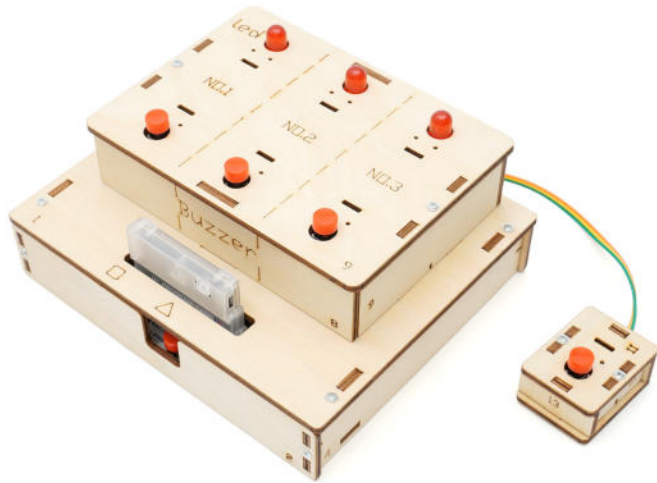


HS-AIO Answerer

Learning kit assembly instructions



Product Introduction

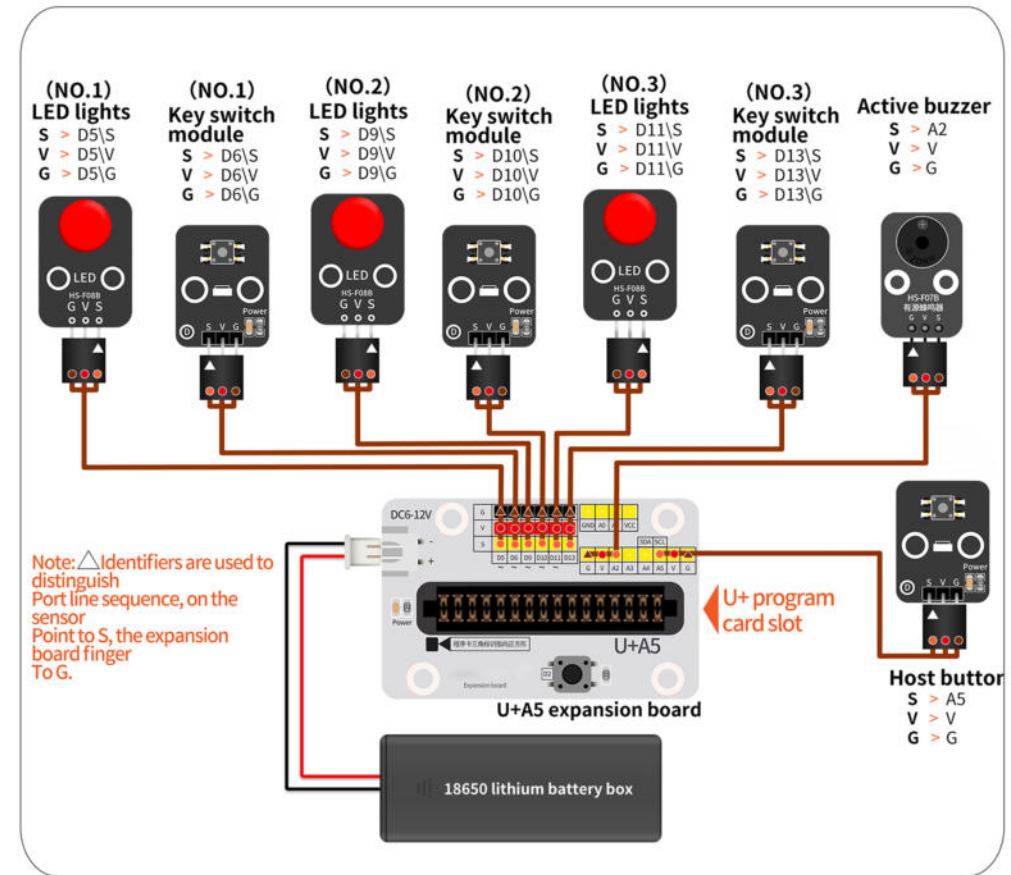
The answerer is a smart kit that combines LED lights, key switch modules, active buzzers and other accessories. This kit enables answerer functionality and whack-a-mole-playing games. You can also modify the sample program through programming software such as Arduino IDE, Mixly or write a new program yourself to control the answerer.

