Smart home landing practice Skills training course

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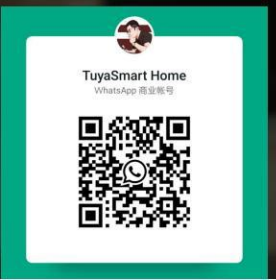
whatsAPP Tik Tok. WeChat



preface

With the development of Internet technology, the following Internet of Things technology has mushroomed into the public view, and the smart home and smart hotel system we will learn is the new darling of the Internet of Things technology.

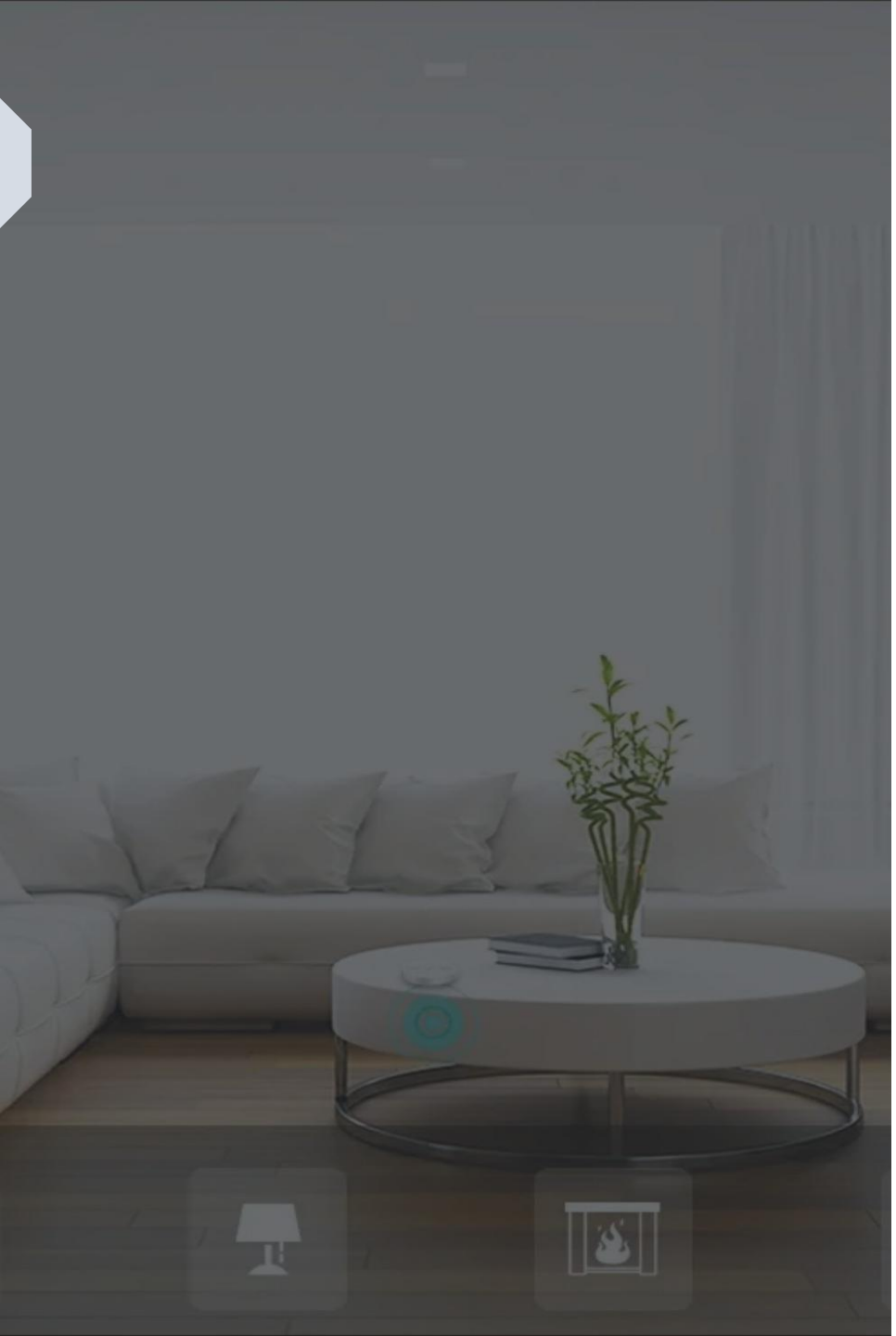
In fact, smart home, we have more or less understanding, remote control, scene mode, intelligent induction, voice control and other functions have been heard, not unfamiliar. Starting from today, we can further understand and master the equipment application, working principle, scheme design, construction and debugging and other related technologies of the smart home system through this set of textbooks.

1. This textbook starts from a single intelligent device, and gradually analyzes to the whole smart home system; respectively expounds the classification, characteristics, advantages and defects of smart home;

2. Combined with the actual engineering cases, architectural decoration drawings, intelligent deepening drawings, clearly guide the early design method of smart home;

3. Through the practical operation experiment, a comprehensive analysis of the construction debugging will encounter technical points, so that learners more easy to accept and understand.

I hope that through the introduction of this textbook, all students can really master the cutting-edge technology and intelligent design skills of smart home, and develop and expand the team of smart home industry together!



catal ogue

Smart home subsystem parsing chart

1.Intelligent lighting system

- switch panel
- Intelligent lamps and lanterns
- The dimming drive
- Tuning module

2.Intelligent mechanical and electrical control

- Smart curtain
- Intelligent gating
- Smart window
- Intelligent valve

3.Intelligent home appliance control

- The IR / RF transponder
- Smart power socket / off

4.Intelligent HVAC control

- Central air conditioning control
- Fresh air and floor heating control

AI speech control

Automatic sensing control

LCD screen central control control

APP telecontrol

5.Intelligent entertainment system

- Smart background music
- Intelligent video and audio central control

6.environmental monitoring system

- Formaldehyde / PM2.5/CO2
- Temperature and humidity detection
- Light sensing

7.intelligent safe-guard system

- Human body sensing sensor
- Leak / leak sensor
- smoke transducer
- Intelligent surveillance camera
- intelligent door lock

8.Weak current network system

- Wireless WIFI coverage
- LAN comprehensive deployment

Chapter 1: About the smart home hardware

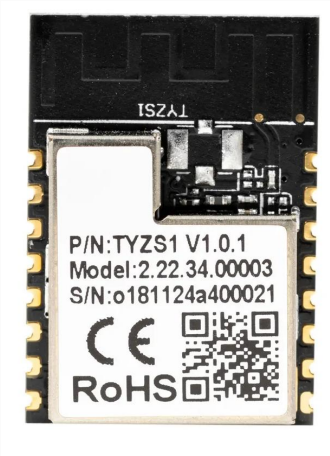
From the following eight sections, learn about the smart home related hardware products.

Section 1: About the intelligent switches

1.1 Intelligent switch communication classification

Definition: The switch is called the intelligent switch, because the switch is integrated with the intelligent communication module, which can be added to the intelligent system independently, for remote control, voice control, group control, scene linkage and other functions.

Intelligent switch from the communication protocol can be divided into zigbee intelligent switch, BT (Bluetooth) intelligent switch, Wifi intelligent switch and other protocol intelligent switch.



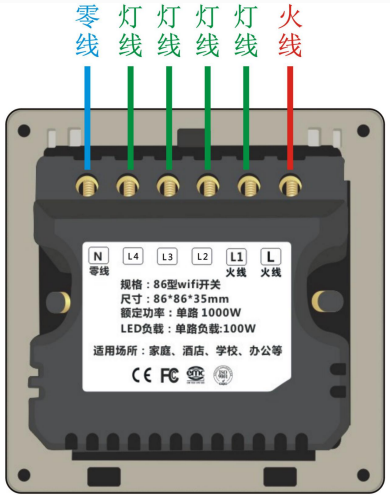
zigbee module

wifi module

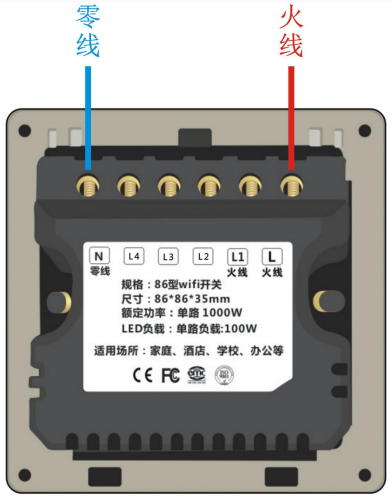
The WiFi + BLE module

1.2 Classification of intelligent switch functions

Intelligent switch can be divided into intelligent on and off switch (with relay output), intelligent scene switch (without relay output), intelligent dimming switch, wireless random switch (function similar to remote control).



零火线智能开关



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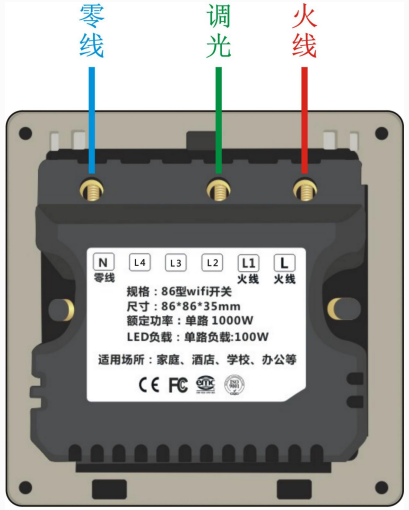


单路可控硅调光开关

Dispatch the switch at will

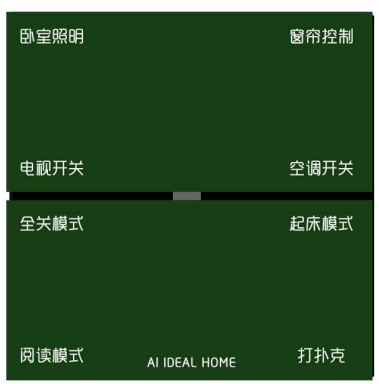
1.3 Material classification of intelligent switch

Intelligent switch from the appearance of material differentiation: PC touch switch, glass touch switch, glass touch switch, alumina switch, stainless steel switch.

PC

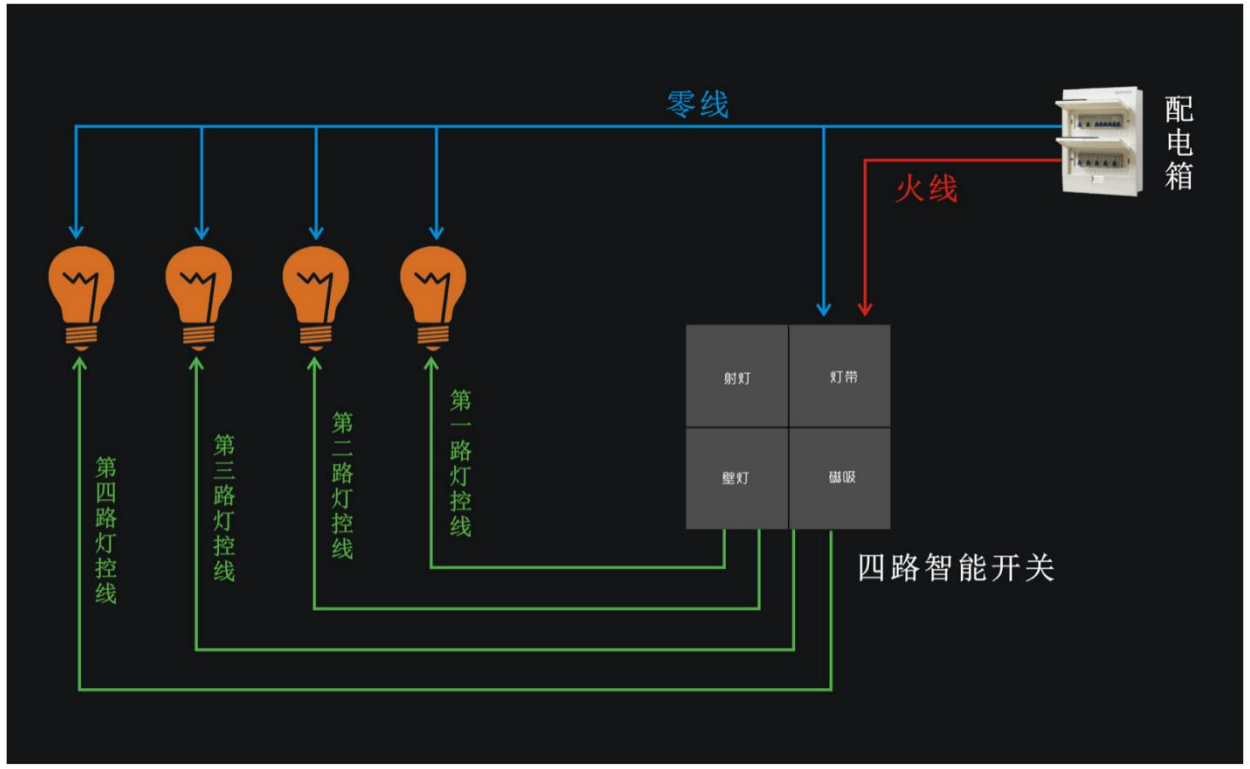
glass

stainless steel



alumina

1.4 Routine wiring diagram of intelligent switch

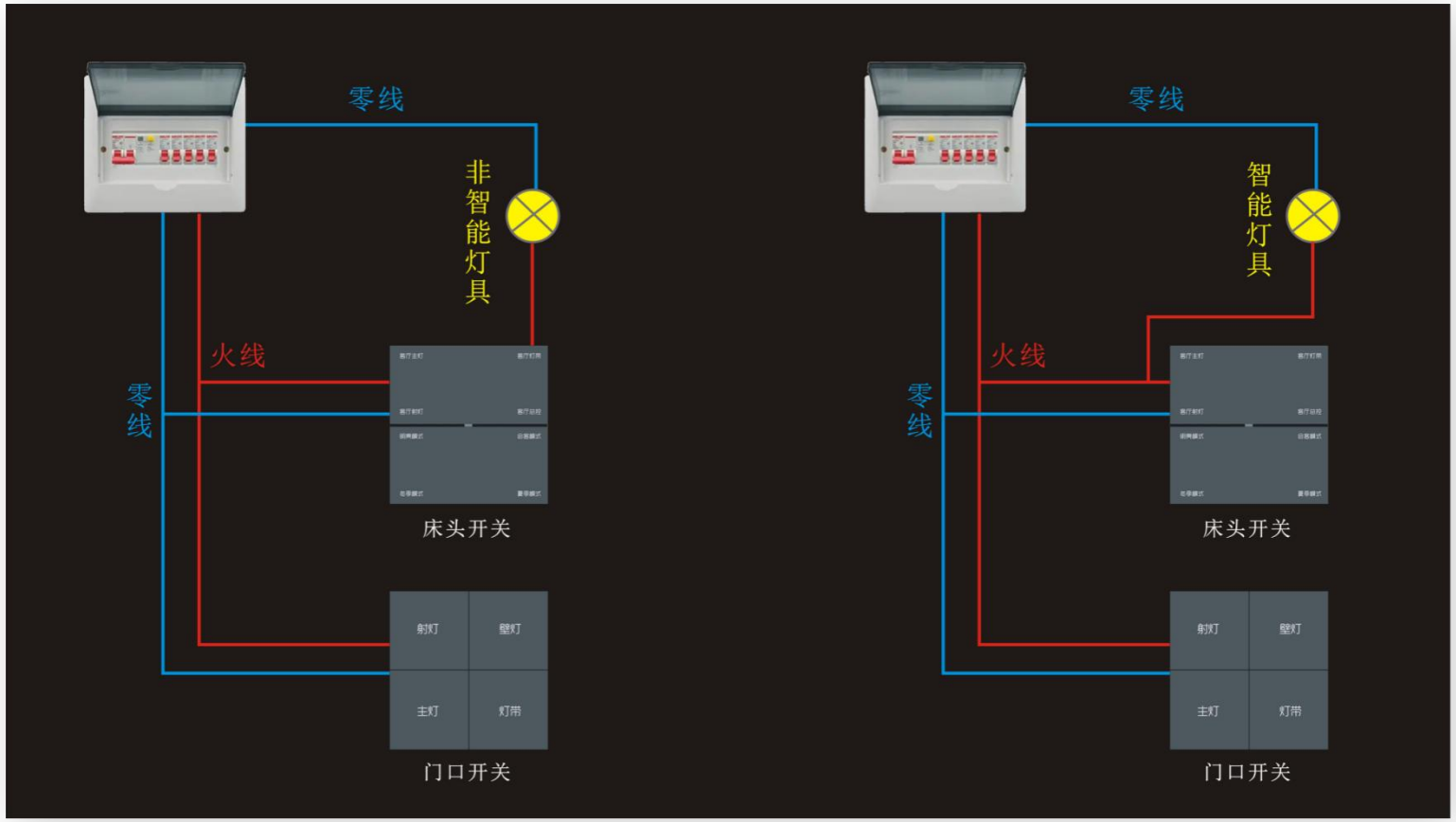


1. Intelligent switch panel, usually for the national standard 86 bottom box.
2. Switch bottom box reserved zero line, fire line, light control line.
3. When encountering double control, you only need to reserve zero fire line in the switch bottom box without light control line.
4. When connecting the intelligent dimming lamp, the light control line can directly long power supply, that is, connected with the fire line, and set automatically in the APP to realize the switch control.
5. When controlling the strong electric curtain motor, the forward turn and reverse control line of the motor can be connected to L1 / L2..... Output port and then set the control in the APP.
6. When controlling the intelligent curtain motor, we only need to connect the switch and set the automatic scene in the APP.
7. When controlling the SCR lamp, it is necessary to connect the SCR dimming switch panel to the zero fire wire and the dimming lamp control line.
8. Single fire switch only needs to connect to the fire line, light control line. The single fire switch load should be controlled between 12W-150W.
   - Zero fire switch shall access the corresponding load power according to the manufacturer parameters; usually in the range of 300-500W.

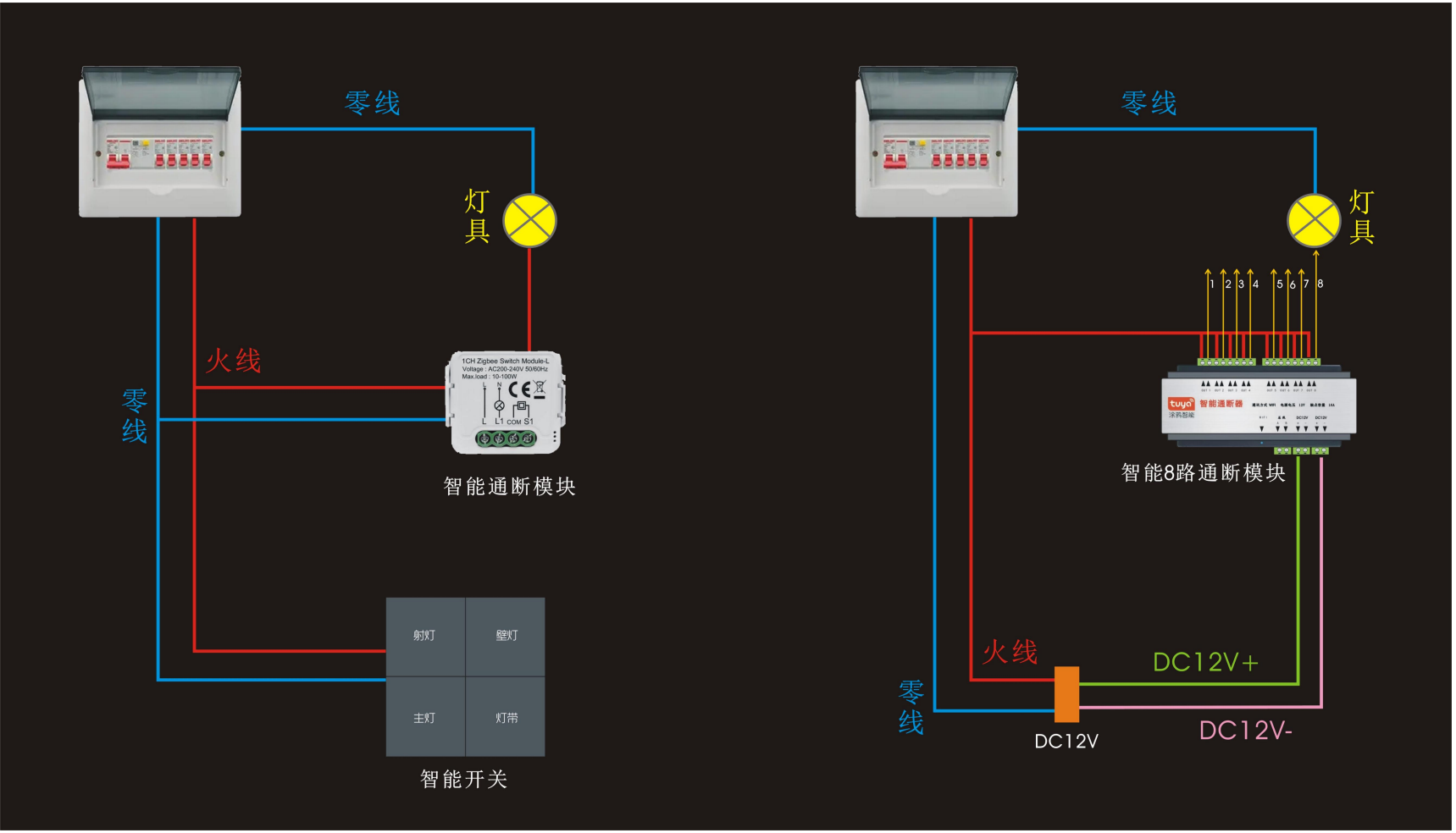
1.5 Double-control wiring diagram of intelligent switch

Left picture: When two or more switches are encountered, you need to control the same street lamp, the street lamp control line can be connected to any switch loop port, the rest of the need dual and multi-control switches, only need to turn on the power supply. When debugging, do multi-control correlation setting in the APP.

Right picture: When the controlled lamp itself is an intelligent lamp, it is recommended to use the long power supply method to connect the intelligent lamp. If the light control wire has been arranged to the switch box, directly in parallel with the fire wire.



1.6 Intelligent module wiring diagram

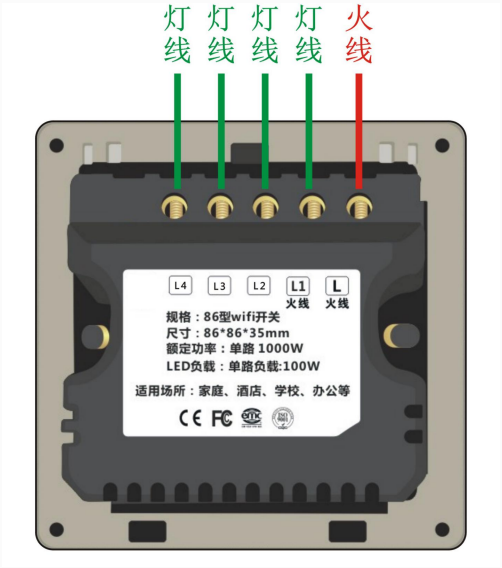


Left picture: When the controlled equipment (lamp) is zero and the controlled line is not arranged in the bottom box of the switch, the lamp (the wiring mode is the same as that of the intelligent switch); then switch other switches that need to manually control the street lamp and switch on the power supply. During debugging, do multi-control correlation setting in the APP.

Right picture: When there is a multi-channel light control line, arranged to the same point (distribution box), we can connect the light control line to the intelligent multi-circuit switching module. During debugging, the intelligent module and the switch loop to be controlled are set by automatic scenario linkage.

1.7 The wiring diagram of the intelligent single fire switch

Conventional single-fire switch wiring mode. When the zero line is missing in the switch bottom box, the single fire intelligent switch can usually be used. The fire line connects to L port, and the light control line connects to L 1 to L 4 ports successively. Remember that the single-circuit load control is> 12W, <150W.



