

Keypad Standalone Access Controller



Reading carefully before Install and use this manual

1. Product Profile

S208 is a RFID card keypad Access Controller, supporting EM and Mifare two type cards. It is one of the most advanced stand alone access controller with unique exterior design, Built-in high-grade microprocessors, strong anti-interference ability, high Safety and reliability. It can provide a powerful security for 6,500 users. It has strong functions, such as low power consumption, Luminous keyboard, independent passwords, Wiegand input, the output short circuit protection, exit button, the doorbell interface, security level Settings etc. All these features make S208 widely used in home, office, residential area and other public places.

2. Features

Low power consumption: <30mA standby current

Backlit keypad: Offering full night time operation

User capacity: Supporting up to 6,500 users

Mode of operation: Card only, Passcode only or Card and Passcode

User passcode modification: Users can change their own individual passcodes

Active response time: Card response time <0.1 seconds

Short circuit protection: All outputs will shutdown if shorted within 100µs

Wiegand interface: Wg26 or Wg34 format input interface for external reader.

Functional keypad: All programming, adding and deleting card/users can be done via the keypad

Doorbell button: Built-in keypad offering independent operation of any doorbell system

3. Technical parameters

Work Voltage: DC12V ± 10%

Static Current: ≤30mA

Reading Range: 3~8cm

Capacity: 6,500 users

Ambient Temperature: -35°C ~ 60°C

Ambient Humidity: 10% ~ 90%

Electricity lock output: ≤3A

Alarm output: ≤20A

Output short circuit protection time: ≤100µs

Open time: 0 ~ 99 seconds (adjustable)

Size: 120mm*115mm*20mm

4.Sound and Light indication

| Illustration | Red Light | Green Light | Yellow Light | Buzzer |
|---|-----------|-------------|--------------|-------------------------------|
| Working state | On | | On | |
| Program mode | On | On | Flash | |
| Program mode sub-menu | On | On | | |
| Presenting unregistered card | On | | On | Make long sound"di" |
| Presenting registered card& door open | On | On | | Make two short sound" di di " |
| After Presenting the card and need to input the passwords | On | Flash | On | |
| Card+password mode | On | Flash | On | |
| Password mode keyboard | On | Flash | On | Make one short sound"di" |
| Successful Setting | | | | Make two short sound" di di |
| Failure Setting | | | | Make a long sound"di" |
| Invalid inputting | | | | Make a long sound"di" |
| Alarm | | | | Continuous sound: di di di |

5. Operation Instruction

5.1 Enter Program mode

Press '#' 4 times → input password "123456" → press "#" to save (enter the program mode successfully)

Note: ① "123456" is default password.

② If entering the program mode successfully, the buzzer will make two short sound "di di", otherwise, make a long sound "di".

5.2 Function setup (All the following steps should begin with

Entering Program Mode)

(1) Key "0": modify program password

Press "0" → input new password → press "#" → input the new password again → press "#" → press "9" to exit

Note: ① If add successfully, the buzzer will make two short sound “di di”, otherwise, make a long sound “di”.

② The password is 6-digits one.

(2) Key “1”: register cards in continuous way

press “1” → continuously presenting the unregistered card → press “#” to confirm → press “9” to exit

Note: ① The system will give a number to each card. The original password is “888888”. Such password can only be used for Card and Password Mode.

② If there is no card in the system, the card number will start from “0001” and increase gradually. The largest number cannot exceed “6,500”. If the registered already exist, the number will increase from the number of previous registered cards (including the deleted cards).

③ If add successfully, the buzzer will make two short sound “di di”, otherwise, make a long sound “di”.

(3) Key “2”: register a single card (allow registering card continuously)

press “2” → present the card → input the 4-digit user number → press “#” → present another card → input the 4-digit user number → press “#” (.....continuously register cards) → press “#” → press “9” to exit

Note: ① The system will give an default password “888888” to each card. Such password can only be used in the Card and Password Mode.

② If the card has already existed, the buzzer will make a long sound “ di”. Then you can present another card. If the inputted number has already existed, the buzzer will make a long sound “di”. Then you can input another number.

