PS4

Remap

Flex Modchip

Installation and Use Instructions

Revised 1/20/2015

Tools needed

- PS4 Controller
- Tac Switches
- Viking PS4 Remap Flex modchip
- Soldering iron and solder
- 30 AWG wire (American wire gauge) or similar
- Wire strippers (capable of stripping above wire)
- Electrical tape
- Fine phillips screwdriver
- Power drill
- 9/64 inch drill bits
- Hot glue and glue gun
- Safety glasses
- Additional useful items: flux, tweezers, scissors, wire snippers, etc.

Remove the screws and cover

Once the 4 screws are removed, start separating the cover near the microphone port at the bottom. It may take some force to separate the shell. Cracking noise may be heard and some small tabs may be broken in the process, practice will make this process go more smoothly:

It is possible to remove the shell without removing either the triggers or the bumpers. The rear part near the round end of the handles should be lifted up and over the pegs that lie underneath:

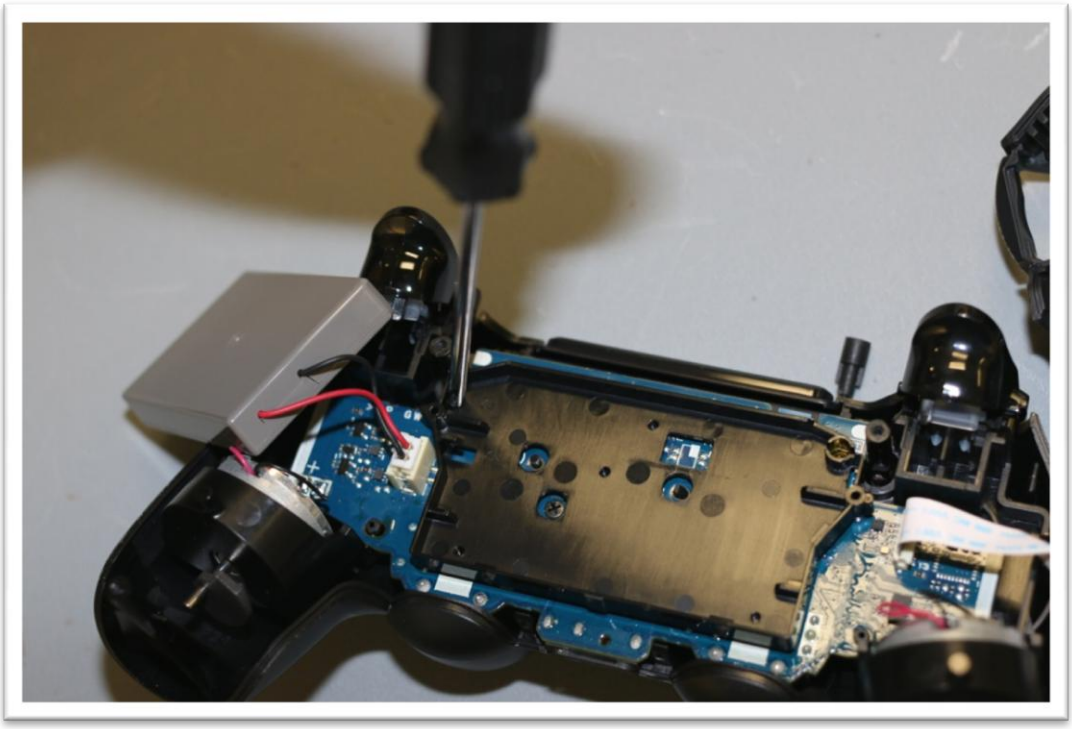
Once the rear handles have cleared the pegs, it is possible to push the back half of the shell "forward" to clear the bumper and triggers, without causing the triggers to pop off. Practice will make this process go more smoothly. If the triggers pop off, **LOOK AROUND CAREFULLY FOR THE SMALL TRIGGER SPRING.** The small trigger spring is required otherwise the trigger will not return fully to the non-pressed position.

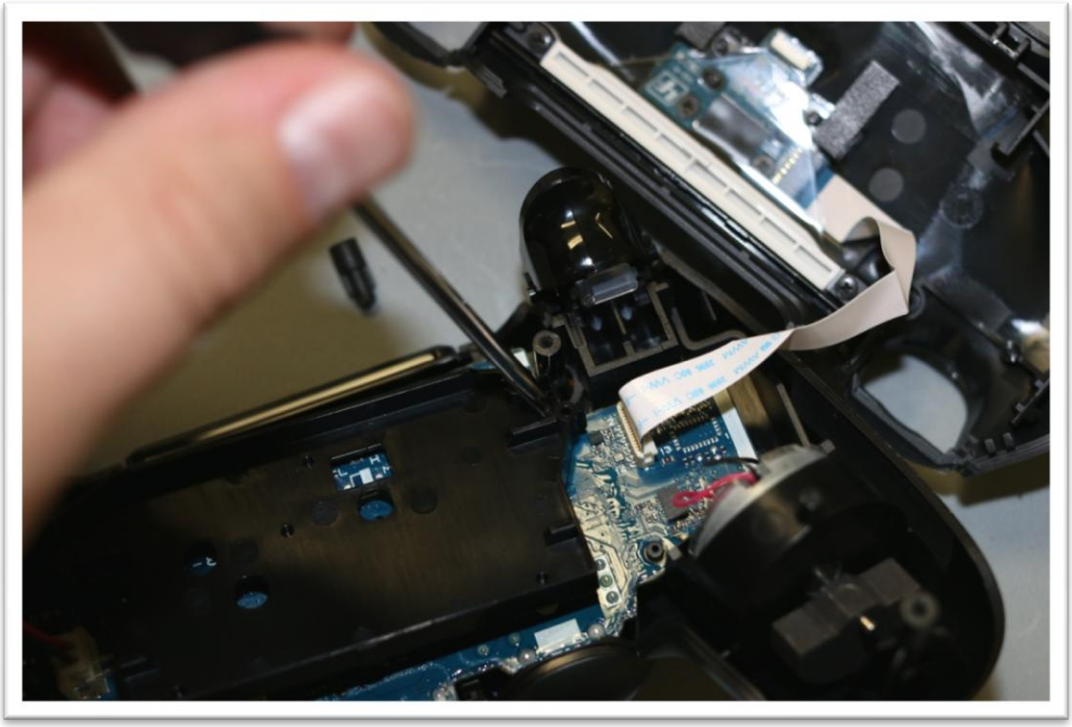
Disassemble the circuit board

Once you've gotten the back half separated from the front half, flip it open like a clam shell:

Remove the small rubber reset button as it is easy to lose. (In more recent versions the reset button is permanently attached to the battery pack holder). Unhook the battery wires from the battery wires hook and remove the battery.

