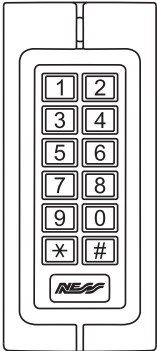


# S2

Metal Waterproof Access Control



User Manual

## 1. Introduction

This is a proximity and waterproof access controller, IP65, which is a modern and advanced access control system. It uses the latest central processor(CPU), S2 can store 2500 users. It supports card, card plus PIN and card/PIN three access modes, also can add PIN independently. Anti-vandal, alarm, exit button, safe mode, wiegand input/output, etc, which make the user safer.

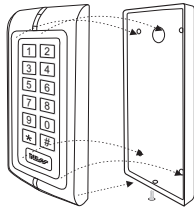
## 2. Technical Specifications

Features	Description
Appearance	Metal case, anti-explosion and anti-tamper
Waterproof	IP65
Input voltage	DC: 12-24V AC: 12-18V
Capacity(max)	2500
PIN	4digits Not related to the card.
Master card	Add/delete user
As reader	Support Wiegand 26bits, PIN wiegand output is virtual number, set the facility code, set the address of reader.
Connect external reader	Can connect any EM/HID/IC readers with wiegand 26 output
Connect high power alarm	External current of the alarm ≥3A

## 3. Installation Procedure

### 3.1 Installation and Fixation

- Drill hole on the wall according to the back size of the machine or install distributing box well.
- Thread the cable through cable hole, connect related cable. For the un-used cable please separate with insulating tape and keep well in case of short circuit.
- Fix back cover on the wall or distributing box with screw.
- After wiring, install front casing to the back casing and fix well.



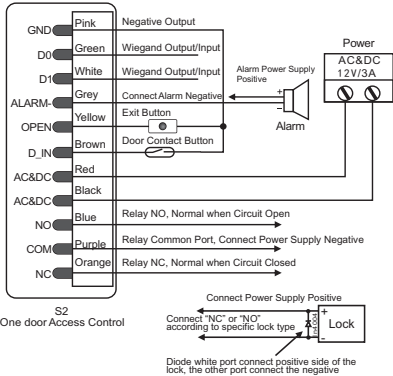
PCB connect diagram

### 3.2 Wiring

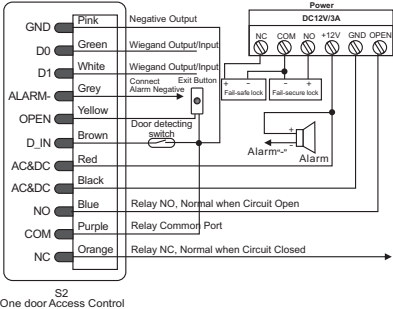
Function	Color	Description
D0	Green	Wiegand 26 output/input
D1	White	Wiegand 26 output/input
ALARM-	Grey	Alarm Negative
OPEN	Yellow	Request to Exit Button
D_IN	Brown	Door Contact
AC&DC	Red	12V AC&DC Regulated Power Input
AC&DC	Black	12V AC&DC Regulated Power Input
NO	Blue	Relay NO
COM	Purple	Relay COM
NC	Orange	Relay NC
GND	Pink	Negative

### 3.3 Connection Diagram

#### 3.3.1 Common power supply



#### 3.3.2 Special Power Supply



## 4. Administrator Operation

### 1.To Reset to Factory Default

To reset to factory default, power off, press "\*", hold it and power up, release it after hearing two beeps and the LED turns orange. The controllers is then waiting to add a new master card. Then present any two EM cards. The first one will "add a user card", the second is "adding a new delete user card". The LED will then turn red, confirming the unit has been reset back to factory default and new Master Cards added. If new Master Cards are not set within 10 seconds the LED will turn in red, and S2 goes back to working status.

**Note:** Resetting to factory default, the user's information is still retained.

### 2.Enter into Programming Code:

Press [\*] [Master code] [#] 888888 is the default factory master code.

**Note:** Below 3 to 11 items all operation need in programming mode.

### 3.Change Master Code:

Press [0] [New code #] [New code #]

**Note:** the master code can be any 6 digits, please stores well.

### 4.To add users

#### 4.1 To add card users automatically.

Press [1] [Read card1] [Read card2]...[#]

Mark: The range of ID number : 1~2500.

The ID number is auto generation and be Search continuously. The add card will auto associate PIN "1234" (factory default) , this PIN could not open the door.

#### 4.2 To add card users manually

Press [1] [ID number 1# read card1] [ID number 2# read card2] ...[#]

Mark: Press [#] means "confirm", Press last [#] means end of the current settings. Press [\*] means to exit the current operation

#### 4.3 To add no-card users

Press [1] [ID number 1# PIN 1] [ID number 2# PIN 2] ...[#]

Mark: The PIN of S2 is 4 digits any number;

· 04 ·

#### 4.4 To add card users synthetically

Press [1] [read card1] [ID number 1# read card2] [ID number 2# PIN#]...[#]

#### 4.5 To add users by manager card

[Manager add card] [Swipe add user card continuously] [Manager add card]

That is exit add users settings

#### 4.6 To add consecutive card users

Press [5] [ID number #] [8 digits number 1 #] [Card number #].

