75.00 mm

105.00 mm

VISIONIS

Indoor + Outdoor Rated IP66 Metal Access Control Standalone + Wiegand 26 Keypad + Card Reader + 1000 EM Cards + Flush Mount Design

User Manual

VIS-3029

Need help?
If you're having trouble installing our product, our support team is ready to assist you remotely via phone, or email.
Contact us at support@visionistech.com or call 1-800-340-0727

INTRODUCTION

Enhance your security with our standalone access control system, designed for seamless and reliable single-door access. Featuring Wiegand input and output, this system is powered by an Atmel MCU, ensuring stable performance and long-lasting durability with its low-power circuitry.
With support for up to 1,000 users (990 common users + 10 visitor users), this device offers versatile access options to suit your needs. Choose from card access, PIN access, card + PIN access, or multi-card/PIN access for maximum flexibility and security.

Features

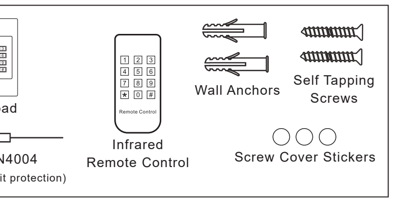
- Waterproof, conform to IP66
- Vandal resistant metal enclosure
- One relay, 1,000 users (990 common + 10 visitor)
- PIN length: 4~6 digits
- Card Type: 125KHz EM Card
- Wiegand 26 bits output, Wiegand 26/34bits input automatic identification
- Card block enrollment
- Tri-color LED status display
- Pulse mode, Toggle mode
- Low temperature resistance (-40°C)

Specifications

User Capacity Normal Users Visitor Users	**1000 Cards/PINs** 990 10
Operating Voltage Working Current Idle Current	**12-18V** ≤ 150mA ≤ 60mA
Keypad	**12 Keys**
Proximity Card Reader Radio Technology Read Range	**EM** 125kHz EM Card 2 ~ 6 cm (0.79 ~ 2.36 in.)
Wiring Connections	Relay Ouput, Exit Button, Wiegand (in/out)
Relay Adjustable Relay Ouput Time Lock Output Load	**One (NO, NC, Common)** 0-99 Seconds (5 seconds default) 2 Amp Maximum

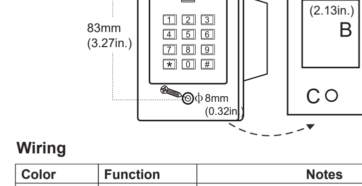
PIN Length	**4~6 digits**
Wiegand Interface	Wiegand 26 bits output Wiegand 26/34 bits input automatic identification
Environment Operating Temperature Operating Humidity	**Outdoor (Meets IP66)** -40°C ~ 60°C (-40°F ~ 140°F) 0%RH - 98% RH
Physical Color Dimensions Unit Weight Shipping Weight	**Stainless Steel Plate** Silver & Black L115 x W70 x H25 (mm) L4.53 x W2.76 x H0.98 (in.) 245g 285g

Carton Inventory:



INSTALLATION

1. Drill three holes in the wall:
   Two holes (A, C) for the screws.
   One hole (B) for the device.
2. Insert the supplied rubber bungs into the screw holes (A, C).
3. Thread the cable through hole (B).
4. Attach the unit to hole (B).
5. Secure the unit firmly to the wall using two flat-head screws.
6. Cover the screws with the provided screw cover stickers.



Wiring

Color	Function	Notes
Red	Power+	12-18V DC Regulated Power Input
Black	GND	Ground
Blue	NO	Normally Open Relay Output
Brown	COM	Common Connection for Relay Output
Grey	NC	Normally Closed Relay Output
Yellow	OPEN	Request to Exit Input (Rex)
Green	D0	Wiegand Input/Output Data 0
White	D1	Wiegand Input/Output Data 1

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	Orange 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

Basic Configure

Enter and Exit Program Mode

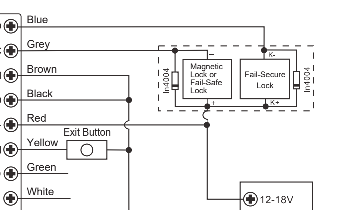
Programming Step	Keystroke Combination
Enter Program Mode	*** (Master Code) #** (Factory default is 123456)
Exit Program Mode	*

Set Master Code

Programming Step	Keystroke Combination
1. Enter Program Mode	*** (Master Code) #**
2. Update Master Code	**0 (New Master Code) # (Repeat New Master Code) #** (Master code is any 6 digits)
3. Exit Program Mode	*

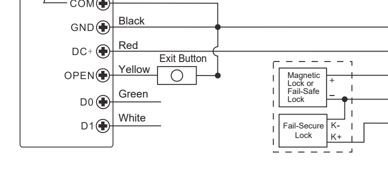
Connection Diagram

Common Power Supply



Attention: Install a 1N4004 or an equivalent diode when using a common power supply, or the keypad may be damaged.
(A 1N4004 diode is included in the package.)