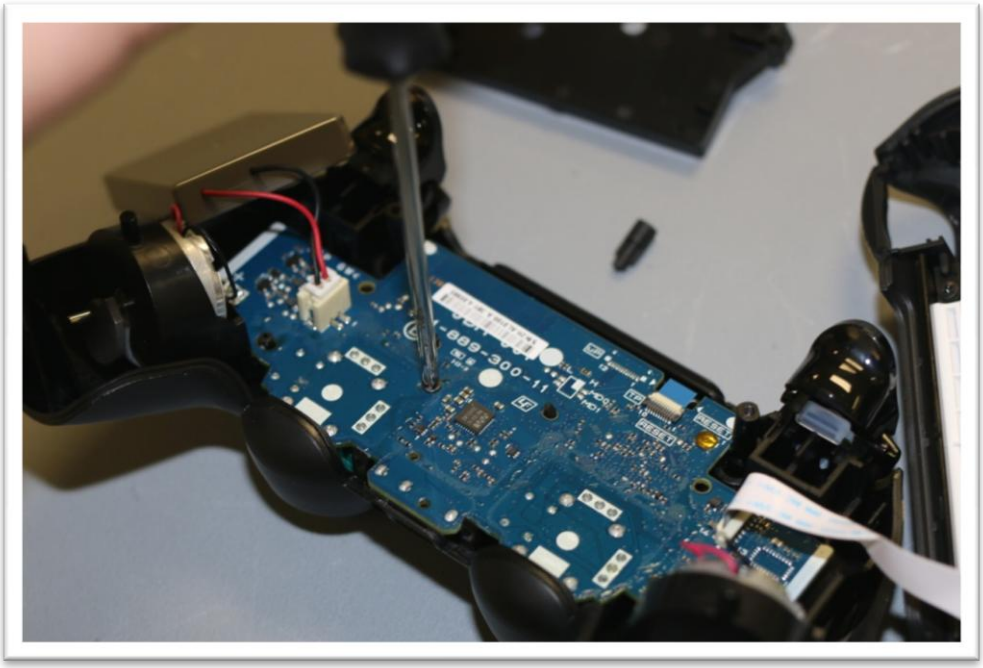
The black battery holder is held in place by two plastic tabs that “hook” around the circuit board. The tabs can be loosened by inserting a flat-tip screwdriver in the locations shown:



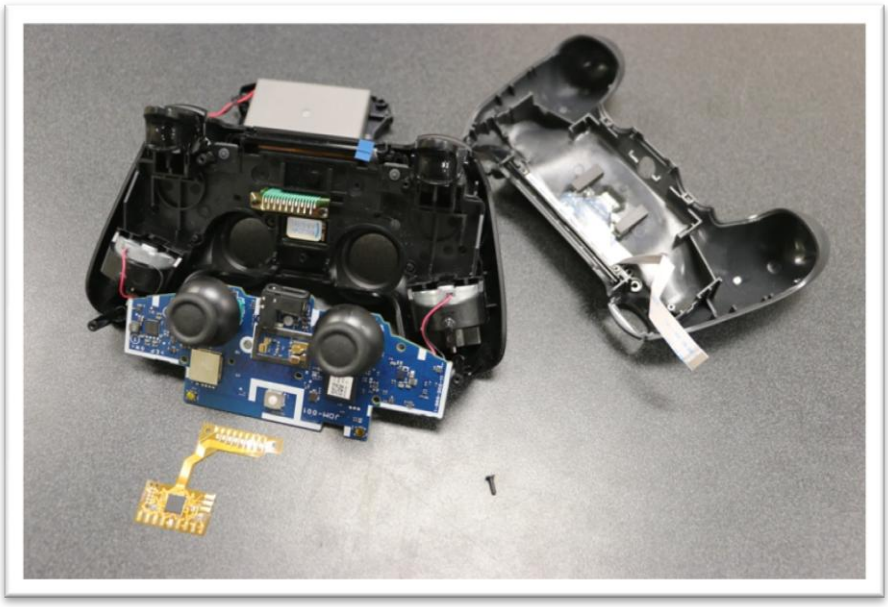


Remove the black plastic battery holder. Remove the single screw that holds the circuit board in place. Now, remove the battery wires, remove the larger white ribbon cable by pulling straight up on the blue tab.

Next, notice the smaller ribbon cable near the “RESET” on the board. Flip up the little white tab, then pull the ribbon cable out by pulling on the blue tab. The white tab locks the blue tab in place, so the white tab must be lifted before the blue tab can be pulled out.



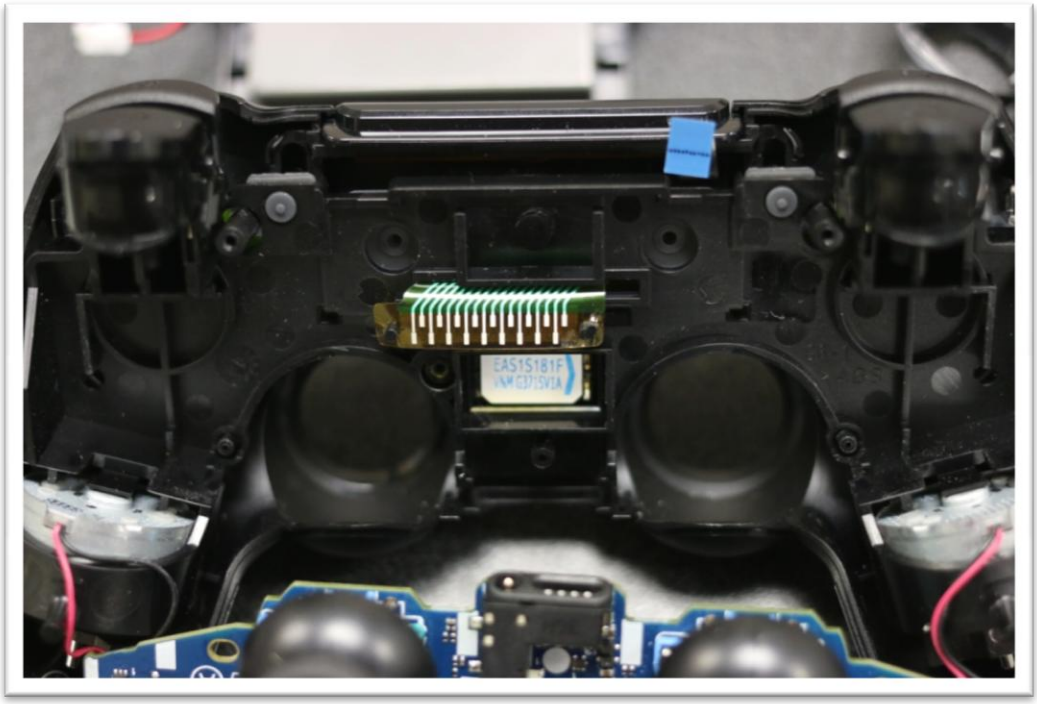
Once both ribbons have been removed, the battery has been removed, the reset button has been removed, and the single screw has been removed, the circuit board is still permanently connected to the two rumble motors. Pull the circuit board up and flip it over clam-style again:

