

INTRODUCTION — The device is a waterproof metal case standalone fingerprint access control with The device supports up to 1000 users (Card user/ Fingerprint user), with Wiegand 26~37 bits output, it can also work as a slave reader to connect to a 3rd party controller.

The device supports fingerprint access, card access and multi users access; with

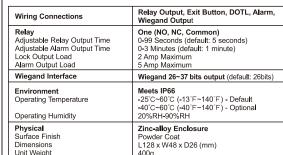
- Waterproof, conforms to IP66 Metal case, anti-vandal
- One programming relay output 1000 users (Card / Fingerprint) Wiegand 26~37 bits output

. Multi-color LED status display

- Standalone or Pass-through operation Multi Cards / fingerprints access · 2 devices support interlock for 2 doors
- Latch Mode to hold door or gate open Anti-tamper alarm

Specifications

User Capacity Operating Voltage Idle Current Active Current		1000 (Card/Fingerprint) 12~18V DC <60mA <150mA	
Fingerprint Reader Resolution Identification Time FAR FRR		Optical Finger 500DPI <1S <0.01% <0.11%	print Module



Powder Coat L128 x W48 x D26 (mm) **Carton Inventory**

INSTALLATION —

Basic Stand Alone Wiring

12V DC Regulated Power Input

Pass -through Wiring (Wiegand Reader)

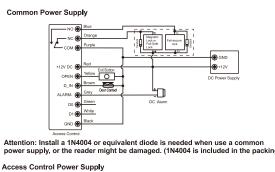
Alarm Output Negative contact for Alarm
Contact Input Door/Gate Contact Input (Normally Closed)

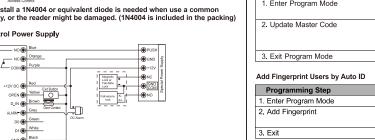
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	_	Wall	Operation Status	LED	Finger Sensor Light	Buzzer
			Stand by	Red light bright	Off	-
			Enter into programming mode	Red light shines	Off	One beep
	1 1 11	• • • • • • • • • • • • • • • • • • •	In the programming mode	Orange light bright	-	One beep
	1 1 1	⊕ € 5*5mm A 5mm	Operation error	-	-	Three beeps
		→	Exit from the programming mode	Red light bright		One beep
	1() 11	ф 9mm	Open lock	Green light bright	Off	One beep
		73mm —	Alarm	Red light Shines quickly	Off	Beeps
		98.5 65mm ⊕ mm = - ○ C	Basic Configure Set the Working Mode Notes: The device has 2 worki choose the mode you use. (Fa	actory default is Sta	ndalone Mode)	eader Mode,
	-	Step2 Step1	Programming Step	Keys	troke Combination	
	8		Enter Program Mode	* (Ma	ster Code) #	
	Step3		2. Standalone Mode OR		(Factory Default)	
	T		Wiegand Reader Mode	75#		
or	Function	Notes	2 Evit	*		

Normally Open Relay Output (Install diode provided)

Normally Closed Relay Output (Install diode provided)
Request to Exit (REX) Input







(Master Code) #

Master Code) #

(Factory default is 123456)

(Master code is any 6 digits)

0 (New Master Code) # (Repeat New

EM version: Any 125KHz industry standard 26bits EM proximity

tag / card HID & EM version: Any 125KHz industry standard 26bits HID & EM proximity tag / card Mifare version: 13.56MHz Mifare tag / card (ISO14443 Type A)

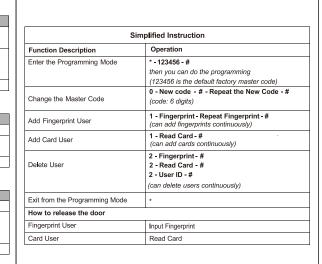
Remark: For Mifare version, SF1 is not good at reading cards, please place the 4 corners of the card on the card reading area.

