Full-view OLED Fingerprint Access Control & Reader





Equipped with WIFI, it has the following functions



User Manual

INTRODUCTION

This is a door access control with OLED display screen. Visual operation menu, easy and clear for operation. Thickened ABS plastic shell, strong and durable.

Supports WiFi function and smartphone management. Supports OTA online upgrade function (the WiFi models have these functions).

Supports 5000 card and password users, 100 fingerprint users (500 fingerprint users optional). Supports door opening by card/ password/fingerprint/multi-users. Supports Wiegand output/ input,can be set to card reader mode. The waterproof level is IP66(optional).

Advantages and Features

- Smart phone management, Smart phone open (WiFi has this feature)
- Supports OTA online upgrade (WiFi has this feature)
- Smart phone door status check (WiFi has this feature)
- Visual operation menu
- Set the temporary PIN code with APP
- Access Mode: fingerprint, card, PIN
- Wiegand 26 ~ 58 bits Input/output
- PIN Wiegand output formats: 4 bits, 8 bits(ASCII), 10 digits virtual card number.
- Pulse Mode and Toggle Mode

Specifications

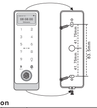
Fingerprint User	100 or 500 (Factory default:100)
Card User/ PIN User	5000
Operating Voltage	DC10-24V
Idle Current	<=60mA
Active Current	<=120mA
Card Type	EM or Mifare or EM & Mifare card
Card Frequency	125KHz/ 13.56MHz
Read Range	<=60mm
Operating Temperature	-20℃ ~ +60℃
Operating Humidity	10% ~ 99%

Carton Inventory



INSTALLATION

1. Draw the location of the hole and drill the hole on the installation position according to the hole of the back cover.
2. Fix the back cover on the wall with the wall anchors in the accessories bag.
3. Thread the cable through cable hole, connect related cable. For the un-used cable please separate with insulating tape.
4. Cover the front cover and fix the front and back cover together with screwdriver and screws.



Wires Definition

NO.	Function	Colour	Notes
1	NC	Orange	Relay NC
2	COM	Purple	Relay COM
3	NO	Blue	Relay NO
4	GND	Black	Negative Pole
5	DC+	Red	10-24V DC Power Input
6	OPEN	Yellow	Exit Button
7	D_IN	Brown	Door Contact
8	ALARM-	Grey	Connect to external alarm negative pole
9	D0	Green	Wiegand Output/Input Data 0
10	D1	White	Wiegand Output/ input Data 1
11	BELL	Pink	External doorbell
12	BELL	Pink	External doorbell

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

Set Factory Default and Set Admin Card/ PIN/ Fingerprint

1. The first step, please connect one port of the exit button to the yellow cable of the device, another port connected to the negative pole of the power. Then follow the next operations.

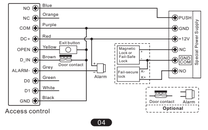
2. Turn off the power, hold on the exit button, then turn on the power, release it after hearing two beeps. The red and green lights will light up together, and the device will enter the "Admin settings" menu at the same time. Choose the administrator password or administrator card or administrator fingerprint to be added and add it to the device.

1) Reset to factory default will not delete the user data.

2) One Admin Card in the factory packaging, which has added into the device. If you add one new card into it as Admin Card, the old one will be deleted automatically. One device can be only set one Admin Card.

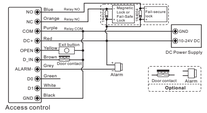
STANDALONE MODE

Connection Diagram



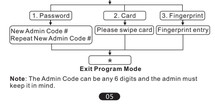
DC Power Supply

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).



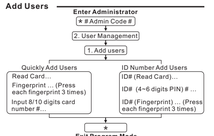
Access control

Add or Modify Admin Code/ Admin Password/ Admin Fingerprint



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

Add Users



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. **Add fingerprint users:** Every fingerprint should be pressed 3 in times.

4. User Card or Code ID range: 1-4990, Anti-duress users ID: 4991~5000, User Fingerprint ID range: 5001-5099 , Admin Fingerprint ID: 5100.

Add proximity cards sequentially numbered



Note: The ID number must be empty and successive.

Usage of Admin Add/Delete Card and Fingerprint

Add users	Step 1: Read Admin card or press Admin fingerprint Step 2: Read user card or press the fingerprint 3 times. (Repeat step 2 for additional users) Step 3: Read Admin card or press Admin fingerprint again to end.
Delete users	Step 1: Read Admin card or press Admin fingerprint twice at the standby mode Step 2: Read user cards or press fingerprint (Repeat step 2 for additional users) Step 3: Read Admin card or press Admin fingerprint again to end.

