# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



### Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





## MiniQ 4WD Cross Country Arduino Mobile Robot SKU:ROB0111



#### **INTRODUCTION**

Our newly upgraded 4WD MiniQ mobile platform is especially designed for education/learning purposes. It comes fully assembled and all your need is a PC with Arduino IDE and 4xAA battery. This alternative version of MiniQ 4WD robot provides higher ground clearance (25mm instead of 9mm), bigger approach angle and improved off-road capability in complex terrains. The mobile robot comes with Arduino Leonardo controller (ATmega32u4) and also integrates modules such as RGB LED, photosensitive diode, infrared trasmitters, infrared receivers, light sensors, additional buttons and buzzer.

Along with this upgraded MiniQ 4WD kit, we offer 8 lessons for beginners, from entry-level to line-following, obstacle avoidance, and remote control. Users can easily grasp through the tutorial. All codings and tutorials are open and free to download.

lesson1. Get to Know Your Robot lesson2. Control Buzzer lesson3. Light Direction Indication lesson4. Line\_following lesson5. RGB LED lesson6. Obstacle Avoidance lesson7. Encoder lesson8. IR Remote Control

**Note for Lesson4**: Since the line tracking sensors were removed, this lesson is not available actually. If you want to use this feature, please buy the kit 4WD MiniQ Complete Kit V2.0.)

MiniQ 4WD Cross Country is differrent from MiniQ 4WD at:

- Higher ground clearance: from 9mm(0.35") to 25mm(0.98").
- Removing 5 line-following sensors on chassis.

#### FEATURES

- Improved off-road capability on a compact, flexible mobile robot platform
- Micro USB for download the code(bootloader: Leonardo)
- WS2812 RGB LED for controlling the color by only one pin
- Soft buttons for giving you more comfortable feeling
- Two Infrared transmitters and 1 infrared receiver for obstacle detection and avoidance. Also includes an IR remote control to easily control its features remotely

#### **SPECIFICATION**

- Controller: Atmega32U4 (Arduino Leonardo)
- Power Supply: 4x AA batteries or Micro-USB
- Working Voltage: 4.5 to 6V
- Driving Mode: 4WD
- Max Speed: 79cm/s
- Size: 115x110x45mm(4.53x4.33x1.77")

#### SHIPPING LIST

- MiniQ 4WD Cross Country x1
- IR remote controller x1
- Micro USB Cable x1