

PS5 V2.x Rapid Fire and Programmable Remap Mod Installation

This guide covers the basic installation of our Rapid Fire and Programmable Remap mods. The basic installation is the exact same for both mods. Adding buttons or paddles is not covered in this guide.

*Note: Connecting the triggers on the programmable remap mods is now optional. See additional notes at the end of this guide for more information.

For installation you will need a few tools. A Philips PH00 size screwdriver is required for opening the controller. A plastic pry tool is recommended, but not necessary.

You will need a soldering iron and solder. Only use a soldering iron set to 350 degrees Celsius or lower (30 watt or less for non-adjustable irons) . Using a higher temp iron can easily damage the mod causing pads to delaminate.

A pair of needle nose pliers and tweezers are great help in removing and installing the many ribbon cables inside the controller.

There are currently 2 versions of Sony controllers available. The BDM-010 and BDM-020. The image to the right shows how to identify them. The connections for power and the triggers are different based on the controller and will be indicated at those steps.

Method 1: Check the part number on the back of the controller

BDM-010



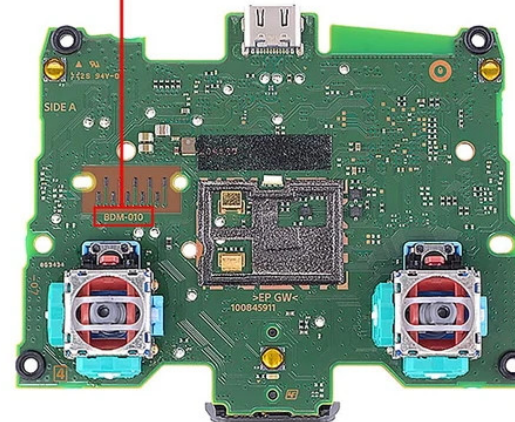
BDM-020



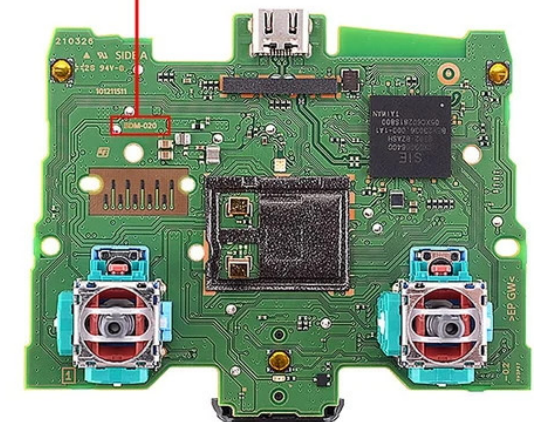
Method 2: Take apart your controller and check the mainboard



BDM-010



BDM-020



Opening the Controller

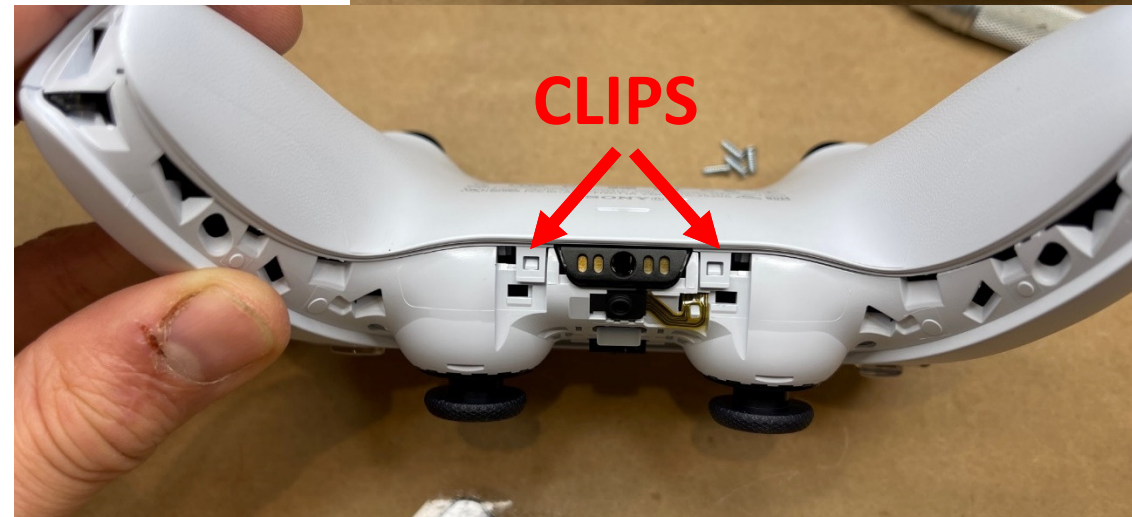
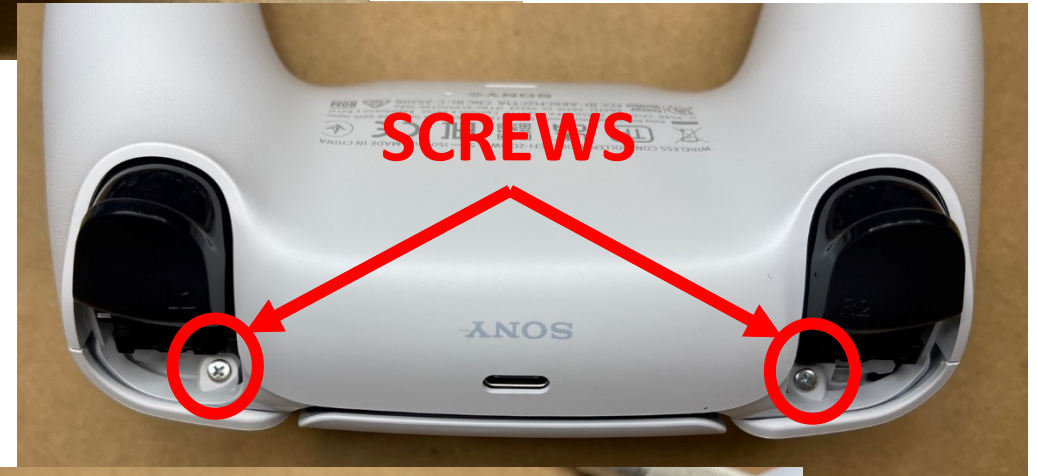
- To open the controller you must first remove the trim piece around the thumb sticks and PS button. To do this start with the controller upside-down. Use a pry tool (your fingernail can also work just as well) place it between the shell and the trim to pop it out. Do the same to both sides.
- Flip the controller over and slowly work up both sides of the trim piece releasing the clips.
- Once all of the clips are released you will need to lift the bottom of the trim piece over the thumb sticks and then out.
- Once removed flip the controller back over to reveal the 2 Phillips PH00 screws and remove them.