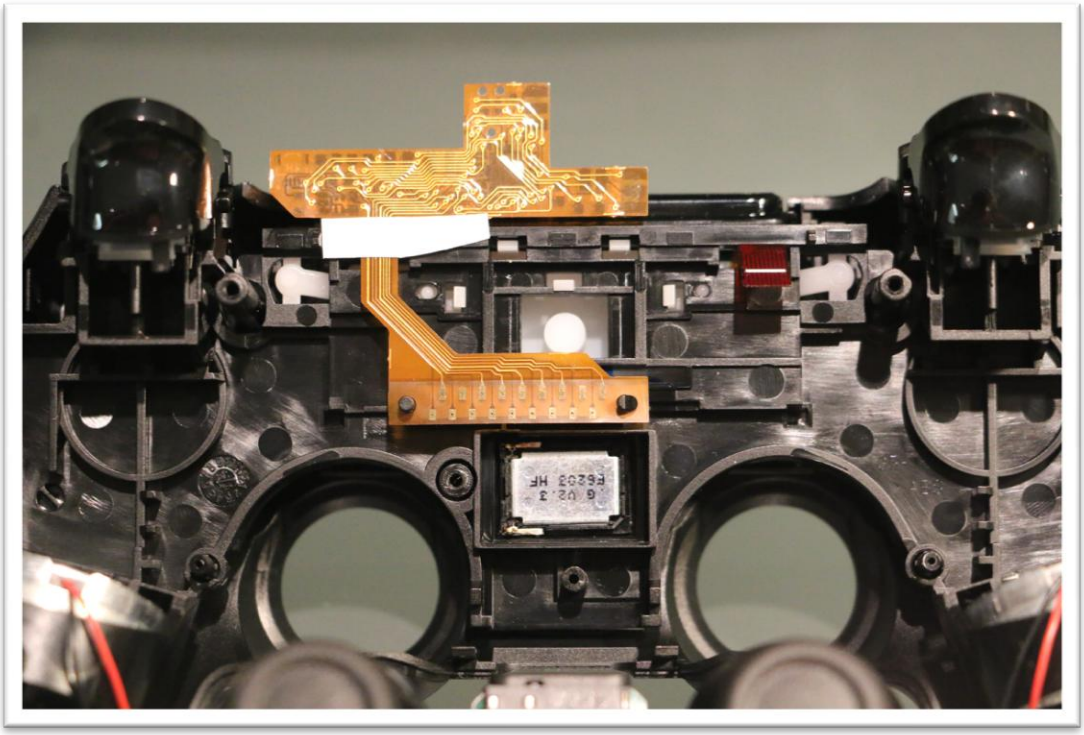


We are now ready to proceed with modchip installation.

Install the modchip

The modchip is installed into this location. Tape can be used to hold the modchip in place:

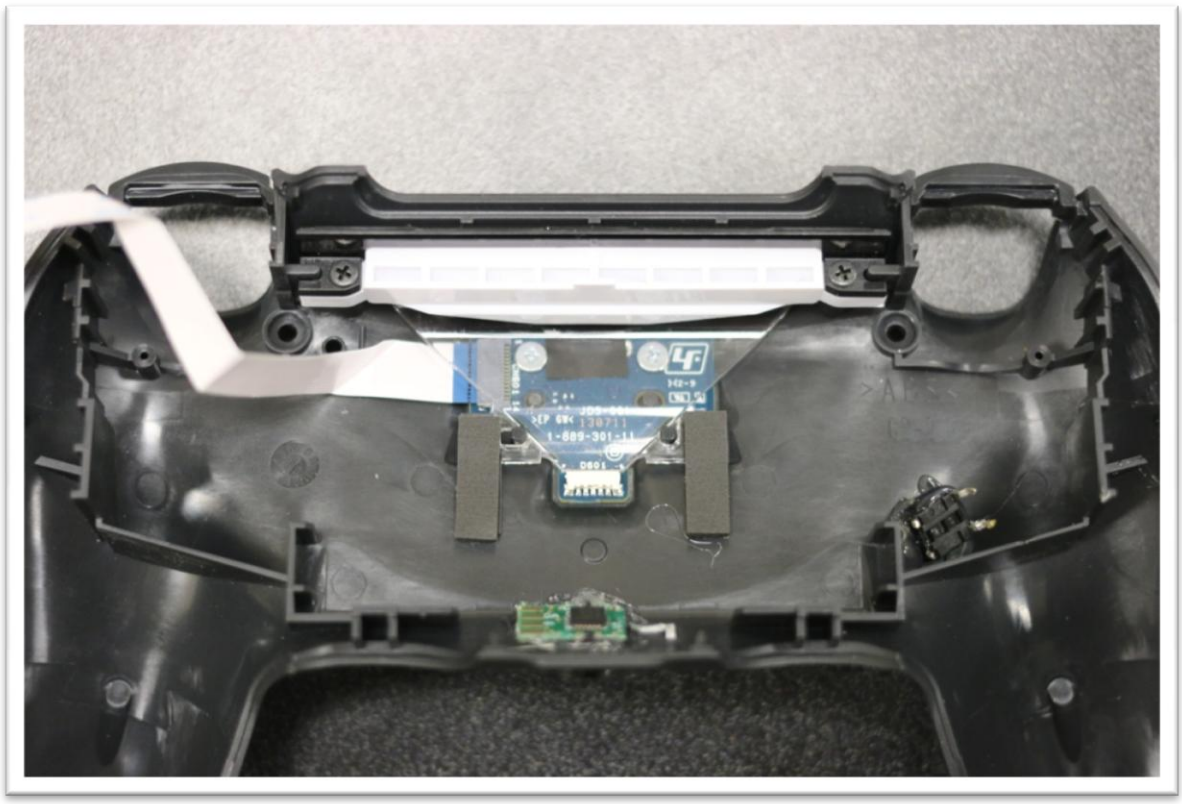




Once the solderless portion of the modchip is in place, re-install the Sony circuit board. Then put a square of electrical tape, or some hot glue, on the Sony circuit board, and fold the modchip over and stick it to the electrical tape or hot glue to secure the modchip in place:

