



Ricks Portal Gun (Rick & Morty)



Bannerz

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Summary

Ricks portal gun, split and ready to print. Includes space for electronics. Hardware list in description.

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Tags: [portal](#) [rick](#) [gun](#) [and](#) [morty](#)

UPDATE

I Designed a PCB to go with it, makes it easier to build and a lot sleeker looking on the inside. You will need to print a new Body and Tray (the ones on the GitHub) for it all to fit properly. I switched programming languages to Circuitpython so I could use their I2S audio library, so sound is now possible. It's set to play a sound when the button is pressed

I wanted to build a portal gun from Rick and Morty, but I wasn't really happy with any of the files I found online. So I decided to have a go at making my own. And here it is!

I printed the body of the portal gun in two parts out of PLA on my Ender 3 V2, as well as the tray that slides in the front.

The LED lenses and the plasma tube were printed in clear resin on my Photon mono X.

This project needed a lot of filling, sanding and painting, so be prepared!

For best results on the plasma tube I recommend sanding your way up to a very high grit and then applying a couple coats of clear coat.

I used hot glue to create the plasma ball effect/

The electronics I use are as follows:

Raspberry Pi Pico (specifically the Pico LiPo from Pimoroni)

5 green 5mm LEDs

A rechargeable 500mah LiPo battery (I was originally going to get a bigger one but couldn't source it in the end)

Fermion: EC11 Rotary Encoder Module (Breakout) (cut down)

Adafruit 0.56" 4-Digit 7-Segment Display - w/ I2C Backpack QT - Red (Assembled)

The materials I used are as follows:

PLA

Clear UV resin

E-tech advanced body filler

PlastiKote Matte & Glossy spray paint

Rustoleum Crystal clear glossy clear-coat

Hot Glue (for plasma ball)

Various grits of sandpaper up to 2500grit

Badly written code here (Micropython): <https://github.com/Bannerz/RMPicoPortalGun>

Video here: <https://www.youtube.com/watch?v=tSseKFKc9i8>

Print Settings:

PLA Settings;

Temp: 210c

Bed Temp: 65c

Wall Count: 5

Supports: Yes - Linear

Infill: 20%

Support density: 5%

Adhesion: Brim (not necessary)

Total Time (all PLA prints): ~50 hours

Resin;

Layer Height: 0.05mm

Bottom Layer Count: 8

Exposure Time: 2.8s

Bottom Exposure Time: 45s

Lift Distance: 8mm

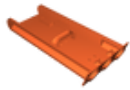
List Speed: 180mm/min

Retract Speed: 240mm/min
Total Time: ~4hours

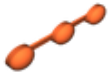
Model files



dial.stl



tray.stl



led-lenses.stl



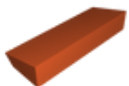
tube.stl



main-body.stl



handle.stl



rotary-encoder-wedge.stl

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