Access Control Power Supply:



Programming

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

Notes:
> User ID number: Assign a User ID to the access card/PIN for tracking purposes.
The Common User ID:
PIN/Card User ID: 0 ~ 989
Visitor User ID: 990 ~ 999

IMPORTANT: User IDs do not need to be preceded by leading zeros. Recording the User ID is critical. Any modifications to the user require the User ID to be available.

> Proximity Card:
Proximity Card: Supports 125KHz EM cards

> PIN: Can be any 4–6 digits, except 8888, which is reserved.

Add Common Users

PIN/Card user ID: 0~989; PIN length: 4~6 digits except 8888

Programming Step	Keystroke Combination
1. Enter Program Mode	*** (Master Code) #**
Add Card User	
2. Using Auto ID (Allows the device to assign a Card to the next available User ID number) **OR** 2. Select Specific ID (Allows the Master to define a specific User ID to associate the card to) **OR** 2. Add Card: Block Enrollment (Allows the Master to add up to 988 cards to the Reader in a single step). Takes 2 minutes to program.	**1 (Read Card) / (Input 8/10/17 Digits Card Number) #** The cards can be added continuously. **1 (User ID) # (Read Card) / (Input 8/10/17 Digits Card Number) #** **1 (User ID) # (Card Quantity) # (The First Card 8/10/17 Digits Number) #** Cards' numbers must be consecutive (Card quantity is the number of cards to be enrolled)
Add PIN User	
2. Using Auto ID (Allows the device to assign a PIN to the next available User ID number) **OR** 2. Select Specific ID (Allows the manager to define a specific User ID to associate the PIN to)	**1 (PIN) #** The PINs can be added continuously. **1 (User ID) # (PIN) #**
3. Exit	*

Tips for PIN Security (Only valid for 6-digit PINs):
For higher security, we allow you to hide your correct PIN with other numbers up to a maximum of 10 digits.
Example PIN: 123434
You could use: **(123434)**
**(123434)
("*" can be any numbers from 0–9)

Simplified Instruction	
Function Description	**Operation**
Enter the Programming Mode	*** (Master Code) #** then you can do the programming (123456 is the factory default master code)
Change the Master Code	**0 - New Code - # - Repeat New Code - #** (code: 6 digits)
Add Card User	**1 - Read Card - #** (can add cards continuously)
Add PIN User	**1 - (PIN) - #** (The PIN is any 4~6 digits except 8888 which is reserved)
Delete User	**2 - Read Card - #** **2 - PIN - #**
Exit from Programming Mode	*
How to release the door	
Card User	**Read Card**
PIN User	**Input PIN #**

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Add Visitor Users

There are 10 groups of visitor PINs/cards available. Users can be assigned up to 10 times of usage. Once the specified number of uses is reached (e.g., 5 times), the PIN/card becomes automatically invalid.

Programming Step	Keystroke Combination
1. Enter Program Mode	*** (Master Code) #**
2. Add Card **OR** 2. Delete a PIN	**1 (User ID) # (0–9) # (Read Card) / (Input 8/10/17 Digits Card Number) #** **1 (User ID) # (0–9) # (PIN) #** (0~9 specifies times of usage; 0 = 10 times)
3. Exit	*

Change PIN Users (PIN length: 4~6 digits except 8888)

Programming Step	Keystroke Combination
Note: Below actions are performed outside programming mode, and users can undertake these themselves.	
Change PIN	*** (User ID) # (Old PIN) # (New PIN) # (Repeat New PIN) #**
Change PIN of Card + PIN Access Mode (When adding, the system will automatically allocate PIN 8888 to cards.)	*** (Read Card) (Old PIN) # (New PIN) # (Repeat New PIN) #**

Delete Users

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

2. Delete User - By Card/PIN **OR** 2. Delete User - By ID Number **OR** 2. Delete User - By Card Number **OR** 2. Delete ALL Users	**2 (Read Card) / (Input PIN) #** Users can be deleted continuously. **2 (User ID) #** **2 (Input 8/10/17 Digits Card Number) #** **2 (Master Code) #**
3. Exit	*

Set Relay Configuration

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

Programming Step	Keystroke Combination
1. Enter Program Mode	*** (Master Code) #**
2. Pulse Mode **OR** 2. Toggle Mode	**3 (1~99) #** (Factory default: The relay time is 1–99 seconds. Default is 5 seconds.) **3 0 #** (Sets the relay to ON/OFF Toggle mode)
3. Exit	*

Set Access Mode

For multi-user access mode, the interval time for reading must not exceed 5 seconds; otherwise, the device will exit to standby mode automatically.