Set Master Code

Programming Step

Programming Step Enter Program Mode * (Master Code) # 1 (User ID) # (Fingerprint) (Repeat Fingerprint) Fingerprints can be added continuously

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Add Card Users by Auto ID Programming Step	Keystroke Combination		D is 1001	,1002,can add by User ID or Refei er Card/Fingerprints" to Add Mast
Enter Program Mode Add Card : by Reading Card OR	* (Master Code) # 1 (Read Card) Cards can be added continuously	Cards/Fingerprints) Programming Step		Keystroke Combination
Add Card: by Card Number But Specific ID Add Card Users by Specific ID	1 (Input 8/10 Digits Card Number) #	Enter Program Mode Add Master Card OR Add Master Fingerprint		* (Master Code) # 1(User ID)#(Read Card) 1(User ID)#(Fingerprint)(Refingerprint)
Programming Step	Keystroke Combination	3. Exit		*
Enter Program Mode Add Card : by Reading Card OR Add Card : by Card Number	* (Master Code) # 1 (User ID) # (Read Card) Cards can be added continuously 1 (User ID) # (Input 8/10 Digits Card	Master Cards Usage Using Master Cards to add and d	lelete user	s
OR 2. Add Card: by Block Enrolment 3. Exit	Number) # 1 (User ID) # (Card Quantity) # (Input 8/10 Digits Card Number of the First Card) # *	Add Card or Fingerprint User	2. Read (Rep	Master Add Card User Card / Input Fingerprint Twice eat Step 2 for additional users) Master Add Card Again
Programming Step 1. Enter Program Mode 2. Delete Fingerprint: by Fingerprint	Keystroke Combination * (Master Code) # 2 (Input Fingerprint)	Delete Card or Fingerprint User	2. Read (Rep	Master Delete Card User Card / Input Fingerprint Once eat Step 2 for additional users) Master Delete Card Again

erprints can be deleted continuously

2 (Input 8/10 Digits Card Number) #

2 (Read Card)

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Delete Card: by Reading Card

2. Delete Card: by Card Number

. Delete ALL Users

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Master Cards Usage	
Using Master Cards to add and d	elete users
Add Card or Fingerprint User	Read Master Add Card Read User Card / Input Fingerprint Twice (Repeat Step 2 for additional users) Read Master Add Card Again
Delete Card or Fingerprint User	Read Master Delete Card Read User Card / Input Fingerprint Once (Repeat Step 2 for additional users) Read Master Delete Card Again
Remark: can also use Master Fing	erprints to add and delete users, the operations are the

1		
	Remark: can also use Master Fing same with Master Cards.	erprints to add and delete users, the operations are the
ı	Set Relay Configuration	

Programming Step	Keystroke Combination
Enter Program Mode	* (Master Code) #
2. Pulse Mode	3 (1-99) # (Factory default)
OR	The relay time is 1-99 seconds
	(1 is 100ms) (Factory default: 5 second
2. Latch Mode	30#
	Sets the relay to ON/OFF latch mode
3. Exit	*

Card+Fingerprint: Card and Fingerprint must use the same user ID, for example add Card by user ID 2, must add Fingerprint user also by User ID 2; > Multi Cards/Fingerprint Access:

Diode 1N4004 (For relay circuit protectio

Screw Driver

Master Add Card Master Delete Card Master Card

Wall Anchors

For Multi Cards/ Fingerprints access mode, the interval time of inputting Cards/Fingerprints can not exceed 5 seconds, or else, the device will exit to standby automatically: In each access, the same Card or fingerprint can not be used repeatedly, or else, the

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device will exit to standby automatically.	The same as a deed repeatedly, or clos, the
Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Card Access ONLY OR	40#
2. Fingerprint Access ONLY OR	41#
2. Card + Fingerprint Access OR	43#
Card or Fingerprint Access OR	4 4 # (factory default)
2. Multi Cards / Fingerprints Access	4 5 (2~8) #

2. Multi Cards / Fingerprints Access	4 5 (2~8) #
3 Exit	*
Set Alarm	
Programming Step	Keystroke Combination
Enter Program Mode	* (Master Code) #
2.Enable Alarm	5(1~3) # (factory default: 1 minute)

OR 2.Disable Alarm	50#
3. Exit	*
Set Strike-out Alarm The strike-out alarm will engage after 1	0 failed Card/Fingerprint attempts, factory d

Programming Step	Keystroke Combination
Enter Program Mode	* (Master Code) #
2. Strike-out OFF	6 0 # (factory default)
OR	
2. Strike -out ON	6 1 # Access will be denied for 10 minut
OR	
2. Strike - out ON(Alarm)	6 2 # Enter Master Code# or Valid PIN # or Fingerprint to silence
3. Exit	*

Set Door Open Detection

Door Open Too Long (DOTL) Detection

When use with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened normally, but not closed after 1 minute, the inside buzzer will beep automatically to remind people to close the door. The beep can be stopped by closing the door, master users or valid users, or else, it will continue to beep the same time with the alarm time set.

or Forced Open Detection When use with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened by force, the inside buzzer and external alarm (if there is) will both operate, they can be stopped by master users or valid users, or else, it will continue to sound the same time with the alarm time set.