This product must be paired with a U+ program card (U+ PROGRAM CARD) USE
U+ Program card Support Arduino IDE, Programming software such as Mixly, Ardublock, Scratch, etc

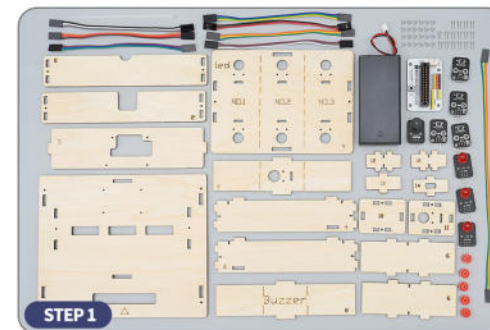
Preparation of tools and assembly considerations

Self-equipped assembly tools: 3mm diameter Phillips screwdriver, scissors.
Self-provided debugging tools: 1 computer with Windows 7, 8, 10, 11 operating system, 1 U+ program card, 1 data cable 18650 lithium battery
1 pair.
If you want to easily assemble the kit, you need to read the assembly manual carefully, assemble step by step

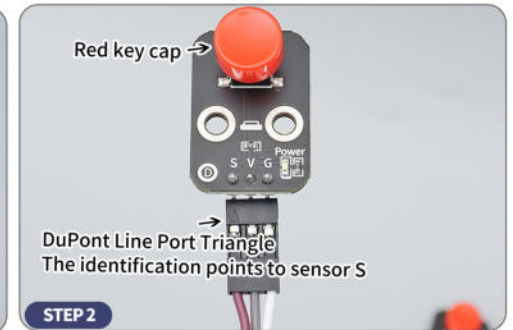
Warning: Persons under the age of 14 must be under the guidance of a professional teacher or knowledgeable adult!
The assembly and debugging of the product require the use of relevant tools, please take safety precautions when assembling to avoid injury!
This product is a teaching and experimental product, please do not use its function as a daily necessities, there will be instability!
When you are not using this product, please turn off the power switch on the battery compartment and remove the battery, keep the battery safe!



● Circuit wiring reference diagram



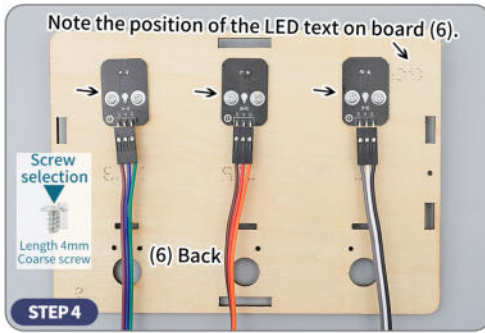
- Prepare all accessories and wood materials, and carefully check the number on the materials when assembling the wood materials. (The board has a number side as the front and no number as the back)



- Plug a 3P DuPont cable port into the key switch module and install the red key cap on the key switch module.



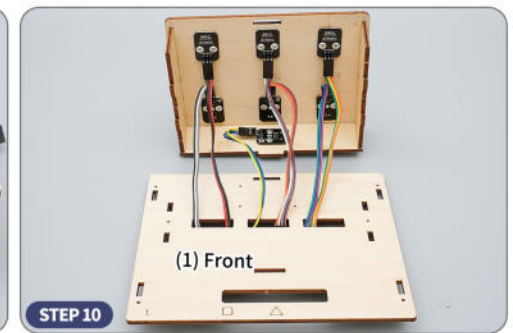
- Refer to the method of STEP2, plug the six 3P DuPont cable ports into two key switch modules, three LED lights, and an active buzzer, and then install the two red key caps on the key switch module.



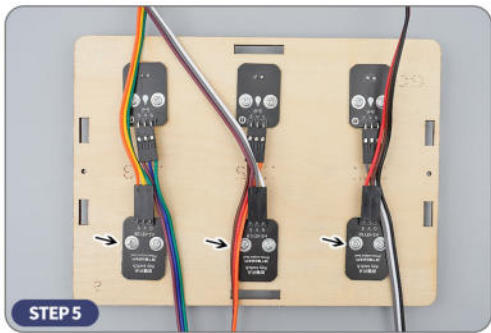
- Install the three LED lights on the back of board (6) with 4mm rough screws.



