adafruit learning system

Mount for CRICKIT

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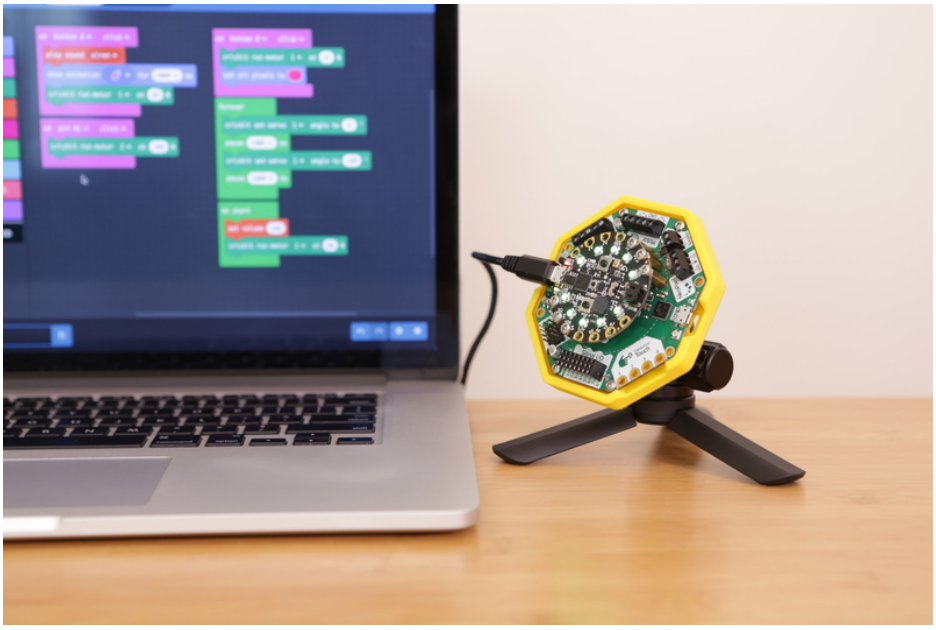
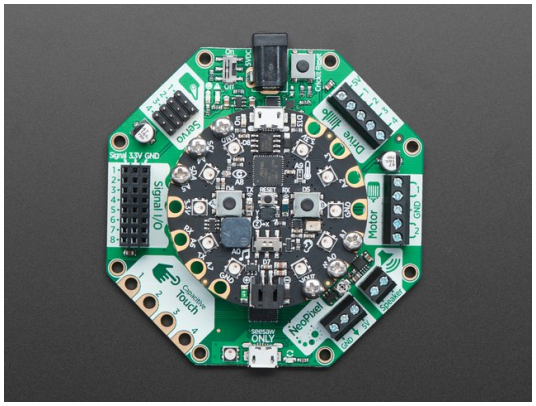
Overview



3D Printed Mount for CRICKIT

Do you want to secure the CRICKIT board to your project? Then this mount is for you! This 3D printed mount is a general, multi-purpose mount designed to house the CRICKIT PCB with M3 machine screws. It features slots for attaching to surfaces and things. The low-profile design has openings for all of the various ports and terminal blocks allowing room for cables and wires.



Adafruit CRICKIT for Circuit Playground Express

$29.95
IN STOCK

ADD TO CART

Your browser does not support the video tag.

Circuit Playground Express

$24.95
IN STOCK

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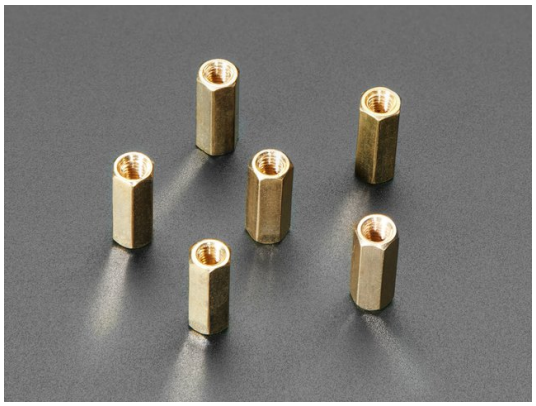
Heat-set Insert for #4-40 / M3