(4) Key “3”: delete the register card

Delete card

press 3, 0 → present the card → present the another card (...Continuously present the card that need to be deleted) → press “#” → press “9” to exit

Delete the user number

press 3, 1 → input the user number → press “#” → input another one → press “#” (...continuously delete many user numbers) → press “#” → press “9” to exit

Delete all the cards

press 3,2 → input “9999” → press “#” → press “9” to exit

(5) Key “4”: Door open mode setting

Card or password model

press 4, 0 → press “#” → press “9” to exit (that is the factory default mode)

Card and password model

press 4, 1 → press “#” → press “9” to exit

Password model

press 4, 2 → press “#” → press “9” to exit

(6) Key “5”: Door open time setting

Press “5” → input time → press “#” → press “9” to exit

Note: ① The time format is “**”, e.g. “03” represents that the open time is 3 seconds.

② when time is set as 99 seconds; the open method is trigger mode (presenting card and the door open. presenting the card again, then the door close.)

(7) Key “6”: setup the door open password (the factory default open password is blank)

Door open password setting

press “6” → input the new password → press “#” → input password again →press “#” → press “9” to exit

Blank password setting

press “6” →press “#” →press “#” → press “9” to exit

Note: ① This password can be used in Card or Password Mode and the Card and Password Mode.And it must have 6 digits.

② If it is blank password setting, the password mode can not be used.(Can not open the door via password.)

5.3 The exit key is “9”

5.4 Modify card password (should operate in the Card and Password Mode, do not enter the programming)

Press “9”(the red light is off and the green light is on) → present the card(must be authorized cards) →input the original password(the original password is 888888) → press “#” → input new password → press “#” → input password again → press “#”

Note: ① this password is only valid in Card and Password Mode.

② If modify successfully, the buzzer makes 2 “di-di” short sounds, then it will exit the Program Mode.

5.5 Restore to factory default settings (only restore the Program passwords and parameter settings, and authorized cards will not be deleted)

With power off, short the JP1 jumper to 2 and 3 position. Then with power on, after hearing 2 “di-di” sounds, short the JP1 jumper to 1 and 2 positions. Then modify successfully.

6.Operation Example

6.1 Setting New program password ‘789000’

Firstly, enter the program mode

press “#” 4 times → input password “123456” → press “#” again(green light flashes) → press “0” → input the program password “789000” → press “#” → input the password “789000” again

Then press “9” to exit, the default password “123456” turns to “789000”.

Please remember the modified program password. It has to be used to enter the program mode later.

6.2 Continuously presenting cards to register

Firstly, enter the program mode

press the “#” 4 times → input password “123456” → press “#” again(green light flashes) → press “1” → present new cards(after presenting all the needed cards → press “#”

Then press “9” to exit, the registered card can open the door now.

6.3 Continuously register two cards, “0088” “0099”

(allowing register many cards continuously)

Firstly, enter the program mode

press the “#” 4 times → input password “123456” → press “#” again(green light flashes) → press “2” → present the new cards → input the number “0088” → press “#” → present the second card → input the number “0099” → press “#” → press “#” once again

Then press “9” to exit

card “0088” and card “0099” can open the door.

6.4 Delete cards according the card number

e.g. delete the card “0088” and the card “0099”

Firstly, enter the program mode

press the “#” 4 times → input password “123456” → press “#” again(green light flashes) → press “3” → press “1” → input “0088” → press “#” → input ‘0099’ → press “#” → press “#” once again

Then press “9” to exit, card “0088” and card “0099” cannot open the door now. (Deleting multiple cards means that you can input number one by one. Then, press “#”. In this case, you can delete multiple cards. After confirming, press the “#” once again.)

6.5 Setup the opening mode as presenting cards

Firstly, enter the program mode

press the “#” 4 times → input password “123456” → press “#” again (green light

flashes)→ press “4” → press “0” →press “#”

Then press “9” to exit

the opening mode has been changed to Card or Password Mode.

6.6 Setup the opening password as “147258”

Firstly, enter the program mode

press the “#” 4 times → input password“123456” → press “#” again(green light flashes)→ press “6” → input “147258” → press “#” →press “147258” again → press “#” once again

Then press “9” to exit

press “147258”, then press “#” to confirm, and you can open the door now.