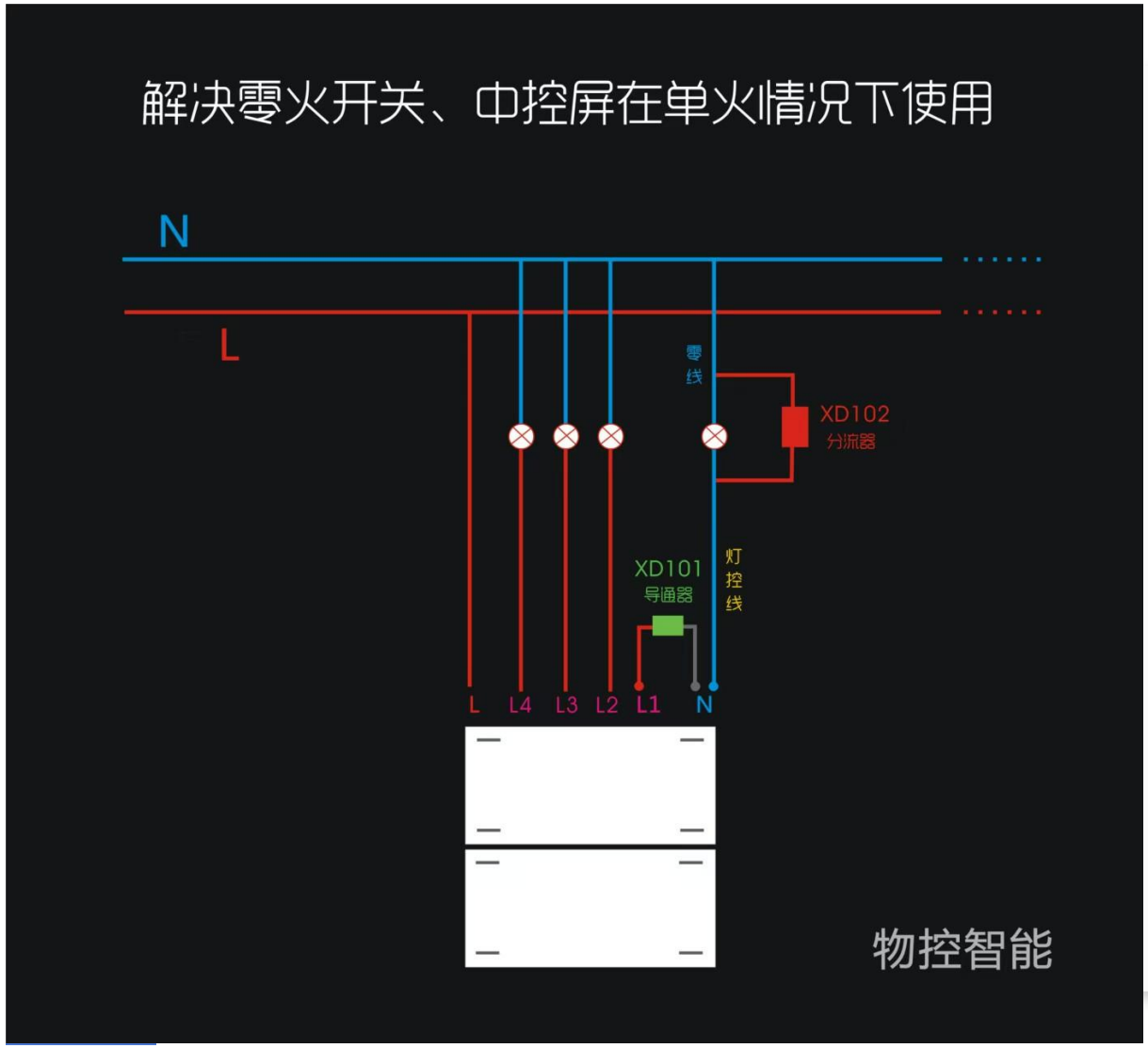
零线

灯具

火线

智能单火开关

1.8.1 Application diagram of intelligent zero-fire switch



Wiring mode of single fire generator with zero fire switch. Through the single fire generator module, you can still use the zero fire switch without the zero line. For the specific wiring mode, refer to the left figure.

A set of modules can drive three zero-fire switches (switching power <15W).

The load power of single switch is <400W, and 200W is recommended.

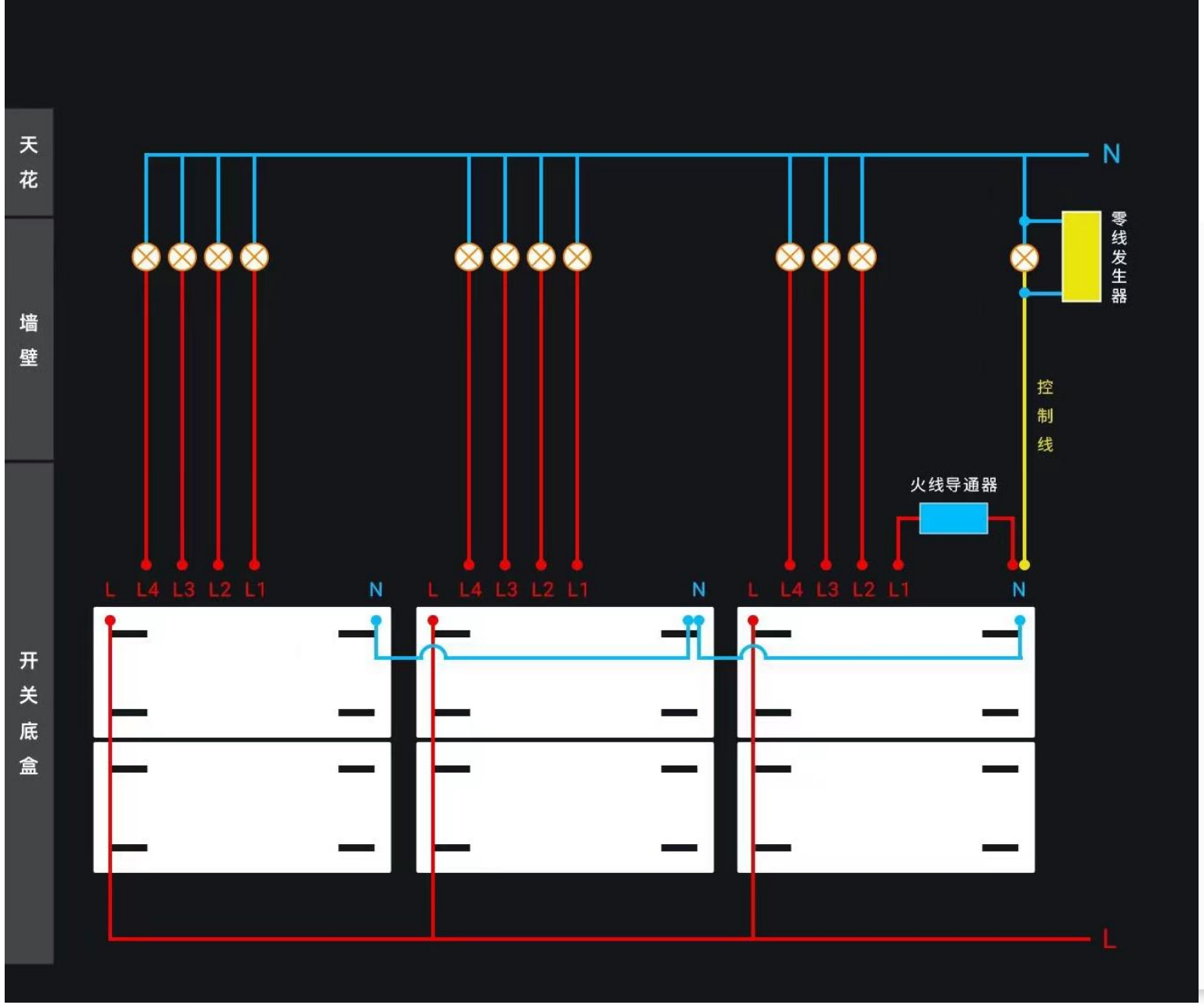
1.8.2 Fire wiring diagram of intelligent zero-fire switch

Three switches, sharing a set of single fire generator

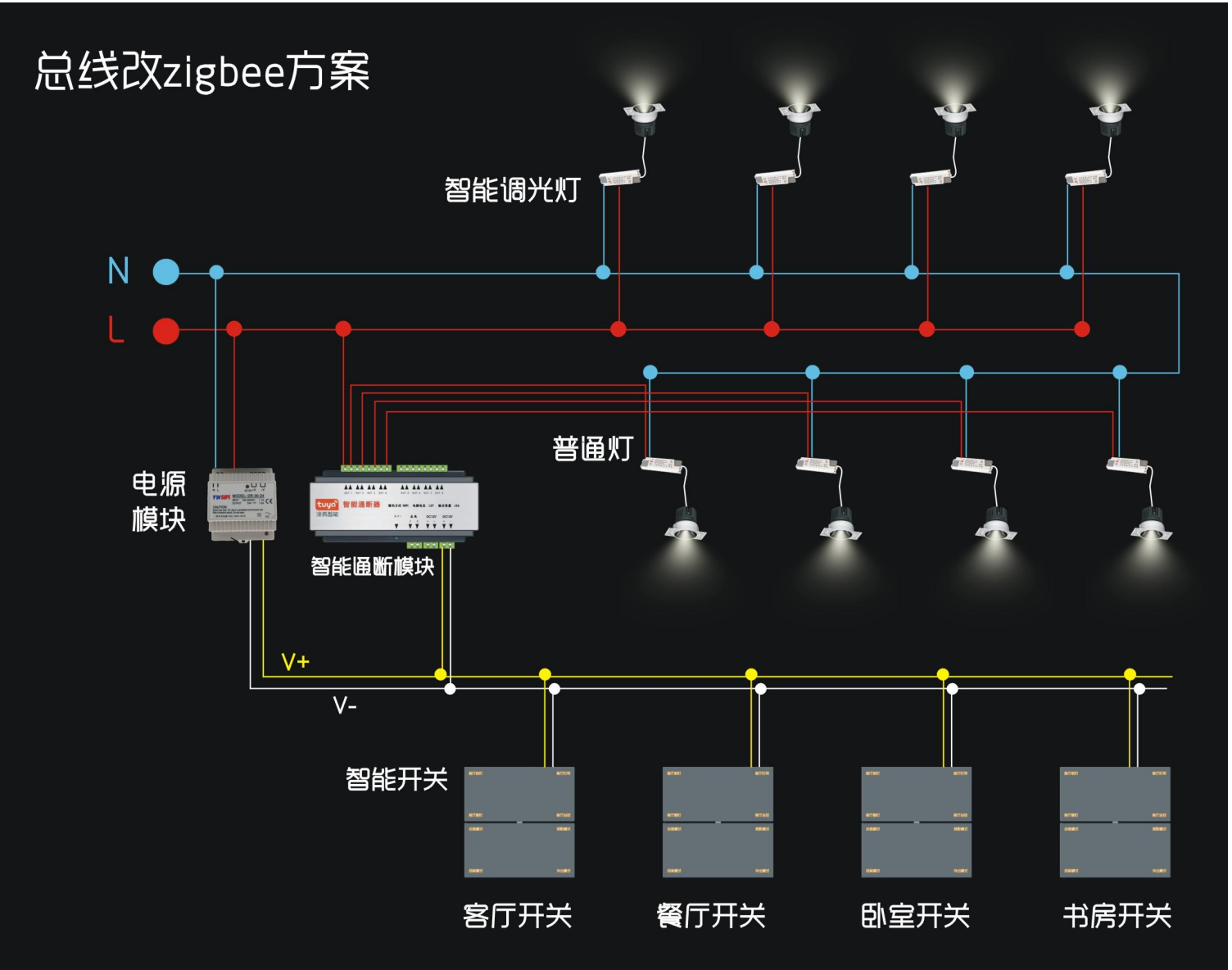
See the right picture:

A set of modules can drive three zero-fire switches (switching power <15W).

The load power of single switch is <400W, and 200W is recommended.



1.9 Routing mode of the weak-current intelligent switching panel



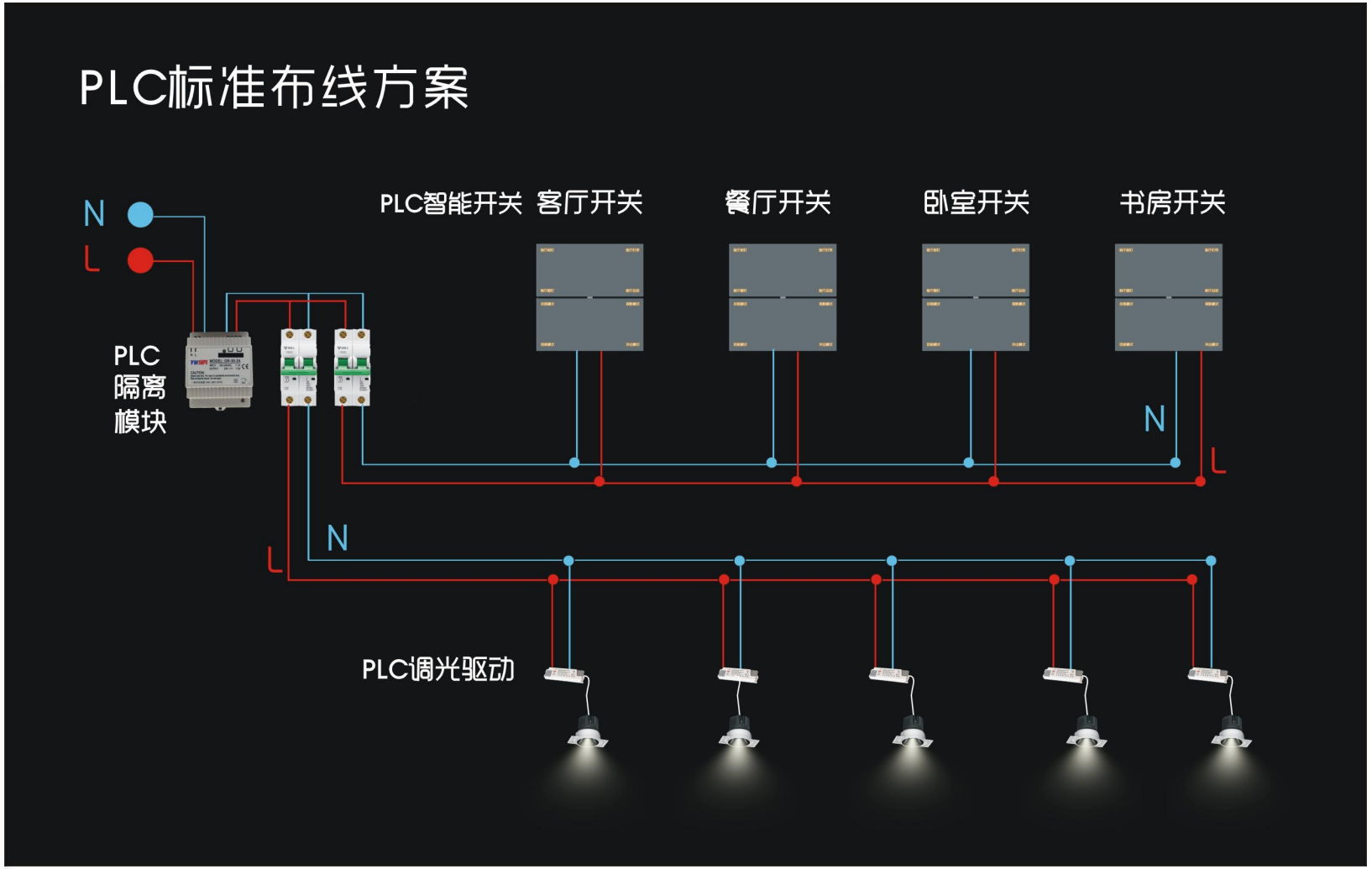
- The weak current intelligent switch panel is actually a modified bus scheme, because usually the switches of the bus scheme are all weak current power supply, so it can be used by weak current power supply + intelligent lamps and disconnection module to rectify the system.
- Weak current panels are usually 5V-24V wide voltage, need to use power voltage module to supply its power.
- As shown in the figure, the smart lamps adopt the long power supply mode;

Non-intelligent lamps are controlled by intelligent on-off module.

- Therefore, the equipment is installed and added to the APP, and the software is automated for scene setting and multi-control association for intelligent control.

Smart panel wiring diagram of the 2.0 PLC protocol

- PLC is a kind of power communication technology, is the wire as a data transmission line, in the power supply, and can carry the modulated electrical signals.
- In the same PLC smart home system, all PCL smart devices have added PLC-IOT communication module, which simply collude through wires without additional signal lines.
- However, in practical application, PCL electrical signals are vulnerable to the interference of the power environment, leading to instability. Therefore, it is necessary to add a PLC electrical signal isolation module in the front section of the controlled equipment to stabilize the system.



Section 2: About Intelligent lamps and lanterns

2.1 Classification of intelligent lamps

① Intelligent lamp definition: a single lamp or configured driver, with built-in intelligent communication module; can be added to the APP alone, remote control, voice control and other devices in the system can be called intelligent lamps.

② Smart lamps can be divided into zigbee smart lamps, BT (Bluetooth) smart lamps, Wifi smart lamps and other protocols.

③ Intelligent lamps from the lighting application, can be divided into intelligent spotlight / downlight, intelligent light belt / linear light, intelligent magnetic suction track light, intelligent ceiling light, intelligent lantern and intelligent stair light.

flush light panel

spotlight

tape lights

Magnetic grille lamp

Magnetic suction floodlights

2.2 Intelligent light / downlight wiring diagram:

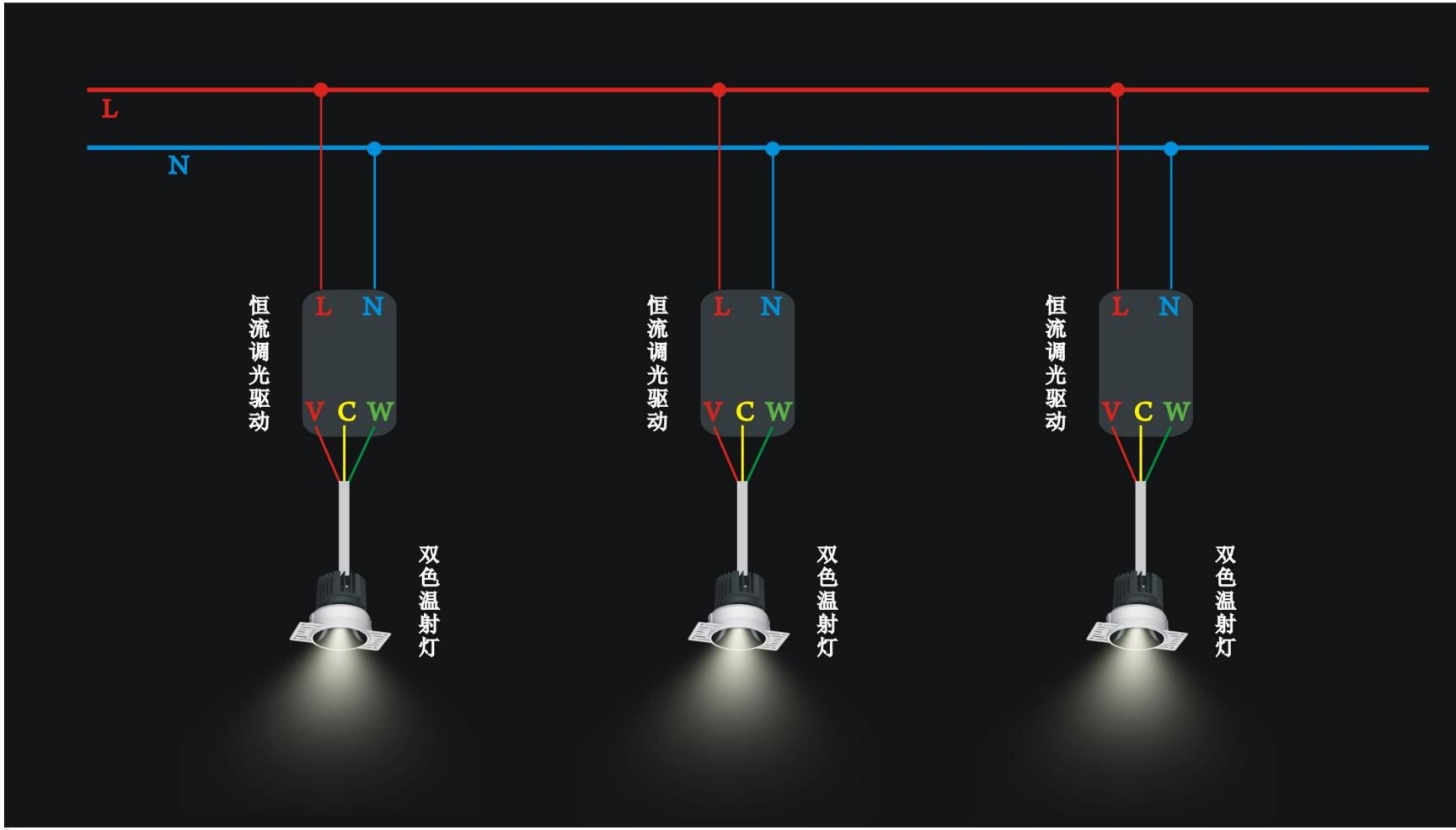
- Intelligent constant current dimming drive, built-in communication module, can be independently added by the APP. Conduct intelligent control.
- Drive input AC220V zero fire wire, output: DC48V (power: 5W / 7W / 10W / 12W / 15W).
- Two-color temperature light / downlight wiring is as follows:

V: Responsible for the power supply +

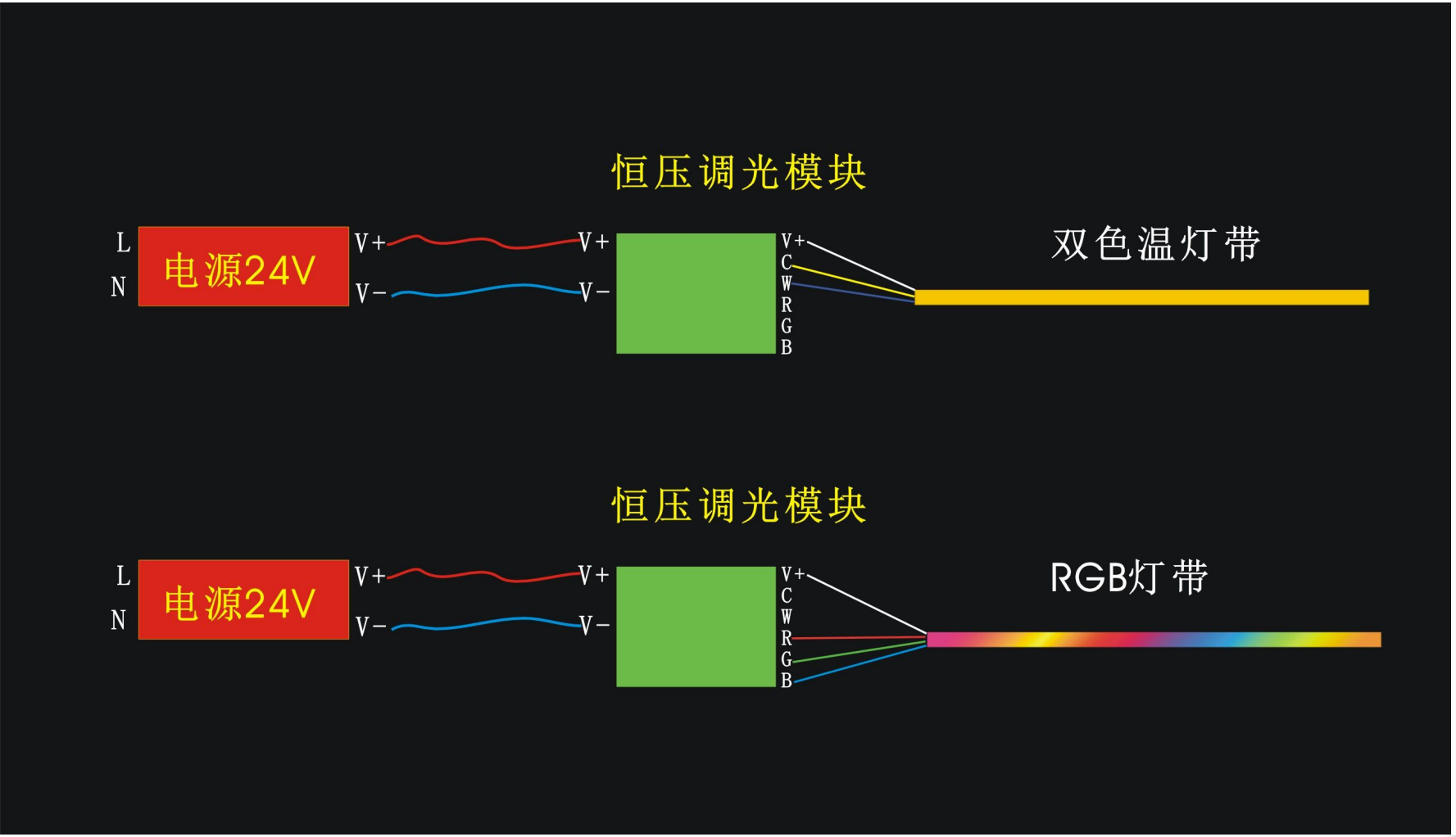
C: Responsible for cold white light (above 7000K)

W: Responsible for warm yellow light (2700K)

- For monochrome temperature spotlights / downlights, only V and (W or C).
- When added to the APP for adjustment, if the color plate color of the APP is exactly opposite to the actual display color, the wiring position of the W and C can be adjusted.