SCREWS

Opening the Controller Continued

- Next you will need to remove the R1 and L1 buttons. Again, using the pry tool, you will need to get behind the button, as shown in the picture, and pop it out. This takes a good bit more force than the trim piece to remove. If you do not have a pry tool, use the PH00 screwdriver or a pair of tweezers.
- Once removed you will see the second set of PH00 screws that must be removed.
- The final step to remove the back cover is to separate the shell starting at the end of one of the grips. While separating you will need to release the 2 clips shown in the bottom picture. Separate from the bottom opening like a clamshell until you feel resistance then push the shell up and out away from the triggers.

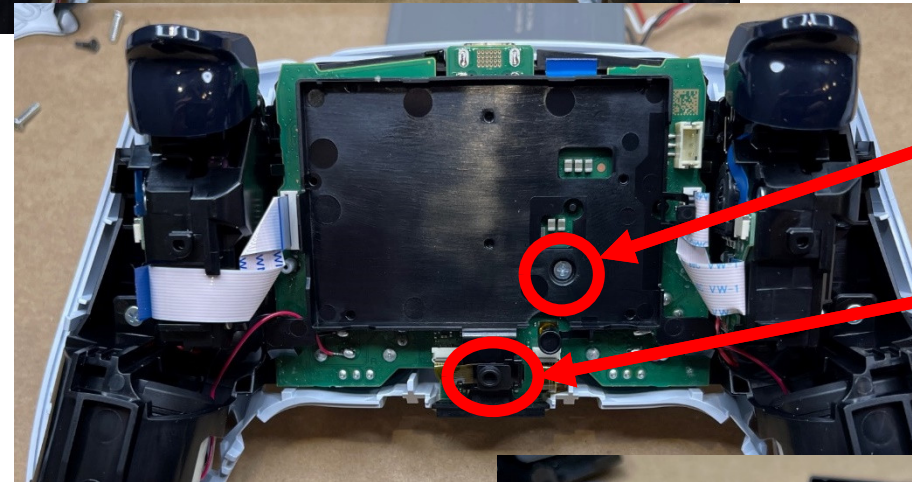


Opening the Controller Continued

- With the controller open you can remove the battery by unplugging from the circuit board.
- This reveals the battery tray which is held in by one Philips PH00 screw. Remove this screw. You will also need to remove the microphone which is clipped into the bottom of the tray.
- The final step is to unplug all of the ribbon cables from the main circuit board. Some of these are stubborn and best removed by grasping firmly as close to the plug as possible with a pair of needle nose pliers. If you will be installing our replacement trigger ribbon cables, then you can also remove the trigger ribbon completely from the trigger module.

