Otto DIY build your own robot

Otto DIY

VIEW IN BROWSER

updated 10. 4. 2022 | published 18. 8. 2020

Summary

An interactive robot that anyone can make, program with Aduino or blockly based software, easy expand.

5.58 hrs	2 pcs	0.28 mm	0.40 mm	PLA	92 g	Prusa MINI / MINI+

Hobby & Makers > RC & Robotics

Tags: toy robot steam diy stem biped arduino iot ottodiy

An interactive robot that anyone can make!

Otto walks, dances, makes sounds, avoids obstacles, you can code by your own and even customize, It is completely open source, Arduino compatible and 3D printable.

more details in https://www.ottodiy.com/

Print instructions

If you bought a Builder kit you can skip ahead but if you have the Maker kit you have to 3D print the parts but Otto is very well designed for 3D printing, so wont give you trouble if you follow this common parameters:

Recommended to use a FDM 3D printer.
No need supports or rafts.
Resolution: 0.3mm or 0.2mm for better resolution
Fill density 15%

All parts in total use 100gr aprox. equivalent to 35m of regular PLA 1.75mm thickness, it should take around 5 hours to 3D print a full set of parts for one Otto even less with optimized settings depending on your printer and slicer.

Features

- Simple Programming with Otto Blockly or Arduino
- Robotics Kit easy to build
- Instruction manual included
- Rechargeable battery included
- Integrated USB charger
- Walks & dances
- Avoids obstacles
- Makes emotional sounds and melodies
- Expandable and modular

List of Parts

- Otto Nano Microcontroller I/O board
- Micro USB cable
- Rechargeable battery already included!
- Printed Instruction Manual
- ⚙ 4 x micro servo motors with set of screws.
- Ultrasonic sensor
- Buzzer
- DuPont easy to connect cables
- Phillips screwdriver
- 3D Printed head
- 3D Printed body
- 3D Printed legs
- 3D Printed feet

Instruction Manual and coding in this link.

You could also remote control via our Bluetooth App.

How to code video

Buy our full robot kits here

Be a part of this friendly community of robot builders, teachers and makers.
Welcome to our Otto Builder community!

Model files

ottodiyheadnanopcb.stl

ottodiybodyv13.stl

ottodiylegv13.stl

☐ Print 2

ottodiyfootrv13.stl

ottodiyfootlv13.stl

ottodiyheadsparkfunshield.stl

☐ Alternative Head that works with Arduino Nano + Shield

ottodiybodysparkfun.stl

☐ Alternative Body that works with booster battery module

Print files

ottodiyhead_028mm_pla_mini_1h28m.gcode

PLA 0.40 mm 0.28 mm 1.46 hrs 26 g Prusa MINI / MINI+

Head only

ottodiybodylegsfeet_028mm_pla_mini_4h7m.gcode

PLA 0.40 mm 0.28 mm 4.12 hrs 66 g Prusa MINI / MINI+

Body legs and feet

Find source .stl files on Thingiverse.com

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