$0.00
OUT OF STOCK

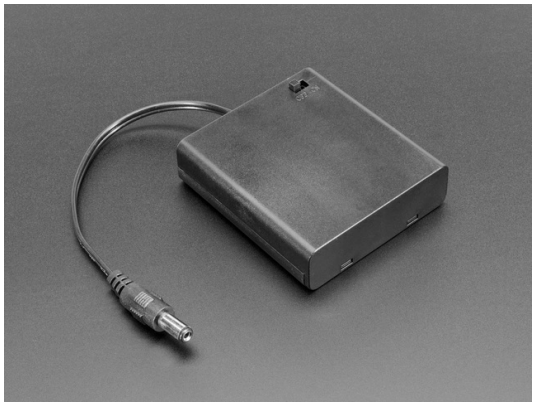
OUT OF STOCK



Circuit Playground Bolt-On Kit

$3.95
IN STOCK

ADD TO CART



4 x AA Battery Holder with 2.1mm Plug and On/Off Switch

$3.95
IN STOCK

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Additional Hardware

You'll want to get some extra screws and hex nuts for securing the PCB to the mount and attaching to other things. Here's a list of M3 metric hardware you'll need.

1 x M3 x .5mm x 6mm Machine Screws
Phillips Metric Pan Head Screws

BUY NOW

1 x M3 x .5mm Hex Nuts

Metric Hex Jam Nuts

BUY NOW

1 x Tripod Screw Insert

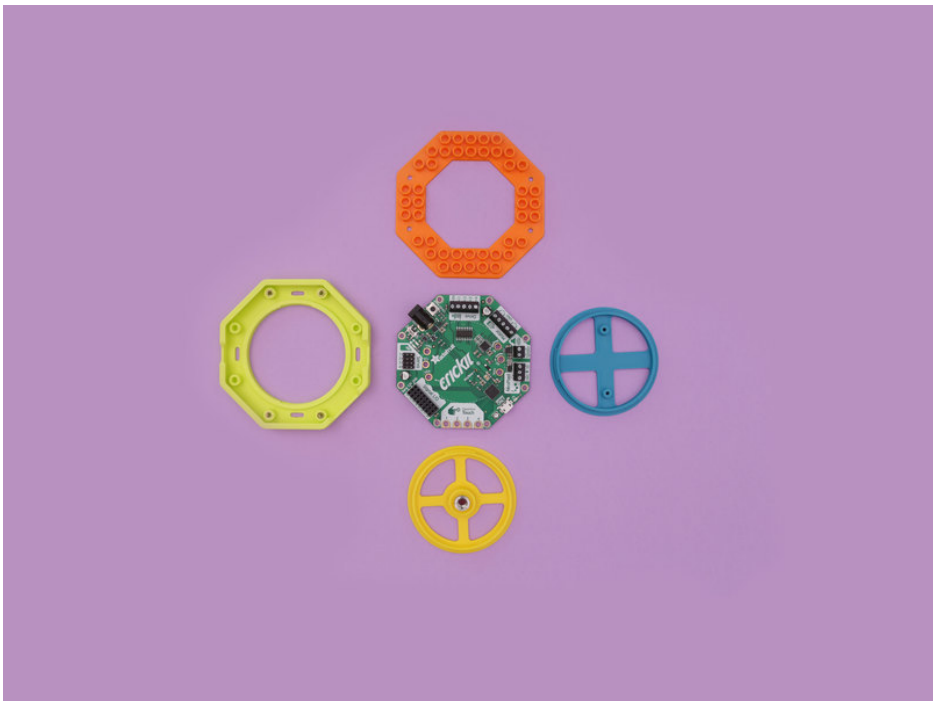
Camera and Tripod 3/8" to 1/4" Adapter Screw

