

sygonix®

Wi-Fi RFID Code Lock

Item No.: 3686300

CE

Introduction

The device is a single door multifunction standalone access controller or a Wiegand output reader. It uses Atmel MCU assuring stable performance. The operation is very user-friendly, and low-power circuit makes it long service life.

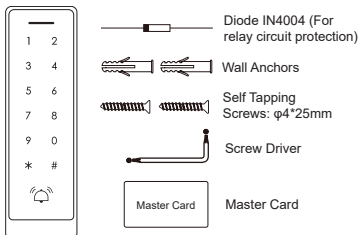
Features

- > Metal case, anti-vandal
- > Waterproof, conforms to IP66
- > PIN length: 4~6 digits
- > EM card
- > EM card: Wiegand 26~44 bits input & output
- > Can be used as Wiegand reader with LED & buzzer output
- > Card block enrollment
- > Tri-color LED status display
- > Integrated alarm & buzzer output
- > Pulse mode, Toggle mode
- > User data can be transferred
- > 2 devices can be interlocked for 2 doors
- > Built-in light dependent resistor (LDR) for anti tamper
- > Backlit keypad, can set automatic OFF after 20 seconds

Technical data

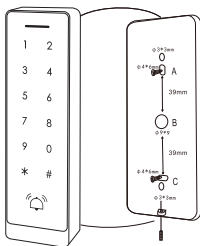
User Capacity	10000
Common User	9988
Panic User	2
Visitor User	10
Operating Voltage	12-18V DC
Working Current	≤150mA
Idle Current	≤60mA
Proximity Card Reader	EM
Radio Technology	125 kHz
Read Range	2~6 cm
PIN Length	4~6 digits
Wiring Connections	Relay Output, Exit Button, Alarm, Door Contact, Wiegand Input, Wiegand Output
Relay	One (NO, NC, Common)
Adjustable Relay Output Time	0~99 Seconds (5 seconds default)
Lock Output Load	2 Amp Maximum
Wiegand Interface	EM card: Wiegand 26~44 bits input & output. (Factory default: Wiegand 26bits for EM card)
PIN Output	4 bits, 8 bits(ASCII), 10 digits Virtual Number (Factory Default: 4 bits)
Ingress protection	IP66
Operating Temperature	-40°C ~ 60°C (-40°F~140°F)
Operating Humidity	0%RH~98%RH
Physical	Zinc-Alloy
Colour	Silver & Black
Dimensions	L148 × W44 × D22 (mm)
Unit Weight	330g
Shipping Weight	405g

Delivery contents



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 4 flat head screws
- > Thread the cable through the cable hole (B)
- > Attach the unit to the back cover



Wiring

Wire Color	Function	Notes
Basic Standalone Wiring		
Red	DC+	12~18V DC Power Input
Black	GND	Negative Pole of DC Power Input
Blue & Black	Relay NO	Normally Open Relay Output (install diode provided)
White & Black	Relay Common	Common Connection for Relay Output
Green & Black	Relay NC	Normally Closed Relay Output (Install diode provided)
Yellow	OPEN	Request to Exit (REX) Input
Pass-Through Wiring (Wiegand Reader or Controller)		
Green	Data 0	Wiegand Output (Pass-through) Data 0
White	Data 1	Wiegand Output (Pass-through) Data 1
Advanced Input and Output Features		
Grey	Alarm Output	Negative contact for Alarm
Brown	Contact Input	Door/Gate Contact Input (Normally Closed)
WIFI		
Brown & Black	Doorbell A	Contact for Doorbell
Yellow & Black	Doorbell B	Contact for Doorbell

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 Configuration

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	*

Set the Working Mode

Notes: The device has 3 working modes: Standalone Mode, Controller Mode, Wiegand Reader Mode, choose the mode you use. (Factory default is Standalone Mode / Controller Mode)