Drill Shell and Install Buttons

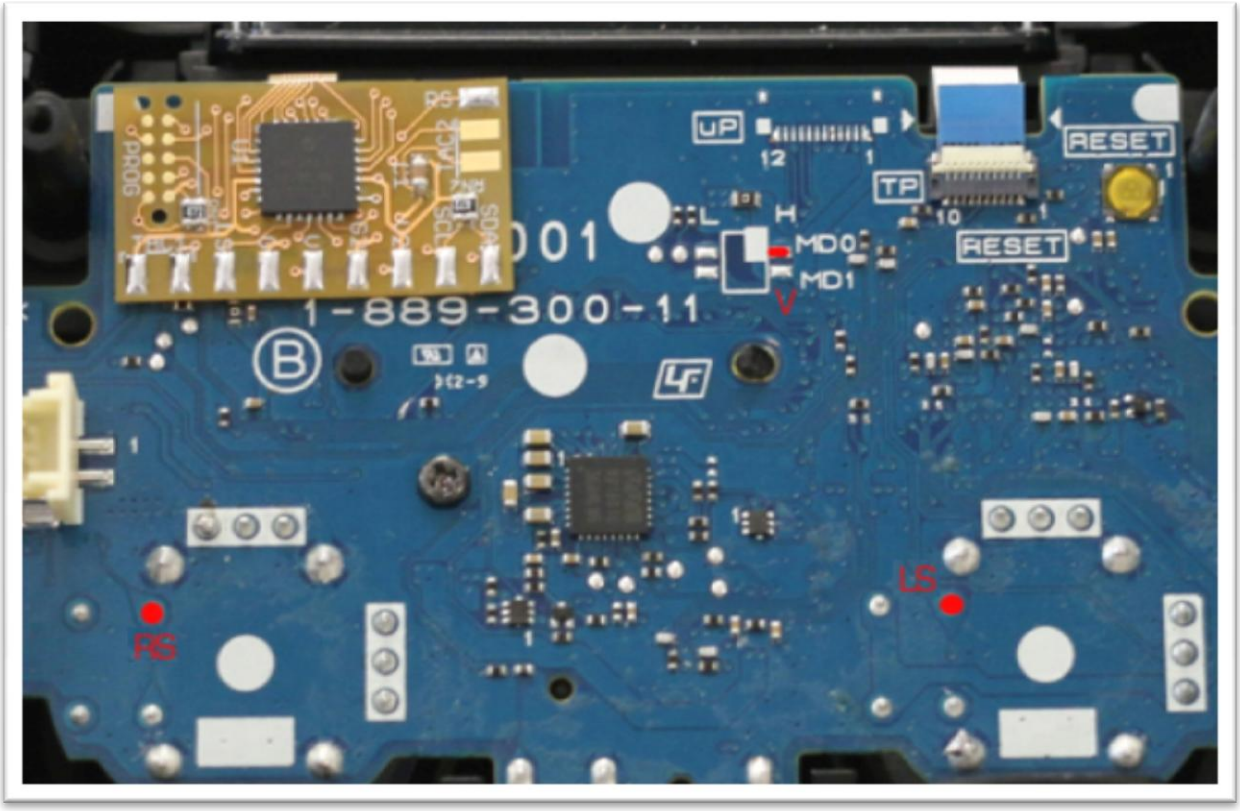
Drill holes as desired for tac switches. One possible location for a tac switch is shown in the photo below, but many locations are available:



