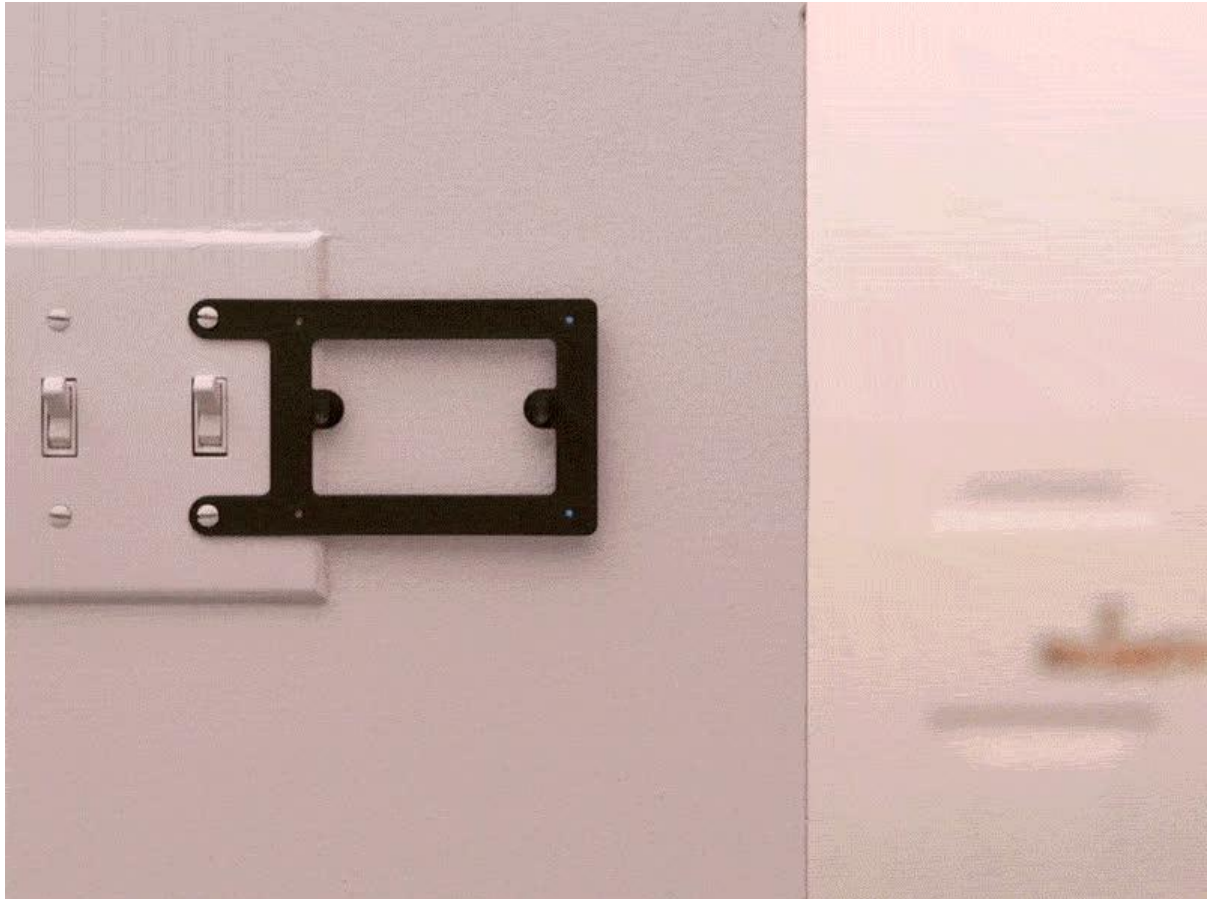




PyPortal Wall Mount

Created by Ruiz Brothers



<https://learn.adafruit.com/pyportal-wall-mount>

Last updated on 2021-11-15 07:35:59 PM EST

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Assembly



Wall Mounted PyPortal

This is a 3D printed wall mount for the PyPortal. The two part design features a hanging setup so it can be docked and undock. The mounting bracket can be attached to an existing light switch plate. We think this will be nice for IoT projects that need to be stationary.



Outlet Version

This version is designed to work with outlets. This reduces the length of cable needed for powering from electrical receptacles.

