ATARI2USB ADAPTER

Last Updated: July 27, 2019

SHIFT838 announces the new ATARI2USB Joystick Adapter for 2019.

Have you ever wanted to be able to pull those old retro style Atari 2600 type joysticks or compatibles out of storage and hook them up to your PC? Want to have that full retro feeling again? Well this is the solution.

The ATARI2USB joystick adapter allows a user to hook up vintage Atari 2600 compatible joysticks for 1 and 2 buttons to a PC via the USB port. This adapter recognizes up to 2 joysticks and has been tested on Windows 10 and Linux Ubuntu 18.04.

Atari compatible joysticks for 2 buttons do require the 2nd button to be wired to the standard pin #9 of the joystick. If your joystick is setup for a 2nd button and wired this way the 2nd button will work (this was default for Atari 2 button joysticks).

The joystick adapter utilizes an Arduino Pro Micro controller with USB interface. The Arduino has been custom coded to interpret the appropriate Atari joystick signals and translate to USB.

Requirements:

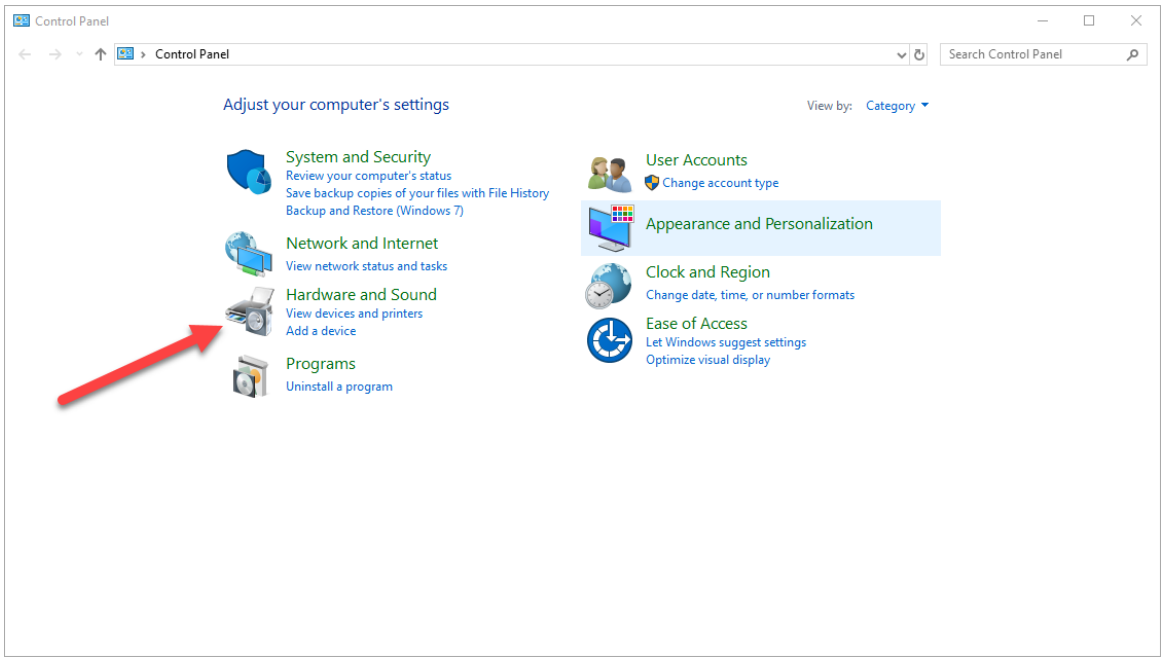
- Windows (Tested on Windows 10)
- Linux Ubuntu 18.04
- Micro USB cable
- Atari 2600 compatible joystick
- Designed to fit into a Hammond 1591XXL case (not included)

Installation:

