

## KP-900 Touch Embedded Access Control Keypad with RFID Card Reader

### Quick Programming Guide

- Enter Program Mode (Factory Default is 123456)

\* 1 2 3 4 5 6 #

- To Exit Program Mode

\*

- Change Master Code

New 6 Digit Master Code

New 6 Digit Code Again

\* 1 2 3 4 5 6 # 0             #           #

- Add a Entry Code

New 4-6 Entry Code

\* 1 2 3 4 5 6 # 1           # The Entry Code can be any 4 to 6 digits except 8888 which is reserved

This device supports 990 common users and 10 visitor users. It supports a combination of users modes to access entry, Entry Code, Card Access, or Card and Entry Code access together.

- Add a Entry Card

\* 1 2 3 4 5 6 # 1 CARD READ # You can add cards continuously

- Delete a Entry Code or Card

\* 1 2 3 4 5 6 # 2 CARD READ or Entry Code #

- Delete All User Codes and Cards

\* 1 2 3 4 5 6 # 2 MASTER CODE # To Exit \*

- Add a Visitor Code

There are 10 available Visitor Entry Codes. You can set up these with a specific number of times to allow entry up to 10 times of usage, after which the code or card will become invalid automatically. User codes IDs 990-999

\* 1 2 3 4 5 6 # 1 User ID # (0-9) times of usage # Entry Code # To Exit \*

- Set Relay Strike Time

\* 1 2 3 4 5 6 # 3 (1-99 seconds) # Or Toggle Mode 3 0 # Factory Relay Time 5 seconds

#### Introduction & Features

This device is a single gate/door standalone access controller with Weigand input & output. It supports 1,000 users (990 common users and 10 visitor user codes) It supports multi access modes in Card Access, Entry Code Access and Card & Entry Code Access.

#### Features

- Waterproof, conform to IP66
- Vandal resistant metal enclosure
- One relay holding a 100 user codes
- Entry Code length 4-6 digits
- Card Access
- Pulse mode or Toggle mode
- Weigand 26 bits output, Wiegand 26/34 bits input automatic identification.

#### Specifications

- Operating Voltage 12 - 18V DC Working Current <120mA
- Idle Current <50mA
- Wiring Connections Relay Output, Exit Button, Weigand input & output
- EM Proximity Card Reader Radio Technology 125KHz

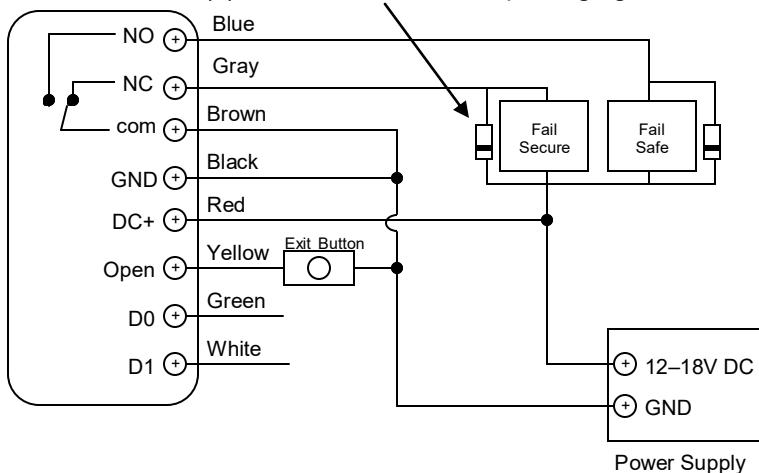
## Connection Wiring & Diagram

### WIRING

Color	Function	Note
Red	POWER	12 - 18V DC
Black	GND	Ground
Blue	NO	Relay Normally Open
Brown	COM	Common for Relay
Gray	NC	Relay Normally Closed
Yellow	Open	Exit input
Green	D0	Wiegand Data 0
White	D1	Wiegand Data 1

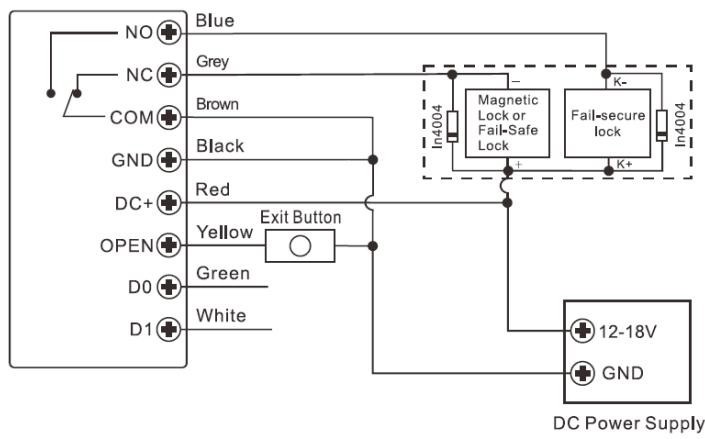
Install a 1N4004 or equivalent diode is needed

