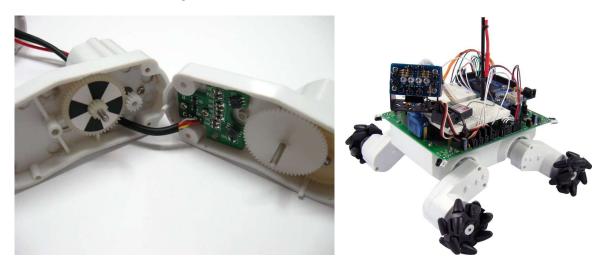
ROVER 5



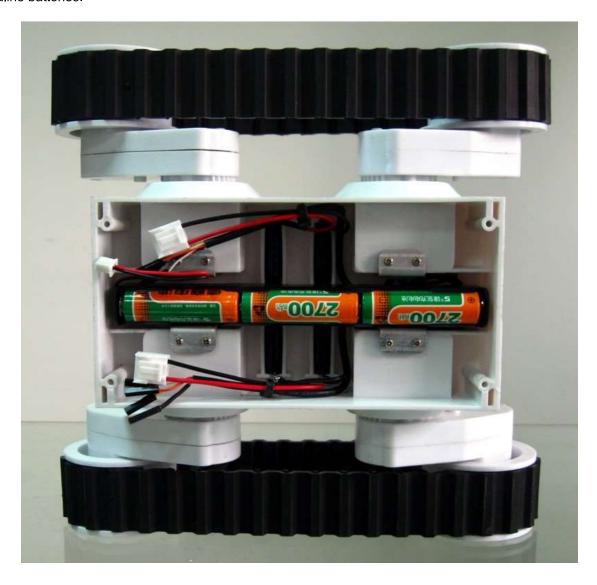
Rover 5 is a new breed of tracked robot chassis designed specifically for students and hobbyist. Unlike conventional tracked chassis's the clearance can be adjusted by rotating the gearboxes in 5-degree increments. "Stretchy" rubber treads maintain tension as the clearance is raised.



Each gearbox has an 87:1 ratio includes an optical quadrature encoder that gives 1000 pulses over 3 revolutions of the output shaft. The chassis can be upgraded to include four motors and encoders making it ideal for mecanum wheels.



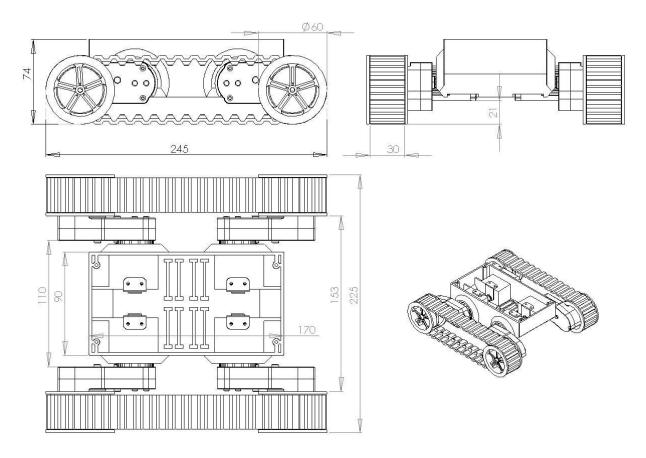
Inside of the chassis are 4 noise suppression coils at the bottom and a battery holder that accepts 6x AA batteries. It is recommended to use NiMh batteries as they last longer and have a higher current output than Alkaline batteries.



Video of the chassis in action can be seen here:

Video indoors autonomous: http://v.youku.com/v_show/id_XMjE5NzkwODA0.html Video outdoors RC mode: http://v.youku.com/v_show/id_XMjIwMTkxODk2.html

Dimensions:



Specifications:

Motor rated voltage: 7.2V Motor stall current: 2.5A

Output shaft stall torque: 10Kg/cm

Gearbox ratio: 86.8:1 Encoder type: Quadrature

Encoder resolution: 1000 state changes per 3 wheel rotations

Speed: 1Km/hr