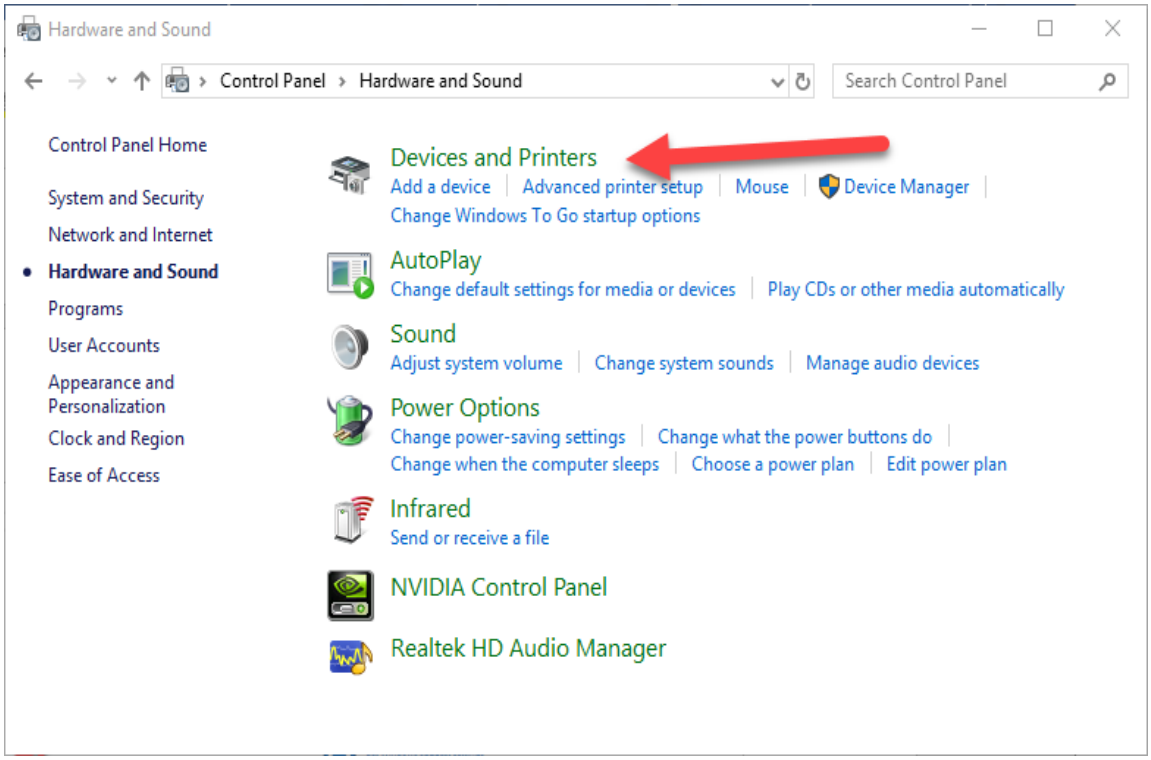
Windows OS

The unit is plug-n-play, so windows 10 will recognize this device with no issues. Windows 10 will recognize the device as a Arduino Leonardo Gamepad as a Arduino microcontroller is used.