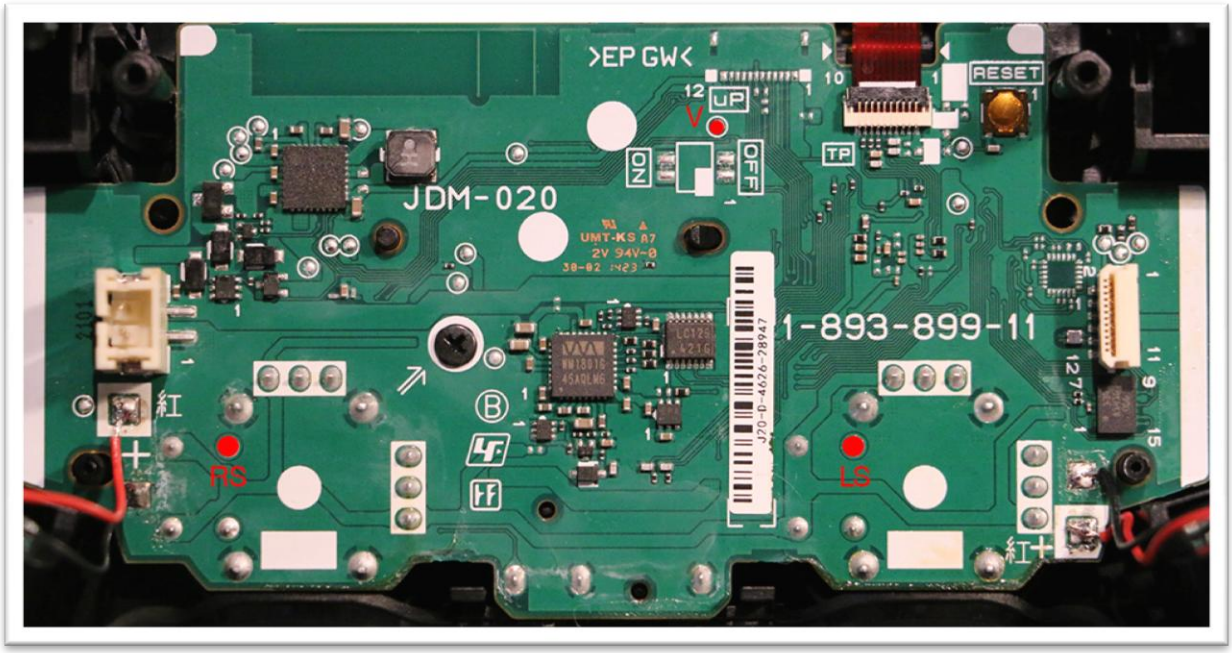
Begin soldering the modchip

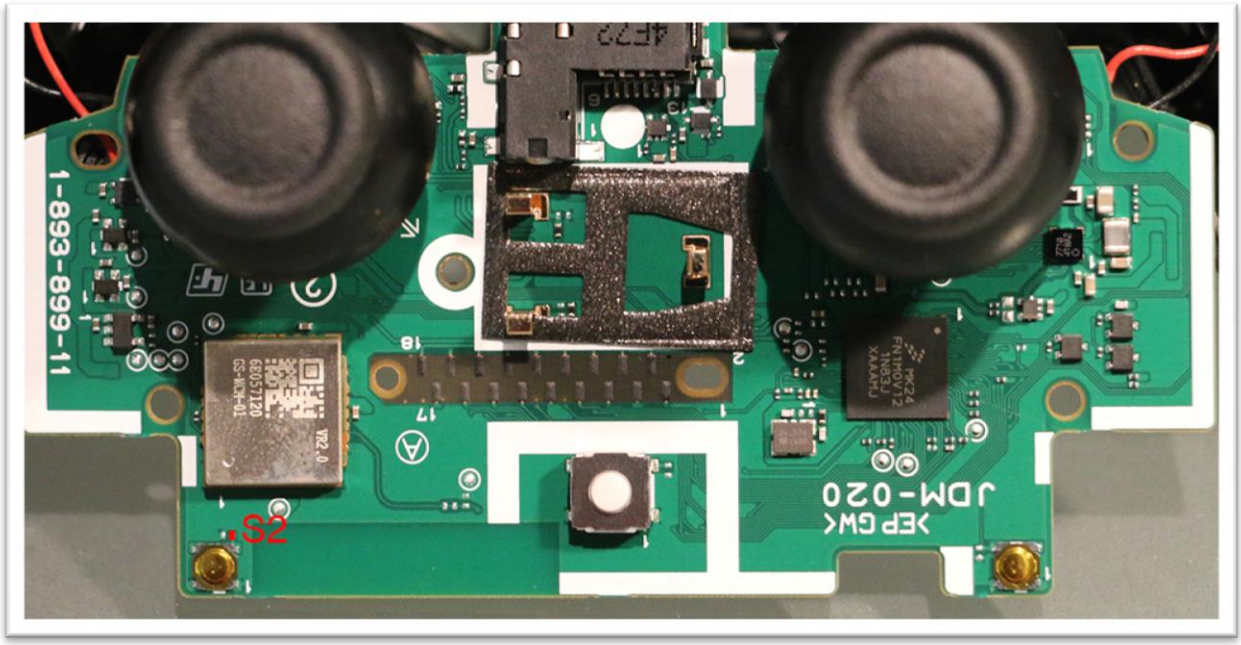
PLEASE NOTE: THERE ARE SEVERAL DIFFERENT REVISIONS OF CIRCUIT BOARDS. You may have to remove a barcode sticker on the PS4 circuit board to uncover the JDM-001 marking. Currently the known circuit board revisions are JDM-001, JDM-011, and JDM-020.

Four wires are soldered from the modchip to the Sony circuit board. “LS” which is the left thumbstick center button, “V” which is voltage/power, and “RS” which is the right thumbstick center button, and “S2” which goes to the PS4’s OPTIONS button:

