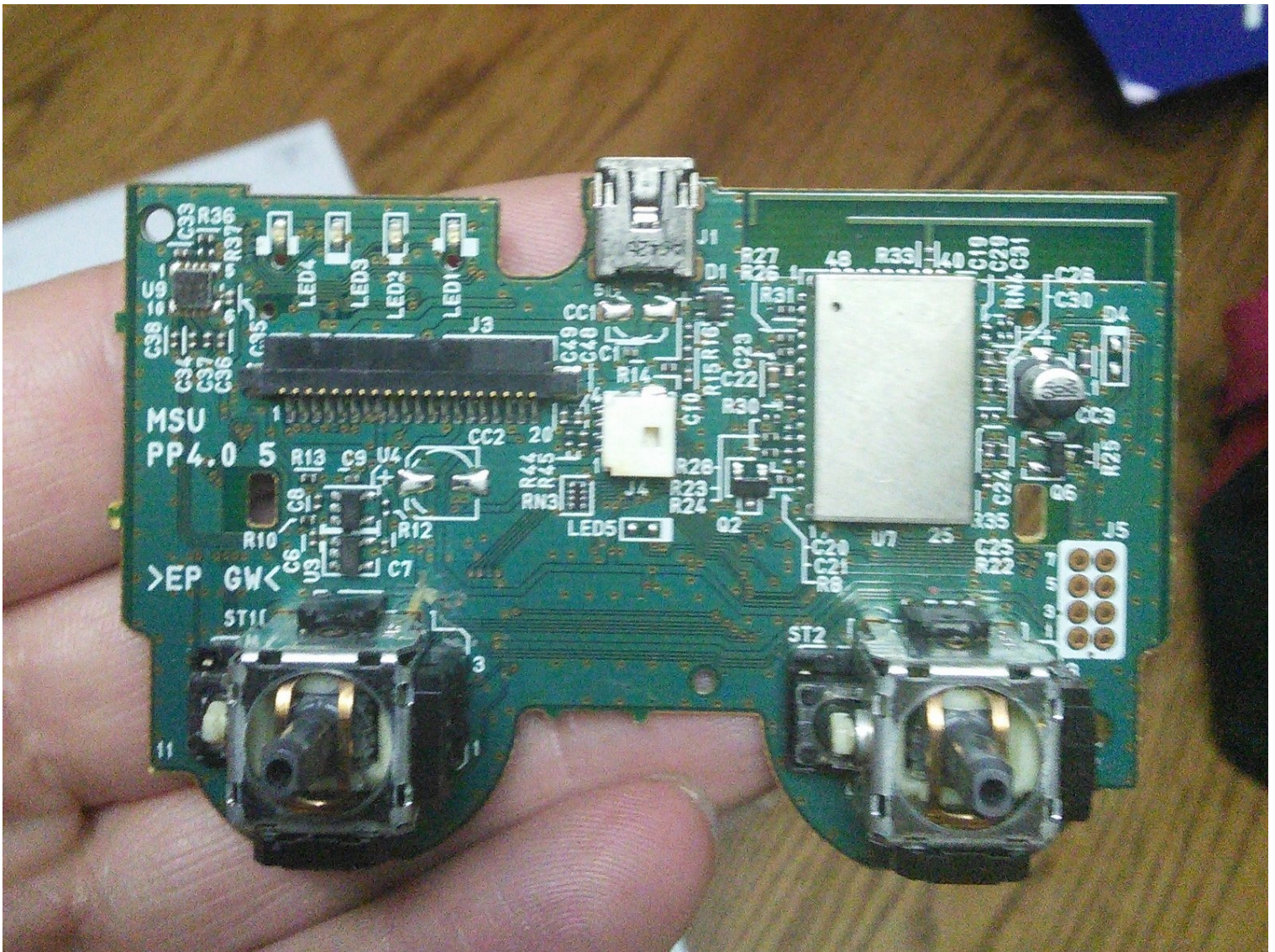




Sony Game Console Accessory L3 and R3 Potentiometer Replacement for PS3 & PS4

When the L3 and R3 potentiometers wear out,...

Written By: DARKMATTER



INTRODUCTION

When the L3 and R3 potentiometers wear out, proper de-soldering equipment will be necessary to safely remove and replace them. De-soldering the parts is challenging, but it can be done. Please search eBay to find US replacement parts for this repair.

When purchasing the replacement parts, please choose those for Sixaxis/non-DualShock controllers. The conductive film has a ribbon connector, and the mainboard has a connector port superior to the DualShock 3. Also works on PS4 too just that they are all sandwich job conductive film.



TOOLS:

[iFixit Opening Tool](#) (2)
[Phillips #00 Screwdriver](#) (1)
[80W soldering iron](#) (1)
[Soldering tip, small](#) (1)
[Manual de-soldering pump](#) (1)
[De-soldering braid](#) (1)



PARTS:

[L3 R3 Potentiometer](#) (2)

Step 1 — Controller



- Using the Phillips #00 Screwdriver, remove the four 6.0 mm screws securing the rear cover to the controller.

⚠ Be careful loosening the screws, using the wrong sized screwdriver, or letting the screwdriver slip can permanently damage the screw heads, making removal extremely difficult.

Step 2



❗ Four fragile plastic clips hold the casing together. You can see their locations more clearly in [this guide](#).

❗ The clips help hold the seams together. If you break these clips, the controller will still work.

- Beginning with the **left handle**:
 - Pinch the left handle of the controller to introduce an opening.
 - Wedge a plastic opening tool into the opening and slide it up towards the joystick.
 - Pull down on tool to pry open the casing.
- Repeat these steps for the **right handle**.

