

Lesson 3 Wireless Glove Control

1. Preparation

The controller of wireless glove has built-in Bluetooth module and has been burnt firmware program before delivery.

Step1: Make sure that the Bluetooth module of uHand2.0 has been connected correctly.



Step 2: Before using the wireless glove, please confirm that the battery has been fully charged.

Charging method:

After the charger is connected to the battery charging cable, the indicator will be green.

When the charger indicator is red, it is charging.

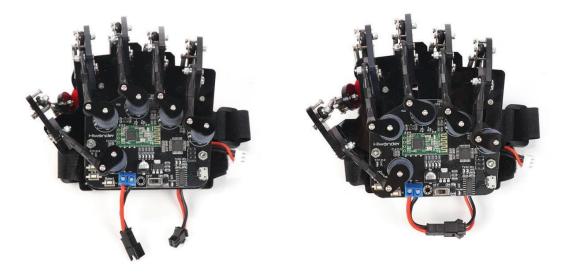
When the red charger indicator turns green, it means the charging is completed.



2. Device Connection

2.1 Device wearing

Step1: Connect the power wires, red to red and black to black.



Step 2: Until all the straps on the glove. Then put 5 fingers into the corresponding finger straps in turn, and tighten the finger traps.



Notes: The finger cots should be fixed at the root of the fingers, for better control!



Step 3:After wearing the finger traps, tie the two wrist straps as the figure shown below.

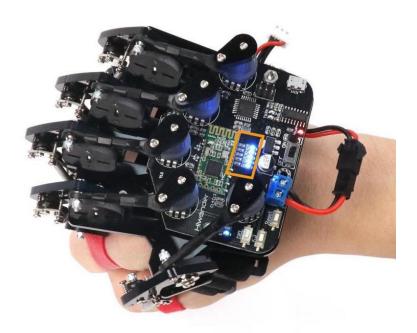


2.2 Device Calibration

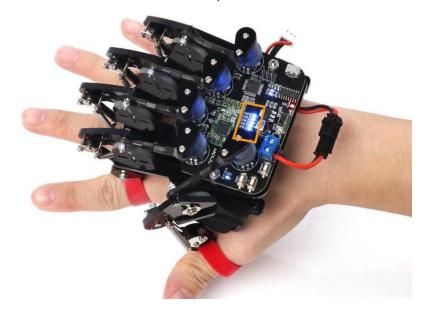
For better experience, the wireless glove must be calibrated before using. The specific steps are as follow:

Step 1: Straighten out your arm and clench your fist with the palm direction is vertically downward. Then switch on the glove and you can see the lights D1-D5 will flash once.





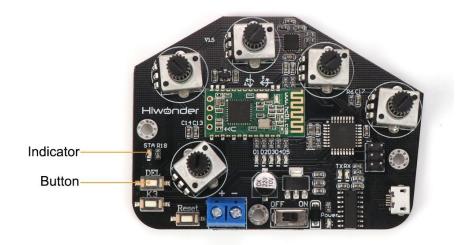
Step 2: After flashing, completely stretch your hand and the lights D1-D5 will flash again to indicate that the calibration is complete.



Note: If fail to calibrate, you can press "DEL" key on controller again. Then repeat the above steps to calibrate.



Step 3: After the calibration is complete, connect to Bluetooth. The flashing frequency of STA indicator on the controller indicates the current Bluetooth connection status. The "DEL"key can clear the previous Bluetooth connection record.



The corresponding relation between the flashing frequency of STA indicator and the Bluetooth connection status is shown in the following table:

STA indicator	Bluetooth
Fast flashing	No Bluetooth connection record and Bluetooth unconnected
Slow flashing	There is Bluetooth connection record but Bluetooth unconnected
Continuous lighting up	Bluetooth connected

If STA status indicator flashes slowly or lights up but cannot control the uHand2.0, you can press "DEL" button. At this time, STA indicator flashes fast, which indicates that the Bluetooth connection records are cleared successfully. Then connect Bluetooth again according to the previous steps.

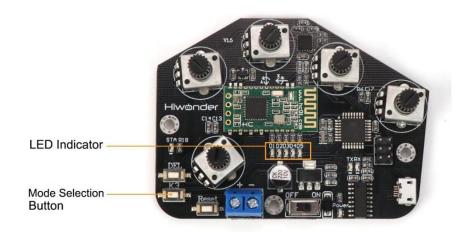


3. Mode Selection

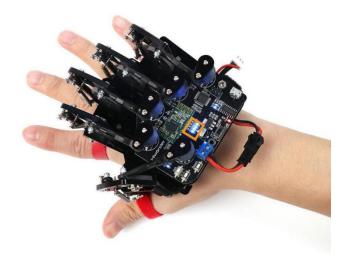
Notes: The uHand2.0 can only be controlled by wireless glove in a one-to-one manner, that is, one-to-many manner can not be allowed. (if multiple robots are purchased)

In addition, before entering corresponding mode, please make sure that the device has been connected successfully.

In order to distinguish between different control modes. The KEY3 button for switching the control mode and 5 LED lights (D1~D5) indicating the different control modes are preset on wireless glove.



In this section, we use the uHand2.0. If switch to this mode, you need to press"KEY3" button multiple times until lights D1-D4 keep on simultaneously.



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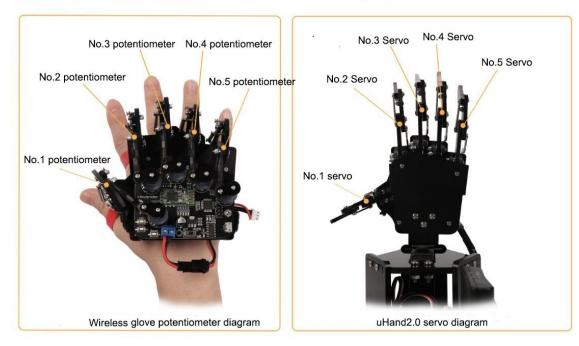


If "KEY3" button is pressed and then none of the 5 LED lights responds, you can restart the glove and repeat the operations from device connection step.

4. Button Diagram

The glove straps on wireless glove corresponds to the servos on uHand2.0's finger. By manipulating the glove, uHand2.0 can execute the corresponding action. Their correspondence is shown in the following figure.

Note: The numbers of the left picture correspond to that of the right picture.



Reminder: Please keep uHand2.0 away from human body during using to avoid accidental injury and control the robot as slow as possible.