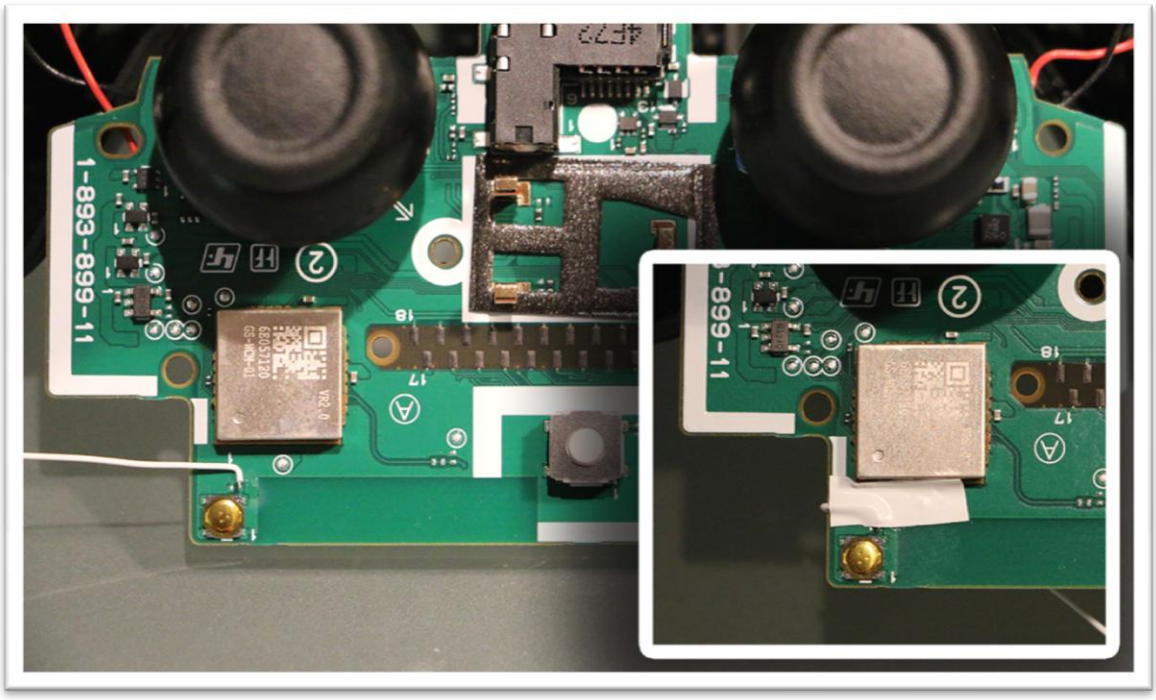


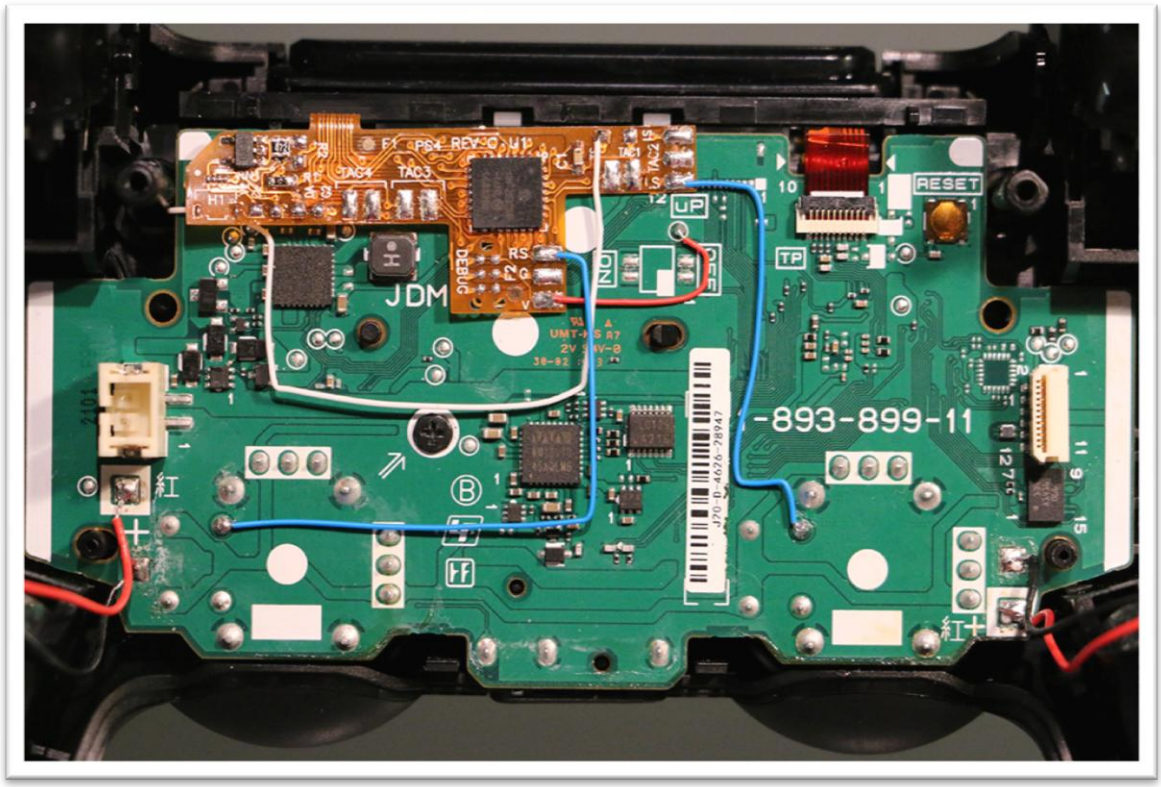
(Pictured above: JDM-001 circuit board connection points)



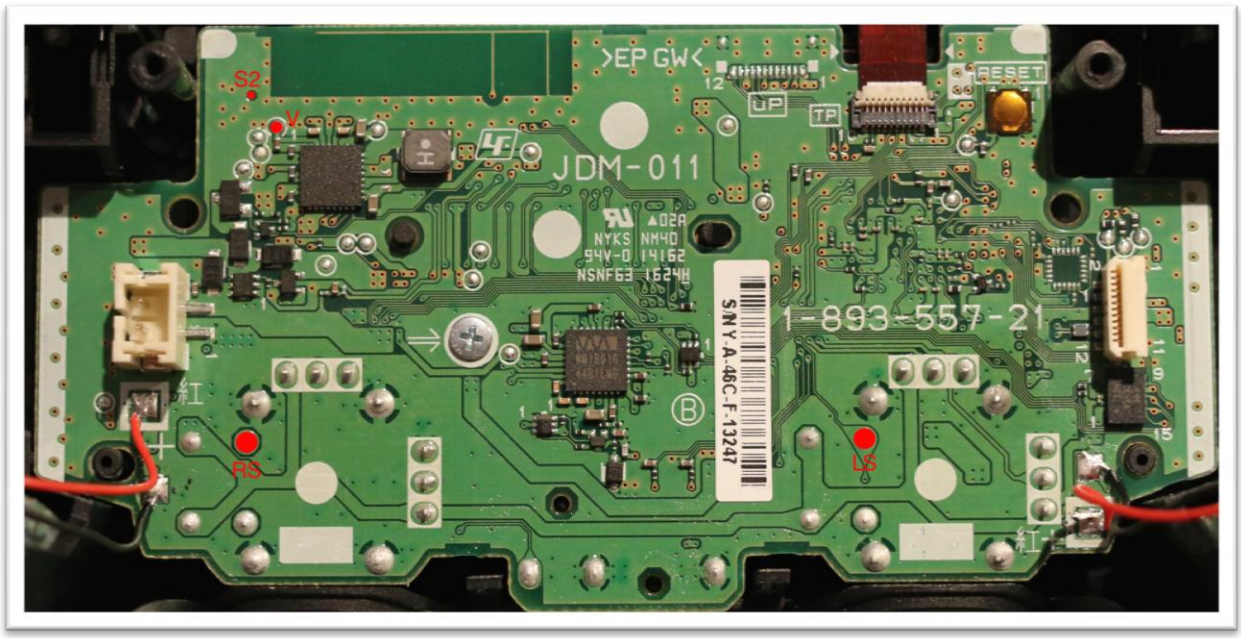


(Pictured above: JDM-020 circuit board connection points)





