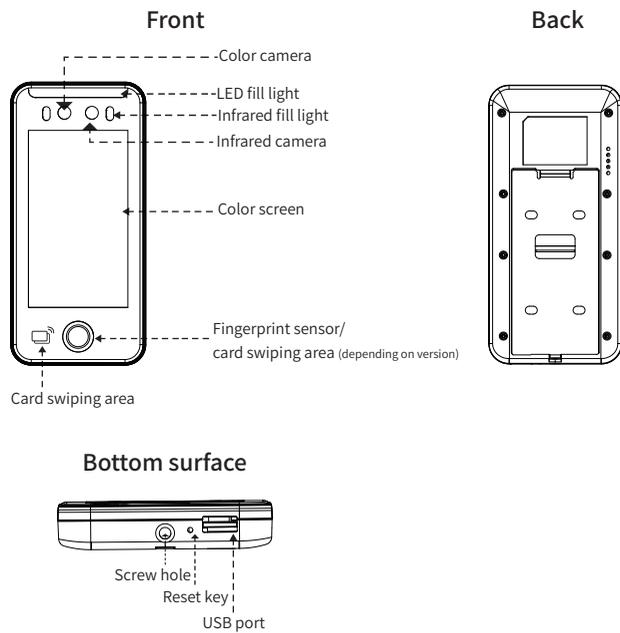


# AI dynamic facial terminal

Please read this manual carefully before installation and keep it safe for future reference

V1.0

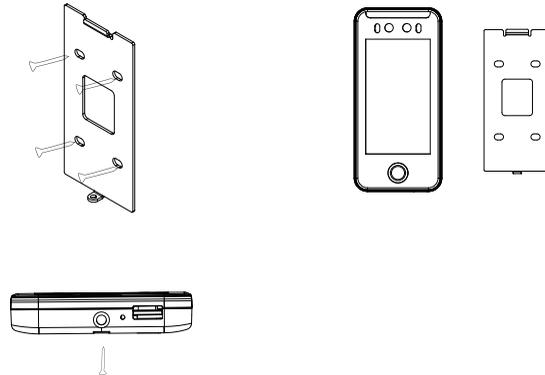
## 1. Appearance introduction (pictures for reference only)



1

## 2. Wall mounted installation

- 1) Choose the most suitable installation height of 130cm based on the actual situation of check-in personnel.
- 2) Remove the installed hanging board and stick it on the wall. Select the correct installation position and make a mark.
- 3) Drill holes according to the marked positions.
- 4) Fix the rear hanging plate to the wall.
- 5) Install the device on the back panel and secure it, then plug in the power.



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## 3. Warm Prompt

- 1) Do not operate with electricity.
- 2) When connecting the power lock, it is recommended to use a 12V/2A power supply (for facial recognition devices, independent power supply is recommended).
- 3) Do not install the device in direct sunlight or damp places.
- 4) Please read the access control wiring diagram and strictly follow the rules for wiring.
- 5) When static electricity is severe, please first connect the grounding wire before connecting other wires to prevent static electricity from damaging the machine.

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## 4. Basic parameters

Product Name	Dynamic facial recognition terminal
Operating system	LINUX Intelligent Operating System
Display screen	5-inch IPS 480 * 854
CPU	ARM Cortex-A7 800M
User capacity	5000
Facial database	5000
Card capacity	5000 cards (default ID card)
Fingerprint capacity	200, 880, 1760 optional (Fingerprint version only)
Code capacity	5000
User records	100000
Camera	Binocular 2 million pixels
Recognition distance	0.5-2 meters
Rejection rate	<= 0.1%
Misidentification rate	<= 0.001%
Power supply	DC 12V/2A
Communication methods	TCP, USB, WIFI, 4G(Optional)
Language display	Simplified Chinese, English, and Japanese
Access control interface	One set of switch signals, one set of wiegand
Verification method	Face, card, password, temporary password, visitor QR code, fingerprint (optional), card+Facial and other combinations for verification
Working temperature	-20°C~60°C

## 5. Password management

Click on the password in the lower left corner of the machine screen, as shown in the figure:  
 Password verification:  
 Administrator login password: Default is **123456**  
 Change administrator login password: [Settings] → [Access Control Management] → [Access Control Parameters] → [Administrator Change Password]  
 Turn off [Administrator Login Password]: [Settings] → [System Settings] → [Advanced Settings] → [Login Verification]  
 Offline QR code scanning to open the door: This function is generated by the cloud platform, and the QR code is aimed at the camera to scan and open the door  
 [Personal password to open the door]: Enter the [employee ID] of the registered personnel  
 [Password] Then click [Confirm], note that all accounts are pure numbers.  
 [Temporary password to open the door]: Enter the temporary password generated by the mini program to open the door  
 [Device password to open door]: Default is **888888**  
 Change device door password: [Settings] → [Access Management] → [Access Parameters] → [Door Password Change]  
 ALT is used to switch input methods  
**For security reasons, please change your password promptly after purchase**



