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Preparation - For the purpose of this document, the following products were used:

1. Latest iVMS-4200 version $\geq (2.7.2.4)$

Download link: <https://www.hikvision.com/au-en/Support/Downloads/Client-Software>

2. 1 master lift control and 1 distributed lift control: DS-K2210, DS-K2M0016A
3. 1 apartment door station and 1 indoor station (Firmware version V1.4.72 or above)
4. 1 HIKVISION card reader connecting to the master lift control via Wiegand or RS485 (only when you need card reader in the system)
5. Set up the indoor station to connect to the door station

DS-K2210

DS-K2M0016

DS-K1106(or any other card reader)



Indoor station



Apartment door station

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How to set up elevator controller to work with intercom system

1. DIP Switch configuration



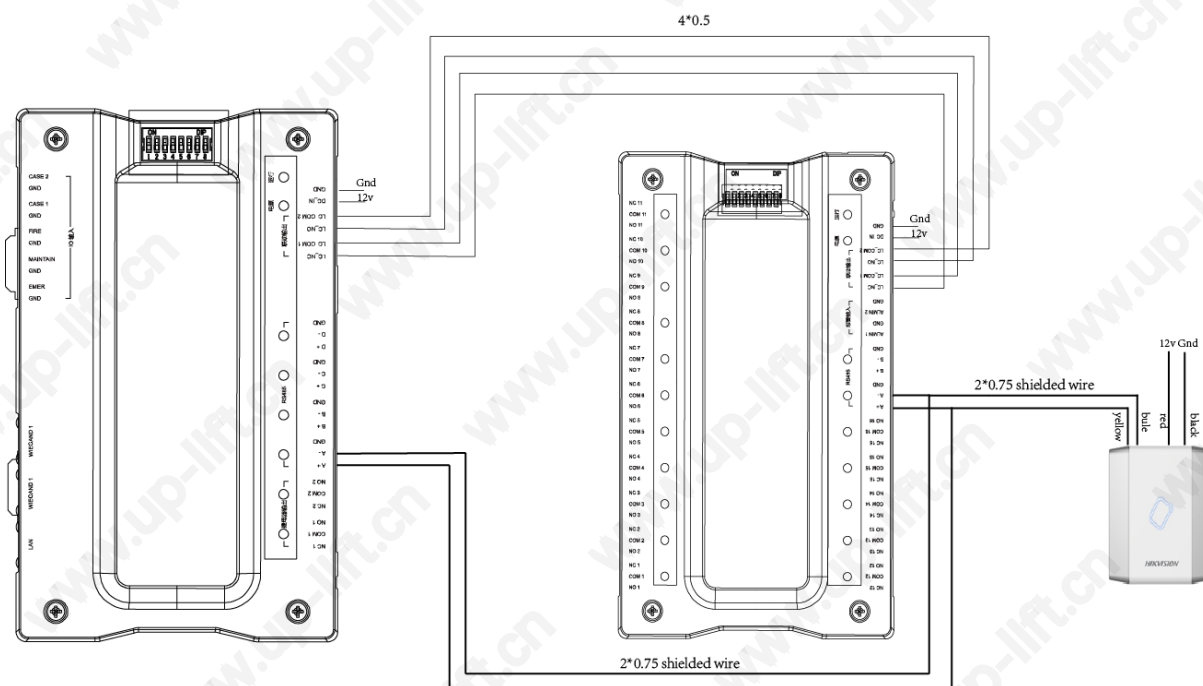
- The DIP switch of the card reader should be decimal 1 or 2.
The DIP switch of distributed elevator controller (DS-K2M0016A) is decimal 3-10.
All devices use binary dialing codes.

DIP Switch status for distributed lift control	Decimal	The corresponding floor
1100 0000	3	1-16
0010 0000	4	17-32
1010 0000	5	33-48
0110 0000	6	49-64
1110 0000	7	65-80
0001 0000	8	81-96
1001 0000	9	97-112
0101 0000	10	113-128