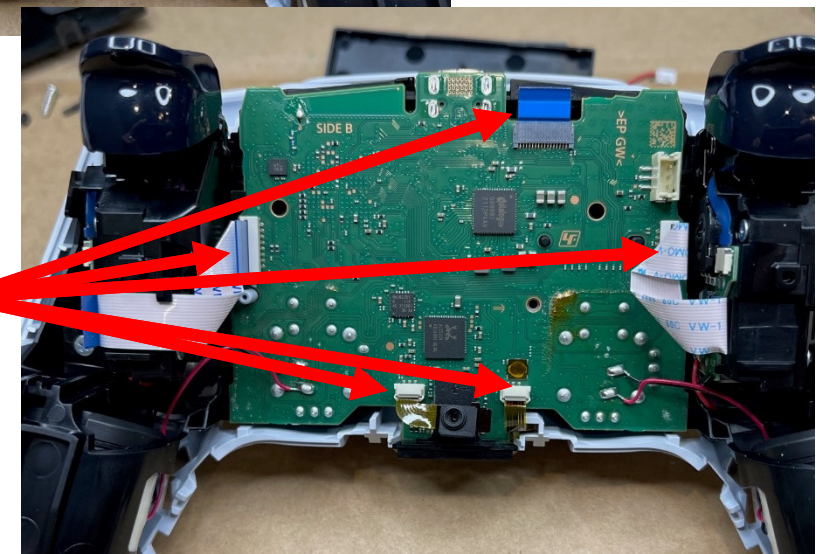


BATTERY PLUG



SCREW

MIC

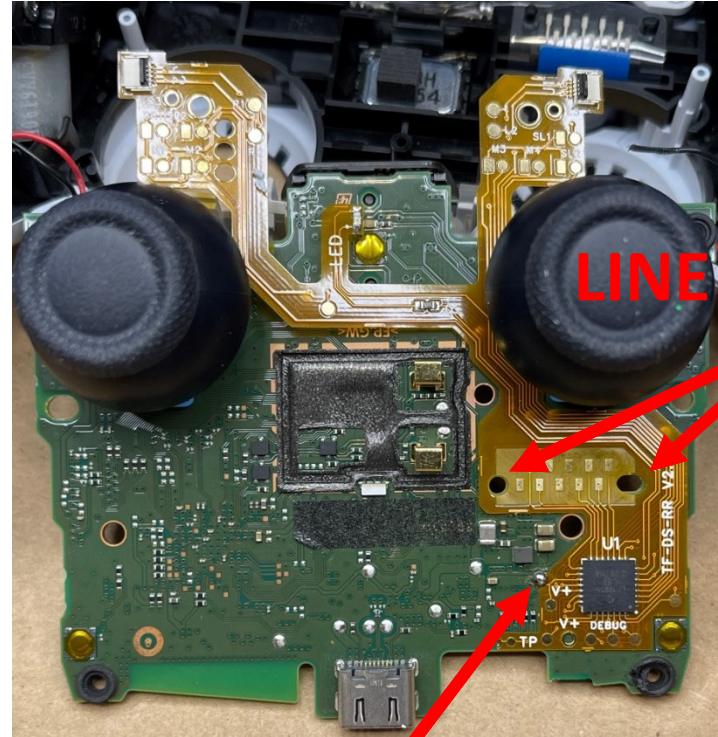


RIBBON CABLES

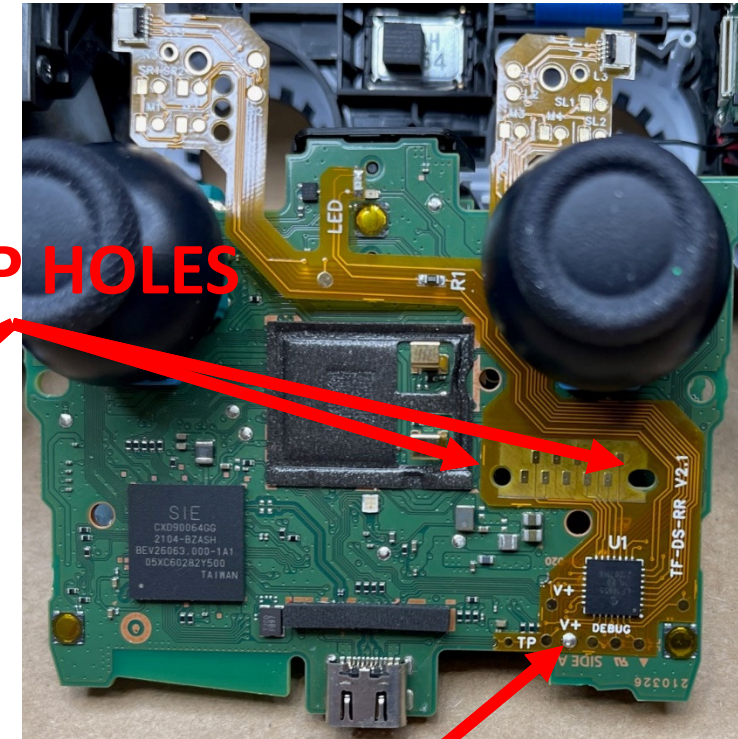
Installing the mod Connecting Power

- With the ribbon cables disconnected you can now lift out the circuit board and flip it over to begin the mod installation. Be careful as there are still wires connected for the rumble motors.
- Start by lining up the mod with the holes on either side of the section of black rectangles. It is highly important that the mod is aligned correctly with these holes.
 - DO NOT use any hot glue, tape or allow anything to interfere with the exposed area between the holes. You will have a nonfunctional controller if you do.
- The power connection location depends on the controller model. Both are shown here. Use the connection appropriate for your controller model.
- Although it is not necessary to use hot glue or tape to hold down the mod, if you would like to do so you can do this on the back side of the flex behind the main IC chip, or on the thin sections near the LED.