- Install board (7) on board (6).



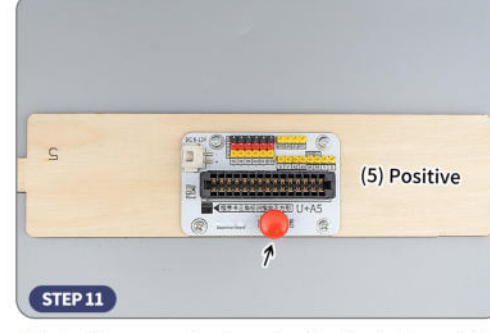
- Pass all DuPont lines through the three wire holes of plate (1).



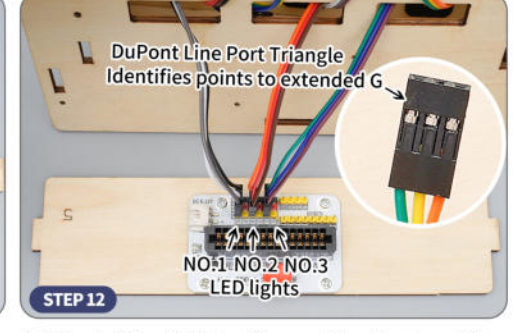
- Install the three key switch modules on the back of board (6) with 4mm rough screws.



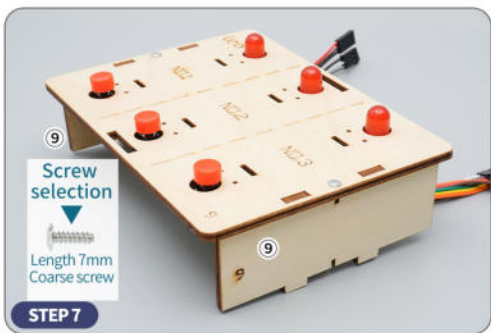
- Check that the key switch module and LED light installation position are correct.



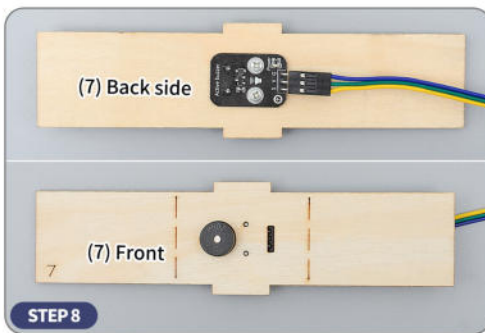
- Install the expansion board on the front of board (5) with 4mm rough screws, and then attach the red key cap.



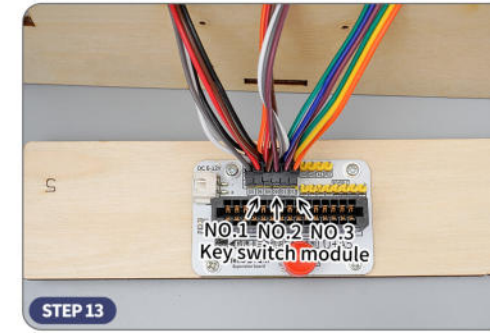
- Refer to [Circuit Wiring Diagram] Plug the three LED lights DuPont wire ports into the D5, D9, and D11 of the expansion board. **Note: The ▲ logo is used to resolve the port line order, the sensor points to S, and the expansion board points to G.**



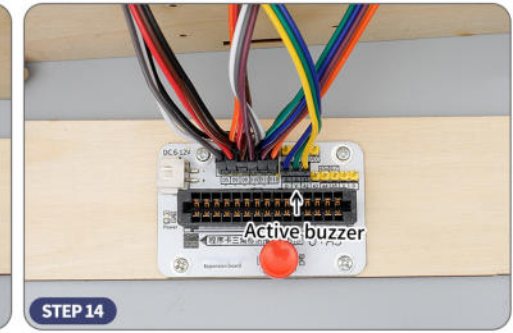
- Install two (9) plates on the (6) plate with 7mm rough screws.



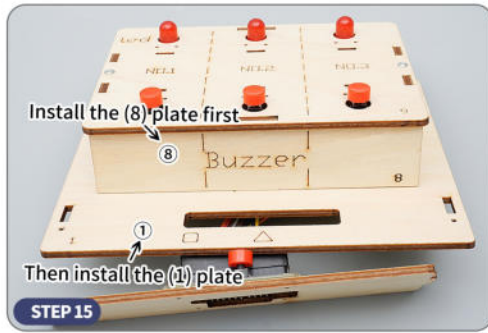
- Install the active buzzer on board (7) with 4mm rough screws.



