微光互联
二维码扫描专家

CC104

User manual

Please read it carefully and keep it properly.

- ☑ Four door access controller
- ☑ Door magnetic signal monitoring
- ☑ Large capacity whitelist storage

About manual

This manual mainly introduces the CC104 product functions and wiring instructions. Reading this manual carefully can help you quickly master the equipment performance and usage of CC104.

The pictures in this manual are for reference only. In case of any discrepancy between individual pictures and actual products, the actual products shall prevail. For the upgrade and update of this product, Beijing Vguang Internet Technology Co.,Ltd reserves the right to modify the document at any time without notice.

The risk of using this product shall be borne by the user. To the maximum extent permitted by applicable laws, Beijing Vguang Internet Technology Co.,Ltd shall not bear any responsibility for the damage and risk caused by the use or inability to use this product, including but not limited to direct or indirect personal damage, loss of business profits, trade interruption, loss of business information or any other economic losses.

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Edit history

Change date	Version	Description	Responsible
2023.2.23	V1.0	Initial version	

Catalog

1. Preface

Thanks for using the CC104 access controller product. Reading this manual carefully can help you understand the function and features of this device, and quickly master the use and installation of the device.

1.1. Product introduction

CC104 access controller is a four-door controller required for the deployment of intelligent access control system. Combined with Vguang RS485 reading head and access control cloud platform, it can realize intelligent access control management, and has a series of functions such as personnel management, visitor management, remote door opening, flow monitoring, etc.

Integration of anti-tampering and fire alarm interfaces, making the access control scene more secure. In addition, the device offers external development protocol interfaces, users can do docking development according to their own situation.

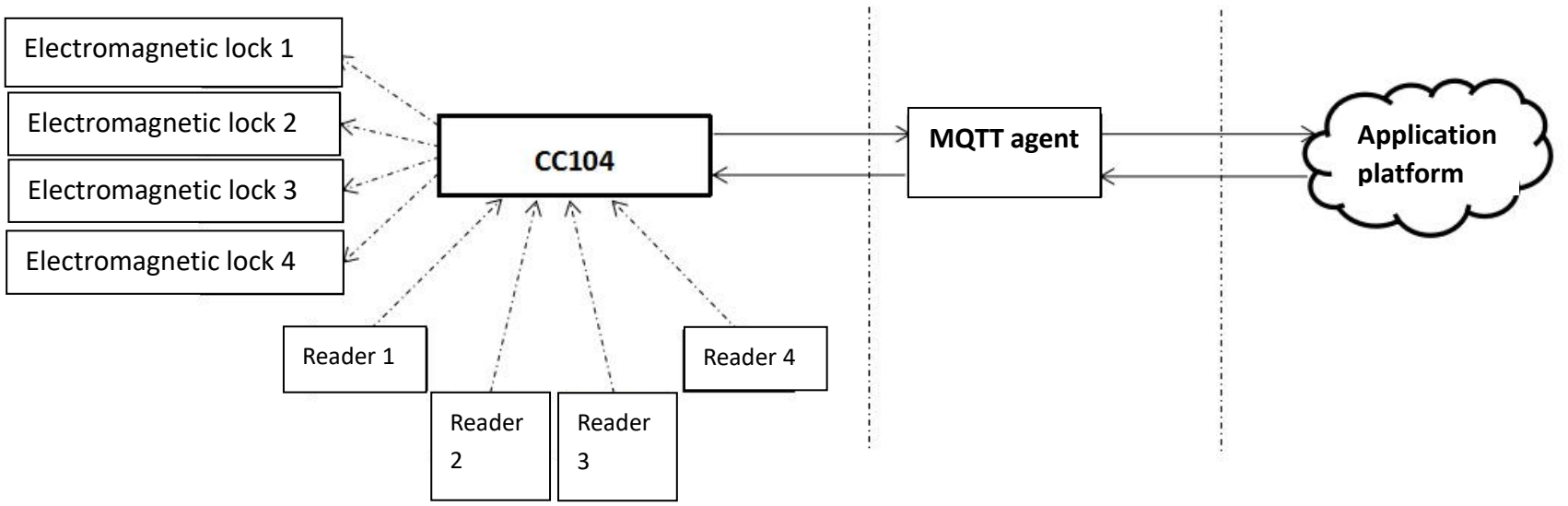
It is suitable for banks, hotels, office buildings, intelligent residential areas, factories and so on.

1.2. Product parameters

- Communication mode：TCP/IP、udp、mqtt、RS485
- Supporting chassis size(cm)：249*140*37
- Supporting power supply：12VDC 10A
- Reader input format：RS485　115200 BAUD
- Number of card readers available：Four pairs
- Controllable door output：Four sets
- Working temperature：-30 ℃-70℃

- Number of user registration cards： 100,000
- Record offline storage quantity： 100,000
- Data power off protection:High speed flash memory design, no data loss