(1) 1N4004 is included in packaging



**Attention:** Install the included 1N4004 Diode when using common power supply, the keypad might be damaged.

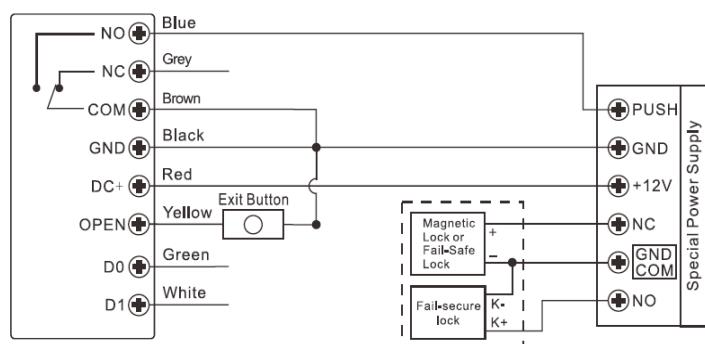
## WIEGAND Wiring & Diagram



### Controller Mode

The Keypad Operates as a Controller

It supports Wiegand 26/34 bit input, so an external Wiegand device with 26/34 bit output can be connected to the Wiegand input terminals on the keypad. Either an EM card reader (125KHz) or an Mi-fare card reader (13.56MHz) can be connected to the keypad. Cards must be added at the external reader, except EM card reader is used, in this case cards can be added at either reader.



### Wiegand Mode

In this mode the keypad supports a Wiegand 26 bit output so the Wiegand data lines can be connected to any controller which supports a Wiegand 26 bit input, and then the keypad will operate as a slave reader.

#### Keypad Transmission Format

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

Example: code 999999

Press 999999# then the output will be: 00999999

**Attention:** Install the included 1N4004 Diode when using common power supply, the keypad might be damaged.

## Set Relay Configuration

Pulse Mode	Enter * (Master Code) # 3 and (1-99) # Example 38# Relay time would be 8 seconds * to Exit
Toggle Mode	Enter * (Master Code) # 30# Sets the Relay to an On/Off or Toggle Mode * to Exit

## Simple Programming

Enter Programming	Enter * (Master Code) # (Factory Default 123456)
Change Master Code	Enter * (Master Code) # - 0 - New Code - # - Repeat New Code - #
The following are all after Entering Programming mode *(Master Code) #	

Add a Card	1 - Read Card - #	Add a Code	1 - Code - #
Delete a Card	2 - Read Card - #	Delete a Code	2 - Code - #

## Adding Visitor Codes

Visitor cards/codes are only good for a set number of usage up to 10 times, after the set number of times the card/code will become invalid automatically. Visitor ID numbers are 990-999 only with a 4-6 digit except 8888.

Add a Card	1 - ID - # (1-9) - # - Read Card - # or Input Card Number to track usage
Add a Code	1 - ID - # (1-9) - # - Code - #
Example: adding a card 1 - 990 - # (5) - # - Read Card - # ID 990 User card usage set to 5 times	
Exit Programming	*

## Add Users

Code/Card User ID are 0-989 with code length of 4-6 digits except 8888.

The following are all after Entering Programming mode *(Master Code) #	
Using Auto ID Card	1 - Read Card or Input Card Number #
Using Auto ID Code	1 - Code - #
Auto ID allows the device to assign card/code to next available ID number	
Choose ID Card	1 - ID - # - Read Card or Add card number - #
Choose ID Code	1 - ID - # - Code - #

## Block Card Adding

Allows you to add up to 988 cards in a single step. Cards numbers must be consecutive. Card Quantity is the number of cards to be entered. Takes 2 minutes to program.

Add Block Cards	1 - ID - # - Card Quantity - # - The First Card Number - #
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## Delete Users

Delete all Codes/Cards	2- Master Code - #
Delete Card by Number	2- Card Number - #
Delete Code	2- Code - #
Exit Programming	* Always use to exit any programming mode

Notes

## Set Access Mode

Dual-Factor Authentication or simply using Access Credentials (which combine the card/fob with a PIN/ code), verifying you have the card *and* know the secret code for secure entry Program Step 2

Card Access	40 - #	Card + Code Access	42 - #	Multi User Access	43 - (2-9) #
Code Access	41 - #	Card or Code Access	43 - #	43 # Factory default	

Reading interval must not exceed 5 seconds; otherwise, the device will automatically enter standby mode. 40# Unit: Access is permitted only via card. 41# Unit: Access is permitted only via code. 42# Unit: Access requires both code and card. 43# Unit: Access is permitted via either code or card. 43(2-9)# Only after 2-9 valid users, can the gate/door be opened.

## Set Strike-out Mode

The strike-out alarm will engage after 10 failed entry attempts. It can be set to deny access for 10 minutes after engaging or disengaging only after entering a valid card/code or Master code/card.

Enter Program mode	* Master Code #
Strike-Out Off	60 - # Factory default
Strike-Out On	61 - # Will deny access for 10 minutes
Strike-Out On with Alarm	62 - # Factory default is 1 minute

## Set Audible and Visual Response

Disable Sound	70 - #	Keypad Backlit OFF	74- #
Enable Sound Factory default	71 - #	Keypad Backlit On	75- #
LED Off	72 - #	Keypad Backlit Auto	76- #
LED On Factory default	73- #	Auto Off after 20 seconds	

## Reset to factory default

Power off, press the exit button, hold it and power up the unit, there will be two beeps, then release the exit button, the LED light turns into yellow, then read any EM 125KHz card, then the LED will turn red, which means its been set back to factory defaults successfully.

## Using Master Card to Add & Delete

Add Card /Code	1.Input Master Card 2.Input Card /Code # Repeat step 2 for additional cards or codes. 3.Input Master Card again
Delete Card /Code	1.Input Master Card twice within 5s 2.Input Card /Code # Repeat step 2 for additional cards or codes. 3.Input Master Card again



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