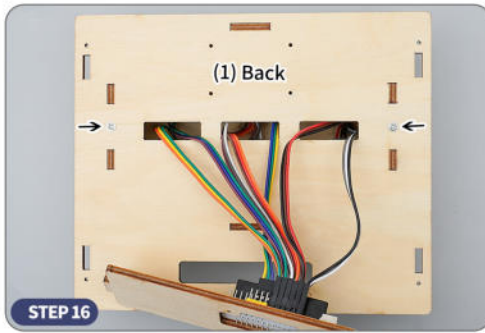
- Refer to [Circuit Wiring Diagram] to plug the three key switch module DuPont cable ports into the D6, D10, and D13 interfaces of the expansion board. **Note: The ▲ logo is used to resolve the port line order, the sensor points to S, and the expansion board points to G.**



- Refer to [Circuit Wiring Diagram] Plug the active buzzer DuPont cable port into the G, V, A2 interface. **Note: The ▲ logo is used to resolve the port line order, the sensor points to S, and the expansion board points to G.**



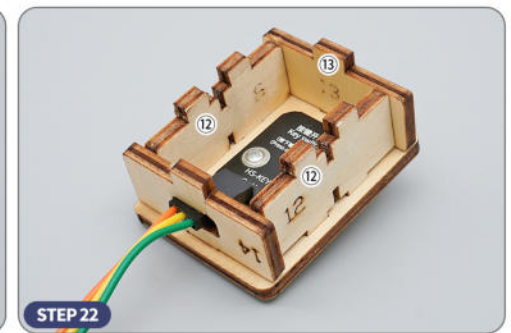
- Install board (8) on board (6), and then board (1) on board (7), (8), and (9).



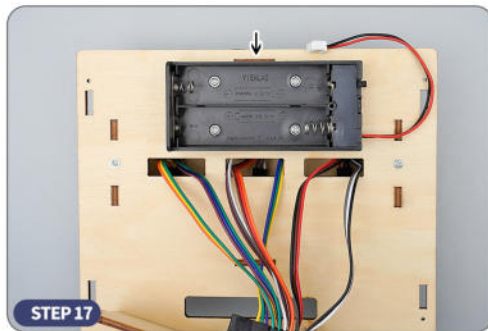
- Use 7mm rough screws to secure the (1) plate to the two (9) plates.



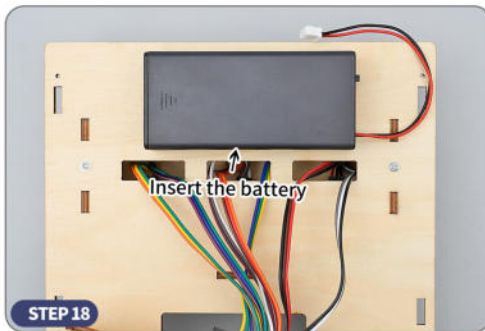
- Install board (14) on board (11) first, and then plug the 3P DuPont cable port through the line hole of board (14) to the interface of the key switch module.



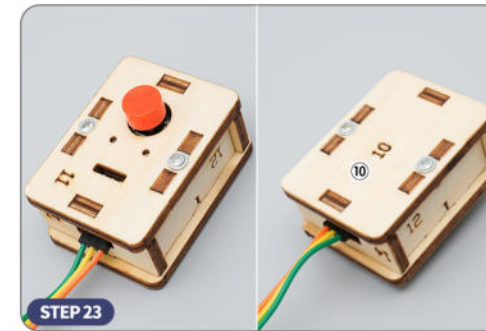
- Install two plates (12) and (13) on board (11).



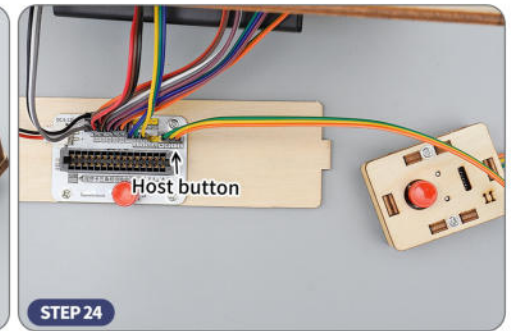
- Install the battery compartment on board (1) with 4mm rough screws.



