

# Wireless Access Control

## User Manual



Wireless Keypad

Wireless Exit Button

Please read this User Manual carefully before installation

### INTRODUCTION

WLPK2 is a wireless access control. It is plastic case, reads 125KHz ID card, adopting 433MHz wireless communication technology and TEA+ rolling code encryption algorithm. And it can be connected with door contact, external alarm, external exit button, external door bell.

WLPK2 consists of three parts:

- Wireless Access Control Keypad (install at the door outside)
- Wireless Controller (install inside the door)
- Wireless Exit Button (install inside the door)

One Wireless controller can be connected with 5 devices (Wireless access control keypad + Wireless exit button). And one Wireless access control keypad (or one Wireless exit button) can be connected with unlimited Wireless controllers.

### Features And Benefits

- > Weatherproof. Protection level conforms to IP67.
- > Doorbell Function. There is a door bell built-in the Wireless controller, and you can also connect external doorbell into it.
- > Backlit keypad design, making it is easy to operate in darkness.
- > Temporary users. You can add temporary visit card and PIN into the access control system.
- > TEA+ rolling code encryption algorithm which makes it high-level security.
- > Relay output. Can be set Pulse Mode or Toggle Mode.
- > Anti-tamper. When the device is disassembled by the bad guys, the keypad outside and the controller inside will alarm at the same time.
- > External alarm/external doorbell/door contact are supported.

### Model Related

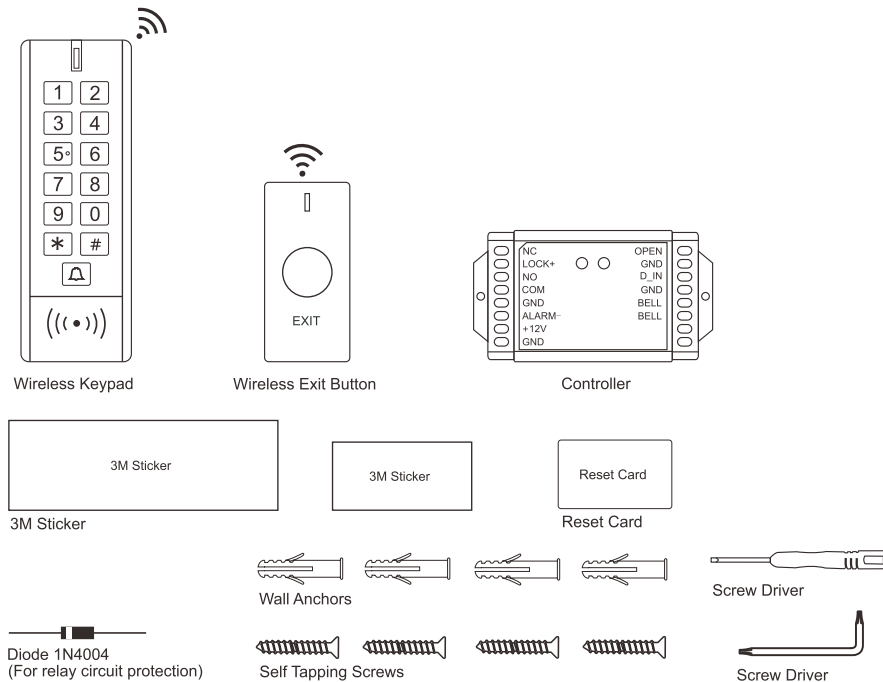
Model Name	Card Type	Frequency
WLPK2-EM	EM	125KHz
WLPK2-MF	Mifare (ISO14443A)	13.56MHz