## 6. About Input Method Explanation

Press "Alt" to switch between pinyin, uppercase/lowercase letters, and numbers. After completing the input, press 'confirm' to save the settings and then press 'return' to exit

**Symbol input:** When the input status is Pinyin, pressing " " can only input spaces. When the input status is a letter, pressing " " consecutively will result in spaces, dots, commas, exclamation marks, etc



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## 7. User management

Click on the bottom of the machine screen [Settings]>[User Management]



5

Set content	Instructions
User list	Find, modify, and delete personal information
Department management	Edit Department
Download User information	Insert a USB flash drive to download user information in batches
Upload User information	Insert U disk, you can edit the good staff data into the machine.
Management card registration	Card registration free: After clicking this feature, the card can be registered as a user card as long as it is placed in the card reading position Swipe the card to register the face: swipe the management card once, you can register the user's face, fingerprint, card Registrar master card: Register the card as a master card, you can set 5 master cards, change the card can be registered user face, fingerprint, card

USB flash drive format requirements: (1) USB flash drive must be fat32  
 (2)U disk 32G memory less

## 8. Communication management

Click on the bottom of the machine screen [Settings]>[Communication Management]



Communication management interface Default IP address, click on server connection test Connect WiFi

Set content	Instructions
IP Address	After the device is connected to the Internet, it automatically obtains the IP address and connects to the PC software.
Wiegand setup	[Wiegand mode] Input/Output Optional. [Wiegand format] Wiegand 26/34 Optional. [Content of Wigan] : Output card number and employee number are optional.
WiFi Settings	Turn on the button (do not repeat the operation, patiently wait for the device to search for nearby WiFi signal) Only 2.4G 5G WiFi is not supported
Tuya Settings	Connect the phone to wifi and open the doodle APP for network distribution (doodle version only). See the link:

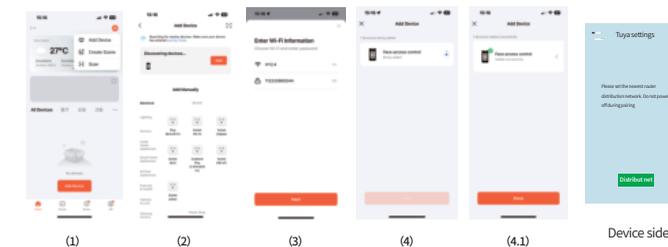
6

## Tuya Configuration

Click on the menu [Settings] → [Communication Management] → [Tuya Settings]  
 (This function is optional and requires both Bluetooth and WiFi to be enabled)  
 Mobile end: 1. Scan and download the Tuya Smart APP on your phone or search for the Tuya Smart Download APP on your phone  
 2. Open the app to add a device, click the "+" button in the upper right corner to add a device  
 3. Enter the WiFi password, click OK, and then click Next.  
 4. Wait for successful connection, add successfully, click complete



Device side: Click on the menu [Settings] → [Communication Management] → [Tuya Settings] click on "Network Configuration" to successfully configure and click OK

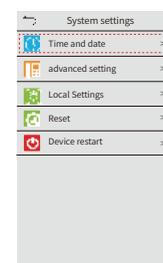


Device side

## 9. System Settings

Click [Settings] > [System Settings] at the bottom of the machine screen.

### 1. Time and date



### 2. Advanced Settings



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Set content	Instructions
Number of administrators	Set the total number of device administrators
Verification mode	Set the identification verification mode of the machine, which can be verified individually or in combination.
Privacy hiding	It is turned off by default and hides the middle digit of the name when turned on
1: N Matches the threshold	Set the matching accuracy of face recognition
Mask mode	Turn on the switch, the identification will prompt "Please wear a mask"
Mask threshold	Set the matching accuracy when carrying face mask recognition
Fill-in light	Default auto-fill light, can be set to normal open, normal close
Firmware upgrade	Insert USB flash drive to upgrade firmware
Login authentication	Authentication is required when login is opened
Change screen saver	Insert the USB flash drive to replace the screensaver
Magazine lock screen	Default shutdown; if this function is turned on, the screen saver will rotate when the screen is turned off