2.3 Diming belt wiring diagram:



- Intelligent constant voltage dimming drive, built-in communication module, can be independently added by the APP. Conduct intelligent control.
- Drive input: DC24V + 24V-, Output: DC24V + 24V-.
- The two-color temperature lamp strip wiring is as follows:

V: Responsible for the power supply +

C: Responsible for cold white light (above 7000K)

W: Responsible for warm yellow light (2700K)

- Only V and (W or C).
- The RGBCW lamp strip wiring is as follows:

V: Responsible for the power supply +

C: Responsible for cold white light (above 7000K)

W: Responsible for warm yellow light (2700K)

R: Responsible for the red color

G: Responsible for the green color

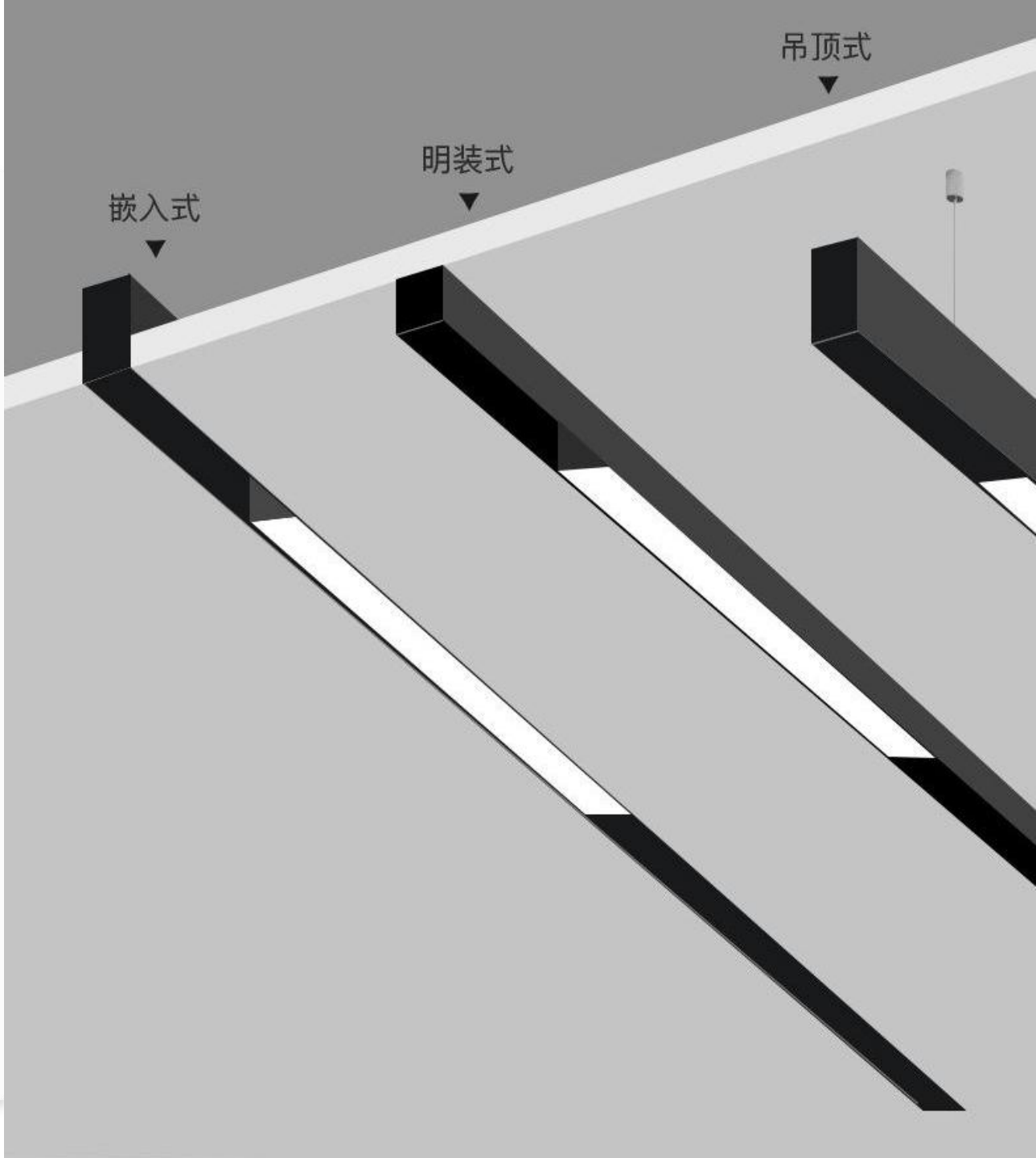
B: Responsible for the blue color

2.4 Magnetic suction track lamp:

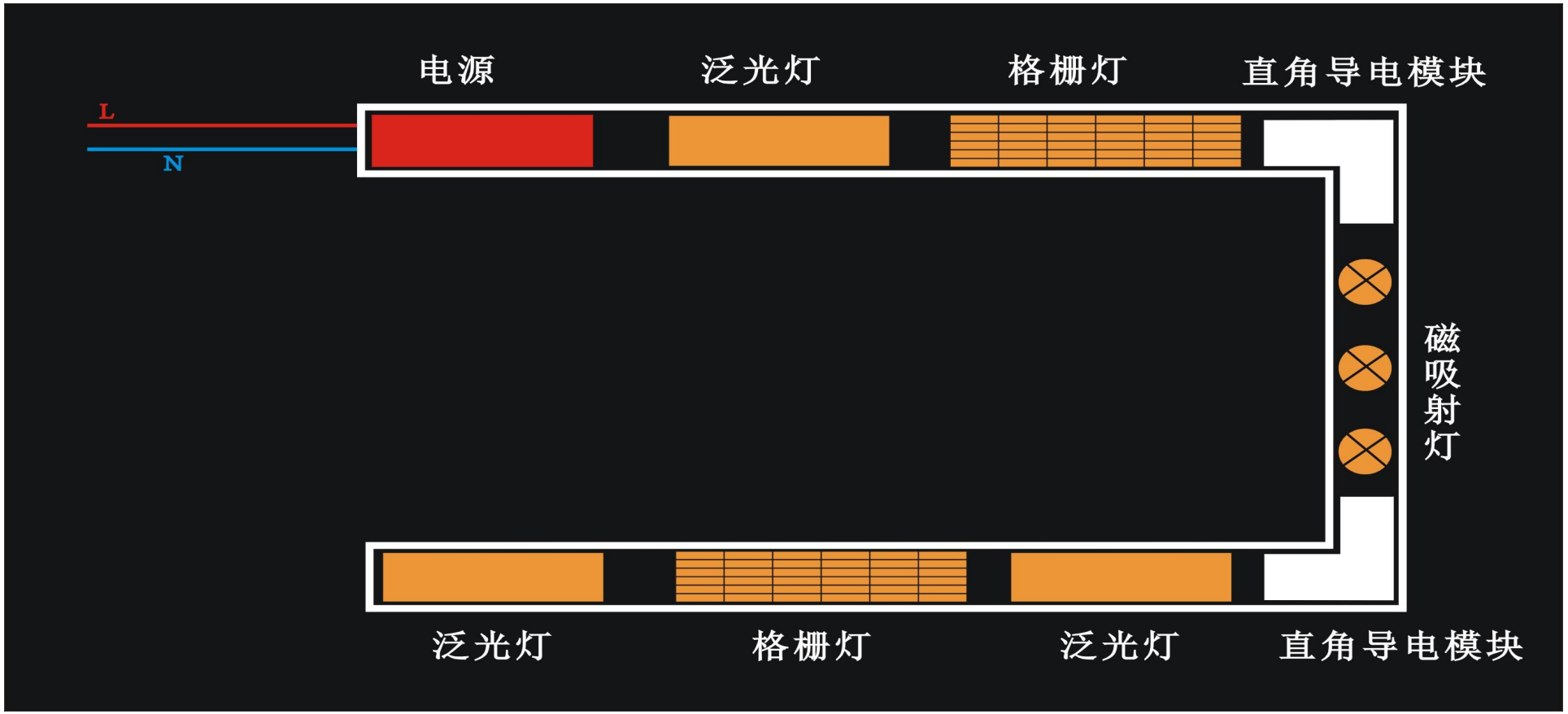
- The lamps of the magnetic suction track lamp are all modular, and each lamp is an intelligent individual.
- The design of magnetic suction track lamp is more, the most commonly used is the flood light magnetic suction lamp, grille magnetic suction lamp, folding money magnetic suction lamp, magnetic suction lamp, magnetic suction hanging wire lamp and so on.
- The magnetic suction lamp is embedded in the magnetic suction track card slot through the magnetic suction way, and the conductive copper strip on both sides of the card slot just coincides with the contact point of the magnetic suction lamp, playing the role of power supply.
- The power supply of the magnetic suction lamp, with the same size of the magnetic suction lamp, can also be embedded in the inner end of the magnetic suction track, and contact with the conductive copper strip for power supply.
- The magnetic suction lamp mostly powers the DC48V. Power supply has output: 100W 200W
- Magmagnetic track is divided into embedded track (need woodworking reserved for required)

Open loading track and hanging line installation track.

- The width specification of the magnetic suction track is mostly 3.5CM 2.0CM 1.5CM

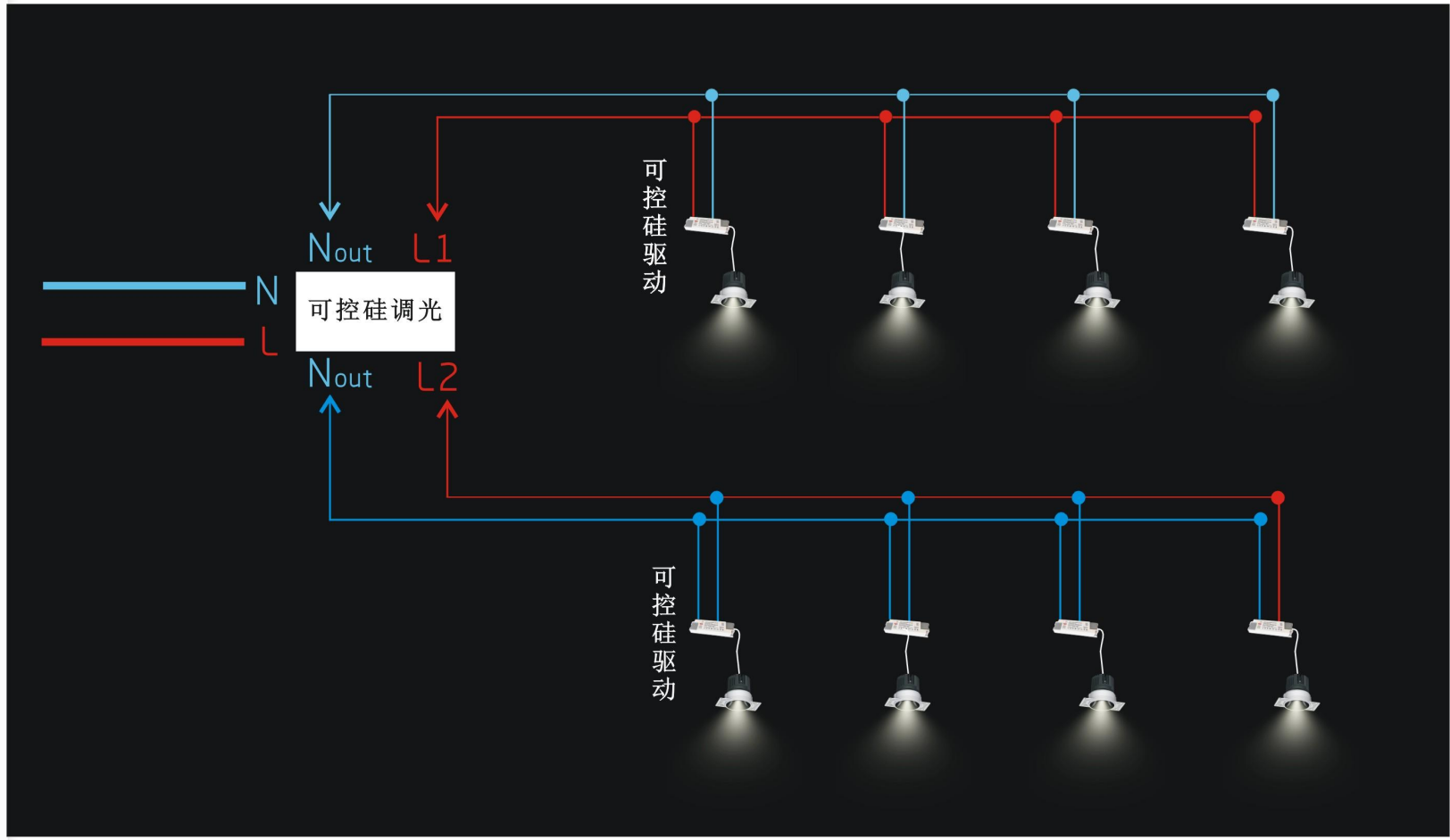


2.5 Schematic diagram of the magnetic suction lamp

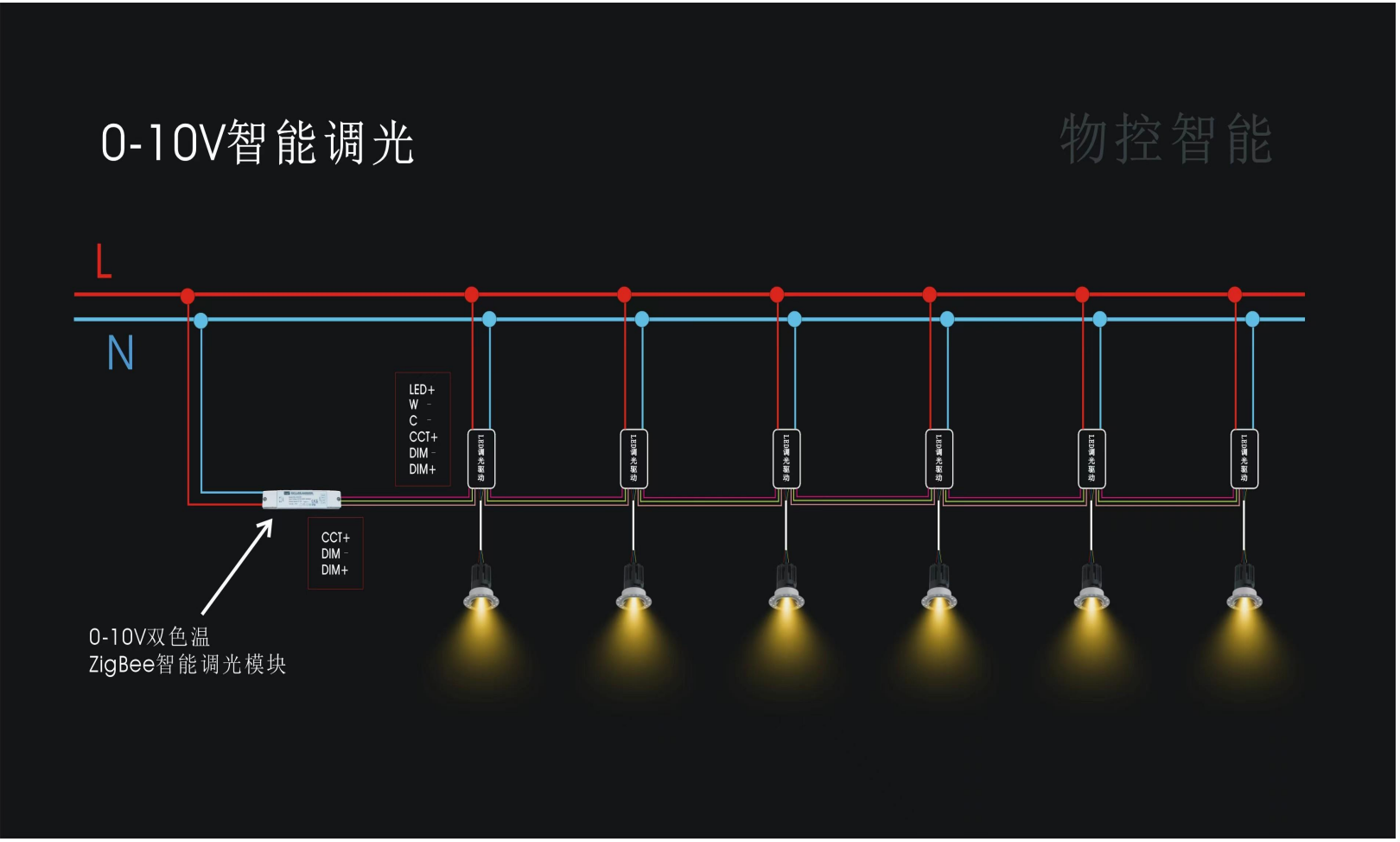


2.6 Schematic diagram of silicon dimming

- Silicon dimming is a kind of cluster dimming, which means that the use of intelligent silicon stor dimming module to output the corresponding voltage to the corresponding circuit and change the light brightness value to achieve the purpose of dimming.
- The dimming module can be divided into single and double circuit. See the figure on the right, which is the dual silicon control dimming module.
- Siristors can only adjust the brightness of the light, and it is not difficult to adjust the light color temperature and color.
- When our circuit lamp is incandescent lamp, it can be adjusted directly; but when we connect the LED lamp, the lamp needs to be driven for normal dimming.
- In addition to the thyristor dimming module, there is a thyristor dimming switch (knob style, touch sliding style) if the thyristor dimming switch is used, then the light control line is directly arranged to the switch bottom box.
- The single load of SCR intelligent dimming module is usually set to about 150W, which is suitable for all SCR drive.



2.7 schematic of 0-10V dimming / palette



- 0-10V dimming is also a cluster dimming mode. Through the intelligent 0-10V dimming module, 0-10V dimming drive is controlled to adjust the brightness and color temperature.
- Dimmer drive wiring for 0-10:

Need to access: zero line, fire line;

The two-color temperature lamp is: V + WC

The intelligent dimming module: DMI + CCT DMI-

- 0-10V intelligent dimming module wiring: zero line, fire line

The 0-10V dimming drive is: DMI + CCT DMI-

(DIM is responsible for brightness regulation, and CCT is responsible for switching color regulation.

- As shown in the figure, 0-10V dimming needs to string a three-core wire from the lamp driver to the position of the intelligent dimming module. Do not exceed 200 meters away.
- If it is only used to adjust the brightness, then the driver only needs to connect the DIM + / DIM-to the corresponding interface of the intelligent dimming module.
- A single 0-10V smart dimming module can usually carry about 200W of power.

Section 3: On the intelligent electromechanical control

In the smart home system, in addition to the intelligent switches and lamps that we have learned before, the application of the electromechanical control is also very wide. The intelligent electromechanical control includes all the intelligent control about the realization of the motor rotation mode. For example: electric curtain motor, electric window push device, automatic gating, mechanical valve, garage door, channel gate and so on.

Smart home system is based on the basis of the original electric, the addition of various IOT control modules, can make it realize remote control, voice control, scene linkage control with other intelligent devices and other required timing, automatic control and so on.

Part of the electromechanical control equipment is built-in IOT communication module factory, itself is an intelligent independent individual. There is also a need for an external intelligent control module, to achieve intelligent control.

When the communication module of different protocols is put into the electromechanical equipment, it determines through which protocol the equipment is communicated, and the networking mode of different protocols is also different. For example: curtain motor has WIFI protocol, also has ZigBee protocol, of course, there will be Bluetooth protocol.

Open and close curtain motor

Dream curtain motor

Curtain motor

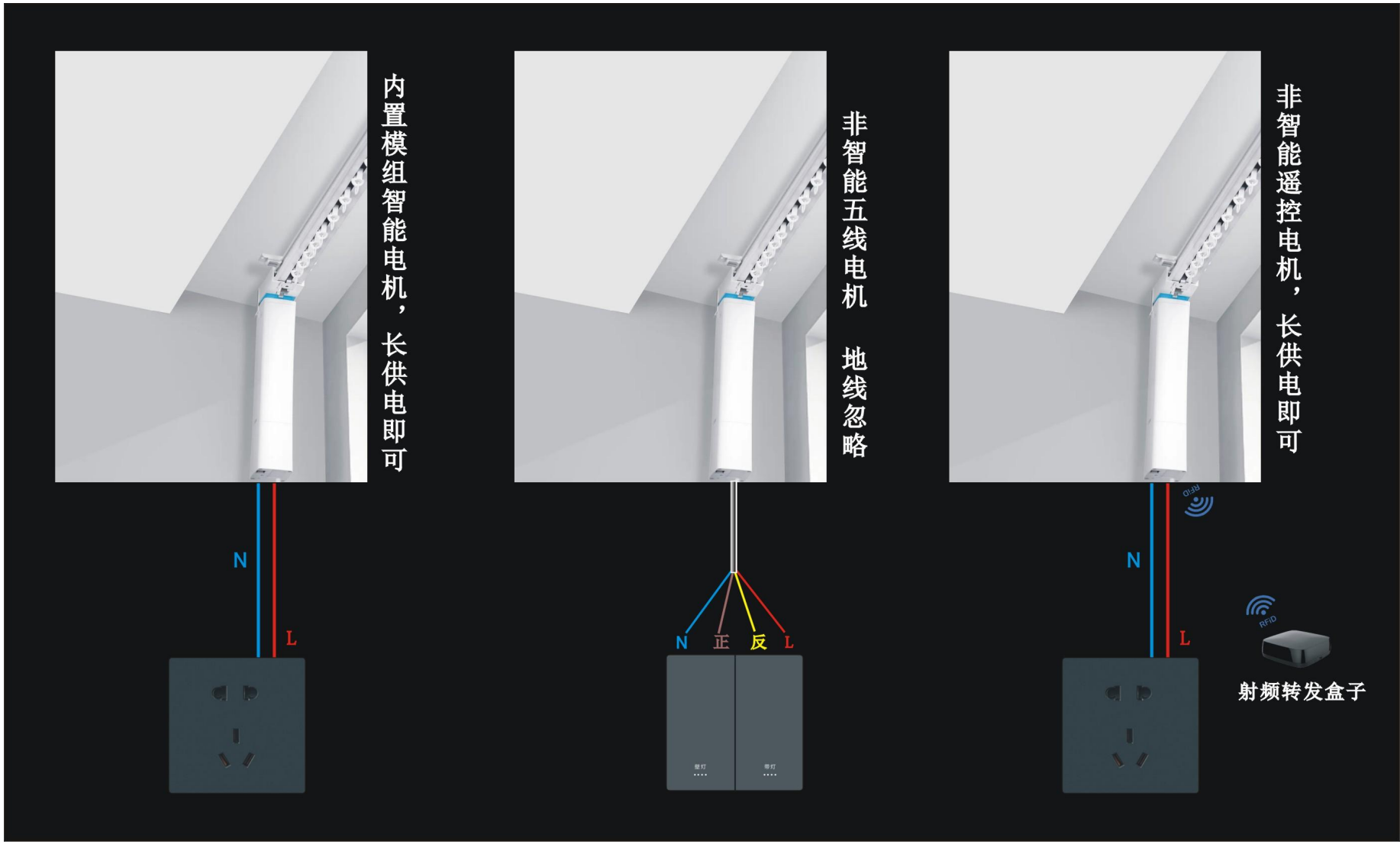
Push window motor

Automatic door motor

Electric manipulator valve

3.1 Intelligent curtain opening and closing wiring mode

- The curtain motor with built-in intelligent communication module can be directly supplied and added to the APP through the corresponding network access mode for intelligent control.
- The non-intelligent strong electric five-wire motor adopts the docking intelligent curtain switch or intelligent curtain module, and then the switch or module is added to the APP for intelligent control.
- When the non-intelligent curtain motor has no intelligent module, the remote control signal is learned by the RF repeater, which can also be added to the smart home system.
- For the track box of the curtain motor, it is recommended that carpentry reserve a width of more than 20CM.
- The grid entry mode of the curtain motor refers to the debugging part of the later study.
- The control mode and connection mode of the rolling curtain motor are similar.

