

1、APP remote control tutorial

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1.1、Download and install APP

Android users scan the QR code by browser to download APP.

iOS users scan the QR code by browser or camera to download APP. Or search "ROS Robot" in App Store to download APP.



1.2、Connect DOGZILLA

The TF card provided in the kit has been written into the system file, we only need to insert the TF card into the Raspberry Pi, assemble the DOGZILLA according to the steps, and then it can be turned on normally.

Press the switch button on the side of DOGZILLA, the green indicator light of the switch is kept on, DOGZILLA will stand up, wait for about 2 minutes, until DOGZILLA completes stretch action, it means that the system starts normally, and we can see the information will be displayed by the OLED at this time.

User name: pi

Password: yahboom

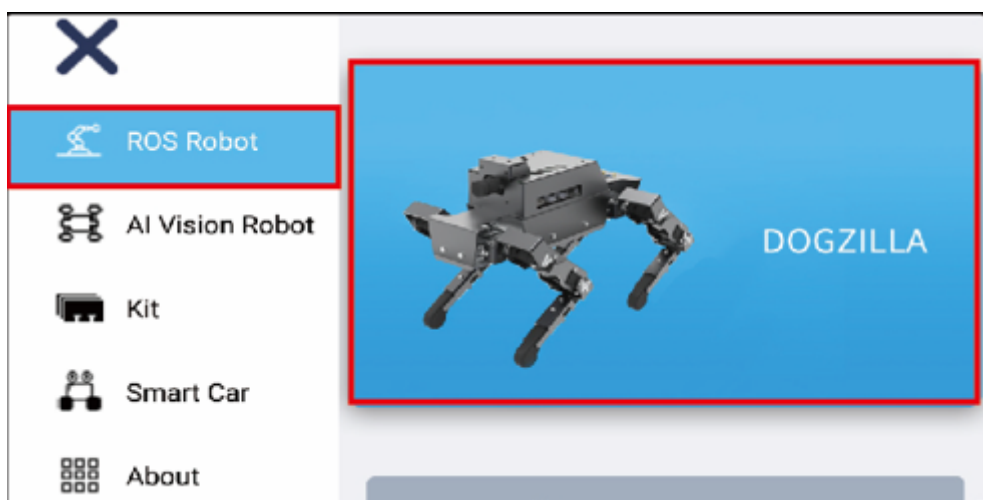
VNC login password: yahboom

Jupyterlab login password: yahboom

DOGZILLA comes with a hotspot signal 【DOGZILLA_WIFI】 , you can use your mobile phone to connect to this WIFI to form a LAN. Hotspot password is 12345678.

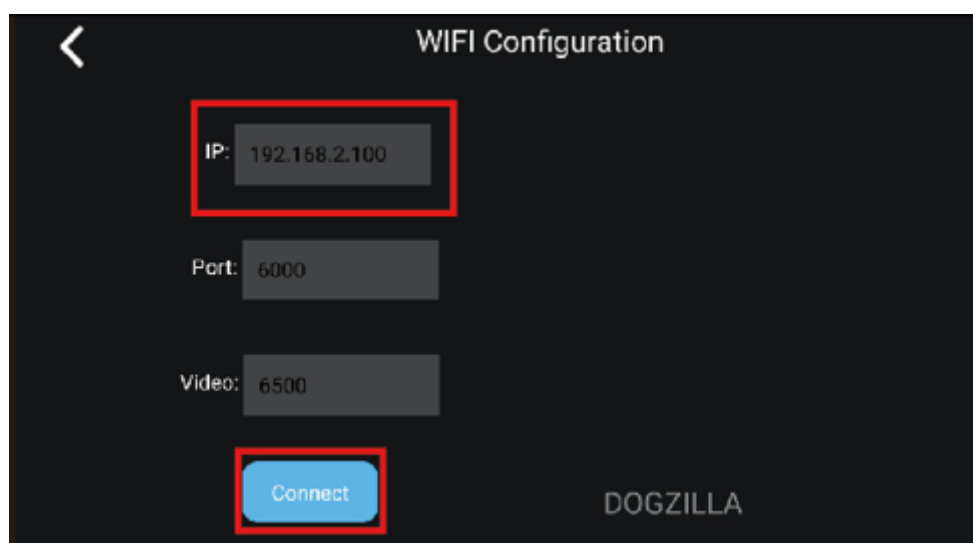
1.2.1、 Select device

Open the [YahboomRobot] APP for the first time, according to the purchased robot model, you need to select the [DOGZILLA] device in [ROS Robot].