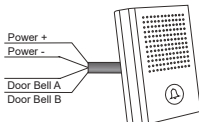
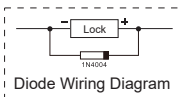
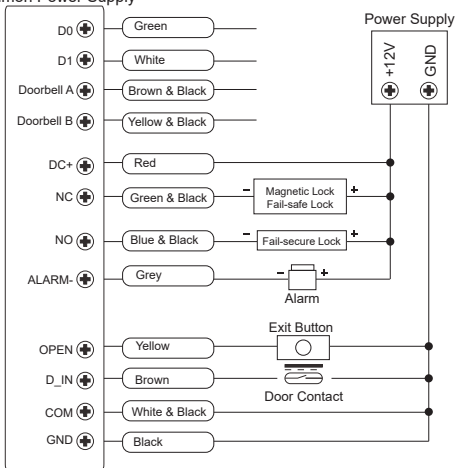
Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Standalone/ControllerMode	7 7 # (Factory default)
OR	
2. Wiegand Reader Mode	7 8 #
3. Exit	*

Standalone mode

The device can work as Standalone Access Control for single door.
(Factory default mode) — 7 7 #

Connection Diagram

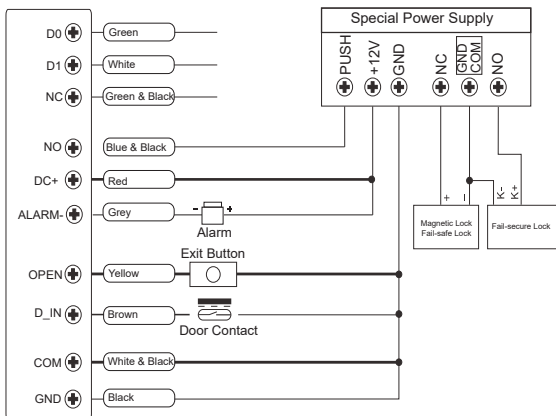
Common Power Supply



Attention:

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

Access Control Power Supply



Programming

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

Notes:

> **User ID number:** Assign a user ID to the access card/ PIN in order to track it.

> User ID number:

The Common Card/PIN User ID: 1~9988

Panic User ID: 9989~9990

Visitor User ID: 9991~10000

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:

Proximity Card: EM card

> **PIN:** Can be any 4~6 digits.

Add Common Users

(PIN/ Card user ID: 1-9988; PIN length: 4~6 digits)

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
Add Card User	
2. Using Auto ID (Allows the device to assign Card to next available User ID number)	1 (Read Card) / (Input 8/10/17 Digits Card Number) # The cards can be added continuously.
OR	
2. Select Specific ID (Allows Master to define a specific User ID to associate the card to)	1 (User ID) # (Read Card) / (Input 8/10/17 Digits Card Number) #
OR	
2. Add Card: Block Enrollment (Allows Master to add up to 200 cards to the Reader in a single step) Takes 2 minutes to program.	1 (User ID) # (Card Quantity) # (The First Card 8/10/17 Digits Number) # Cards' number must be consecutive; Card quantity = number of cards to be enrolled.
Add PIN User	
2. Select Specific ID (Allows manager to define a specific User ID to associate the PIN to)	1 (User ID) # (PIN) #
3. Exit	*

Tips for PIN Security (Only valid for 6 digits PIN):

For higher security we allow you to hide your correct PIN with other numbers up to a max of 10 digits.

Example PIN: 123434

You could use *(123434)* or *(123434)

("*" can be any numbers from 0~9)

Add Panic Users (Valid for Card/ PIN Users)

(User ID number is 9989,9990 PIN length: 4~6 digits)

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add Card	1 (User ID) # (Read Card / Input 8/10/17 Digits Card number) #
OR	
2. Add PIN	1 (User ID) # (PIN) #
3. Exit	*

Add Visitor Users (Valid for Card/ PIN Users)

The device supports up to 10 visitor PINs or cards (User IDs 9991–10000, PIN length: 4–6 digits). Each visitor entry can be limited to a specified number of uses, up to a maximum of 10. Once the set number of uses is reached, the PIN or card is automatically invalidated.

