This document is intended to be a summary of a device to make it easier to add to the website.

# Product Information

## Product Name

Ivy Nunchuck Joystick Adapter

## Device Category

Adapted Toys

Aids for Daily Living (ADL)

Assistive Switches

Communication Aids (AAC)

Computer Access

Environmental Controls

Gaming

Keyguard

Kits

LipSyncs

Mounting

Recreation and Leisure

Seating and Positioning

Switch Interfaces

Writing Aids

## User Value Statement

## If you love the freedom of your old Wii Nunchuk style controller the Ivy Nunchuck Joystick Adapter is an easy to use package that lets you plug it in anywhere you need a USB mouse, or USB gaming joystick.

## Designer

Makers Making Change

# Device Info

## Overview

## The Ivy Nunchuck Adapter allows a Nunchuck Controller to be used as a USB HID Mouse or USB HID Gamepad. The device is comprised of off-the-shelf electronics that are assembled without the need to solder into a 3D printed enclosure. The overall cost of materials for the adapter is $20 (plus $8 for component shipping). Paired with an old Nintendo Wii Nunchuk controller or a Nunchuck Controller replacement ($10-$20), this provides a cost-effective solution for an input device.

## Disability Type

Select one or more disability types:

Agility / Dexterity

Arthritis

Cognitive

Hearing

Mobility

Other

Pain

SCI

Vision

## Disability Type Description

For anyone who likes the function of the Wii style Nunchuck Controller and wants to expand it for use as either a USB mouse or USB gaming joystick.

## How To Use

For full instructions please refer to the [User Guide](https://github.com/makersmakingchange/Ivy-Nunchuk-Joystick-Adaptor/blob/main/Documentation/Ivy-Nunchuck-Joystick-Adapter_User_Guide.pdf).

**Usage**

Using the Joystick

1. Plug the USB cable from the Ivy Adapter into the host device.
2. Hold or mount the Nunchuck controller as needed.
3. Move the Nunchuck joystick as you would with a standard controller.

**Compatibility**

* USB HID Mouse: PC, Mac, Android Smartphone, Apple Smartphone (iOS 13+)
* USB HID Gamepad: PC, Xbox Adaptive Controller, Android Smartphone, Apple Smartphone (iOS 13+)

The estimated material cost of the device:

 $0 - $10

 $11 - $25

 $26 - $50

 $51 - $100

 $101 - $250

 $250+

## Attribution

Several previous projects have interfaced with a Nunchuck controller to use it as a mouse or joystick including [USB Nunchuck Mouse](https://hackaday.io/project/188294-usbnunchuckmouse).

The [Adafruit QT Py](http://www.adafruit.com/products/4600) development board was designed by Limor Fried/Ladyada from Adafruit. The PCB design is [available open source](https://github.com/adafruit/Adafruit-QT-Py-PCB) under a CC-BY-SA license.

The [Adafruit Wii Nunchuck Breakout Adapter - Qwiic / STEMMA QT](https://www.adafruit.com/product/4836) board was designed by Limor Fried/Ladyada from Adafruit. The PCB design is [available open source](https://github.com/adafruit/Adafruit-Wii-Nunchuck-Breakout-Adapter-PCB) under a CC-BY-SA license.

The firmware utilizes the [WiiChuck](https://github.com/madhephaestus/WiiChuck) library by [Kevin Harrington (madhephaestus)](https://github.com/madhephaestus)) available under a [LGPL-3.0 license](https://www.gnu.org/licenses/lgpl-3.0.html).

The firmare also utilizes the [FlashStorage](https://github.com/cmaglie/FlashStorage) library by [Cristian Maglie (cmaglie)](https://github.com/cmaglie) available under a [LGPL-2.1 license](https://www.gnu.org/licenses/lgpl-2.1.html).

# Maker Info

## Project Skills

3D Printing

Custom PCB

Electronics

Laser Cutting

Mechanics

Other

Software

Soldering

Woodworking

## Skills Description

This is an intermediate build requiring soldering and 3D printing.

## Tools Needed

3D Printer

Common Hand Tools

Common Power Tools

Laser Cutter

Soldering Iron

Specialized Tooling

## Print time (hrs)

2

## Assembly time (hrs)

0.25

## Build Instructions

This build consists of off-the-shelf electronics that are assembled into a 3D printed enclosure and flashed with firmware. For full details please refer to the [Maker Guide](https://github.com/makersmakingchange/Ivy-Nunchuk-Joystick-Adaptor/blob/main/Documentation/Ivy_Nunchuck_Joystick_Adaptor_Maker_Guide.pdf).

Print Settings:

* 0.2mm Layer Height
* 20% infill
* Some optional parts require supports

## Download Link

[https://github.com/makersmakingchange/Ivy-Nunchuk-Joystick-Adapter/archive/refs/heads/main.zip](https://github.com/makersmakingchange/Ivy-Nunchuk-Joystick-Adaptor/archive/refs/heads/main.zip)

## Project Link

[https://github.com/makersmakingchange/Ivy-Nunchuk-Joystick-Adapter](https://github.com/makersmakingchange/Ivy-Nunchuk-Joystick-Adaptor)

# License

## License

Hardware: CERN 2.0 Weakly Reciprocal license

Software: GNU General Public License v3.0 (GPL-3.0)

Documentation: Attribution-ShareAlike4.0 International