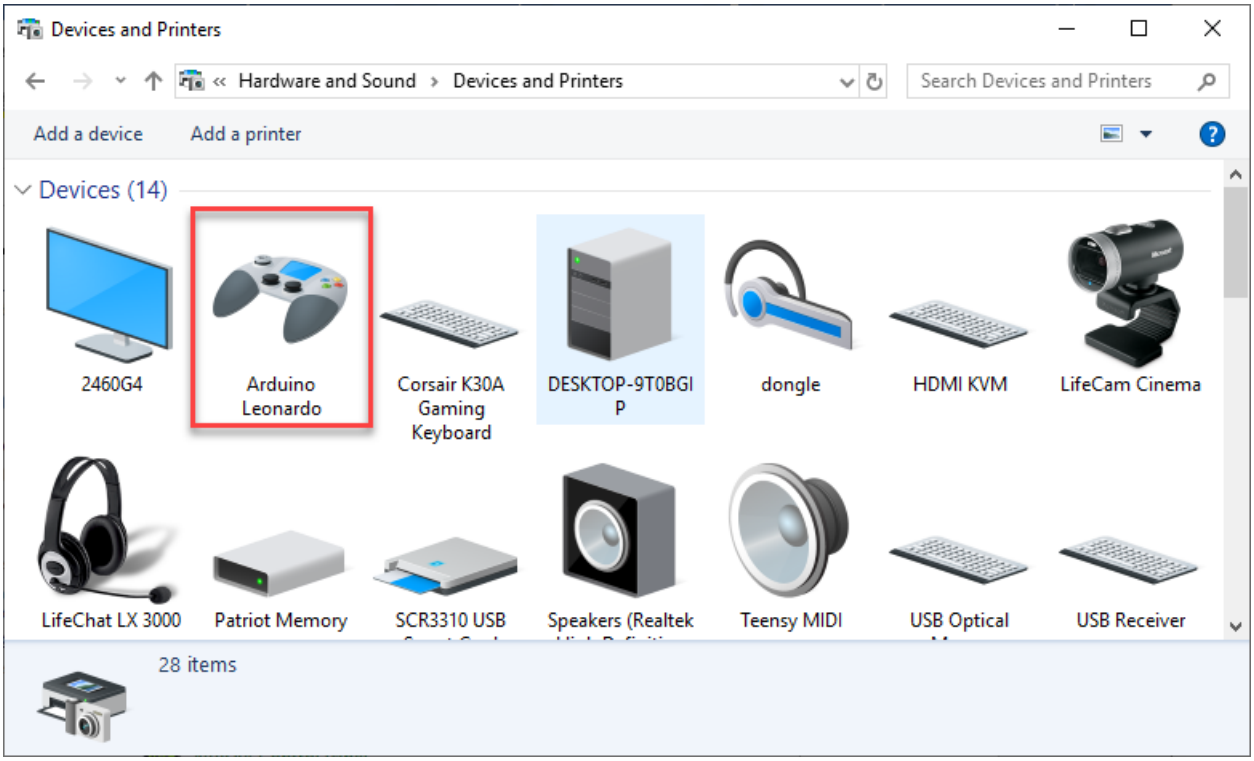
1. Plug the Micro USB cable into the computer and then into the ATARI2USB Adapter and let Windows detect and setup the device.
2. Plug Atari 2600 compatible joystick into port #1 or port
3. Open Control Panel
4. Click Hardware and Sound



