



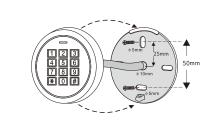


Screw Driver

- **INSTALLATION** -> Remove the back cover from the unit
- > Drill 2 holes(A.C) on the wall for the screws and one hole for the cable

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- > Knock the supplied rubber bungs to the screw holes(A,C) > Fix the back cover firmly on the wall with 4 flat head screws
- > Thread the cable through the cable hole(B)



Wiring Colour Function

Coloui	i uncuon	140163
Red	Power+	12-18Votes DC Regulated Power Input
Black	GND	Ground
Blue	NO	Normally Open Relay Output
Brown	COM	Common Connection for Relay Output
Grey	NC	Normally Closed Relay Output
Yellow	OPEN	Request to Exit input(REX)
Green	D0	Wiegand Input/Output Data 0
White	D1	Wiegand Input/Output Data 1

Sound and Light Indication

Operation Status	LED	Buzzer
Stand by	Red light bright	_
Enter into programming mode	Red light shines	One beep
In the programming mode	Orange light bright	One beep
Operation error	_	Three beeps
Exit from the Programming mode	Red light bright	One beep
Open lock	Green light bright	One beep
Alarm	Red light Shines quickly	Beeps

Basic Configure

Enter and Exit Program Mode

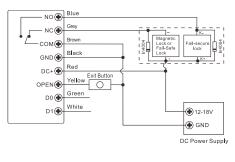
Programming Step	Keystroke Combination
Enter Program Mode	* (Master Code) # (Factory default is 123456)
Exit Program Mode	*

Set Master Code

out muster odde		
Programming Step	Keystroke Combination	
1. Enter Program Mode	* (Master Code)#	
2. Update Master Code	0 (New Master Code) # (Repeat New Master Code) # (Master code is any 6 digits)	
3. Exit Program Mode	*	

Connection Diagram —

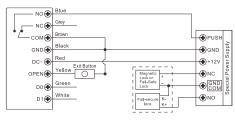
Common Power Supply



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Attention:
Install a 114/004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (114/004 is included in the packing)

Access Control Power Supply



Programming will be varied depending on access configuration. Follow the instructions according to your access configuration

> User ID number: Assign a user ID to the access card/ PIN in order to track it. The Common User ID:

PIN/ Card user ID: 0 ~ 989 Visitor User ID: 990 ~ 999 IMPORTANT: User IDs do not have to be proceeded with any leading zeros. Recording of User ID is critical. Modifications to the user require the User ID be available.

> Proximity Card:

Proximity Card: 125KHz EM card or 13.56MHz Mifare card

> PIN: Can be any 4~6 digits except 8888 which is reserved.

OTHERS -

Example PIN: 123434 You could use **(123434) ** or ** (123434) (**" can be any numbers from 0~9)

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For higher security we allow you to hide your correct PIN with other numbers up to a max of 10 digits.

Add Common Users
PIN/ Card user ID: 0~989; PIN length: 4~6 digits except 8888

Enter Program Mode

Using Auto ID
 (Allows the device to assign Card to next available User ID number)

(Allows Master to define a specific

Takes 2 minutes to program.

(Allows the device to assign PIN to next available User ID number)

(Allows manager to define a specific

Tips for PIN Security (Only valid for 6 digits PIN):

Users Operation & Reset to Factory Default

User ID to associate the PIN to)

Add Card User

2. Select Specific ID

Add PIN User

2. Using Auto ID

* (Master Code) #

(Allows Master to add up to 988 cards to the Reader in a single step)

First Card 8/10/17 Digits Number):
Cards' number must be consecutive;

1 (Read Card) / (Input 8/10/17 Digits Card Number) #

1 (User ID) # (Read Card) / (Input 8/10/17 Digits Card Number) #

First Card 8/10/17 Digits Number)#

The PINs can be added continuousl

I (User ID) # (PIN) #

(Card quantity is the number of

he cards can be added continuously

then you can do the programming Enter the Programming Mode (123456 is the factory default 0 - New Code - # - Repeat the New Change the Master Code (code: 6 digits) 1 . Read Card . # Add Card User (The PIN is any 4~6 digits except 8888 which is reserved) How to release the door Card User Read Card PIN User

(User ID number is 990~999; PIN length: 4~6 digits except 8888)
There are 10 groups Visitor PIN/card available, the users can be specified up to 10 times of usage, after a certain number of times, i.e. 5 times, the PIN/card become invalid automatically.