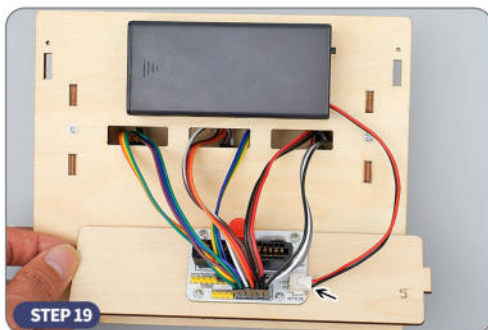
- Put the battery in the battery compartment first, and then close the battery compartment lid.



- First use 7mm rough screws to fix the (11) board on the two (12) plates, then install the (10) board on the (12), (13), (14) plate, and fix it on the two (12) boards with 7mm rough screws, and the host button assembly is completed.



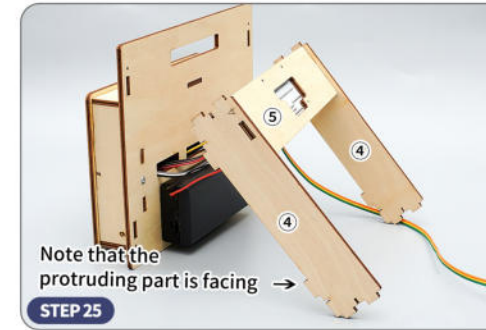
- Refer to [Circuit Wiring Diagram] Plug the host button 3P DuPont cable port into the A5, V, and G interfaces on the expansion board.



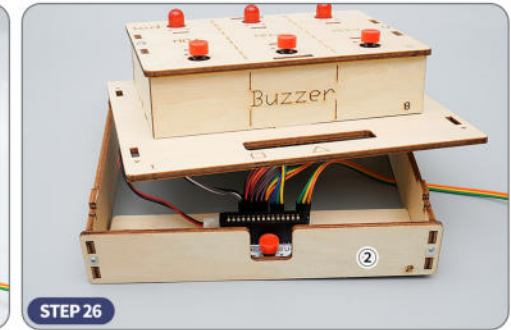
- Refer to [Circuit Wiring Diagram] to plug the battery box wire port into the power connector of the expansion board.



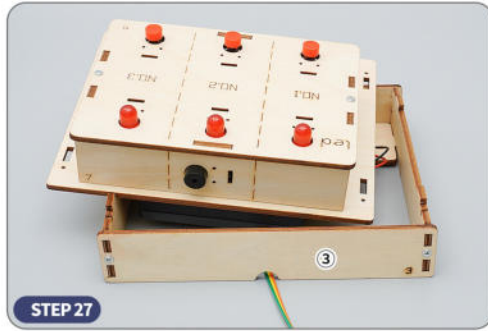
- Install the key switch module on the back of the (11) plate with 4mm rough screws.



- Install two (4) plates on either side of (5) plates.

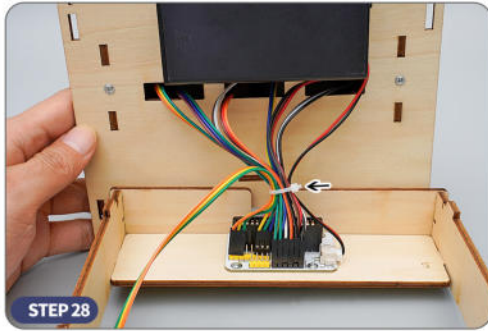


- Install the (2) plate on two (4) plates with 7mm rough screws.



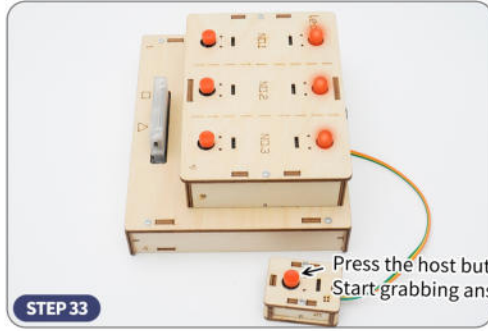
STEP 27

- Install the (3) plate on two (4) plates with 7mm rough screws.