2. Wiring

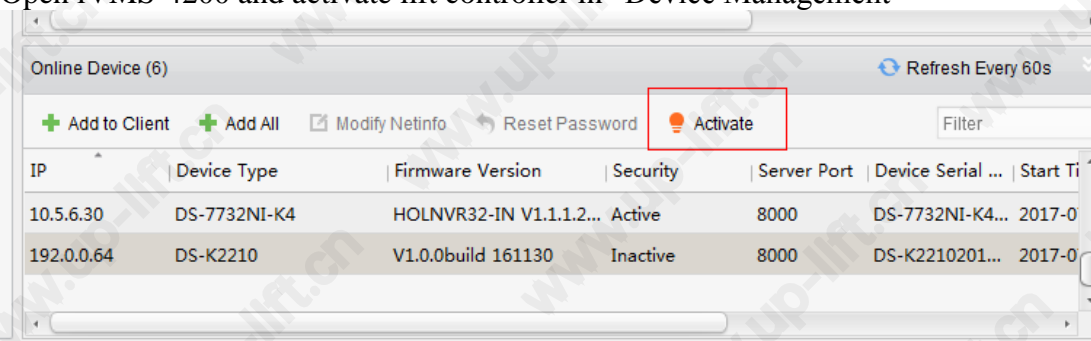
- Master lift control RS-485 A+ connects to distributed lift control RS-485 A+ as well as card reader RS485A
Master lift control RS-485 A- connects to distributed lift control RS-485 A- as well as card reader RS485B
Master lift control LC_NC connects to distributed lift control LC_NC
Master lift control LC_COM connects to distributed lift control LC_COM
Master lift control LC_NO connects to distributed lift control LC_NO
Master lift control LC_COM2 connects to distributed lift control LC_COM2

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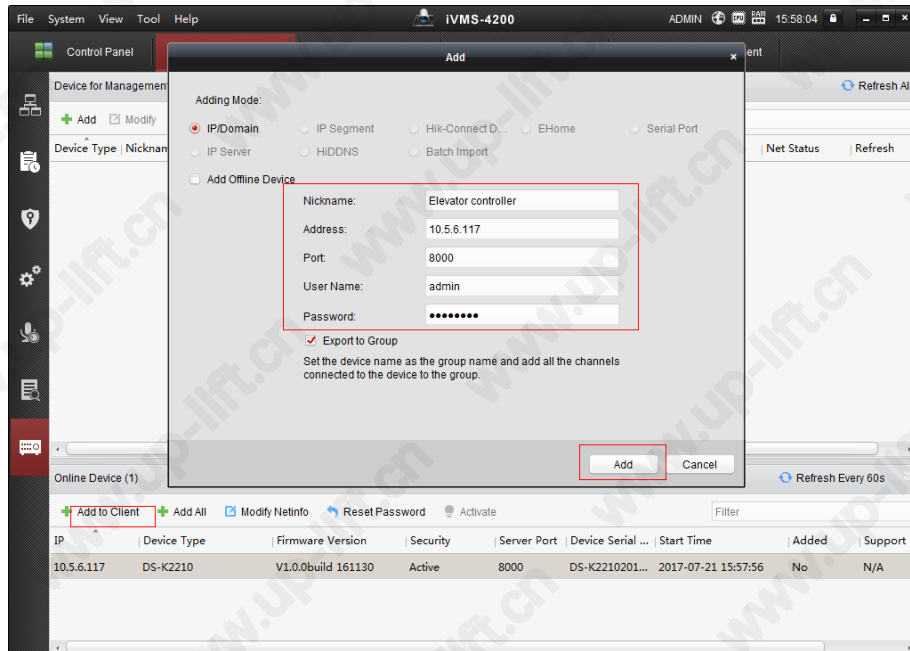
3. Configuration

- 1) Open iVMS-4200 and activate lift controller in “Device Management”



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2) Add the lift controller to client.



3) Click remote configuration of the door station and set up the elevator control for the door station.

- Elevator NO”1”. If there is more than 1 master lift control in the system, we need to distribute different elevator NO to different master lift control. One door station can add up to 4 master lift control
- Elevator control type “DS-K2210”
- Interface type “Network Interface”
- Enable or not ”Yes”
- Server IP address is the IP address of the master lift controller. Server port should be 8000.
- User name “admin”
- Password is the one you used for activating the lift control
- Save once done

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Configuring the Door and Ladder Parameters

Access Control

☐ Upload Alarm for Not-Closed Door

Door No.: 1

Door-unlocked Duration: 15 s

☐ Encrypt Card

Elevator Control

Elevator No.: 1

Elevator Type: DS-K2210

Negative Floor: 0

Interface Type: Network Interface

Tip: All elevators should use the same interface type.