Delete User



Note: User Card or Code ID range: 1-4990, Anti-duress users ID: 4991~5000,User Fingerprint ID range: 5001-5099 , Admin Fingerprint ID: 5100.

Delete All User



Modify user

Note: User Card or Code ID range: 1-4990, Anti-duress users ID: 4991~5000,User Fingerprint ID range: 5001-5099 , Admin Fingerprint ID: 5100.

The new card or password will replace the old one when modifying a user

Copy user

Data transmission of user card & user code



Note: (Only support copy user of card and code)

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 & code user to the device A. Device B has no user. Connect the Wiegand cable of device A and B, then power on. Execute copy the user menu on the device A. The green led of the two devices flash. The device A is sending the user data to device B.

Access Mode Setting

Unlock method (Factory default: Fingerprint/ Card/ Password)



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 red led light flashing.

Pulse Mode Toggle Mode Setting



Note: 1. Pulse Mode and Toggle Mode, you only can choose one.
2. Factory default is Pulse Mode, and access time is 5 seconds. 0 seconds is toggle mode.
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.

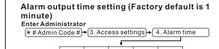
Safe Mode Setting (Factory default is Off)



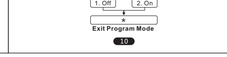
Note: **Lockout Mode**: If swipe card/input fingerprint with invalid users for 10 times in 10 minute, the device will be lockout for 10 minutes. When in Lockout Mode, press the Exit Button can open the door.

Alarm Output: If swipe card/input fingerprint with invalid users for 10 times in 10 minute, the device will beep and external alarm will activate. The valid user can remove the alarm.

Alarm output time setting (Factory default is 1 minute)



Door detection setting (Factory default is Off)



Note: After enable the door detection function, you must connect the detection switch into the wiring. There will be two detection status:

1. The door is opened by valid user, but not closed in 1 minute, the device will beep.
How to stop the warnings: Close the door/valid user/ Automatically stop when the alarm time is up.

2. If the door opened by force, the device and external alarm will activate.
How to stop the alarm: Valid user/Automatically stop when the alarm time is up.

Sound and Light mode setting

Sound setting (Factory default is medium)



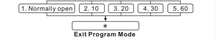
Red LED setting (Factory default is On)



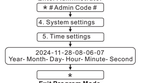
Keypad LED setting (Factory default is Timed off)



Display settings (Factory default : 20 seconds)



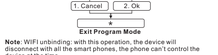
Time settings



System language (Factory default is English)

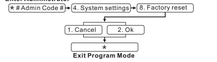


TUYA app Smart phone unbinding



Note: WiFi unbinding: with this operation, the device will disconnect with all the smart phones, the phone can't control the device at the time.

Factory Default settings



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

System Information/ Open door Information inquiry



Note: Open door record:

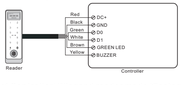
11/28 09:15 F-001 (Month- Day- Hour- Minute- Fingerprint-Fingerprint ID)

11/28 09:15 C-200 (Month- Day- Hour- Minute- Card- Card ID)

11/28 09:15 P-300 (Month- Day- Hour- Minute- Pin users- Pin users ID)

WIEGAND READER MODE

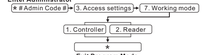
Connection Diagram



Set Controller/ Wiegand reader mode (Factory default is Controller mode)

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

Enter Administrator



Wiegand format setting (Factory default: EM 26 bit, Mifare 34 bit, Password 4 bit, Wiegand check On)

Note: (1) 10 Digits Virtual Card Number: Input 4~6 digits PIN, press "#", output a 10-bit decimal card number. For example, input password 999999, the output card number is 0009999999.

(2) Each key press sends 4 bits data, the corresponding relationship is:
1 (0001) 2 (0010) 3 (0011) 4 (0100) 5 (0101) 6 (0110)
7 (0111) 8 (1000) 9 (1001) ★(1010) 0 (0000) #(1011)

(3) Each key press sends 8 bits data, the corresponding relationship is:
1 (1110 0001) 2 (1101 0010) 3 (1100 0011) 4 (1011 0100)
5 (1010 0101) 6 (1001 0110) 7 (1000 0111) 8 (0111 1000)
9 (0110 1001) ★(0101 1010) 0 (1111 0000) #(0100 1011)