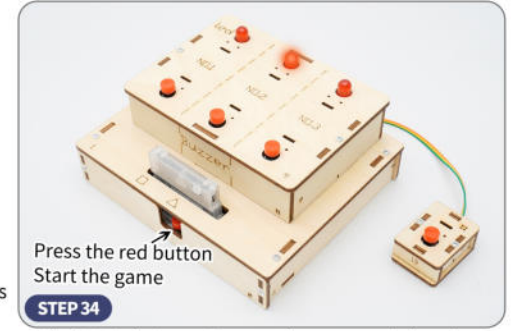
STEP 28

- Tie all the wires with a cable tie and trim off the excess cable tie with scissors. **Note: Handle with caution when using scissors to avoid injury!**



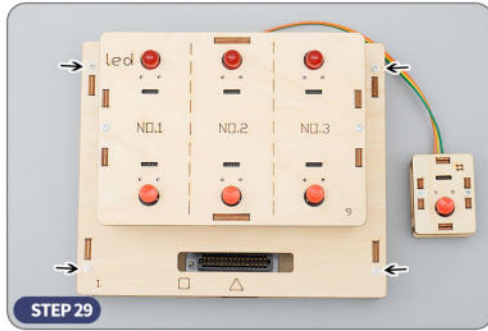
STEP 33

- Answerer program: After turning on the power switch, press the host button, the LED light is on and beeps to start the answer, the three buttons press the button first, the LED light is on and beeps, indicating the winner.



STEP 34

- Whack-A-Mole Game: Turn on the power switch and press the red button on the expansion board to start the game. Game rules: three LED lights light up at the same time, and then start to randomly light up an LED light, participants need to press the button corresponding to the LED light in time, if the button is not pressed within the limited time, it is regarded as a lost opportunity, the limited time will be shorter and shorter with the game progression, each game has a total of three chances, losing three opportunities is the game is over.



STEP 29

- Install the (1) plate on two (4) plates with 7mm rough screws.



STEP 30

- Use the Mixly software to upload the kit's sample program to the U+ program card.

After the assembly is completed, you also need to check whether the installation is correct to avoid danger during commissioning!

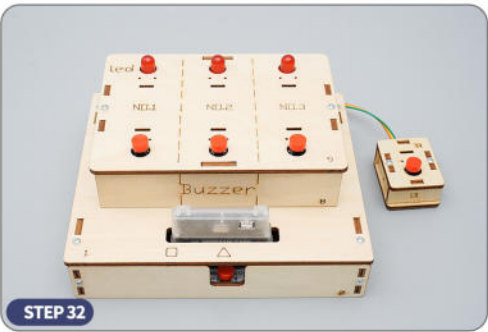


1. Carefully check whether the whole kit has the wrong accessories, if there are wrong accessories, it will cause the whole kit to not operate normally.
2. Carefully refer to the circuit connection reference diagram to check whether the wire connection is correct, the wrong wire connection will cause the circuit to short circuit, burn the electronic components, and seriously lead to fire, explosion and other dangerous situations.
3. Carefully check whether the pins at the bottom of the circuit board accessories are in contact with other metals, and if there is contact, please check whether the accessories are not installed, resulting in the circuit board and other metals are not isolated.
4. Please check the power supply type and battery model used in this kit, the wrong use of the power supply or battery will cause fire, explosion and other dangerous situations.
5. If you encounter problems that you do not understand, please contact the online customer service of the official service website or find relevant professionals for consultation during working hours from Monday to Saturday 9:00-18:00, do not operate blindly, otherwise there will be danger.



STEP 31

- Insert the program card of the downloaded program into the card slot of the expansion board. **Note: The triangle identification of the program card points to the shield square identification.**



STEP 32

- The answerer assembly is complete!

Refer to the procedure below to debug the kit



You may encounter the following problems during debugging, refer to the tips below to see if you can troubleshoot!



1. Check whether the wiring is loose or incorrectly connected, please refer to the circuit wiring diagram for details.
2. Check whether the battery has run out of power, it is recommended to replace the new battery.
3. Check whether the DuPont wire of the sensor and the expansion board is connected correctly, please refer to the circuit wiring diagram.
4. Check whether the U+ PROGRAM CARD program card has downloaded the program.
5. Check whether the U+ PROGRAM CARD program card is inserted backwards, which will cause short circuits, please refer to the [STEP31] card insertion method for inserting the card.