- Hole Distance: 3.81" (96.8mm)
- [Flush-mounted NEMA 5-15 receptacle part \(https://adafru.it/EmG\)](https://adafru.it/EmG)



PyPortal Guide

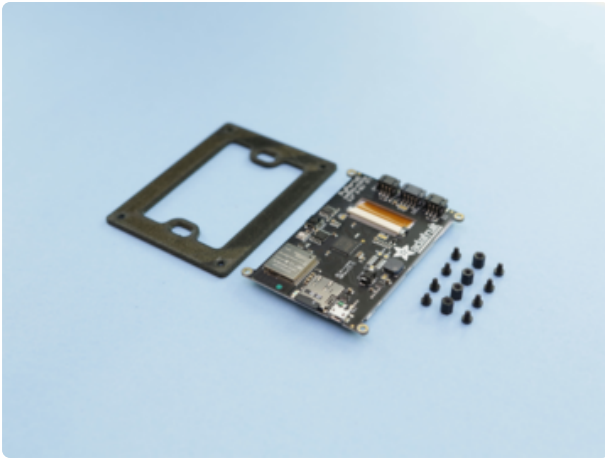
Say hello to PyPortal! The easiest way to build your IoT projects with a touchscreen display! Make sure to walk through the PyPortal introduction guide and walkthrough the pages. It'll get you setup with Circuit Python and a handful of demo code to play with!

PyPortal Guide

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PyPortal Intro Guide

<https://adafru.it/Ecp>

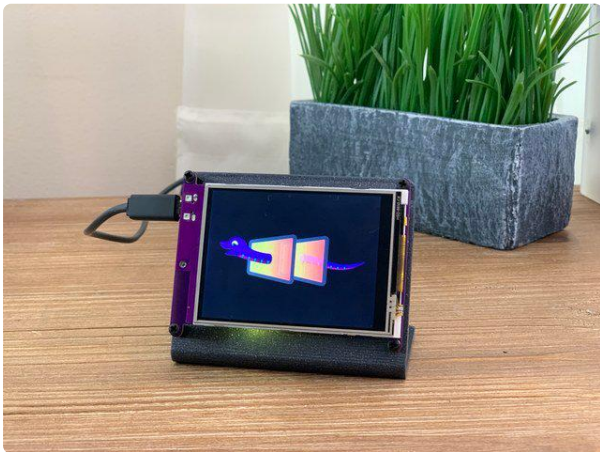


3D Printed Mount

The PyPortal PCB is secured to the 3D printed mount using M2.5 standoffs and fasteners. Two loops in the inner opening can be used for mounting to the 3D printed bracket or another surface.

Required Hardware:

- 4x - M2.5 x 6mm standoffs
- 8x - M2.5 x 4mm screws



[Adafruit PyPortal - CircuitPython Powered Internet Display](https://www.adafruit.com/product/4116)

PyPortal, our easy-to-use IoT device that allows you to create all the things for the “Internet of Things” in minutes. Make custom touch screen interface...

<https://www.adafruit.com/product/4116>



[Black Nylon Machine Screw and Stand-off Set – M2.5 Thread](https://www.adafruit.com/product/3299)

Totalling 380 pieces, this M2.5 Screw Set is a must-have for your workstation. You'll have enough screws, nuts, and hex standoffs to fuel your maker...

<https://www.adafruit.com/product/3299>



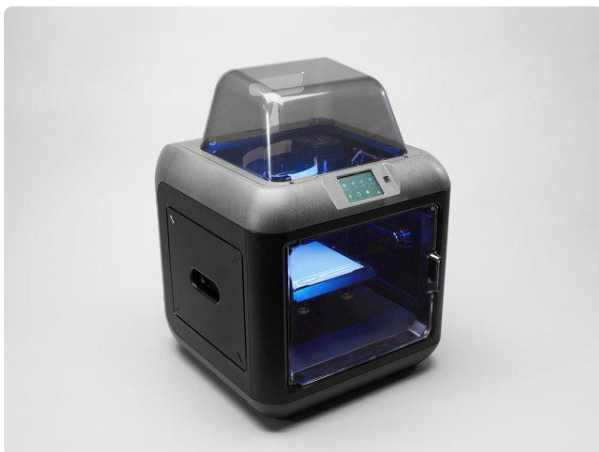
5V 2.5A Switching Power Supply with 20AWG MicroUSB Cable

Our all-in-one 5V 2.5 Amp + MicroUSB cable power adapter is the perfect choice for powering single-board computers like Raspberry Pi, BeagleBone, or anything else that's...

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3D Printer

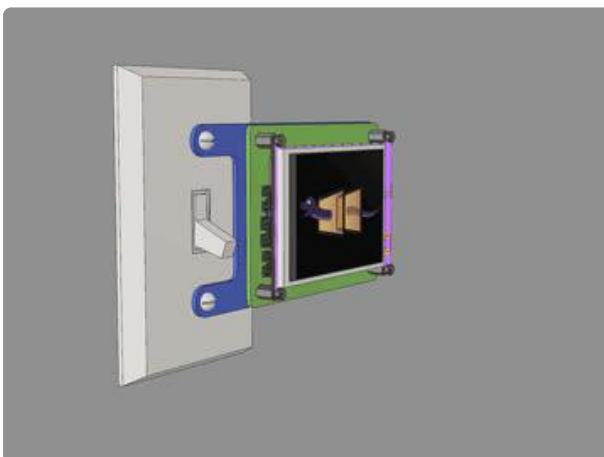
If you don't have access to a 3D printer, you can use a service like [3D hubs](https://adafruit.it/ldo) (<https://adafruit.it/ldo>), [makeXYZ](https://adafruit.it/EiG) (<https://adafruit.it/EiG>) and [shapeways](https://adafruit.it/f1h) (<https://adafruit.it/f1h>). Adafruit also carries [3D printers](https://adafruit.it/vAo) (<https://adafruit.it/vAo>) in the online shop. We suggest also checking your local library, makerspace, or school.



