



Installation manual

INTEGRATED ACCESS CONTROLLERS

KDH-KZ730U/H

KDH-KZ630U/H

 **KaDe**

VERSION 1.0



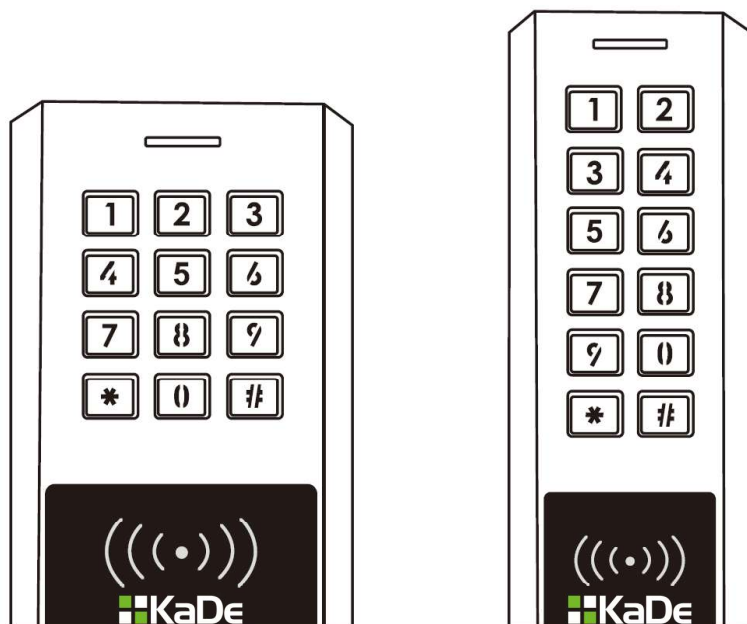
Features

- Metal case, antivandal
- Waterproof, IP66
- One relay, keyboard programmer
- 1000 users (998 common users + 2 panic users)
- PIN length: 4-6 digits
- Card type: 125 kHz HID and Unique cards
- Wiegand 26-37 bits input/output
- Can be used as Wiegand reader with LED and buzzer input
- Card block enrollment
- Integrated alarm and buzzer output
- Pulse mode, toggle mode
- LDR sensor - antitamper

Technical specifications

User Capacity	1000 (998 common + 2 panic)
Operating Voltage Idle Current	12 V DC (recommended) < 70 mA
Proximity Card Reader Radio Technology Read Range	Unique and HID Prox 125 kHz 2-6 cm
Wiring Connections	Relay output, exit button, alarm, door contact, Wiegand input/output
Relay Adjustable Relay Output Time Lock Output Load	One (NO, NC, COM) 1-99 s (5 s default) 2 A max
Wiegand Interface	Wiegand 26-37 bits input/output
Environment Operating Temperature Operating Humidity	Meets IP66 -40°C-60°C, or -40°F-140°F 10%-90% non-condensing
Physical Color Dimensions Unit Weight Shipping Weight	Zinc-alloy enclosure Silver 114,5 x 75 x 22 (LxWxD mm) - KDH-KZ730U/H 134 x 55,5 x 21 (LxWxD mm) - KDH-KZ630U/H 360 g - KDH-KZ730U/H 340 g - KDH-KZ630U/H 440 g - KDH-KZ730U/H 420 g - KDH-KZ630U/H