1.2.2、 Establish a network connection

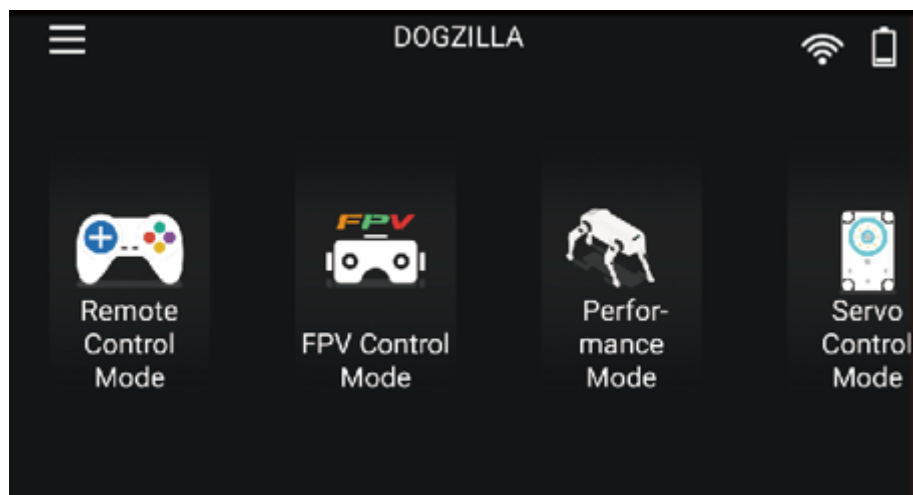
Fill in the IP address displayed by the OLED in DOGZILLA in the IP column, and use the default parameters in the Port and Video columns. Click [Connect], and it will automatically jump to the main control interface after the connection is successful.



Note: Before connecting the device, please confirm that the mobile phone is connected to the ROSMASTER hotspot signal, or the mobile phone and the ROSMASTER car are connected to the same router. And the app program has been started (the factory system defaults to start the app program).