BDM-010



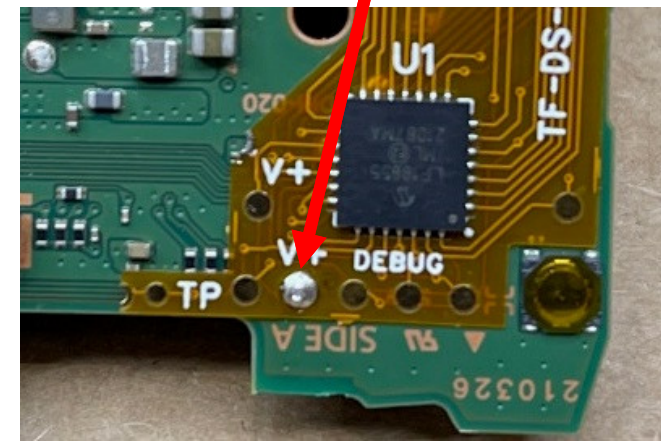
BDM-020



BDM-010 POWER

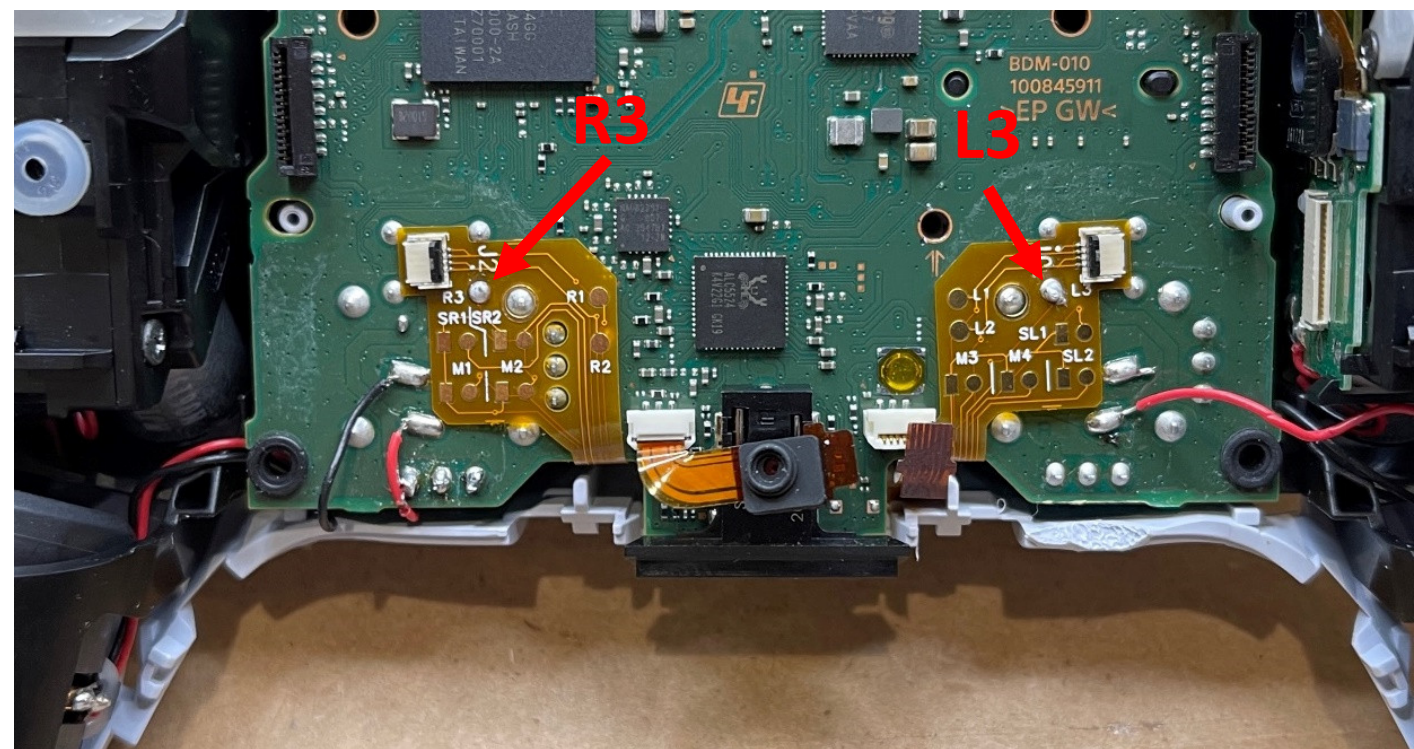
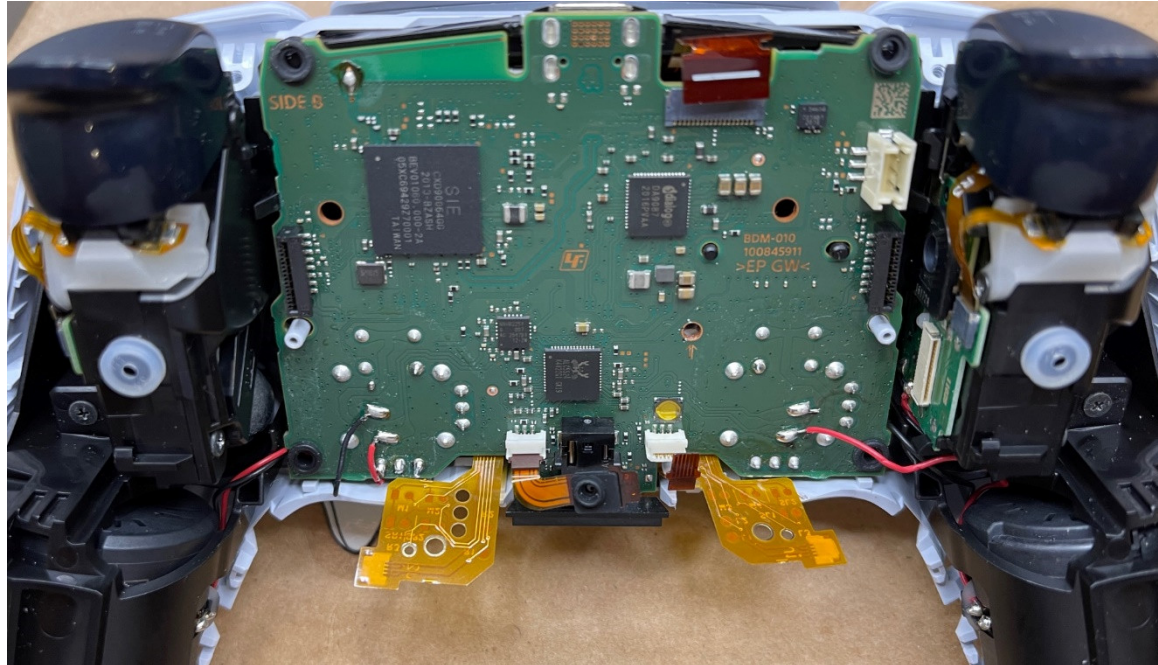


BDM-020 POWER



Installing the mod Connecting R3 and L3

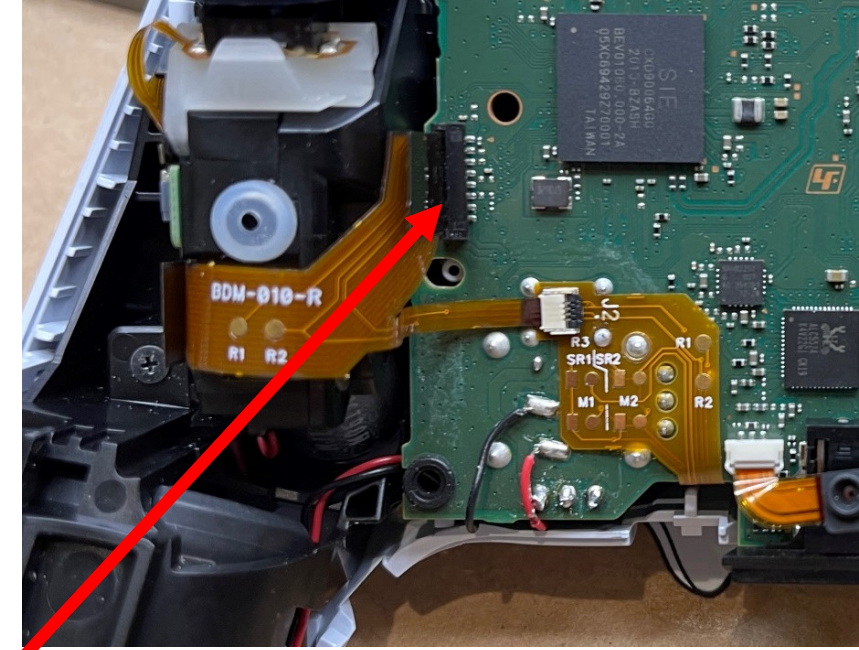
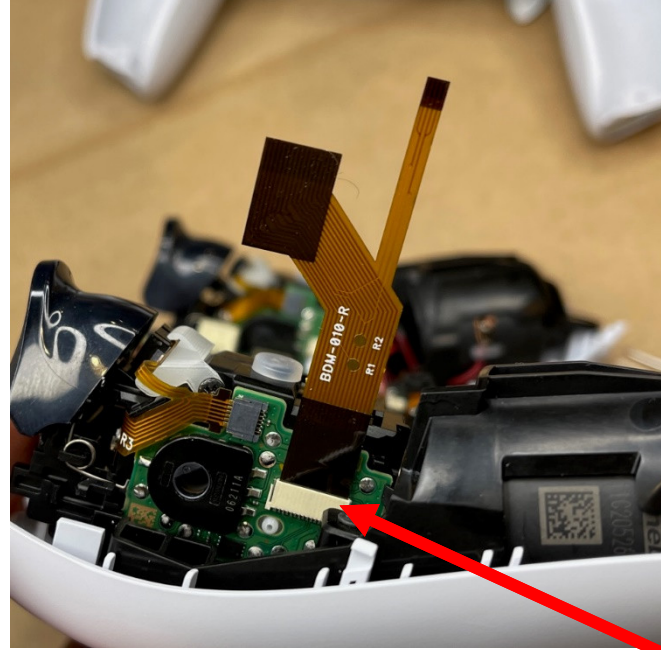
- This step of the installation is the same for both BDM-010 and BDM-020.
- With the holes lined up and power connected you can flip the board back over and place it back into the controller. You should have the 2 legs of the mod sticking up at the bottom.
- One at a time fold the legs over and solder the R3 and L3 connections.
- The next steps are for connecting the triggers. This can be done with wires or with our replacement trigger Ribbon cables. Follow the appropriate section for your installation method.
- **Please Note that connecting the triggers is REQUIRED for the rapid fire mod. However, it is optional for the programmable remap mod. If you are skipping the trigger installation, please see the last page for one additional step you must take after putting your controller back together.**



