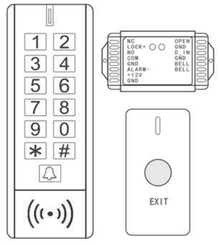
Wireless
Access Control



User Manual

INTRODUCTION

The device is a single door wireless access control, consists of a wireless & waterproof keypad, a mini controller and a wireless exit button. 433MHz Rolling Code of encryption algorithm and the split design guarantees higher-secure.

The keypad can store 600 PIN / card users, including 500 common users and 100 visitor users. PIN length can be 4~8 digits, with internal & external alarm, door contact, exit button (wired) and door bell.

Because of ultra low power consumption, the keypad and exit button can work as long as one year (bases on 20 times/day), with just 3 units of AAA batteries and 1 unit Li-battery. It will remind people to replace batteries intelligently if low battery.

Features

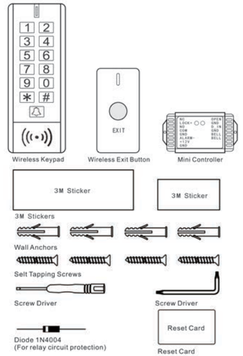
> Waterproof, conforms to IP65
> 600 PIN / card users (500 common users + 100 visitor users)
> PIN length: 4~8 digits
> Backlit Keypad
> Communication frequency: 433MHz
> Communication distance: 50m Max
> Door contact, alarm and door bell output
> Pulse mode, toggle mode
> Tri-color LED status display
> Ultra low power consumption (wireless keypads10uA)

Specifications

User Capacity	**600 PIN / card users** (500 common users + 100 visitor users)
PIN Length	4~8 digits
Card Type	125KHz EM card
Operating Voltage	
Wireless Keypad	3 units of AAA batteries
Mini Controller	12V DC ± 20%
Wireless Button	1 unit of 2032 Lithium battery

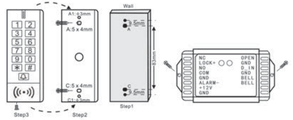
Current	
Idle Current	Wireless Keypad: ≤10uA; Mini Controller: ≤20mA; Wireless Button: ≤10uA
Working Current	Wireless Keypad: ≤80mA; Mini Controller: ≤50mA Wireless Button: ≤30mA
Communication Frequency	**433MHz**
Communication Distance	**50m Maximum**
Relay Contact Load	**2Amp Maximum**
Environment	**Outdoor (Wireless Keypad)**
Operating Temperature	-40°C~60°C (-40°F~140°F)
Operating Humidity	**10%~90%RH**
Physical	**ABS Shell**
Dimensions	Wireless Keypad: L134 × W48 × D25(mm) Mini Controller: L85 × W50 × D25(mm) Wireless Button: L80 x W38 x D15 (mm)
Unit Weight	Wireless Keypad: 150g Mini Controller: 62g Wireless Button: 34g
Shipping Weight	300g

Carton Inventory



INSTALLATION

Method 1: Stick by 3M stickers
The device packed with 3M double-side Stickers, can easily stick the Wireless Keypad and Wireless Button on Metal door, Glass Door, Wooden Door, or Smooth Wall.
Method 2: Install by screws.



Wiring (Mini Controller)

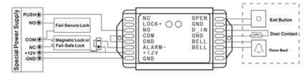
No.	Function	Notes
1	GND	Negative Pole of DC(12V) Power Input
2	+12V	Positive Pole of DC(12V) Power Input
3	ALARM-	Negative Contact for Alarm
4	COM	Common Connection for Relay Output
5	NO	Normally Open for Relay Output
6	LOCK+	Positive Pole of Lock Power Input
7	NC	Normally Close for Relay Output
8	OPEN	Contact to One Wire of Exit Button
9	D_IN	Door Status Detecting
10	BELL_A	Contact for Door Bell
11	BELL_B	Contact for Door Bell

Sound and Light Indication

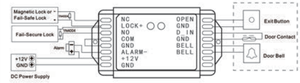
Operation Status	Red LED	Green LED	Buzzer
Standby	-	-	-
Unlock the lock	-	ON for 3 seconds	
Key press under Program Mode	-	-	One beep
Enter into Program Mode	Shines per 1.5 seconds	-	One long beep
Invalid PIN	-	-	3 beeps
Exit from the Program Mode	-	-	One beep
Low battery reminding	RED & GREEN alternately shines 2 times (Wireless Button)		-
	ON (Wireless Keypad)		3 beeps when key press

Connection Diagram

Access Control Power Supply:



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)

Reset to Factory Default for Keypad

Power on, press #, read 'reset card', there will be one beep, means reset to factory default successfully.

