



DIY RC Excavator



ProfessorBoots

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Summary

This is a fully functional 3D Printable RC Excavator with a thumb!

[Hobby & Makers](#) > [RC & Robotics](#)

Tags: [remote](#) [excavator](#)

This is a fully functional RC excavator that takes advantage of the wondrous capabilities of 3D printers. It uses micro robotic development parts such as an ESP32 development board that can be programmed via the Arduino IDE, this model specifically can then be connected to a ps3 controller.

If you'd like to support the channel and fund the development of these mini DIY RC projects consider becoming a ProfessorBoots Workshop member which will give you access to a step by step guide on sourcing the PCB's/Electronics and uploading the code to the development board. As well as pretty much everything else you may need to know in order to build your very own 3D Printed Mini Excavator.

ProfessorBoots Workshop: <https://professorboots.com/products/professorboots-workshop-pass>

Youtube Video:

Model files



Group Prints

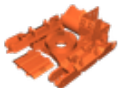
5 files



1-main-color-print-group.stl



2-secondary-color-print-group.stl



3-secondary-color-print-group-pt2.stl



4-tpu-print-groupprint-tracks-seperate.stl



track.stl



Individual STL

35 files



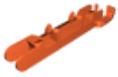
1-drive-gear.stl



2-front-drive-gearno-motor.stl



3-left-track-support.stl



4-right-track-support.stl



5-track-motor-lock.stl



6-lower-track-roller.stl



7-upper-track-roller.stl



8-lower-frame.stl



9-main-boom-holder.stl



10-pinion-gear-for-excavator-rotation.stl



105-swivel-lock.stl



11-lower-body.stl



12-motor-holder.stl



13-motor-holder-lock.stl



14-main-boom-push-rod.stl



15-dipper-and-bucket-push-rod.stl



16-thumb-push-rod.stl



17-main-boom.stl



18-dipper.stl



19-attacher.stl



20-bucket.stl



21-bucket-swing-arm.stl



22-bucket-push-link.stl



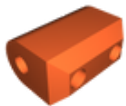
23-thumb.stl



24-cab.stl



25-main-boom-rotator-cuff.stl



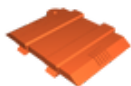
26-rear-cover-swivel.stl



27-rear-cover.stl



28-step.stl



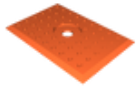
29-engine-cover.stl



30-exhaust.stl



31-guardrail.stl



32-step-mat.stl



33-rear-cover-mat.stl



34-track.stl



Individual STEP

35 files

1-drive-gear.step

2-front-drive-gearno-motor.step

3-left-track-support.step

4-right-track-support.step

5-track-motor-lock.step

6-lower-track-roller.step

7-upper-track-roller.step

8-lower-frame.step

9-main-boom-holder.step

10-pinion-gear-for-excavator-rotation.step

105-swivel-lock.step

11-lower-body.step

12-motor-holder.step

13-motor-holder-lock.step

14-main-boom-push-rod.step

15-dipper-and-bucket-push-rod.step

16-thumb-push-rod.step

17-main-boom.step

18-dipper.step

20-bucket.step

19-attacher.step

21-bucket-swing-arm.step

22-bucket-push-link.step

23-thumb.step

24-cab.step

25-main-boom-rotator-cuff.step

26-rear-cover-swivel.step

27-rear-cover.step

28-step.step

29-engine-cover.step

30-exhaust.step

31-guardrail.step

32-step-mat.step

33-rear-cover-mat.step

34-track.step



Push Blade Attachment

6 files



push-blade-assembly.stl



1-push-blade.stl



2-push-blade-chassis-mount.stl



3-motor-holder-push-blade.stl



4-motor-holder-lock.stl



5-push-blade-push-rod.stl



Rotating Claw Attachment

8 files



claw-assembly.stl



1-rotating-claw-attacher.stl



2-pinion-gear-for-claw-rotation-motor.stl



3-output-gear-for-claw-rotation.stl



4-rotating-claw-servo-holder.stl



5-claw-arm-left.stl



7-claw-servo-push-link.stl



6-claw-arm-right.stl



Electrical Slip Ring Upgrade

2 files



1-lower-body-with-slip-ring.stl

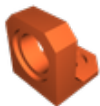


2-swivel-lock-with-slip-ring.stl



Boom LED Upgrade

1 file



boom-led-holderprint-2.stl

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