Installing the mod

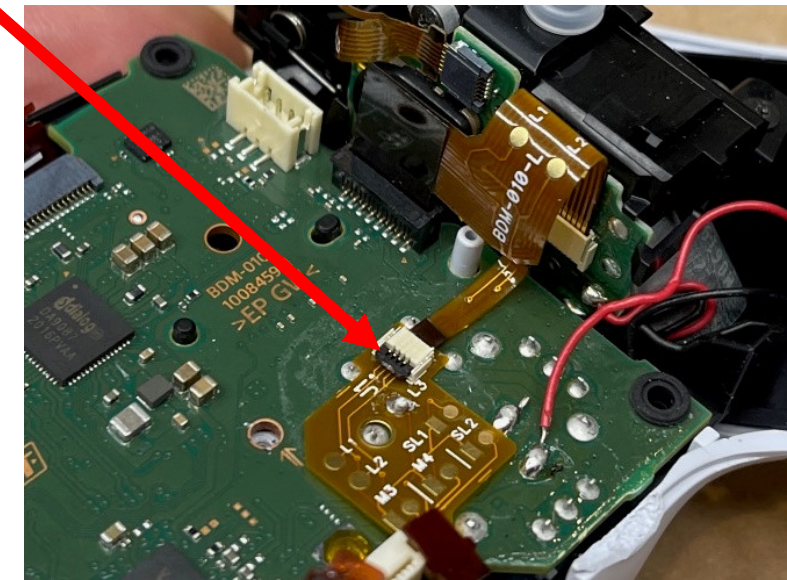
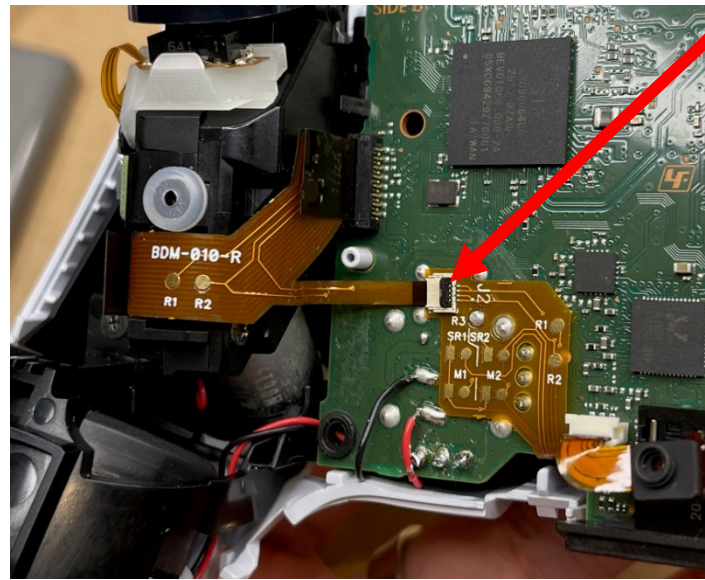
Connecting the triggers using the replacement trigger ribbon cables

- This process is the same for both BDM-010 and BDM-020 controllers. However, while the process is the same the ribbons are different. The Ribbons are labeled as BDM-010 or BDM-020, be sure you have the correct ribbons for your controller. Using the wrong ribbons will cause the mod to not work properly.
- To install, if you have not already removed the stock ribbon cable from the trigger module, do this first.
- Next install the new ribbon by first pushing the ribbon into the connector on the trigger module. Make sure it is fully inserted. Using needle nose pliers can help to grip and push in the cable.
- Then push the ribbon into the connector on the controller's circuit board.
- Finally, connect the small leg of the ribbon to the mod. This connector is different from the controllers as It has a small black release lever on the back. Flip this up to allow the ribbon to be inserted and flip down to lock the ribbon in place. It is important that the ribbon is fully inserted and locked for a solid connection.



