

# sygonix<sup>®</sup>

MIFARE Keypad, 13.56 MHz IP66

Item No.: 3439970

CE

## Features

- > The built in card reader supports 13.56Mhz Mifare Card
- > Vandal resistant enclosure
- > Backlit keypad
- > Multi-color LED status display
- > One programmable relay output
- > 1000 Users (990 normal users+10 visitor users)
- > Access mode: card, PIN, card+PIN
- > Low power consumption (50mA)
- > Anti-tamper alarm
- > Latch mode to hold door or gate open
- > 12~18V DC power input

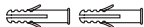
## Carton Inventory



Access Controller



Diode 1N4004 (For relay circuit protection)



Wall Anchors



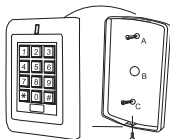
Self Tapping Screws



Screw Driver

## 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.

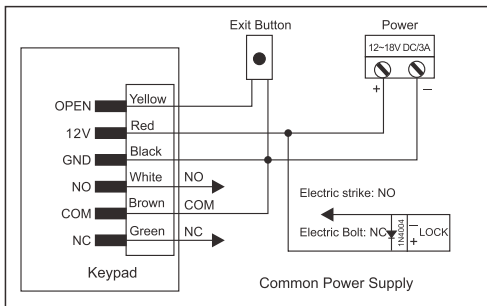


## Wiring

| Wire Insulation Colour | Function | Notes                              |
|------------------------|----------|------------------------------------|
| Red                    | Power +  | 12~18 Vdc DC 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)         |

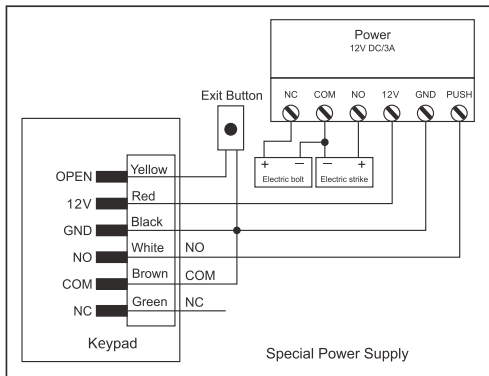
## Connection Diagram

Common power supply:



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

### Programming 1 -----Configure the device

Change the configure settings according to your application (optional). Multiple configuration settings can be changed at one time: enter program mode, change desired settings, then exit program mode.

#### Set Master Code

The 4-6 digit Master Code is used to prevent unauthorized access to the system. To interface with the device the manager will need a Master Code (factory default code: 123456). We highly recommend immediate update and record of your Master Code.

## Simplified Instruction

| Function Description           | Operation                                                                                                                                        |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Enter the Programming Mode     | <b>* (Master Code) #</b><br>(123456 is the default factory master code)                                                                          |
| Change the Master Code         | <b>0 (New Master Code) # (Repeat New Master Code) #</b><br>(code: 4-6 digits)                                                                    |
| Add Card User                  | <b>1 (Read Card) #</b>                                                                                                                           |
| Add PIN User                   | <b>1 (User ID) # (PIN) #</b><br><b>1 (PIN) #</b><br>The ID number is any number between 0 ~ 989. The PIN is any 4-6 digits between 0000 ~ 999999 |
| Delete User                    | <b>2 (Read Card) #</b><br><b>2 (PIN) #</b><br><b>2 (User ID) #</b>                                                                               |
| Exit from the programming mode | <b>*</b>                                                                                                                                         |
| How to be granted access.      |                                                                                                                                                  |
| Card User                      | <b>Read Card</b>                                                                                                                                 |
| PIN User                       | <b>Enter (PIN) #</b>                                                                                                                             |

| Programming Step      | Keystroke Combination                                         |
|-----------------------|---------------------------------------------------------------|
| 1. Enter Program Mode | <b>* (Master Code) #</b>                                      |
| 2. Update Master Code | <b>0 ( New Master Code) #<br/>( Repeat New Master Code) #</b> |
| 3. Exit               | <b>*</b>                                                      |

## Set Access Configuration

There are 3 types of access configurations for the device

- > **Card or PIN (Default):** The User must present a valid Card to the device or enter their PIN code followed by the # key, in order to be granted access.
- > **Card Only:** The User must present a valid Card to the device in order to be granted access.
- > **Card + PIN:** The User must first present a valid Card to the device and then enter their PIN code followed by the # key, in order to be granted access.

