

Tip:

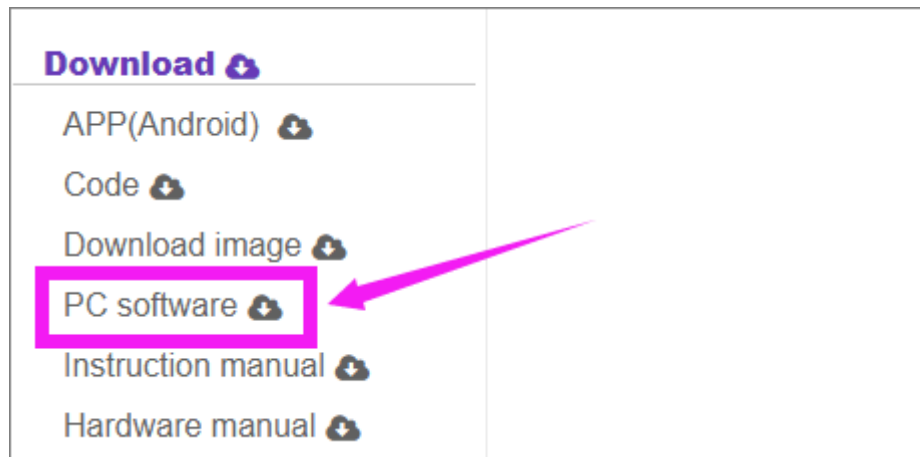
PC software remote control and APP remote control use the same program.

The image provided by us has enabled the process by default.

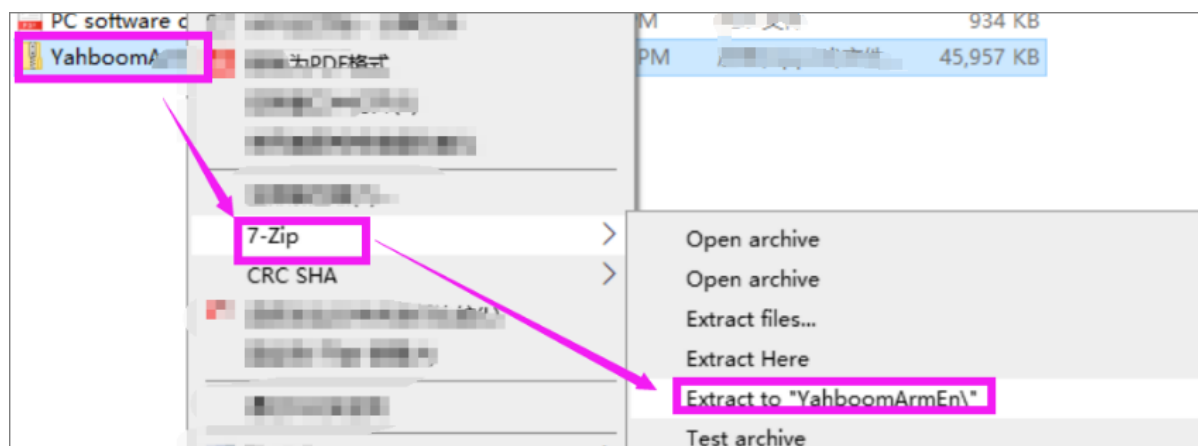
Username: pi Password: yahboom

## 1.Install PC software

1.1 Download PC software from our website.



1.2 Extract ZIP file by 7z software or you can use others software.



1.3 You will get a folder as shown below.



## 2.Start up DOFBOT and connect PC software

2.1 After turning on the power switch, wait patiently. When the robotic arm buzzes three times, it means that the system has been started.