Step 3



- Wedge a plastic opening tool into the case-splittings and pull down to crack open the casing near the following buttons:

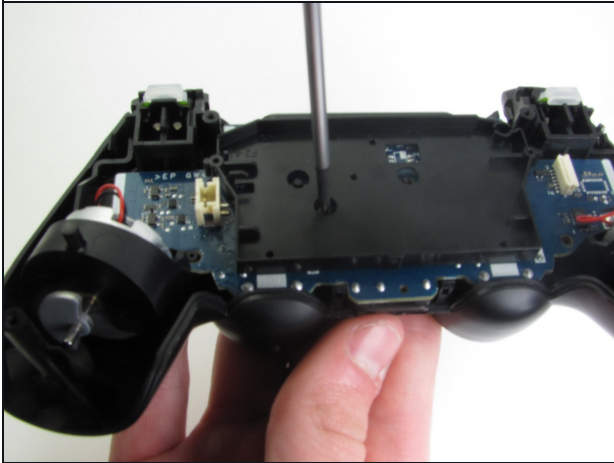
- **Share** button
- **Options** button

- Split the plastic covers of the controller apart, taking note that they will still be attached by circuit board ribbons.

❗ Three small pieces are often released from the framework. To prevent loss, maintain a controlled work field.

- 2 Trigger Springs
- 1 Grey Reset Button Extension

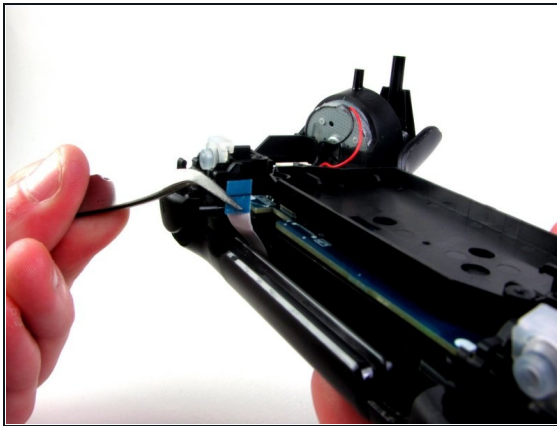
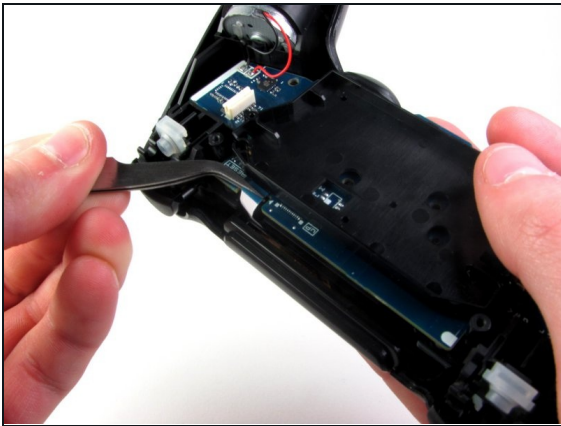
Step 4 — Disassembling DualShock 4 Motherboard Assembly



- Remove the single 6.0 mm Phillips screw found below the battery retainer with the Phillips #00 Screwdriver.

⚠ Do not forcefully loosen the screw, as it may amount to permanent damage of the threads, making removal impossible.

Step 5



- Gently detach the touchpad ribbon connected to the motherboard using the blunt forceps. The touchpad ribbon is connected to the motherboard by a connector that flips to tighten and loosen. During reassembly, to reattach the ribbon, the plastic tray will need to be gently removed from the motherboard and the flip-lock flipped up.

Step 6



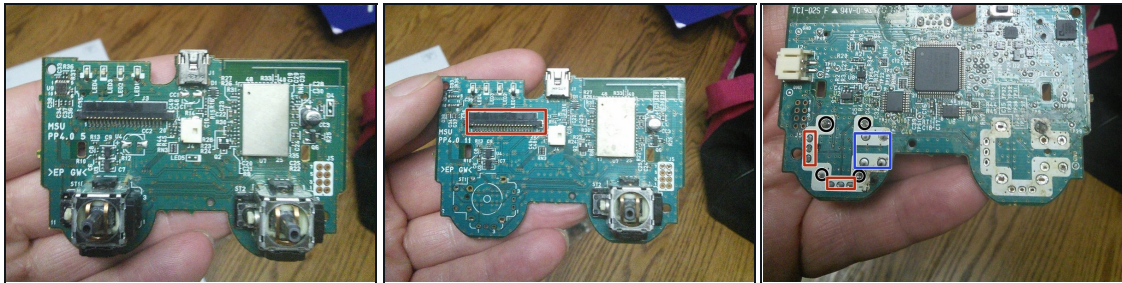
- Carefully dislodge the motherboard assembly from the front cover.
 - Vibration motors are loosely attached to the motherboard assembly. Provide support at the two ends to ease the separation.
- i** When removing the motherboard assembly, try not to tilt the front cover upside down as the buttons and their covers may fall out.

Step 7 — Disassembly Complete



- Successful disassembly of the controller will result in the following three parts, respectively:
 - Motherboard Assembly
 - Front Cover
 - Rear Cover

Step 8 — De-Solder Worn Potentiometers



- Note the Sixaxis conductive film connector is superior to the DualShock 3.
- De-solder the four (4) potentiometer through hole mounts.
- De-solder the six (6) potentiometer through hole joints.
- De-solder the L3 and R3 button joints, then insert and solder the new potentiometers.
- Note this mainboard assembly uses lead solder, likely 63/37 eutectic. A 80W soldering iron is strongly recommended for de-soldering and re-soldering operations, as solder tends to not easily flow with less heat transfer.
- Also works on Dual Shock 4

Step 9



- Finally found a wall charger that charges PS3 effortlessly. Since no other charger works.

To reassemble your device, follow these instructions in reverse order.