### Specifications

Operating Voltage	Keypad: 3 AAA battery Controller: DC12V±20% Exit button: 2032 lithium battery(3V)
Idle Current	Keypad≤10uA ;Controller≤20mA;Exit Button≤10uA
Active Current	Keypad≤80mA ;Controller≤50mA;Exit Button≤30mA
Lifetime of battery for the keypad	About 12 months, if open the door 20 times per day
Lifetime of battery for the exit button	About 12 months, if open the door 20 times per day
User Capacity	600 (500 common users + 100 temporary users)
Communication Frequency	433MHz
Communication Distance	≤30m (Related to the using environment)

Lock Output Load	≤2A
Operating Temperature	-40°C ~ 60°C (-40°F ~ 140°F)
Operating Humidity	10% ~ 90%RH
Dimensions (Keypad)	L134xW48xH25mm
Dimensions (Controller)	L80xW38xH15mm
Dimensions (Exit button)	L80xW50xH25mm
Gross Weight	330g
Net Weight	Keypad: 150g
	Controller: 62g
	Exit Button: 34g

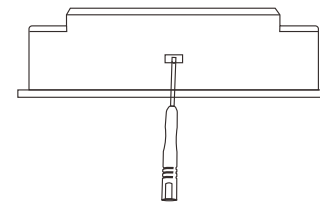
### Packing List



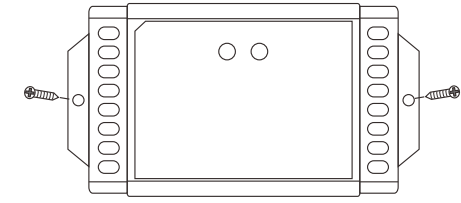
## INSTALLATION

**Note:** Installation for the Keypad and Exit Button, just use the 3M adhesive to stick them on the wall or at the door frame. The installation for the Wireless Controller is as below.

- How to open the case of controller: Insert the screwdriver directly into the hole of the case and pry the screwdriver upward.
- Draw 2 holes on the wall where the controller is needed to be installed, then drill 2 holes, insert the rubber plug into the holes, and fix the controller to the wall with screws.



(Figure 1)



(Figure 2)

### Wiring

No.	Function	Notes
1	GND	Negative Pole
2	+12V	DC 12V power supply input
3	ALARM-	Negative of external alarm
4	COM	Relay COM
5	NO	Relay NO
6	LOCK+	Positive pole of Electric lock
7	NC	Relay NC
8	OPEN	Connect to exit button
9	D_IN	Connect to door contact
10	BELL_A	External doorbell
11	BELL_B	External doorbell

### Sound And Light Indication

Operation Status	LED	Buzzer
Standby Mode of keypad outside	--	--
Standby Mode of Exit button	--	--
Status of pairing	Red and Green flashing alternately	--
Low power reminder for Exit button	Red and Green flashing two times alternately	--
Low power reminder for keypad	Orange	3 beeps
Access the door with Keypad	Green LED bright for 3 second	One beep
Enter program Mode	Red light shines	One beep
Operation correct	Green light bright for 0.5s	One beep
Operation incorrect	--	3 beeps
Exit program mode	--	One beep
Standby of the controller	Red light bright	-
Unlock of the controller	Green light bright	One beep

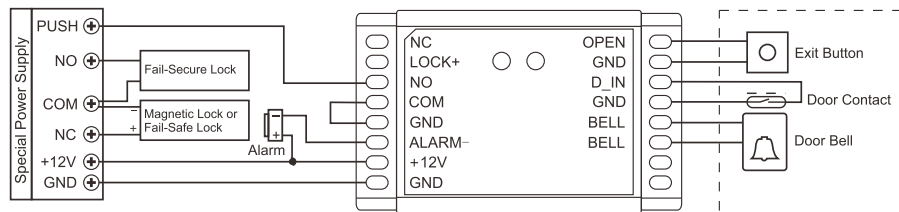
### Set Factory Default Of The Keypad

Power on, press the key #, swipe Reset Card, there will be a beep, which means the Resets to factory default setting is success, and the users' information won't be deleted.