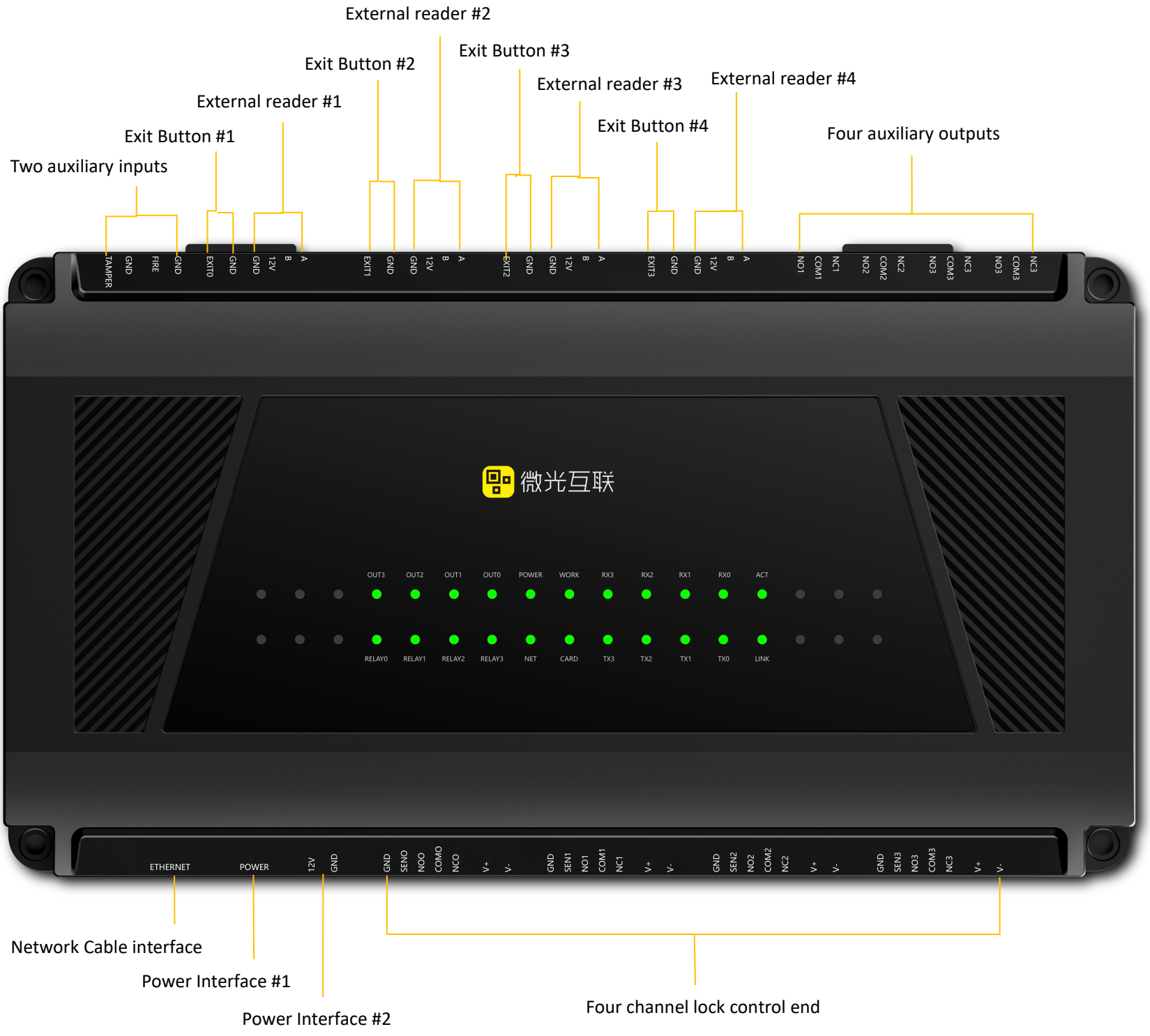
1.3. Application scenario diagram



2. Appearance and interface

2.1. CC104 appearance drawing

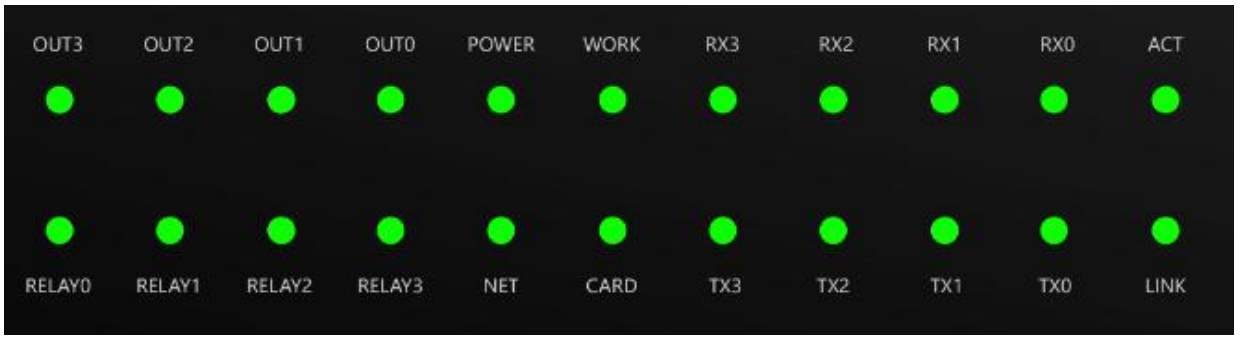
2.2. Port description



Port description list

Port number	Definition	Instructions	
1	Network cable port	Connect the network cable	
2	Power interface 1	Connect the power adapter (Either power supply 1 or power supply 2)	
3	Power interface 2	Connect external 12V power supply (Either power supply 1 or power supply 2)	
4	Four channel lock control end	GND	Door Magnetic Signal Input end
		SEN	
		NO	Relay Output end
		COM	
		NC	
		V+	Electromagnetic Lock Power Supply
		V-	
5	Four Auxiliary Outputs (Reserved)	NO	Relay Normally Open end
		COM	Relay Common end
		NC	Relay Normally Closed end
6	Four External Readers	A	485A
		B	485B
		12V	12V Output
		GND	Power Ground
7	Four Exit Buttons	GND	Connect Exit Button
		EXIT	
8	Two Auxiliary Inputs	GND	Fire Alarm Input
		FIRE	
		GND	Tamper Alarm Input
		TAMPER	
9	Door Magnetic	GND	Connect the door lock magnetic detection end (Not connect if there is no lock)
		SEN	
10	Relay	NO	Normally open end
		COM	Common end
		NC	Normally closed end

2.3. Meaning of control box indicator

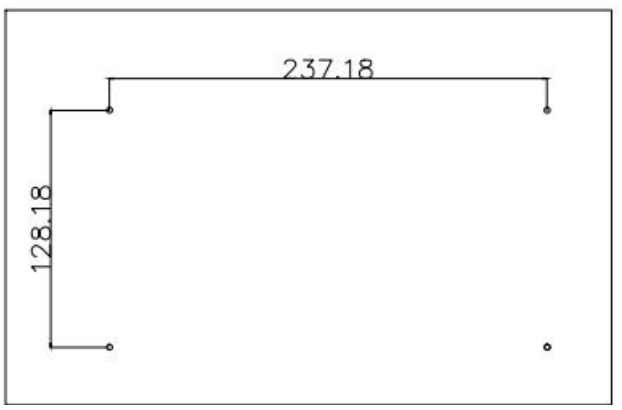


Indicator light	Definition	Instructions
OUT（0-3）	Auxiliary relay output indicator light (yellow)	• Yellow light on: valid output • Light off: no output