Enable Or Not: Yes

Server IP Address: 192.168.1.119

Server Port: 8000

User Name: admin

Password: *****

- 4) Setup an indoor station to connect to the door station
- 5) Click remote configuration of the indoor station. Setup the floor NO for the indoor station (the example below is shown as NO 2)

Remote Configuration

Configuring the Room Numbers

Device No. Configuration

Device Type: Indoor Station

Room No.: 205

Floor No.: 2

- 6) Now when you unlock the door from the indoor station, it will trigger relay output 2 in the distributed lift control

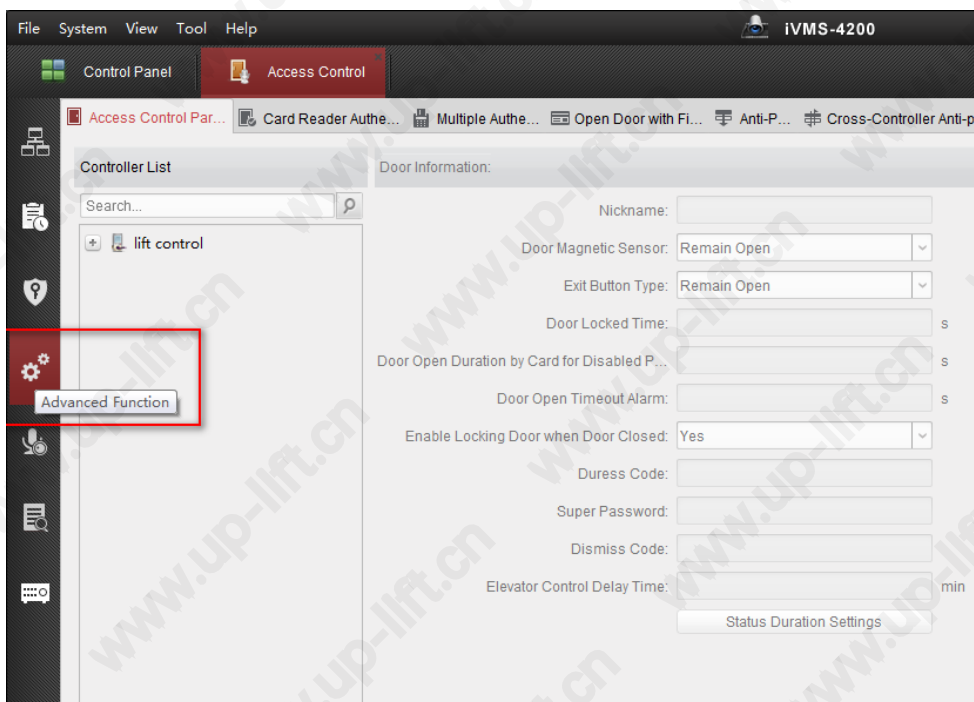
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4. Set up the activation time for each relay output of the distributed lift control.

- 1) We need to setup the activation time for each relay output of the distributed lift control. Click “Access Control” tab in iVMS-4200



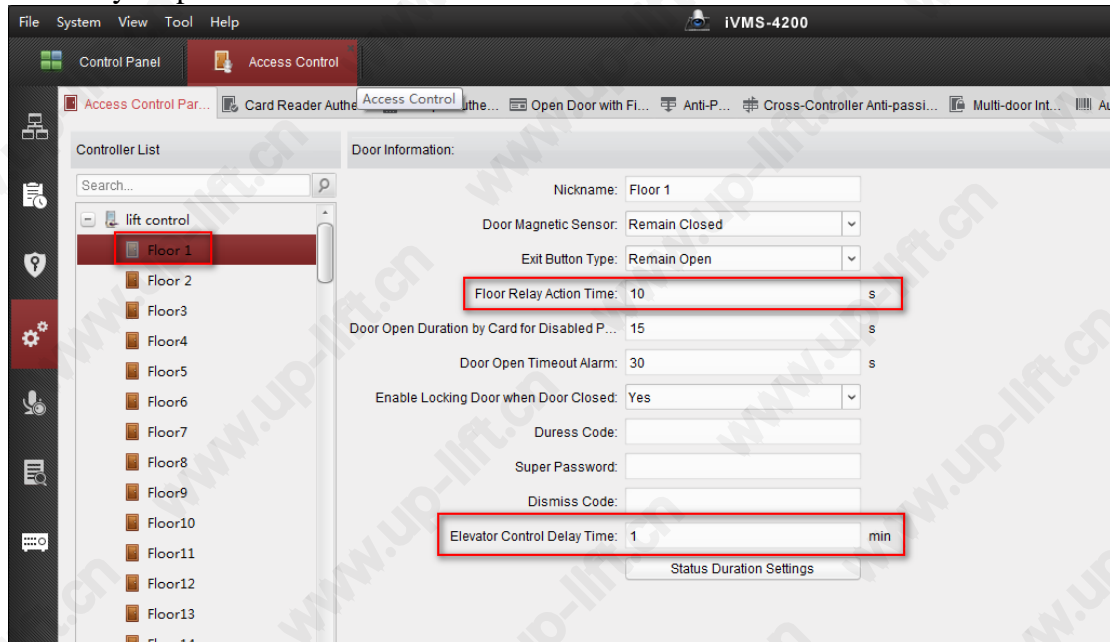
- 2) Click “Advanced Function”



