safire



STAND ALONE ACCESS CONTROL

EN User's manual

INTRODUCTION

This device is an access control/card reader which supports 3000 user cards and guest user settings. Supports wiegand input and output, multi-user card authentication, can be set to card reader mode.

Advantages and Features

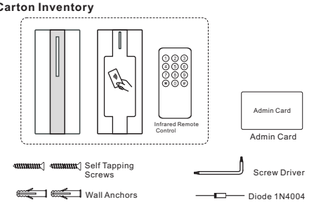
> Support EM card
> Large User Capacity: 3000 Users
> 10 Visitor users
> EM Wiegand 26 bit.
> Pulse Mode and Toggle Mode

Specifications

Operating Voltage	DC12V
Idle Current	≤45mA
Active Current	≤150mA
Card Type	EM card
Card Frequency	125 kHz
Card User	3000
Read Range	30～80mm
Operating Temperature	-40℃～+60℃

Operating Humidity	10%～99%
Dimensions	L84xW36xH8mm
Unit Weight	28g
Shipping Weight	100g

Carton Inventory



INSTALLATION

Wires Definition

Function	Colour	Notes
NC	Grey	Relay NC
COM	Brown	Relay COM
NO	Blue	Relay NO
GND	Black	Negative Pole
DC+	Red	12V DC Power Input
OPEN	Yellow	Exit Button
D0	Green	Wiegand Output/Input Data 0
D1	White	Wiegand Output/ input Data 1

Sound and Light Indication

Operation Status	LED	Buzzer
Standby Mode	Red light bright	— —
Enter program Mode	Red light shines	— —
In the Program Mode	Orange light bright	— —
Open lock	Green light bright	One beep
Operation failed	— —	Three beeps

Modify Admin Code

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Modify Admin Code	0# (New Admin Code) # (Repeat New Admin Code) # (Factory Default is 123456)	Orange bright
Exit Program Mode	*	Red bright

Note: The Admin Code can be any 6 digits and the admin must keep it in mind.

Set Factory Default and Set Admin Card

Press and hold the exit button, power on,release it after two beeps. Swipe the admin card, the red led on with one beep, the factory default setting done. And the admin card added successfully.

The admin card has the function of adding/deleting users.

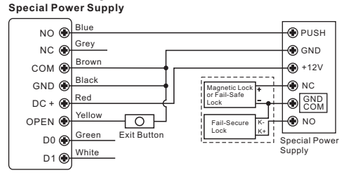
Note:

1. Reset to factory default, the users' information won't be deleted.
2. If you don't want to add admin card: press and hold the Exit Button for 10 seconds, release it until hear one long beep and the red light bright.

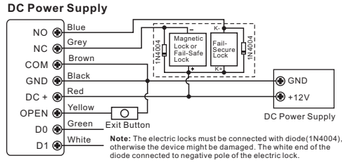
STANDALONE MODE

Connection Diagram

Special Power Supply



DC Power Supply



Note: The electric locks must be connected with diode(1N4004), otherwise the device might be damaged. The white end of the diode connected to negative pole of the electric lock.

Usage of Admin Add/Delete Card users

Using Admin cards to add and delete users	
Add users	Step 1: Read Admin card Step 2: Read user card (Repeat step 2 for additional user cards) Step 3: Read Admin card again to end
Delete users	Step 1: Read Admin card twice at the standby mode Step 2: Read user cards (Repeat step 2 for additional user cards) Step 3: Read Admin card again to end

Add Users

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Add Card User		
Add Card User: By Card	1# (Read Card)…	Orange bright
Add Card User: By Card Number	1# (Input 8/10 digits card number) #…	

ID Number Add Users

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Add Card/ PIN Users		
Add Card User	2# ID# (Read Card)…	Orange bright
Add Card User: By Card Number	2# ID# (Input 8/10 digits card number) #…	

Note: 1. The ID number is a number assigned to each user and it is usually useless. But when you want to delete specific user, you should input the ID number or card number.

2. When adding users, the ID number will be assigned automatically from small to big.

3. User Fingerprint ID range: 0-2999. Anti-duress users ID range: 2988, 2989. Visitor users ID range: 2990~2999.

Add proximity cards sequentially numbered

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Add proximity cards sequentially numbered	2# (Input the first ID number) # (Input the number of card) # (Input 8/10 digits card number) #	Orange bright
Exit Program Mode	*	Red bright

Note: The ID number must be empty and successive.