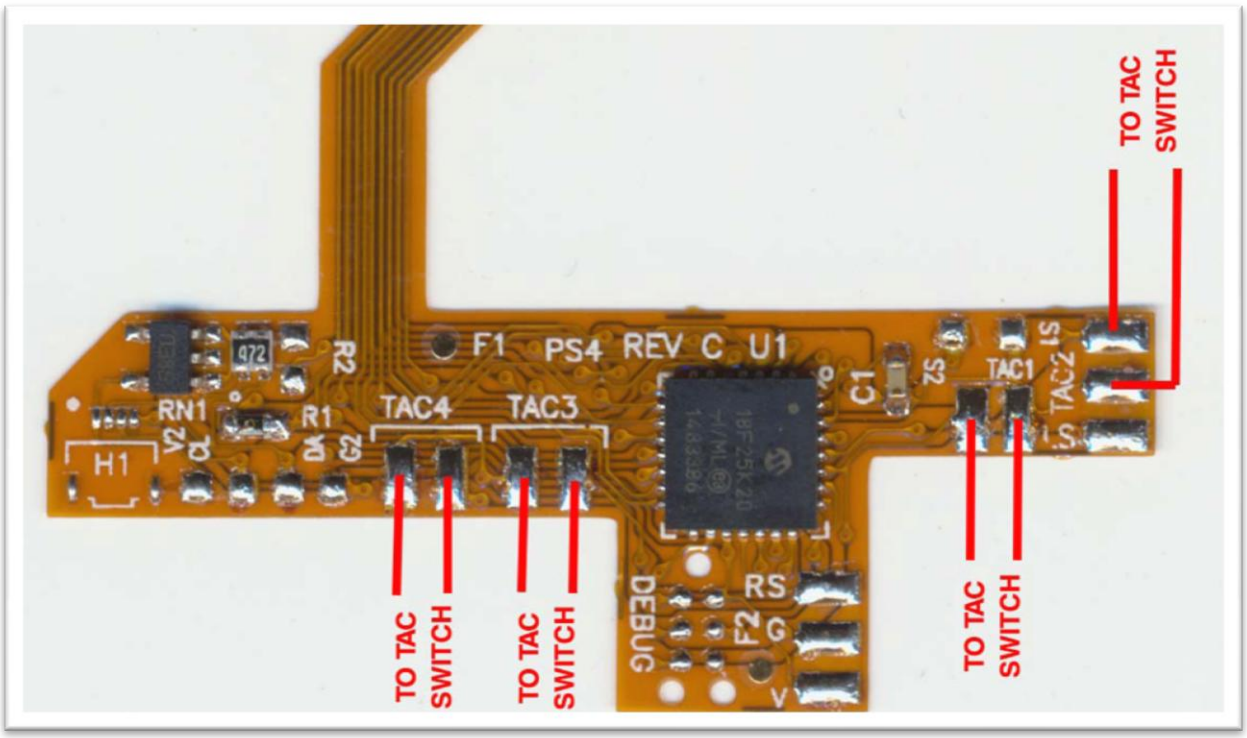
(Pictured above: JDM-020 example installation)



(Pictured above: JDM-011 circuit board connection points)

Connecting Re-mappable Tactile Buttons

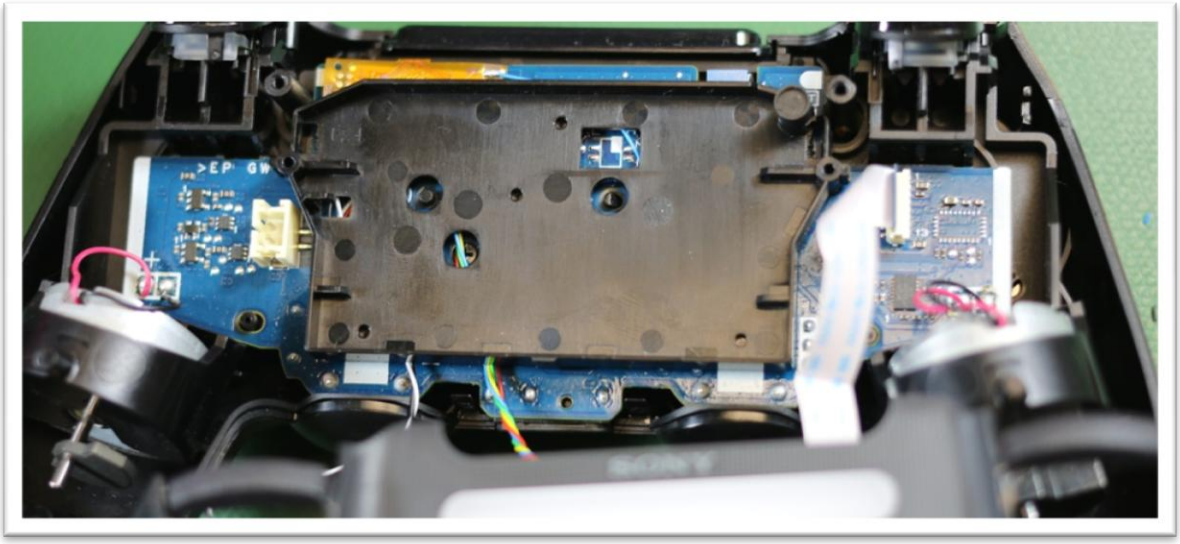
You may connect many tactile buttons, and these tactile buttons may then be used as programmable remapping buttons. Tactile buttons may be connected to “TAC1”, “TAC2”, “TAC3”, and “TAC4”:



Note that “S1” pad may also each be used as a fifth remap button, but a separate ground was not provided for this pad. To use “S1” as a remap button, for example: connect one leg of your tac switch to “S1” and the other leg of your tac switch to any ground.

Put the controller together

Once the wires have been installed, re-install the plastic battery cover, the ribbon cables, and the reset button. Any tac switch wires you created should be routed underneath the black plastic battery holder:



Route the wiring “left” and “right” into the more open areas such that they will not get pinched or caught when the shell is closed. You can follow the ribbon cable as another “safe” path:

Setup the Remappable Buttons

The PS4 controller can be connected to a Windows PC. In order for the modchip to work, the controller must be synced either to a Windows PC (using a standard USB to micro USB cable) or to a PS4 console.

To enter button programming mode: Once synced to a PC or console, hold the OPTIONS button for at least 3 seconds, then release. The modchip is now awaiting you to program your tac buttons. You may hold the button for longer than 3 seconds, but it must be held for at least 3 seconds.