Monoprice Inventor II 3D Printer with Touchscreen and WiFi

The Monoprice Inventor II 3D Printer Touchscreen with WiFi is a perfect entry-level 3D printer with small footprint and reliable performance. It comes equipped with...

<https://www.adafruit.com/product/3897>



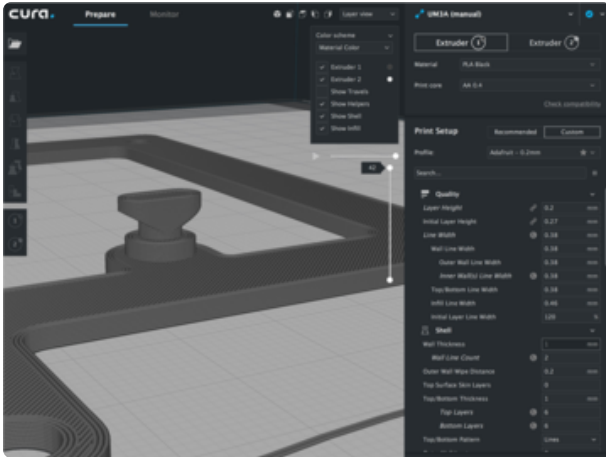
CAD Assembly

This cad animation demonstrates how the parts are assembled. The PyPortal PCB is secured to the mounting plate using M2.5 standoffs and fasteners. The mounting plate docks the light switch bracket. The plate can be attached to a standard U.S. light switch plate using existing screws.

[Download CAD Files](#)

Design Source Files

The enclosure assembly was designed in Fusion 360. This can be downloaded in different formats like STEP, SAT and more. Electronic components like the board, displays, connectors and more can be downloaded from our [Fusion 360 CAD parts github repo](#).



Slice Settings

Use these settings as reference. Values listed were used in [Ultimaker's CURA 3.X](#) (<https://adafru.it/C26>) slicing software.

- 0.2mm Layer Height / 0.4mm nozzle
- 0.38mm Line Width (inner & outer widths)
- 40mm/s printing speed
- 20% infill
- Supports: No



Install Standoffs

Insert the M2.5 fasteners through the four mounting holes on the corner of the PCB mounting plate. Fasten the M2.5 standoffs onto the threads of the screw on the other side. Finger tighten the standoffs to the screws.



Install PCB

Place the PyPortal PCB on top of the standoffs and adjust the placement so the mounting holes line up. The mounting plate is symmetrical so the orientation can go either way.



Secure PCB

Insert and fasten four M2.5 x 5mm machine screws into the mounting holes on the PyPortal PCB. Use a screwdriver to fasten the screws.



Docking Test

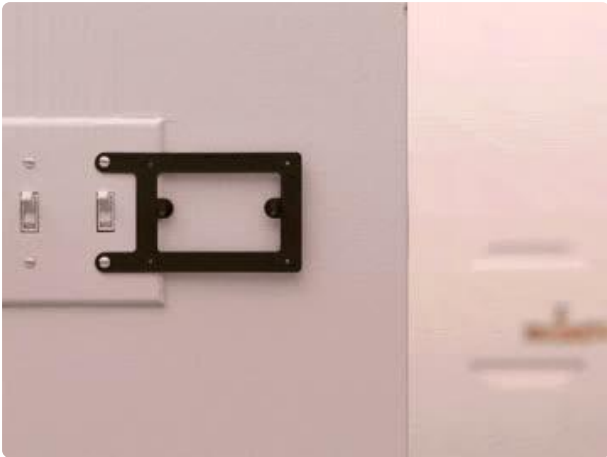
Try hanging the PyPortal mount onto the light switch bracket. The hooks should freely insert into the loops on the PyPortal mounting plate.



Light Switch Installation

The light switch mounting bracket can be attached to a standard U.S. light switch plate. Use the existing screws to attach the bracket.

- Hole Distance – 2.37in (60.3 mm)
- Screw Holes – 0.24in (6mm)



Hang it!

With the light switch mounting bracket attached, the PyPortal can now be docked. The hooks should mate with the loops in the mounting plate.