PUSH INTO THE CONNECTOR

INSERT RIBBON AND FLIP DOWN THE LOCK

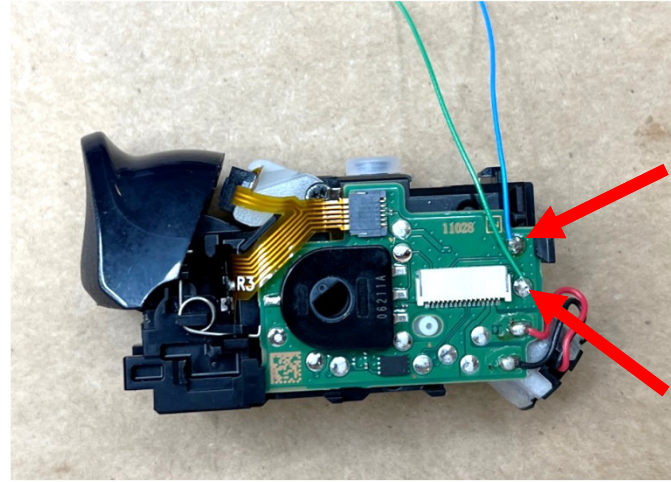


Installing the mod

Connecting the triggers using wire

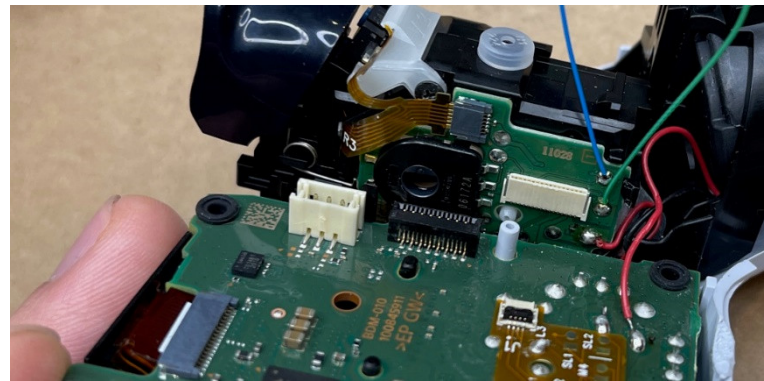
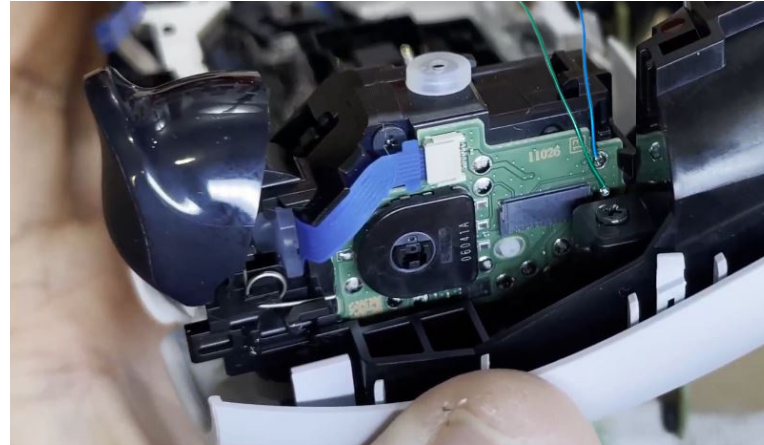
- The locations of the solder points on the trigger module are different based on the controller model, see pictures at the right.
- The first pictures are with the trigger removed to better see the solder locations. The Left and right triggers are identical so the solder points will be the same on both.
- In these pictures R1 and L1 are green wires. R2 and L2 are Blue wires.
- Using sections of wire that are 3" long (75mm) solder them to the pads on the trigger modules for R1, R2, L1 and L2. Take care not to touch the ribbon going behind the trigger with your iron, it will easily melt and need to be replaced. Further disassembly of the controller can be done to gain additional access to the solder points.
- The lower images show the wires soldered for each controller type.
- Continue to the next page to make the connection to the mod.

BDM-010

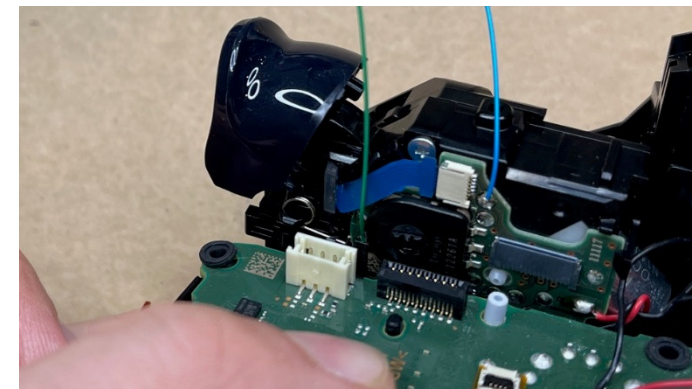
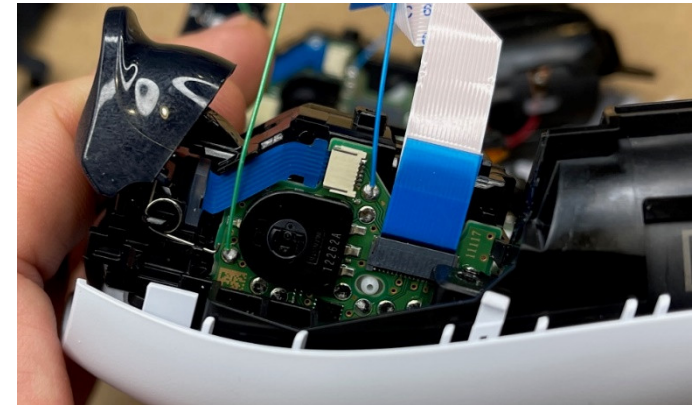
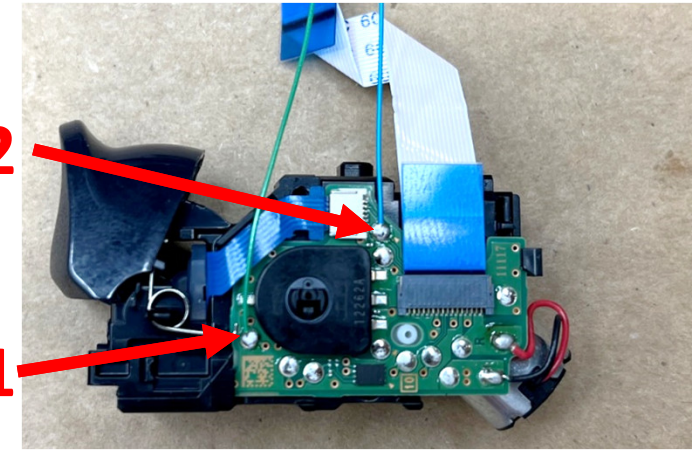