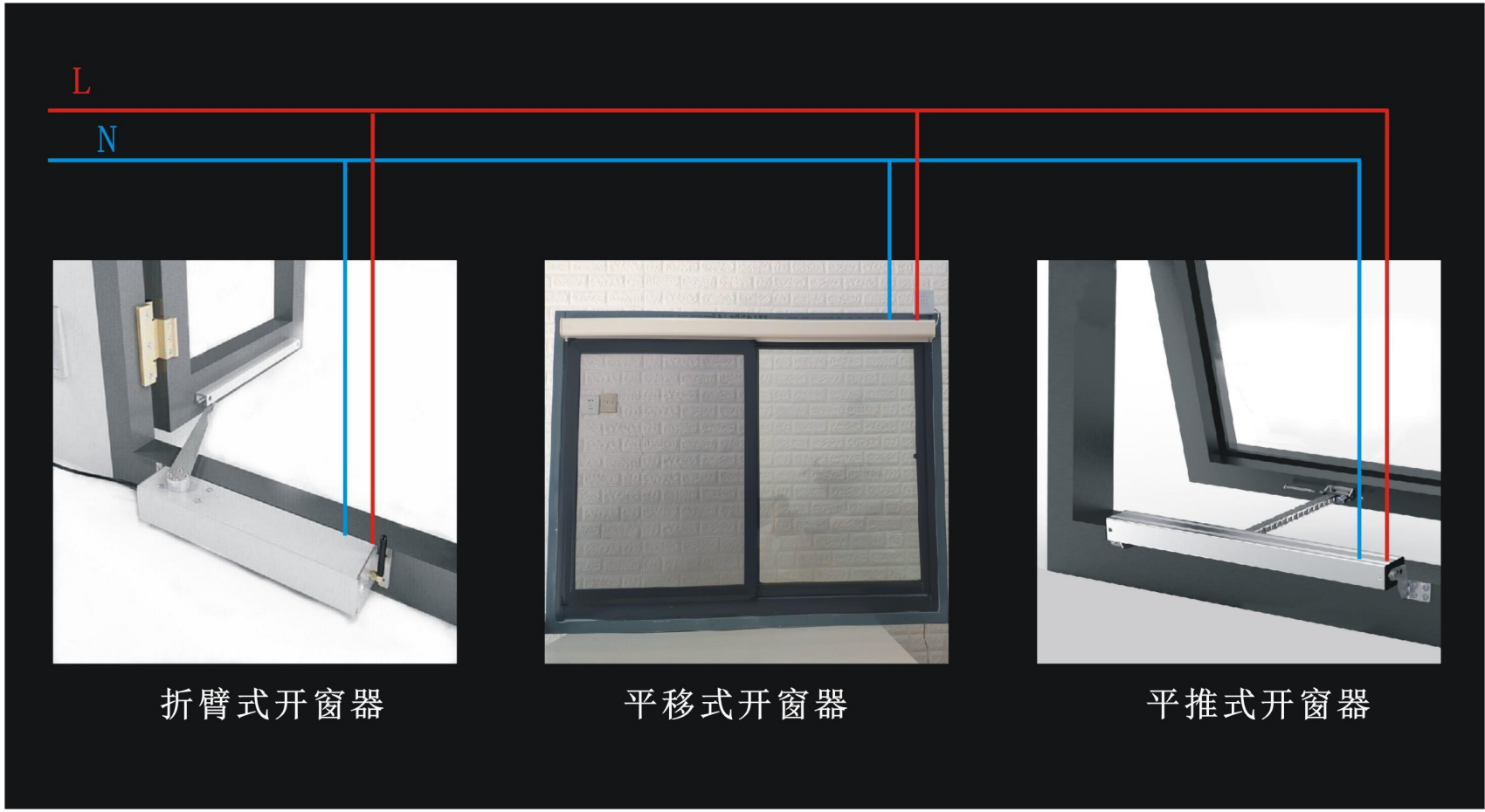


3.2 Intelligent Dream Curtain

- Intelligent dream curtain is a built-in IOT module, which can be added by APP for remote control, AI voice control, scene linkage control, group one-click control, etc.
- The difference between dream curtain and conventional opening and closing curtain lies in the shading form used is different. Dream curtain using cloth yarn integration, fragment type design. Each piece of shading fabric can not only be open and closed control, but also 180 degrees of rotation control, to achieve full shading, half shading, full opening purpose.
- According to the size specifications of the dream curtain track mold and fabric on the market, each one-sided material width is usually divided into two specifications: 10CM and 12.5CM. The width of the fabric is directly related to the hook spacing during the production of the track, and the track factory needs to be informed when customization the track.
- The rated power of the dream curtain motor is generally about 80W, supporting the track within 6 meters. Open over 6 m recommended; one motor at each end.
- It is recommended that the curtain box reserve more than 18 cm.

3.3 Intelligent window window control

- The window motor with a built-in intelligent communication module can be directly power supply and added to the APP through the corresponding network access mode for intelligent control.
- Through the picture on the right, we can see that different Windows use different styles of window motors, and the installation methods are also different, refer to the product installation instructions.
- Window motor power supply is usually divided into DC24V and AC220V two, in the optional products, we should pay attention to the reserved power supply belongs to that kind of specification.
- If you encounter a non-intelligent window motor, you can learn RF remote control signal through external intelligent module, intelligent switch or RF forwarding, which is similar to the non-intelligent electric curtain motor mentioned above.
- Automatic door motor and controller, there are few built-in intelligent module, all need to connect with external intelligent control module or RF forward to learn RF remote control signal control.



3.4 Routing mode of mechanical valves

- The manipulator valves are all built-in intelligent communication modules, which can be added by the APP for remote control, AI voice control, scene linkage control, group one-click control, etc.
- The manipulator valve usually uses AC220V and DC12V two power supply is optional, DC12V comes with a power adapter, in the installation of the equipment accessories should be reserved strong electric socket.
- The manipulator valve can also be divided into WiFi communication and zigbee according to the built-in communication module properties; the RF RF module is controlled by remote control.
- Mainly used for the valve control of water and trachea. According to the size of the pipe, the factory card has specifications applicable to 4 and 6. There are also adjustable clips for stainless steel fasteners.

Section 4: On the intelligent home appliance control

At present, there are two ways for smart home appliances:

1. Some home appliance manufacturers connect with the smart home platform, and the home appliance equipment can be directly added in the corresponding APP. For example: common intelligent humidifier, smart TV, smart refrigerator, intelligent electric fan, intelligent clothes hanger, intelligent sweeping robot, intelligent sound and so on.

2. When home appliances are not connected with the smart home platform, it is necessary to use infrared transponder, radio frequency transponder, intelligent socket equipment, intelligent on and off module, etc., to control the remote control signal learning, power and supply switch management and other means. Controlled devices can also be added to the APP to carry out relevant intelligent control and scene linkage.

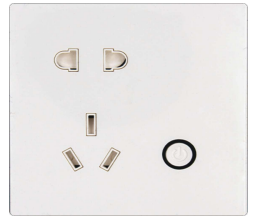
3. Cinema home appliances equipment, in addition to the above control mode, can also with the help of special audio and audio central control host, through 232 serial port signal, the power amplifier, projection, decoder, player and other equipment for centralized addition, unified central control control.

From left to right, the first and second are controlled by learning the remote control signal of the home appliance; the third, fourth and fifth are used to control the power supply of the device.

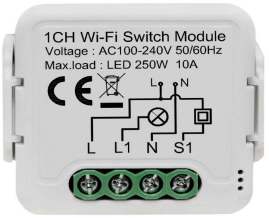
The RF + infrared transponder

Single infrared forward

Smart mobile socket



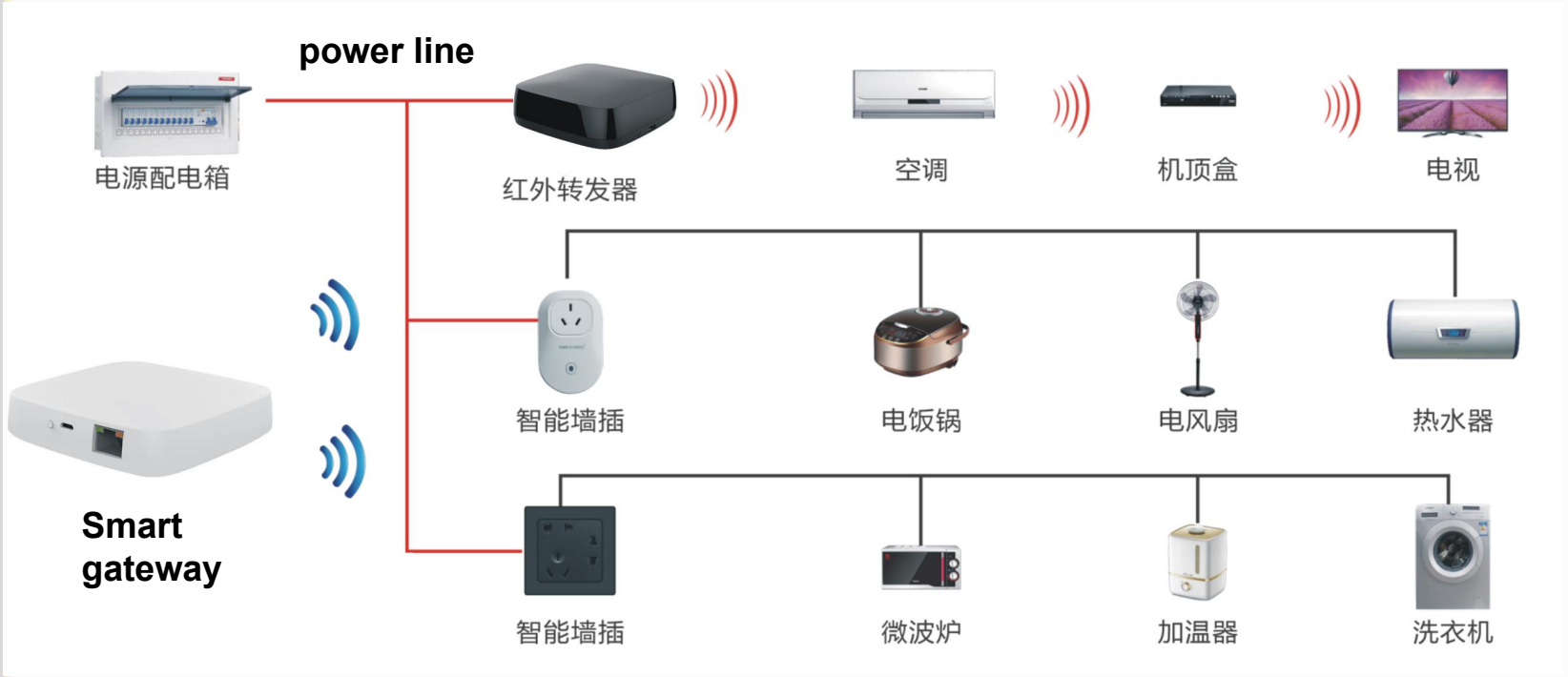
Smart wall socket



Dark equipped intelligent module

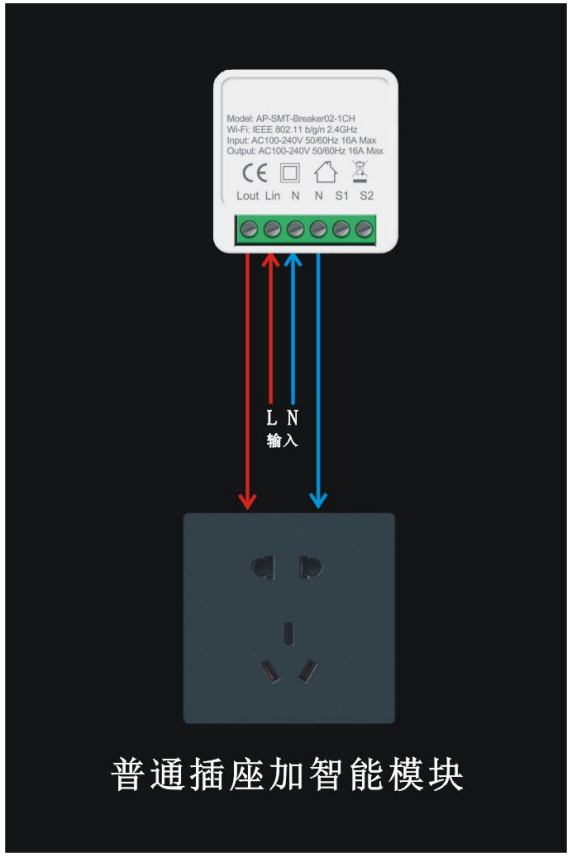
4.1 Household appliance control topology diagram

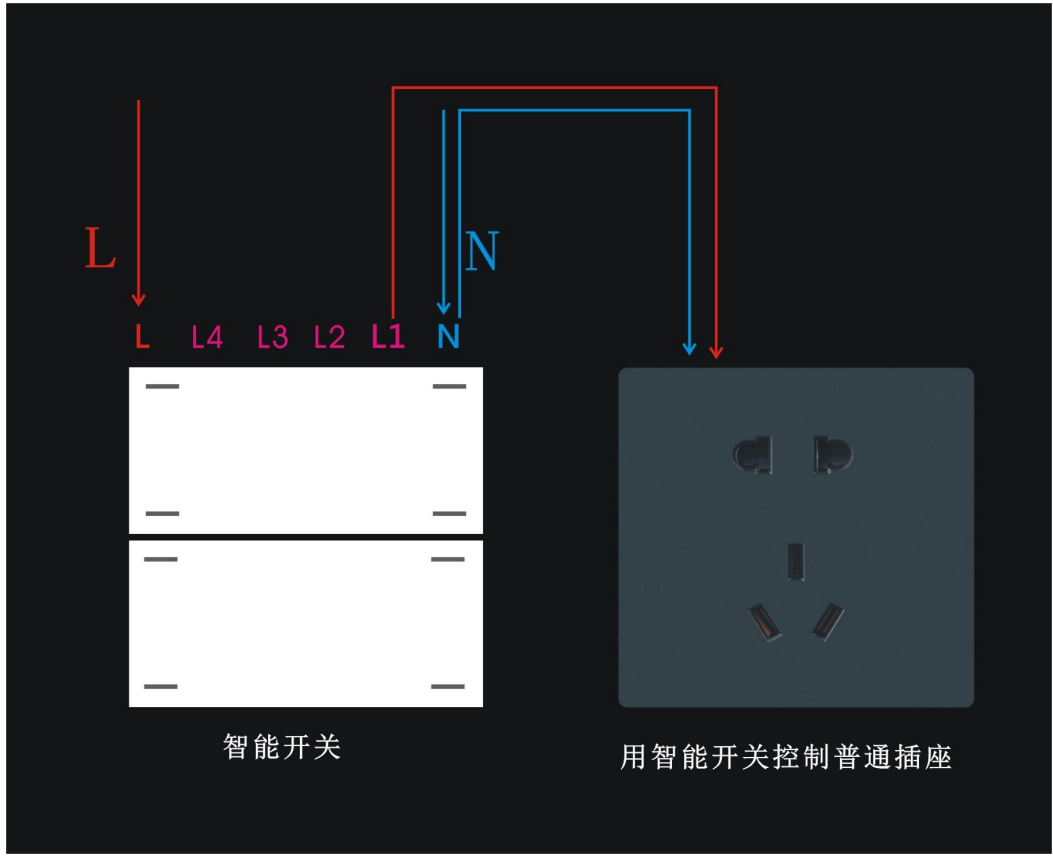
- The remote control signal transponder usually powers the DC5V adapter, and a power outlet shall be reserved in the installation area.
- When the remote control signal is learned, there will be an uploaded remote control signal database, and the corresponding database can be selected according to the type and model of the control equipment. If a suitable database is not found, manual learning should be conducted, and the specific learning steps should refer to the later debugging data.
- The smart socket can be energized, and the controlled device is plugged into the socket. After the smart socket is added to the APP, the intelligent power-off control can be realized.
- In addition to connecting the zero line and the fire line, the intelligent on-off module also needs to connect the power control cable of the controlled device to the controlled terminal of the module.
- The above devices are available in WIFI and zigbee models.



4.2 The on-off module is connected to the ordinary socket

- Intelligent on and off module, in addition to the previous we can be connected to the lamp control can also be used to connect the ordinary socket, to achieve the control of the power socket intelligent off, is also equivalent to the indirect intelligent control of the electrical equipment inserted in the socket. The S1 S2 above the intelligent on-off module is used to connect the non-intelligent ordinary switch panel.
- In the same way, we use the adjacent intelligent switch a button, the output control line is connected to the ordinary socket power supply use, can also achieve intelligent control of the ordinary socket.





Section 5: About intelligent HVAC control

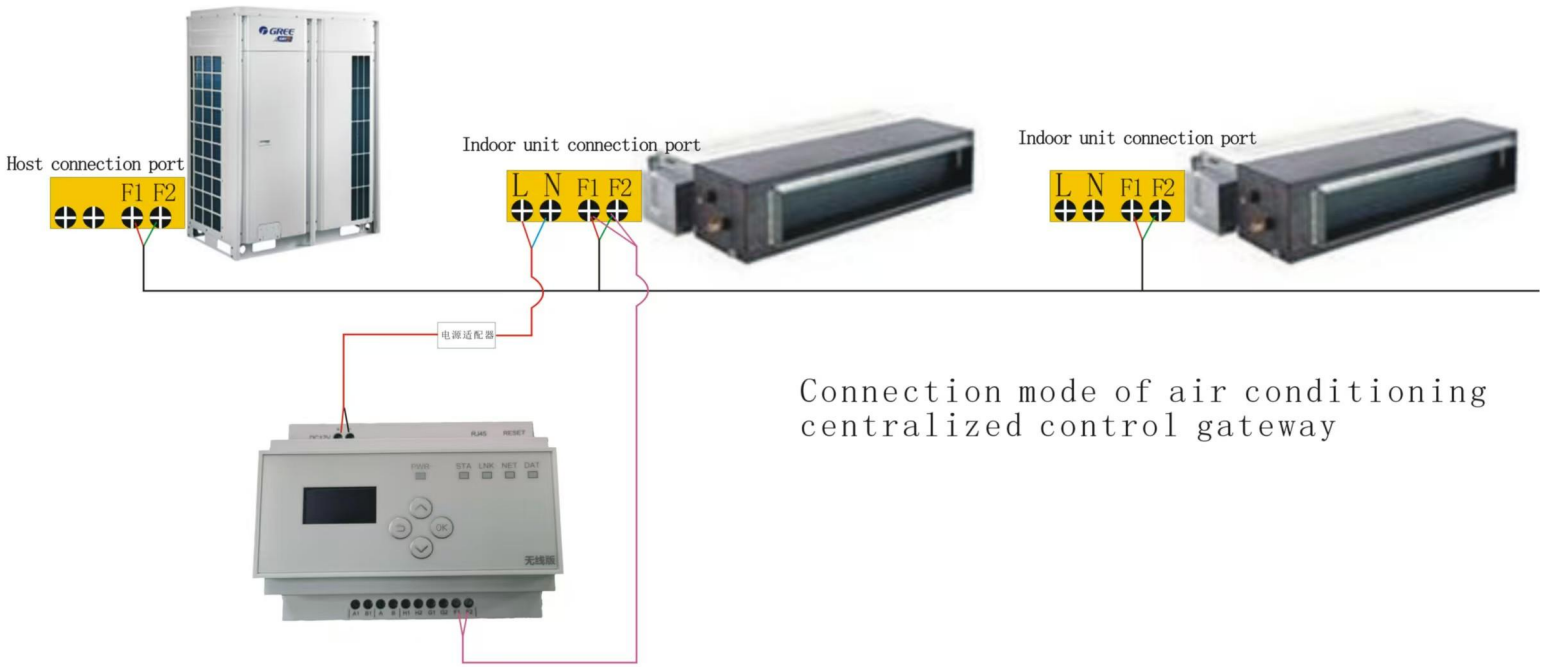
Intelligent HVAC mainly includes three categories: central air conditioning system control, floor heating system control and fresh air system control.
Through the special VRF gateway, intelligent temperature controller, infrared transponder and other intelligent devices to connect, the hVAC equipment can be added to the smart home system, remote control, AI voice control, intelligent scene linkage control, automatic sensing control, etc.
Central air conditioning can be divided into water machine system (mainly York, Turing, Carrier, Mcville and other brands), while the fluorine machine system is mainly dominated by Daikin, Mitsubishi Electric, Mitsubishi Heavy Industries, Hitachi, Haier, Gree and other brands.
The most direct way to control the water machine is to replace the original temperature controller panel and replace the intelligent temperature controller panel. At the same time, the intelligent thermostat panel can also be used to control the floor heating and fresh air, and also directly replace the thermostat panel.
Fluorine machine is mostly controlled by VRF centralized control gateway and wire control gateway. At present, the brands of such gateway are: Zhonghong, Demry and IRACC.

Centralized control gateway

Line control gateway

Intelligent temperature controller

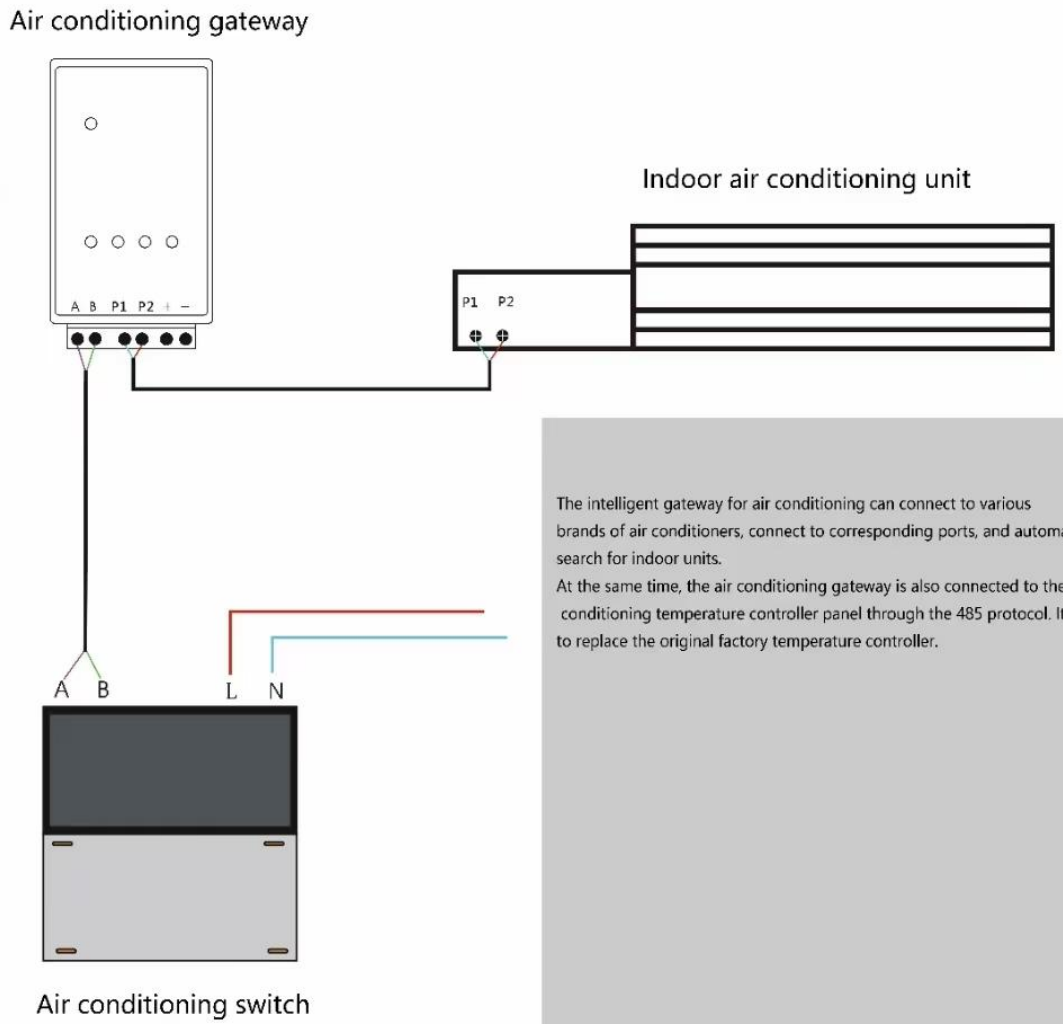
5.1 Centralized control gateway of central air conditioning



- Intelligent air conditioning centralized control gateway, with built-in WIFI or zigbee communication module, can be directly added to the system for relevant intelligent control.
- The centralized control gateway is connected to the air conditioning indoor unit port through the 485 data line. All brands of air conditioning indoor units have corresponding wiring ports for connecting with the centralized control gateway. For example, Dajin F1 F2; Midea P1 P2; Hitachi 1 2..... refer to the centralized control gateway instructions for details.
- The centralized control gateway can add 64 indoor units, and the number of indoor units waiting by different brands varies; it is best to control within the same outdoor unit.
- The centralized control gateway adopts DC12V power supply, which can take power from the wiring port of the indoor unit. The outdoor unit model should be provided to determine the firmware program of the centralized control gateway.