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

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

Programming Step	Keystroke Combination
Note: Below is done outside programming mode, users can undertake this themselves	
Change PIN	* (User ID) # (Old PIN) # (New PIN) # (Repeat New PIN) #

Delete Users

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Delete User- By Card	2 (Read Card) #
OR	The users can be deleted continuously.
2. Delete User - By ID number	2 (User ID) #
OR	
2. Delete User - By Card number	2 (Input 8/10/17 Digits Card Number) #
OR	
2. Delete ALL Users	2 (Master Code) #
3. Exit	*

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) #
2. Pulse Mode	3 (1~99) # (factory default)
OR	The relay time is 1-99 seconds. (Default is 5 seconds)
2. Toggle Mode	3 0 #
	Sets the relay to ON/OFF Toggle mode
3. Exit	*

Set Access Mode

For Multi user access mode, the interval time of reading can not exceed 5 seconds, or else, the device will exit to standby automatically.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Card Access	4 0 #
OR	
2. PIN Access	4 1 #
OR	
2. Card or PIN	4 3 # (factory default)
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 triggers after 10 consecutive failed entry attempts (disabled by factory default). Once triggered, it can be configured to either deny access for 10 minutes or remain active until a valid card, PIN, or Master code/card is presented.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Strike-Out OFF	6 0# (factory default)
OR	

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 the New Code - # (code: 6 digits)
Add Card User	1 - Read Card - # (can add cards continuously)
Add PIN User	1 (User ID)-PIN-# (The PIN is any 4~6 digits)
Delete User	2-Read Card- # 2-User ID-#
Exit from the Programming Mode	*

How to release the door

Card User	Read Card
PIN User	Input PIN #

2. Strike-Out ON	6 1 # Access will be denied for 10 minutes
OR	(Exit button is still workable)
2. Strike-Out ON (Alarm)	6 2 #
Set Alarm Time	5 (0 ~ 3) # (factory default is 1 minute) Enter Master Code # or Master Card or valid user Card / PIN to silence
3. Exit	*

Set Door Open Detection

Door Open Too Long (DOTL) Detection

When used with an optional or built-in magnetic contact, if the door remains open for longer than one minute after a normal entry, the internal buzzer will sound automatically to remind users to close the door. The buzzer can be stopped by closing the door or by a master or valid user. Otherwise, it will continue to sound for the duration set in the alarm timer.

Door Forced Open Detection

When used with an optional or built-in magnetic contact, the device will trigger both the internal buzzer and external alarm (if connected) if the door is forced open. The alarm can be stopped by any master or valid user. Otherwise, it will continue to sound for the duration set in the alarm timer.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Disable Door Open Detection	6 3 # (factory default)
OR	
2. Enable Door Open Detection	6 4 #
Set Alarm Time	5 (0 ~ 3) # (factory default is 1 minute)
3. Exit	*

The function of **Set Alarm Time** also apply for anti-tamper alarm

Set Audible and Visual Response

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Disable Sound	7 0 #
Enable Sound	7 1 # (factory default)
OR	
2. LED Always OFF	7 2 #
LED Always ON	7 3 # (factory default)
OR	
2. Keypad Backlit Always OFF	7 4 #
Keypad Backlit Always ON	7 5 #
Keypad Backlit Automatic OFF	7 6 # (factory default) Automatic OFF after 20 seconds, it will go ON by pressing any key (this key isn't taken into consideration)
3. Exit	*

Master Card Usage

Using Master Card to add and delete users

Add Card/ PIN Users	1. Read Master Card
	2. Read Card or Input User ID-PIN # Repeat step 2 for additional users
	3. Read Master Card again
Delete Card/ PIN Users	1. Read Master Card Twice within 5s
	2. Read Card or Input User ID-PIN # Repeat step 2 for additional users
	3. Read Master Card again