Add Visitor Users

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Add Visitor Card	2# ID# (1~9)# Read Card	Orange bright
Exit Program Mode	*	Red bright

Note:Visitor users ID range: 2990~2999, Number of time is 1~9.

Delete User

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Delete Card User: By Card	3# (Read Card) …	Orange bright
Delete Card User: By Card number	3# (Input 8/10 digits card number) # …	
Delete User: By ID number	4# (Input ID number) # …	
Delete All User	3# (Admin Code) #	
Exit Program Mode	*	Red bright

Note: Card ID or code ID range: 0~2999.

Pulse Mode and Toggle Mode Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Access Time Setting	5# (1~99) # (**Factory default is Pulse Mode**)	Orange bright
Set Toggle Mode	5# 0#	
Exit Program Mode	*	Red bright

Note: 1. Pulse Mode and Toggle Mode, you only can choose one.

2. Factory default is Pulse Mode, and access time is 5 seconds.
3. **Pulse Mode**: The door will be closed automatically after opening the door for a while.

   Toggle Mode: Under this mode, after opening the door, the door won't be closed automatically until next valid user input. That's means whether open or close the door, you must swipe valid card or input valid fingerprint.

Access Mode Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Open door by card	6# 1#	Orange bright
Open door by multi-user	6# 3 (2~9) #	
Open door by card	6# 4# (Factory Default)	
Exit Program Mode	*	Red bright

Note: The number of Multi-User access can be set to 2~9. If the user number is set to 9, it should input 9 different valid users continuously to access, and the time interval of inputting two valid user should be less than or equal 10s. If timeout, the device will exit to standby mode automatically. During the operation, the led shines.

Safe Mode Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Close safe Mode	8# 0# (Factory default)	Orange bright
Lockout Mode	8# 1#	
Alarm output Mode	8# 2#	
Exit Program Mode	*	Red bright

Note: **Lockout Mode**: If swipe card/input fingerprint with invalid users for 6 times in 1 minute, the device will be lockout for 10 minutes. When in Lockout Mode, press the Exit Button can open the door.

Alarm Output: If swipe card/input fingerprint with invalid users for 6 times in 1 minute, the device will beep. The valid user can remove the alarm.

Sound and Light mode Setting

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Control Sounds: OFF	9# 0#	Orange bright
ON	9# 1#(Factory Default)	
Control Red LED: OFF	9# 2#	
ON	9# 3#(Factory Default)	
Exit Program Mode	*	Red bright

Data transmission of user card

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Enter the menu	11# 8#	Orange bright
Exit Program Mode	*	Red bright

Note: (Only support copy user of card)

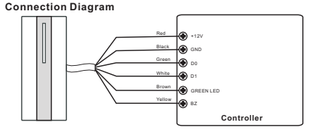
1. The two devices must be the device produced by us and support this function.
2. The two devices have the same admin code
3. Connect the Wiegand cable of the two devices and power on

For example:

For device A and B, they have the same admin code. Add a new card user to the device A. Device B has no user. Connect the Wiegand cable of device A and B, then power on. Do the operation of * admin code # 11 # 8 # on device A. The green led of the two devices flash. The device A is sending the user data to device B.

WIEGAND READER MODE

Connection Diagram



Set stand-alone control / Wiegand reader mode

Programming Step	Keystroke Combination	LED
Enter Program Mode	* Admin Code #	Red shines
Stand-alone contol Mode	9# 7# (Factory Default)	Orange bright
Wiegand reader Mode	9# 8#	
Exit Program Mode	*	Red bright

Note: In wiegand reader mode, brown wire control the Green LED, Yellow wire control the buzzer, only active with low voltage.

Simplified Instruction

Enter the Programming Mode	* - Admin Code-# Then you can do the programming (Factory default is 123456)
Modify Admin Code	**0# (New Admin Code) # (Repeat New Admin Code)#** (The Admin Code can be any 6 digits)
Add Users	**1# - Read Card**
Delete Users	**3# - Read Card**
Exit from the Programming Mode	*
How to release the door	
Open door by card	(Read Card)