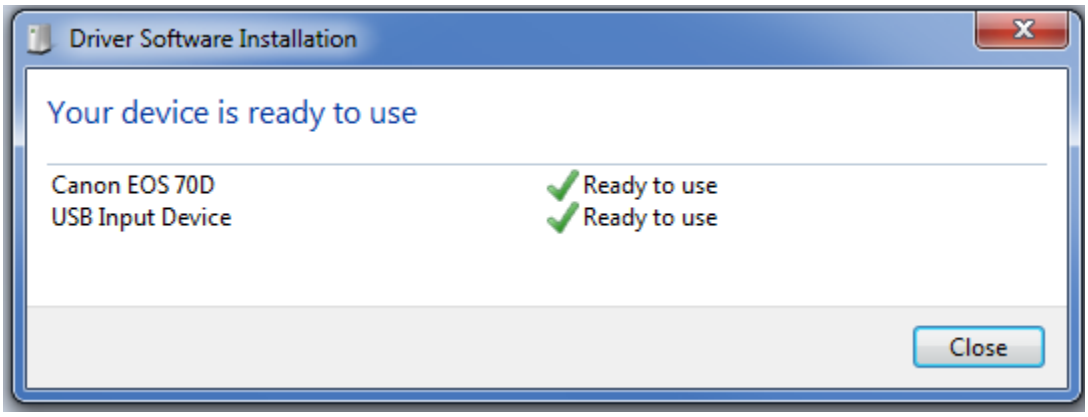
To program a tac switch: Once in programming mode, hold down any tac button, then tap a stock button to map it to the tac switches.

To exit programming mode: When you are done setting up all your tac switches, hold the OPTIONS button for at least 3 seconds, then release. This exits the tac switch programming function. You may hold the button for longer than 3 seconds, but it must be held for at least 3 seconds.

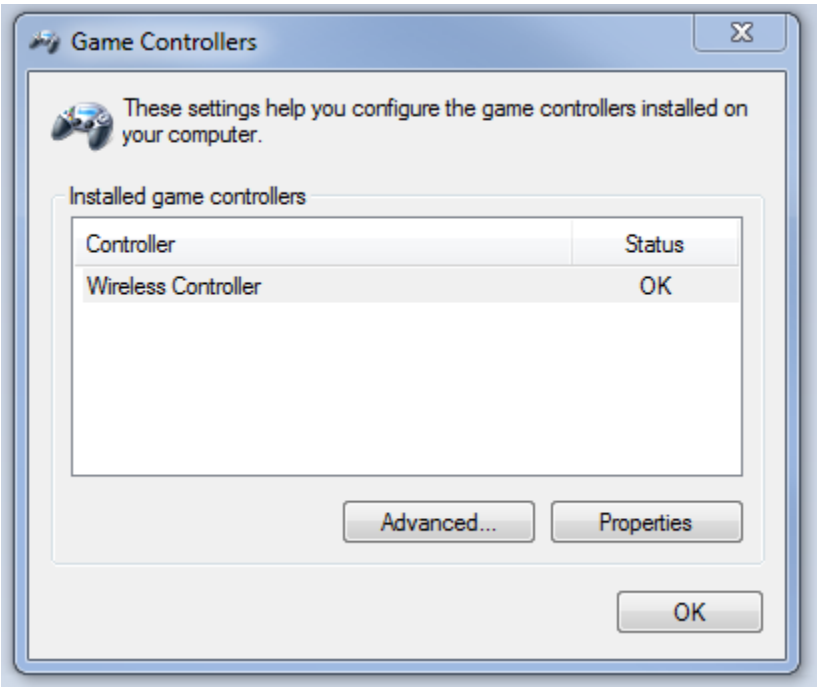
To use the remappable tac switch: After the tac switch is setup to emulate a stock button, just press it – you now have a remapped tac switch that emulates a stock button press.

Test the Controller

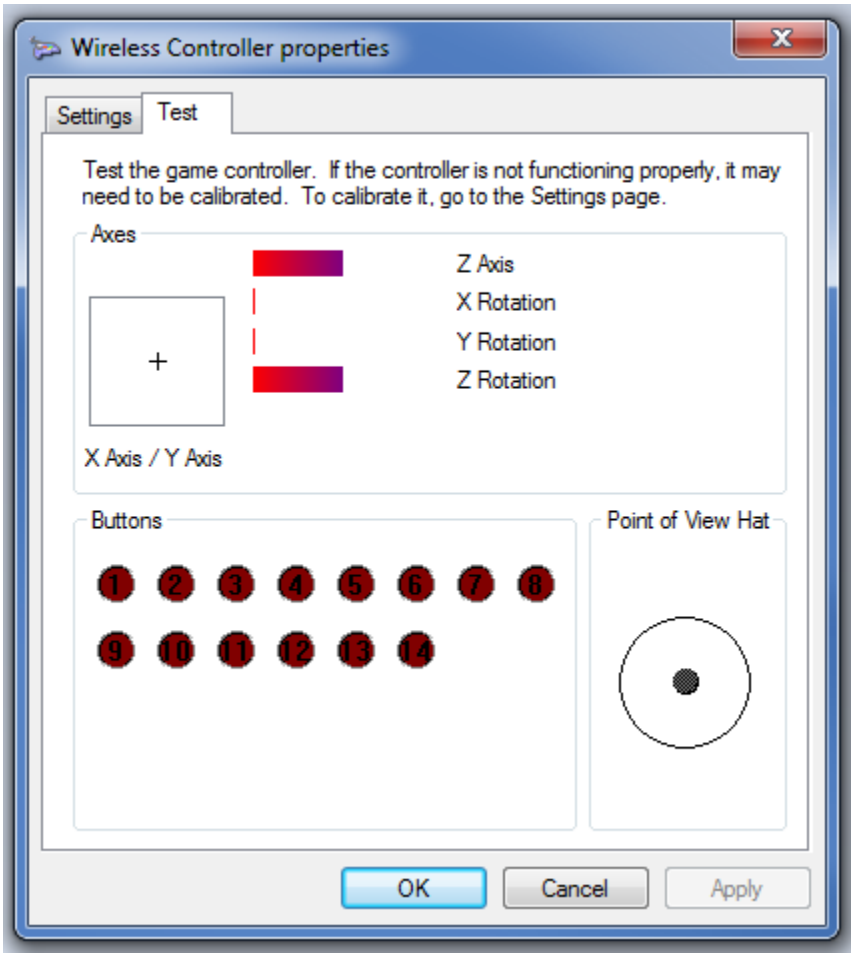
The PS4 controller can be connected to a Windows PC.



On Windows 7 for example, connect your controller by USB to your computer, and then type “Set up USB game controllers” into the search bar to launch the Windows native game controller tool.



The tool can be used to check that all button presses are functioning properly.



Once all button presses have been confirmed working and mods have been tested, it's time to play!