| Programming Step                                            | Keystroke Combination                                                  |
|-------------------------------------------------------------|------------------------------------------------------------------------|
| 1. Enter Program Mode                                       | <b>* (Master Code) #</b>                                               |
| 2. Card or PIN<br>OR<br>2. Card + PIN<br>OR<br>2. Card only | <b>3 0 #</b> (factory default)<br><br><b>3 1 #</b><br><br><b>3 2 #</b> |
| 3. Exit                                                     | <b>*</b>                                                               |

## Set Relay Configuration

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

| Programming Step                             | Keystroke Combination                                                                                                                    |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Enter Program Mode                        | <b>* (Master Code) #</b>                                                                                                                 |
| 2. Pulse Mode<br><br>OR<br><br>2. Latch Mode | <b>4 (1-99) #</b><br>The relay time is 1-99 seconds.<br>Default is 5 seconds.<br><br><b>4 0 #</b><br>Sets the relay to ON/OFF Latch mode |
| 3. Exit                                      | <b>*</b>                                                                                                                                 |

## Set Strike-out Alarm

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

| Programming Step                                                                        | Keystroke Combination                                                                                                                                                            |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Enter Program Mode                                                                   | <b>* (Master Code) #</b>                                                                                                                                                         |
| 2. Strike-Out OFF<br>OR<br>2. Strike-Out ON<br>OR<br>2. Strike-Out ON<br>Set alarm time | <b>6 0 #</b> (factory default)<br><br><b>6 1 #</b> Access will be denied for 10 minutes<br><b>6 2 #</b> The buzzer alarms.<br><b>5 (0 ~ 3) #</b><br>Factory default is 1 minute. |
| 3. Exit                                                                                 | <b>*</b>                                                                                                                                                                         |

## Set Visual Response

| Programming Step                                                                         | Keystroke Combination                                                                                                                                                         |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Enter Program Mode                                                                    | <b>* (Master Code) #</b>                                                                                                                                                      |
| 2. Keypad Backlit Always OFF<br>Keypad Backlit Always ON<br>Keypad Backlit Automatic OFF | <b>7 0 #</b><br><b>7 1 #</b><br><b>7 2 # (factory default)</b><br>Automatic OFF after 20 seconds, it will go ON by pressing and key (this key isn't taken into consideration) |
| 3. Exit                                                                                  | <b>*</b>                                                                                                                                                                      |

## Programming 2 ----- Program Cards and PINS

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

### GENERAL PROGRAMMING INFORMATION

> **User ID Number:** Assign a user ID number to the access code in order to keep track of the users of access cards or PINS. The normal user ID can be any number from 0~989, and the 10 groups of visitor is from 990~999. **IMPORTANT:** User IDs do not have to be proceeded with any leading zeros. Recording of User ID is critical. Modifications to user data require either the card or the User ID be available.

> **Proximity Card:** 13.56MHz Mifare Card (ISO1443 Type A)

> **Keypad PIN:** The PIN can be any 4~6 digits between 0000~999999 (except 1234 which is reserved for factory testing).

## ACCESS CONFIGURATION: CARD OR PIN & CARD ONLY -----

### Add User Cards

| Programming Step                                                                                                                                                                                                 | Keystroke Combination                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Enter Program Mode                                                                                                                                                                                            | <b>* (Master Code) #</b>                                                                                                                      |
| 2. Add Card: Using Auto ID<br>(Allows device to assign Card to next available User ID number)<br>OR<br>2. Add Card: Select Specific ID<br>(Allows manager to define a specific User ID to associate the card to) | <b>1 (Read Card) #</b><br>Cards can be added continuously.<br><br><b>1 (User ID) # (Read Card) #</b><br>The user ID is any number from 0~989. |
| 3. Exit                                                                                                                                                                                                          | <b>*</b>                                                                                                                                      |

### Delete User Cards

| Programming Step                                                    | Keystroke Combination                                                                                                            |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 1. Enter Program Mode                                               | <b>* (Master Code) #</b>                                                                                                         |
| 2. Delete Card: By card<br>OR<br>2. Delete Card: Select Specific ID | <b>2 (Read Card) #</b><br>Cards can be deleted continuously<br><br><b>2 (User ID) #</b><br>The user ID is any number from 0~989. |
| 3. Exit                                                             | <b>*</b>                                                                                                                         |

### Add or Delete a PIN

| Programming Step                                                                       | Keystroke Combination                                  |
|----------------------------------------------------------------------------------------|--------------------------------------------------------|
| 1. Enter Program Mode                                                                  | <b>* (Master Code) #</b>                               |
| <b>Add PIN User</b>                                                                    |                                                        |
| 2. Using Auto ID<br>(Allows the device to assign PIN to next available User ID number) | <b>1 (PIN) #</b><br>The PINs can be added continuously |

|                                                                                                |                                                                                   |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 2. Select Specific ID<br>(Allows manager to define a specific User ID to associate the PIN to) | <b>1 (User ID) # (PIN) #</b>                                                      |
| <b>Delete PIN User</b>                                                                         |                                                                                   |
| 2. By PIN<br>OR<br>2. By User ID                                                               | <b>2 (PIN) #</b><br>The users can be deleted continuously<br><b>2 (User ID) #</b> |
| 3. Exit                                                                                        | <b>*</b>                                                                          |