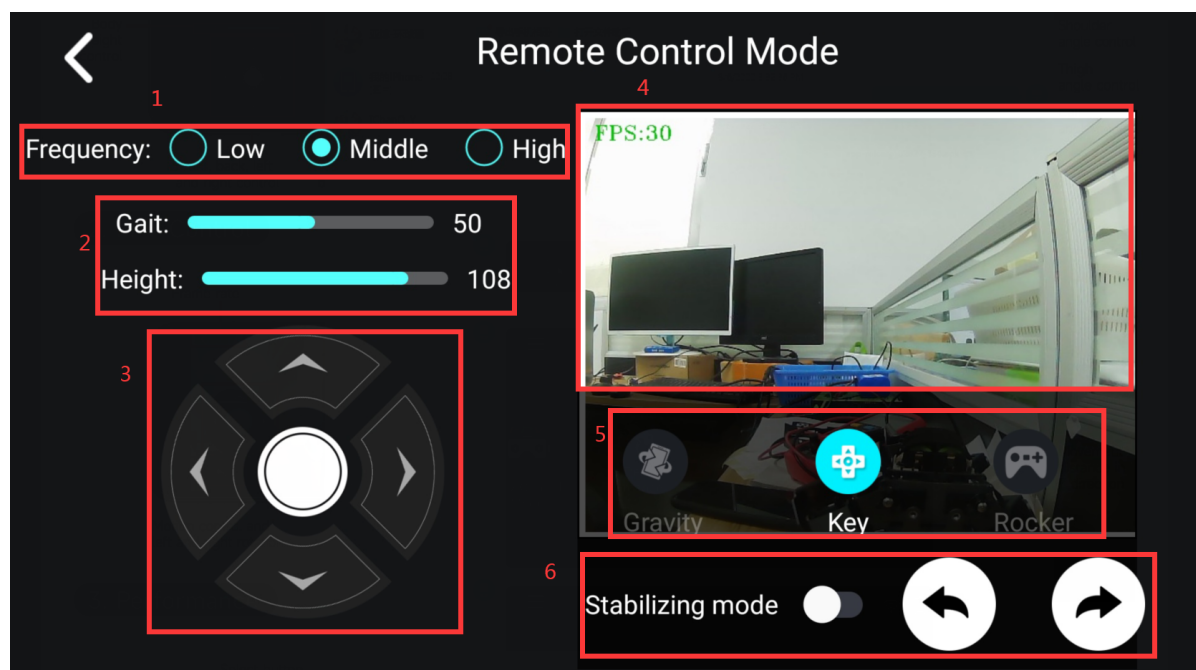
1.3、 APP function introduction

The main interface of DOGZILLA APP is mainly divided into five modules, each of which corresponds to different functions.



1.3.1、 Remote control

[Remote control] interface functions are shown as follows.



Part 1. Speed control.

Part 2. Body Height Control.

Part 3. Front, back, left and right motion control.

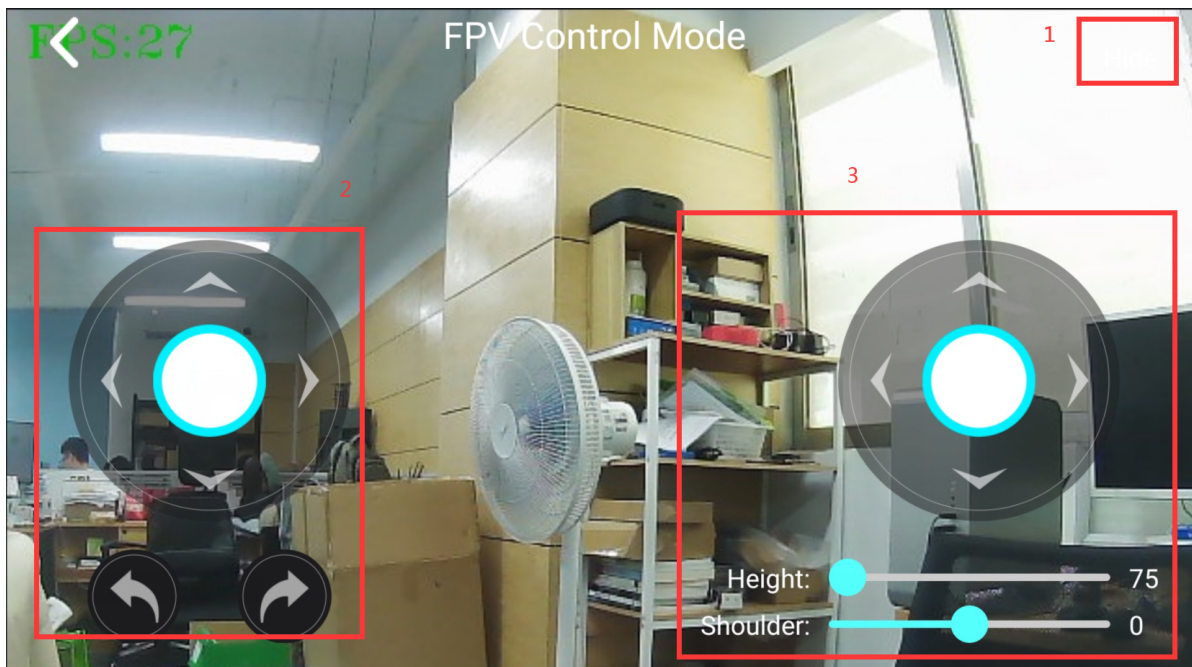
Part 4. Camera image.

Part 5. Select the control method.

Part 6. Turn on the self-stabilizing mode, keep the feet still, and keep the back level.

Part 7. Left and right rotation.