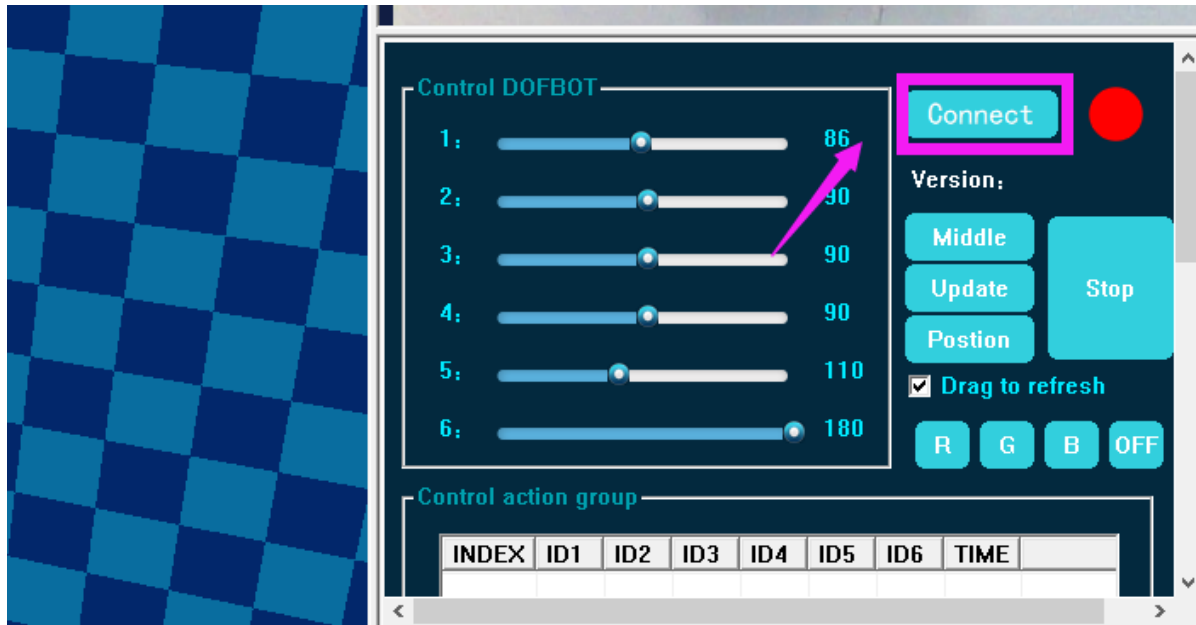
2.2 Ensure your computer and robotic arm are under the same LAN.

2.3 Double-click the exe file to open the software.

3DS	1/21/2021 10:33 AM
Video	1/21/2021 10:33 AM
config.ini	1/21/2021 12:19 PM
Dofbot.exe	1/19/2021 8:11 PM

### 3.Control DOFBOT by PC software

3.1 Click [Connect] to connect robotic arm.



3.2 Select the network connection method.

Input the IP address, communication port, and video port of the robotic arm. Then click \*  
[\*\*Connect\*\*\*]\*\*\*.

You need to modify it according to the actual IP displayed by the oled or the system. Our factory hotspot IP is 192.168.1.11

Communication configuration

Connection method: ☒ Network ☐ Serial port

Network configuration

Host address: 192.168.1.169 Communication: 6000

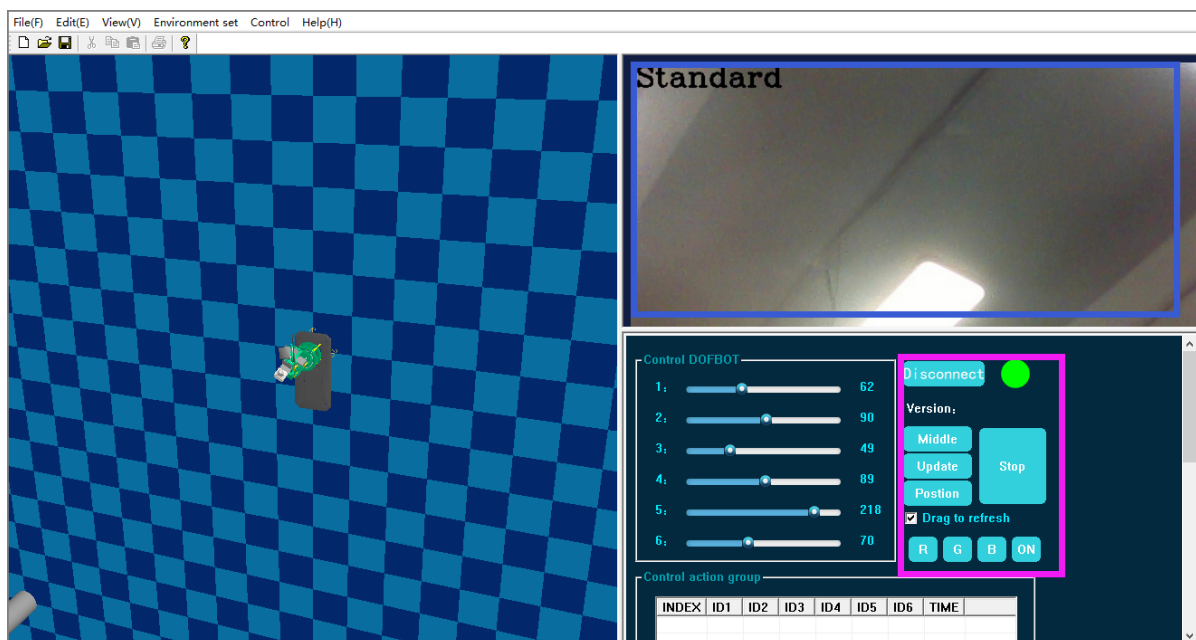
Video: 6500

Serial port configuration

Serial port:  Baud rate:

Connect

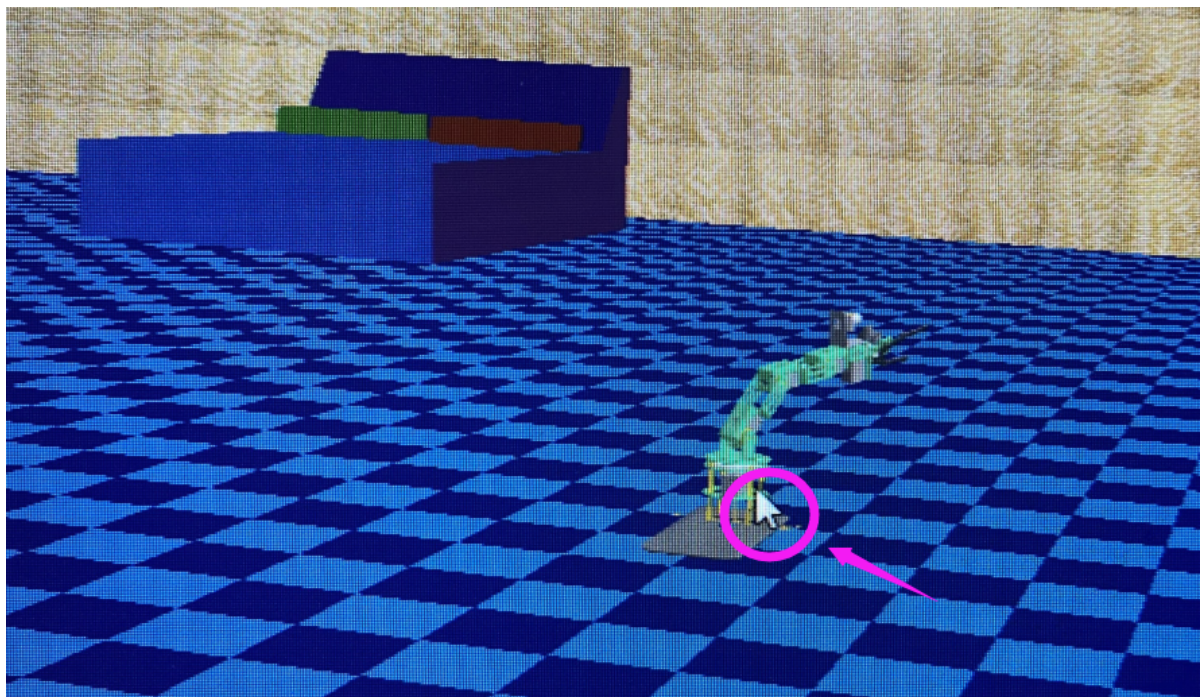
3.3 If the connection is successful, the status indicator on the interface will become green, as shown below. The video screen will also be loaded.



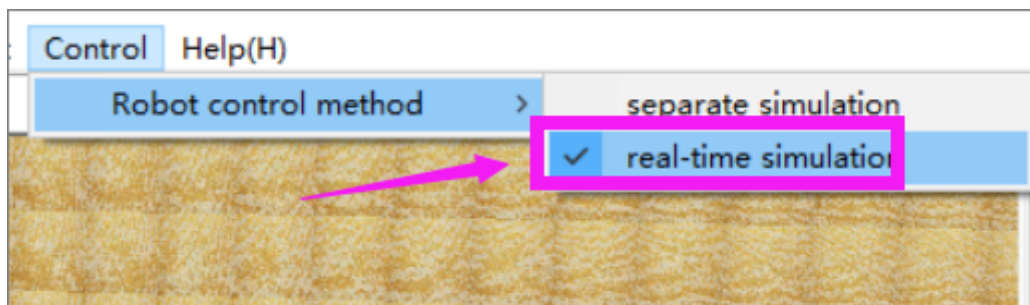
## 4.PC Function

Real-time simulation

1. Click the 3D simulation of the robotic arm on the left side on PC software.



2. Choose [Control]--[Robot control method]--[real-time simulation].



3. You can control robotic arm by button on key board. As shown below.

Note: During control, the mouse needs to be kept on the 3D simulation.



