

INSTRUCTION MANUAL

K3-3 Standalone Access Control

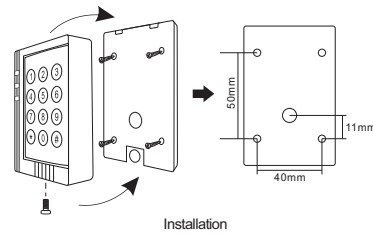
1. Introduction, Features and Specifications

1.1 Introduction
K3-3 is a standalone, convertible integrated reader and access control. It controls electronic lock, exit button, and the magnetic contact switch on the door. If the unit is connected to a standard access control unit, then it functions as a reader. The unit accepts up to 500 users, allows entry via a 4-6 digits PIN and/or by presenting a proximity EM card.

1.2 Features
Backlit keypad, multi-function, operating as access control or card reader, suitable for various occasions.

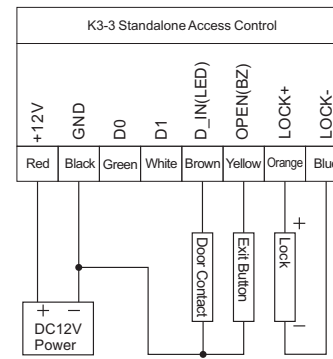
1.3 Specifications
> Operating voltage range: DC12-24V
> Static input current: $\leq 20\text{mA}$
> Max proximity card read range: 5-8cm
> Excitation Frequency: 125KHz
> Card transmit format: Wiegand 26
> Keypad transmit format: 4-6 digits key press to output card number format. Each press outputs a 4 bits or 8 bits data.
> Size (Height*Width*Depth): 90*60*27mm
> Operating temperature range: $-40\sim 60^{\circ}\text{C}$
> Operating humidity: 0-95% (non-condensing)

2. Installation and Wiring Instructions

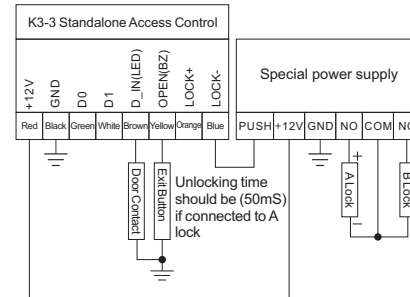


Installation

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Wiring diagram (DC 12V power supply)



Wiring diagram (Special power supply for access control)

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3. Wiring Definition

Color	Functionality	Description
Red	+12V DC	+12V Power Input
Black	GND	GND
Green	D0	Wiegand output D0
White	D1	Wiegand output D1
Brown	LED	Green light input
Yellow	Buzzer	Buzzer input

4. Master keypad Operation

Enter Master Operation Mode. It will return to normal mode if there is no right Master PIN input in 5 seconds. After input of right master PIN, it will also return to normal mode if there is no valid operation in 30 seconds. Press "*" to confirm the input number, return to previous menu by press "#", the LED will indicate the operation mode.

Master Operation		
Red	Flash Red	Function
*	6-8 digits master PIN, #	Master mode (default 888888)
Access control mode settings		
Flash Red	Red and Green LED ON	Function
0	6-8 digits new PIN, #, repeat 6-8 digits new PIN, #	Change master PIN
1	Read card	Rotate operation ②③
	1-500 (ID), #, Read card 8 or 10 digits card number①,	
2	1-500 (ID), #, 8 or 10 digits card number, #	Rotate operation ②③
	1-500 (ID), #, 4-6 digits user PIN, #	
2	Read card	Delete one card, or delete more than 1 card
	8 or 10 digits card number, #	
2	1-500 (ID), #	Delete one user, or delete more than one user

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2	0000, #	Delete all users and PIN
3	0, #	To unlock by card
	1, #	To unlock by card and PIN
4	0, #	To unlock by card or PIN (default)
	2, #	To unlock by card or PIN (default)
4	0, #	Lock strike release time: 50mS
	1-99, #	Lock strike release time: 1-99S (default 5S)
5	0, #	Type A electronic lock④
	1, #	Type B electronic lock⑤ (default)

Reader mode settings

Flash Red	Flash Red and Green	Red Green	Function
7	1	0, #	Reader mode
		1, #	Access control mode (default)
	3	0, #	4-6 digits key press sends card number
		1, #	Each key press sends 4bit output data (default)
		2, #	Each key press sends 8bit output data

Remark:
① 8 digits card number, such as 118,32319, some cards have no mark of the first 3 digits 118, remains 32319. It requires to add card by reading card, adding cards by input card number is not acceptable; 10 digits card number, such as 0007765567, some cards have no mark of the first 3 digits 000, remains 7765567, requires to input 10 digits 0007765567 by adding 000 before 7765567.

