Data Sheet for the Rhe Wheel chair

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General Information

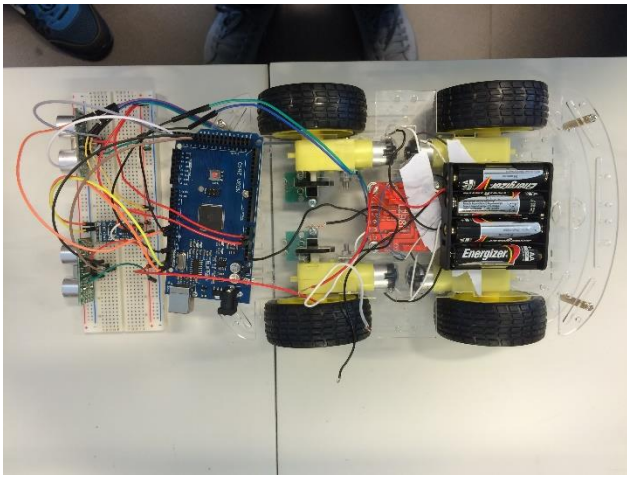

Figure 1 Top View of Product

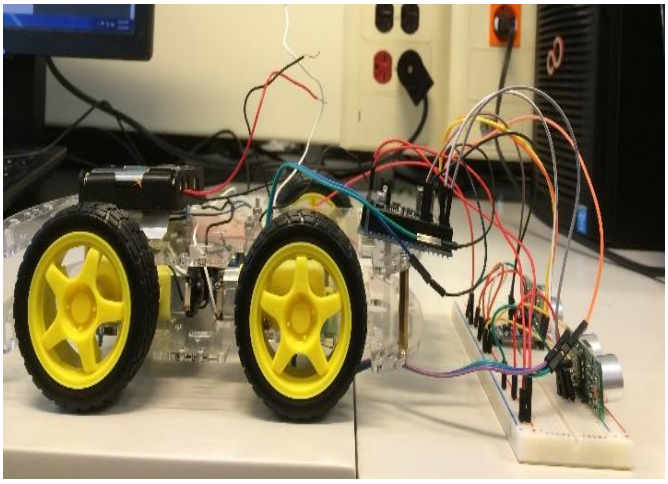

Figure 2 Side View of Product

The Rhe wheelchair is a vehicle that is equipped with accelerometer, encoders, ultrasonic devices, and DC motors. The device detects obstacles and gaps and responds accordingly. It increases its speed according to the inclination.

The product has the following components: Arduino Sensor Tilt Sensor ADXL345 – Arduino Mega 2560 – 2 HC–SR 05 ultrasonic sensors – 4 AA batteries – HC-020K encoder - Smart Car Chassis KYS002.

Specifications

Input voltage for DC motor:	9 V or 4 AA batteries
Input voltage for Arduino:	7-12V
Length:	23 cm
Width:	3.3 cm
Height:	15.5 cm
Mass:	1.2 pounds or 560 grams
Max speed:	3cm / second
Min speed:	0 cm /second
Maximum response time:	3 seconds

System Characteristic

Linearity	100% linear
Resolution of Obstacle sensor and gap sensor	1 cm
Resolution of angle detector	1 degree
Accuracy/Uncertainty	100% / 0%
Repeatability	100%
Hysteresis	0%
Sensitivity with respect to inclination	1.25 / degree
Y intercept (motor speed when inclination is 0)	180

This catalog provides information as of April, 2016. Specifications and information herein are subject to change without notice.