Introduction



KDH-KZ730U/H

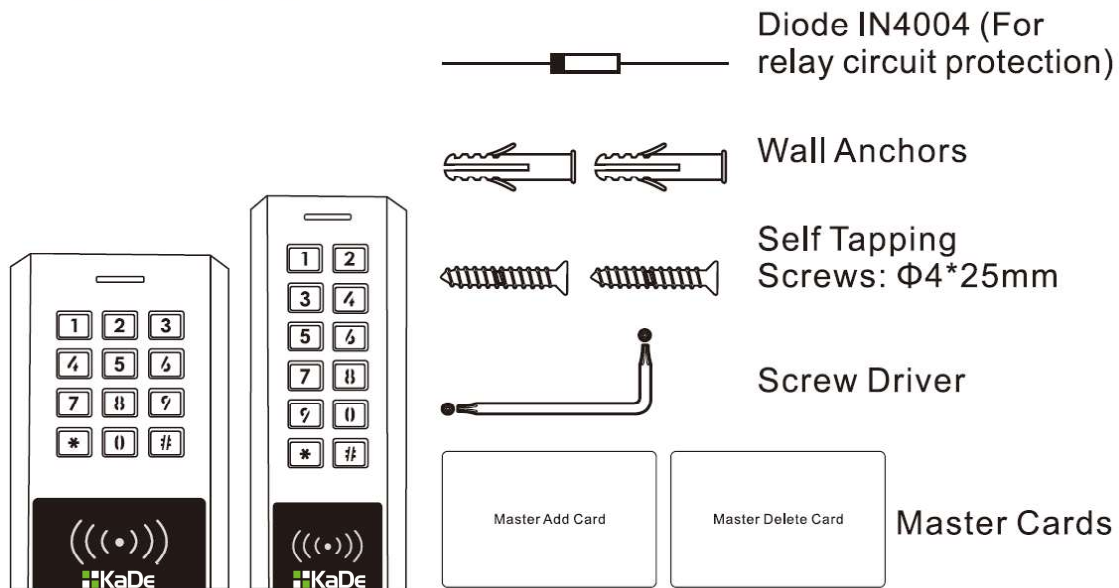
KDH-KZ630U/H

KDH-KZ730U/H and KDH-KZ630U/H are single entry multifunction access controllers with integrated keypad and card reader. They are designed and manufactured to perform in a wide range of indoor, outdoor and harsh environments.

The controllers support up to 1000 users (998 common users + 2 panic users) in multiple access configurations (card, PIN, card + PIN or multi cards/PIN). The built in card reader supports Unique and HID 125 kHz frequency cards. The relay can operate in pulse mode (suitable for access control) or toggle mode (suitable for arming/disarming alarms, switching lights, machines etc.)

KDH-KZ730U/H and KDH-KZ630U/H offer advanced programming features like: block enrollment, interlocked, Wiegand 26-37 bits interface etc. These features make them an ideal choice for door access control not only for small shops and domestic households, but also for commercial and industrial applications such as factories, warehouses, laboratories, banks and prisons.

