Mobile APP remote control tutorial

1. Scan the phone code to install the APP

For Android users, please open the Google Play APP Store and search for [MakerControl], or open the mobile browser and scan the QR code below to download and install the [MakerControl] APP.

For iOS users, please search [MakerControl] on App store, or open code scanner, scan the QR code below, and download and install [MakerControl] APP.

If you already have the latest version of [MakerControl]APP installed on your phone, you don't need to install it again.

2. Start the RDK X3 ROBOT

The TF card provided in the product has a mirror system by default. After the TF card is installed in the RDK X3 ROBOT, it can be started normally without reconfiguring the mirror.
Turn on the power switch of the RDK X3 ROBOT, and the buzzer can be heard three drops in about 1 minute, indicating that the system is started normally. At this time, you can see the information displayed by the OLED.

System username: root Password: yahboom

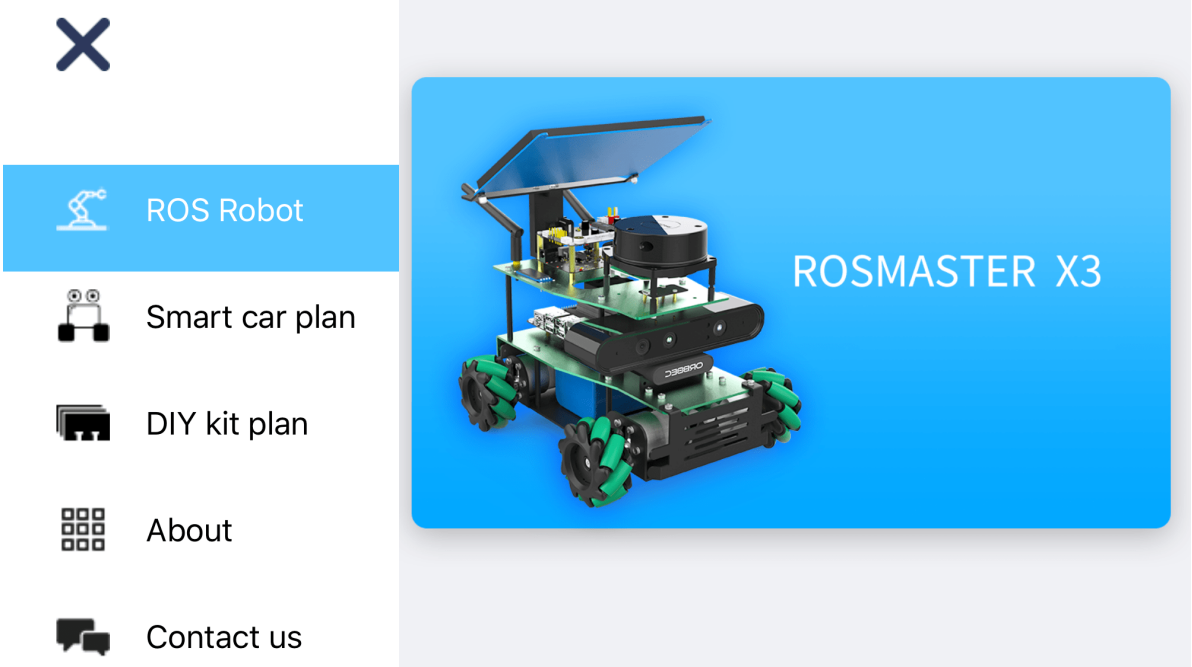
3. Connect the RDK X3 ROBOT

RDK-X3 ROBOT factory system comes with the emission of hotspot signal [RDK-X3-ROBOT], you can first use the mobile phone to connect RDK-X3-ROBOT hotspot signal to form a LAN, hotspot password 12345678. Or connect RDK-X3-ROBOT and mobile phone to the same router to form a LAN.

