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: <u>http://v.youku.com/v_show/id_XMjE5NzkwODA0.html</u> Video outdoors RC mode: <u>http://v.youku.com/v_show/id_XMjlwMTkxODk2.html</u>

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