## 3. Local Settings

Set content	Instructions
Language	Default: Chinese, English, Japanese
Volume	Set the volume of the speaker
Speech pattern	You can choose to broadcast a name or play a greeting
Salutation	Optional: Please pass, welcome, time greeting, punch the card successfully
Recognition interval	Face can be repeated punching interval
Screen setup	Set automatic screen and screensaver time
Recognition distance	The default value is 50-150CM
Liveness detection	Verify that the user is acting as a real living person
Repeat recognition	Repeatable verification is possible
Face wake up	It lights up when it detects a live face

4. [Restore factory Settings]: All data will be cleared after restoring factory Settings.
5. [Device restart]: Restart the device.
6. [System maintenance]: The device restart time can be set periodically

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## 10. Data management

Click on the bottom of the machine screen 【 Settings 】>【 Data Management 】

data management

- Clear data
- Menu initialization
- Cancel management permissions
- Export new entry and exit records
- Export all entry and exit records
- Clear all employee information
- Clear all entry and exit records

【 Clear Data 】 Clear all data

【 Menu initialization 】 Restore the device parameters to the factory state, without affecting the personnel information and punch record

【 Cancel Administrative permissions 】 Clear all administrator permissions on the device

【 Export new access record 】 You can download the new access record saved in the machine to the U disk. And form an Excel file.

【 Export all access records 】 All records saved in the machine can be downloaded to the U disk. And form an Excel file.

【 Delete all employee information 】 Delete all personnel's registration information (face, fingerprint, card, password)

【 Clear all access records 】 Delete all personnel's access records

## 11. Access control parameters

### 1. Access control parameters

Click 【Settings】 > 【Access Control】 > 【Access Control Parameters】 at the bottom of the machine screen.

Set content	Instructions
Opening delay	Sets the interval at which the lock control relay will return to its normal state after it is activated
Stranger unlocking	Strangers can open the lock directly after opening it
Door opening password change	Change the door opening password
Changing the administrator Password	Change the administrator password
Fire alarm	Can be set to normally open/normally closed/closed
Simultaneous recognition number	Need N people to verify before opening the door (N stands for the number set here)
False press alarm	Set the number of false press alarms
No access records are kept	When this feature is turned on, no entry or exit record is saved
Prohibited Access Mode	After opening, traffic is prohibited at other times except the normally open time
Stranger verification	Can be set as No/Yes/Alarm

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## 2. Time Attendance Settings

### 2.1 Days

According to the user's access rule and system, the daily traffic time is set to the corresponding time period. A total of 8 day periods can be set, and a day period can support a maximum of 5 time periods for weekly selection. For example, a setting that can open the door from 6 a.m. to 8 p.m., and open the door from 17 p.m. to 19 p.m., as shown in the following figure 【day period 1】, if you need to set the all-weather door, as shown in the following figure 【day period 2】:

For example:【Day Period 1】 is set to

1	06 : 00	08 : 00
2	17 : 00	19 : 00
3	00 : 00	00 : 00
4	00 : 00	00 : 00
5	00 : 00	00 : 00

For example:【Day Period 2】 is set to

1	00 : 00	23 : 59
2	00 : 00	00 : 00
3	00 : 00	00 : 00
4	00 : 00	00 : 00
5	00 : 00	00 : 00

### 2.2 Week Period

According to the user's access rules and regulations, the traffic time of each week is set to the corresponding day period. For example: Monday to Sunday

5 Apply the above day time period 1 rule, Saturday and Sunday can be open all day. As shown in Figure 1, the setting of weekly session 1:

Week period	
Monday	1
Tuesday	1
Wednesday	1
Thursday	1
Friday	1
Saturday	2
Sunday	2

(Figure 1)

The door is usually open	
Monday	1
Tuesday	1
Wednesday	1
Thursday	1
Friday	1
Saturday	1
Sunday	1

(Figure 2)

Note: 【Weekly period 0】 is open all day by default. All other hours are closed throughout the day.

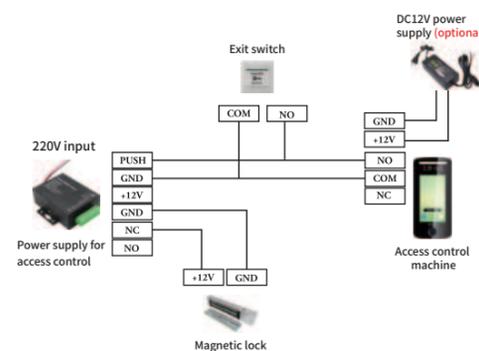
If the definition of the day period is not changed, other times are also open all day by default.