R2/L2

R1/L1



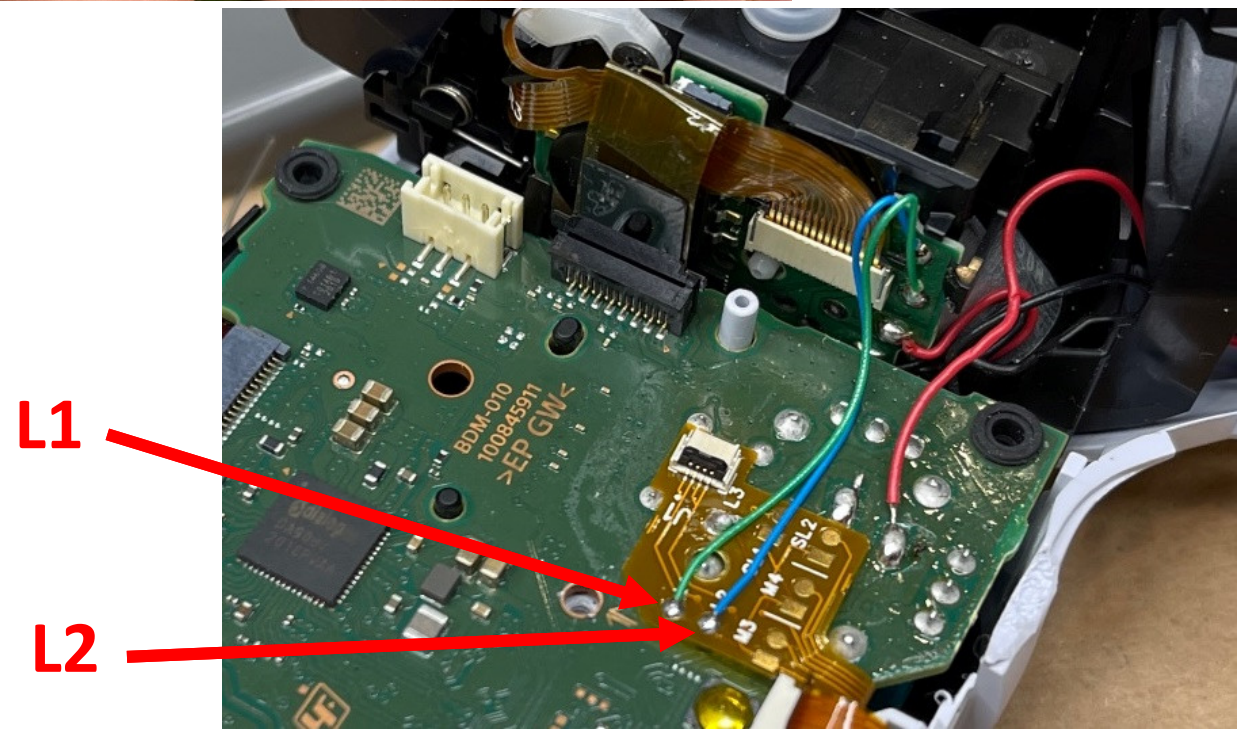
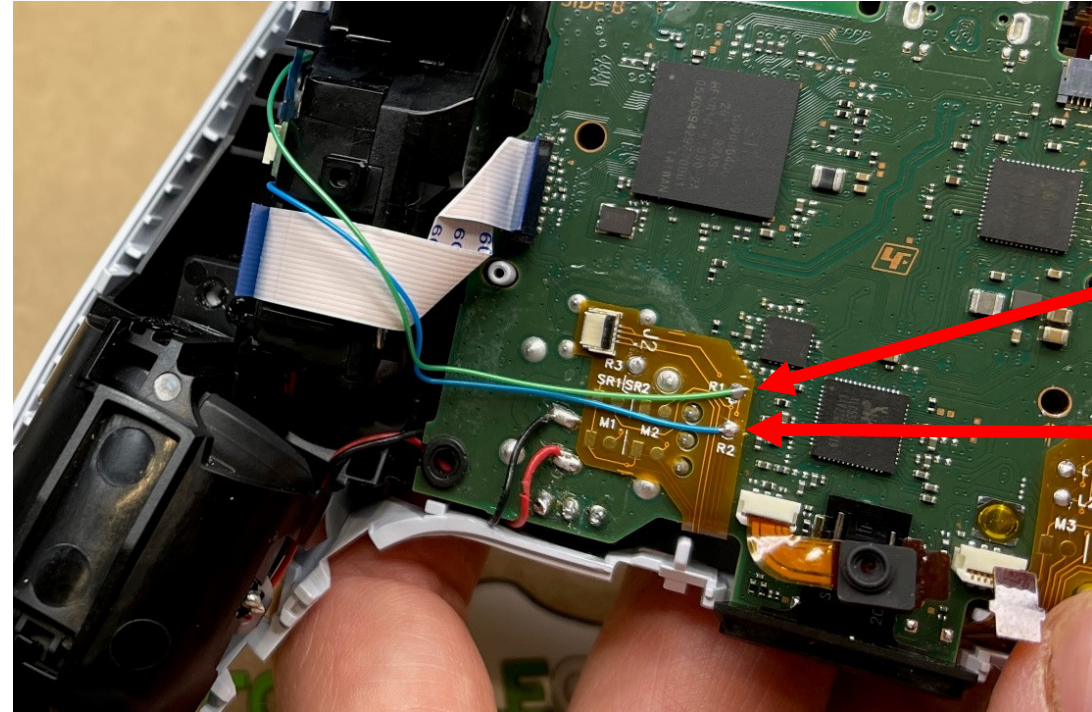
BDM-020



