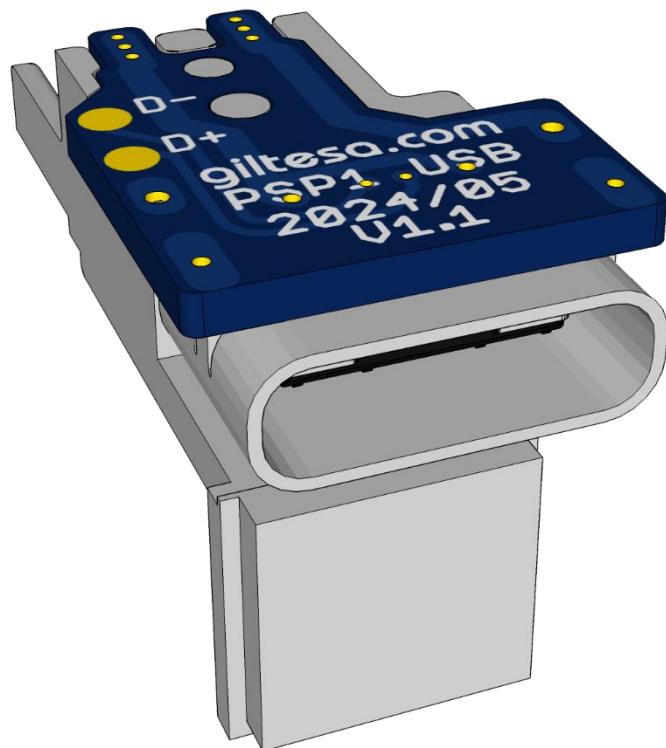


# **USB-C KIT FOR**

# **SONY PSP 1000**



**PRODUCT**

[HTTPS://SHOP.GILTESA.COM/PRODUCT/SONY-PSP-1000-USB-C-KIT](https://shop.giltesa.com/product/sony-psp-1000-usb-c-kit)

**PLEASE READ THROUGH THESE INSTRUCTIONS  
ENTIRELY BEFORE ATTEMPTING TO INSTALL.**

**WARNING: IF YOU ARE NOT COMFORTABLE WITH  
SOLDERING, OR PERFORMING ANY STEP IN THIS  
GUIDE, DO NOT PERFORM THE INSTALL YOURSELF.  
FIND SOMEONE WHO IS COMFORTABLE TO DO IT FOR  
YOU.**

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# **DESCRIPTION**

The **Sony PSP: USB-C Kit** is a board that allows to replace the original charging connector for a modern and standard USB-C.

If your original connector is too old or damaged and you need a new one, or if you would like to charge your Sony PSP with a standard USB-C charger, like the charger of your phone, laptop, you can with this kit.

This board is compatible with these two models:

- Sony PSP 1000

# **FEATURES**

- Plastic holder made by resin 3D printer.
- Charging your Sony PSP with:
  - USB power banks
  - USB-A chargers
  - USB-C chargers
  - USB-C PD chargers (normal speed, not fast)
  - USB-A to USB-C cables
  - USB-C to USB-C cables
- USB data support where you can connect two cables to the MiniUSB port (optional, cables not included).

