



# 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 you need is a PC with Arduino IDE and 4xAAA 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 transmitters, 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 different 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