



# PS4 Gamepad Display Mount

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<https://learn.adafruit.com/ps4-gamepad-display-mount>

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# Overview



## Gamepad Display

Ever wish you could attach a mini display to your PS4 gamepad? With 3D printing, you totally can! This 3D printed mount attaches a 7" HDMI 1200x800 display to a Playstation 4 DualShock wireless controller.



## 3D Printed Display Mount

With some hardware and a tripod screw you can securely mount the display to the gamepad. It features a sturdy hinge so you can adjust the viewing angle. This uses a standard 1/4"-20 tripod screw allowing a wide range of mounting options.



## Hardware Screws

The following hardware is required to assemble this project. Note a "Go Pro" bolt is an M5-0.8 metric screw. A standard tripod screw is 1/4-20 (ANSI unified screw thread).

**1 x DualShock Playstation 4 Gamepad**  
Wireless Controller for PS4

<https://www.amazon.com/gp/product/B01LWVX2RG/>

**1 x 1/4-20 D-Ring Screw**  
1/4-20 Tripod Screw

<https://www.adafruit.com/product/2629>

**1 x M5 x 20mm Screw (50pc)**  
Metric M5 x 20mm long socket head cap (GoPro Bolt)

<https://amzn.to/3bXFg5P>

**1 x M5 Hex Nut**  
M5 x 0.8mm Metric Hex Nut (50pc)

<https://amzn.to/2Wo8T9Y>

**1 x M3 x 8mm Screw**  
M3 x 0.6mm button head screw assortment kit (300pc)

<https://amzn.to/2Wod1qh>

**1 x M3 Hex Nut (50pc)**  
M3 Hex Nut

<https://amzn.to/3flejLi>



**7" Display 1280x800 (720p) IPS + Speakers - HDMI/VGA/NTSC/PAL**

Yes, this is an adorable small HDMI television with incredibly high resolution and built in 3W stereo speakers! We tried to get the smallest possible HDMI/VGA display with...

<https://www.adafruit.com/product/1667>



### HDMI 4 Pi - 7" Display 1280x800 (720p) IPS - HDMI/VGA/PAL/NTSC

Yes, this is an adorable small HDMI television with incredibly high resolution! We tried to get the smallest possible HDMI/VGA display with high-res, high-contrast visibility. The...

<https://www.adafruit.com/product/1033>



### Mini HDMI to HDMI Cable - 5 feet

Connect a device with a Mini HDMI port to a regular sized HDMI port together with this basic HDMI cable. It has nice molded grips for easy installation, and is 1.5 meter long...

<https://www.adafruit.com/product/2775>

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## 3D Printing



### 3D Printed Parts

The parts are designed to 3D print without any support material. Use PLA filament. The STL files are oriented to print "as-is".

- ps4-clamp.stl
- ps4-knuckle.stl
- ps4-adapter.stl
- ps4-plate.stl
- ps4-washer.stl

Download CAD source

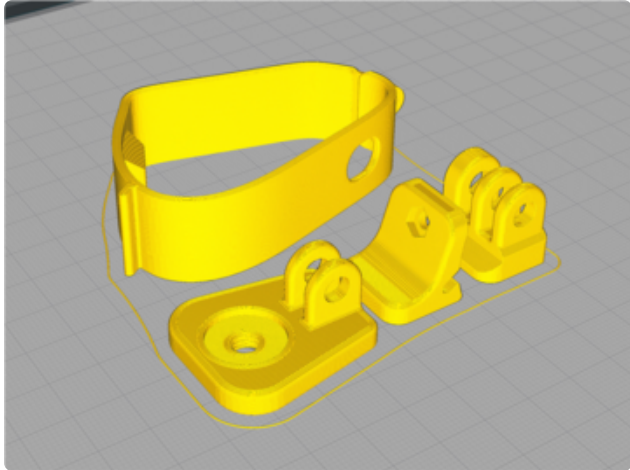
<https://adafru.it/1a00>

Download CAD files from  
Thingiverse

<https://adafru.it/KQd>

Download CAD Files from Prusa Printers

<https://adafru.it/KQe>

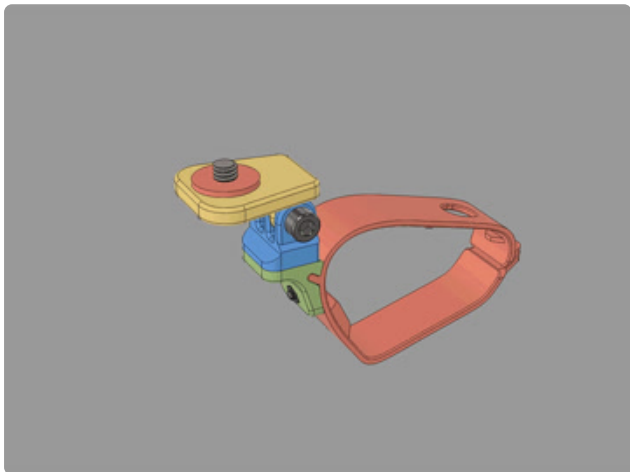


## Slicing Parts

No supports are required. Slice with settings for PLA material.