POWER	Power indicator light (red)	• Red light on: power on • Light off: no power
WORK	Work indicator light (green)	• Normal mode: flashing at 500ms intervals • Disabled mode: 1500ms interval flashing
RX（0-3）	485 receive signal light (yellow)	Flashes when there is signal
TX（0-3）	485 output signal light (green)	Flashes when there is signal
ACT	Data light (yellow)	• Normally light on: When the PHY is not powered on • Flashing: data sending and receiving
LINK	Network cable light (yellow)	• Normally light on: Network cable connection • Light off: The network cable is not connected
CARD	Card swipe indicator light (yellow)	reserved
NET	Network light (yellow)	• Light off: Not connected to the Network • Flashing at 3-second intervals: Start networking • Flashing at 2-second intervals: Networking is in progress • Flashing at 1 second intervals: MQTT is connected
RELAY（0-3）	Relay light (green) corresponding to Reader (0-3)	Light on: relay operates

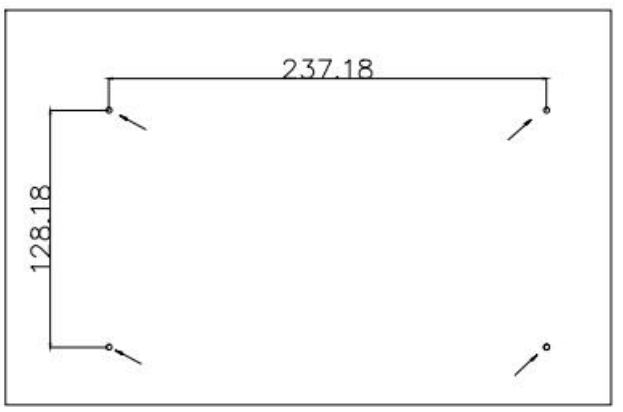
3. Control box installation and fixation

CC104 access controller can be installed in either of two ways according to the actual scene.

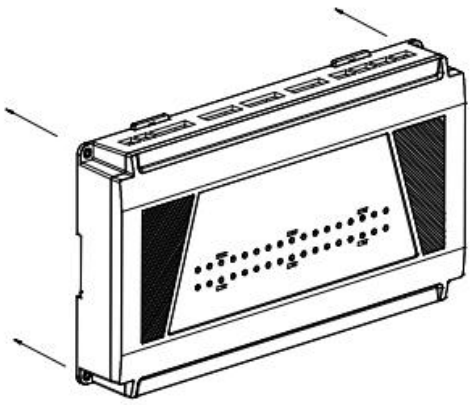
3.1. Wall mounting diagram



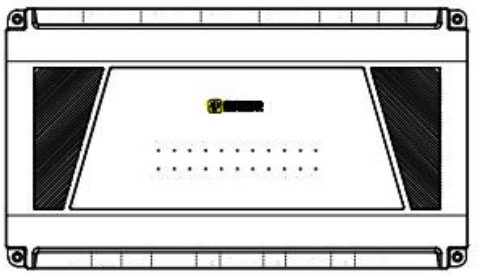
Step 1: Drill four holes in the wall. The distance between the holes is as shown in the picture.