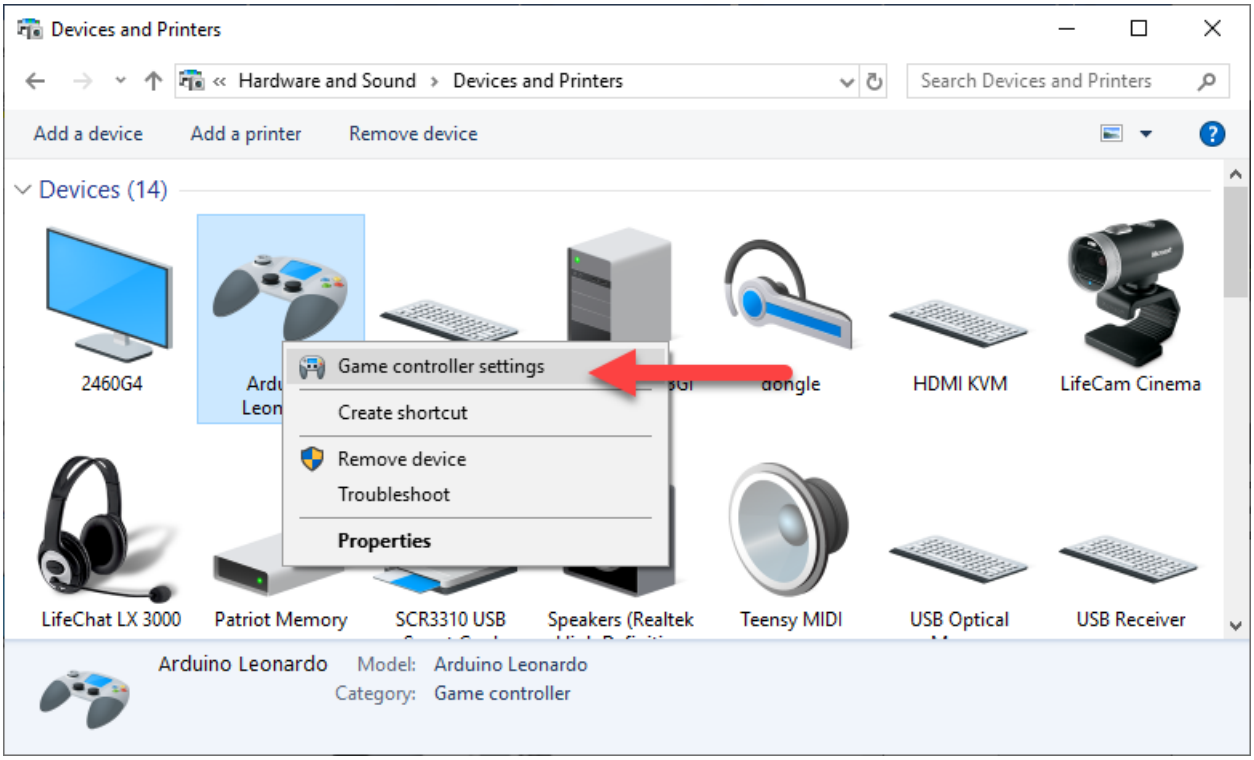
5. Click Devices and Printers



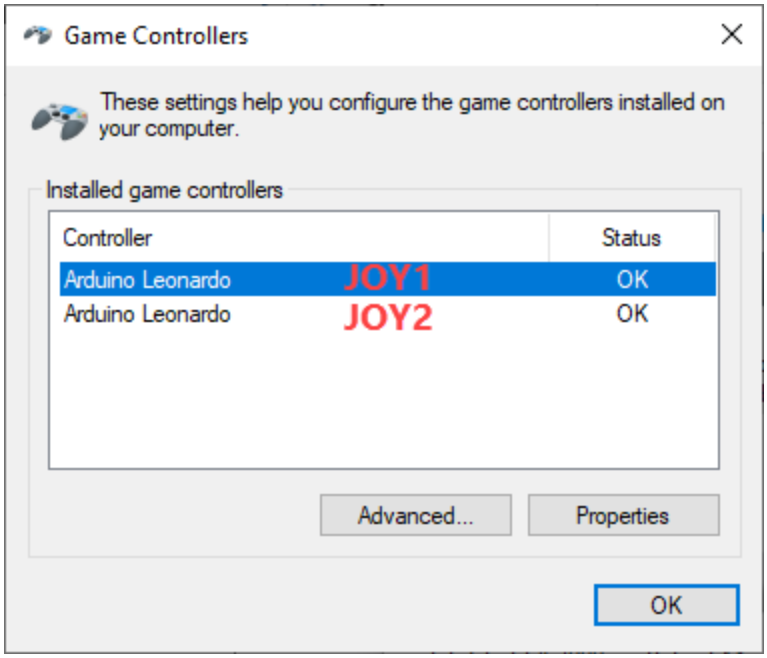
The game controller is detected and shown as:



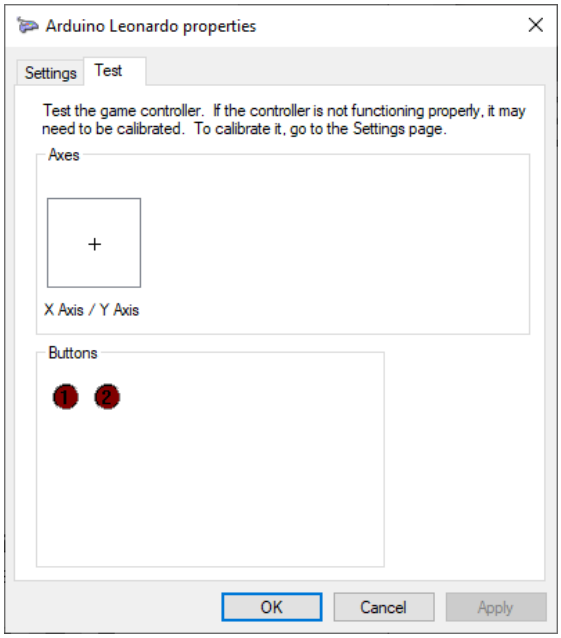
6. Right click the game controller and select Game Controller Settings



This will open the Game controller settings.



7. Select each controller and click the properties to verify functionality, which will bring up the joystick calibration screen.



With the joystick plugged into the correct port press the fire button and button 1 should light up on the properties. Move the joystick up, down, left and right and the cross-hair will move to the correct location.