The parts were sliced using CURA using the slice settings below.

PLA filament 220c extruder  
0.2 layer height  
10% gyroid infill  
60mm/s print speed  
60c heated bed



## CAD Assembly

The knuckle adapter attaches to the clamp using an M3 screw and cap nut. The tripod plate is mounted to the knuckle adapter using an M5 screw and cap nut. The clamp is secured to the gamepad using an M3 screw and locknut.



## Glue Knuckle Mount

The knuckle and adapter parts are glued together. Apply a few drops of super glue to the flat surface of the knuckle. Align the adapter with the knuckle and press them together. Allow glue to cure before assembling.

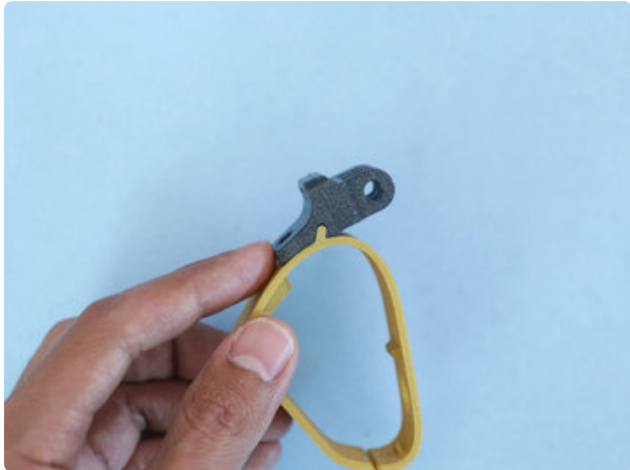


## Glued Knuckle

The knuckle and adapter were separated to avoid using support material.

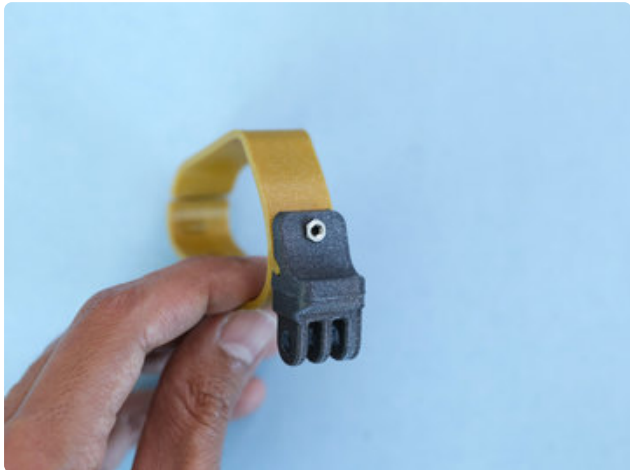
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## Assembly



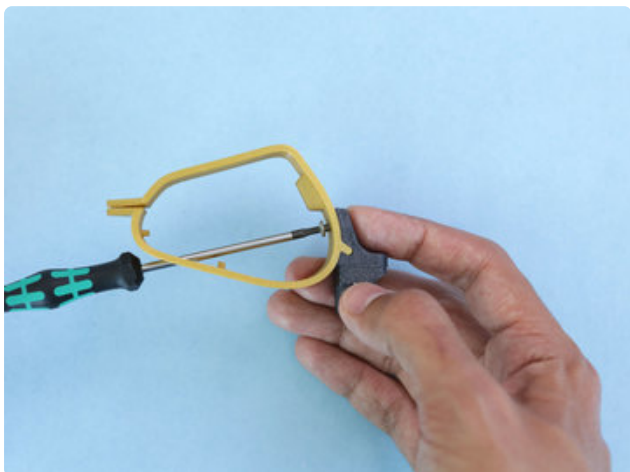
### Install Knuckle to Clamp

Fit the knuckle mount onto the clamp. The groove slides on to the nub. These two pieces fit together so they are kept aligned.



### Insert Hex Nut

Place an M3 hex nut onto the knuckle mount. Press the hex nut into the polygon shaped recess.



### Secure Knuckle to Clamp

Insert and fasten an M3 x 8mm long machine screw through the hole. This secures the knuckle mount to the clamp.





## Secured Knuckle

The knuckle mount should be securely mounted to the clamp.



## Install D-Ring

Insert and fasten the 1/4"-20 tripod D-ring screw into the plate.