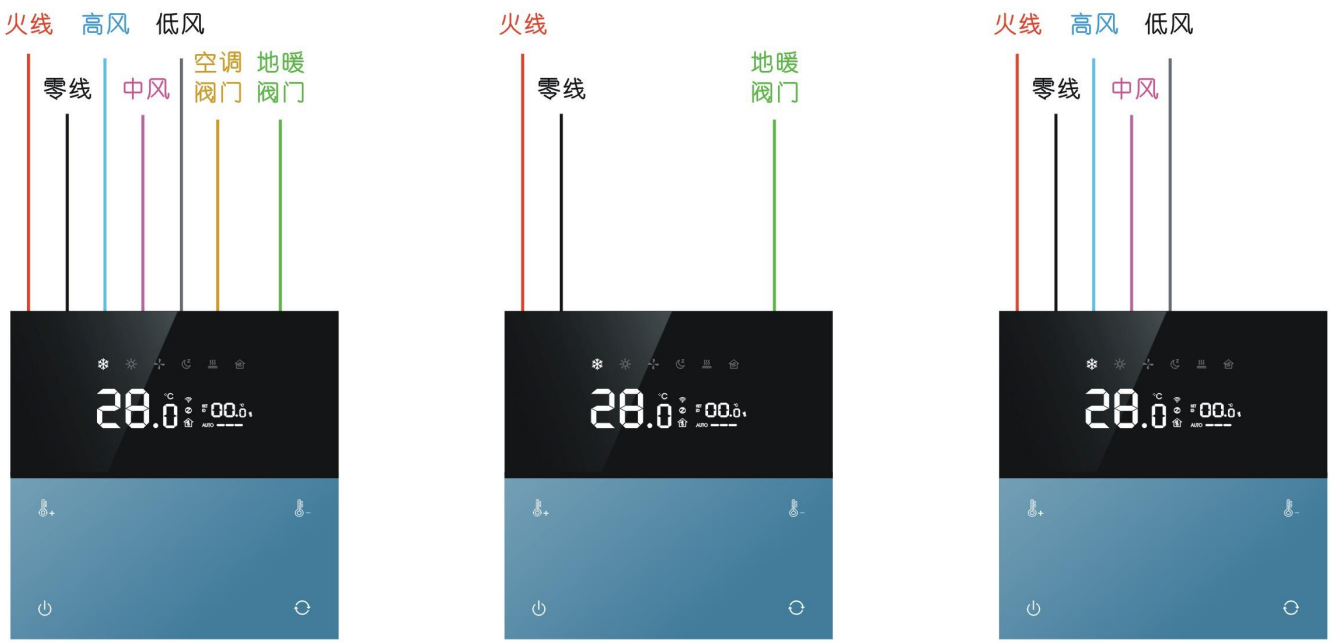
5.2 Intelligent wire control gateway

- Intelligent air conditioning wire control gateway, is also a built-in WIFI or zigbee communication module, can be directly added to the system for relevant intelligent control.
- The wire-controlled gateway does not need additional access to the power supply. The air conditioning indoor unit 485 can output an active signal, which can directly supply power to the wire-controlled gateway.
- The 1-to-1 working mode of wire-controlled gateway cannot be used as centralized control multilink.
- The wiring port labeling of the wire-controlled gateway and the indoor unit is also different from the air conditioning brand. For example, Toshiba air conditioning is the P1 P2 port of the gateway connected to the indoor unit AB port. Gree is gateway P1 P2 port to indoor unit H1 H2 port... see manual for details.
- When the original temperature controller panel is required to be replaced, the AB of the temperature controller panel needs to be connected to the AB port of the wire control gateway.
- Provide the original temperature controller panel model to determine the firmware program of the wire control gateway.



The intelligent gateway for air conditioning can connect to various brands of air conditioners, connect to corresponding ports, and automatically search for indoor units.
At the same time, the air conditioning gateway is also connected to the air conditioning temperature controller panel through the 485 protocol. It is possible to replace the original factory temperature controller.

5.3 Application of intelligent temperature controller (water machine)

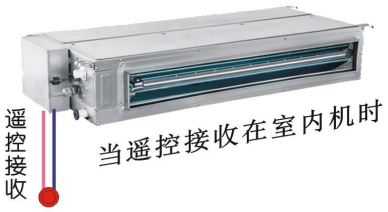


接空调+地暖　　接地暖　　接新风

- Intelligent water machine temperature controller, built-in intelligent communication module, can be added to the intelligent control system through WIFI or zigbee protocol, to realize intelligent control.
- Refer to the wiring mode on the left picture, and compare the wiring according to the required functions of the field HVAC equipment.
- Air conditioning corresponds to four relay output, respectively control the fan disk and valve. The new fan is mainly used to control the air volume of the fan disk. If the two wind speed, it only needs to connect high and low end.
- Floor heating is divided into two types: water floor heating and electric floor heating. Among which the power of electric floor heating is relatively large, and the temperature controller needs at least 25A relay to make it work. Water floor heating temperature controller connected to electric floor heating, can consider external AC contactor.
- The temperature controller is AC220V power supply, the bottom box needs to reserve zero fire wire.

5.4 Remote transmission control of intelligent temperature controller

- The intelligent temperature controller also has an infrared remote control emission function. When we encounter the hVAC equipme with infrared reception, we can use the infrared emission to achiev intelligent control.
- Intelligent temperature controller is equipped with infrared code database, find the corresponding brand of infrared code, setting c be completed. According to the instructions for the specific operat
- Intelligent temperature controller installed bottom box, need zero f wire, infrared emission control line + - (polar). From the installatior bottom box to the air conditioning return outlet, hidden installation
- If the infrared receiving port of the HVAC device is in the indoor ur position, align the infrared head at the infrared receiving port of th indoor unit. The infrared reception of some air conditioners is set the wire control panel. At this time, the wire control panel is move the return air outlet of the air conditioner to hide the installation. Empty the bottom box for installing the intelligent temperature controller.



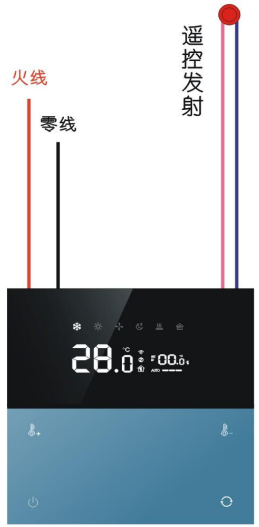


图1

将传统面板移至回风口，隐藏安装。

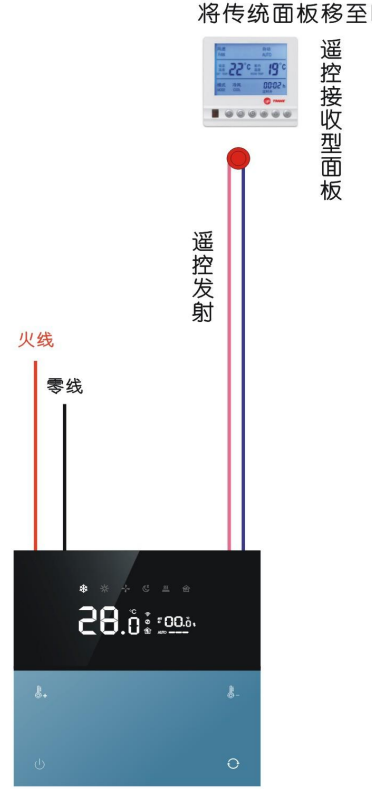


图2

Section 6: About the intelligent background music

The background music system itself belongs to an independent weak current system. The system principle is also relatively clear and simple, the basic configuration is the power amplifier, the player plus the sound to complete. However, in these basic configuration, plus the intelligent module or docking with the intelligent system cloud cloud, the centralized management and control of the intelligent home system can be realized.

The power amplifier and player of smart background music are usually integrated LCD tablets, and its operating system is Android system and Linux system. There are 4 inches (86 * 86), 7 inches, 8 inches, 10 inch appearance shape, bottom box into the wall installation. Music host can be built-in sound source, SD sound source, online audio source (QQ music, Kuwo music box, Migu music), external audio source, Bluetooth sound source, etc. Can be connected to passive sound, top sound, top sound parameters are usually: fixed resistance, 8 ohm, 10W-30W, opening size according to the needs of the field environment, can choose 165mm / 178mm / 185mm / 220mm and so on.

The intelligent background music host not only has its own music-related functions, but also has the role of central control of smart home devices. The devices, scenes and groups in the APP can realize touch control and voice control on the LCD host. At the same time, there are some hosts with built-in zigbee gateway module, which can be used as a smart home gateway (there is a special explanation behind the gateway).

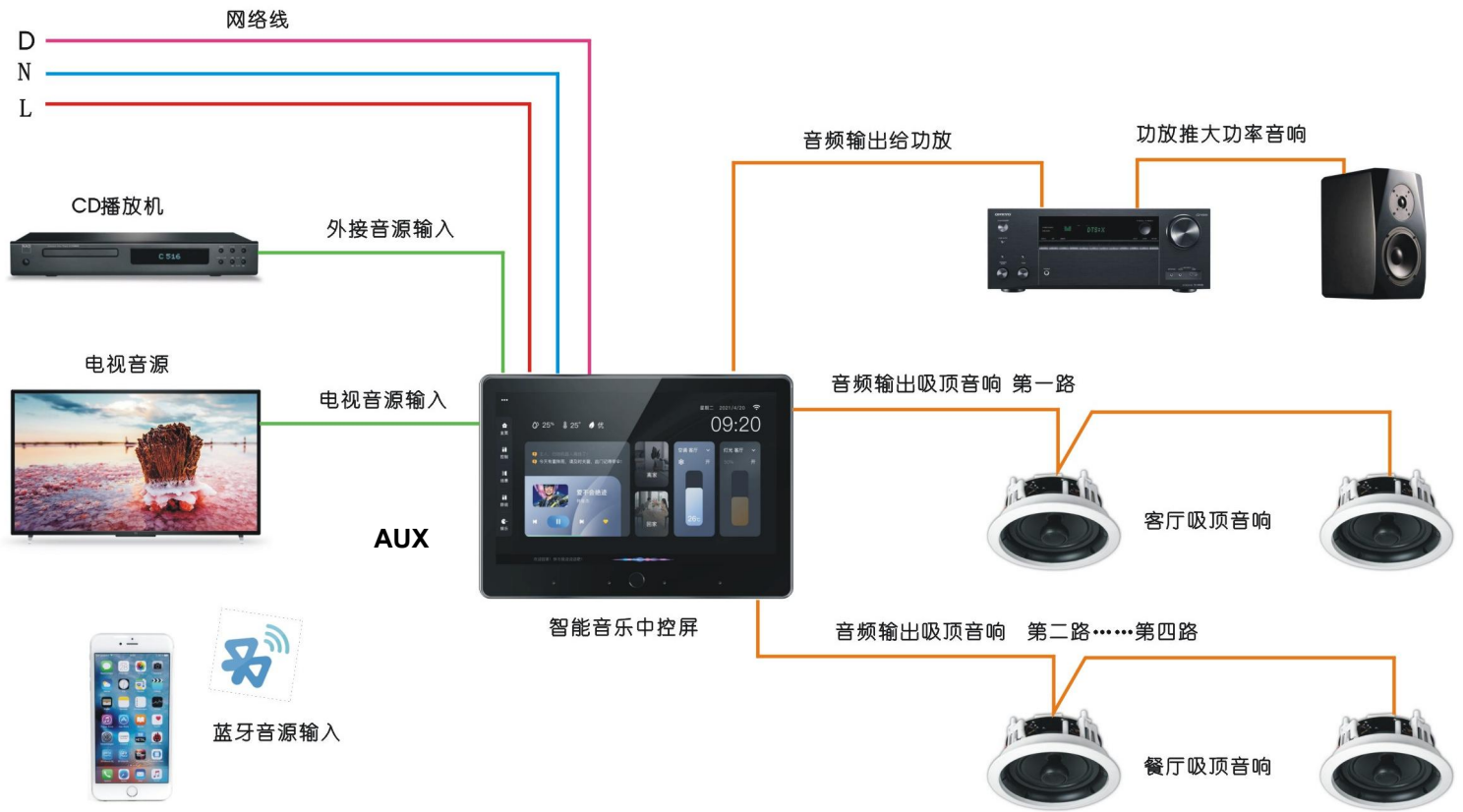
The 8-inch central control music host

The 7-inch central control music host

A 4-inch central control music host

Top stereo wired / Bluetooth

6.1 Intelligent music wiring diagram



- Intelligent music host base is 86 * 86, use the conventional switch base box; for other specifications of the base, follow the product specification or consult the parameters provided by the equipment manufacturer. For example: 175 * 115 * 75 (thickness)
- Zero line, fire line and sound line are reserved in the background music box; the network cable is reserved according to the situation, because almost all music consoles have WIFI wireless networking function.
- Other audio sources and audio lines are arranged according to the actual requirements; ignored.
- The music host can usually load 2 groups or 4 groups of audio lines, the number of loaded audio and the total power of the host load. Arrange sound reasonably after accounting.
- When the Bluetooth function of the music host is driven as receiving, it can connect the sound source of the Bluetooth mobile phone; when the Bluetooth function is driven as transmitting, it is used to connect the Bluetooth audio to transmit the audio function.

Section 7: On security and environmental sensing

Sensing equipment of smart home system is the main component of automation. Through automatic judgment and automatic operation of the whole system, the sensing equipment also has important tasks such as safety prevention and environmental detection. According to different environments and different intelligent needs, the choice of appropriate sensing device is the key point that must be paid attention to when designing smart home. Sensing and recognition devices can be roughly divided into two broad categories:

① Security: human mobile sensor, human existence sensor, door magnetic sensor, vibration sensor, mobile detection camera, gas sensor, water immersion sensor, smoke detector, intelligent fingerprint lock, face recognition visual access control.

② Environmental sensing: formaldehyde, carbon dioxide, PM2.5 sensor, temperature, humidity sensor, illumination sensor, water quality monitor and so on.

Various kinds of sensors can be intelligently set with each other to control, send induction signals and trigger the corresponding scene. For example, when the human body sensor detects a human body movement, it can first judge the time, and then make the linkage command; if the owner triggers the home, open the home mode; if this time, the owner and the family are on vacation, but the human body movement in the home is triggered, the alarm device can be linked.

human body induction

There is induction

Gas sensing

Baptist sensing

camera

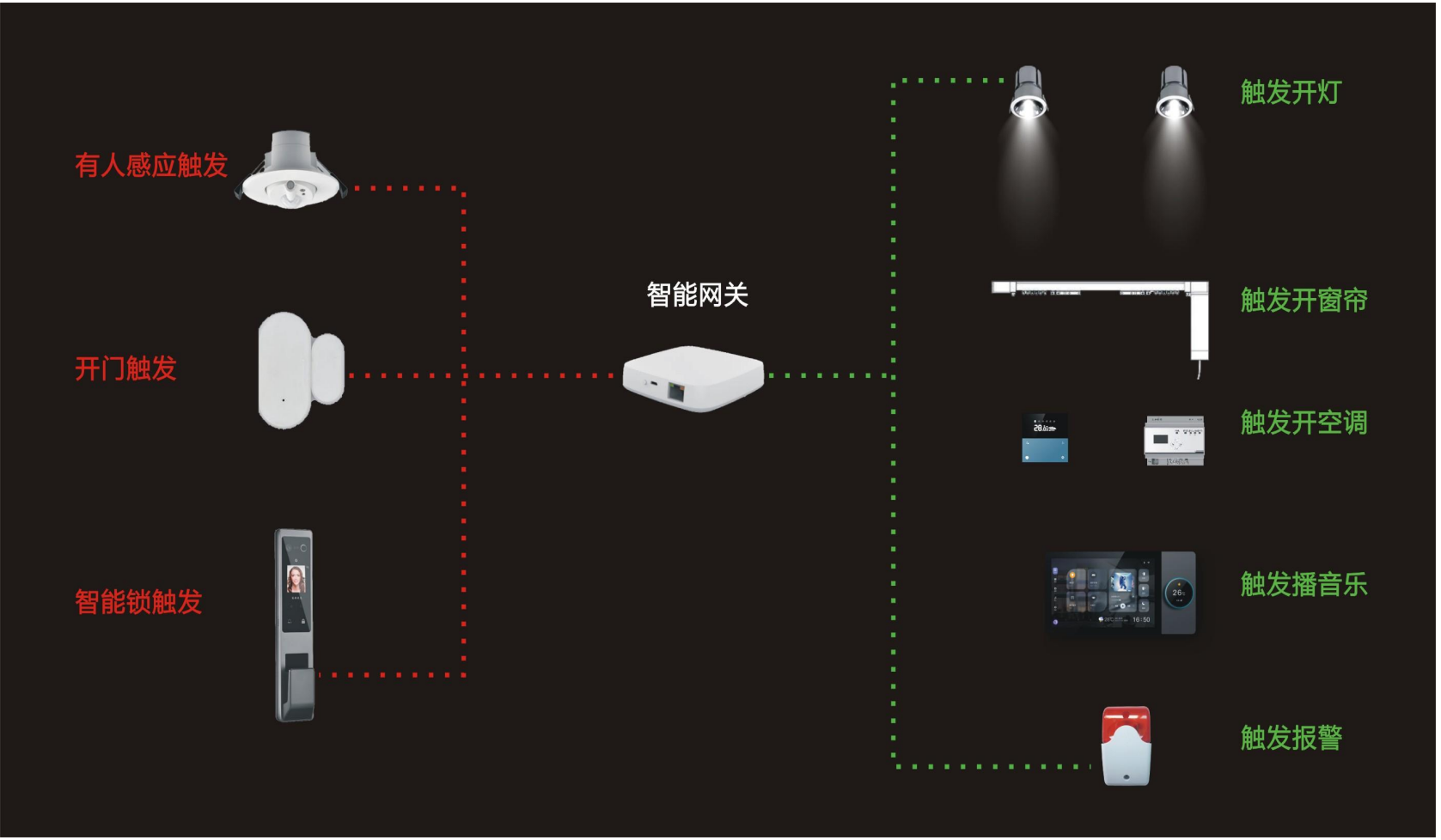
humiture

environmental monitoring

Visual access control

Intelligent lock

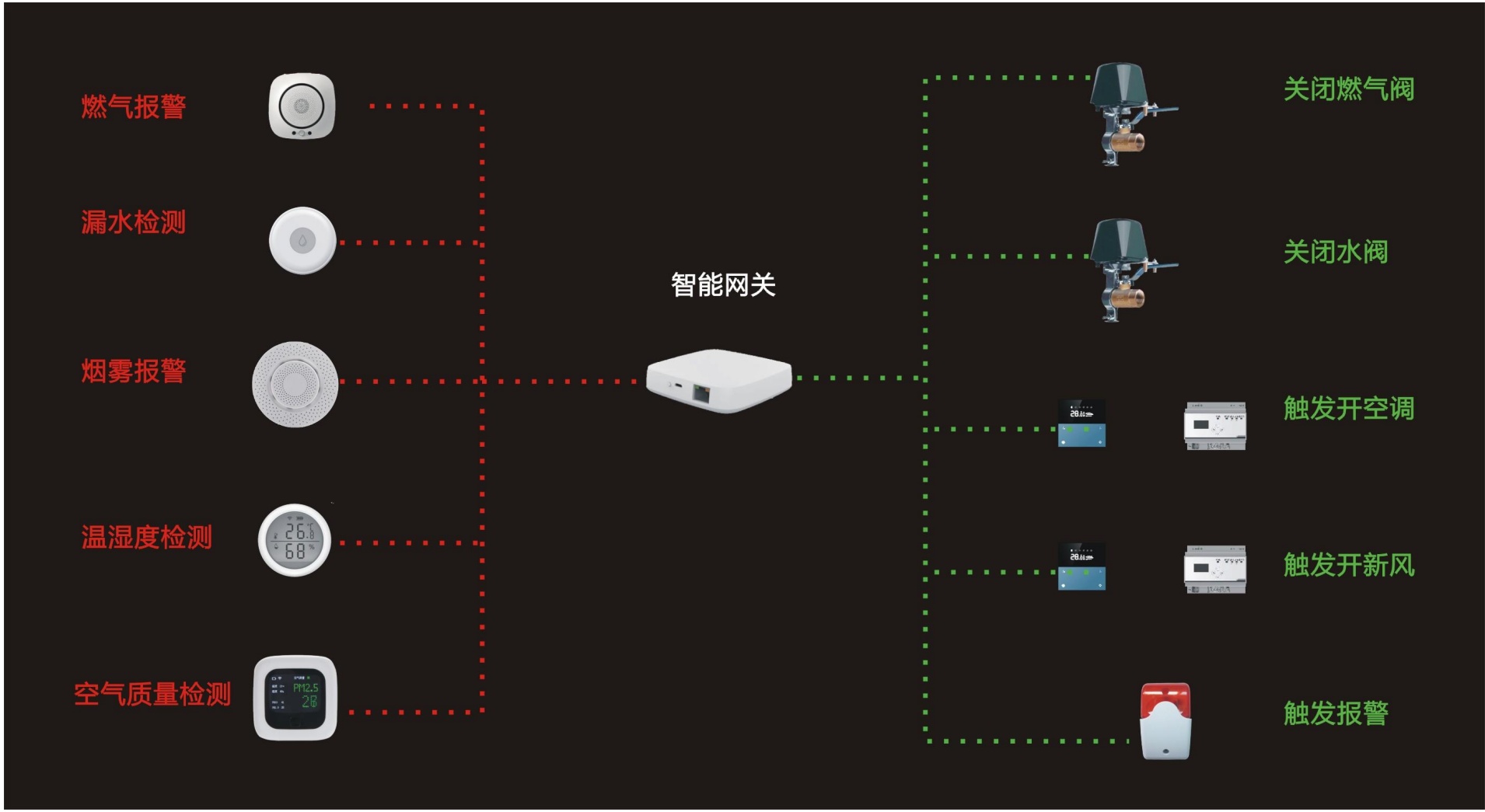
7.1 Intelligent Security Sensor linkage system diagram



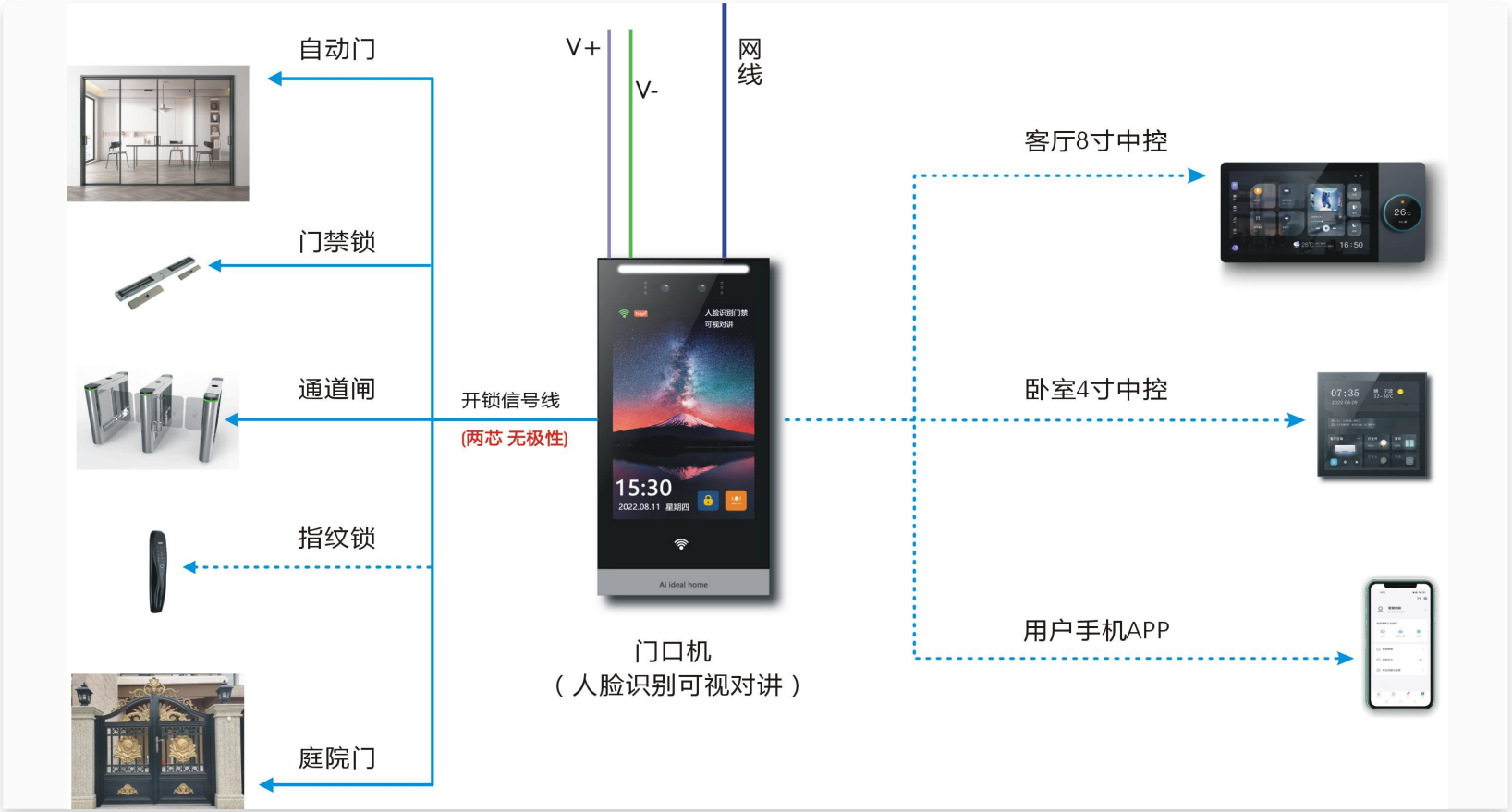
- Smart sensors are mainly WIFI or zigbee communication. After being added to the APP, they can be used as the trigger source of events and linkage scenes. When the corresponding trigger action is detected, it will be reported to the intelligent gateway. The intelligent gateway then issues the execution action to the corresponding execution device.
- Different scenarios use different trigger sources, and when some sensing devices have similar functions, the optimal device is selected for trigger linkage.
- The execution device can be a single one or a group control of multiple devices, which can be added according to the scene experience and intelligent functions needed.
- The sensing equipment is battery powered, adapter or strong power directly connected to the power supply, specifically refer to the product instructions or consult the production factory.