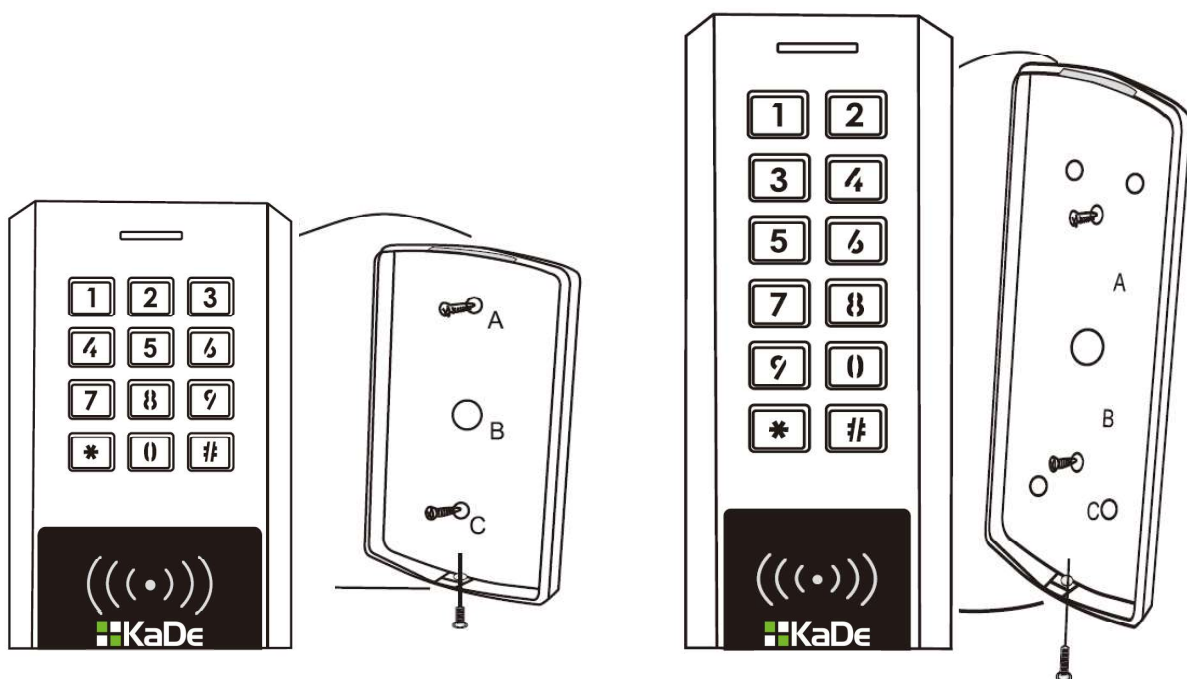
Carton Inventory



KDH-KZ730U/H or KDH-KZ630U/H

Unit 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.
- Knock the supplied rubber bungs to the screw holes (A, C).
- Fix the back cover firmly on the wall with 2 flat head screws.
- Thread the cable through the cable hole (B).
- Attach the unit to the back cover.



Wiring

Wire Color	Function	Notes
Basic Standalone Wiring		
Red	VDC	+12 V DC Power Input
Black	GND	Negative Pole
Pink	-	-
Blue	NO	Normally Open Relay Output
Purple	COM	Common Connection for Relay Output
Orange	NC	Normally Closed Relay Output
Yellow	OPEN	Request to Exit Button
Advanced Input and Output Features		
Green	D0	Wiegand Input/Output Data 0
White	D1	Wiegand Input/Output Data 1
Grey	Alarm Output	Alarm Negative (Open Collector)
Brown	D_IN	Door status detecting

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 programming mode

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

Set Master Code

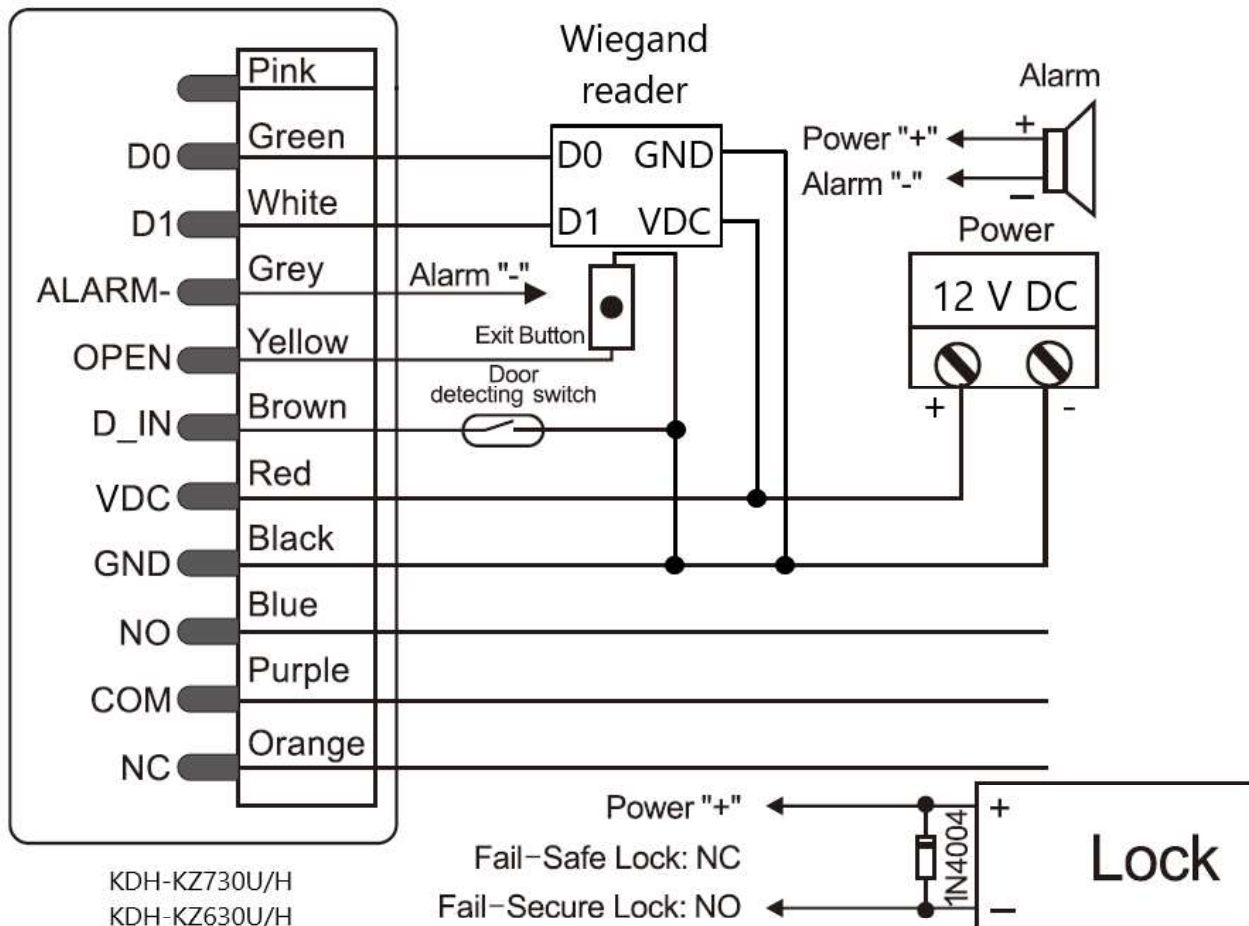
Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) # (Factory default is 123456)
2. Update Master Code	0 (New Master Code) # (Repeat New Master Code) # (Master Code is any 6 digits)
3. Exit programming mode	*