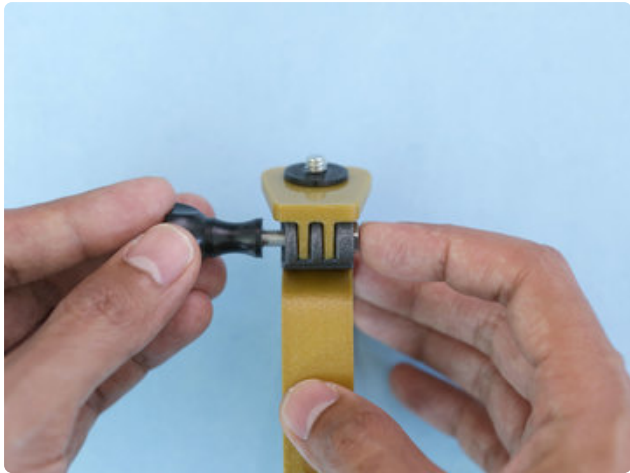
## Install Rubber Washer (optional)

A rubber washer is used for getting a better grip to the display. This was printed in Ninjaflex TPU filament.



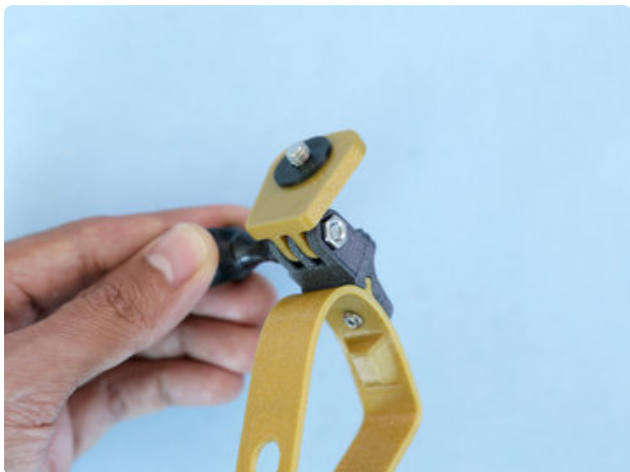
## Insert Cap Nut

Fit an M5 hex nut onto the recess on the side of the knuckle mount.



## Install M5 Screw

Place the tripod plate onto the knuckle mount. Insert the M5 x 20mm long screw through the hole of both pieces. Fasten the M5 screw into the hex nut.



## Installed Knuckle

Use the M5 screw to tighten or loosen the tripod plate and knuckle mount.



## Install Clamp to Gamepad

Open the clamp slightly and fit it over the PS4 gamepad.



## Insert M3 Screw

Pinch the tabs on the end of the clamp together. Insert an M3 x 8mm long machine screw through the holes on both tabs.



## Secured Clamp

Use an M3 hex nut to secure the tabs on the clamp.



### Lock Nut (Optional)

A hex nut with a nylon insert will prevent the hex nut from becoming loose.



### Menu Button

A hole in the clamp allows the menu button to be accessible.



### Install Display

Get the HDMI display onto the clamp mount and fasten the tripod screw.



## Adjust Display

Keep the display aligned in the desired position while tightening the tripod screw.



## Adjust Viewing Angle

Use the M5 screw and hex nut to tighten or loosen the hinge.



## Final Build

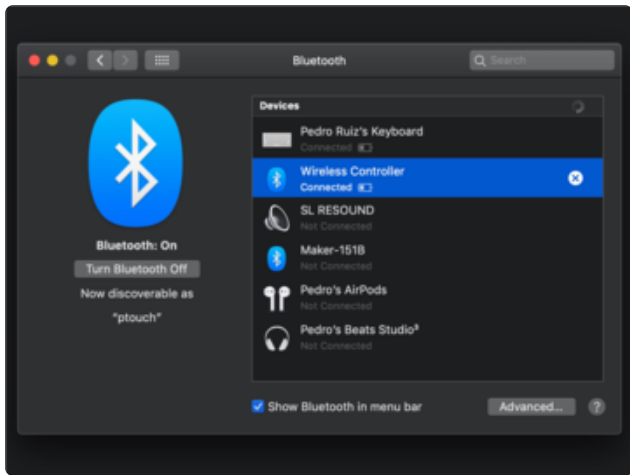
And now you're ready to game on!

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## Usage

### Pair Devices to Gamepad

Get the PS4 controller into pairing mode by pressing the **menu** (Playstation icon) and **share** buttons until the LED flashes.



## Connect to Mac OS

Go to the **System Preferences** application by clicking the **Apple** icon in the top left menu bar. Click on the **Bluetooth** icon. Search and click on the **connect** button on the **Wireless Controller**.

## Unpair Controller

To pair with different devices you'll need to first unpair with the currently connected device. In most applications, use the "**forget this device**" option.