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3) Click any floor under “lift control”. Floor 1 used as an example below

- If the master lift control is using firmware V1.0.0, then the floor relay action time is the relay output activation time
- If the master lift control is using firmware V1.0.1, then the elevator control delay time is the relay output activation time



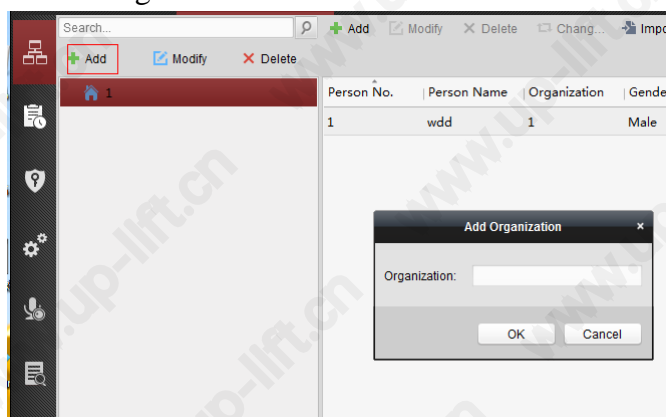
5. Enroll users to the system

1) Click the “Access Control” tab in iVMS-4200

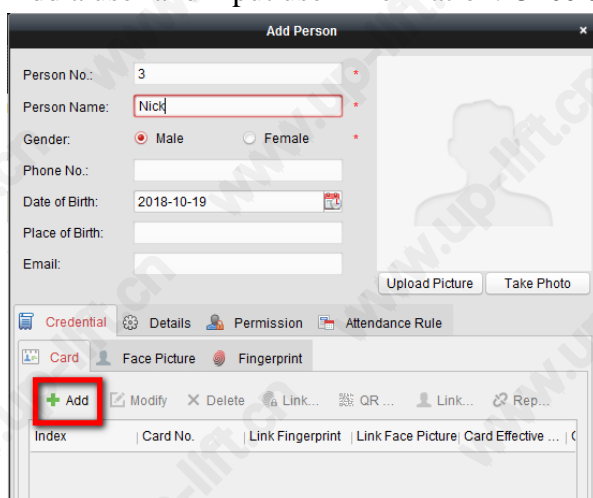


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2) Add an organization first

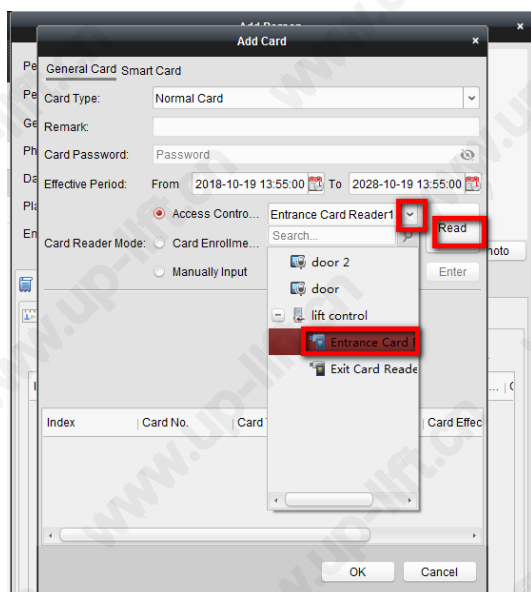


3) Add a user and input user information. Once done, select “Add” under the “Credential” tab

