User Manual

MIO Educational Robot is a programmable educational robot that contains a wealth of electronic modules and mechanical components, supports a variety of graphical programming software that allows children to fully learn STEAM (science, technology, engineering, art, mathematics) Field of knowledge, exercise ability, develop logical thinking, open the door to the scientific world for children.

The MIO Educational Robot is powered by a 3.7V lithium battery and can be operated by turning off the power switch and using the MIO Educational Robot. MIO Educational Robot's power module is divided into two parts, one is a DC TO DC 5V step-down, the other is the LDO 3V3. Enter the battery voltage through the step-down 5V to the master microcontroller Atmega 328p-MU, ultrasonic sensors, patrol line sensor power supply. At the same time 5V power supply chip 3V3 LDO, to the Bluetooth module power supply. The included sensor module can handle the needs of different modes.

Wireless function: After the power is on, the Bluetooth-equipped BL module starts to work and waits for the Bluetooth connection of the mobile phone. MOBILE PHONE APP has Android version and iphone version. First, download Mio robot control APP from App Store, open Mio Android APP, click Bluetooth button, select MIO device to connect in the Bluetooth list that appears, You can connect Mio robot on the Bluetooth, the connection can be carried out after the mobile-side control and mobile-side programming. Mobile APP can control Mio robots move forward, back and other basic movements, but also control the control of emoticons, music, colorful LED modules to make the appropriate action.

Infrared remote control with the car's infrared receiver code, the use of infrared remote control can be maliciously Mowao robot forward, back, turn left, turn right, or to achieve some other fun action. For example, when the A key is pressed, the Mio robot performs the obstacle avoidance procedure. When the B key is pressed, the Mio robot performs the inspection procedure.

In obstacle avoidance mode, the Mio robot always detects the distance of the front obstacle. When it detects the distance of the front obstacle less than 20 cm, the Mio robot automatically retreats and then turns to enter the obstacle detection state.

In patrol mode, Mio robots can always walk along the presented map of black and white lines, the patrol sensor below it can detect the black and white status, and continuously revise the mio robot to walk along the black line.