Note: KDH-KZ730U/H and KDH-KZ630U/H have 2 working modes: Standalone mode and Wiegand Reader mode. Choose the mode to use. Factory default is Standalone mode.

Set working mode

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) # (Factory default is 123456)
2. Standalone controller mode OR 2. Wiegand Reader mode	72 # (Factory default) 73 #
3. Exit programming mode	*

Standalone controller mode



Attention: Install 1N4004 or equivalent diode to the lock when using common power supply to prevent controller damage.

Notes:

- **User ID number:** Assign user ID to the access card/PIN in order to manage it. The common user ID can be any number 0-997, the panic user ID is 998-999. User IDs don't have to be proceeded with any leading zeros. Recording of user ID is critical. Modifications to the user require known user ID number.
- **PIN:** Can be any 4-6 digits except 8888 which is reserved.

Add common users

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
Add card user	
2. Add card using auto ID (assign card to next available user ID number) OR 2. Add card selecting specific ID (allows to define a specific user ID associated with card) OR 2. Add card by card number OR 2. Add card - block enrollment (allows to add up to 998 cards in single step)	1 (Read card) # Cards can be added continuously. 1 (User ID) # (Read card) # (User ID is any number 0-997) 1 (Input 8/10 digits card number) # 1 (User ID) # (Card quantity) # (First card number) #
Add PIN user	
2. Add PIN using auto ID (assign PIN to next available user ID number) OR 2. Add PIN selecting specific ID (allows to define a specific user ID associated with PIN)	1 (PIN) # PINs can be added continuously. (PIN: 4-6 digits) 1 (User ID) # (PIN) #
3. Exit programming mode	*

Add panic users

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
Add card user	
2. Add card OR 2. Add PIN	1 (User ID) # (Read card/Input 8/10 digits card number) # 1 (User ID) # (PIN) # (User ID is any number 998-999)
3. Exit programming mode	*

Change user's PIN

Note: It can be done outside programming mode. Users can change PIN by themselves	
Programming Step	Keystroke Combination
1. Change PIN by card (Auto-assigned PIN is 8888 for card users) OR 1. Change PIN by user ID	* (Read card) (Old PIN) # (New PIN) # (Repeat new PIN) # * (User ID) # (Old PIN) # (New PIN) # (Repeat new PIN) #
3. Exit	*

Delete users

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
Delete common card user	
2. Delete card by card reading OR 2. Delete card by user ID OR 2. Delete card by card number	2 (Read card) # Cards can be deleted continuously. 2 (User ID) # 2 (Input 8/10 digits card number) #
Delete common PIN user	
2. Delete PIN by PIN input OR 2. Delete PIN by user ID	2 (PIN) # 2 (User ID) #
Delete panic user	
2. Delete panic card user OR 2. Delete panic PIN user	2 (User ID) # 2 (User ID) #
Delete all users	
2. Delete all users	2 (Master Code) #
3. Exit programming mode	*

Set relay configuration

The relay configuration sets the behavior of activated relay output.