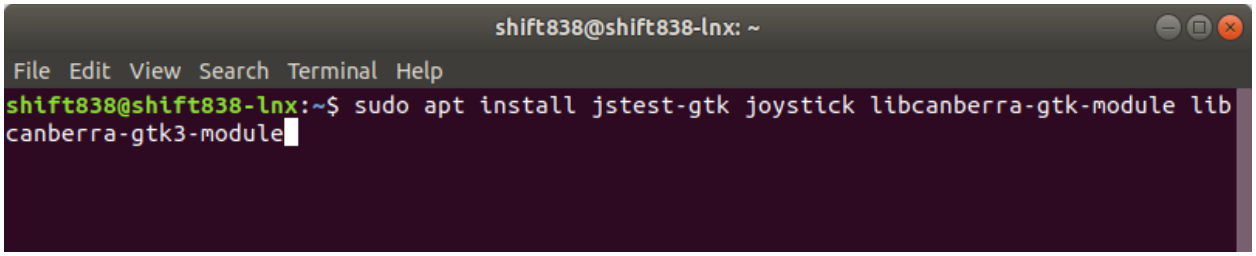
If your joystick has a button #2 wired up to pin #9 of the standard joystick pressing fire button #2 will light the #2 fire button.

If using joystick #2 cancel out and select joystick #2 with the Joystick plugged in to the 2nd port and repeat.

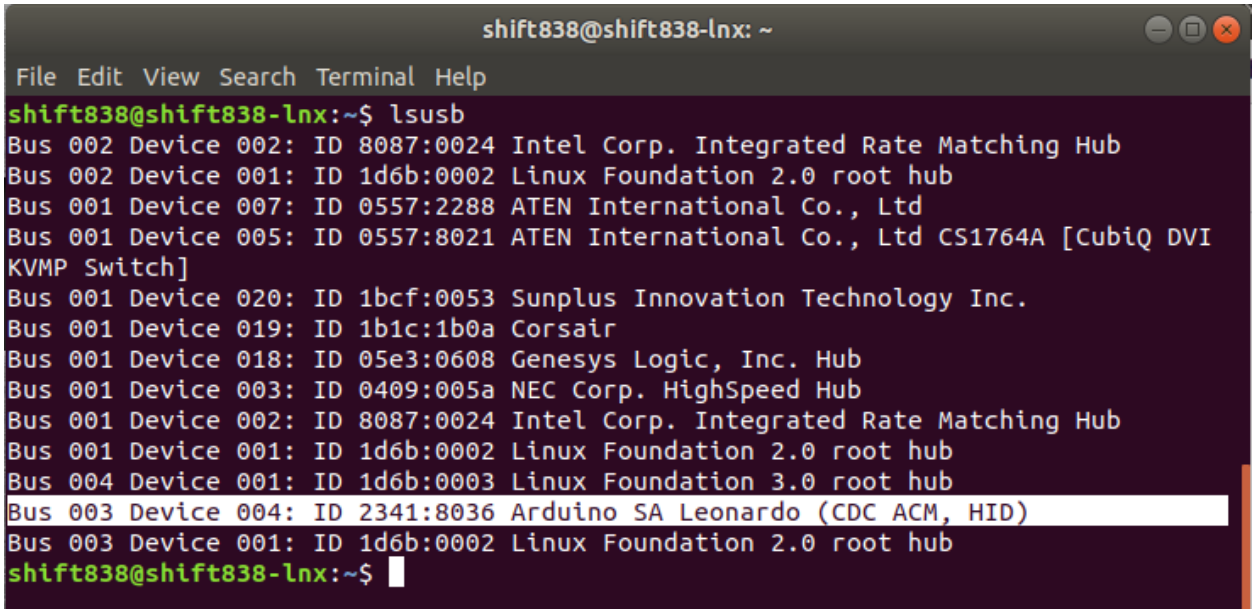
Linux

The unit is plug-n-play, so Linux will recognize this device but only with one joystick as the standard USBHID driver loaded with the OS does not recognize multiple joysticks within one. However, this can be changed with little effort. Linux will recognize the joystick adapter as a Leonardo Gamepad as a Arduino microcontroller is used.