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 #
3. Exit	*

Users Operation & Reset to Factory Default Open the door: Input valid Card user or input valid fingerprint.

- > Open the door in Multi Cards / Fingerprints Mode: Input valid multi Cards or fingerprints within 5 seconds.
- > Remove Alarm: Input valid user Card or input valid fingerprint, or input master fingerprints or input Master Code #. > To reset to factory default & Add Master Cards/Fingerprints: Power off, press the Exit
- Button, hold it and power on, there will be two beeps, release the button, the LED light turns into Orange, which means entered into Add Master Fingerprints mode, the first fingerprint (input for twice) entered is Master Add Fingerprint, the second fingerprint (input for twice) entered is Master Delete Fingerprint, this step need to finish within 30 seconds, then the LED light turns into RED, means reset to factory default successfully.
- Remarks:

 Master Card Users also can add when Reset to factory default, the operation same with Master Fingerprints

 If no Master Cards/Fingerprints added, must press the Exit Button for at least 30 seconds before release, at the same time, the Previously Master Fingerprints will be deleted.

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

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PASS-THROUGH OPERATION ——

ne device can work as a Wiegand output reader to the controller -- 7 5 #. Below the operations for adding fingerprint users: 1.Add fingerprint on the reader (refer to Page 06).

Operate the controller to enter into adding Card users, then read this added ngerprint on the reader, this fingerprint's corresponding User ID will generate a virtual ard number and send to the controller, the controller save this number, and then the

Yellow wire: Buzzer control

Sound and Light Indication

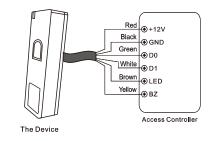
STANDALONE MODE -

Lock 1: Fail-Safe Lock or Door/Gate Operator

Lock 2: Fail-Secure Lock or Magnetic Lock

Connection Diagram

The device can work as Standalone Access Control for single door. Factory default mode)-- 7 4 #



lotes:
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

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.

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Please set the Wiegand output format of Reader according to the Wiegand input format of the Controller

ass-through: Please check No.4 Pass-through Operation

GENERAL PROGRAMMING INFORMATION

>User ID Number: Assign a user ID number in order to keep track of the users of access fingerprints or Cards, The user ID number is from 1~1000, one ID can add one Card & one Fingerprint.

MPORTANT: 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 or Card be available.

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Programming -----

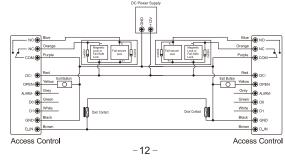
Programming Step Enter Program Mode * (Master Code) # Set Wiegand output bits Disable Wiegand output

Set Device ID

Keystroke Combination
* (Master Code) #
8 1 (00) # (factory default)
8 1 (01~99) #
*

ADVANCED APPLICATION -

The device supports the Interlock function. It is of two devices for two doors, and mainly used for banks, prisons, and other places where a higher level security is required Remarks: The Door Contact must be installed and connected as the diagram.



Let's name the two devices as "A "and "B" for two doors "1" and "2" proll the users to the two devices (refer to Page 06)

Set both of the two readers (A and B) to Interlock function				
Programming Step	Keystro ke Combination			
Enter Program Mode	* (Master Code) #			
2. Interlock -OFF	7 0 # (factory default)			
OR				
2. Interlock-ON	71#			
3 Exit	*			

The interlock operation is finished, When and only door 2 is closed, the user can Input the valid Card or input valid fingerprint on Reader A, door 1 will open; then when and only door 1 closed, Input valid Card or input Set Anti-tamper Alarm

The anti-tamper alarm will engage if anyone open the Back Cover of the device.

		_
rogramming Step	Keystroke Combination	
Inter Program Mode	* (Master Code) #	٦
inti-tamper Alarm OFF	72#	
nti-tamper Alarm ON	7 3 # (factory default)	
xit	*	1
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