6.7 Setting new password ‘88899’ in Card and Password

Mode(should operate it in the Card and Password Mode)

Press “9” → presenting the card (previous registered card) → input the original password “888888” (the original program password. If you have modified it, please use the modified one to operate the next step.) The red light and the green light flash one after another → input the new password ‘888999’→ press “#” → press ‘888999’ again → press “#”

7.Special case

7.1 External readers

- 1: When use the external readers to register and delete cards, external readers have video and audio indication, so please take attention to that when presenting another card.
- 2: If the external reader has no above indication, please wait 2-3 seconds to present after the first one.
- 3: If have to set card number when register cards for external readers, you can only set serial number on the master controller.
- 4: Support external keyboard readers. You can also input password to open the door via it

7.2 Light change indication

- 1: According to the changes of the red light, you can know current opening mode, which can be divided into 3 cases:

| | | |
|-----------|--------------------------|------------------------|
| Red light | always on | card or password mode |
| Red light | flashes every 0.5 second | card and password mode |
| Red light | flashes every 1 second | password mode |

2: If red light and green light are on at the same time, it means that the relay is closed and the output is trigger mode.

7.3 Normal open/close under special conditions(presenting cards to open or close, the relay will have no auto response)

Enter the Program Mode, set 99 seconds opening time, the controller relay's output turns to trigger mode. That is to say, when presenting the card to open the door, the lock remains open. When presenting the cards again, the lock remains close.

7.4 Only the card can open the door, or only the password can open the door

1: only card can open the door

Firstly, set the opening mode as Card or Password Mode. Then set blank opening password.

2: only password can open the door

Set the opening mode as Password Mode. There is no response when presenting the card

8.Faults Judgment

8.1 Cards cannot open the door

Making sounds but the green light is off, please check the card is registered or not

Making sounds but the green light and the red light flash at interval Check the Opening Mode Status

Making sounds and the green light is on, Check wire connection

8.2 No response after presenting the card

*Check the card format, or whether the card has been damaged.

*Check the opening mode

In Password Mode, there will be no reader function and no response after presenting cards.

*Check light indication

When the red light is off and the green light on, it is door open status. There will be no response after presenting cards.

8.3 No key response

Check the indication light

When the red light is off and the green light on, it is door open status. There will be no key Response.

9. Wiring instruction

7-pin wire

| | | | |
|---------------|-------------|------------------------|--------------------------|
| Purple | OPEN | External Reader | Exit button input |
| Black | GND | | |
| Red | +12V | | |
| White | D1 | | |
| Green | D0 | | |
| Blue | LED | | |
| Yellow | BEEP | | |
| | | | |