1. Plug the Micro USB cable into the computer and then into the ATARI2USB Adapter and let Windows detect and setup the device.
2. Plug Atari 2600 compatible joystick into port #1 or port
3. Launch a terminal window
4. Issue the below in order to install the joystick support for Linux.



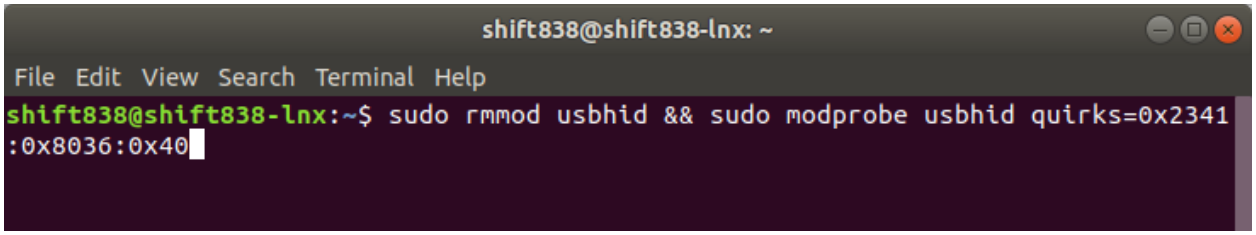
5. Now issue the "lsusb" command to find the VID and PID of the Atari Joystick Adapter.



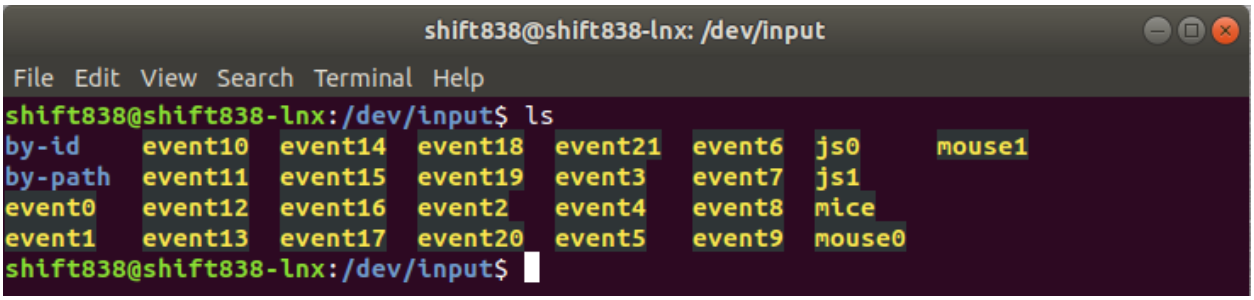
My Atari USB Joystick adapter as it should is listed as "Arduino SA Leonardo (CDC ACM, HID)". The VID is "2341" and the PID is "8036". Your's may be different.

6. Now issue the below command inserting your VID and PID found from the above step.

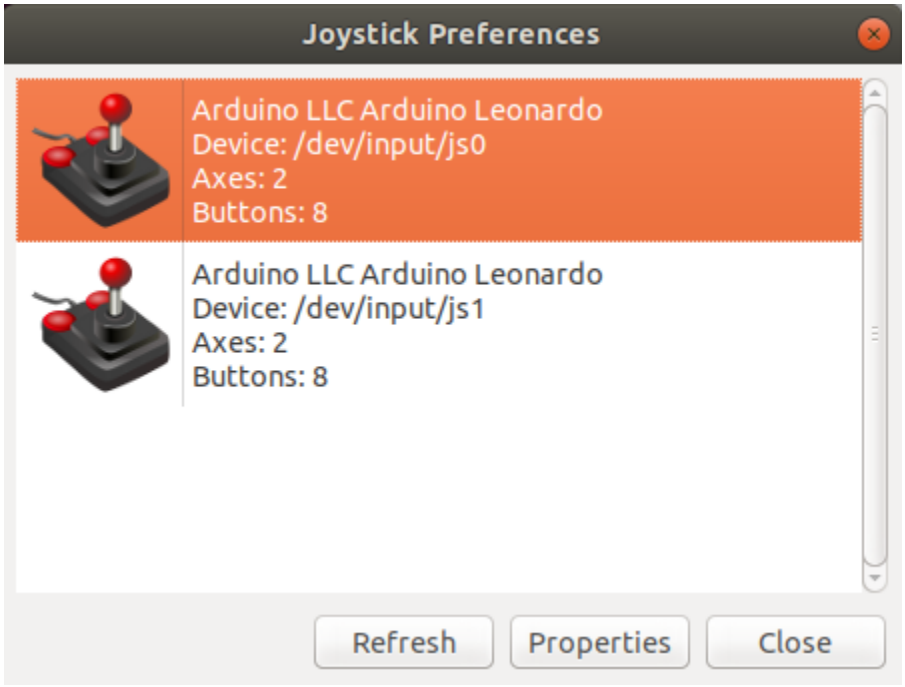
   This command below removes the USBHID driver and reinstalls it. But this time it enables the HSB-HUB Feature for it so that the adapter will be detected as 2 joysticks.