3.1 Select device

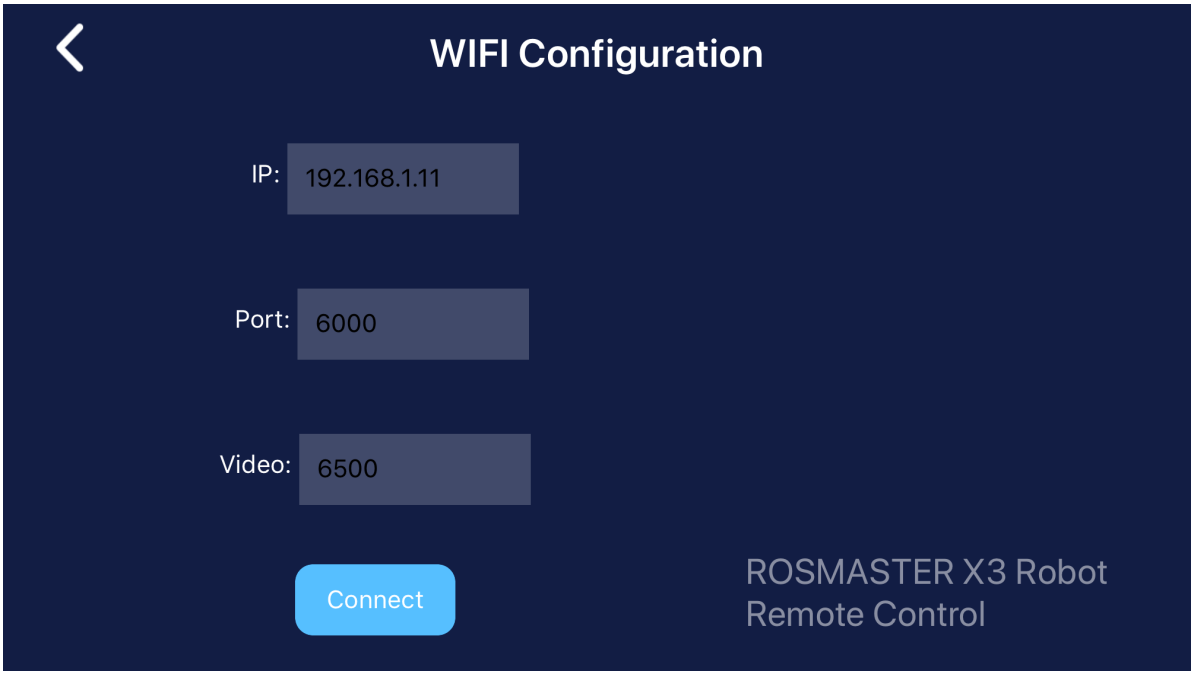
Note: RDK-X3-ROBOT and Rosmaster X3 use the same APP, so select Rosmaster X3 when selecting the robot.

When opening the [MakerControl] APP for the first time, you need to select the [Rosmaster X3] device in [ROS Robot].



3.2 Establish a network connection

Enter the IP address displayed in the OLED of RDK-X3-ROBOT in the IP column, and use the default parameters in the Port and Video columns. Click "Connect". After the connection is successful, it will automatically jump to the main control interface, and the WiFi icon in the upper right corner will no longer appear the forbid symbol.



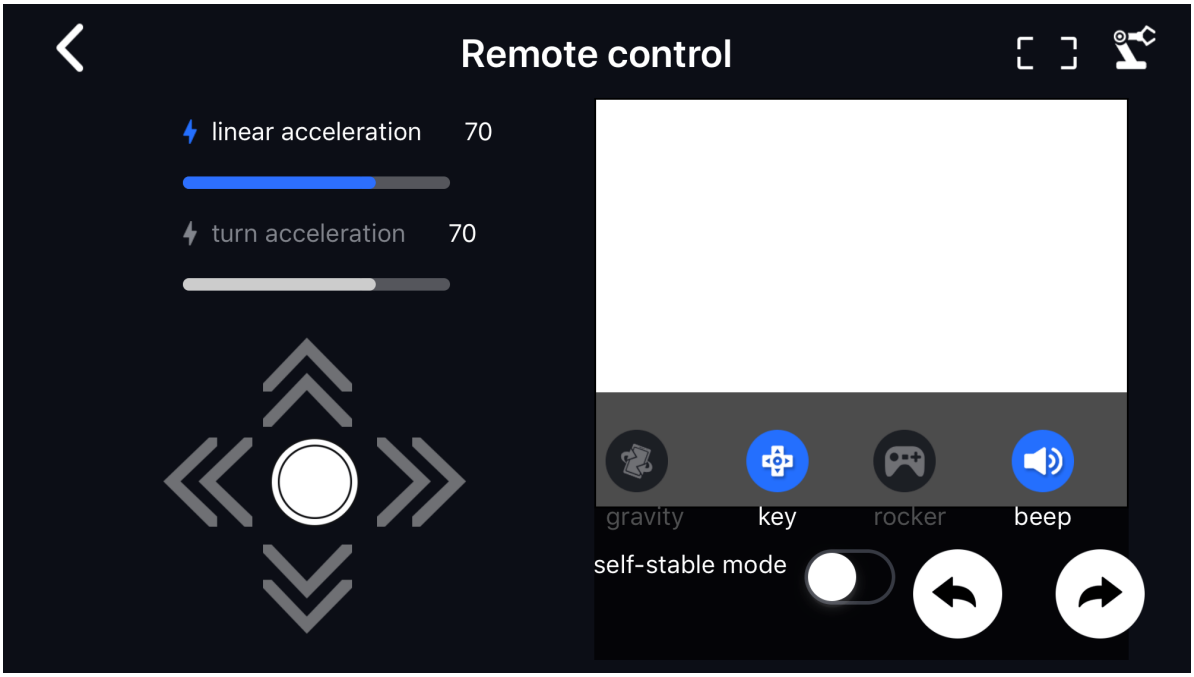
Note: Before connecting the device, make sure that the phone is connected to the RDK-X3-ROBOT hotspot signal, or that the phone is connected to the same router as the RDK-X3-ROBOT . And the app control program has been started (the factory system starts the app control program by default).