### 3. Visitor entry and exit time slots

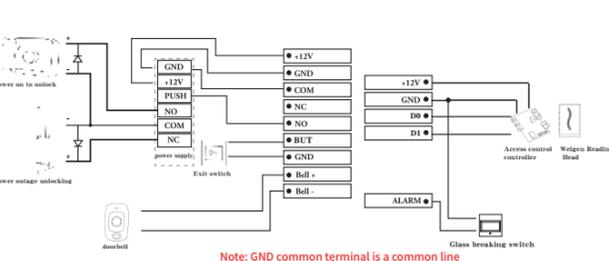
Set visitor entry and exit time periods according to needs

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### (2) Wiring Diagram with Special Access Control Power Supply



### (3) Wiring Diagram with Wiegand Controller



Recommended power supply: 12V -6A

If sharing power with other devices, it is recommended that the power supply current of the power supply be greater than the total operating current

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### 4. Door normally open time period

According to the demand, set the corresponding daily time slots for each week, within which the door remains open, as shown in Figure 2. Setting the day slot 1 every day means that the door lock remains open from 06:00 to 08:00 and from 17:00 to 19:00 every day

### 5. Unlock combination setting

5 sets of unlocking combinations can be set. For example, if the unlocking combination is set to 1, only personnel from group 1 can open the door. User groups can be set in User Management -> New Users ->Advanced Settings ->User Groups.

## 12. Attendance management

### 1. Attendance rules

Click on the bottom of the machine screen 【 Settings 】 Pop-up menu, click 【 Attendance Management 】>【 Attendance rules 】

Set content	Instructions
Duplicate confirmation time	If the interval between two records is less than this time, only the previous record is stored
Download Attendance report	Insert U disk to export the scheduling table, you can edit the scheduling table on the computer, as shown below:
Upload schedule	After editing the schedule, edit the content that needs to be set, save it and import it into U disk
Attendance record warning	When the number of records left to store is less than this value, the machine will alarm
Save photo	After the save photo function is enabled, the machine can capture the photo when the user is identified and save it
Stranger snap	After the function is turned on, the machine can capture the photo of the stranger user identification and save it
Verification failure prompt	You can choose prompt or alarm if the verification fails
Default shift	Set default shifts to apply to unscheduled users
visa-free	Can be set to sign only morning and evening work or only sign early work, etc
Excel password	Set the password for the attendance report
Allowable late time	More than how long late is counted as late
Early leave time allowed	The amount of time over which you leave early is counted as early leave
Double check no door open	After this function is enabled, repeated verification does not open the door
Upload questionnaire	Custom

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### 2. Type B equipment(AI520)

#### (1) Definition of Equipment Cable Interface

Function	Colour	Function Description
GND	Black	Common terminal
BUT	Brown	Force upgrade input
ALARM	Grey	Fire Alarm
DOOR	Blue	Exit Switch Button
DOOR BELL	Pink	Doorbell+
D1	Orange	WG output line D1
D0	Purple	WG output line D0
NO	Green	Relay Normally open
COM	White	Relay Common (public) end
NC	Yellow	Relay Normally Closed

Function	Colour	Function Description
GND	Black	Power supply-
+12V	Red	Power supply+

Function	Colour
RX-	Network cable
RX+	
TX+	
TX-	

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### 【 Export schedule 】 Sample chart:

Shift											
Note: A. Shift name up to 16 words. B. Section type: 0: normal attendance; 1: overtime. C. cut off time: if the punch before the cut off time, it will calculate as the previous day											
NO.	Name	IN	OUT	Sec 1	Sec 2	Sec 3	Sec 4	Sec 5	Sec 6	CutoffTime	
1	Day Shift	08:00	12:00	0	13:00	18:00	0	18:00	23:00	1	00:00
2	Night Shift	22:00	06:00	0							01:00

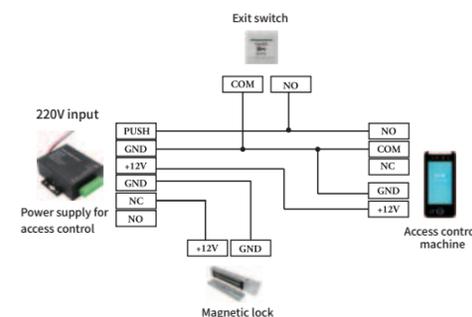
Ask for editing shifts as prompted at the table head. Up to 8 shifts can be set up. After finishing the editing, press [Save] directly to copy the modified file to the USB flash drive and directly replace the original file. Attention:

- (1) For data security. You must copy the file to the computer, then edit it, and then copy it back to the USB flash drive after editing. Do not edit directly on USB flash drive. Otherwise, an error message will be displayed during the import.
- (2) The format of attendance time must be time, and the type of attendance must be number. Therefore, pay attention to whether the input method status is English Text half corner status. Check method: If you enter 10:30, double-click the cell, the software will automatically change to 10:30:00.
- (3) If the cross-day time is set, the punch before the cross-day time is counted as the previous day's record. And scheduling should start after the day shift. For example:

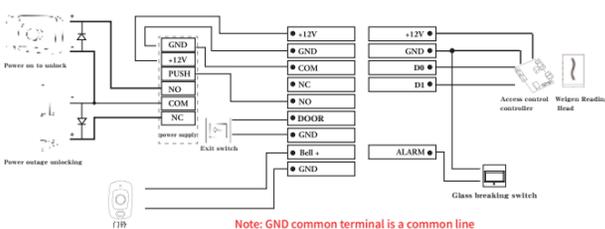
Shift										
Note: A. Shift name up to 48 words. B. Section type: 0: normal attendance; 1: overtime. C. cut off time: if the punch before the cut off time, it will calculate as the previous day										
NO.	Name	IN	OUT	Sec 1	Sec 2	Sec 3	Sec 4	Sec 5	Sec 6	CutoffTime
1	Shift	17:00	08:00	0						08:00

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### (2) Wiring diagram with access control power supply



### (3) Wiring Diagram with Wiegand Controller



Recommended power supply: 12V -6A

If sharing power with other devices, it is recommended that the power supply current of the power supply be greater than the total operating current

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### 2. Attendance export

Insert U disk, export attendance can automatically generate a table

### 3. Record viewing

Check the verification record, click 【start query time】 to set the date to be queried, 【end query time】

Enter the end time of the query and click the search icon

### 4. Editing shift

This machine supports eight shifts, you can edit the shift name, time, support cross-day time Settings

### 5. Ring the bell

5.1 Ringing Time: You can set 24 ringing times per week

5.2 Number of Ringing Times: Set the number of continuous ringing times (1 ~ 99)

5.3 Doorbell Output:

5.4 Doorbell setting: You can choose the local doorbell ringing and external doorbell ringing

### 6. Record upload switch

On or off, whether to upload records to the software platform

## 13. Automatic testing

Click the pop-up menu of 【Settings】 at the bottom of the machine screen, click 【Automatic test】 > 【All test】 This function can automatically test the machine

automatic testing

- All tests
- Screen testing
- Voice testing
- Fingerprint testing
- Facial testing
- Real time clock test

Factory test

- LCD test
- Camera test
- WiFi test
- RFID test
- Ethernet test
- Infrared light
- Light sensor test
- Light test
- Touch test
- Facial test
- Weight test
- Alarm test
- USB test
- IC card (QR code)
- Aging test

Auto test    Reset test

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## Warranty Notice:

In order to protect your usage rights and relieve your worries! Our company provides you with a one-year high-quality warranty service!

During the warranty period of the product, if there is an electronic malfunction, the warranty can be processed with a warranty card or invoice;

2. If the repair or replacement of the product is caused by a malfunction (provided that there is no damage to the appearance of the product), the company will send out the product within 15 days after receiving it;

3. The following situations are not within the scope of warranty for repair:

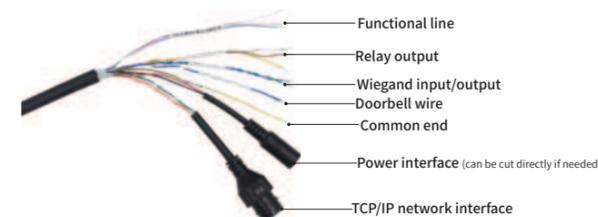
- Users alter, disassemble, or replace the product number and machine number without authorization;
- Damage caused by the use environment not meeting the product's usage conditions;
- Product damage caused by poor transportation;
- For the following situations, the material cost will be charged separately, whether within or outside the warranty period or service contract: damage caused by uncontrollable natural forces such as earthquakes, fires, floods, etc; Malfunctions caused by improper use (such as power supply).

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## 15. Access control cable diagram

### 1. Type A equipment(AI519)

#### (1) Wires Definition



Feature	colour	Function description
POL	White and black	Forced upgrade input
BUT	Pink	Door opening button
ALARM	Light green	Alarm negative
NC	Yellow	Control lock signal normally closed end
COM	White brown	Lock signal public end
NO	Brown	The lock signal usually starts
D0	Blue and white	WG output line D0
D1	Greenish white	WG output line D1
GND	Yellow black	Negative power supply
BELL+	White and blue	Doorbell interface "+"
BELL-	Blue	Doorbell interface "-"

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