7. Navigate to the /dev/input directory
8. Issue a 'ls' command to show the directory contents and you should now see a "js0" and "js1" directory detecting both Joystick 1 and 2.



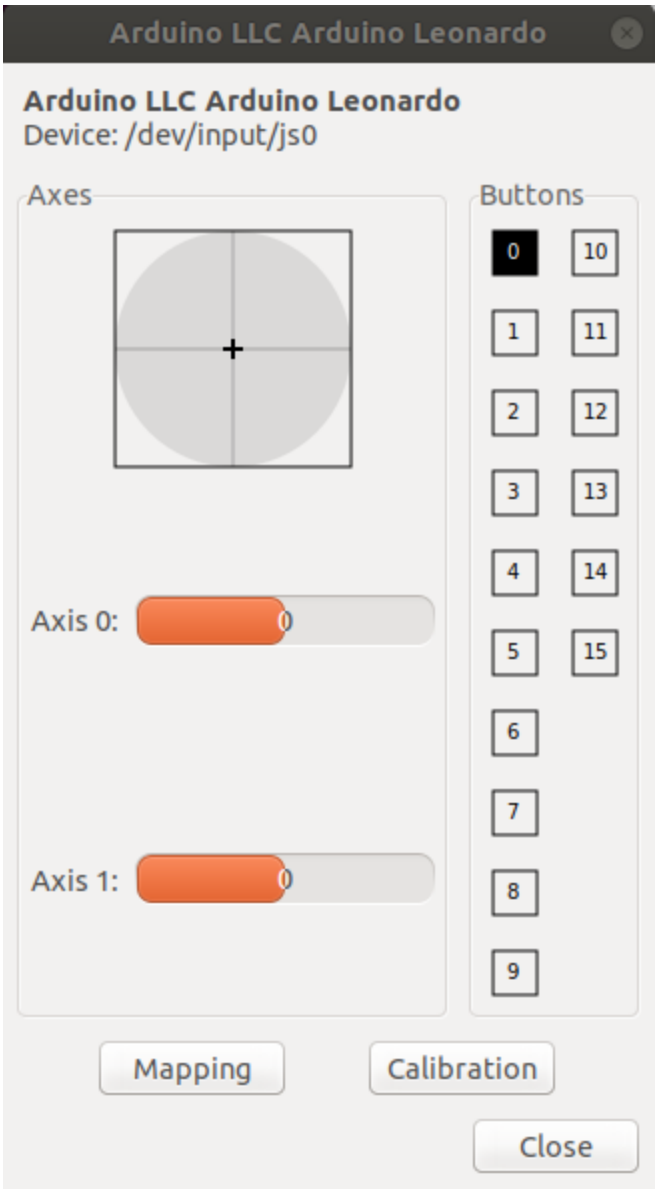
9. Issue the "jstest-gtk" to bring up the joystick test and calibration gui.



10. Select device /dev/input/js0 (joystick 1) and click the "Properties" button.

11. Press your fire button(s) and up, down, left, right directions and the respective signals will show on the test screen.

Note: Button 1 = 0 ; Button 2 = 1 ;
Crosshairs will move in the direction of the joystick when moved.



12. Close
13. Select /dev/input/js1 (joystick 2)
14. Repeat above to test Joystick 2

For Support or questions send an email to:

838sup@gmail.com