Step 2: install the the M3*30 plastic expansion tube into the hole.

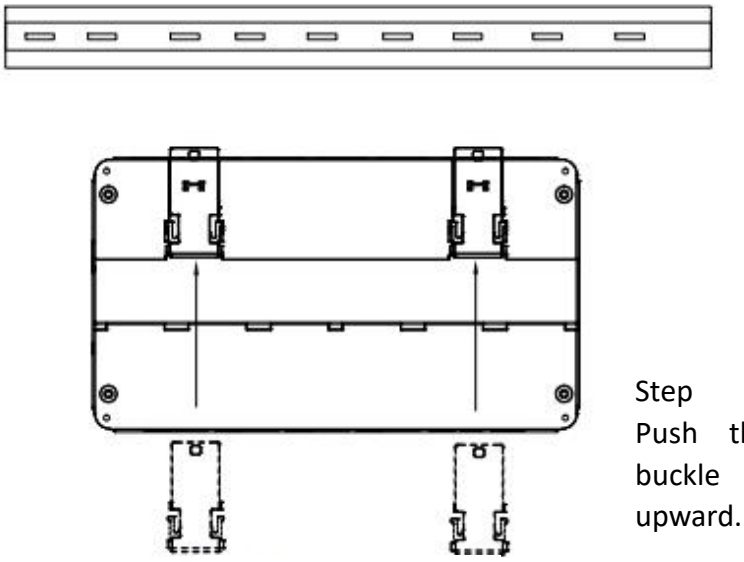


Step 3: fix the product to the installation wall with M3*30 screws.



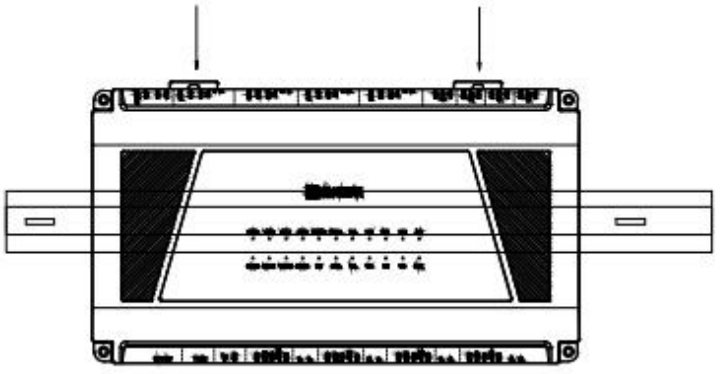
Step 4: Installation completed.

3.2. Slide rail installation diagram



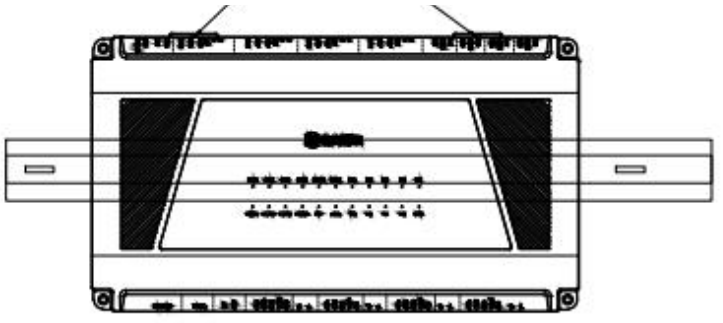
Step 1: Push the buckle upward.

Step 2: Place CC104 on the slider rail.



Step 3: Press down the buckle.

To disassemble, use a slotted screwdriver to insert into the hole exposed by the buckle and move the buckle upward.