Mark: The quantity of S2 cards could not exceed 2500.

The ID number must be continuous vacant number.

### 5. To delete users

#### 5.1 Auto Delete

Press [2] [Read card1] [Read card2] ...[#]

#### 5.2 Manual Delete

Press [2] [ID number1#] ...[#]

#### 5.3 Synthetical Delete

Press [2] [Read card1] [ID number1#]...[#]

#### 5.4 Delete all users

Press [2] [0000] [#]

#### 5.5 To delete User by Manager Delete Card

[Manager delete card] [Swipe delete user card continuously] [Manager delete card] That is exit delete users settings

### 6. Door Open mode settings

#### 6.1 Open by cards:

Press [3] [0] [#]

#### 6.2 Open by cards+PIN

Press [3] [1] [#]

#### 6.2 Open by cards or PIN(Factory default)

Press [3] [2] [#]

#### 7. Door relay time settings

Press [4] [0~99] [#]

Marks: The door relay time is between 0~99 seconds, the factory default setting is 5 seconds.

· 05 ·

### 8. Door open detection settings

#### 8.1 To disable door open detection. (Factory default)

Press [6] [0] [#]

#### 8.2 To enable door open detection

Press [6] [1] [#]

8.2.1When used with the function, ,there are two situation: if the door is opened normally, but not closed after 1 minute, the inside buzzer will beep automatically to remind people to close the door and continue for 1 minute before switching off automatically.

8.2.2If the door is forced open, the inside buzzer and alarm output will both operate.

### 9. Security Mode settings

#### 9.1 Normal status:(Factory default )

Press [7] [0] [#]

#### 9.2 Keypad Lockout

Press [7] [1] [#]

If there are 10 invalid cards or 10 incorrect PIN numbers in a 10 minute period either the keypad will lockout for 10 minutes.

#### 9.3 Alarm Output

Press [7] [2] [#]

If there are 10 invalid cards or 10 incorrect PIN numbers in a 10 minute period either the the outside buzzer and alarm output will both operate.

### 10. To set the facility code:

Press [8] [1] [0-255] [#] (Factory default is 029)

Marks:This facility PIN output as Wiegand mode: If the facility Code is 029, PIN is 8888.When press [8888] [#] Facility will output a virtual number 029,08888.

### 11. To set the address of reader

Press [8] [2] [0~3] [#] (Factory default is 0)

0: To set the reader address 0,wiegand output is 26bit.

1: To set the reader address 1.

2: To set the reader address 2.

3: To set the reader address 3.

· 06 ·

### 12. Alarm output time

Press [9] [1~3] [#]

Factory default is 1 minute

## 5. User Settings

### 1. Cards users change the PIN

[\*] [Read Card] [Old PIN] [#] [New PIN] [#] [Repeat New PIN] [#]

Marks: S2 PIN is only 4digits; The PIN could not change to "1234"

### 2. No card users the PIN

[\*] [ID number #] [Old PIN] [#] [New PIN] [#] [Repeat New PIN] [#]

Marks: S2 PIN is only 4digits; The PIN could not change to "1234"

### 3. Open door by users card

[Read Card] If it is valid ,the door will open.

### 4. Open door by PIN

[Users PIN] [#] If the PIN is right, the door will open.

### 5. Open door by users card+PIN

[Read Card] [Users PIN] [#]

If the card and PIN are right, the door will open.

### 6. To remove the alarm

6.1 The inside buzzer and alarm output will both operate.

[Read valid card] or press [Master Code] [#] to reset the Door Forced Open warning.

#### 6.2 Close the door forced warning

Close the door or [Read valid card] or [Master Code] [#] to reset the Door Forced warning

· 07 ·

## 6. Sound and Light indication

Operation Status	Red Light	Green Light	Buzzer
Stand by	Slow flash	Off	—
Press keypad	—	—	Short Ring
Operation successful	Off	Bright	Ring...
Operation failed	—	—	3 Short Rings
Enter into programming mode	Bright	Off	Ring...
In the programming mode	Bright	Bright	—
Exit from the programming mode	Slow flash	Off	Ring...
Open the door	Off	Bright	Ring...
Alarm	Quick flash	Off	Alarm

## 7. Specifications

Operating Voltage	DC:12-24V AC:12-18V
Idle Current	35±5mA
Active Current	<80mA
Card Reading Distance	3~6 cm
Operating Temperature	-40~60°C
Lock Output Load	2A
Alarm Output Load	3A

## 8. Packing List

Name	Size	Quantity
Machine	S2	1 set
Packing box	S2	1 piece
Rubber bungs	□4mm X28mm	4 PCS
Self tapping screws	□4mm X28mm	4 PCS
Master Card		2 PCS
Screw driver	Star diagram	1 piece
Drying agent		1 Package

Remarks: Master Card (Master Add Card & Master Delete Card).

· 08 ·