

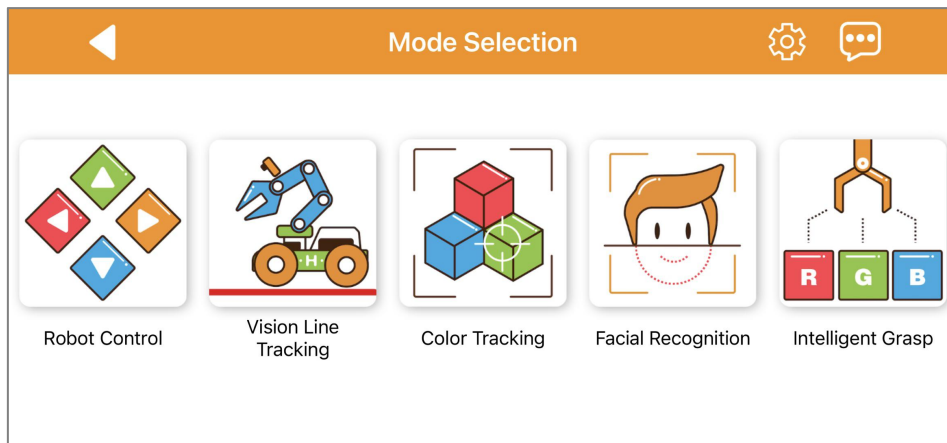
Lesson 2 Quick User Experience

1. Getting Ready

Please refer to “Lesson 1 APP Installation and Connection” to install APP and connect ArmPi Pro.

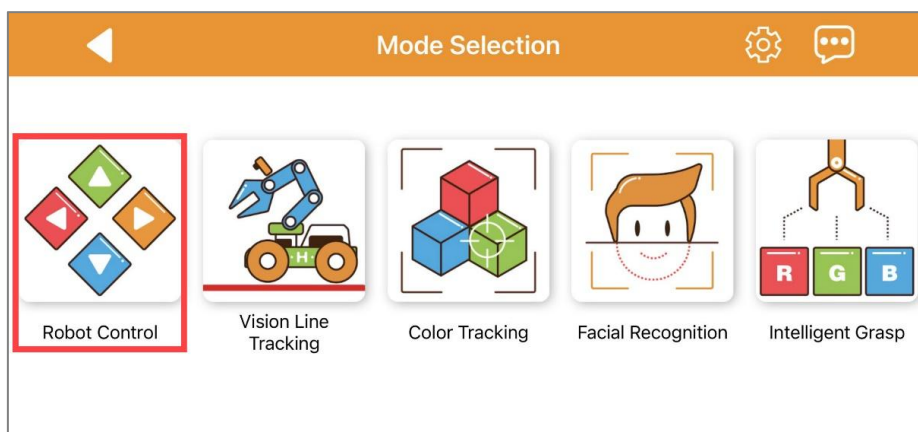
2. Start Game

Click ArmPi Pro icon to enter mode selection




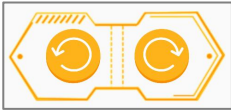



2.1 Robot Control

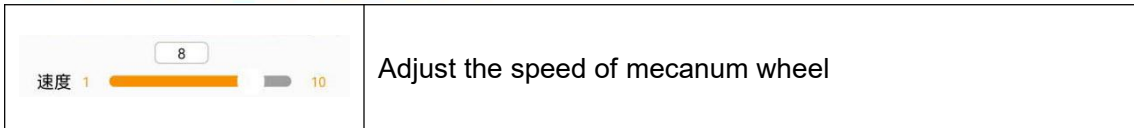
1) Select “Robot Control” in Mode Selection interface to enter this game, robotic arm will return to the initial posture.




2) The interface of “Robot Control” interface is divided into five parts. The left side is the interface to control the movement of robot by dragging the slider.