Installing the mod

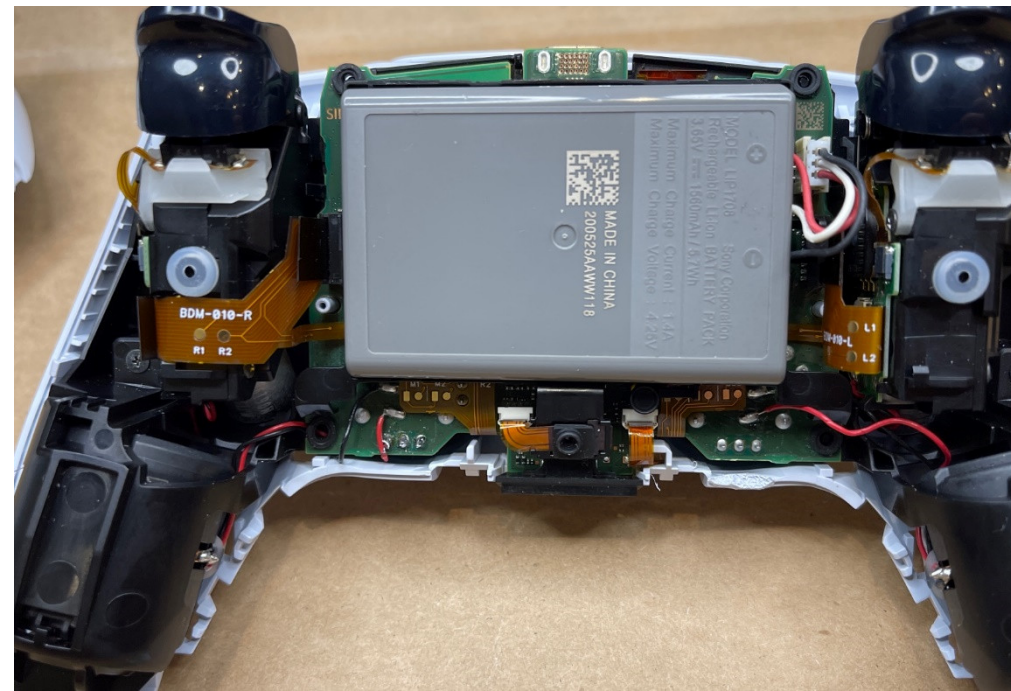
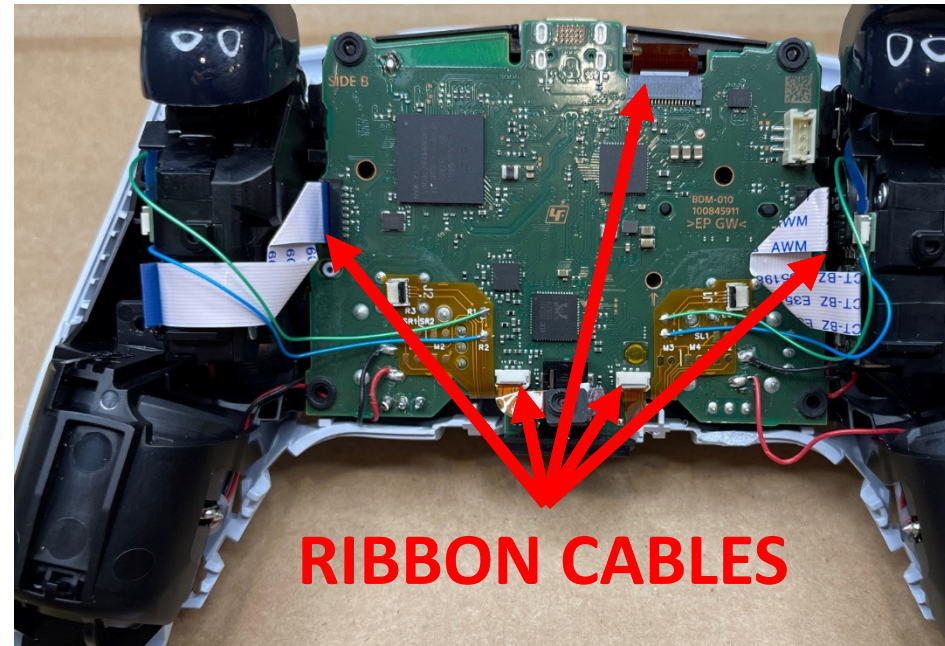
Connecting the triggers using wire

- Now that the wires are connected to the trigger modules, you can solder them to the mod. This part of the installation is the same for both controller types.
- Solder the wires from the trigger modules to the correct matching pad on the mod.
- Be sure that the wires are able to lay flat against the controller's circuit board so that the battery tray will fit properly.
- Reinstall the stock trigger ribbon cables between the trigger module and the main circuit board.



Reassembling the controller

- The basic mod installation is now complete. If you are not installing buttons or paddles you can now assemble the controller and begin using it.
- Covered separately, you can find our guide on installing buttons or paddles. Both the Rapid Fire mod and the Programmable Remap mod allow for adding up to 4 remap buttons or paddles to the controller. These are soldered to the pads labeled M1, M2, M3 and M4.
- To reassemble your controller.
- Ensure all ribbon cables are connected.
- Reinstall the battery tray and put in the single Philips PH00 screw.
- Plug in the battery and place it in the tray.
- Place the back cover and reinstall the 4 Philips PH00 screws.
- Press back in the R1 and L1 bumper buttons.
- Re-install the black trim over the thumb sticks.



Excellent your Done!

Programmable Remap Mod

If you skipped the step of installing the triggers, you will need to make one additional change before the mod will work properly. You must tell the mod that the triggers are not connected.

This is done by starting with the controller turned OFF. HOLD UP on the D-PAD + X. While holding UP and X turn on the controller. Keep holding for proximately 8 seconds. You should see the mods red LED flash 2 times. This indicates the trigger check is disabled and you can release the buttons. You only need to make this change one time. If later, you decide to connect the triggers, you can go back and perform the same steps to reenale the trigger check.

If not already obvious with the trigger not connected, be aware that you will not be able to map the triggers to the reflex buttons or paddles that you add to the controller.

Without the triggers connected, you will enter the programming mode by holding the DOWN direction on the D-pad + X + Square.