7.2 Intelligent Environment Sensor Linkage system diagram

Note: zigbee sensing equipment needs data through the intelligent network; WiFi sensing equipment does not need intelligent gateway, directly report the monitoring data to the cloud server.

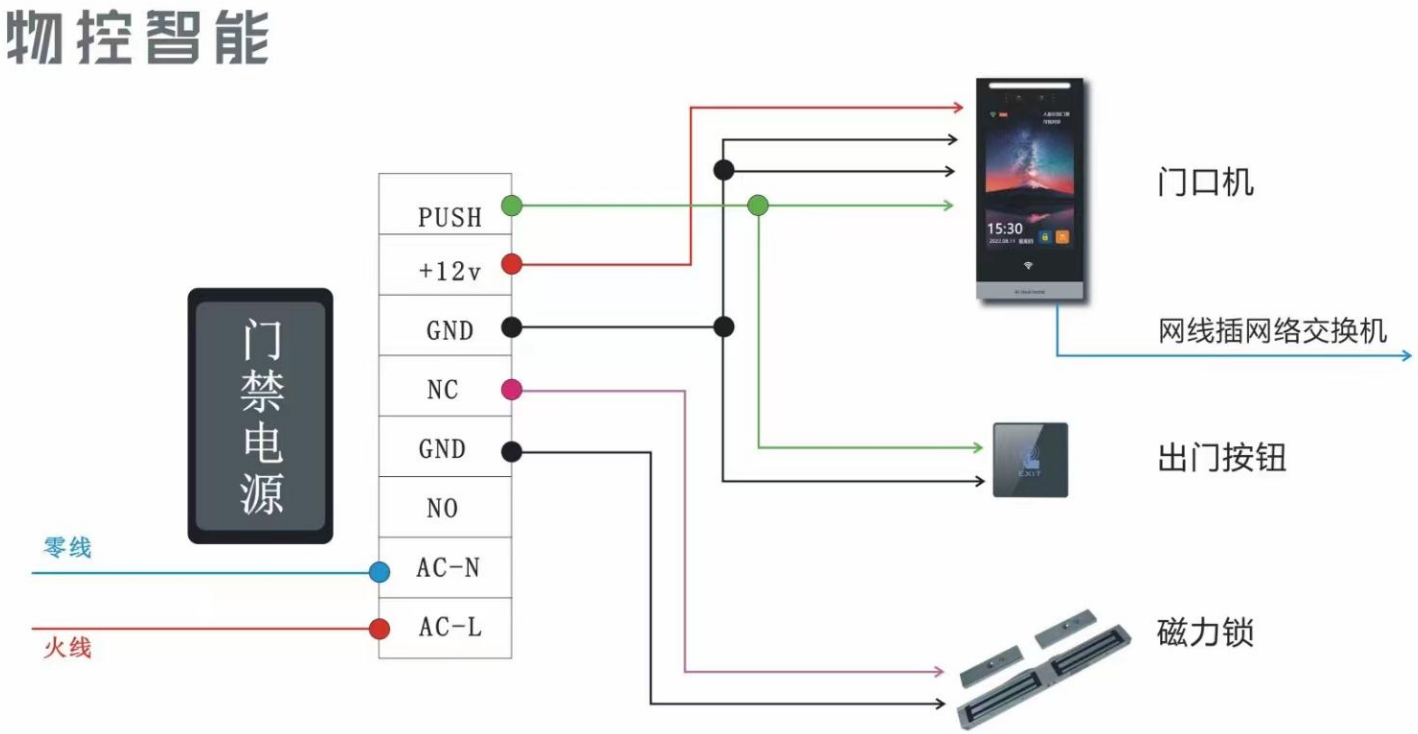


7.3 Intelligent visual access control linkage system diagram



- After the access control host is connected with the intelligent system, the functions of remote call, visual intercom and remote unlocking can be realized.
- Intelligent access control host itself functions have fingerprint recognition, face recognition, password recognition, card recognition and other unlocking functions.
- The access control host supplies DC12V. The access control host with WiFi networking module can be connected through WIFI, otherwise a set of network cables should be reserved. Unlock signal line is a set of passive dry contact signal output. Can be connected to the access control power supply, or the automatic door out button port can be.
- If the intelligent access control host with face recognition needs to be connected to the visual indoor computer, it also needs to reserve a network cable from the host to the indoor computer. But the smart home indoor central control screen can also be used as an indoor machine, for visual intercom. Wireless docking.

7.3 Intelligent Visual Access Control Linkage System Drawing (detailed)



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Section 8: About wireless WIFI coverage

Wireless WiFi system, in fact, belongs to the category of weak current network system, the main function is to meet the whole house WIFI equipment networking, including mobile phone, TV, set-top box, smart small home appliances, smart home related equipment, etc. Therefore, the stability of the whole house network system is the basis to ensure the stable operation of smart home. In view of this problem, we do smart home engineers must understand and master the corresponding network basic knowledge, to meet the needs of smart home system debugging.

The home network system is composed of optical cat, router, switch, (AC manager), wireless AP and other equipment. The role of these devices in the network system is described as follows:

① Light cat: access to the operators optical fiber access cable, the RJ 45 network port on the light cat is the WAN port network cable inserted into the router. As the optical modulation mediator, optical cat usually has three functions, namely one: optical fiber signal conversion; two: providing basic WIFI functions; three: providing network cable, router, telephone and other socket functions.

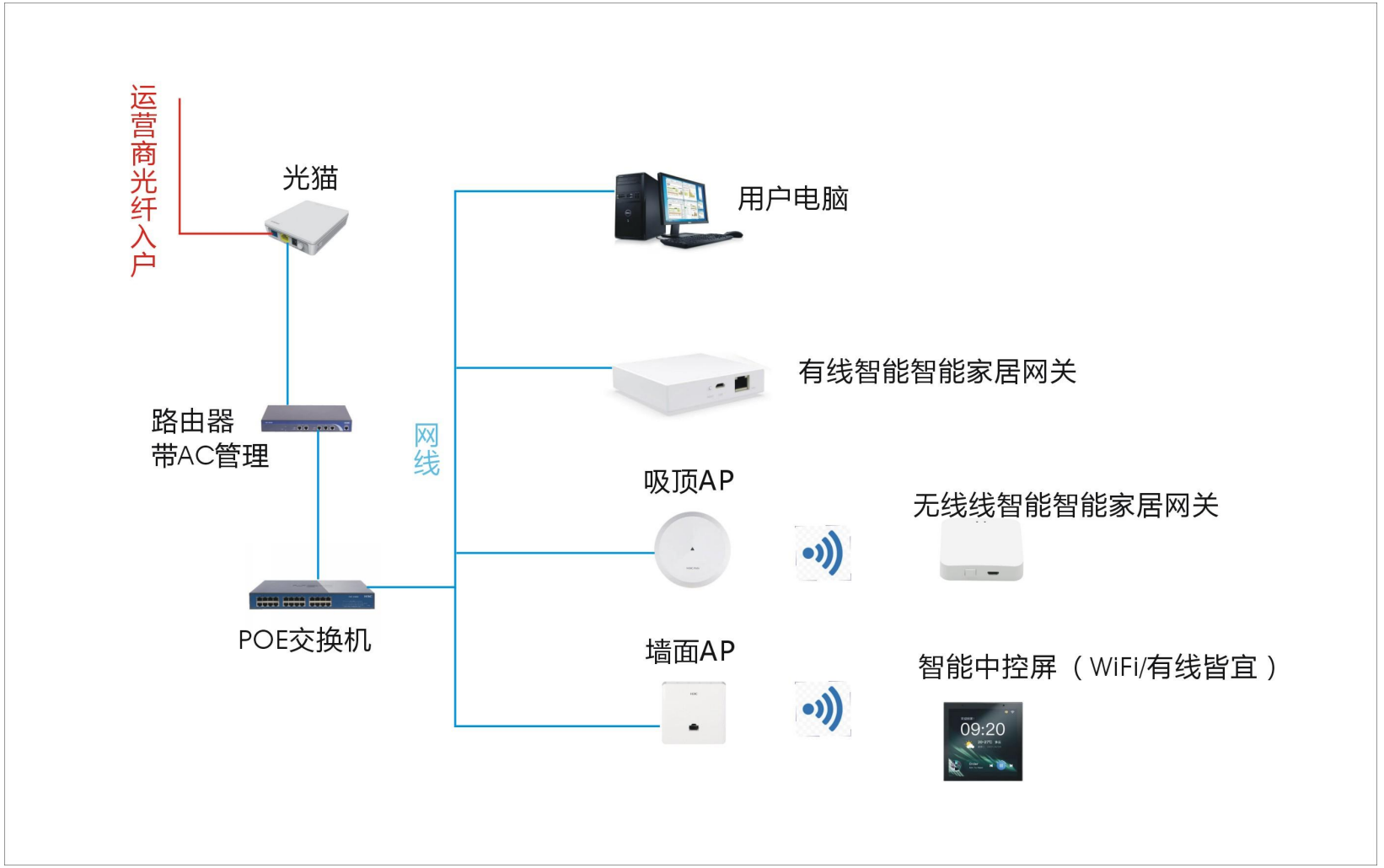
② Router: the WAN port of the router, access to the optical cat network port, the LAN port of the router can directly connect to the user equipment, when the user equipment has too many equipment, it is necessary to access the switch for expansion. The router is powerful and supporting various LAN and WAN interfaces for connecting LAN and WAN, and data and traffic management between user devices. The wireless router also plays the basic WIFI transmission function; the router with AC management also requires the wireless AP architecture management, AP user management, channel management, traffic management and so on. The router with POE output also has the function of providing power supply to the POE equipment.

③ Wireless AP: Wireless AP is divided into two types: top suction AP and wall AP. Its main function is to convert the wired network into radio frequency WIFI signal and transmit it to the corresponding area to play the role of WIFI coverage.

8.1 Network system architecture diagram

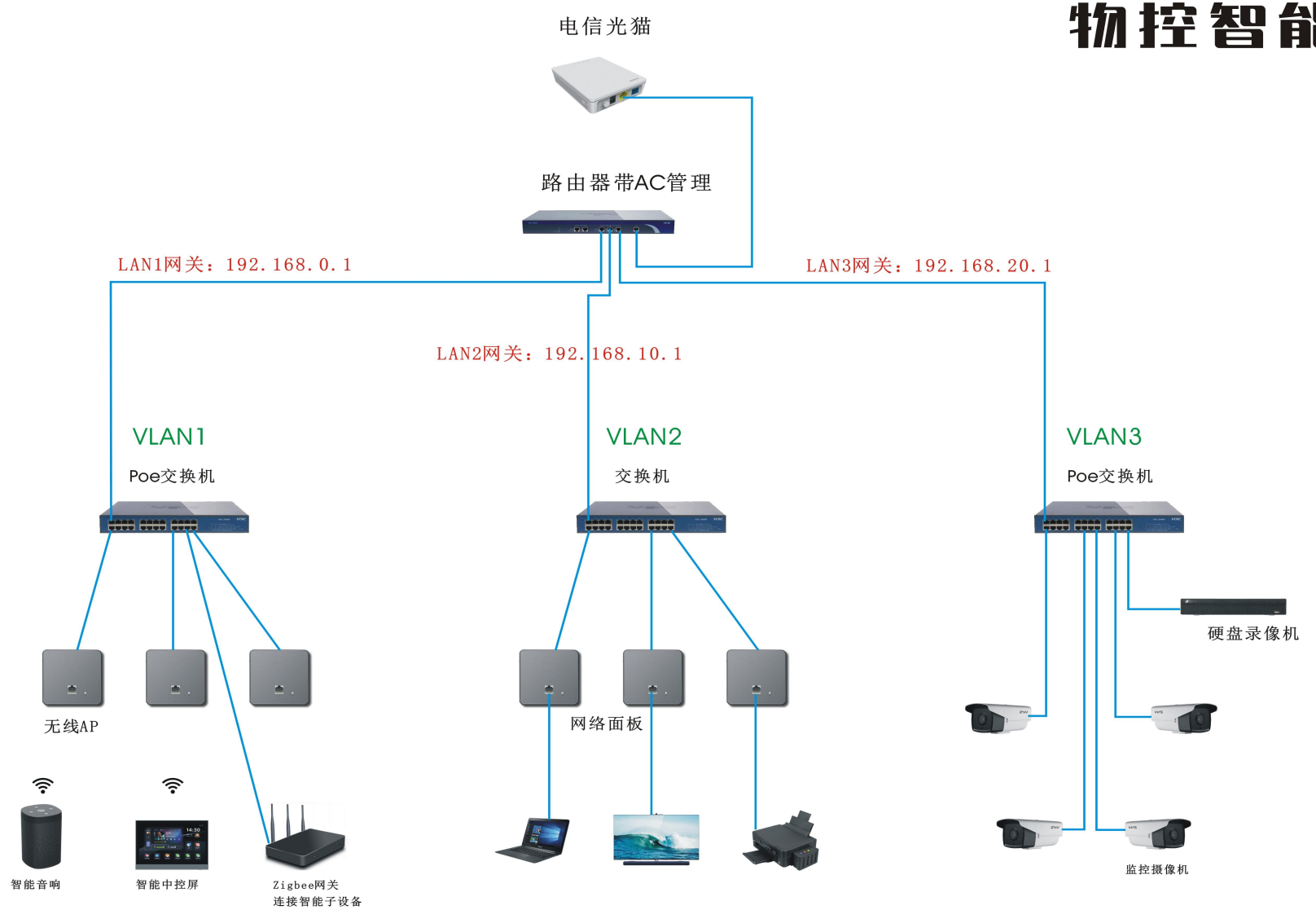
matters need attention:

- Smart home cable network close, do not plug into the light cat redundant network port.
- When adding the smart home gateway, the mobile phone should be in the same network segment as the gateway.
- The router selects equipment with AC management function, and the switch needs POE power supply function to easily power AP or other POE equipment.
- The wireless WIFI setting and router configuration refer to the product description of each brand.
- When setting WiFi, separate 2.4G from 5G band to reduce the communication impact on zigbee devices.
- When there is no network device requiring local visits, it is recommended to start user isolation.



8.1 Network refinement system architecture diagram

物控智能



智能家居设备IP:
192.168.0.2～250

家电及办公设备IP:
192.168.10.2～250

安防设备及其他设备IP:
192.168.20.2～250

Chapter 2: About the scheme design of smart home

1. understand the requirement
2. Site / drawing review
3. Drawings to deepen
4. Listing configuration

Section 9: Understanding the needs, the scene investigation

A perfect and reasonably designed smart home system scheme is inseparable from understanding the needs of the owner, early communication; early field investigation, and decoration drawing review. After finishing the previous work, you can be sure and get twice the result with half the effort.
First, we need to have a general understanding of customers understanding and basic needs of smart home systems. Of course, some customers are also in a relatively vague state of concept. In the process of communication, as professional designers, we must pay attention to guide customers. When the customer proposes the basic requirements, the designer needs to improve the direct and linkage functions, and clearly them or not, make communication notes. In the process of communication, we also need to understand the third-party equipment that we must be involved in making the plan. For example, whether the air conditioner is water machine or fluorine machine; the external model number of the fluorine machine and the temperature controller panel model; whether the floor heating is water or electric floor heating; the curtain is open or single, monorail or double track; the material of the switch, the size of the central control host, the light only need to adjust the brightness, or the brightness and color temperature, etc. We can complete the communication process with the customers around the following table 1 content.

If you need to go to the customers home site investigation, we need to pay attention to the following points:

① The approximate area of each floor, the site environment, the number of partition walls.

② Whole decoration progress, progress of water and electricity wiring project; (convenient for water and electricity wiring, power supply reservation, line transformation, etc.)

③ Completed reserved width and preliminary size of curtain track; related brands of central air conditioning and HVAC equipment.

④ The position of the switch bottom box, the layout size of the connected switch, the installation point of the ceiling sound, and the installation point of the camera.

⑤ Location of the weak current cabinet and the reasonable position where the gateway can be installed.

⑥ The contact information of the project manager and the hydropower team is best to build a group to facilitate communication.

Form 1

客户：_____智能家居系统沟通记录表

客户笼统描述：别墅三层（含地下1层），做全屋智能控制。包含灯光、窗帘、空调控制；无线WiFi/外围监控。具有手机控制、语音控制等功能；最好能够有各种模式控制。

系统名称	客户描述分析	完善补充	需求明确	特别注意/备注
智能灯控系统	灯光智能控制开与关	客厅、餐厅、卧室、地下室茶室区域做调光、调色温。	需要	全屋无主灯设计，开关面板选用氧化铝材质，颜色未确定。
智能窗帘系统	电动窗帘可以语音控制	客厅、卧室、书房都要电动窗帘	需要	做双轨、对开。卫生间智能卷帘待定。
智能空调控制	远程控制，提前开空调	场景联动，自动控制全屋空调；空调、地暖、新风温控器更换为统一风格	需要	中央空调为多联机，原厂温控器面板型号：大金BRC1C61　水地暖。
全屋WIFI覆盖	没有具体要求	用吸顶AP、空调回风口隐藏安装	需要	考虑实际面积，每层至少需要安装2只吸顶AP
监控摄像机	外围、地下室入户门口	加硬盘录像机、确保本地录像时间。	需要	外围三个面,摄像机对照，户外枪机。入户门口安装半球摄像机。参照图纸补点。
背景音乐系统	之前没考虑	播放音乐、场景联动、语音/中控控制全屋。	需要	客厅与地下室茶室安装背景音乐，采用4寸液晶主机。
智能门锁	忘记了，实际需要。	人脸识别、手机远程控制、可视对讲，开门联动开启回家模式。	需要	地下室入户门及一楼入户门。锁体尺寸暂时未知。
感应控制	客户不了解	人来灯亮、人走灯灭。感应开灯、场景联动。	需要	入户门、楼梯间、卫生间、衣帽间区域存在感应。

Section 10: Drawing deepening and budget

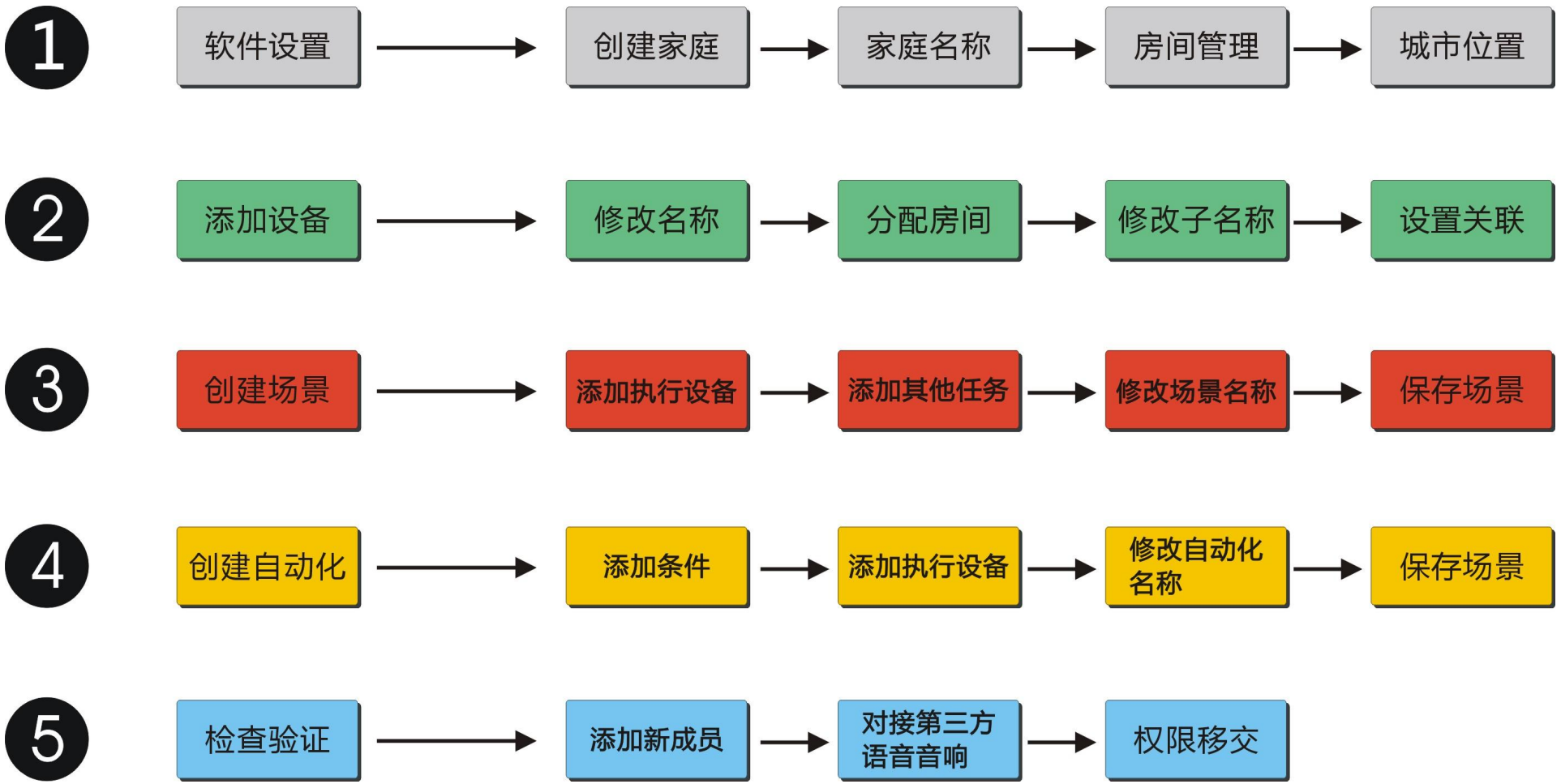
(Referring to case Appendix 1 for drawing deepening)

(Please refer to Annex 2 of the budget list.)

Chapter 3: about the smart home software debugging

1. Software Settings
2. Equipment into the network
3. Create a scene
4. Create automation
5. Add members, rights handover

Smart home software debugging steps topology diagram



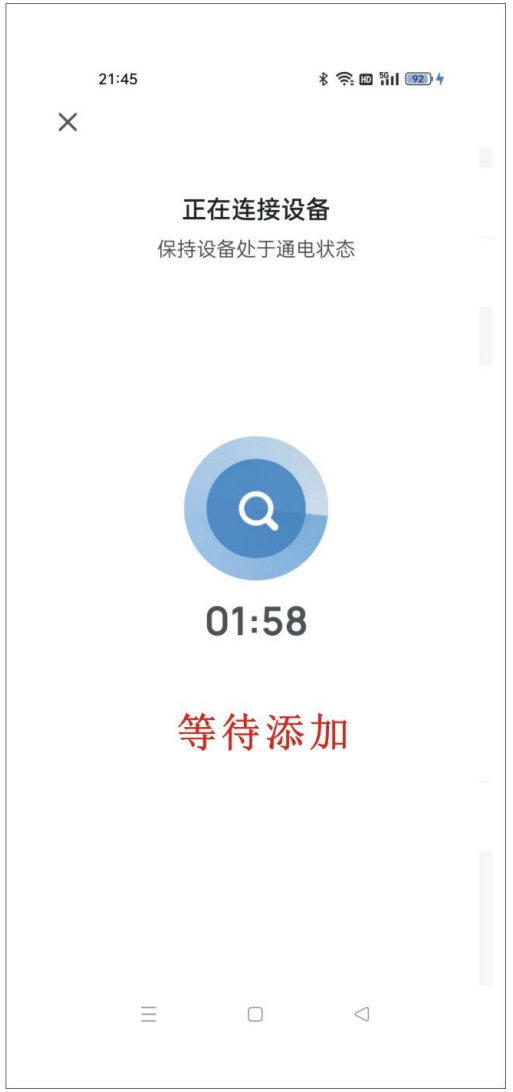
1.1 Software Settings (graffiti oodle example)

- ✓ We first set up the basic functions of the software, including home, room, profile, account and security and so on.
- ✓ You need to open the smart home APP permission in the mobile phone application. Including access camera access, microphone access, location access, message push access, storage space access, attachment devices, etc.