4.APP function introduction

The main interface of the APP is divided into three modules, each corresponding to different functions.

4.1 Remote control

Click the "Remote Control" icon on the main interface, and the following interface will appear.



Part 1.The left control control : the upper part can adjust the straight line speed and turning speed of the robot, and the lower part can control the robot to complete forward and backward, left and right and stop.

Part 2. Middle camera display: you can see the front screen of Rosmaster, and the screen supports zoom in/out. The frame rate of the current camera is displayed in the upper left corner of the screen.

Part 3. Upper button control on the right: you can choose three control modes, including gravity sensing, key control, rocker control, the last button can be pressed to control the buzzer whistle, release the hand buzzer off. Robot Arm version Click the robot arm icon to open the robot arm control interface.

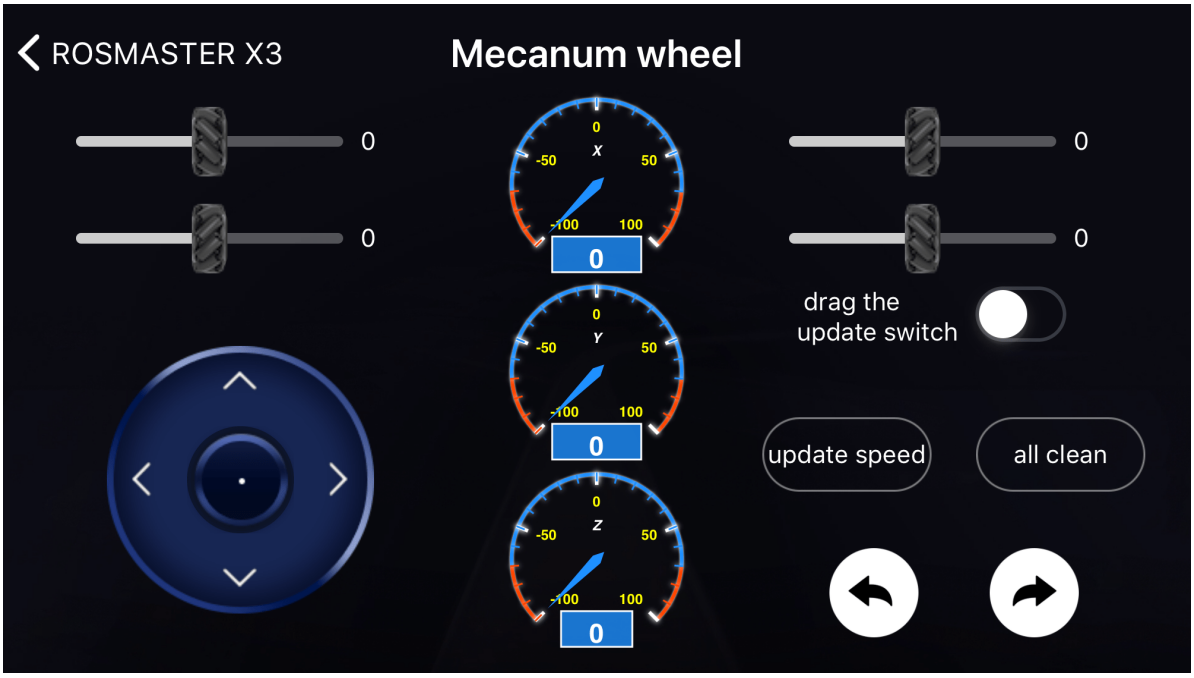
Part 4. Self-stabilizing mode: Open the self-stabilizing mode, the car receives the parking instruction, the brake will stop immediately; close the self-stabilizing mode, the car receives the stop instruction, and the car will stop after sliding freely.