Other function icons can refer to the following table:

Icon	Function
	Drag slider to control the movement of ArmPi Pro
	Control the movement direction of ArmPi Pro
	Control the robotic arm return to the initial posture
	Display the current transmitted image
	Control the rotation of each servo of robotic arm



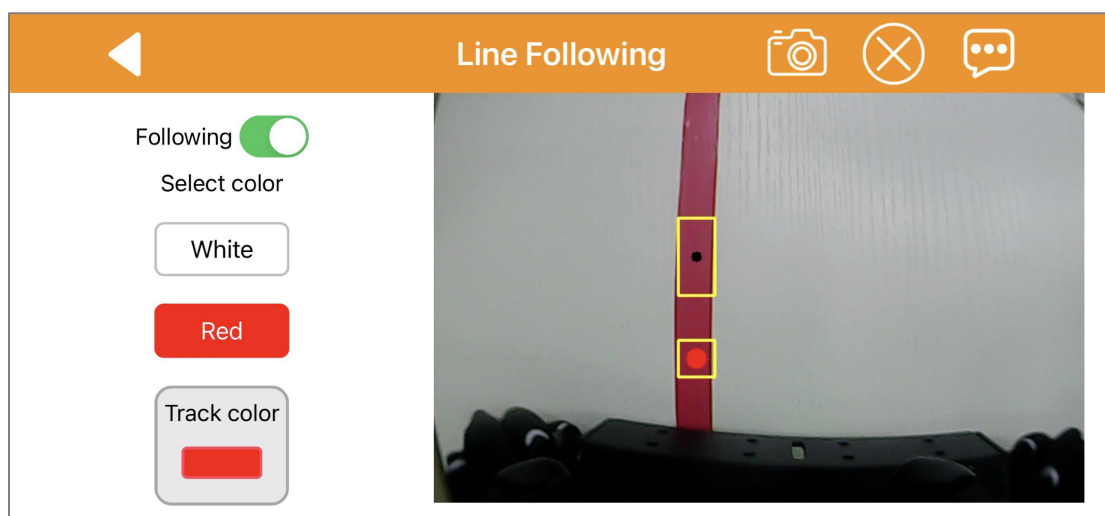
3) If want to back to the mode selection interface, click the blank area of interface and then click  in the left side.


2.2 Line Following

Note:

- ① Please start this game in a well-lit environment, but keep robot from the direct light.
- ② When recognizing, please do not have the same or similar colored object within the detected range to avoid interference.
- ③ If the recognition effect is not good enough, please refer to “1.ArmPi Pro Basic Lesson /2.Quick User Experience /Lesson 2 Color Threshold Adjustment”

- 1) Click “Line following” to enter this game.
- 2) After selecting color for the line, click “Start” to start following line.



- 3) If want to back to the mode selection interface, click the blank area of interface and then click  in the left side.

2.3 Color Tracking

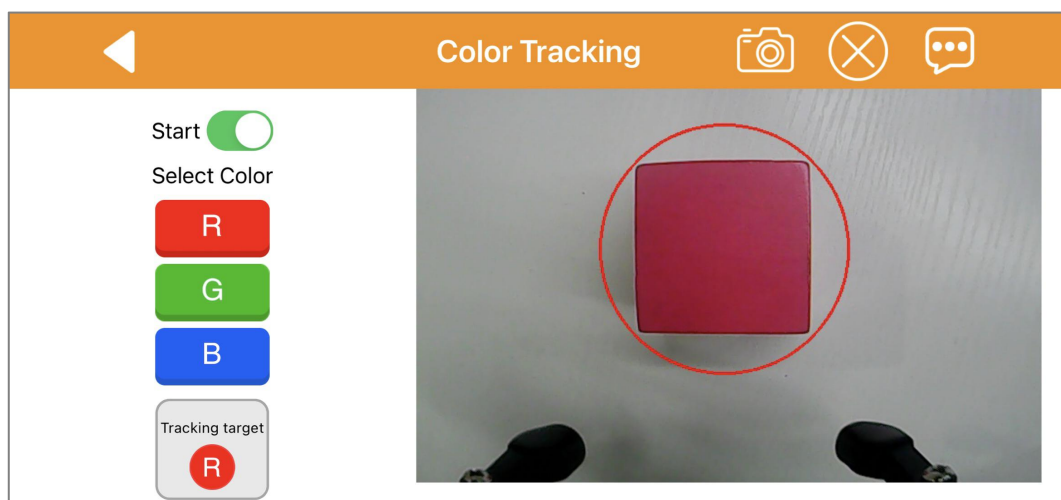
Note:

④ Please start this game in a well-lit environment, but keep robot from the direct light.


⑤ When recognizing, please do not have the same or similar colored object within the detected range to avoid interference.

⑥ If the recognition effect is not good enough, please refer to “1.ArmPi Pro Basic Lesson /2.Quick User Experience /Lesson 2 Color Threshold Adjustment”

- 1) Click “Color Tracking” to enter this game.



2) After selecting color, click “Start” and then the robotic arm will follow the movement of recognized color.