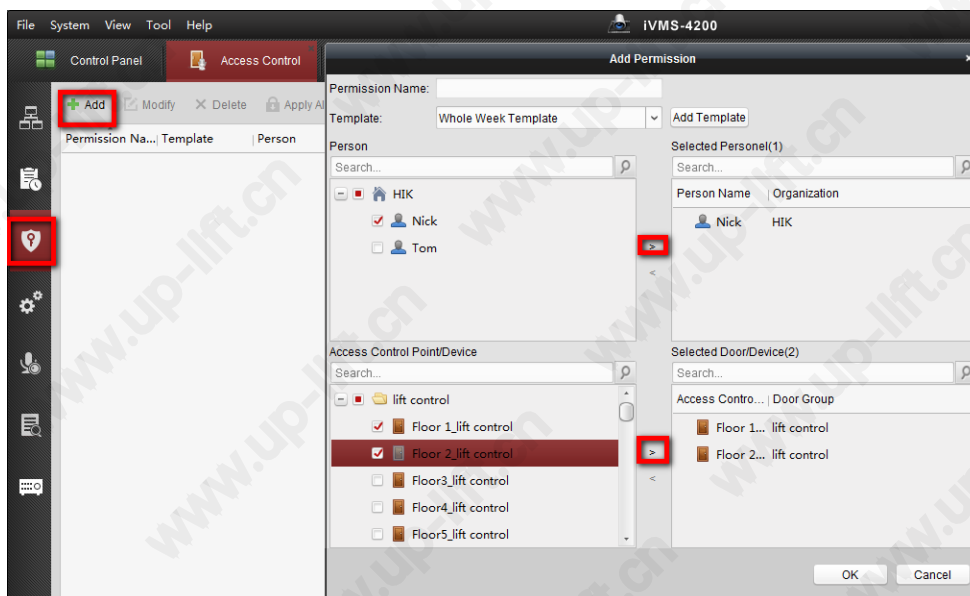


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- 4) Select a card reader which is connected to the master lift control. Now select “Read” to read the card number and save the information after the card details are displayed

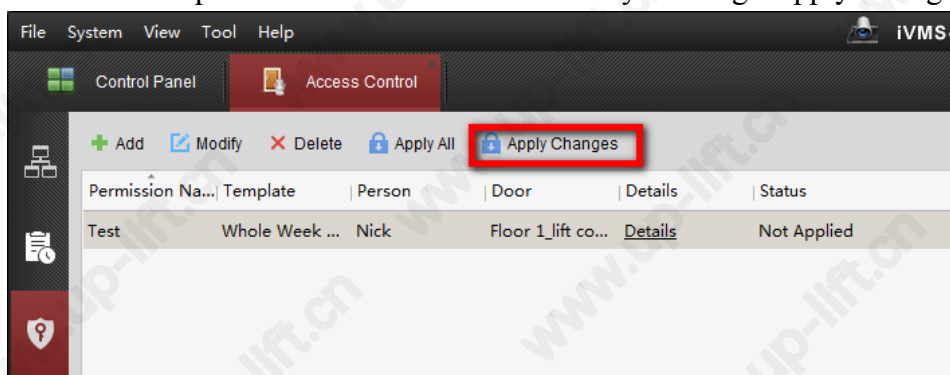


- 5) Go to the “Permission” tab and “Add” a new permission. Distribute different floors to different users



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- 6) Download the permission to maser lift control by clicking “Apply Changes”



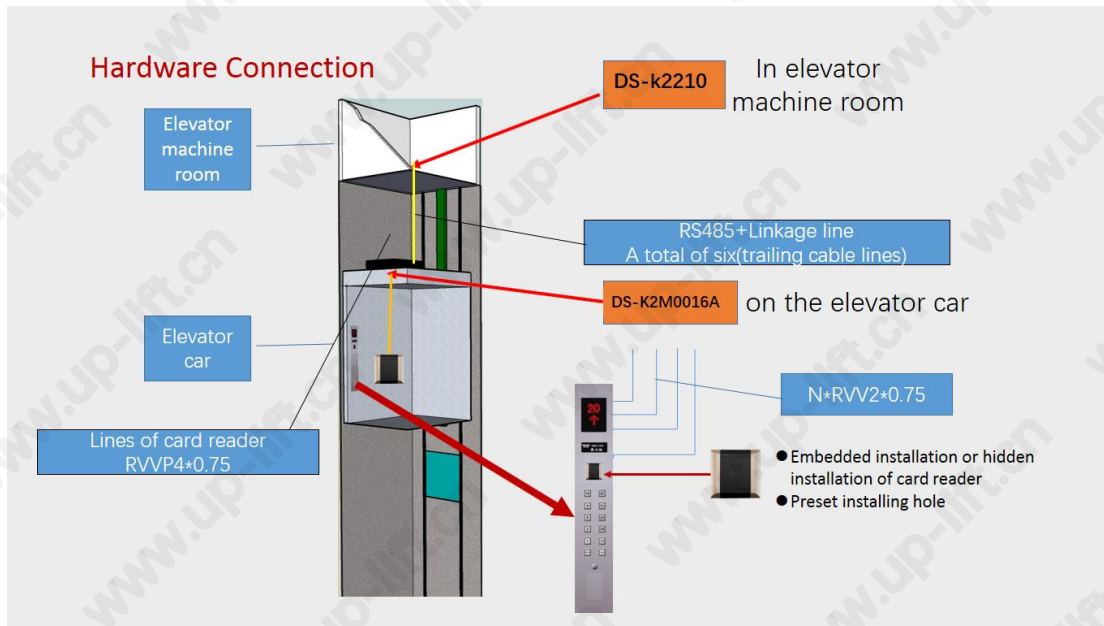
- 7) Now when you badge the card in the card reader which is connected to the lift controller, it will trigger the related relay output on distributed lift controller