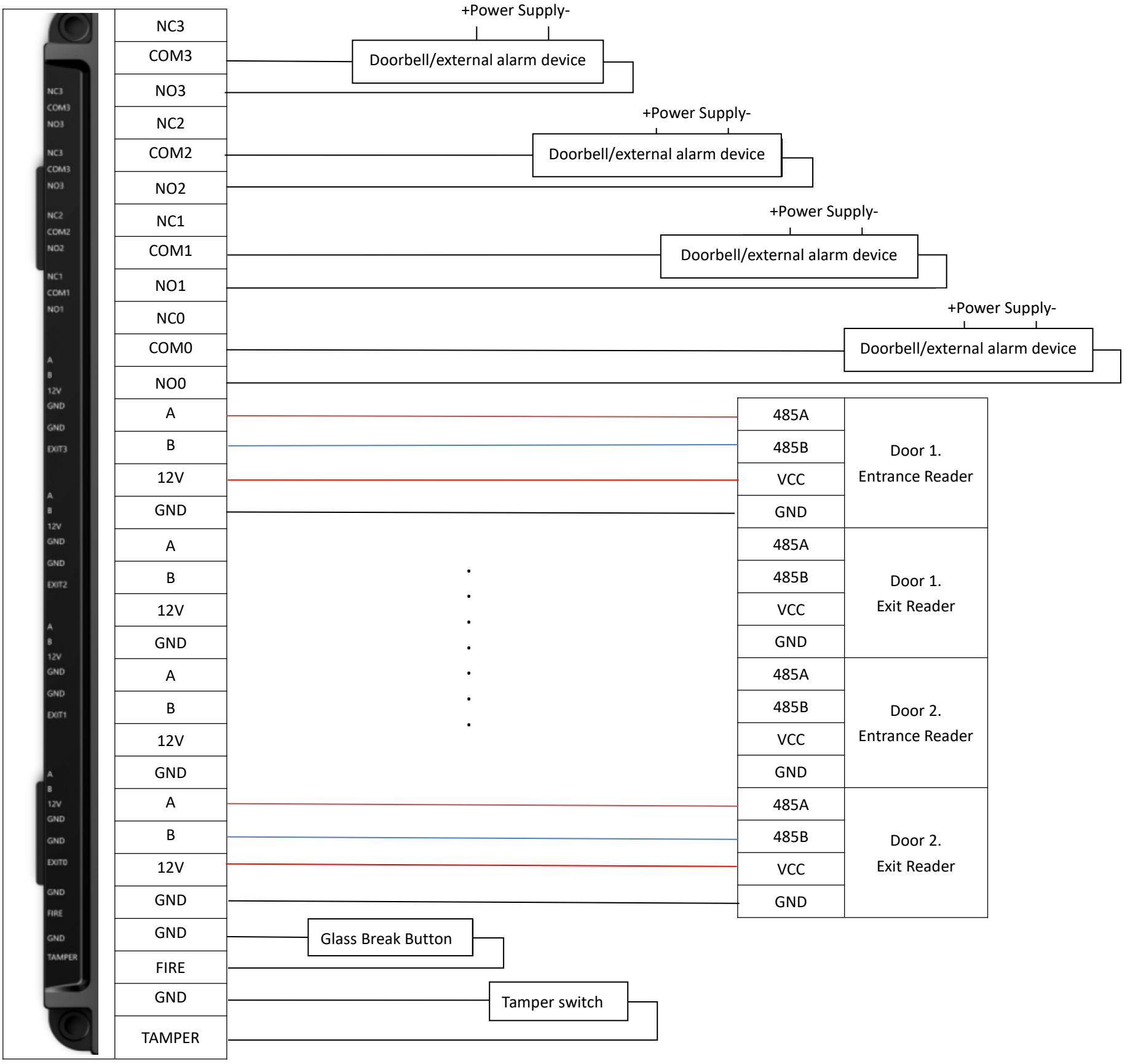
Step 4: Installation completed.