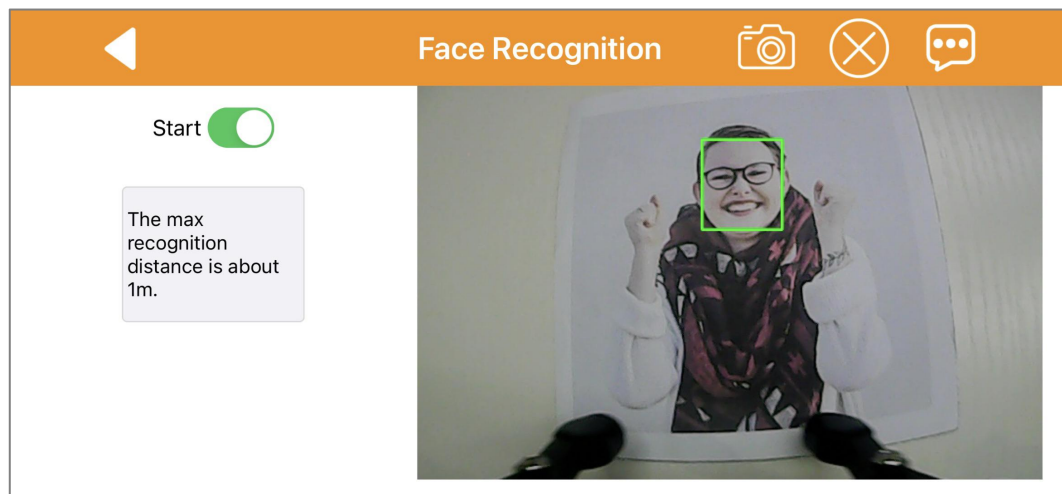
- 3) If want to back to the mode selection interface, click the blank area of interface and then click  in the left side.

2.4 Face Recognition


Note:

- ① Please start this game in a well-lit environment, but keep robot from the direct light.
- ② When recognizing, one human face only is allowed to appear within the detected range. Otherwise, it will affect the game result.

1) Click “Face Recognition” to enter this game.

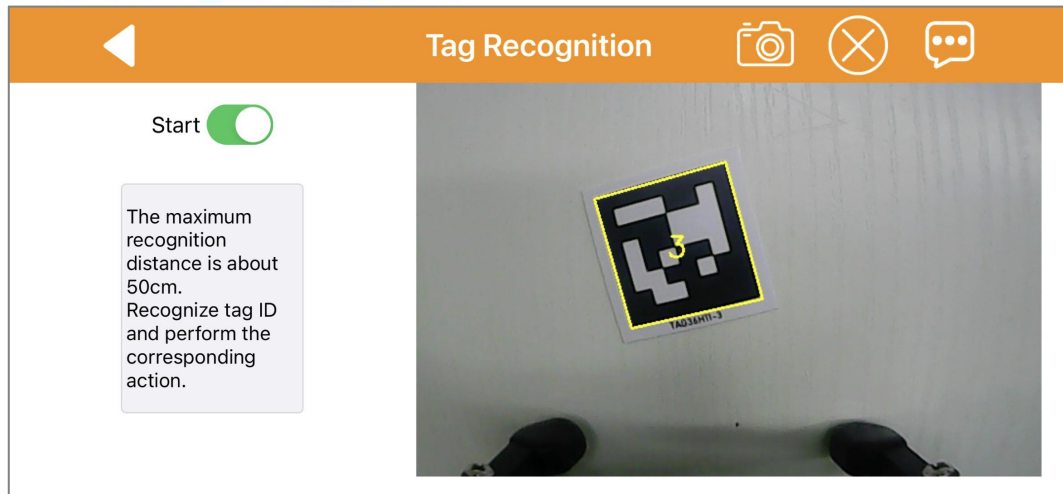


2) After clicking “Start”, robotic arm will search human face within the detected range. The recognized face will be framed in a green box after recognizing and the gripper will open. Then, the robotic arm will move with the recognized face.

3) If want to back to the mode selection interface, click the blank area of interface and then click  in the left side.

2.5 Tag Recognition

1) Click “Tag Recognition” in mode selection interface to enter this game.



2) Click “Start”. Then ArmPi Pro will identify Tag within the detected range and carry out different actions according to the recognized ID.

ID	Corresponding Action
1	The mecanum wheel moves in a triangular trajectory. (The car is always facing forward)
2	The mecanum wheel moves in a circle trajectory. (The car is always facing forward)
3	The mecanum wheel moves in a circle trajectory. (The car is always towards the center of circle.)