## Change a PIN

This operation is executed from outside of Program Mode.

| Programming Step | Keystroke Combination                                        |
|------------------|--------------------------------------------------------------|
| 1. Change a PIN  | <b>* (User ID #) (Old PIN #)<br/>(New PIN #) (New PIN #)</b> |

## ACCESS CONFIGURATION: CARD+PIN-----

### Add a Card+ PIN User

| Programming Step                | Keystroke Combination                                                                                               |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------|
| 1. Enter Program Mode           | <b>* (Master Code) #</b>                                                                                            |
| 2. Add a User Card by ID number | <b>1 (User ID) # (Read Card) #</b>                                                                                  |
| 3. Exit Program Mode            | <b>*</b>                                                                                                            |
| 4. Add PIN                      | <b>* (Read Card) (1234#)<br/>(New PIN #) (New PIN #)</b><br>This operation is executed from outside of Program Mode |

## Change PIN

Allows card user to update the PIN for their card + PIN User ID. This operation is executed from outside of Program Mode.

| Programming Step                                           | Keystroke Combination                                                                                                            |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 1. Change PIN using a Card<br>OR<br>1. Change PIN using ID | <b>* (Read Card) (Old PIN #)<br/>(New PIN #) (New PIN #)</b><br><br><b>* (User ID #) (Old PIN #)<br/>(New PIN #) (New PIN #)</b> |

## Delete Card by User ID

Deleting by ID number will clear cards and PINS

| Programming Step               | Keystroke Combination    |
|--------------------------------|--------------------------|
| 1. Enter Program Mode          | <b>* (Master Code) #</b> |
| 2. Delete User Card by User ID | <b>2 (User ID) #</b>     |
| 3. Exit                        | <b>*</b>                 |

## Visitor User Setting

There are 10 groups Visitor PIN available, the users can be specified up to 10 times of usage, after a certain number of times, i.e. 5 times, the PIN become invalid automatically.

| Programming Step                                                | Keystroke Combination                                                                                          |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 1. Enter Program Mode                                           | <b>* (Master Code) #</b>                                                                                       |
| 2. Add Visitor PIN User<br><br>OR<br><br>2.Delete Visitor Users | <b>8 (0~9 #) (User ID #) (PIN #) #</b><br>PIN is any 4~6 digits number except 1234<br><br><b>2 (User ID #)</b> |
| 3. Exit                                                         | <b>*</b>                                                                                                       |

Note:

Number of time is 0~9, 0=10 times

User ID number must be any number between 990~999

Visitor PIN must be unique, should be distinguished from common PIN

## OTHERS

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### Reset to Factory Default:

1. Power off
2. Press the \* Button, hold it and power on
3. There will be two beeps, release the button, then will have one beep  
The device reset to factory default successfully.

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

### Erase all Users

This will delete ALL User data.

1. Enter Program Mode by press: \*(Master Code) #.
2. Press 2 (Master Code) #
3. Exit: \*

All configuration data is retained.

### Reset Strike-Out Alarm and Anti-tamper Alarm.

Enter Master Code or Valid Card/PIN to silence

### Sound and Light Indication

| Operation Status                               | Red LED                  | Green LED | Sounds            |
|------------------------------------------------|--------------------------|-----------|-------------------|
| Power on                                       | ON                       | Flashing  | Short Single Beep |
| Stand by                                       | ON                       |           |                   |
| Press Keypad                                   | ON                       |           | Short Single Beep |
| Enter Master Code Entry Mode                   | ON                       |           | Short Single Beep |
| In program mode                                | ON                       | ON        | Short Single Beep |
| Entered Program Step Successfully              | Single Flash             | Flashing  | Short Single Beep |
| Entered Program Step Incorrectly               | Flashing                 |           | 3 Short Beeps     |
| Exit from the programming mode                 | ON                       |           | Short Single Beep |
| Entry Granted                                  |                          | ON        | Short Single Beep |
| Open lock                                      |                          | ON        | Short Single Beep |
| Alarm Mode Engaged                             | Flashing                 |           | Alarm             |
| Alarm                                          | Red light Shines quickly |           | Beeps             |
| Pressing * Toggles Standby / Master Code Entry | ON/Flashing              |           | Short Single Beep |

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