6. Installation

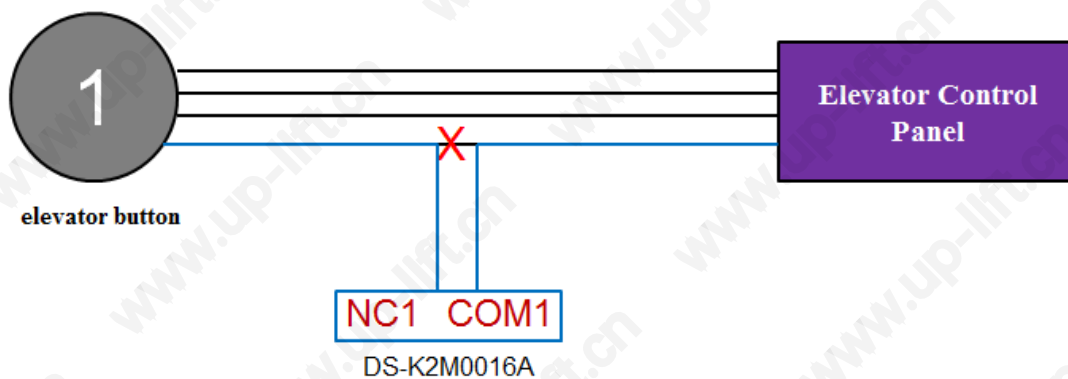
- 1) Controller installation diagram

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2) Principle:

(The DIP switch of distributed elevator controller (DS-K2M0016A) is decimal 3-10) : We control the buttons in the elevator, by connecting NC (normally closed) and COM (common) into the button circuit. If the permission is verified, the relay will action and you can press the corresponding level button. The reason for connecting normally closed is that in the normal state the relay coil is energized and the relay contact are open. When the relay output is triggered, the relay contacts will close and allow the relevant button to be pressed. The advantage of this circuit is that it will allow the button to be pressed if the power supply fails and is unable to power the relay coil.

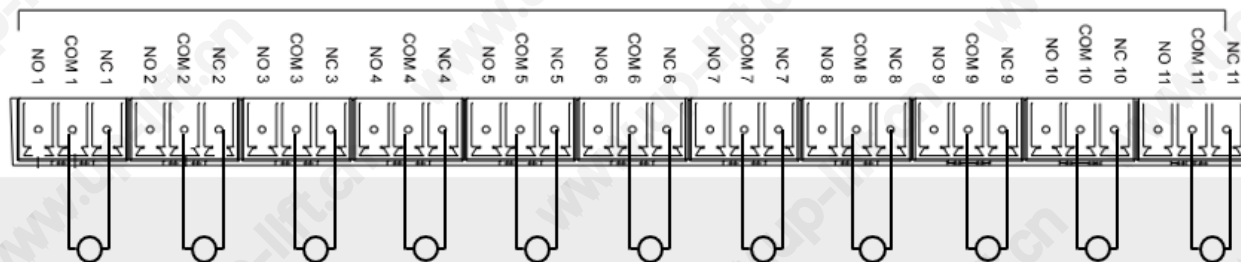


After the authentication is passed, the relay closes and the button enables

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Connect the relay output to the corresponding button

Relay connection



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