

3D Scanner - Android based



gsohler

[VIEW IN BROWSER](#)

updated 1. 8. 2023 | published 1. 8. 2023

Summary

NO, this is not Starship Enterprise even though It looks like. It is my interpretation of a 3d Scanner. With a few...

[3D Printers](#) > [Accessories](#)

Tags: [thingiverse](#) [3dscan](#) [3d](#)

NO, this is not Starship Enterprise even though It looks like.

It is my interpretation of a 3d Scanner. With a few additionally parts, an android phone has all the capabilities to help you

3D scanning an item of interest.

Just follow the instructions!

Highlights about this scanners are:

- small printing time, only the disk takes little more time
- No microcontroller and firmware needed, only laser and motor

The video of the owl can be found at <https://youtu.be/3iBqB1-8d1Y>

Another one of "Adolf the duck" is <http://youtu.be/lmRgxYoPE90>

I would really appreciate if you posted some fotos and some scan results!

Instructions

PartList:

- All the STL Files above once but 3dscanner_base two times
- An Android Phone or Tablet
- A red line laser like <http://www.ebay.de/itm/281562839777>
- A small rotating Motor (only 3RPM) like this <http://www.ebay.de/itm/261549739071> . A Microwave motor like <http://www.ebay.de/itm/261301609520> is probably also fine.
- 2 Aluminium square profile rods 10mm square - about 200mm and 300 mm length should be sufficient.
- 2 Aluminium round rods Diameter 8mm X 100 mm
- 2 M3x10 screws +_ 2 M3 nuts for inserting into the base
- A rubberband to mount the android phone

Assembly/Setup

- Print the parts
- prepare the rods
- insert the m3 screws and nuts into the base
- mount the motor into the motor house
- put everything together
- connect the laser and the motor electrically. I used a 12V power adapter and an LM7805 to supply the laser
- adjust the laser(1. adjust lens for minimal laser line thickness, 2 adjust laser to be exactly vertical, 3.) adjust laser to point exactly to center of dish)
- Get Android app "scan3doid" from the Google Playstore (make sure to use at least 1.3, older versions are quite unstable)
- Mount the Android Device to the phone holder
- Finish with the instructions in the Android App

Some hints for succesful 3D scanning

- First trial is not always the best. Retry with different settings to improve the result.
- Care for a good setup. What the laser does not touch, and the camera does not see, will not be translated to the STL File

Happy 3D scanning

Category: 3D Printer Accessories

Model files



owl_hires.stl



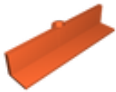
3dscanner_tcross.stl



3dscanner_motormount.stl



3dscanner_base.stl



3dscanner-phoneholder.stl



3dscanner-laserholder.stl



3dscanner-tablet.stl

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

License ©

This work is licensed under a
Creative Commons (4.0 International License)



Attribution-ShareAlike

- ✗ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✓ | Commercial Use
- ✓ | Free Cultural Works
- ✓ | Meets Open Definition