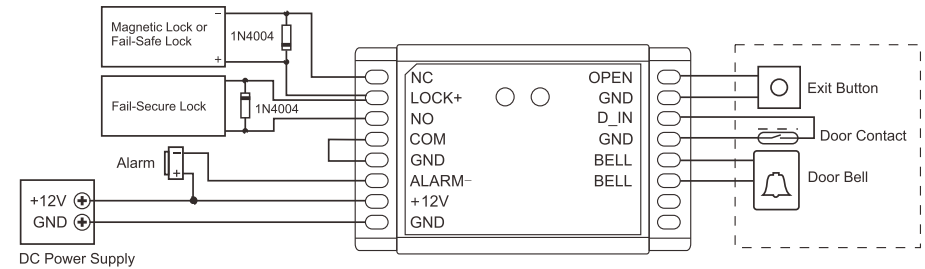
**Note:** For safety, after the factory default setting, the keypad must be paired with the controller again.

## STANDALONE MODE

### Wiring Diagram Of Wireless Controller Inside Special Power Supply For Access Control



### Common Power Supply



DC 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)

### Enter And Exit Program Mode

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

### Modify Admin Code

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Modify Admin Code	0 (New Admin Code)# (Repeat New Admin Code)#	Red shines
Exit Program Mode	*	--

**Note:** The Admin code can be any 6 digitals.

### Add Users

Programming Step	Keystroke Combination	LED
Enter Program Mode	*(Admin Code) #	Red shines
Add User: By swiping Card	1 (Read Card) (read next card) ...	Red shines
Or	1 (Input User ID) # (Read card) ...	
Add User: By User ID	1 (Input User ID) # (4-8 digits PIN) #	
Or	1 (Input User ID) # (4-8 digits PIN) # (Repeat 4-8 digits PIN) #...	
Exit Program Mode	*	--

- Note:**
1. User ID is range from: 0-499
  2. When adding user by swiping card, the user ID will be added automatically from 0 to 499
  3. When adding card users, an attached PIN 1234 will be added automatically. This PIN cannot be used to open door. If you want to open door by card + PIN, you should first change the PIN 1234 to others. Refer to Change PIN.
  4. User ID 00-099 are used for temporary users, when add common users, do not add the number 0 before ID number. For example: When inputting ID number 1, it will add first common user and inputting ID number 01, it will add a temporary user. But when inputting 001, it will be considered error inputting.

### Add Temporary Users

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Add Temporary card Or Add Temporary PIN	1 (Input User ID) # (1-9) # swipe card or 1 (Input User ID) # (1-9) # (4-8 digits PIN) # (Repeat 4-8 digits PIN) #...	Red shines
Exit Program Mode	*	--

**Note:**

1. ID number for temporary users range: 00-099, the first number "0" means temporary user.
2. The temporary PIN cannot be same as common PIN, if set the same PIN, when the temporary PIN is invalid, the temporary pin user will be considered as common user.
3. How many times the temporary users can open the door? 1 – 9 times. When it is used out, the temporary card/temporary pin will be deleted automatically.

### Delete Users

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Delete user by Card	2 (Read Card) #...	Red shines
Delete users by User ID	2 (Input User ID) #...	Red shines
Delete All User	2 0000 #	Red shines
Exit Program Mode	*	--

**Note:** If you want to delete a specific pin user, the only way is deleting it by user ID.

### Access Mode Setting

Programming Step	Keystroke Combination	LED
Enter program mode	* (Admin Code) #	Red shines
Open door by PIN <b>OR</b> Open door by card + PIN <b>OR</b> Open door by card or PIN	3 0 #  3 1 #  3 2 # (Factory default)	Red shines
Exit Program Mode	*	--

### Pulse Mode And Toggle Mode Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Pulse Mode	4 (1-99) #	Red shines
Toggle Mode	4 0 #	Red shines
Exit Program Mode	*	--

- Note:**
1. Pulse Mode and Toggle Mode, you must choose/set one of them. **Pulse Mode:** The door will be closed automatically after opening for a while(access time).
  2. Access time range: 1-99 seconds.  
When set it to 1, the actual time is 50ms. Current output of electric control lock≥3A, access time is 50ms which can protect whole system. Therefore, this access time is mostly used for electric control lock.
  3. **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.

