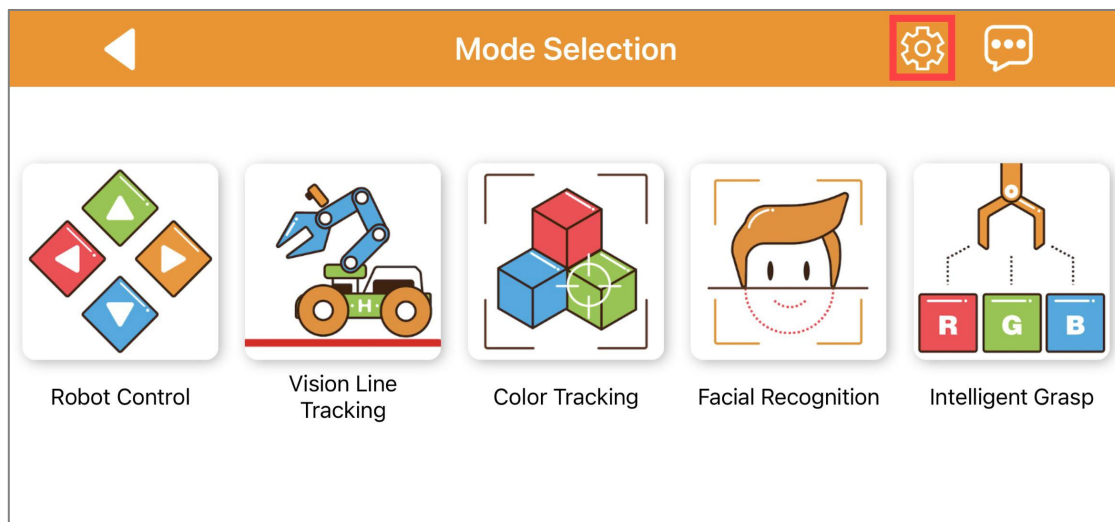# Lesson 2 Color Threshold Setting

When playing AI vision games, the environment light may affect ArmPi Pro's performance, but we can adjust color threshold to cope with this. (This lesson takes Android interface as an example to explain, so as other systems)
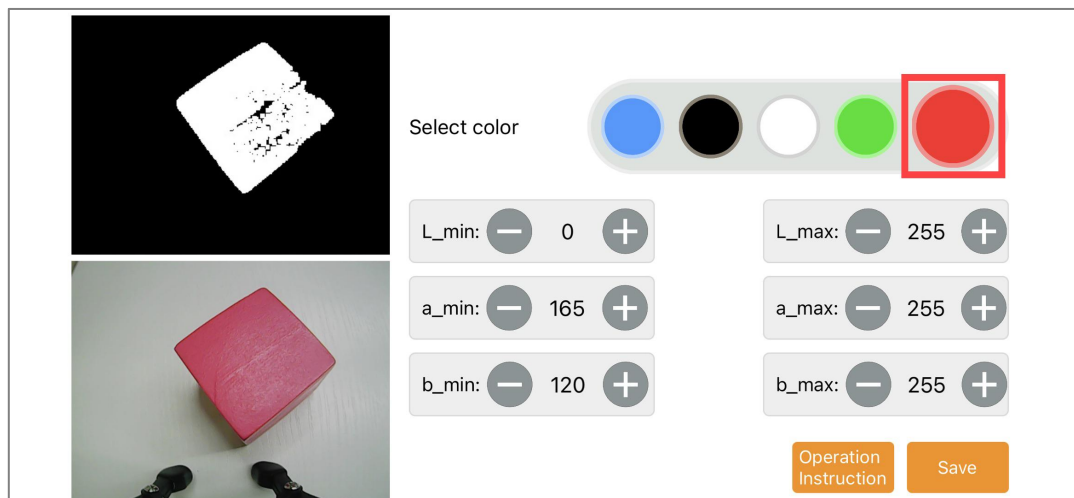
Take setting red as an example, the operation steps are as follow.