Press W,A,S,D key on keyboard at the same time.

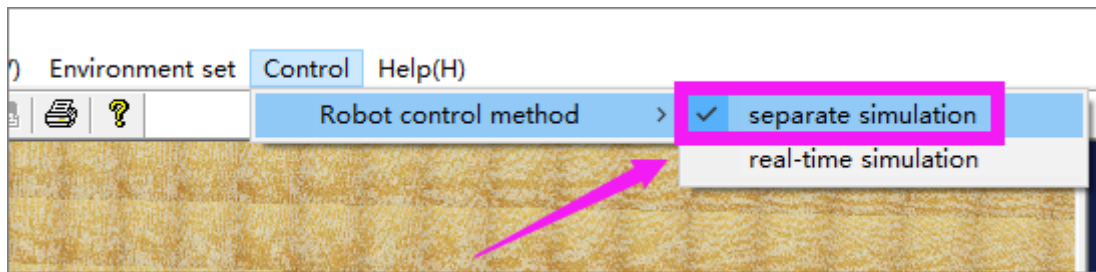
Press T,F,G,H key on keyboard at the same time.

Press I,J,K,L key on keyboard at the same time.

Can control robotic arm.

Separate simulation

1. Choose [Control]--[Robot control method]--[separate simulation simulation].



## 2. Control DOFBOT

You can control 6 servo of robot arm by drag slider.



## 3. Control cation group

Step:

- ① Drag slider on Control DOFBOT area.
- ② Click [Add] on Control action group, which means add a set of actions to robot arm. And you can see a set of action group data on the table. As shown below.

**1** Control DOFBOT

1: 54  
2: 107  
3: 20  
4: 81  
5: 180  
6: 49

Disconnect

Version:

Middle  
Update  
Position

☒ Drag to refresh

R G B ON

**3** Control action group

INDEX	ID1	ID2	ID3	ID4	ID5	ID6	TIME
0	54	107	20	81	180	49	1000

Action group interval time: 1000 ms

Add Delete Clear

Single Loop

We can add more action groups in the same way.

Control DOFBOT

1: 117  
2: 65  
3: 14  
4: 130  
5: 153  
6: 99

Disconnect

Version:

Middle  
Update  
Position

☒ Drag to refresh

R G B ON

Control action group

INDEX	ID1	ID2	ID3	ID4	ID5	ID6	TIME
0	54	107	20	81	180	49	1000
1	117	65	14	130	153	99	1000

Action group interval time: 1000 ms

Add Delete Clear

Single Loop

③Click [Single] or [Loop] to run this action.

**Control action group**

INDEX	ID1	ID2	ID3	ID4	ID5	ID6	TIME
0	54	107	20	81	180	49	1000
1	90	90	90	90	90	180	1000
2	55	46	119	52	125	119	1000

Action group interval time:  ms

④Click Loop off] to stop action is running, and robotic arm will back to center position.

**Control action group**

INDEX	ID1	ID2	ID3	ID4	ID5	ID6	TIME
0	54	107	20	81	180	49	1000
1	90	90	90	90	90	180	1000
2	55	46	119	52	125	119	1000

Action group interval time:  ms

⑤[Delete] and [Clear] be used to delete or clear actions.

#### 4. Custom action group

Choose ActionX, robot arm will automatically completed this action, and the robot arm will automatically stop after the action is completed.