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
2. Pulse mode OR 2. Toggle mode	3 (1-99) # The relay active time is 1-99 s (1 is 50 ms). (Factory default is 5 s) 3 0 # Set relay to ON/OFF toggle mode.
3. Exit programming mode	*

Set access mode

For multi cards/PINs access mode the interval time of reading cards/inputting PINs can not exceed 5 s or device will exit to standby automatically.

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
2. Card access OR 2. Card and PIN access OR 2. Card or PIN access OR 2. Multi cards/PINs access	4 0 # 4 1 # 4 2 # 4 3 (2-9) # (Only after 2-9 valid cards reading or PINs inputting the relay activates)
3. Exit programming mode	*

Set strike-out alarm

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

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
2. Strike-out OFF OR 2. Strike-out ON	6 0 # (Factory default) 6 1 # (Access denied for 10 min)

OR 2. Strike-out ON (Alarm) Set alarm time	6 2 # 5 (0-3) # (Factory default is 1 min) Enter Master Code # or valid card/PIN to silence
3. Exit programming mode	*

Set audio and visual response

Programming Step	Keystroke Combination	
1. Enter programming mode	* (Master Code) #	
2. Control sounds OR 2. Control LED OR 2. Control keypad backlight	7 0 # OFF 7 4 # OFF 7 6 # OFF	7 1 # ON 7 5 # ON 7 7 # ON (Factory defaults are ON)
3. Exit programming mode	*	

Set reading card type

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
2. Read HID and Unique cards OR 2. Read Unique cards only OR 2. Read HID cards only	9 3 # (Factory default) 9 4 # 9 5 #
3. Exit programming mode	*

Set Wiegand input format

Set Wiegand format according to external Wiegand reader output format.

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
2. Wiegand input bits	8 (26-37) # (Factory default is 26 bits)
3. Exit programming mode	*

Set keypad input format

External reader's keypad output format can be 4 bits, 8 bits or 10 digits virtual card number.

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
2. Keypad input format	8 (4 OR 8 OR 10) # (Factory default is 4 bits)
3. Exit programming mode	*

Master Cards usage

Using Master Cards to add and delete card users	
Add user	1. (Read Master Add Card) 2. (Read user card) Repeat step 2 for additional user cards 3. (Read Master Add Card)
Delete user	1. (Read Master Delete Card) 2. (Read user card) Repeat step 2 for additional user cards 3. (Read Master Delete Card)

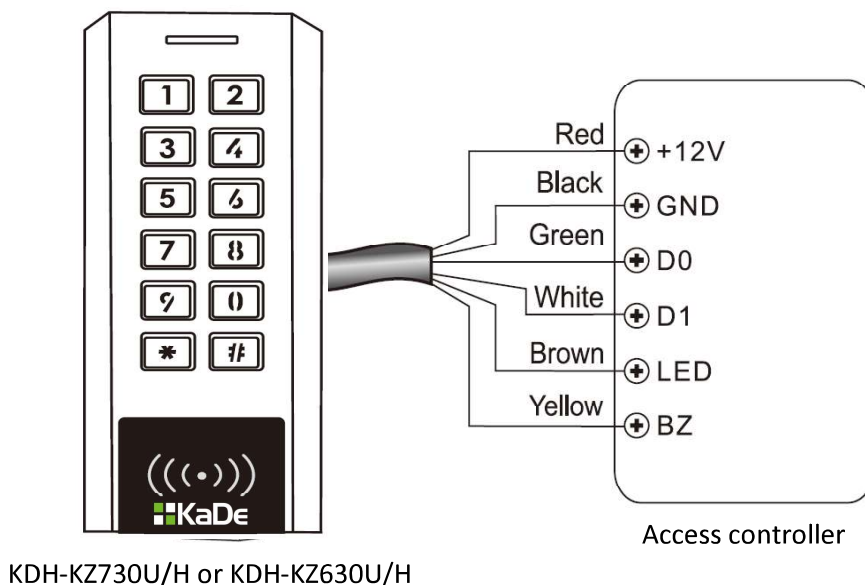
Users operation and reset to factory default