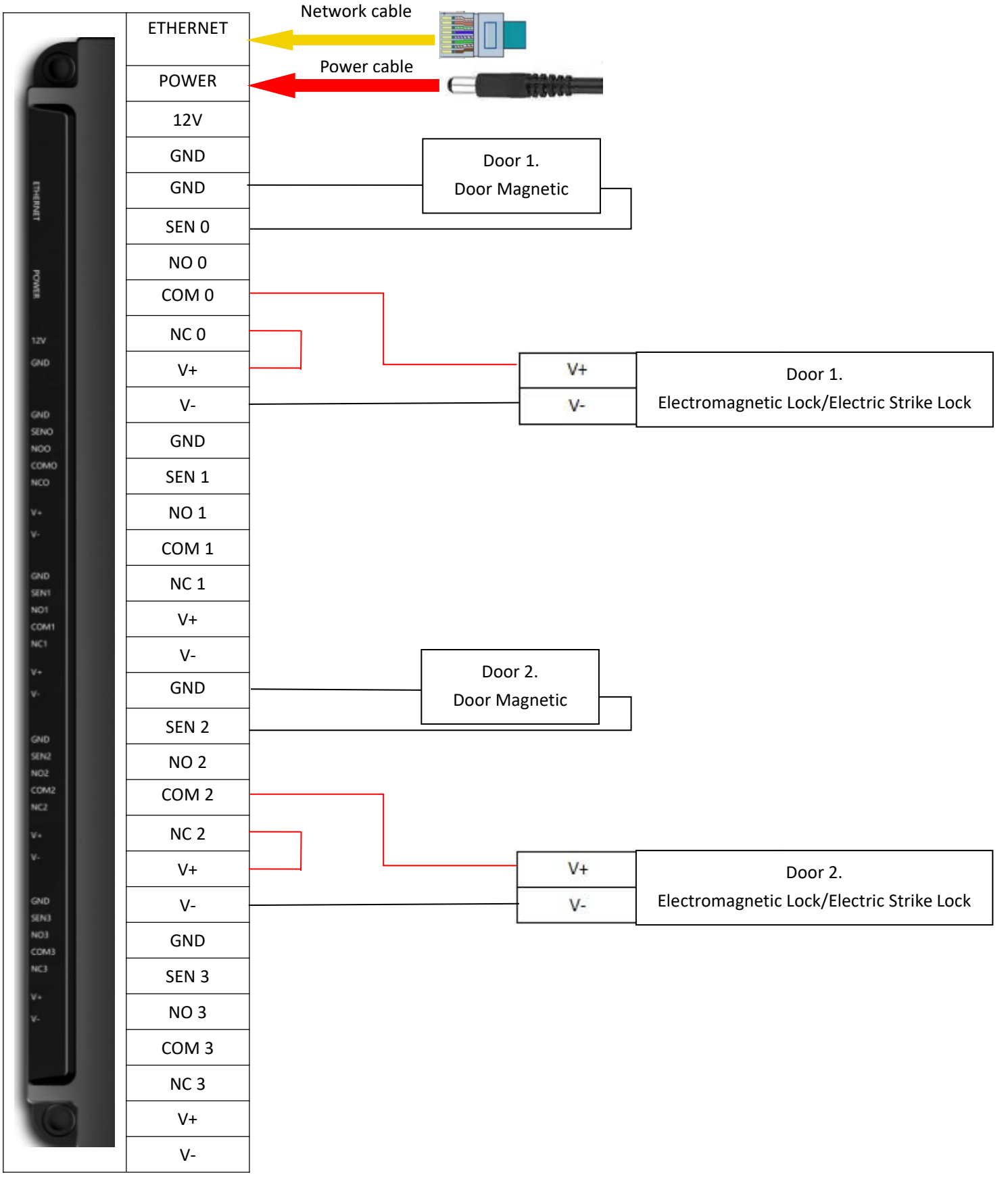
4. Wiring diagram of control panel

4.1. Wiring precautions

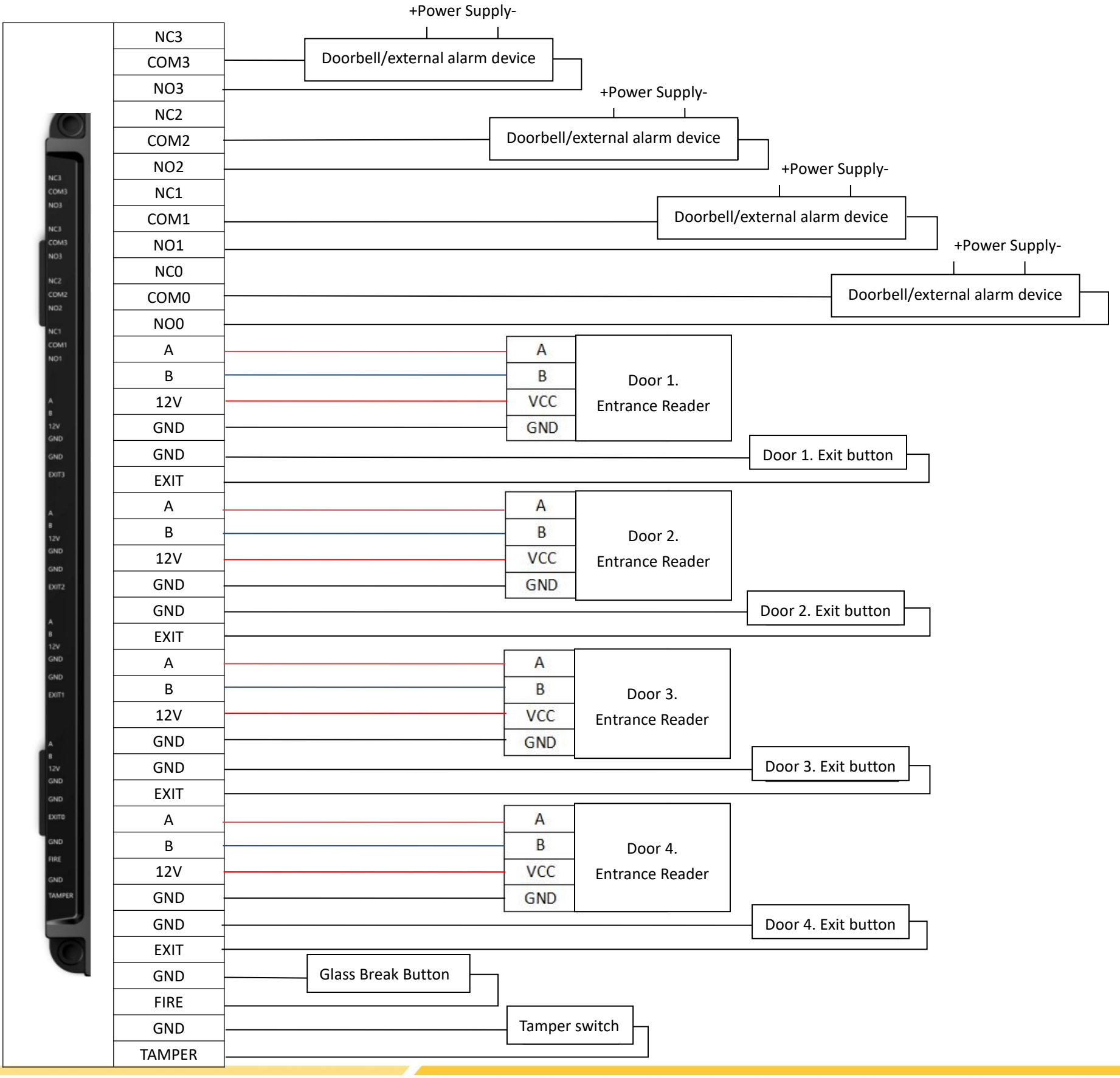
- Before installation, please turn off the external circuit (supply power to the system), including the door lock. Do not power on until the installation is completed.
- Before the device is powered on, please confirm that the output voltage of the power supply is within the specified voltage range.
- It is strongly recommended that the exposed part of all wiring terminals should not exceed 4mm. Professional wire clamping tools can be used to prevent accidental contact of long bare wires, which may cause short circuit and communication failure.
- Do not plug or unplug the terminal with electricity.
- Do not connect the controller and other high current devices to the same power socket.
- It is recommended to use wire connection device with specifications specified in the manual.
- Power supply: either power interface 1 or power interface 2 can be selected for power supply.