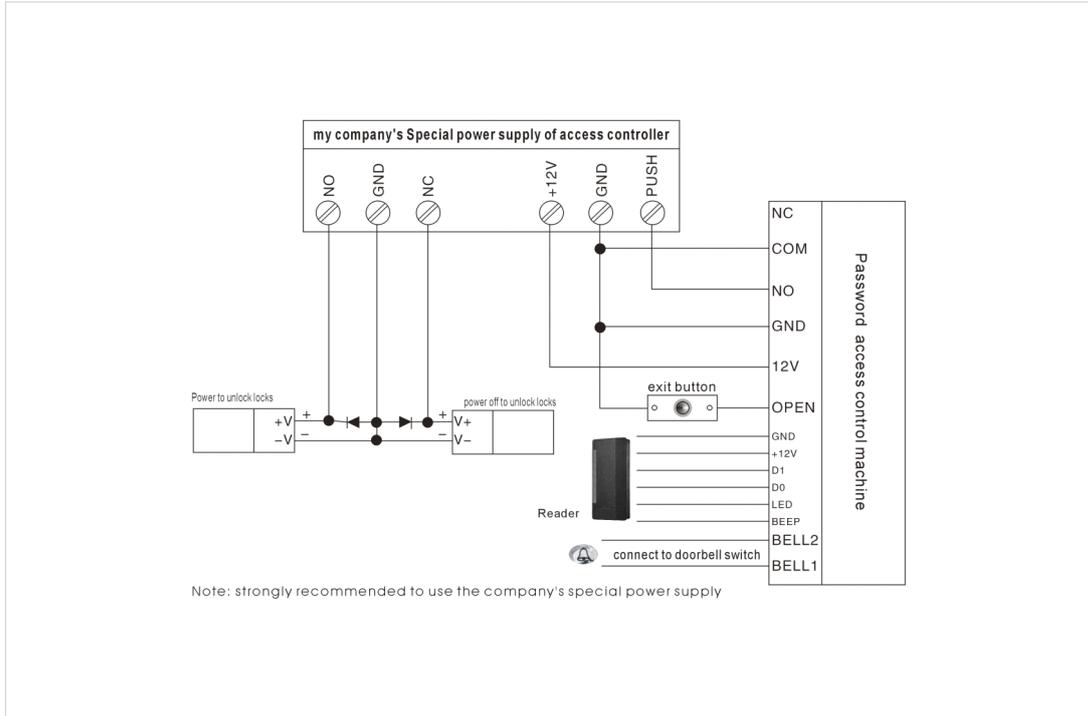
5-pin wire

| | | |
|--------------|-------------|----------------------------|
| Red | +12V | Power |
| Black | GND | |
| Grey | NC | relay signal output |
| Black | COM | |
| Brown | NO | |

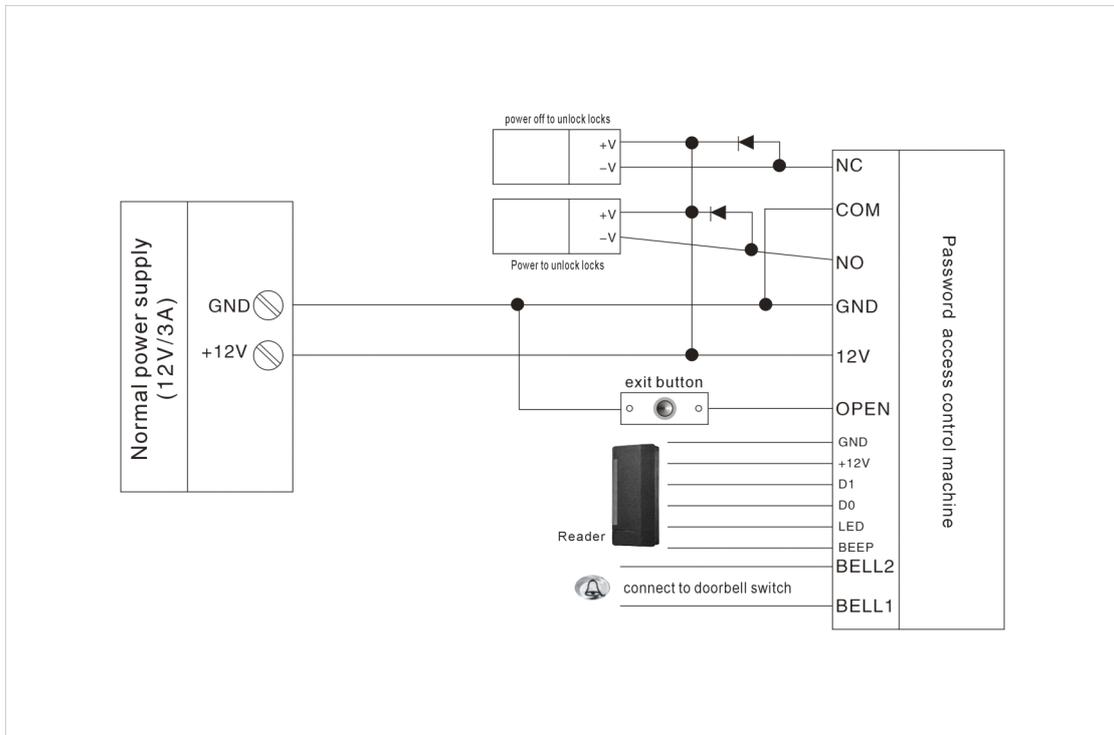
2-pin wire

| | |
|---------------|-----------------|
| Yellow | Doorbell |
| Blue | |

10. Wiring diagram



Connect with Special power supply



Connect with Common power supply