1) Refer to "1.ArmPi Pro Basic Lesson -> 2.Getting Ready -> Lesson 1 Quick User Experience to open App and then connect device.
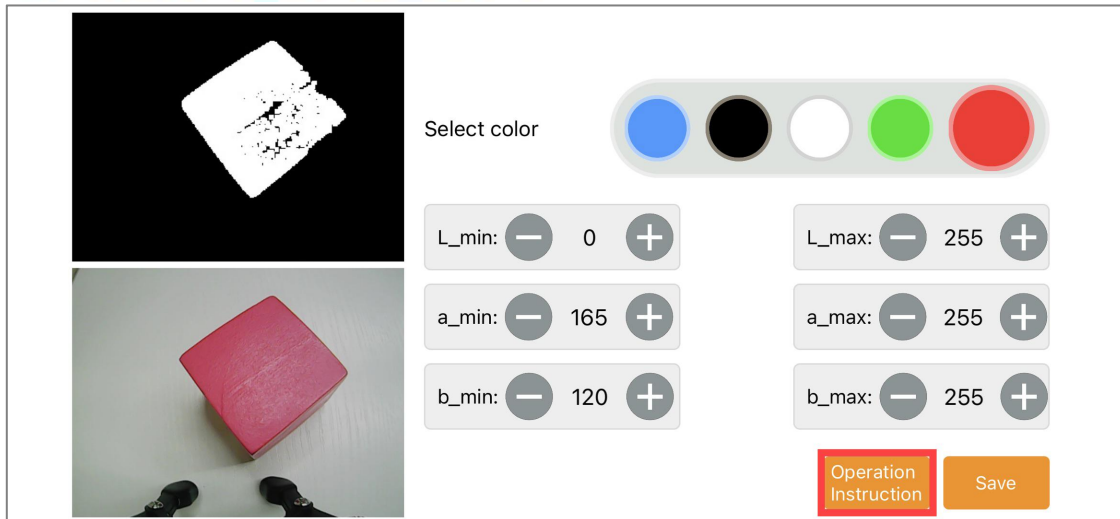
2) Click ⚙ in the upper right corner to enter color threshold setting interface.
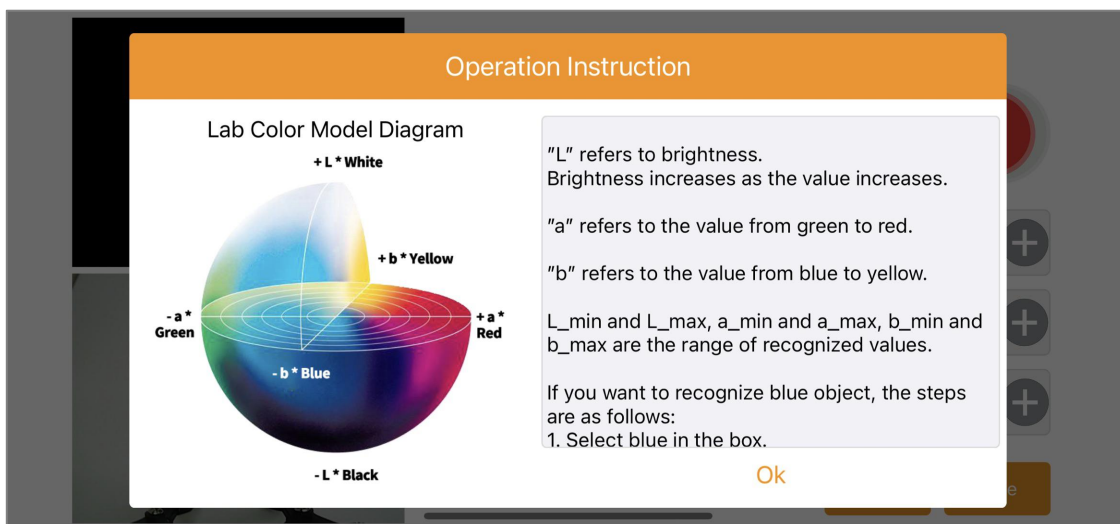