Remarks:
1. Reset to factory default, the user's information is still retained.
2. Keypad needs to pair with controller after reset

PROGRAMMING

Enter and Exit Program Mode

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

Simplified Instruction

Function description	Operation
Enter the Program Mode	* (123456) # then you can do the programming (123456 is the factory default master code)
Change the master code	0 (New Code) # (Repeat the New Code) # (code: 6 digits)
Add PIN user	1 (User ID) # (PIN) # (Repeat PIN) #
Add Card User	1 (Read Card)
Delete user	2 (User ID) #
Delete ALL user	2 (Read Card) 2 (0000) #
Exit from the Program Mode	*
How to release the door	
PIN Access	PIN #
Card Access	# (Read Card)
PIN + Card Access	# (Read Card) (PIN) #

Set Master Code

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	*

Add User PIN(s)

User ID: 0~499; PIN length: 4~8 digits

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add Users	1 (User ID) # (PIN) # (Repeat PIN) # The users can be added continuously
3. Exit	*

Add User Card(s)

User ID: 0~499; Card type: 125KHz EM card

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add Card: Using Auto ID (Allows the device to assign Card to next available User ID number)	1 (Read Card) # The cards can be added continuously.
OR	
2. Add Card: Select Specific ID (Allows Master to define a specific User ID to associate the card to)	1 (User ID) # (Read Card) #
3. Exit	*

Add Visitor Users

There are 100 groups Visitor PIN / card available, the users can be specified up to 9 times of usage, after a certain number of times, i.e. 5 times, the PIN/card become invalid automatically.

User ID: 00~099 (the leading zero of the User ID means Visitor Users)

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add Visitor Card	1 (User ID) # (1~9) # (Read Card) The cards can be added continuously.
OR	
2. Add Visitor PIN	1 (User ID) # (1~9) # (PIN) # (Repeat PIN) # The users can be added continuously
3. Exit	*

Note:
Number of time is 1~9
Visitor PIN/card must be unique, should be distinguished from common PIN/card

Change PIN Users

Programming Step	Keystroke Combination
Note: Below is done outside programming mode, users can undertake this themselves.	
2. Change PIN: By Card (There will auto allocate PIN (1234) to cards when adding)	* (Read Card) (Old PIN) # (New PIN) # (Repeat New PIN) #
OR	
2. Change PIN: By PIN	* (User ID) # (Old PIN) # (New PIN) # (Repeat New PIN) #
3. Exit	*

Delete Users

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Delete user by ID	2 (User ID) # The users can be deleted continuously
OR	
2. Delete user by card	2 (Read Card) #
OR	
2. Delete All User	2 (0000) #
3. Exit	*

Set Access Mode

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. PIN Access	3 0 #
OR	
2. PIN + Card Acces	3 1 #
OR	
2. PIN or Card Access	3 2 # (factory default)
3. Exit	*

Set Relay Configuration

The relay configuration sets the behavior of the output relay on activation.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Pulse Mode	4 (1-99) # (factory default) The relay time is 1-99 seconds. (1 is 500mS.) (Default is 5 seconds)
OR	
2. Toggle Mode	4 0 # Set the relay to ON/OFF Toggle mode
3. Exit	*

Set Door Bell

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Door Bell OFF	5 0 #
OR	
2. Internal Door Bell ON	5 1 #
OR	
2. External Door Bell ON	5 2 #
OR	
2. Internal & External Door Bell ON	5 3 # (factory default)
3. Exit	*

Remarks: press Door Bell on keypad, there will be 2 times 'dingdong' from mini controller

Set Safety Mode

In safety mode, it can be set to deny access for 10 minutes after 10 failed PIN / card attempts in 10 minutes (Factory is OFF)

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Strike-Out OFF	6 0 # 0 # (factory default)
OR	
2. Strike-Out ON	6 0 # 1 #
3. Exit	*

Set Anti-tamper Alarm

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Anti-tamper Alarm OFF	6 1 # 0 #
OR	
2. Anti-tamper Alarm ON	6 1 # 1 # (factory default)
3. Exit	*

Remarks: when anti-tamper alarm is triggered, keypad alarm, mini controller alarm and external alarm will trigger an alarm. User can close the cover / Master Code # / Valid PIN or Card # to release the alarm or until the alarm time (1 minute) is finished.

