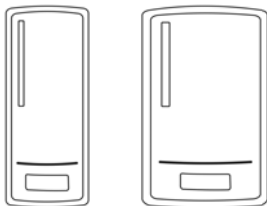


Stand-alone Proximity Access Control



S3

S4

User Manual

INTRODUCTION

The S3/S4 is a compact, waterproof stand-alone programmable access control system that provides proximity entry for up to 2000 users, read both EM & HID card. It uses Atmel microcontroller assures maximum performance in any environment, and the low-power circuit makes its service life prolonged. The product unique feature is simple in design, easy operation, and high reliability.

Features:

- Waterproof, conform to IP66
- Read 125KHz EM & HID card
- One programmable relay operation
- Pulse mode, Latch mode
- Remote infrared programmer
- 2000 users
- Card block enrollment
- Tri-colour LED status display
- Built in light dependent resistor (LDR) for anti tamper
- Buzzer for audible or silent mode
- Low temperature resistance(-40°C)

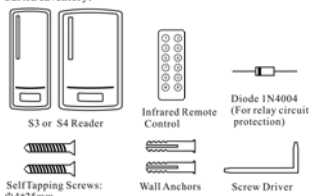
Specifications:

| | |
|-------------------------------------|----------------------------------|
| User Capacity | 2000 |
| Card | EM Card and HID Card |
| Operating Voltage | 9-18V DC |
| Idle Current | <40mA |
| Proximity Card Reader | EM & HID |
| Radio Technology | 125KHz Proximity Card |
| Read Range | 3-10cm |
| Wiring Connections | Relay Output, Exit Button |
| Relay | One (NO, NC, Common) |
| Adjustable Relay Output Time | 1-99 Seconds (5 seconds default) |
| Lock Output Load | 2 Amp Maximum |

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| | |
|------------------------------|--|
| Environment | Meets IP66 |
| Operating Temperature | -40°C ~60°C |
| Operating Humidity | 20%RH~98%RH |
| Physical | ABS Shell |
| Colour | Black |
| Dimensions | S3-L:120*W:48*H:20 (mm) S4-L:120*W:76*H:20 (mm) |
| Unit Weight | S3:120g,S4:150g |
| Shipping Weight | S4:170g,S4:200g |

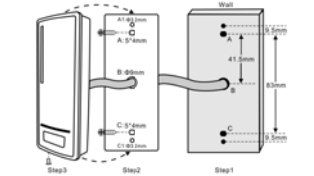
Carton Inventory:



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

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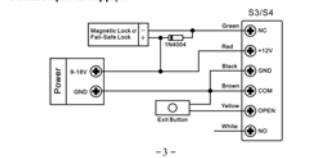


Wiring

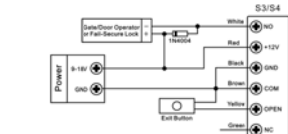
| Colour | Function | Notes |
|--------|----------|------------------------------------|
| Red | Power + | 9-18 VDC Regulated Power Input |
| Black | GND | Ground |
| White | NO | Normally Open Relay Output |
| Brown | COM | Common Connection for Relay Output |
| Green | NC | Normally Closed Relay Output |
| Yellow | OPEN | Request to Exit Input(REX) |

Connection Diagram

Common power supply:

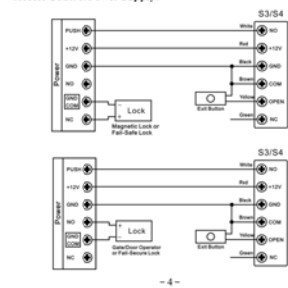


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Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the reader might be damaged. (1N4004 is included in the packing)

Access Control Power Supply:



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PROGRAMMING

Programming will vary depending on access configuration. Follow the instructions according to your access configuration.

General Programming Information

- Remote Control:** Please use the Infrared Remote Control to program the Reader.
- User ID number:** Assign a user ID to the access card in order to track it. The user ID number can be any number from 1-2000. IMPORTANT: User IDs do not have to be proceeded with any leading zeros. Recording of User ID is critical. Modifications to the user require the User ID be available.
- Proximity Card:** Any 125KHz industry standard 26 bit EM and HID Proximity card or Tag.