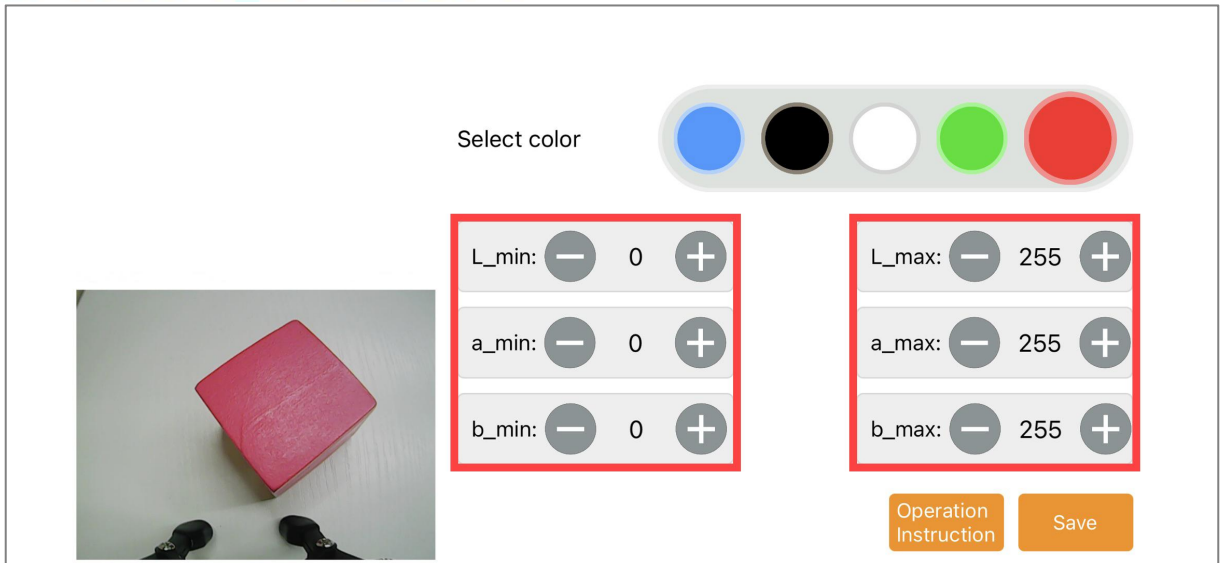3) Place the red block under camera and select color "red".

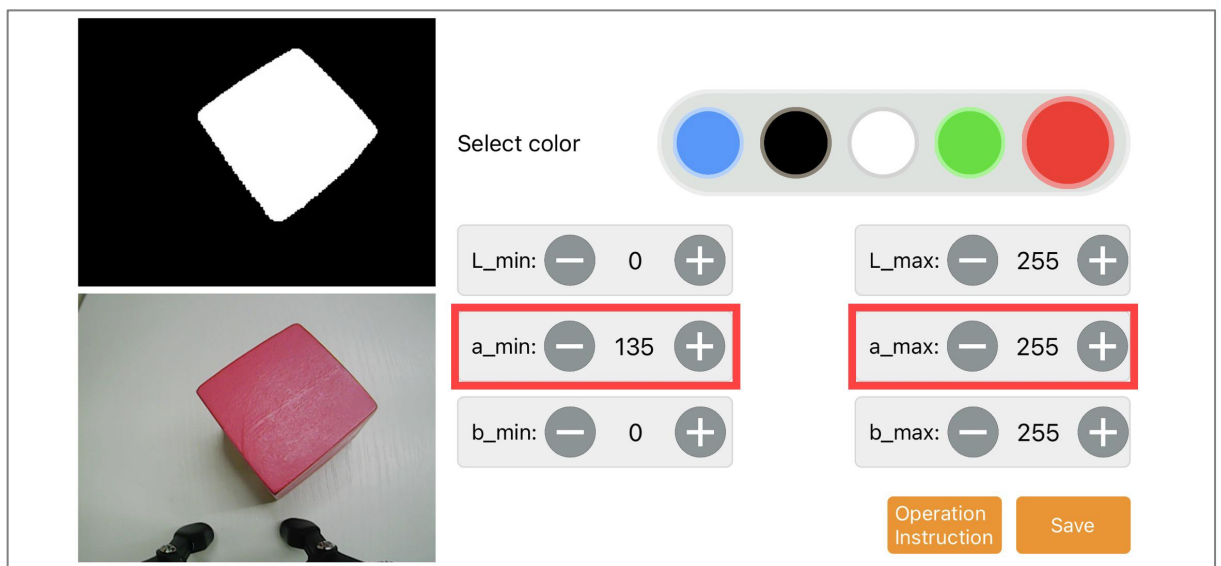4) Click "Operation Instruction" to enter the help interface.