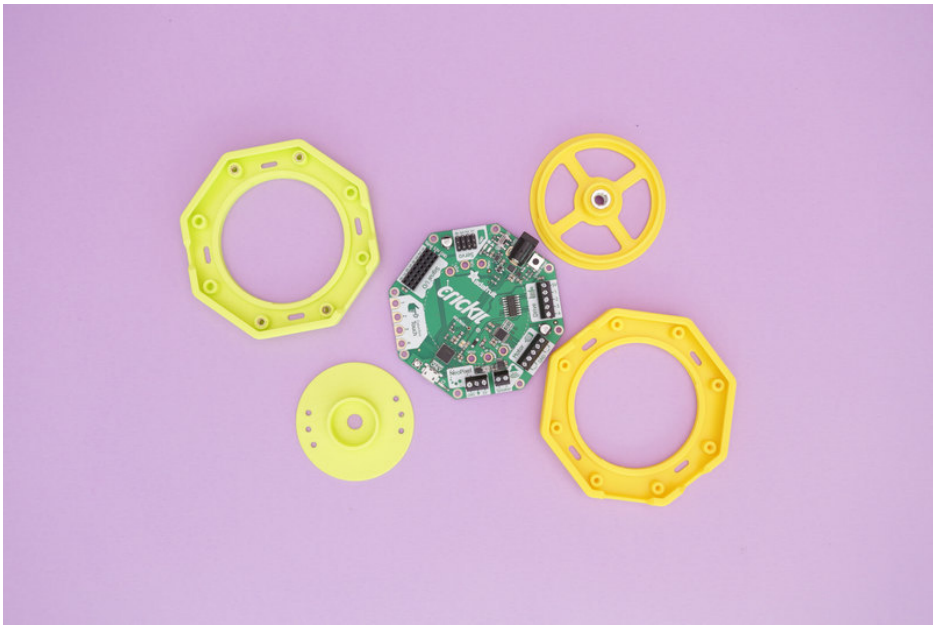
BUY NOW

1 x M3 Threaded Inserts

Brass Threaded Insert Nuts 100PCS

BUY NOW





Add-On Attachments

The mount is designed to fit various add-ons like tripods and battery packs. The center of the mount allows for these add-ons to snap fit in place. So you can swap out different add-ons without having to use additional hardware. This allows the mount to be reused. You can also design your own custom add-ons!

What If I Don't Have A 3D Printer?

Not to worry! You can use a 3D printing service such as 3DHubs (https://adafru.it/jNb) or MakeXYZ (https://adafru.it/veh) to have a local 3D printer operator 3D print and ship you parts to you. This is a great way to get your parts 3D printed by local makers. You could also try checking out your local Library or search for a Maker Space.

Ultimaker 2+ 3D Printer

$2,499.00
IN STOCK

ADD TO CART

Tripod Add-on

This add-on features a spot for a 3/8 – 1/4-20 screw adapter (https://adafru.it/toF) for any standard Tripod. This is a great way to mount your CRICKIT board. Tripods come in many different sizes and configurations so you can attach this to your projects in all sorts of ways.

Battery Pack Add-ons

The battery add-on is secured to the bottom of the mount with two **M2 screws** and **hex nuts**. This is designed to hold a 3x AA battery pack (https://adafru.it/BSH). You'll want to install the battery pack before securing the PCB to the mount. To power CRICKIT, you'll need at least 4-5 volts DC power via the 2.1mm jack.

Threaded M3 Inserts

The mount features 8x built-in standoffs to elevate the CRICKIT board. These standoffs allow for threads M3 inserts for super secure fittings. You can either press fit the inserts or use the tip of a soldering iron to heat press them into the standoffs.

LEGO Add-on

For prototyping with LEGO, we designed a special mount that allows you to snap onto standard LEGO bricks. You'll need standoffs and screws to secure the PCB. Line up the four of the mounting holes and secure using machine screws. The tubes press fit snugly onto LEGO baseplates. We think this is great way to quickly prototype projects and experiment with custom LEGO builds.