- **Open the door:** Read valid card or input valid PIN
- **Remove alarm:** Read valid card, input valid PIN or input Master Code #.
- **Reset to factory default and add Master Cards:** Power off, press the exit button, hold it and power on. There will be two beeps and LED will turn yellow. Release the exit button. Then present any two Unique or HID 125 kHz cards to the controller. First one is Master Add Card, and second is Master Delete Card. Red LED means reset to factory default successfully.

Remarks:

- If no Master Cards added, pressing the exit button for at least 10 s is needed before release.
- Reset to factory default does not erase users information.

Wiegand reader mode



Notes: When set into Wiegand reader mode nearly all settings of Standalone controller mode will be disabled. Brown and yellow wires will be redefined as below:

- brown - green LED control (ON when GND potential appears)
- yellow - buzzer control (ON when GND potential appears)

Set Wiegand output format

Set Wiegand format according to the Wiegand input format of controller.

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
2. Wiegand output bits	8 (26-37) # (Factory default is 26 bits)
3. Exit programming mode	*

Set keypad output format

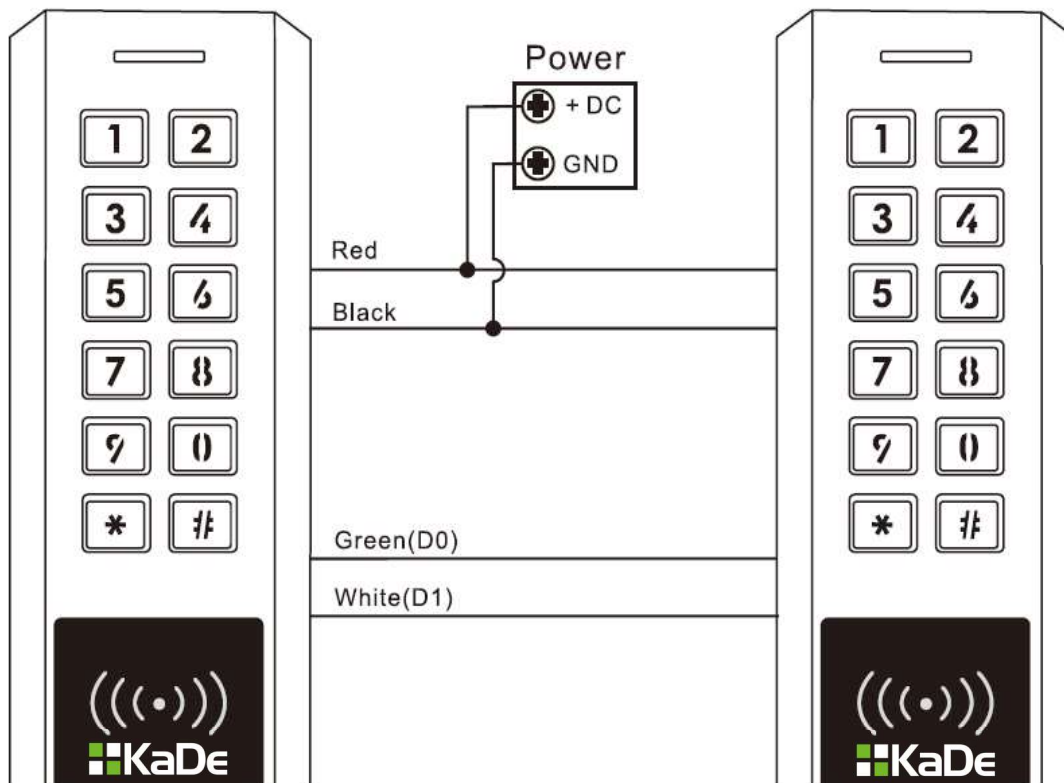
Wiegand reader mode keypad output can be 4 or 8 bits or 10 digits virtual number card. Set the format according to controller settings.