5) We can see that all red colors are near to "+a" of the Lab color model diagram so we need to adjust the threshold area to "+a". Click "OK" to return to the threshold setting interface.
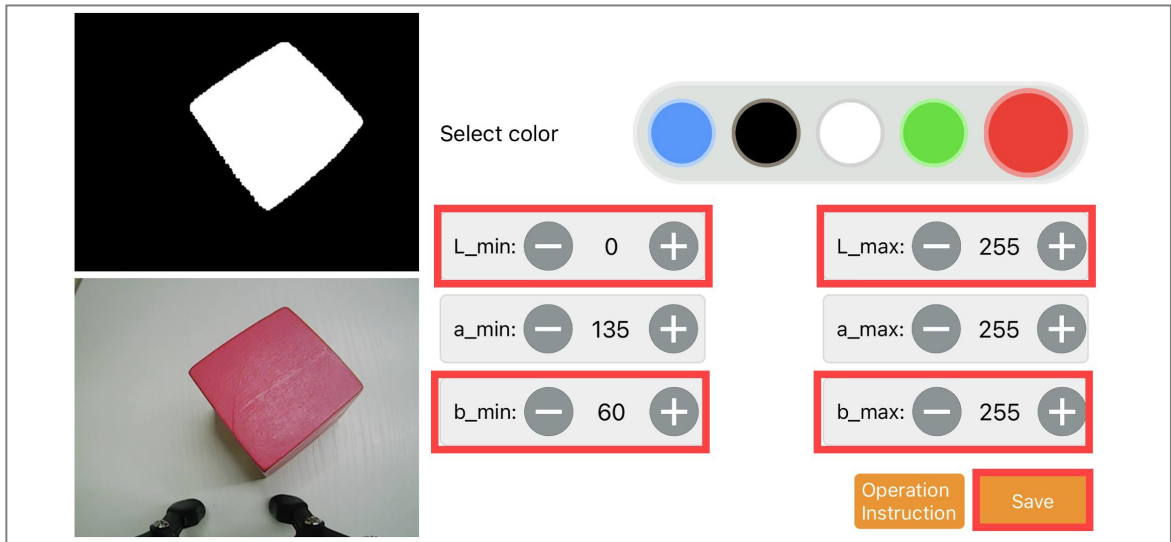

6) Adjust the value of L,A and B in the left side of adjustment area to 0 and the right side to 225, that is, all _min parameters are adjusted to 0 and all _max parameters are adjusted to 255.

7) Keep the value of "a_max" unchanged and increase the value of a_min until the red part of the left screen becomes white and other colors become black.

8) Then, modify the value of "L" and "B" according to the environment. If the red is lighter, increase the value of "L_min" . If it is darker, decrease the value of "L_max". If the red is warmer, increase the value of "b_min"; If it is colder, decrease the value of "b_max". After the adjustment is complete, click "save".

9) Click the blank area in the upper interface to display menu bar, and then click ◀ to return.