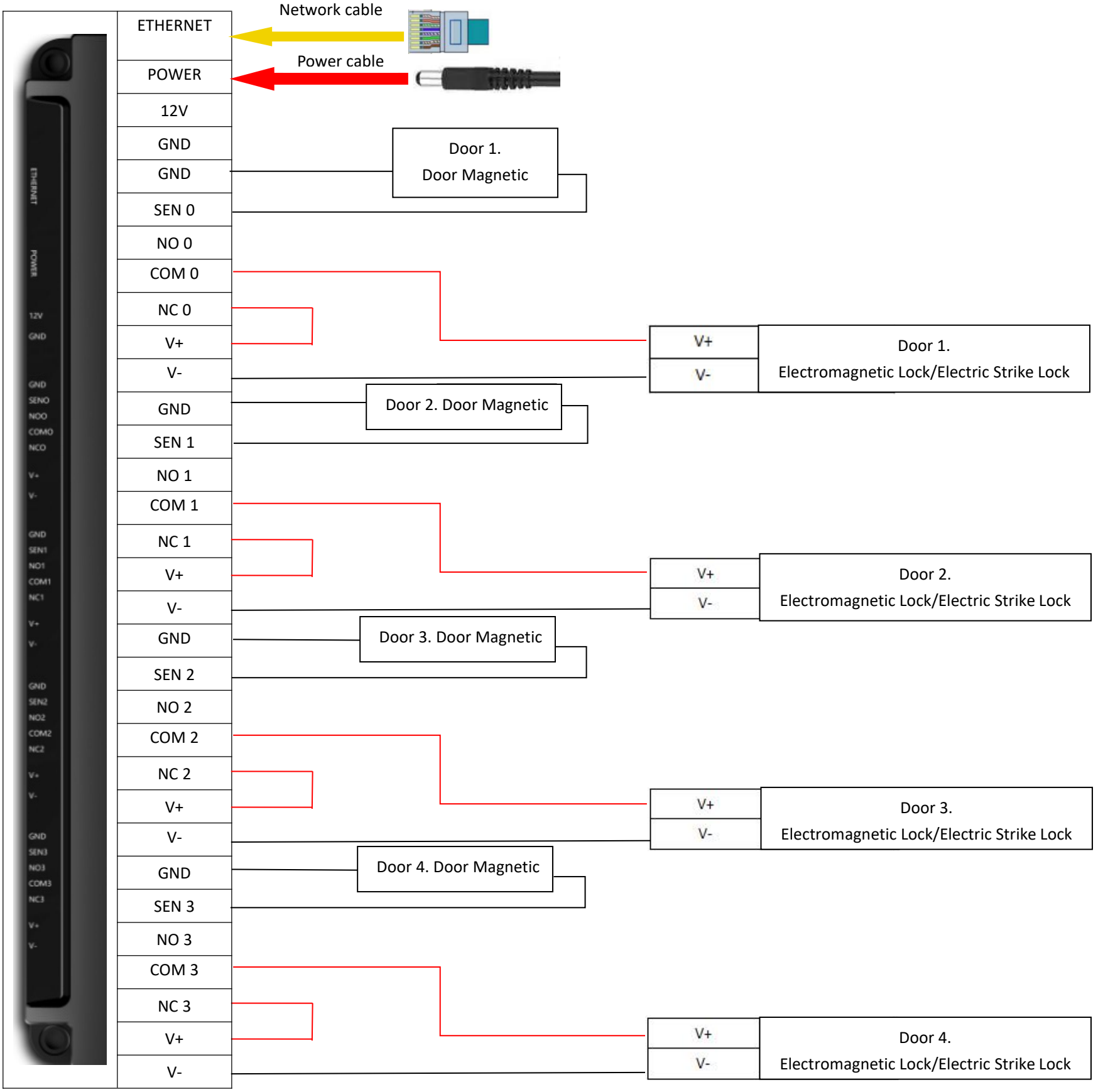
4.2. Double door double control wiring




ETHERNET
POWER
12V
GND
GND
SEN 0
NO 0
COM 0
NC 0
V+
V-
GND
SEN 1
NO 1
COM 1
NC 1
V+
V-
GND
SEN 2
NO 2
COM 2
NC 2
V+
V-
GND
SEN 3
NO 3
COM 3
NC 3
V+
V-
Network cable
Power cable
Door 1.
Door Magnetic
V+
V-
Door 1.
Electromagnetic Lock/Electric Strike Lock
Door 2.
Door Magnetic
V+
V-
Door 2.
Electromagnetic Lock/Electric Strike Lock

