# Description

- Small tracked kit for Smartphone experimentation
- Includes Arduino Uno, shield and Bluetooth module
- Frame made out of laser-cut Lexan parts and aluminum
- Comes with the DFRobotShop Rover Mobile Robot Shield
- Includes LiPo battery and onboard charger
- Cell phone can tilt 90 degrees
- Please verify the polarity of the connector before using this battery as it may differ from the image

The Mini DFRobotShop Rover Mobile Smartphone Development Kit is a small, tracked platform which provides all of the parts necessary to experiment with Arduino-based programming, mobile robots and smart phones. In order to accommodate as many smart phones as possible, the phone is mounted to the robot by adhering it to a silicon anti-slip mat*. Smartphone not included.
The frame is made out of durable laser-cut Lexan parts and aluminum brackets. The drive system is comprised of the Tamiya Twin-Motor Gear Box (must be assembled in configuration A) and a Tamiya Track and Wheel Set . The cell phone is mounted to a servo and bracket which allows the phone to be angled horizontally (0 degrees) to vertically (90 degrees).

No sample apps are available at this time, though should you develop one, we encourage you to submit the app for resale via the RobotShop App Store . Possible projects include:

- Adapt an image / object / face recognition app to follow motion
- Create a telepresence robot
- Use your cell phone as the “brain” of an autonomous robot
- Experiment with Arduino programming
- Using a normal IR remote control to operate the robot

The DFRobotShop Rover Shield is the ideal “all in one” shield for small, Arduino-based mobile robot development. The shield allows you to power your Arduino using a 3.7V LiPo battery (also included with this kit) and even has a 3.7V LiPo charger onboard, allowing you to charge the battery via USB. The onboard L298P H-bridge (dual brushed DC motor controller) is perfect for controlling two small, low voltage gear motors and allows for full control over speed and direction. Additional features include a universal IR receiver, XBee headers and analog pins broken out (for easy connection to sensors).
* We strongly suggest that your phone use a rubber protective case in the event that the phone falls. Additional mounting suggestion would be to permanently glue (using epoxy) an inexpensive smart phone case (made for your phone) to the bracket.
Note: Due to the requirements of shipping these batteries and restrictions from shipping companies, only two batteries can be shipped together at one time. If more than two batteries are added to your cart you will be unable to complete your order. We apologize for any inconvenience this may cause.

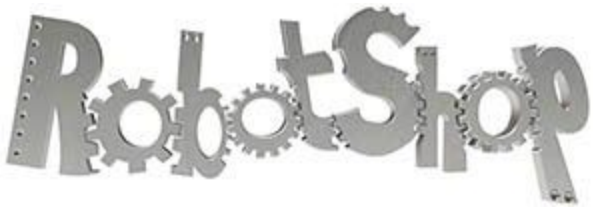
# What's Included

- Arduino Uno microcontroller
- Mobile base (frame, motors, tracks, hardware)
- 3.7V LiPo battery (charging via LiPo charger built into shield)
- DFRobotShop Rover Mobile Robot Shield
- Dual DC motor controller
- Onboard voltage regulator
- 3.7V LiPo battery charger (via micro USB connector)
- XBee headers
- 38Khz Universal IR receiver (~10m unobstructed range)
- On/Off switch & reset button
- 3-pin analog headers (signal / 5V / GND)
- Bluetooth module
- Servo motor
- Tilt system (brackets, hardware)

# Useful Links

PDF Files

- Mini RobotShop Rover Chassis Assembly Guide




- DFRobotShop Rover Shield Schematic
- DFRobotShop Rover Shield User Guide

## Dimensions

- Width: 10.8cm
- Length: 11.8cm
- Height: 19.7cm
- There is a 36mm wide x 7mm high gap in the top support plate for a 3.7V, 1000mAh LiPo battery. Foam is included so the battery is a “friction fit”
- Front mounting slots are for general use.
- Cell phone mounting surface: 6cm x 12cm