1.3.2、 FPV control



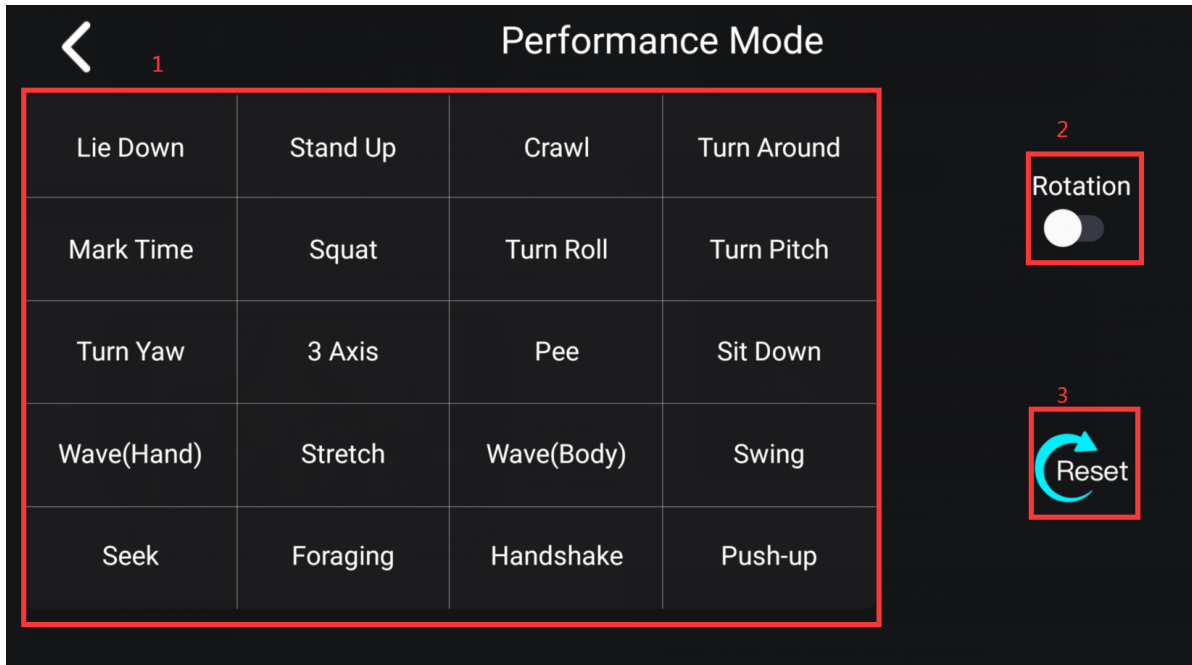
Part 1. Hide the controls and keep the full-screen camera image, which can be controlled with a wireless controller, and click again to display the controls.

Part 2. Control the moving position of the robot dog.

Part 3. Control the body posture of the robot dog.

1.3.3、Action(Performance Mode)

[Action] The interface functions are shown as follows.



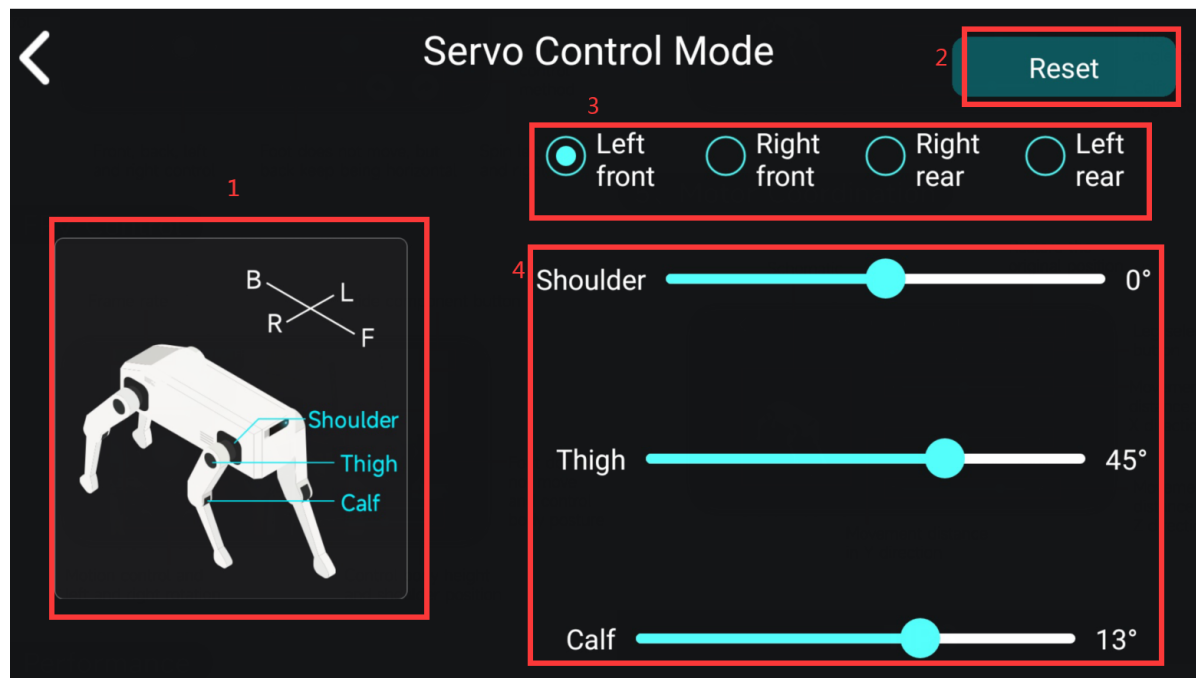
Part 1. Twenty preset actions, run once per click.