# **INCLUDED**

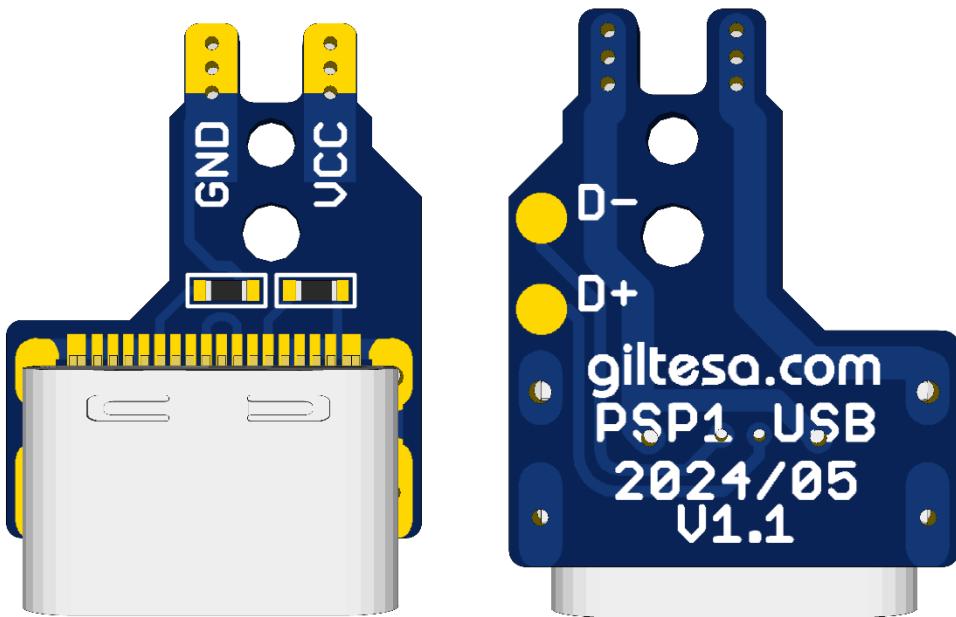
- 1 board.
- 1 plastic part to holder the USB board (random color: Grey/Black)

## **RECOMMENDED / REQUIRED [NOT INCLUDED]**

- The power cable from the original connector.
- Phillips screwdriver
- Soldering iron
- Tin
- Cutting plier
- Cutter
- Tweezers
- Instant glue (Loctite, Super Glue)

# BOARD DETAILS

This tiny board has 4 pads in about 2cm<sup>2</sup> surface, which means it requires good soldering skills. The following explains what each pad is for.



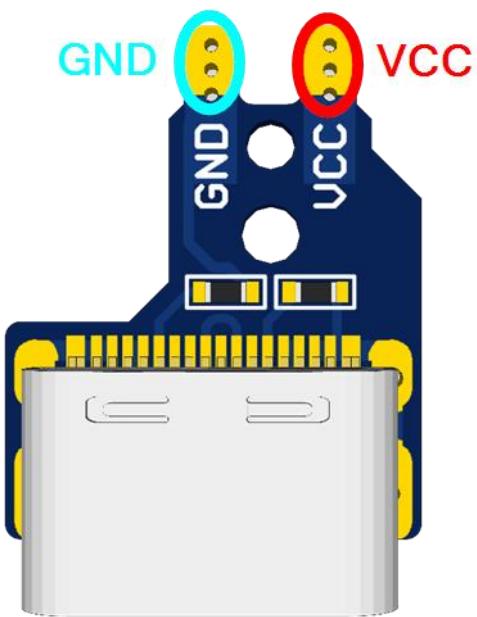
The pads are:

1. **GND** The ground pad.
2. **VCC** The 5V line from the USB-C.
3. **D-** The negative data pad for data connection (optional)
4. **D+** The positive data pad for data connection (optional)

# TEST THE BOARD!

Before starting the installation, you should test the board. If it doesn't work contact me [for a replacement](#) (*all boards are fully tested, but they may damage during the shipping, we try to package them as better as possible*), if it works, go ahead with the installation.

Connect the power from your USB charger to the USB-C connector on the board. Then, with a multimeter in voltage measurement mode, **check for a 5V reading**. If that's the case, continue with the installation.



Unfortunately, it is not possible to test the data connection until the board is fully installed.