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
2. Keypad output format	8 (4 OR 8 OR 10) # (Factory default is 4 bits)
3. Exit programming mode	*

Advanced application

User information transfer

KDH-KZ730U/H and KDH-KZ630U/H support user information transfer function, and enrolled users (cards, PINs) can be transferred from one (master) to another (slave).



Remarks:

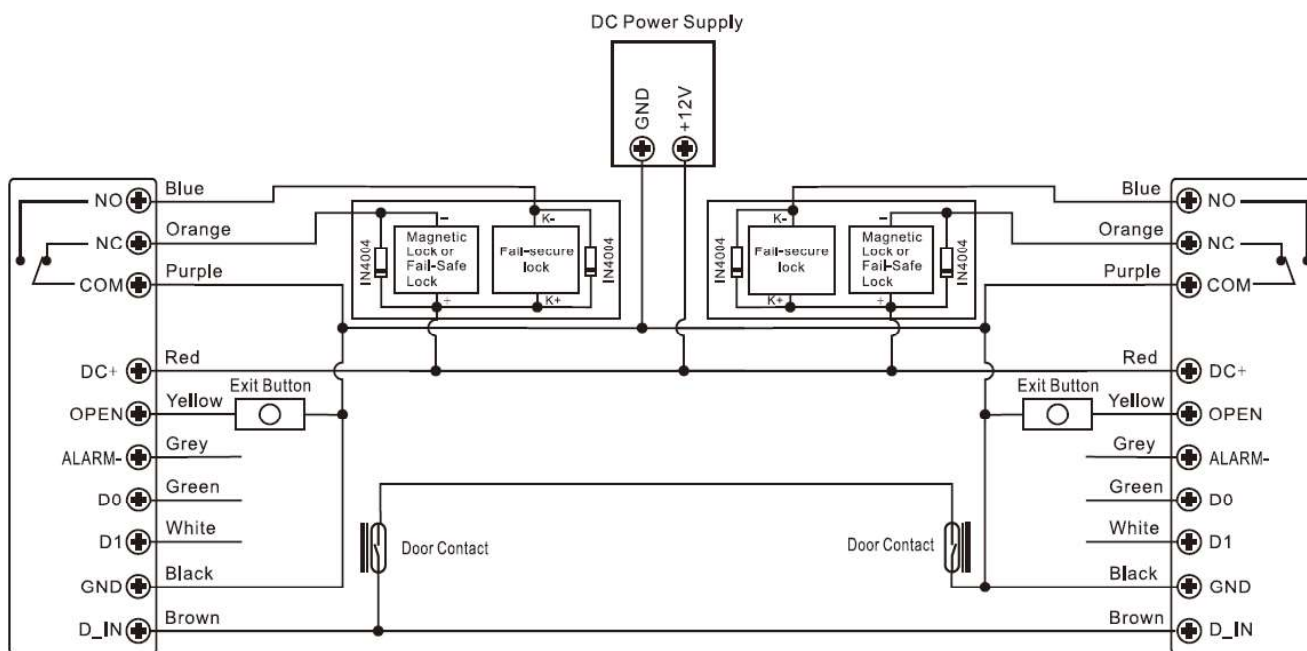
- The Master Code of the master and slave unit must be the same.
- Program transfer operation only on master unit.
- If slave unit already has enrolled users, they will be covered after transfer.
- For full 1000 users the transfer takes about 3 min.

Set transfer on master unit

Programming Step	Keystroke Combination
1. Enter programming mode	* (Master Code) #
2. Set transfer	9 6 #
Within 3 minutes green LED shines. After one beep the LED will turn red, what means the users information has been transferred successfully.	
3. Exit programming mode	*

Interlock

The KDH-KZ730U/H and KDH-KZ630U/H support interlock function. It is mainly used for banks, prisons and other places where a higher security level is required.



Remarks: The door contact must be installed and connected as the diagram shows.

Step 1:

Enrol the users on controller A, then transfer the users information to controller B using user information transfer function.

Step 2:

Set both controllers (A and B) to interlock function

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Interlock-OFF OR 2. Interlock-ON	9 0 # (Factory default) 9 1 #
3. Exit	*

