



## Description

- Bluetooth version of the DFRobotShop Rover
- Versatile, programmable robot tank kit
- Onboard LiPo battery charger
- Complete Arduino board built-in (Arduino Uno)
- Dual H-bridge and onboard voltage regulator (only one battery needed)
- Compatible with a variety of shields
- 1x Bluetooth module included
- Onboard charger and included
- XBee headers need to be soldered
- Please verify the polarity of the connector before using this battery as it may differ from the image

The DFRobotShop Rover V2 – Arduino Compatible Tracked Robot (Bluetooth Kit) is a versatile mobile robot tank based on the popular [Arduino Uno R3 USB Microcontroller](#) microcontroller. The Rover uses the popular Tamiya twin motor gearbox and the Tamiya track and wheel set. The DFRobotShop Rover PCB incorporates a standard Arduino Uno (surface mount ATmega328), L293B motor driver (connected to pins 5 to 8), voltage regulator and prototyping area while contributing to the mechanical structural of the robot. The onboard voltage regulator allows the entire board to be powered using as little as 3.7V to ~9V\*

The DFRobotShop Rover Bluetooth kit includes everything in the DFRobotShop Rover Basic Kit as well as :

- 1x Bluetooth module (for the robot)
- 1x 3.7V LiPo battery
- 1x USB cable

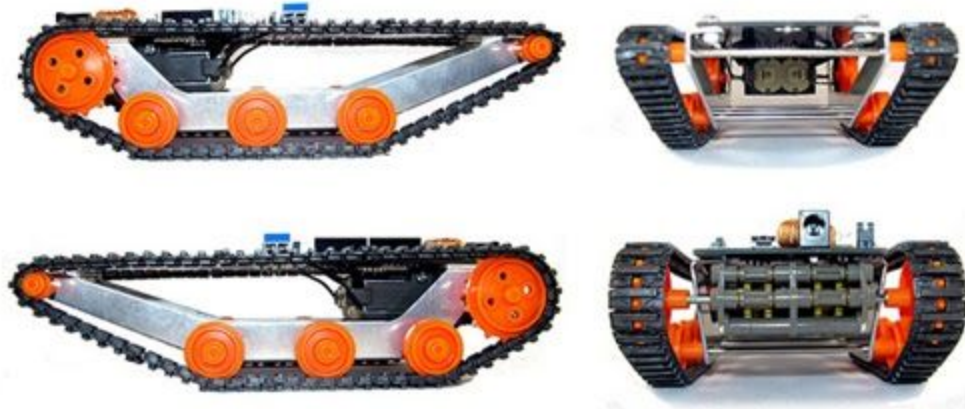
Important Notes:

- 1) If you are using the 4xAA battery pack, please remove the jumper located at the left rear of the board.
- 2) This kit requires that you solder XBee headers to the board (solder to position XBEE2). If you do NOT want to solder, please purchase one of the following shields: [DFRobot I / O Expansion Board for Arduino v5](#) ; [DFRobot XBee Expansion Board \(no XBee\)](#) ; or other shield with XBee headers.

In order to make assembly as easy as possible, solderless quick connect terminals have been included to give customers the option of crimping the wires to the motors (soldering is still preferable). The DFRobotShop Rover is compatible with a variety of shields when used at the same time as the motor driver, and is compatible with all shields when not using the motor driver. Additional features include 2x encoder connectors connected to A0 and A1 for use with the [Encoder Pair for Tamiya Twin Motor Gearbox](#) , pinout for DFRobot Bluetooth and DFRobot APC220 RF modules as well as 6x cool blue LEDs (jumper selectable) placed around the board.

\*Note that the [Tamiya Twin-Motor Gear Box](#) included with the kit operate at 4.5V nominal. For 6V motors.

# RobotShop



## Features

- Arduino compatible and shield stackable
- Based on ATMEGA328 surface mount chip (Uno design) and L298P H Bridge
- Incorporates dual H-bridge for bi-directional motor control (digital pins 5, 6, 7 and 8)
- Voltage regulator included (connected to battery input and 3.5mm barrel connector)
- Two XBee headers with breakout pins (switch selects which is connected to Tx/Rx)
- Solder prototyping area
- Easy connection to DFRobot Bluetooth and APC220 wireless modules
- “Universal connection point” at the front of the robot (see specifications for compatibility)
- 6x Blue LEDs around the board for effect (selectable via jumper LED\_SEL)
- In-system programming via ICSP
- 4x LEDs to indicate motor direction

## What's Included

- Fully assembled DFRobotShop Rover PCB
- DFRobotShop Rover aluminum frame (left and right sides) and hardware
- [Tamiya Twin-Motor Gear Box](#)
- [Tamiya Track and Wheel Set](#)
- 4xAA Battery holder
- DFRobot Bluetooth module
- Lithium Polymer Battery Cell - 3.7V 2000mAh

MiniB USB cable sold separately

## Useful Links

PDF Files

- [DFRobotShop Rover Manual](#)



- [DFRobotSHop Rover Schematic](#)
- [DFRobot Bluetooth Bee Manual](#) (pairing code is 1234)
- [DFRobotShop Rover V2 Schematics](#)

#### Website

- [Arduino 5 Minute Tutorials](#)

#### Forum

- [DFRobotShop Rover on RobotShop Forum](#)

#### ZIP Files

- [DFRobotShop Rover PCB](#)
- [DFRobotShop Rover Sample Code](#)

#### Blog

- [DFRobotShop Rover Tutorials](#)

## Dimensions

- PCB Dimensions: 57mm x 195mm
- Overall dimensions: 200mm long x 108mm wide x 58mm high
- Weight (not including batteries): 250g List of

## Multimedia

<https://www.youtube.com/watch?v=L5cmJo9BFnw>

<https://www.youtube.com/watch?v=MWWoEul9Qsk>