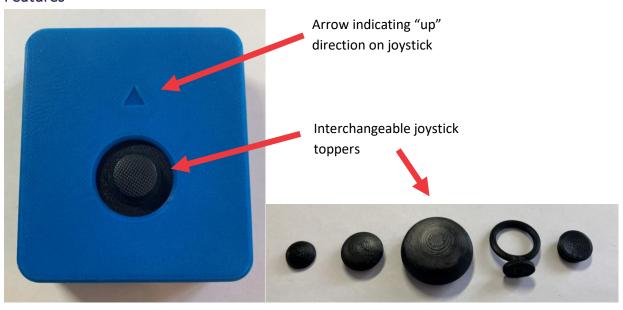


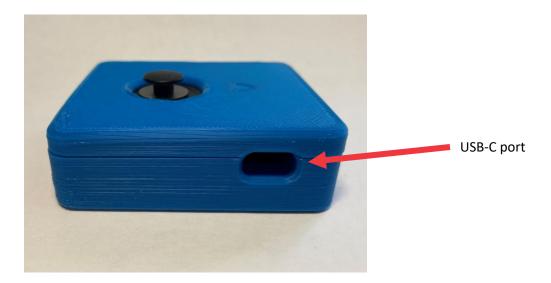
Introduction

The Birch Mini Joystick – U is a small USB gaming joystick that moves in a sliding motion instead of the typical pivoting motion of a joystick or thumbstick. It has a relatively small range of motion and a moderate force required. It plugs into USB and can be used to play games with the Xbox Adaptive Controller (XAC).

Features

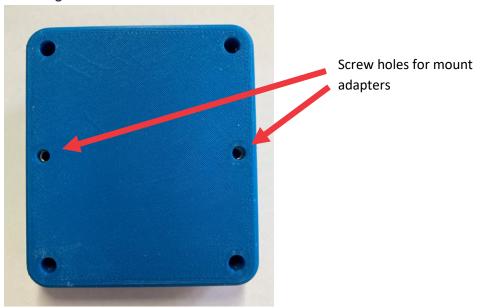


USB Port
This is where the USB-C cable will plug into the joystick.



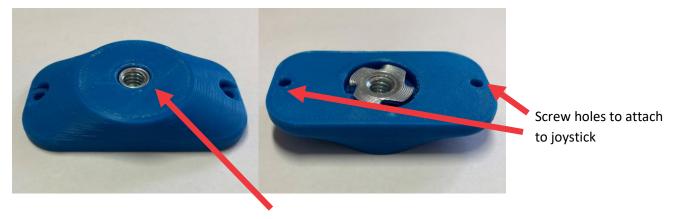


Mounting holes



Joystick Camera Mount Adapter

The Joystick Camera Mount Adapter allows the joystick to be mounted using a ¼-20 thread which is standard for camera mounts.



1/4-20 thread for camera mount



Usage

Using the Joystick

- 1. Plug a USB-C to USB-A cable into the USB-C port on the joystick as shown above.
- 2. Plug the USB-A end of the cable into the host device (such as the Xbox Adaptive Controller).
- 3. Wait for joystick to initialize, approximately 15 seconds.
- 4. Ensure the arrow on the joystick is pointing in the "up" direction, away from the user.
- 5. Mount the device if needed (see below).
- 6. Move joystick as you would with a standard controller.

Compatibility

Compatible with the Xbox Adaptive Controller (XAC). May be compatible directly plugged into PC for some games.

This joystick is plug and play with the XAC and with PC, however will need additional switches for use without the XAC. Open source software such as <u>Vjoy</u> and <u>Joystick Gremlin</u> can be used to combine switch inputs with the joystick.

Changing the Joystick Topper

There are a variety of toppers that can be 3D printed for this joystick, shown below.



To use them:

- 1. Remove the original joystick topper by pulling it off, revealing a small peg underneath
- 2. Take the 3D printed topper, check that it is in the correct orientation and press it onto the joystick. The fit should be snug.



Photos of the toppers on the joystick:











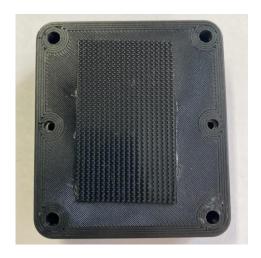


Mounting the Joystick

Tabletop - Hook and Loop Fastener

One way the joystick can be mounted, is on a tabletop or other surface such as a lap tray, and fastened using a hook and loop fastener such as Velcro.

Typically, best practice is to stick the side with the loops (the softer side) to the tabletop or other surface, and to stick the side with the hooks (rough side) to the joystick.



Tabletop - Non-slip pads

Another way the joystick can be use on the tabletop is by using a non slip material, such as the no slip stoppers shown below, or a non slip material such as Dycem.



14-20 Threaded Camera Mount

Another way the joystick can be mounted, is by using a mount with a ¼-20 thread on the end, such as a commercially available camera mount. To mount the joystick on a ¼-20 thread, the Camera Mount Adapter is used. The assembly for this Camera Mount Adapter is found in the Assembly Guide.



Camera Mount Adapter:



This is then screwed onto the bottom of the joystick, as shown below, using two M3 screws that are at least 10 mm long. Now, the joystick can be mounted on a mount with ¼-20 thread, such as a typical camera mount.



Specifications

Total height (with default topper)	2.4 cm
Enclosure height	2.1 cm
Enclosure width	6.0 cm
Enclosure length	6.8 cm
Weight (without USB cable)	48 grams
Weight (including 6ft USB cable)	94 grams
Range of motion	±2 mm
Activation force (to full deflection)	115 grams of force

Cleaning

The Birch Mini Joystick can be wiped down with a damp cloth. Do not use hot water on this device or the plastic housing may warp. Do not submerge the device.