② A PIN 1234 is added for a card, it can not be used to unlock the lock, can be used to change PIN.

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- ③ After one card is added, you can continue to add other cards or PIN without exiting the mode.
- ④ Type A electronic lock: Fail Secure lock (Unlock when power on), such as Electronic Controlling Lock.
- ⑤ Type B electronic lock: Fail Safe lock (Unlock when power off), such as EM Lock, Electronic Bolt Lock, etc.

5. User Settings

- 5.1 To unlock the door for card users, Read valid card once, the electronic lock will be unlocked
- 5.2 To unlock the door for card and PIN users, Read valid card once then enter 4-6 digits PIN#, the lock will be unlocked
- 5.3 To unlock the door for card or PIN users, Read valid card once, the lock will be unlocked Or enter 4-6 digits PIN#, the lock will be unlocked
- 5.4 To change the PIN of a PIN user *, Read Card, input 4-6 digits old PIN, #, input 4-6 digits new PIN, #, repeat input 4-6 digits new PIN, #, or*, Input 1-500 (ID), #, input 4-6 digits old PIN, #, input 4-6 digits new PIN, #, repeat input 4-6 digits new PIN, #.

Remark: For PIN users without card, must get ID number and initial PIN from the master. For users with card, must read card to change initial PIN.

6. Alarm

6.1 Anti Tamper Alarm
While anti-tamper function is valid, if the access control unit is removed from the cover, the buzzer alarm will be activated.

6.2 Magnetic Contact Switch on the Door
While connecting to a door position switch, if door-forced conditions are supported, the buzzer alarm will be activated if the door is forced to open..

6.3 Remove the alarm
While anti-tamper and door status alarm is valid, reading valid card, or input master code can remove the alarm. The alarm will also stop after 1 min if there is no operation.

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7. Reset to Factory Default

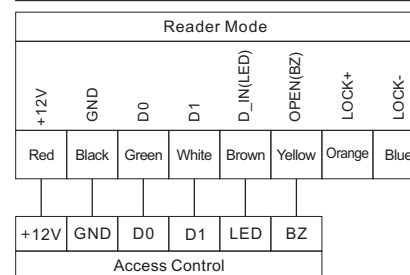
Power off, press *, power on, the red and green LED will turn on, release it until hear two beeps, then will hear one beep and the red LED will turn on, resets to factory default setting is done.

Reset to factory default, the users' information is still retained.

8. Sound and Light Indication

Operation Status	Red LED	Green LED	Buzzer
Standby	ON	OFF	
Press Key			Short Ring
Read Card	OFF	ON	Long Ring
Door Open	OFF	ON	Long Ring
Operation Successful	OFF	ON	Long Ring
Operation failed			3 Short Ring
PIN Inputting	Slow flash	OFF	
Card & PIN inputting	Slow flash	OFF	
1st menu	Slow flash	OFF	
2nd menu	Slow flash	Slow flash	
Under Setting	ON	ON	
Alarm	Quick flash	OFF	Alarm

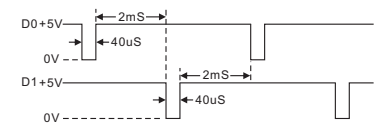
9. Reader Application (wiring diagram)



Set the unit to reader application, functions as below:

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The wire in green (D0) is the wire for Wiegand 0, and the wire in white is the wire for Wiegand 1. The pulse width for low voltage is 40uS; and the time interval is 2mS.



There are 3 formats for the card output by Wiegand 26.
Format 0: 4-6 digits key press sends card number format; Input 4-6 digits PIN, press "#", output a Wiegand 26, 10-bit decimal card number. For example, input password 999999, the output card number is 0000999999, could be displayed by 10-bit decimal card number display equipment.

Format 1: Each key press sends 4 bits data, the corresponding relationship is:

- 1 (0001), 2 (0010), 3 (0011)
4 (0100), 5 (0101), 6 (0110)
7 (0111), 8 (1000), 9 (1001)
* (1010), 0 (0000), # (1011)

Format 2: Each key press sends 8bit output data, the first 4 digits is ones-complement code for the last 4 digits, the corresponding relationship is:

- 1 (11100001), 2 (11010010), 3 (11000011)
4 (10110100), 5 (10100101), 6 (10010110)
7 (10000111), 8 (01111000), 9 (01101001)
* (01011010), 0 (11110000), # (01001011)

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