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:

Power off the device, then press and hold the Exit Button while powering it back on. After two beeps, release the Exit Button — the LED will turn yellow. Present any 125 KHz EM card. When the LED turns red, the factory reset is complete. The card used during this process will be registered as the Master Card

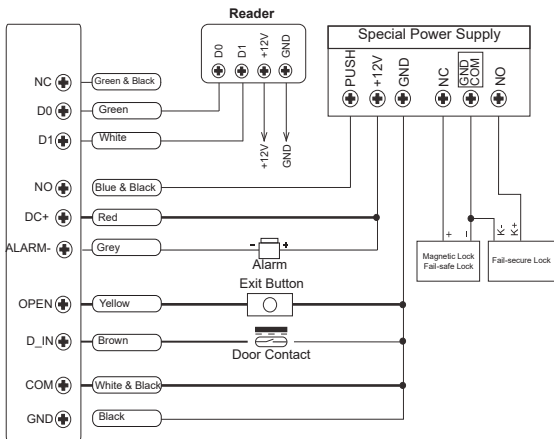
Remarks:

- 1** If no Master Card added, must press the Exit Button for at least 5 seconds before release. (this will make the previous registered Master Card invalid)
- 2** Reset to factory default, the user's information is still retained.

Controller mode

The device can work as Controller, connected with the external Wiegand reader. (Factory default mode)--- 7 7 #

Connection Diagram



The Device

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)

Set Wiegand Input Formats

Please set the Wiegand input formats according to the Wiegand output format of the external Reader.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Wiegand Input Bit	For EM Card: 8 (26~44) # (factory default is 26bits)
3. Disable Parity Bit	8 0 #
Enable Parity Bit	8 1 # (factory default)
4. Exit	*

Note: For connecting Wiegand readers with 32, 40, 56 bits output, need disable parity bits.

Programming

> **Basic Programming is the same as Standalone Mode**

> **There are some exceptions for your attention:**

The device Connected with External Card Reader

-If EM/Mifare card reader: users can be added/deleted on either the device or external reader.

-If HID card reader: users can only be added/deleted on external reader.

The device Connected with Fingerprint Reader

For example:

Connect SF1 as the fingerprint reader to the device.

Step 1: Add the Fingerprint (A)

Step 2: Add the same Fingerprint(A) on the device:

1	Enter Program Mode: * (Master Code) #
2	1 (Press Fingerprint A once on SF1) # (ID auto allocated)
OR	
2	1 (User ID) # (Press Fingerprint A on SF1) # (Select specific ID)
3	Exit: *

The device Connected with Keypad Reader

The keypad reader can be 4 Bits, 8 Bits (ASCII), or 10 Bits output format. Choose the below operation according to the PIN output format of your reader.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. PIN input bits	8 (4 or 8 or 10) # (factory default is 4 bits)
3. Exit	*

Remarks: 4 means 4 bits, 8 means 8 bits, 10 means 10 digits virtual number.

> Add PIN Users:

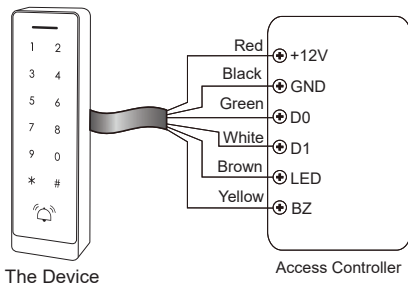
To add PIN users, after enter into programming mode on the device, PIN(s) can be input/added on either the device or the external Keypad Reader.

> **Delete PIN Users:** the same way as add users.

Weigand reader mode

The device can work as Standard Wiegand Reader, connected to the third party Controller --- 7 8 #

Connection Diagram



Notes:

- > When set into Wiegand Reader mode, nearly all settings in Controller Mode will become invalid, and Brown & Yellow wires will be redefined as below:
 - Brown wire: Green LED light control
 - Yellow wire: Buzzer control
- > If you need to connect Brown/Yellow wires:
When the input voltage for LED is low, the LED will turn into Green; and when the input voltage for Buzzer is low, it will sound.