Enter and Exit Program mode

| Programming Step | Keystroke Combination |
|--------------------|-----------------------|
| Enter Program Mode | * (Master Code) # |
| Exit Program Mode | # |

Set Master Code

| Programming Step | Keystroke Combination |
|-----------------------|-----------------------|
| 1. Enter Program Mode | * (Master Code) # |
| 2. Update Master Code | # (New Master Code) # |
| 3. Exit Program Mode | # |

Add User Cards

| Programming Step | Keystroke Combination |
|---|-----------------------|
| 1. Enter Program Mode | * (Master Code) # |
| 2. Add Card: Using Auto ID (Allows S3/S4 to assign Card to next available User ID number) | 1 (Read Card) # |
| OR | |
| | 1 (Read Card) # |

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| | |
|--|--|
| 2. Add Card: Select Specific ID (Allows manager to define a specific User ID to associate the card to) | 1 (User ID) # (Read Card) # The user ID is any number from 1-2000 |
| OR | |
| 2. Add Card: by Card Number | 1 (Input 8/10 digits Card number) # |
| OR | |
| 2. Add Card: Block Enrollment (Allows manager to add up to 2000 cards to the Reader in a single step.) Takes 3 minutes to program. | 1 (User ID number) # (Card quantity) # (The first card number) # Cards' number must be consecutive; Card quantity is the number of cards to be enrolled. |
| 3. Exit | # |

Delete User Cards

| Programming Step | Keystroke Combination |
|------------------------------------|--|
| 1. Enter Program Mode | * (Master Code) # |
| 2. Delete Card: By read card | 2 (Read Card) # The cards can be deleted continuously. |
| OR | |
| 2. Delete Card: Select Specific ID | 2 (User ID) # The user ID is any number from 1-2000. |
| OR | |
| 2. Delete Card: by Card Number | 2 (Input 8/10 digits card number) # |

Set Relay Configuration

The relay configuration sets the behaviour of the output relay on activation.

| Programming Step | Keystroke Combination |
|-----------------------|-----------------------|
| 1. Enter Program Mode | * (Master Code) # |

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| | |
|---------------|---|
| 2. Pulse Mode | 3 (1-99) # The relay time is 1-99 seconds. (1 is 50mS.) Default is 5 S. |
| OR | |
| 2. Latch Mode | 3 0 # Sets the relay to ON/OFF latch mode |
| 3. Exit | # |

Set Strike-out Alarm

The strike-out alarm will engage after 10 failed card attempts. Factory default is OFF. The strike-out alarm can be set to deny access for 10 minutes after engaging or it can be set to disengage only after entering a valid card or Master code.

| Programming Step | Keystroke Combination |
|--------------------------|---|
| 1. Enter Program Mode | * (Master Code) # |
| 2. Strike-Out OFF | 4 0 # (factory default) |
| OR | |
| 2. Strike-Out ON | 4 1 # Access will be denied for 10 minutes |
| OR | |
| 2. Strike-Out ON (Alarm) | 4 2 # |
| Set alarm time | 5 (0-3) # Factory default is 1 minute Enter Master code # or valid user card to silence |
| 3. Exit | # |

Set Audible and Visual Response

| Programming Step | Keystroke Combination |
|-----------------------|---|
| 1. Enter Program Mode | * (Master Code) # |
| 2. Control LED | OFF = 6 1 # ON = 6 2 # |
| OR | |
| 2. Control Sounds | OFF = 6 3 # ON = 6 4 # (Factory defaults are ON) |
| 3. Exit | # |

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OTHERS

Users Operation:

Open the door: Read the valid user card, the door will open.
Remove Alarm: Read valid user card, or Input [Master code] #

Reset to Factory Default and Mater Card Program:

To reset to factory default, power off, press the Exit Button, hold it and power on, there will be two beeps, and the LED light turns into yellow, release the exit button, then read any two 125KHz EM card or HID card, the LED will turn into red, mean reset to factory default successfully. Of the two cards reading, the first one is Master Add Card, and the second one is Master Delete Card.

Remarks: Reset to factory default, the user's information is still retained.

Erase all Cards

This will delete ALL User data.
1. Enter Program Mode by press: * (Master Code) #
2. Press 2 and Master code again
3. Exit: *
All configuration data is retained.

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 | Yellow 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 |

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FCC STATEMENT :

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

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| S3/S4- Simplified Instruction | |
|--------------------------------|--|
| Function description | Operation |
| Enter the programming mode | * - 123456 - # then you can do the programming (123456 is the default factory master code) |
| change the master code | #-new code - # = repeat the new code - # (code: 6 digits) |
| Add card user | 1-Read Card - # (can add cards continuously) |
| Delete card user | 2-Read Card - # (can delete cards continuously) |
| Exit from the programming mode | # |
| How to release the door | |
| Card User | Read card |