Upper limit of APP function usage:

- ✓ The maximum number of devices that can be added to a single home: 200
- ✓ A single family can create a maximum number of one-click execution: 100
- ✓ The maximum number of automations that a single home can create is: 100
- ✓ The maximum task that can be added for a single one-click execution is: 150
- ✓ You can add tasks to a single automation: 150
- ✓ The most conditions to be added to a single automation: 10
- ✓ The maximum family that can be created for a single App account is: 20
- ✓ The most family members that can be added in a single family: 20
- ✓ A single family can create a maximum number of rooms: 20
- ✓ The maximum number of devices that can be added to a single room is: 50
- ✓ The maximum number of devices that can be added to a single device group is: 100
- ✓ The maximum number of device groups that can be created by a single family is: 20
- ✓ The maximum number of individual device groups that can be shared to other users is: 20
- ✓ The maximum number of a single device that can be shared with other users is: 20
- ✓ The maximum number of an App account can be invited by other families: 20

1.2 Add zigbee gateway (graffiti intelligence as an example)



1.2.1 Add gateway (graffiti example)

When we connect to the zigbee device, the first step is to add the zigbee gateway to the APP, and then we can add other devices to the zigbee gateway, as a sub-device.

Central control screen gateway, can be access to the network, or can connect to WIFI. After connecting to the network, refresh the home screen, and the QR code will pop up. Scan the QR code on the screen with the mobile phone smart home APP, and you can add it successfully.

Cable network gateway, wireless gateway, after connecting to the network network, observe the indicator light to change. When the equipment indicator light is always on, follow the steps of adding equipment.(The indicator light is not often on, you can long press the reset key, reset.)

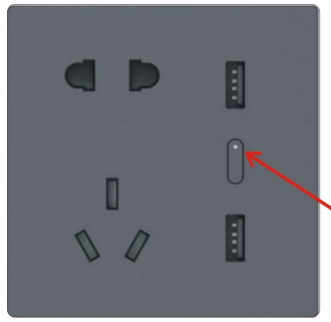
1.2.2 Add add zigbee sub-device (doodle intelligence as an example)

1.2.3 Add zigbee switch and smart socket (doodle smart as an example)

Intelligent switch and network access mode

长按开关任意键10秒，按键指示灯闪烁，即可按照添加zigbee设备的添加方式进行入网。

Press and hold any key of the switch for more than 10 seconds until the backlight of the key flashes, and then click the zigbee gateway in the application to add sub-devices.



Smart socket network access mode

长按开关电源键10秒，入网指示灯闪烁，即可按照添加zigbee设备的添加方式进行入网。

Press and hold any button of the switch for more than 10 seconds until the configuration indicator flashes, and then click the zigbee gateway in the application to add sub-devices.

1.2.4 Add zigbee driver (graffiti oodle example)

恒压电源驱动

恒压驱动

恒流驱动

0-10V调光模块

智能调光驱动、智能电源、智能调光模块的添加方式：

接上电源和灯具以后，通电、断电反复操作6次（有些厂家是10次，具体咨询产品经销商或者生产商）

所接的灯具会呼吸式闪烁时，即可进入配网状态。按照zigbee设备添加方式进行入网。

注意：每次断电以后，请等待2-3秒再通电。（操作不宜过快）

After connecting the power supply and lamps, power on and off, repeat the operation for 6 times, observe the connected lamps, and click the zigbee gateway in the application to add sub-devices when it is in breathing flashing. (Each power-on interval is about 2 seconds.)

1.2.5 Add zigbee motor (graffiti example)

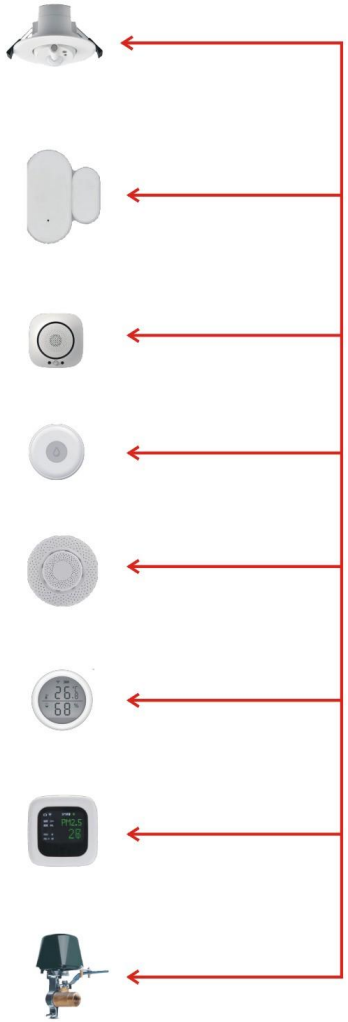
部分电机：接通电源以后，长按底部按钮，指示灯闪烁时松开，即可进入配网状态。按照zigbee设备添加方式进行入网。

部分电机：接通电源以后，短按按底部按钮三次，再长按，指示灯闪烁时松开，即可进入配网状态。按照zigbee设备添加方式进行入网。

推窗器、移窗器等其他电机设备，与第一种入网方式雷同。（具体可参照产品说明书或者咨询经销商、产品生产工厂）

After turning on the power supply, press and hold the reset button at the bottom of the curtain motor. When the indicator light flashes, you can click the zigbee gateway in the application to add sub-devices. In addition, there is a curtain motor that is pressed twice short and then pressed long. When the indicator light flashes, you can click on the zigbee gateway in the application to add sub-devices.

1.2.6 Add zigbee sensor (graffiti smart as an example)



智能传感器设备入网，均通过长按对应的入网复位按键（Reset),直到入网指示灯闪烁时，

即可进入配网状态。按照zigbee设备添加方式进行入网。

部分设备，入网复位键在设备内部，设备表面带有小圆孔，配有插针便于操作。

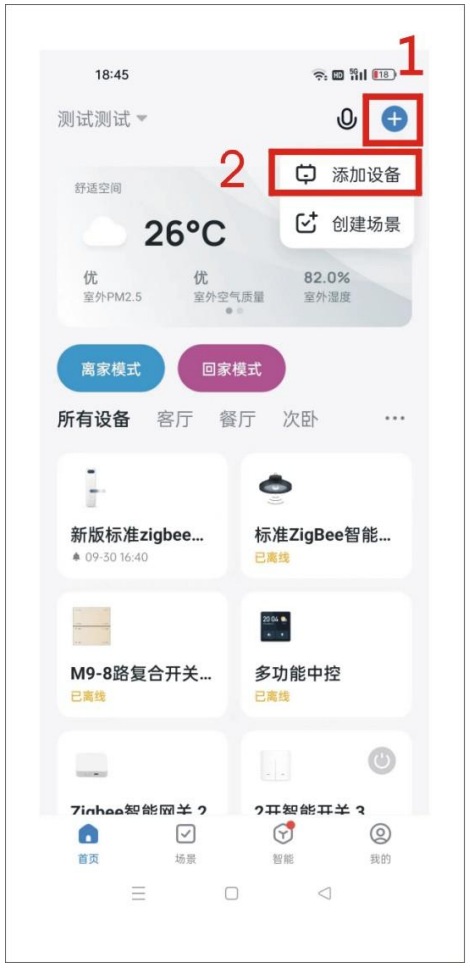
如发现长按入网复位键，指示灯没有闪烁，请考虑更换设备电池。或者尝试将电池取出，

重新安装一次，进行设备重启操作后，再次长按入网复位键。

Press the reset button for a long time, and when the indicator light flashes, you can click the zigbee gateway in the application to add sub-devices.

1.2.7 Add camera (graffiti example)

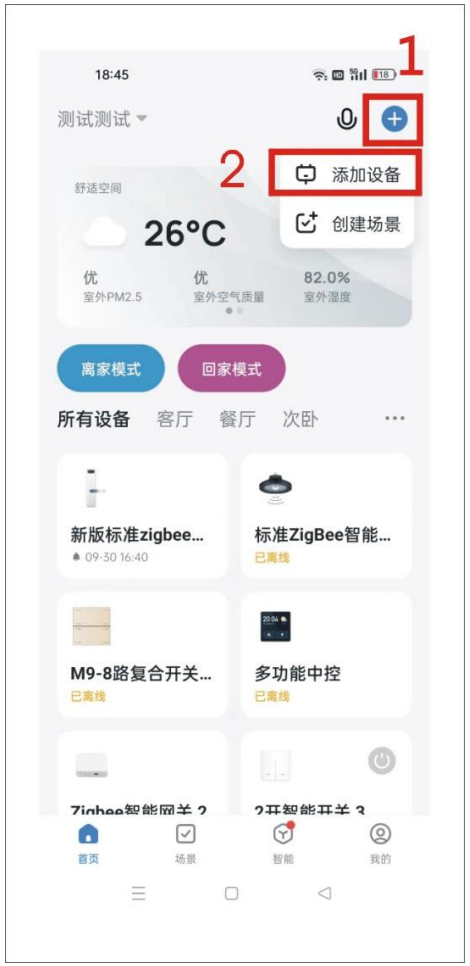
Connect the power supply to the equipment, and long press the reset key to reset.
After the successful reset, there is a corresponding prompt tone.



1.2.8 Add smart lock (graffiti example)

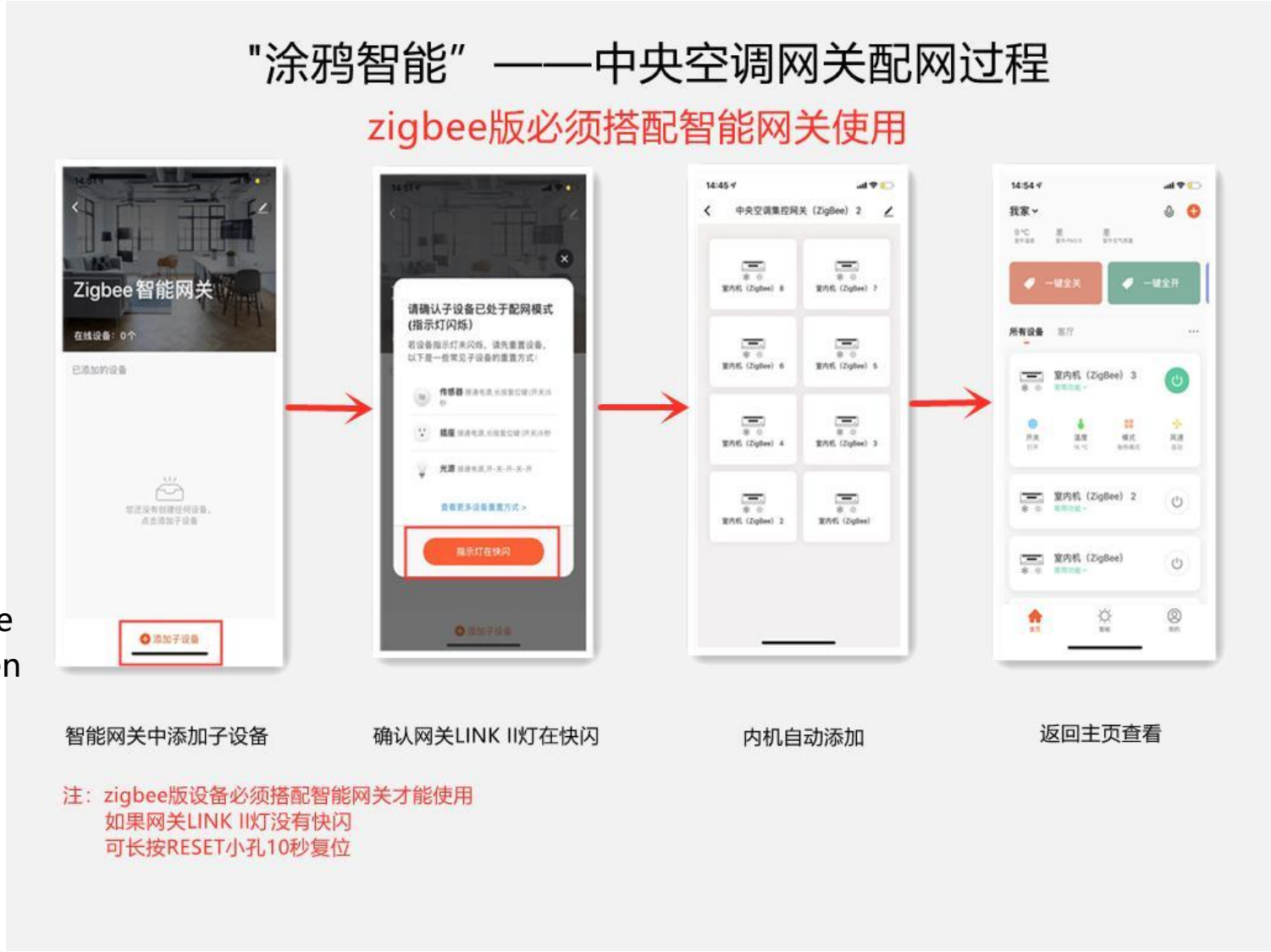
Automatic intelligent lock: enter the system Settings, set up the administrator first. Select the wireless configuration in the system Settings. If WIFI type, add as WIFI. If it is zigbee, click the gateway to add subdevices.

Semi-automatic intelligent lock: enter the system setting, set up the administrator first. Short press the reset button on the back of the smart lock once. After hearing the prompt sound, distribute the network. If WIFI type, add as WIFI. If it is zigbee, click the gateway to add subdevices.

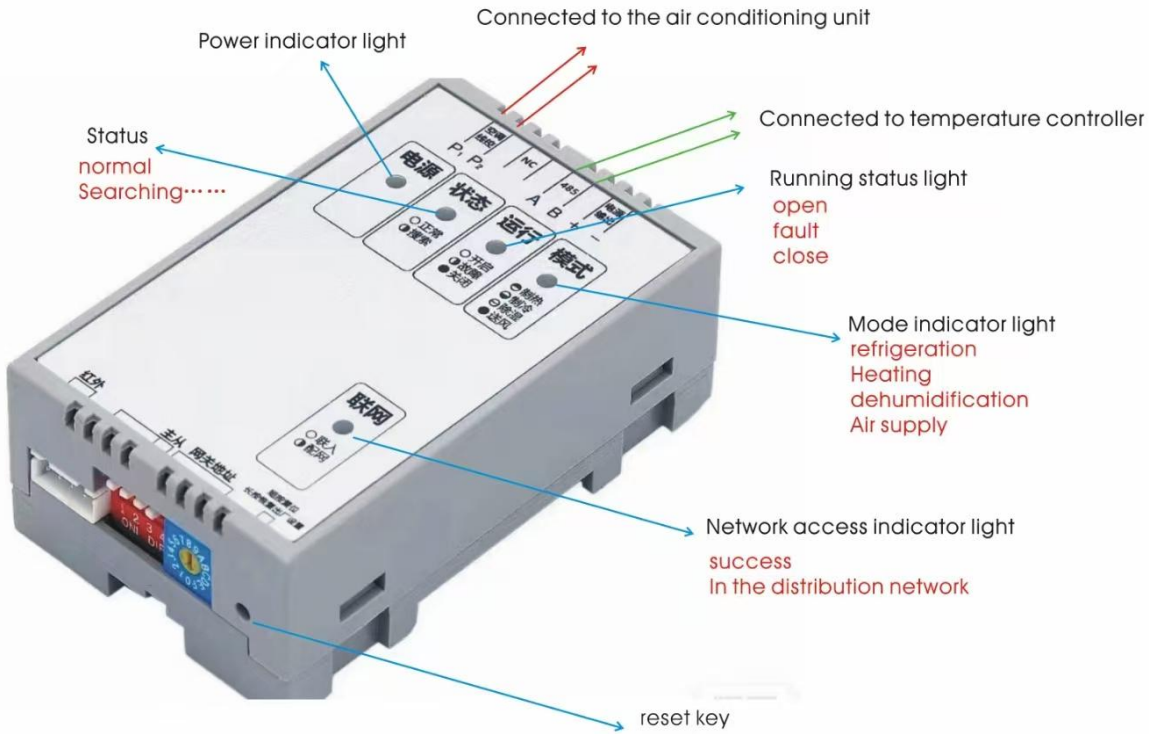


1.2.9 Add air conditioning gateway (graffiti intelligence as an example)

Long press the RESET reset button of the gateway hole for more than 10 seconds, the device will be reset, then the LINKII light of the gateway flash. Enter the distribution network state.
Long press the return key to set up the relevant protocol.

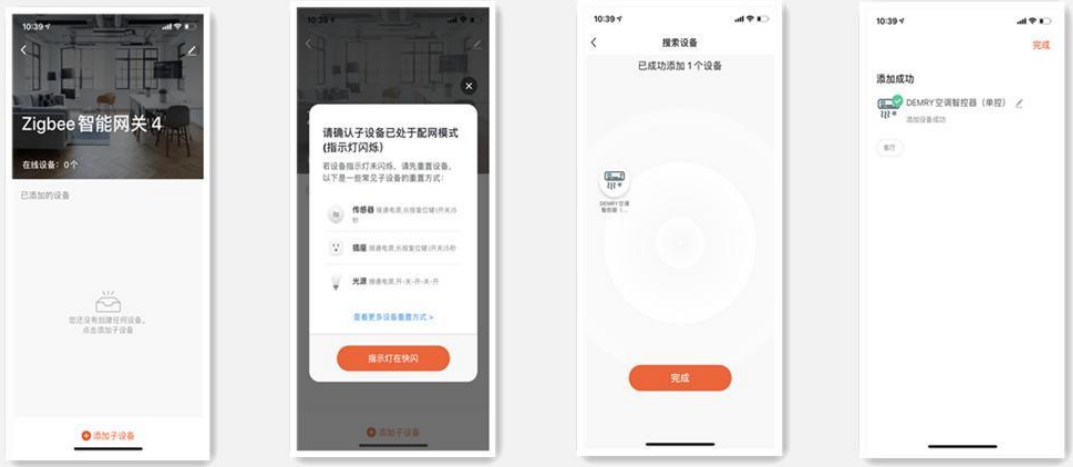


1.2.10 Add air conditioning gateway (graffiti intelligence as an example)



涂鸦智能——中央空调线控网关配网过程

zigbee版必须搭配中控网关使用

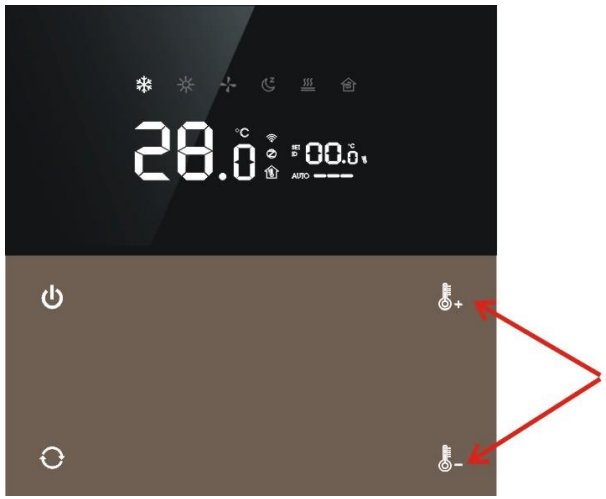


中控网关添加子设备　确认联网指示灯在快闪　等待添加设备　添加完成

注：如果联网指示灯没有快闪
可通过长按复位小孔恢复

Long press the RESET reset button of the gateway hole for more than 10 seconds, the device will be reset, then the LINKII light of the gateway flash. Enter the distribution network state.

1.2.11 Add air conditioning temperature controller (graffiti intelligence as an example



关机状态下，同时长按风量加减键10秒，屏幕出现WIFI图标闪烁。

即可按照zigbee配网方式进行设备入网。（点击已经添加好的zigbee网关——点击添加子设备——点击确认设备状态灯在闪烁——等待设备扫描入网。

In the closed state, press and hold the upper and lower buttons on the right side at the same time until the WIFI icon flashes on the screen, and then click the zigbee gateway in the application to add sub-devices.

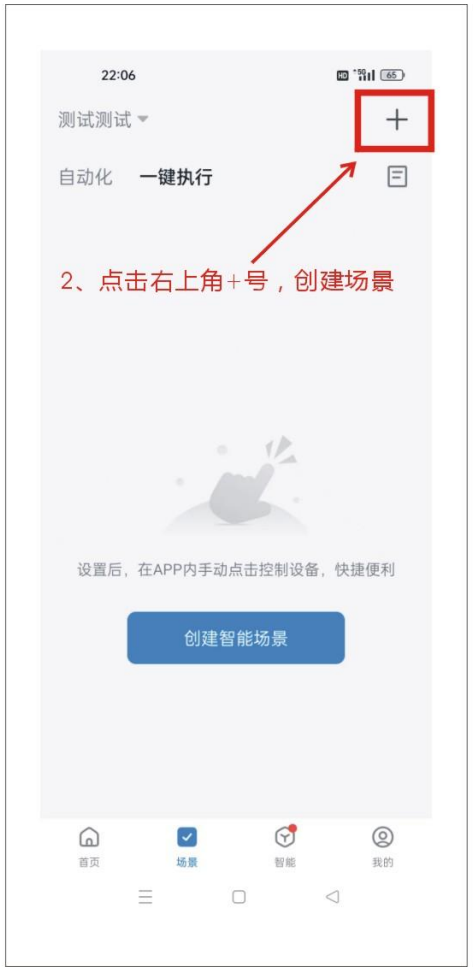
1.2.12 Modify device name / assign room (graffiti smart for example)

1.2.13 Set the switch button multiple control association (doodle intelligence as an exa

Note: multiple control correlation: that is, more than two switch keys, the association binding together,
Play the role of double control and multiple control. After the switch button is successfully associated, the switch status will be automatically synchronized.
Multiple control association, up to 4 switches can be associated. Currently only operational for switches and switches.

1.3 One-click execution scene (graffiti example)

Note: One-button execution scene is an active execution scene without triggering the source, mainly by pressing the scene button on the mobile APP and controlling the scene, the name of the scene needs to be modified to the same text as the voice control command.



1.3 One-button execution scene (graffiti intelligence as an example) connected to the upper page step 5, this page step 6-9:

6、选择需要执行任务的相关设备，设置完成，可以继续多选多个设备。

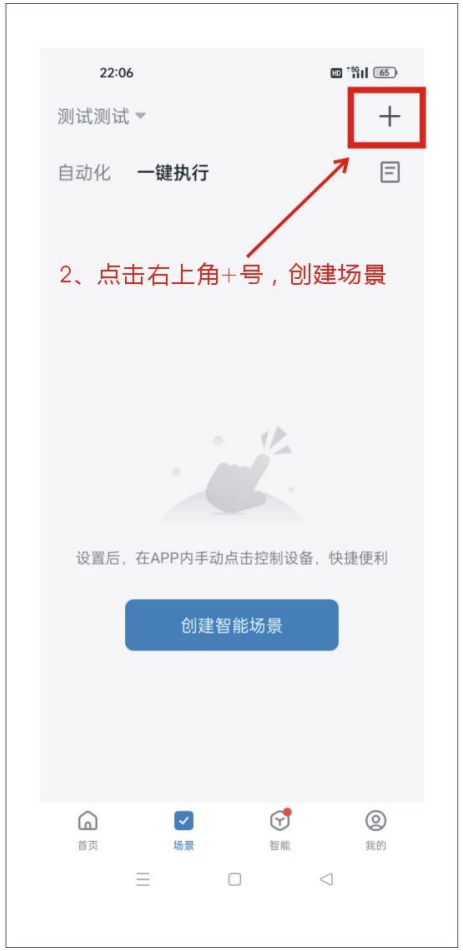
7、选择该设备具体需要执行的动作。

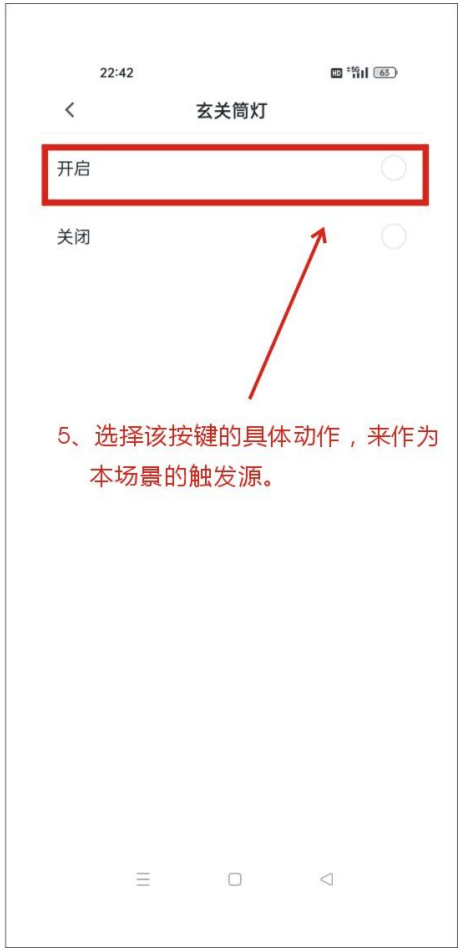
8、执行任务全部添加完成后，点击顶部设置键，修改场景名称。

9、在此输入该场景名称后，点击确定。为了语音精准控制，场景名称请不要输入空格、标点符号等。

1.4 Automation scenario (graffiti oodle for example)

Note: Automated scenario is a passive scenario that requires a trigger condition to perform. A variety of devices within the system can be used as trigger sources. For example, a switch button "on" once this action is triggered, automatically perform related tasks and so on. In addition to the switch button, the trigger source can also be all kinds of sensors, weather temperature, positioning, timing, smart lock state change, and so on, can be used as a scene trigger action.