4.3. Four door single control wiring




ETHERNET
POWER
12V
GND
GND
SEN 0
NO 0
COM 0
NC 0
V+
V-
GND
SEN 1
NO 1
COM 1
NC 1
V+
V-
GND
SEN 2
NO 2
COM 2
NC 2
V+
V-
GND
SEN 3
NO 3
COM 3
NC 3
V+
V-
Network cable
Power cable
Door 1.
Door Magnetic
V+
V-
Door 1.
Electromagnetic Lock/Electric Strike Lock
Door 2. Door Magnetic
V+
V-
Door 2.
Electromagnetic Lock/Electric Strike Lock
Door 3. Door Magnetic
V+
V-
Door 3.
Electromagnetic Lock/Electric Strike Lock
Door 4. Door Magnetic
V+
V-
Door 4.
Electromagnetic Lock/Electric Strike Lock

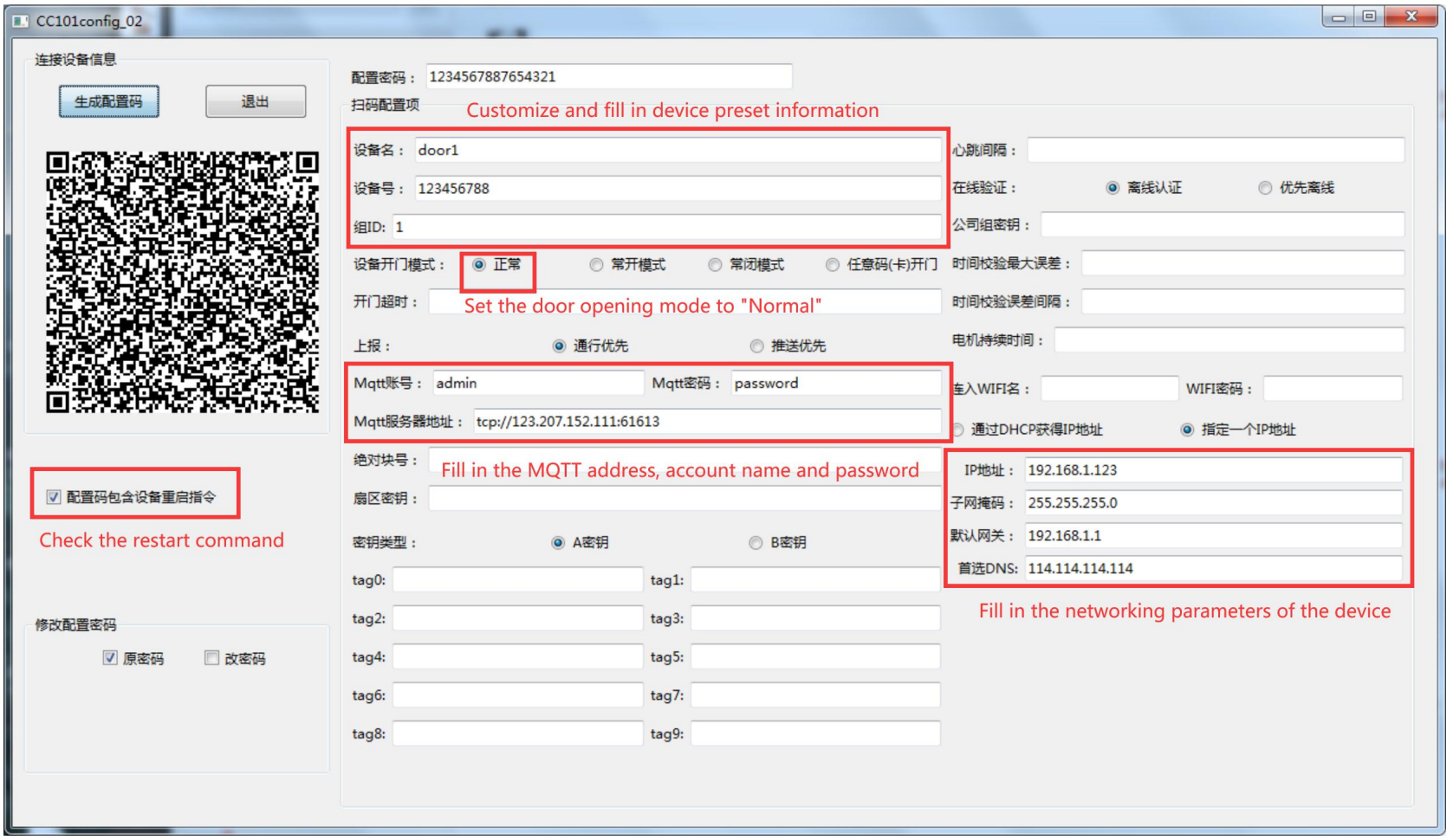
5. Device configuration

Preparation:

Connect the network cable and power supply of the controller, and connect at least one supporting 485 reader.

Generate configuration code:

Open the configuration tool and fill in the information in the following format. Finally, the configuration code is generated and scanned by the 485 reader.



After the reader scans the configuration code, the controller indicator lights turn off, except for the power indicator light, which is red, indicating that the device has been successfully restarted. When the controller's NET light (yellow) lights up and flashes every 1 second, it means that the controller has been connected to MQTT. Combined with the device MQTT

protocol, you can subscribe to and publish messages.

6. Contact info

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