Download STLs

You'll need an STL file to 3D print the mount for the circuit playground express. Click the button below to download the STL from your choice of repo site.

https://adafru.it/BPF

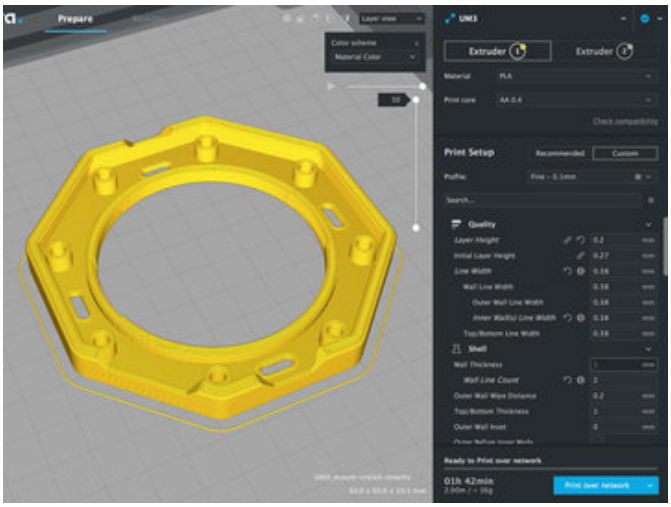
https://adafru.it/BPF

https://adafru.it/BPG

https://adafru.it/BPG

https://adafru.it/BPH

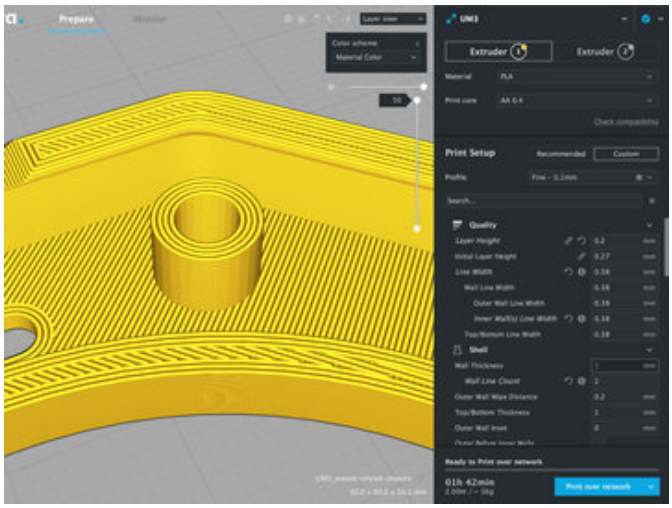
https://adafru.it/BPH



Slicing In CURA

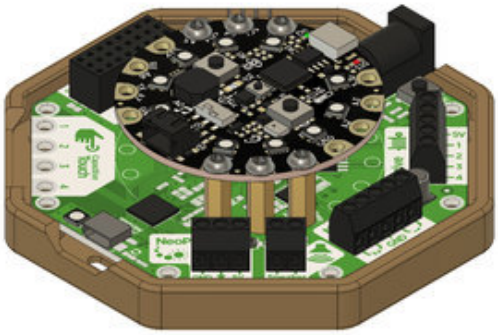
We've tested the model with CURA 3.x. The slice settings we used are configured for an Ultimaker 3. You can use our settings as reference.

- 0.4mm Nozzle
- 0.2 Layer Height
- 0.38 Line Width
- 2 Wall line count
- 70mm/s printing speed
- 20% infill



Preview Tool Paths

In the CURA slicing software, you can use the "Layer View" to see how the tool paths will be generated. This allows you to inspect how the slice settings affect the features in the 3D model. In this example, note how the standoffs are rendered. The perimeters appear to be solid and consistent. The slice settings we used above will produce a clean tool path.



Fusion 360 files

Below is a link to download the fusion 360 source file. This features the parametric timeline and sketches. You can modify the design or reuse the CPX and Crickit component for future projects.

https://adafru.it/BPI

https://adafru.it/BPI

https://adafru.it/BT5

https://adafru.it/BT5

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 (https://adafru.it/AW8).

https://adafru.it/AW8

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