**Custom action group**

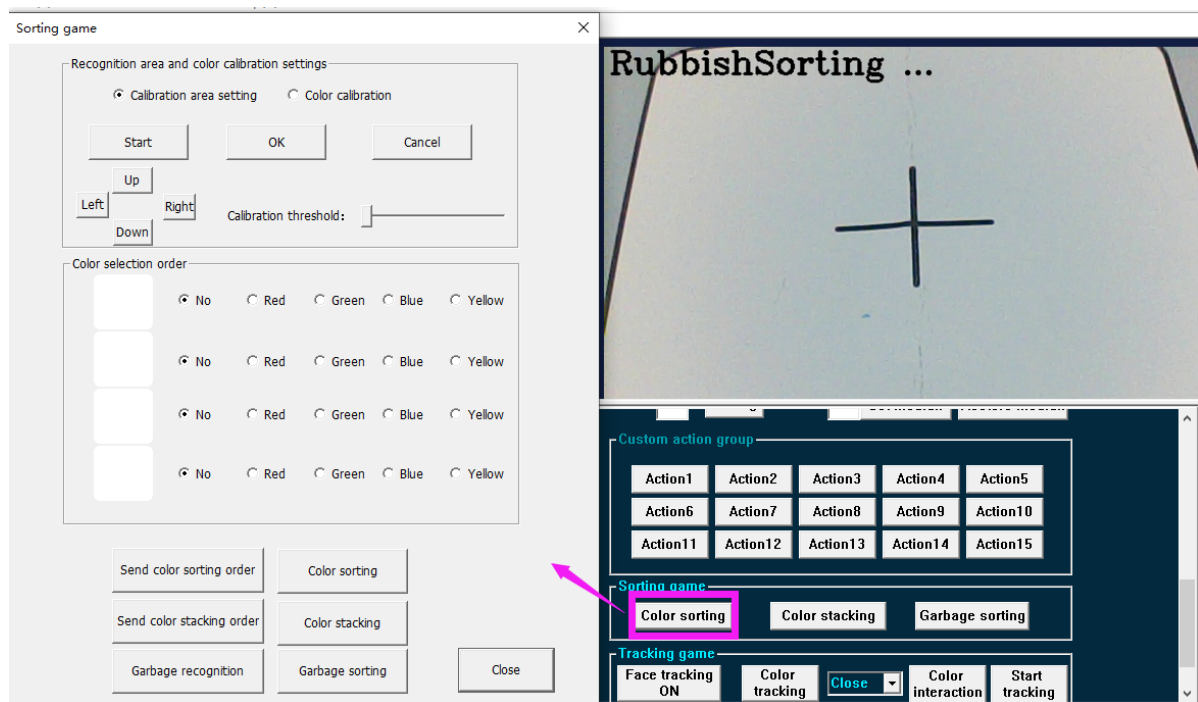
Action1	Action2	Action3	Action4	Action5
Action6	Action7	Action8	Action9	Action10
Action11	Action12	Action13	Action14	Action15

#### 5. Sorting game

**Sorting game**

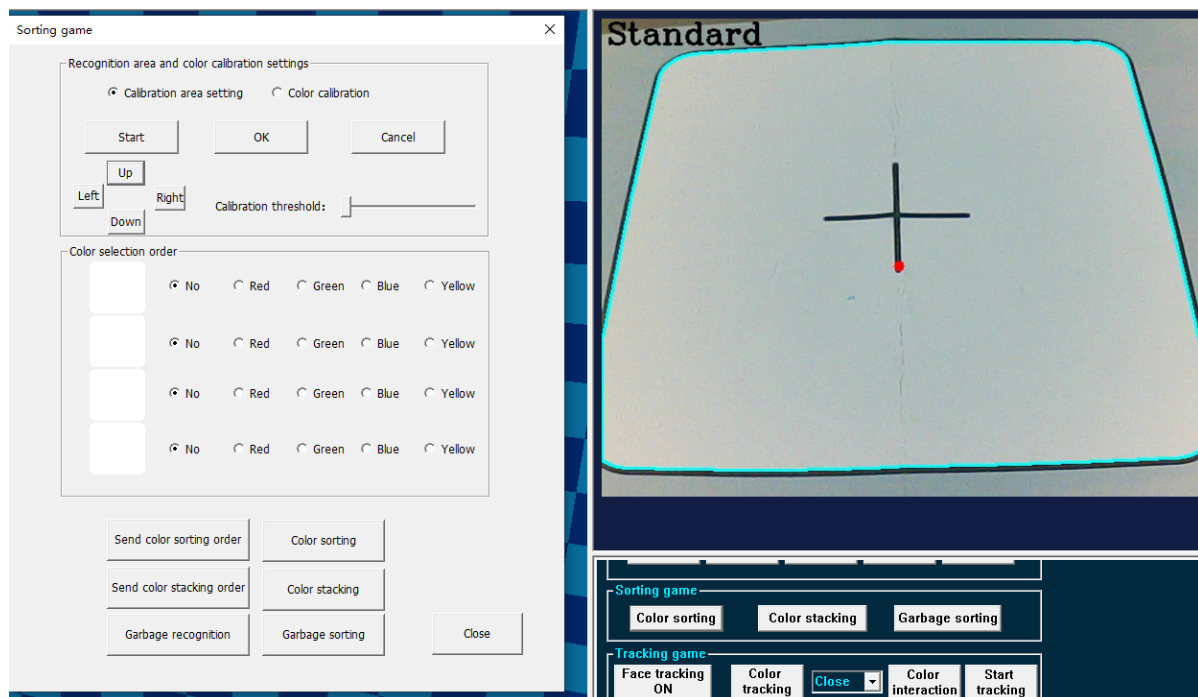
①Place map and click a game, for example-Color sorting.





