



Arduino robot chassis



outcastrc

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Summary

Unique Arduino Uno chassis using standard size 360 degree servos.

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Unique Arduino Uno chassis using standard size 360 degree servos. 1.9" RC tires and a micro RS4 front tire for the caster. Designed for 3mm hardware and 4x8mm bearings.

Print instructions Licence: Creative Commons - Attribution - Non-Commercial Category: Robotics Instructions

The chassis is designed to use standard size 360 degree rotation servos. All holes are designed around 3mm screws, with most holes printed at 2.5mm so you screw directly into the plastic. 2 holes (25mm apart) are included on the front of the chassis for mounting a sensor.

The battery plate includes everything you need to mount a 5 AA battery inside and an arduino uno on top. The plate also includes 2 holes on each side set 25mm apart to add sensor modules as needed. Smaller packs could be used with a piece of foam to act as a spacer. There is 20mm between the plates.

Wheels use any standard 1.9 RC tires and bolt to the round servo horns.

The castor is designed around a front tire from a micro RS4. It uses 4x8mm bearings for the wheel as well as the pivot. Black electrical tape could be used as well to create a tire for the wheel. I use 4mm stepped bushings in the bearings so I can use 3mm screws. An adaptor is included to add a sensor module to the back of the chassis if needed.

A stand is also included for storing / working on your programming. It keeps the tires slightly off the ground.

More STL's will be added for sensors as I create them.

Model files



castor_adaptor.stl



servo_wheel.stl



mini_servo_centered.stl



battery_plate.stl



robot_base_plate.stl



robot_arduino_plate.stl



mini_servo.stl



castor.stl



robot_stand.stl

[Find source .stl files on Thingiverse.com](https://www.thingiverse.com)

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