Programming Step	Keystroke Combination
Enter Program Mode	*(Master Code)#
2. Add Card OR	1 (User ID) # (0~9) # (Read Card) / (Input 8/10/17 Digits Card Number) #
2. Add PIN	1 (User ID) # (0~9) # (PIN) # (0~9 means times of usage, 0=10 times)
3. Exit	*

Change PIN Users(PIN length: 4~6 digits except 8888)

rrogramming step	Reystroke Combination	
Note: Below is done outside programming mode, users can undertake this themselves		
Change PIN	* (User ID) # (Old PIN) # (New PIN) # (Repeat New PIN) #	
Change PIN of Card + PIN access mode (There will auto allocate PIN (8888) to cards when adding)	*(Read Card) (Old PIN) # (New PIN) # (Repeat New PIN) #	

Programming Step	Keystroke Combination
Enter Program Mode	* (Master Code)#
2. Delete User- By Card/ PIN OR	2 (Read Card)/(Input PIN) # The users can be deleted continuously.
2. Delete User - By ID number OR	2 (User ID) #
2. Delete User - By Card number OR	2 (Input 8/10/17 Digits Card Number)#
2. Delete ALL Users	2 (Master Code) #
3. Exit	*

Set Relay Configuration
The relay configuration sets the behaviour of the output relay on activation.

Programming Step	Reystroke Combination
1. Enter Program Mode	*(Master Code)#
Pulse Mode OR Toggle Mode	3 (1~99) # (factory default) The relay time is 1-99 seconds. (Default is 5 seconds) 3 0 # Sets the relay to ON/OFF Toggle mode
3. Exit	*

Set Access Mode

For Multi user access mode, the interval time of reading can not exceed 5 seconds, or else, the device will exit to standby automatically.

Programming Step	Keystroke Combination
1. Enter Program Mode	*(Master Code)#
2 Card Access OR	40#
2 PIN Access OR	41#
2 Card + PIN Access OR	42#
2 Card or PIN Access OR	43# (factory default)
2 Multi User Access	4 3 (2~9) # (Only after 2~9 valid users, the door can be opened)
3. Exit	*

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Set Strike-out Alarm

The strike-out alarm will engage after 10 failed entry attempts (Factory is OFF). It can be set to deny access for 10 minutes after engaging or disengage only after entering a valid card/PIN or Master code / card.

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rogramming Step	Keystroke Combination
. Enter Program Mode	* (Master Code)#
. Strike-Out OFF	60# (factory default)
. Strike-Out ON	6 1 # Access will be denied for 10 minutes
R	(Exit button is still workable)
. Strike-Out ON (Alarm)	62#
Set Alarm Time	5 (0 ~ 3) # (factory default is 1 minute)
	Enter Master Code # or Master Card or valid user card/ PIN to silence
. Exit	*

rogramming Step	Keystroke Combination
I. Enter Program Mode	* (Master Code)#
2. Disable Sound	70#
Enable Sound	7 1 # (factory default)
OR	, , , ,
2. LED Always OFF	72#
LED Always ON	7 3 # (factory default)
B. Exit	*

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WIEGAND MODE -

Pass-through Mode (The keypad Operates as a Wiegand Output Reader)

In this mode the keypad supports a Wiegand 26bits output so the Wiegand data lines can be connected to any controller which supports a Wiegand 26 bits input, and then the keypad will operate as a slave reader Wiring Diagram

Grey NC NC Brown COM Black GND Green D0

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Keypad Transmission Format /irtual Card Number The reader will transmit the PIN data when it receives the last key Example: PIN code: 999999 Press 999999#, then the output format will be:

Controller Mode

Wiring Diagram

D0 Green
D1 White

GND (Black

NC
Grey

(The keypad Operates as a Controller)
It supports Wiegand 26/34 bits input (Automatic Identification), so an external Wiegand device with 26/34 bits output can be nnected to the Wiegand input terminals on the keypad. Either an EM card reader (125 KHz) or an Mifare card reader (13.56MHz) can b

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Cards are required to be added at the external reader, except where an external EM card Reader is used, in this case cards can be added at either reader or controller

NC COM NO +12V GND PUSH

1 If no Master Card added, must press the Exit Button for at least 5 seconds before release. (this will make the previous registered Master Card invalid) 2 Reset to factory default, the user's information is still retained.

successfully. Of the card reading, it is the Master Card.

Open the door: Read valid user card or input valid user PIN #

> Remove Alarm: Enter Master Code # or Master Card or valid user card / PIN #

To reset to factory default & Add Master Card: Power off, press the Exit Button, hold it and power on, there will be two beeps, then release the exit button, the LED light turns into yellow, then read any 125KHz EM card/

13.56MHz Mifare card, the LED will turn into red, means reset to factory default

Master Card Usage

(Users can add the Master Card by themselves--- Can refer to page 12 'Reset to factory default & Add Master Card')

Using Master Car	d to add an d o	delete users
Add Card / PIN Use	ers	Input (Master Card) Input (Card) or (PIN #) Repeat step 2 for additional users Input (Master Card) again
Delete Card / PIN U	sers	Input (Master Card Twice within 5s) Input (Card) or (PIN #) Repeat step 2 for additional user

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