### Doorbell Setting

Programming Step	Keystroke Combination	LED
Enter program Mode	* (Admin Code) #	Red shines
Close Doorbell	5 0 #	Red shines
Only Open Doorbell Built-in	51 #	Red shines
Only Open External Doorbell	5 2 #	Red shines
Open Built-in & External Doorbell	5 3 # (Factory Default)	Red shines
Exit Program Mode	*	--

### Safe Mode Setting

Programming Step	Keystroke Combination	LED
Enter program mode	* (Admin Code) #	Red shines
Close safe mode	6 0 # 0 # (Factory default)	Red shines
Open safe mode	6 0 # 1 #	Red shines
Exit Program Mode	*	--

**Note:** Opening safe mode, inputting invalid users for 10 times, the device will be locked out for 10 minutes. Repower the device or wait for 10 minutes, the keypad can be operated again.

### Anti-Tamper Alarm Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* (Admin Code) #	Red shines
Disable Anti-tamper alarm	6 1 # 0 #	Red shines
Enable Anti-tamper alarm	6 1 # 1 # (Factory default)	Red shines
Exit Program Mode	*	--

**Note:** 1.Enable the anti-tamper alarm, if the back cover of this device is removed, the buzzer built-in and the external alarm will activate at the same time.  
2.How to close the alarm: Fix the case/ Admin code #/ Valid PIN#/Alarm time up(1minute).

### Door Contact Setting

Programming Step	Keystroke Combination	LED
Enter program Mode	* (Admin Code) #	Red shines
Disable door contact	6 2 # 0 # (Factory Default)	Red shines
Enable door contact	6 2 # 1 #	Red shines
Exit Program Mode	*	--

**Note:** Enable the door contact function, a Magnetic Contact should be installed at the door:  
1.The door is opened by valid user, but not closed in 1 minute, the buzzer built-in will beep to remind the user the door is not closed. How To stop the reminder? Valid User/Press Exit Button.  
2.If the door opened by violence, the buzzer built-in and external alarm will activate. How to stop the alarm: Valid User/Press Exit Button.

### Buzzer Setting

Programming Step	Keystroke Combination	LED
Enter program mode	* (Admin Code) #	Red shines
Disable Buzzer of Keypad	7 0 # 0 #	Red shines
Enable Buzzer of Keypad	7 0 # 1 # ( Factory default )	Red shines
Disable Buzzer of Controller	7 1 # 0 #	Red shines
Enable Buzzer of Controller	7 1 # 1 # ( Factory default )	Red shines
Exit Program Mode	*	--

**Note:** When disable the buzzer built-in the Controller, it only disables the reminder of unlock successfully.

### Add Reset Card (1 Reset card is included in the packing list)

Programming Step	Keystroke Combination	LED
Enter program Mode	* (Admin Code) #	Red shines
Add Reset Card 1	0 0 # swipe card	Red shines
Add Reset Card 2	0 1 # swipe card	Red shines
Exit Program Mode	*	--

**Note:** 1.The Reset Card only used to reset the settings of the keypad to factory default, the settings of the controller cannot be reset. And reset card cannot used to unlock door.  
2.After reset of the keypad, it should be reconnect to the controller.  
3.There are total 2 reset card. If lost, you can add new cards as reset cards.