Programming Step	Keystroke Combination
1. Enter Program Mode	*** (Master Code) #**
2. Card Access **OR** 2. PIN Access **OR** 2. Card + PIN Access **OR** 2. Card or PIN Access	**4 0 #** **4 1 #** **4 2 #** **4 3 #**

OR 2. Multi User Access	**4 3 (2~9) #** (Only after 2~9 valid users, the door can be opened)
3. Exit	*

Set Strike-out Alarm

The strike-out alarm will engage after 10 failed entry attempts (Factory setting: OFF). It can be configured to deny access for 10 minutes after engaging or to disengage only after entering a valid card/PIN or Master code/card.

Programming Step	Keystroke Combination
1. Enter Program Mode	*** (Master Code) #**
2. Strike-Out OFF **OR** 2. Strike-Out ON **OR** 2. Strike-Out ON (Alarm) **Set Alarm Time**	**6 0 #** (Factory default) **6 1 #** (Access will be denied for 10 minutes; Exit button remains functional.) **6 2 #** **5 (0~3) #** (Factory default: 1 minute) Enter Master Code #, Master Card, or valid user card/PIN to silence
3. Exit	*

Set Audible and Visual Response

Programming Step	Keystroke Combination
1. Enter Program Mode	*** (Master Code) #**
2. Disable Sound Enable Sound **OR** 2. LED Always OFF LED Always ON	**7 0 #** **7 1 #** (Factory default) **7 2 #** **7 3 #** (Factory default)
3. Exit	*

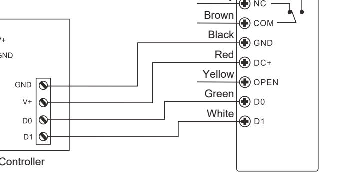
WIEGAND MODE

Pass-through Mode

(The Keypad Operates as a Wiegand Output Reader)

In this mode, the keypad supports a Wiegand 26-bit output, allowing the Wiegand data lines to be connected to any controller that supports a Wiegand 26-bit input. This enables the keypad to function as a slave reader.

Wiring Diagram



Keypad Transmission Format

Virtual Card Number

The reader will transmit the PIN data when it receives the last key (#) after the PIN code.

Example:
PIN code: 999999
Press 999999 #, then the output format will be:
00999999

Controller Mode

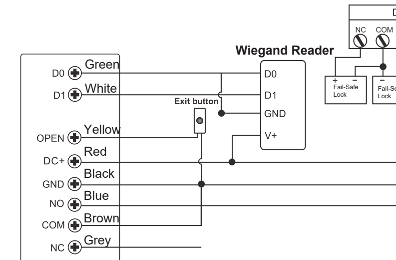
(The keypad Operates as a Controller)

It supports Wiegand 26/34-bit input (Automatic Identification), allowing an external Wiegand device with a 26/34-bit output to be connected to the Wiegand input terminals on the keypad.

EM card reader (125 KHz) can be connected to the keypad.

Cards must be added at the external reader, except when using an external EM card reader—in this case, cards can be added at either the reader or the controller.

Wiring Diagram



OTHERS

Users Operation & Reset to Factory Default

> Open the door:
Read valid user card or input valid user PIN #

> Remove Alarm:
Enter Master Code # or Master Card, or valid user card/PIN #

> To reset to factory default & Add Master Card:
1. Power off the device.
2. Press and hold the Exit Button while powering on.
3. After two beeps, release the Exit Button.
4. The LED will turn yellow.
5. Read any 125KHz EM card.
6. The LED will turn red, indicating that the reset to factory default was successful.
7. The first card read will become the Master Card.

Remarks:
1. If no Master Card is added, you must press and hold the Exit Button for at least 5 seconds before releasing. (This will invalidate any previously registered Master Card.)
2. Resetting to factory default does not erase user information.

Master Card Usage

Users can add a Master Card themselves. (Refer to page 12: "Reset to Factory Default & Add Master Card.")

Using Master Card to add delete users	
Add Card / PIN Users	1. Input **(Master Card)** 2. Input **(Card)** or **(PIN #)** Repeat step 2 for additional users 3. Input **(Master Card)** again
Delete Card / PIN Users	1. Input **(Master Card Twice within 5 seconds)** 2. Input **(Card)** or **(PIN #)** Repeat step 2 for additional users 3. Input **(Master Card)** again