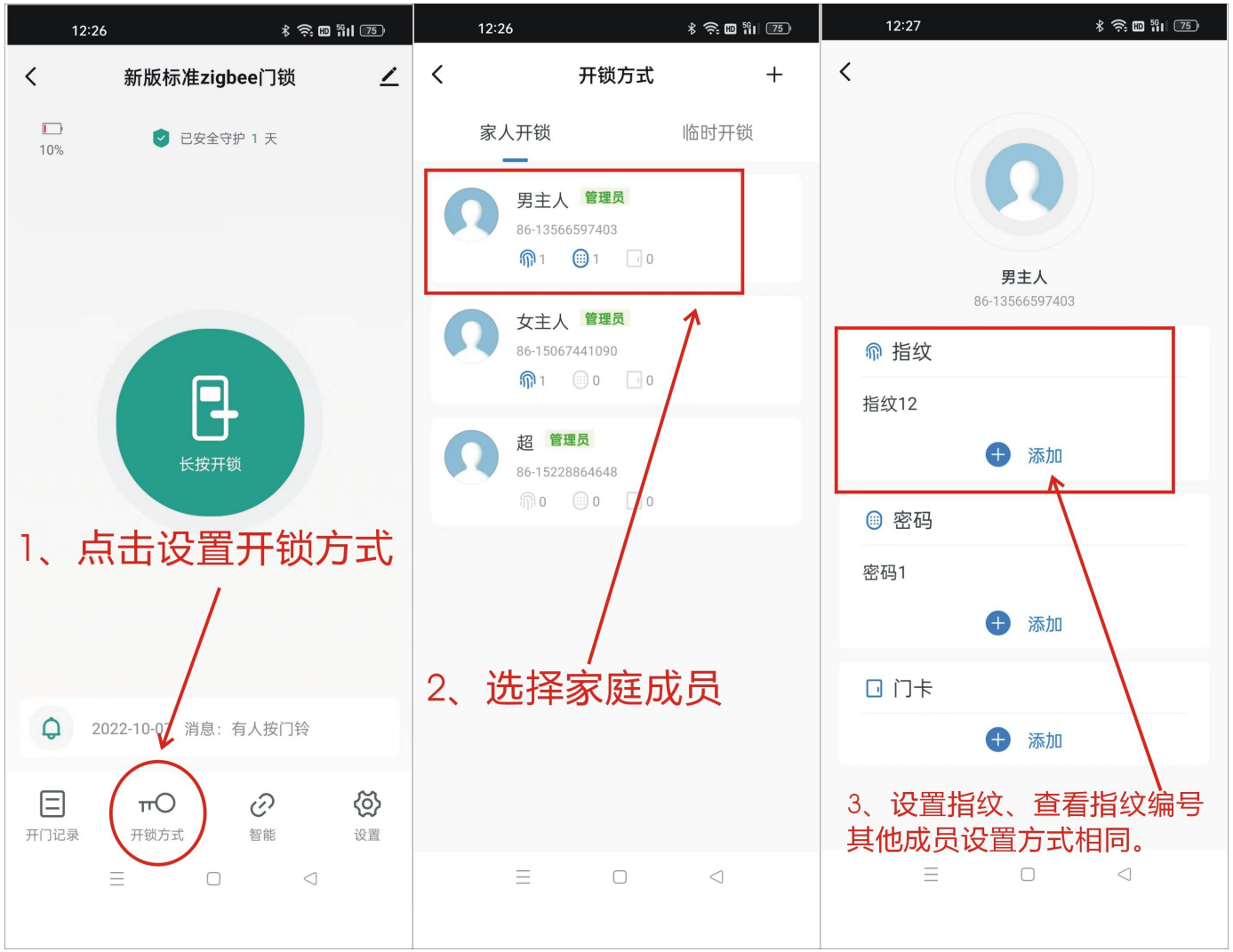


1.4 Automation scenario (graffiti intelligence, for example): Step 5 on the upper page, step 6-10 on this page:

1.5 Automation scenario (practice case)

Requirement 1: Set each family member to start different home mode scenarios when opening the door at home.

Step 1: Set up the intelligent lock and manage the fingerprint unlocking number.



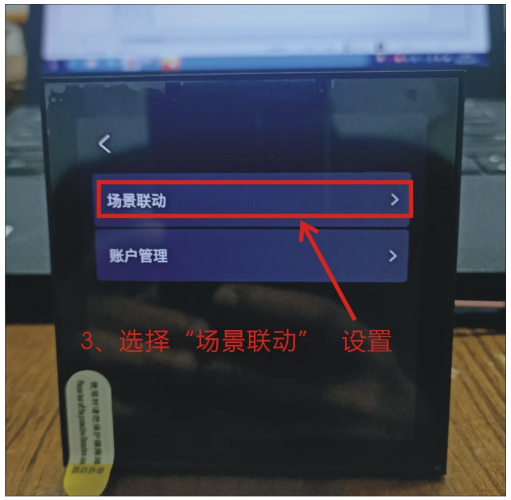
1.5 Automation scenario (practice case)

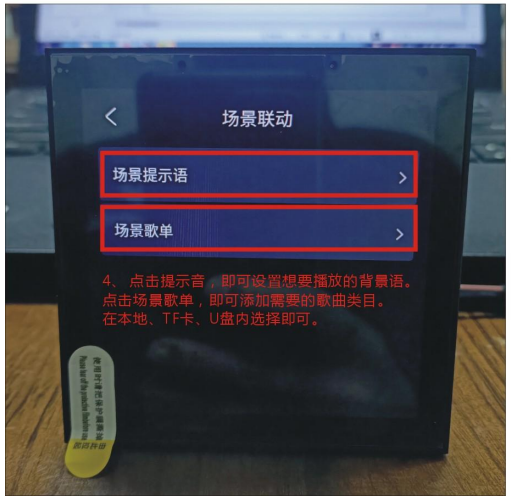
Requirement 1: Set each family member to start different home mode scenarios when opening the door at home.

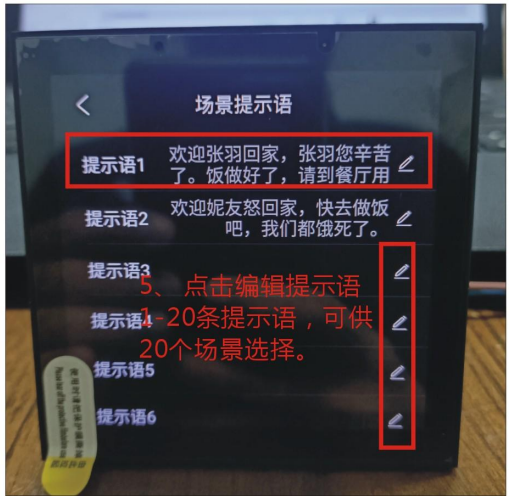
Step 2: Create an automatic scene, select the trigger source to add as the fingerprint unlock, the corresponding number.

Requirement 2: add voice broadcast, welcome language, scene music playback.

Step 3: Set up the voice broadcast and scene playlist on the central control screen.





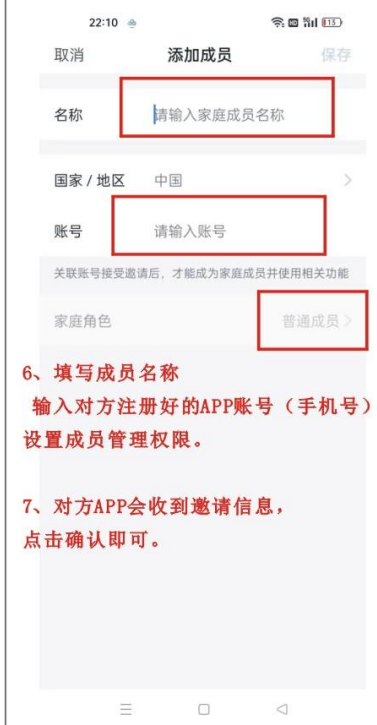


1.5 Automation scenario (practice case)

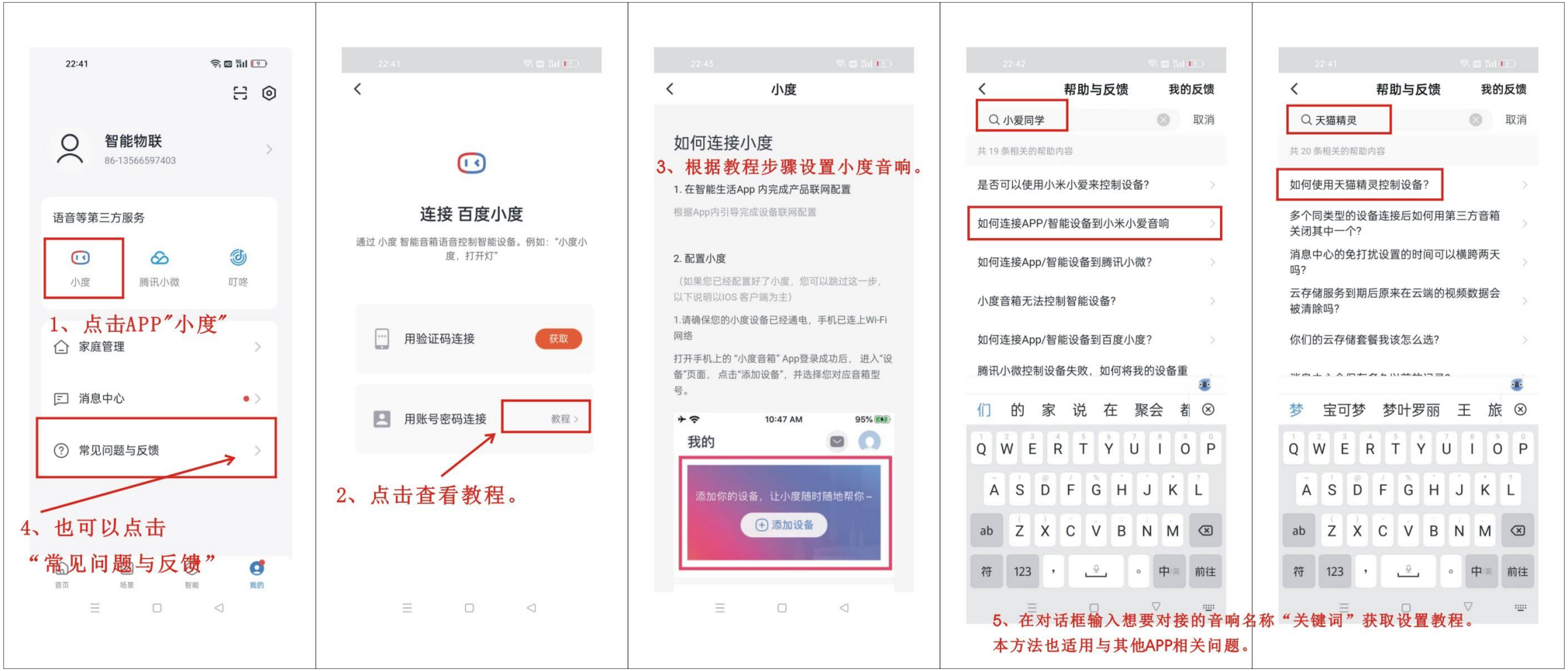
Requirement 2: add voice broadcast, welcome language, scene music playback.

Step 4: Create an automated scene. In addition to selecting other devices to open, you should also select different scene prompts and scene playlists according to different fingerprint number conditions.

1.6 Add Member / Transfer permission (graffiti intelligence as an example)



1.7 Docking with third-party AI audio (graffiti smart as an example)



Chapter 4: About troubleshooting and handling

Software and software related troubleshooting, quick answer.

1. How do the hardware products enter the distribution network mode?

A: This is a relatively general problem, because each hardware product, and each manufacturer, the network mode set up is different. But we can be roughly divided into the following types:

① Almost all products with buttons (such as switches) long press the keys until the indicator light flashes and enters the distribution mode.

② All the devices with reset key (reset hole) Request (security sensing) long press the reset key to enter the distribution mode.

③ Dimming module, dimming drive, on and off module, almost using power and power, repeated operation six times, the connected lamp for breathing type flashing, into the distribution network mode.

④ LCD central control screen, even after the Internet, with the APP to scan the screen QR code to add to the network.

⑤ The product with camera, the mobile APP generates the QR code, which lets the camera scan and configure the network.

2. The hardware product has entered the distribution network mode, but it always cannot be added to it?

A: First, confirm whether the product is WiFi or zigbee protocol, and choose the corresponding addition method to add.

For class zigbee devices, please check whether the gateway is too far away from the device. Try to move the device close to the gateway to add again.

For wifi devices, check whether the WiFi is 2.4G.(Please strip out the 2.4G and 5G frequency bands, connect the mobile phone to 2.4GWiFi, and add it.)

Finally, consider whether the equipment itself is communication fault and replace the equipment.

3, the six-key intelligent switch panel, after being added to the gateway, the APP control device did not respond?

Answer: replace the cable network gateway to add. The six-key switch does not support the wireless gateway and the central control screen gateway.

4, the central air conditioning centralized control / wire control gateway, added to the APP, the number of indoor units displayed is not consistent with the actual situation or can not be controlled?

Answer: Check whether the centralized control / wire control gateway and the connected air conditioning brand model is correct, and set the centralized control brand again.

Check that the wiring terminals are connected according to the instructions.(Switse terminal position)

Check the zigbee gateway version, whether it is the latest version, does not need an upgrade.

Replace the indoor unit, re-connect it to the centralized control or online control, and re-add it.

Some brands need to access the original wire control panel, and set the wire control gateway as a cluster machine, restart, continue to add.

5, the curtain motor is not closed in place, automatically stopped?

A: Relearn the motor stroke. Manually push the curtain to the full open position, power off the motor, and restart. Control the motor to turn it off and allow the motor to slowly self-test. When he all closed, in the control motor to open the operation, let the motor slowly self-test, when he all open. Can return to normal.

6. Is the curtain motor APP control opposite to the actual action direction?

Answer: Enter the curtain motor and more motor setting in the APP, and adjust the direction of the motor.

7. What should I do if the equipment is offline and cannot be controlled?

A: The WiFi device should check whether the router is working correctly and whether the WIFI password has been modified.(Rerequires manual distribution)
zigbee Please check whether the gateway is offline at the same time. If the gateway is offline, please check the network and power supply of the gateway first. After the gateway is restored, the device also returns to normal within 2 minutes.
Check whether the distance between the equipment and the gateway is too far or there are too many walls, so that the ZigBee signal cannot be covered. It is recommended to add the zigbee gateway.
Check whether the wifi2.4G channel interferes with the zigbee channel, modify the WiFi2.4G channel, and suggest to open the equipment isolation.

8, the central control screen can not display the device and scene, can not be controlled normally, including voice control and no response?

A: First, confirm whether the mobile terminal can be controlled normally. Then turn on the hot spot of the phone, connect the central control screen to the phone, wait for about 2 minutes to test again, if it can return to normal. Please open the visitor WIFI, reconfigure the central control screen to connect to the visitor network, and open the DHCP automatic acquisition IP address option of the router.
Check whether the central control screen has a prompt version upgrade, and update the version of the central control screen in time.

9, the single fire switch control lamps are unstable?

Answer: The single fire switch load should be in the 24W-150W range, please check the power of the lamp.
Check whether there is any spare load port to connect to the control line, please connect the existing control line from L1 to leave L2 L3 empty.

10. (Universal router) How to split the SSID of Wi-Fi into 2.4G and 5G frequency bands?

A: If your router supports Wi-Fi with both 2.4 Ghz and 5 Ghz, but can only find one Wi-Fi name in the Wi-Fi search page, refer to the following steps: Enter the Wireless Settings (Wireless) page of the router (the entry method is usually on the label on the back of the router).
Find the 2.4 Ghz settings page, change the Wi-Fi name (SSID) to "xxx-2.4G", and save the settings.
Find the settings page for 5 Ghz, change the Wi-Fi name (SSID) to "xxx-5G", and save the settings.
After the name change is completed, you can find the two Wi-Fi names, "xxx-2.4G" and "xxx-5G" respectively in the Wi-Fi search page of the phone.
Note: Because the Wi-Fi name has been changed, all devices connected to the wireless router need to be re-networked, and if the original password is not changed.
Refer to the original router setup instructions for details.

11. How to achieve group control for multiple devices of the same model?

Answer: Click the button in the upper right corner of the device control page to enter the "Device Edit" page;
Click Create Group: After entering the page, all the added devices with the same device model will be automatically displayed;
Through this function, all devices of the same model can be established into groups for unified management;

12. Why cant the phone receive device notifications, alarm / ringing and call requests from the App?

A: Please ensure that your mobile system permission allows the App to push messages; please make sure that you enable message push in the App: open the App, click my-message center, click the button in the upper right corner, enter the message push Settings, click "Enable message push"; if it is a camera device, you need to open the "mobile detection alarm switch";

Please make sure that the function is enabled in Message Push Settings, or close it first;

If you ensure that your mobile phone and device are allowed to receive push messages, but still cannot receive push messages, please check that the message center in the App has received a new message notification;

Some Android phone systems will force the App message as marketing information, so as to turn off the push and sound / vibration reminder function;

Due to the restrictions of some Android systems, some Android phones can only receive up to 24 App message feeds. If these messages are not cleared, the phone will not be able to receive new App push messages.

Note: If your device is a smart doorbell or smart camera, you cannot receive a voice / video call request on the phone interface due to the restrictions the phone makes on the App. You need to open the App to receive a voice / video call request normally.

The power saving function of some Android phones will close the background process of the App, which is also why you cannot receive the App push:

Please turn off the power saving function in the Android phone, or add the App to the white list of the power saving function (if there is no white list function, you need to turn off the power saving function);

Please lock the background process of the App in the background management page of the Android phone, so that the Android system will not automatically close the background process of the App. (the Android system with this function can see the "lock" mark on the background process of the App);

Please allow the App to be automatically started in the system Settings of Android phones, otherwise the Android system will periodically turn off the background process of the unused App, which will also affect the normal push of App messages.

13. What happens if the one-key execution / automation is not executed correctly?

A: Please confirm that your equipment is normally powered on and turned on;
Please confirm that the device is normally online in the stable and smooth network environment during the task execution period;
If the device is normally online and normally on, but the task is not executed correctly, please delete the task and add a new task;
If the problem is not improve, after removing the device, add the device and set the timing task again.
If you are using a zigbee device, it may be caused because your device is not connected to the gateway. If your gateway is connected, which may be caused by excessive devices configured in the scene, it is recommended to set the scene through a group.
If you are using a Wi-Fi device, possibly because the device may be offline, remove the device and add the device again.

14. How to remove the multicontrol association on the switch?

A: Just swipe the added correlation switch to the left to delete it. If it cannot be deleted, there may be a compatibility problem with the control panel of the device, or the firmware. You can try to replace the Android phone system. You can also continue to add an associated button, action wake up, left slide delete again.

15. Cant accurately control one of the switches or functions when using voice audio control equipment?

A: First, confirm whether the device supports voice control. If it is not supported, the synchronization to the third-party smart speaker App will be displayed as a normal single control device (only one open key is displayed, or even if it is a multi-control switch, but the split switch cannot be controlled separately).

You can also create one-click execution or automation, and then use voice to control the one-click execution or automation you create, so that you can accurately control a single function on your device.

16. What is the maximum communication distance between the intelligent wall switch and the gateway?

Answer: between the wall switch and the gateway in a wall, the communication distance can reach 5-7 meters, under the case of more partition wall, it is suggested to add a gateway or shorten the communication distance as far as possible.

Why does the light color is not uniform, some warm light, some light color is exactly the opposite?

Answer: two-color temperature lamp, can have three wiring generally.V+， W， C。

If the above problems occur, please replace the position of the lamps, W and C wiring with opposite colors.

18. The device has been successfully bound to the third-party smart speaker, but after modifying the name of the device, the smart speaker cannot control the device?

A: At present, after modifying the name of the device in the App, it cannot be synchronized to the third party smart speaker (because the third party smart speaker is a closed platform), and only by rebinding the third party smart speaker, the new name of the device can be synchronized to the third party smart speaker;
But you can rename multiple devices or single device names in a third-party smart speaker App, so you can meet your needs;
When setting the name, please try to modify the name of the device to the third-party smart speaker is easy to identify, otherwise there will be unable to identify the control instruction, so as to control the phenomenon of failure.

19. What is the "one-key switch reversal" function in the one-key execution / automation Settings?

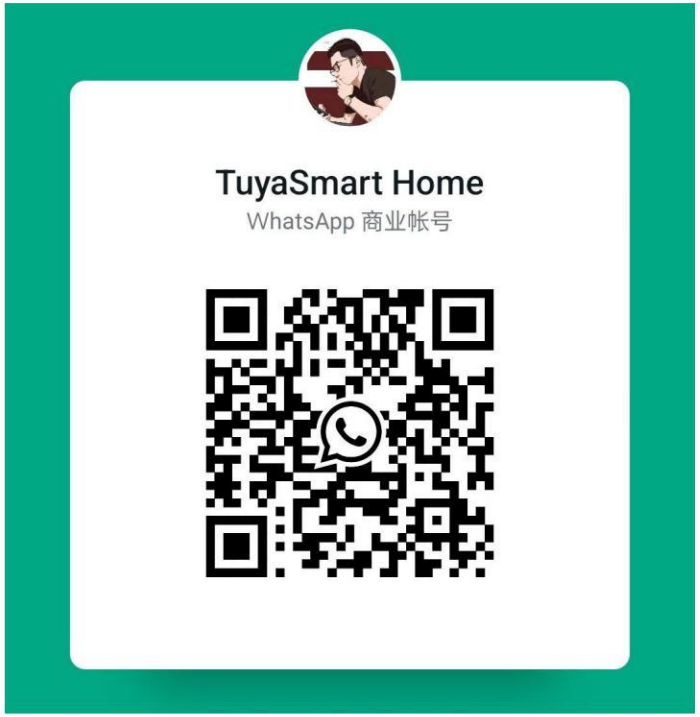
A: The "one-click switch reversal" function allows the device to turn on or off according to its own status. For example, when a "one-click switch reversal" is triggered and the device is on, the device is off, and vice versa. It enables you to set the switch status of the device through one-click execution / automation.

Whats going about the automatic disappearance of the equipment?

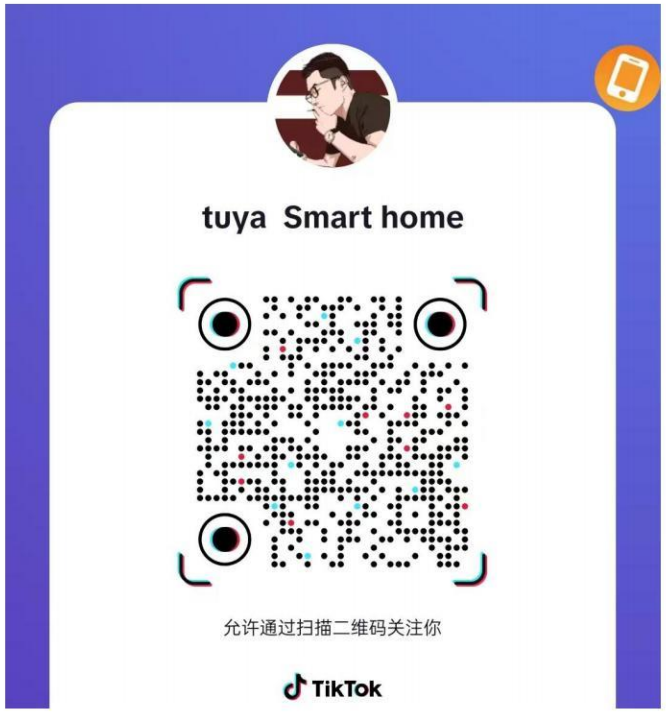
A: It may be that this device is reset. When the smart device is reset and connected to the network, the device under the original account will automatically disappear;
If your device is a Zigbee device or a Bluetooth mesh device, if your gateway is reset, your child device will disappear from the App, please check whether your gateway device is normal first;
After you enter the account, you have selected the wrong home (the device cannot be displayed at the same time in different homes);
You logged in the wrong account and actually registered a new App account through a third party login, so you cannot bind with the account you have registered with your mobile phone number / email. Similarly, after logging in the App through the three-party login method, you cannot inherit the account device that you have registered with your mobile phone number / email before.

More information is continuously updated. ...

whatsAPP



Tik Tok.



WeChat

Thank you for your attention.