### Delete Reset Card

Programming Step	Keystroke Combination	LED
Enter program Mode	* (Admin Code) #	Red shines
Delete Reset Card 1	0 0 # #	Red shines
Delete Reset Card 2	0 1 # #	Red shines
Exit Program Mode	*	--

### Pairing Method Of Keypad And Controller

Programming Step	Keystroke Combination	LED
Controller enter pairing mode	Press the "Pair" button on the Controller	Red and Green alternate flashing
Pairing Method of Keypad	* (Admin Code) # 8 0 #	Red and Green alternate flashing
Exit pairing mode	*	--

**Note:** A controller can be paired with 5 devices. (keypad access control + exit button), after pairing successfully, it will exit pairing mode automatically.

#### Pairing Method Of Exit Button And Controller

Programming Step	Keystroke Combination	LED
Controller enter pairing mode	Press the "Pair" button on the Controller	Red and Green alternate flashing
Pairing Method of Exit Button	Press the "Pair" button on the Exit Button	Red and Green alternate flashing
Exit pairing mode	Press the "pair" button of exit button again	--

**Note:** A controller can be paired with 5 devices. (keypad access control + exit button), after pairing successfully, it will exit pairing mode automatically.

#### Pairing Method Of A Keypad And Several Controllers

Programming Step	Keystroke Combination	LED
Keypad enter pairing mode	* (Admin Code) # 8 0 #	Red and Green alternate flashing
Pairing Method of Controller	Press the "Pair" button of each controller needed to be paired	Red and Green alternate flashing
Exit pairing mode	*	--

**Note:** 1. A Keypad can be paired with multiple controllers(unlimited).  
2. The pairing time of Keypad is 30 seconds, you should press the "pair" button of controllers during this time.

#### Pairing Method Of Exit Button And Several Controllers

Programming Step	Keystroke Combination	LED
Exit Button enter pairing mode	Press the "Pair" button of exit button	Red and Green alternate flashing
Method of Controller	Press the "Pair" button of each controller needed to be paired	Red and Green alternate flashing
Exit pairing mode	Press the "Pair" button of exit button again	--

**Note:** 1. An Exit Button can be paired with multiple controllers(unlimited).  
2. The pairing time of exit button is 30 seconds, and you need to press the "pair" button of controller inside the door during this time.

## Users Setting

### Modify The User PIN

Programming Step	Keystroke Combination
Modify independent PIN	* (ID number) (Old PIN) # (New PIN) # (Repeat New PIN) #
Modify the PIN which attached to the card user	* (Read Card) (1234) # (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 Open The Door

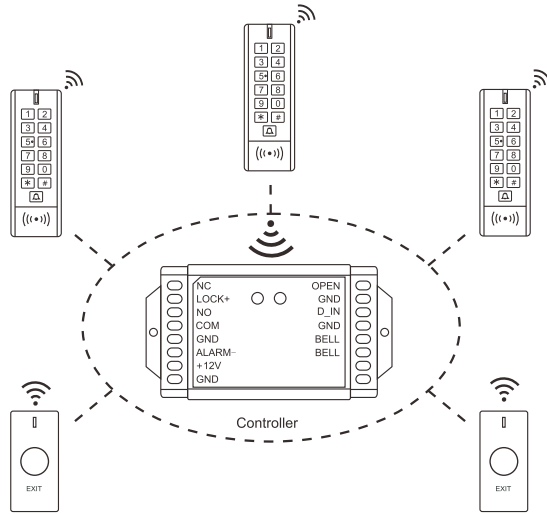
Programming Step	Keystroke Combination
Open door by card	# (Read Card)
Open by PIN	(Users PIN) #
Open door by card + PIN	# (Read Card) (Users PIN) #

**Note:** 1. When swipe invalid card, the device will beep 3 times, the door won't be opened and the device will be Standby mode.  
2. You cannot swipe the same valid card within 5 seconds.

### How To Lock Immediately

Input (0 #), the relay releases and the door will be locked immediately.  
For example: Set the access time to 10 seconds. Close the door in 3s, it won't lock until 10s.  
If you want it to lock immediately, input 0 #.

### Multiple keypads or exit buttons control one controller



### One keypad or exit button control multiple controllers