Part 5. The right bottom two buttons control the left and right rotation of the robot.

Part 6. Full screen display: Hide all controls to display the camera in full screen.

4.2 Mecanum wheel

From the main screen, click the [Mecanum] icon and the following screen will appear. (This part is the exclusive function of the Mecanum wheel model)



After sliding, select [Update Speed], the robot will update the speed, and the wheel will rotate. Open [Drag Update switch], the sliding rod will update the speed of the robot wheel immediately, click [All Return to Zero], and the robot will stop. It is recommended to test the robot first, make sure that it is correct and put it on the ground to see if it is the way you want to move. The bottom two white buttons control the robot to turn left and right.

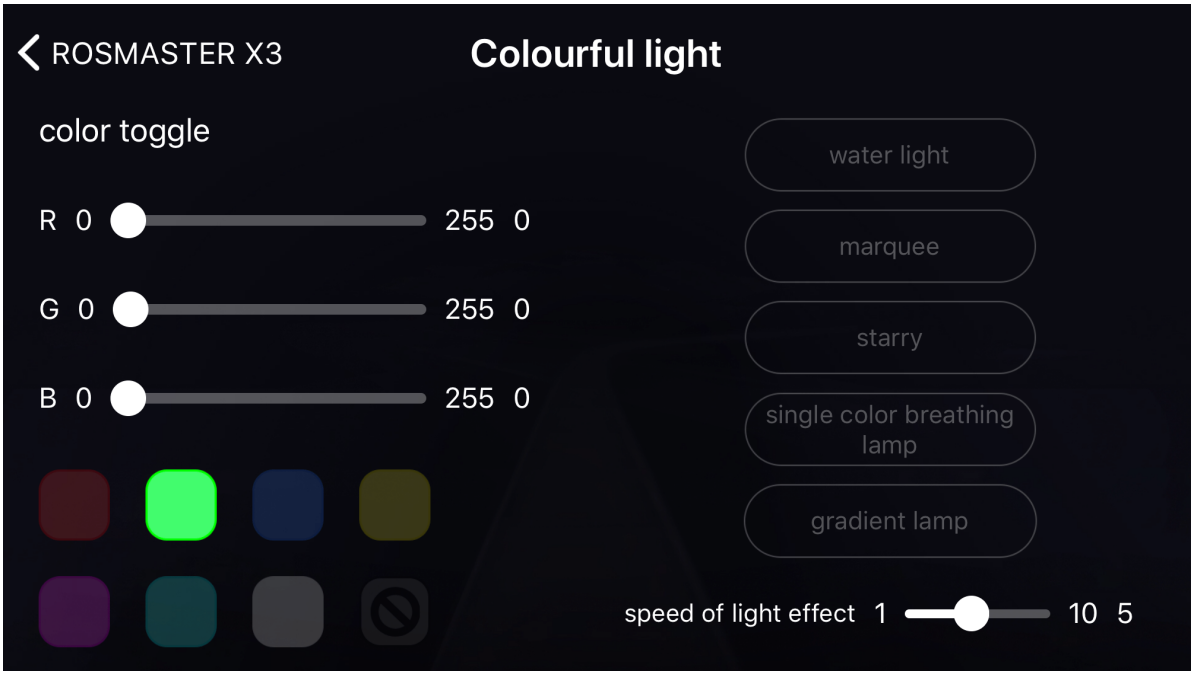
Middle dial (from top to bottom) :

1. X: X axis speed; 2.Y: Y-axis speed; 3.Z: Z-axis speed.

4.3 Colourful light

Note: RDK-X3-Robot is not supported for this part of the function.

Click the "Bright Lights" icon in the main interface, the following interface will appear.



Colourful light are divided into three parts.

Part 1. Upper left part [color switching] : This function can modify the RGB color of the light bar in real time. Directly drag the drag bar of [R] [G] [B], and you can see the RGB light bar at the tail of Rosmaster changing the cool light effect in real time.

Part 2. Lower left part [Fixed color switch] : This function can make the RGB light strip display red, green, blue, yellow, purple, cyan, white, off. At the same time, the color of the monochrome breathing lamp can be adjusted.

Part 3. Right side, [cool special effects] : Every time you click a button, you will display specific special effects, including water light, horse light, starlight, monochromatic breathing light, and gradient light functions. Click the change button again to exit the special effects; The drag bar at the bottom can change the speed of the lighting effect, the default is 5, the fastest is 1, the

slowest is 10.