Part 2. Turn on the action carousel, and all actions will run in turn.

Part 3. Reset button, stop motion and restore default posture.

1.3.4、 Servo control(Servo Control Mode)

The function of the [Servo Control] interface is shown as follows.



Part 1. Schematic diagram of joint position.

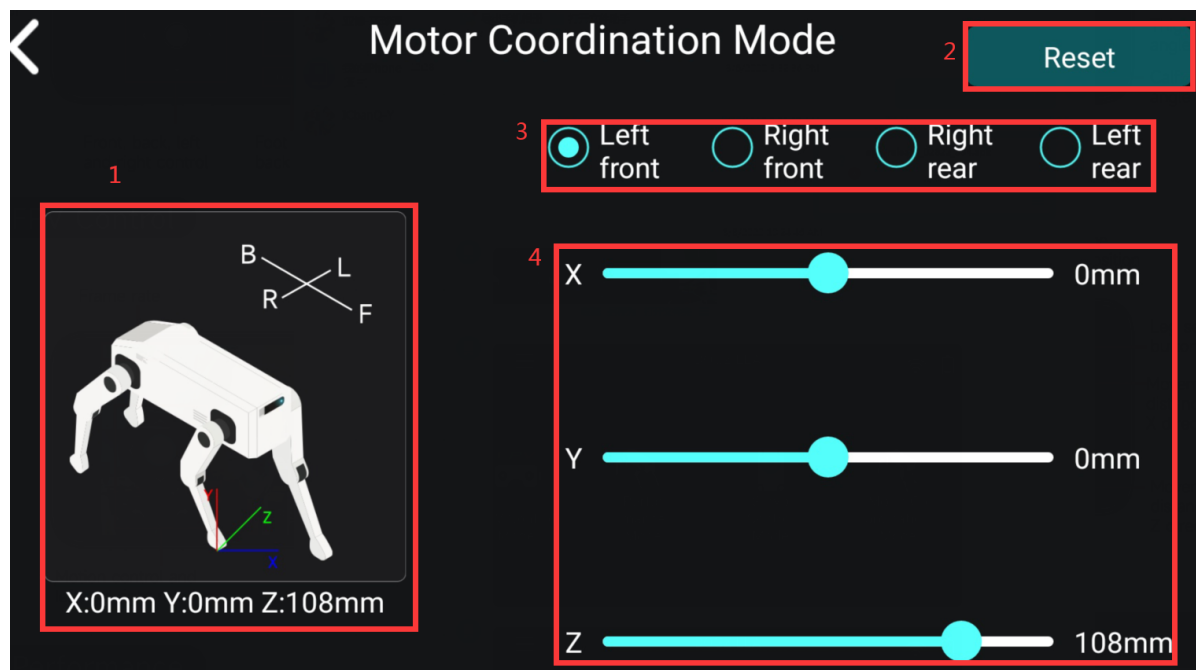
Part 2. Restore the default posture.

Part 3. Choose which leg joint is to be controlled.

Part 4. Control the joint angle.

1.3.5、 Single-leg control(Motor Coordination Mode)

[Single-leg control] interface functions are shown as follows.



Part 1. Schematic diagram.

Part 2. Restore the default posture.

Part 3. Choose which leg to control.

Part 4. Control foot position.