

PieterBot (yes there are many out there :)



protorabbit

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Summary

Small prototype robot. There are many versions out there this is one of them ;-) Using servo's and a arduino nano. And...

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Tags: [arduino](#) [openscad](#) [servo](#) [rotbot](#)

Small prototype robot.

There are many versions out there this is one of them ;-)

Using servo's and a arduino nano.

And printed stuff

See it in action: <http://www.youtube.com/watch?v=5CfzsNUcKHk>

Without head ;-) <http://www.youtube.com/watch?v=4UULxM7JtcY>

This is work in progress but building a custom quadcopter and that takes most of my time but wanted to upload it anyway

Instructions

Get

Two Modelcraft Standaard RS 2 Servo's (Conrad) or something similar

One Tower Pro Mini Servo or something similar

One Battery Holder for 3 AA batteries

One Small Breadboard And mount a Arduino Nano

One ultrasonic sensor (ebay or dealextreme)

Modify de RS2 servo's so that they will turn continuously (google it ;-)

Print:

Base_level

Battery_level

BreadBoard_level

Battery_stop

Servo_holder

thing (nice wheels ;-) also nice protobot) <http://www.thingiverse.com/thing:18377>

thing (nice caster) <http://www.thingiverse.com/thing:20471>

thing (nice head) <http://www.thingiverse.com/thing:24858>

Mount the modified servos to the base level use m3 bolts

mount coasterl with m3 bolts

Mount the battery level using 3 m3 bolts

Mount servo holder to the breadboard level use 3 m3 bolts

Mount the breadboard level using 3 m3 bolts

Glue on the breadboard.

Insert sensor into the sensor holder en glue it to the mini servo (see photo)

Mount the wheels on the RS2 Servos (adding a bit off hotgleu helps) i used jumping rope for the tires (used superglue to make than just cut of the right length)

Insert battery holder and and battery stop (there is a hole for the m3 bolt)

Wiring:

TODO please comment and i will add some instructions how to do this.

Upload very basic program to arduino (PieterBot.zip)

Tinker with it and make it beter ;-)

Things to do:

add extra ball caster

better battery stop

better servo holder

better software

add laser for no good reason ;-)

Category: Robotics

Model files



base_level.stl



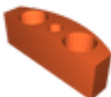
servo_head_mount.stl



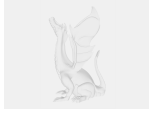
breadboard_level.stl



battery_level.stl



battery_stop3.stl



robot.scad

Other files



pieterbot.ino

[Find source .stl files on Thingiverse.com](#)

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