



MiniQ Discovery Arduino Robot Kit

SKU:KIT0071



INTRODUCTION

Explore the physical world with MiniQ robot! This is a MiniQ 2WD + mobile robot kit which is based on our MiniQ 2WD Chasis. To make it suitable for educational, competitions and fun to play with, we also added extra modules such as Romeo V2 All-in-one controller, Sharp GP2Y0A21 Distance Sensor and 9g micro servo into this kit. What makes it different from the original miniQ robots is that it comes with an upper deck, which allow you to install sensors, servos and even do some prototyping. The leaf pads on the surface make it an ideal on-the-go prototyping board, and it is stackable. You can not only solder DIP components but also solder SMD components with this upper deck. Whatsmore, we have soldered motor wires and glued for you in advance. With this kit you'll be able to play immediately after simple assembling and programming. Our sample codes include many interesting scenarios such as obstacle avoidance, enjoy!

What is Romeo V2?

RoMeo V2[R3] is an All-in-One Arduino compatible microcontroller designed for robotics applications. The Romeo benefits from the Arduino open source platform, it is supported by thousands of open source codes, and can easily be expanded with Arduino Shields. The integrated 2 way DC motor driver and Xbee socket allows you to start your project immediately without the need for an additional motor driver or wireless shield.

SPECIFICATION

Sharp GP2Y0A21 Distance Sensor

- operating voltage: 4.5 V to 5.5 V
- average current consumption: 30 mA (typical)
- distance measuring range: 10 cm to 80 cm (4" to 32")
- output type: analog voltage
- output voltage differential over distance range: 1.9 V (typical)
- response time: 38 ± 10 ms

Other

- 13000 rpm @ No load
- 50:1 Gear ratio
- 260 rpm @ 6V
- 40mA @ 6V
- 360mA stall current @ 6V
- 10 oz inches torque @ 6V

SHIPPING LIST

- Romeo V2 x1
- 9g micro servo (1.6kg) x1
- Sharp GP2Y0A21 Distance Sensor (10-80cm) x1
- Sharp IR Sensor Mounting Bracket x1
- 6xAA battery holder x1
- 2wd miniQ Robot chassis x1
- Upper Deck for MiniQ x1
- M3 * 30 nylon standoffs x5
- M3 * 20 nylon standoffs x4
- M3 * 10 nylon standoffs x4
- M3 nuts
- M3*6 screws
- M2*6 screws
- M2 nuts
- M3*7*1 Black nylon gaskets