Set Wiegand Output Formats

Please set the Wiegand output formats of Reader according to the Wiegand input formats of the Controller.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Wiegand output bits	For EM Card: 8 (26~44) # (factory default is 26bits)
PIN output bits	8 (4 or 8 or 10) # (factory default is 4 bits)
3. Disable Parity Bit	8 0 #
Enable Parity Bit	8 1 # (factory default)
4. Exit	

Note: For connecting Wiegand controller with 32, 40, 56 bits input, need disable parity bits.

Advanced application

Collection Card Mode

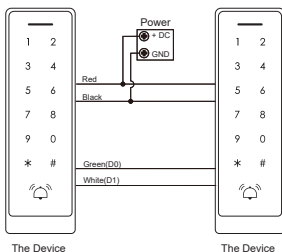
After this mode is turned on, all cards can open the lock. At the same time, the card is added to the device.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Collection Card Mode OFF	9 2 # (factory default)
OR	
2. Collection Card Mode ON	9 3 #
3. Exit	*

User Information Transfer (Valid for Card / PIN Users)

The device supports User Information Transfer, allowing enrolled user data (cards and PINs) to be transferred from one device (the Master Unit) to another (the Accept Unit).

Connection Diagram:



Remarks:

- > The Master units and Accept units must be same series devices.
- > The Master Code of the Master Unit and the Accept Unit must be set to the same.
- > Program the transfer operation on Master Unit only.
- > If the Accept Unit is already with the users enrolled, it will be covered after transferring.
- > For full users enrolled, the transfer takes about 30 seconds.

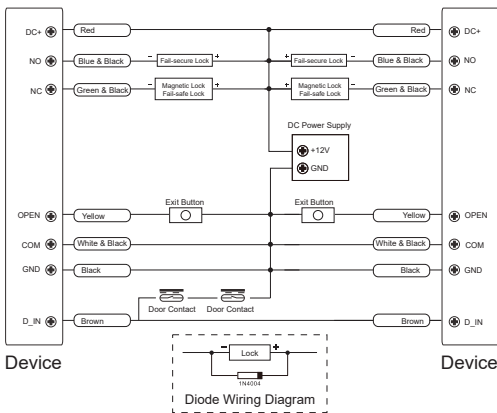
Set Transferring on Master Unit:

Programming Step	Keystroke Combination
1. Enter the programming mode	* (Master Code) #
2. Set transferring	9 8 #
Within 30 seconds, Green LED shines, after one beep, the LED will turn into Red, which means the users' information has been transferred successfully.	
3. Exit	*

Interlock

The device supports the Interlock function, requiring two devices to control two doors. This feature is designed for high-security environments.

Connection Diagram:



Remarks: The Door Contact must be installed and connected as the diagram.

Example:

Name the two Devices as “A” and “B” for two doors “1” and “2”

Step 1:

Enroll the users on Device A, then transfer the users' information to Device B by “User Information Transfer” function.

Step 2:

Set both of the two Devices (A and B) to Interlock function

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Disable Interlock	9 0 # (factory default)
OR	
2. Enable Interlock	9 1 #
3. Exit	*

When interlock is enabled, Reader A will unlock Door 1 only while Door 2 is closed. Reader B will unlock Door 2 only while Door 1 is closed. Both readers accept fingerprint, card, or PIN authentication.

GB This is a publication by Conrad Electronic SE, Klaus-Conrad-Str. 1, D-92242 Hirschau (www.conrad.com).

All rights including translation reserved. Reproduction by any method, e.g. photocopy, microfilming, or the capture in electronic data processing systems require the prior written approval by the editor. Reprinting, also in part, is prohibited. This publication represent the technical status at the time of printing.

Copyright 2026 by Conrad Electronic SE.