②We need to set the calibration area, enter the calibration area. Click to up, down, left and right button to ensure camera can fully see the identification frame.

We can slide the calibration threshold setting so that the cyan box can circle the identification frame in the map, and click **\*[OK]\*** to complete the calibration.



③Select the color block, then send the sorting or stacking order, wait for the camera to recognize it, and then click sorting or stacking.



Recognition area and color calibration settings

☒ Calibration area setting    ☐ Color calibration





Start    OK    Cancel

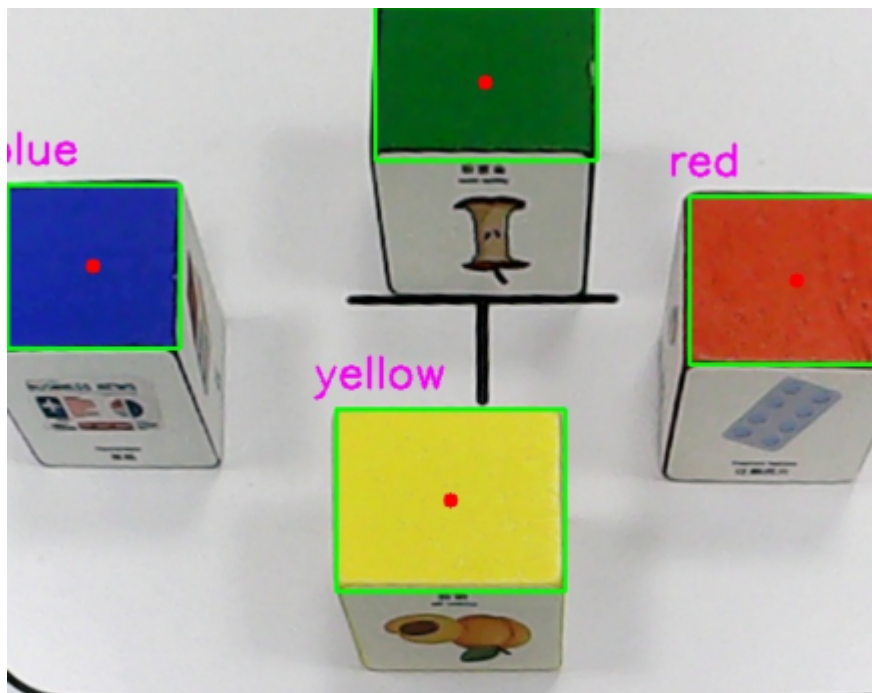
Up  
 Left    Right  
 Down

Calibration threshold:

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Color selection order

	<input type="radio"/> No <input checked="" type="radio"/> Red <input type="radio"/> Green <input type="radio"/> Blue <input type="radio"/> Yellow
	<input type="radio"/> No <input type="radio"/> Red <input checked="" type="radio"/> Green <input type="radio"/> Blue <input type="radio"/> Yellow
	<input type="radio"/> No <input type="radio"/> Red <input type="radio"/> Green <input checked="" type="radio"/> Blue <input type="radio"/> Yellow
	<input type="radio"/> No <input type="radio"/> Red <input type="radio"/> Green <input type="radio"/> Blue <input checked="" type="radio"/> Yellow



## 6. Tracking game

Face tracking: Click [Face tracking ON], when the robotic arm detects the face in the video screen, the robotic arm will move slowly with the face.

Color tracking: Select the color to be tracked. Then, click [Color tracking], place the corresponding color block in front of the robotic arm camera. When we move the color block, the robotic arm will move with the color block.

Color interaction: Click to [Color interaction], place the block in the green recognition box on the screen, wait for the value in the green box to stabilize. Then, click [Start tracking], the robotic arm will move with the color block.

Tracking game

Face tracking  
ON

Color  
tracking

Close

Color  
interaction

Start  
tracking