Set Door Open Detection

Door Open Too Long (DOTL) Detection

When use with an optional magnetic contact or built-in magnetic cortact of the lock, if the door is opened normally, but not closed after 1 minute, the inside buzzer will beep automatically to remind people to close the door. The beep can be stopped by closing the door, valid users or press exit button, or else, it will continue to beep the same time with the alarm time set.

Door Forced Open Detection

When use with an optional magnetic contact or built-in magnetic cortact of the lock, if the door is opened by force, the inside buzzer and external alarm (if there is) will both operate, they can be stopped by valid users or press exit button, or else, it will continue to sound the same time with the alarm time set.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Disable Door Open Detection	6 2 # 0 # (factory default)
OR	
2. Enable Door Open Detection	6 2 # 1 #
3. Exit	*

Set Buzzer

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Buzzer OFF	7 0 # 0 #
2. Buzzer ON (keypad)	7 0 # 1 # (factory default)
OR	
2. Buzzer OFF	7 1 # 0 #
2. Buzzer ON (Mini Controller)	7 1 # 1 # (factory default)
3. Exit	*

Set Reset Card (2 reset cards max)

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add Reset Card 1	0 0 # (Read Card)
2. Add Reset Card 2	0 1 # (Read Card)
OR	
2. Delete Reset Card 1	0 0 # #
2. Delete Reset Card 2	0 1 # #
3. Exit	*

Remarks:
1. Reset cards cannot access the door; it can only reset the Wireless Keypad.
2. Reset cards can be 2 units maximum, any 2 new added will replace the previous two.
3. Pairing is necessary after reset the device.

OTHERS

Users Operation

Programming Step	Keystroke Combination
PIN User Access	(PIN) #
Card User Access	# (Read Card)
PIN + Card User Access	# (Read Card) (PIN) #

Pair Wireless Keypad / Exit Button and Mini Controller

1. They are already paired when out of factory, if no problem, the users do not need to do this operation in using.
2. One Mini Controller can be connected by 5 pieces of Wireless Keypad and Exit Button maximum.

- To pair the wireless keypad and the controller:
  Mini Controller: Remove the back cover, and press the button "Pair"
  Wireless Keypad: * Master Code # 8 0 #, press * on the keypad to exit.
  If pair successfully, there will be one beep from both the controller and the keypad, ; if not, there will be three short beeps, then please repeat the setting.
- To pair the wireless button and the controller:
  Mini Controller: Remove the back cover, and press the button "Pair"
  Wireless Button: Remove the back cover, and press the button "Pair", after hearing one beep, press "Pair" again to exit pairing mode
  If pair successfully, there will be one beep from both the controller and the exit button; if not, there will be three short beeps, then please repeat the setting.
- To pair the wireless keypad with multiple mini controller:
  Wireless Keypad: * Master Code # 8 0 #
  Mini Controller: Remove the back cover, and press the button "Pair" (Same settings for multiple controllers)
  If pair successfully, there will be one beep from both the controller and the keypad, press * on the keypad to exit pairing mode; if not, there will be three short beeps, then please repeat the setting. Users need to finish the pairing within 30s for multiple controllers, or else, the keypad will exit pairing mode automatically.

- To pair the wireless button with multiple mini controller:
  Wireless Button: Remove the back cover, and press the button "Pair"
  Mini Controller: Remove the back cover, and press the button "Pair" (Same settings for multiple controllers)
  If pair successfully, there will be one beep from both the controller and the button, press the button "Pair" on the button to exit pairing mode; if not, there will be three short beeps, then please repeat the setting. Users need to finish the pairing within 30s for multiple controllers, or else, the keypad will exit pairing mode automatically.

Low Battery Reminding

If low battery of the wireless keypad, there will be 3 beeps when every key is pressed, and the LED will be in YELLOW;
If low battery of the wireless button, the LED will shine in RED & GREEN twice alternately;
then please replace the batteries for the keypad and the button within one week.