# INSTALLATION STEPS

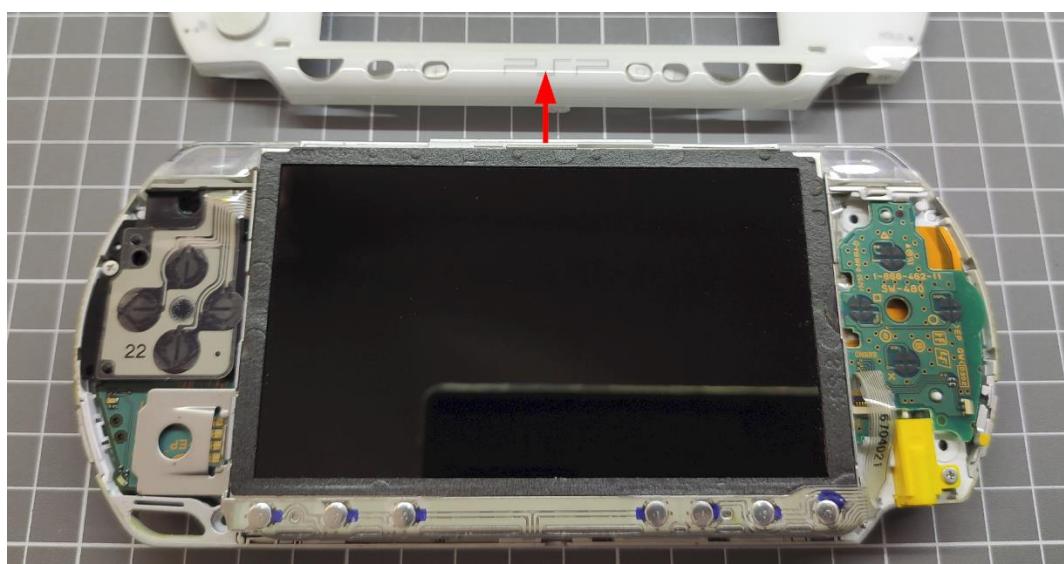
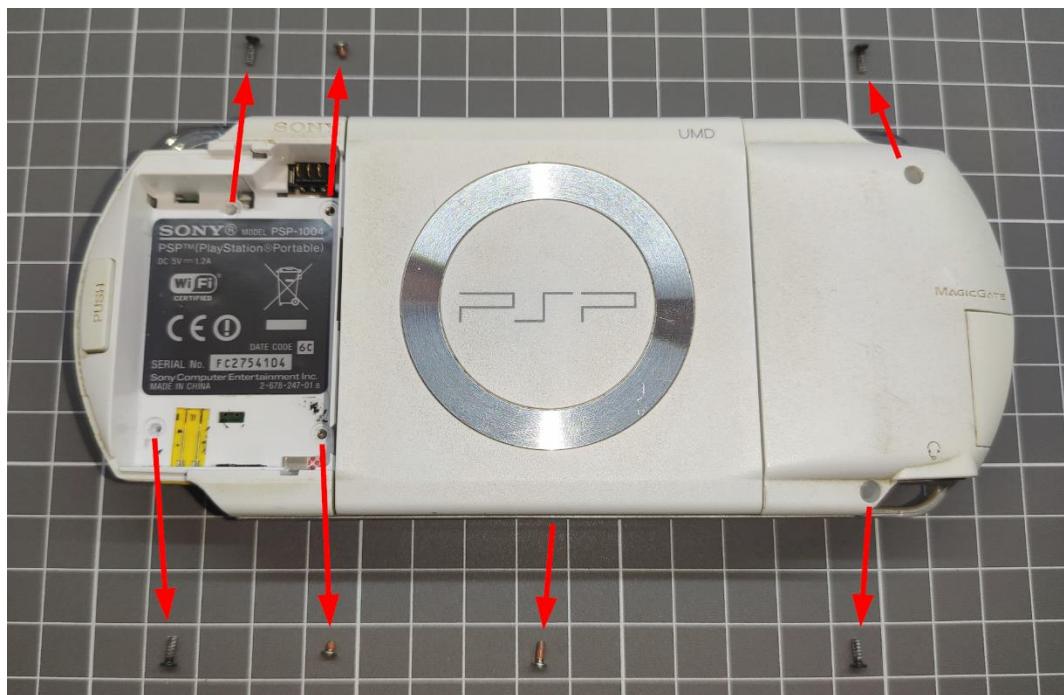
Please, carefully read the following steps for a successful installation.

## PRE INSTALLATION STEPS

Before the installation, your Sony PSP may need some extra steps to have it ready for the kit.

### 1. DISASSEMBLY THE SONY PSP

Sony PSP use the **phillips screws** to close the shell. Remove all the accessories such as the battery, memory card and game disc. Then remove the 7 screws which hold the front shell.



Now, in order to access the part that interests us, the power connector, it is necessary to remove the screen, a metal plate, and the circuit of the right buttons.

*It's a bit complex, since I don't have step-by-step photos, I recommend consulting the [disassembly guide on iFixit](#).*

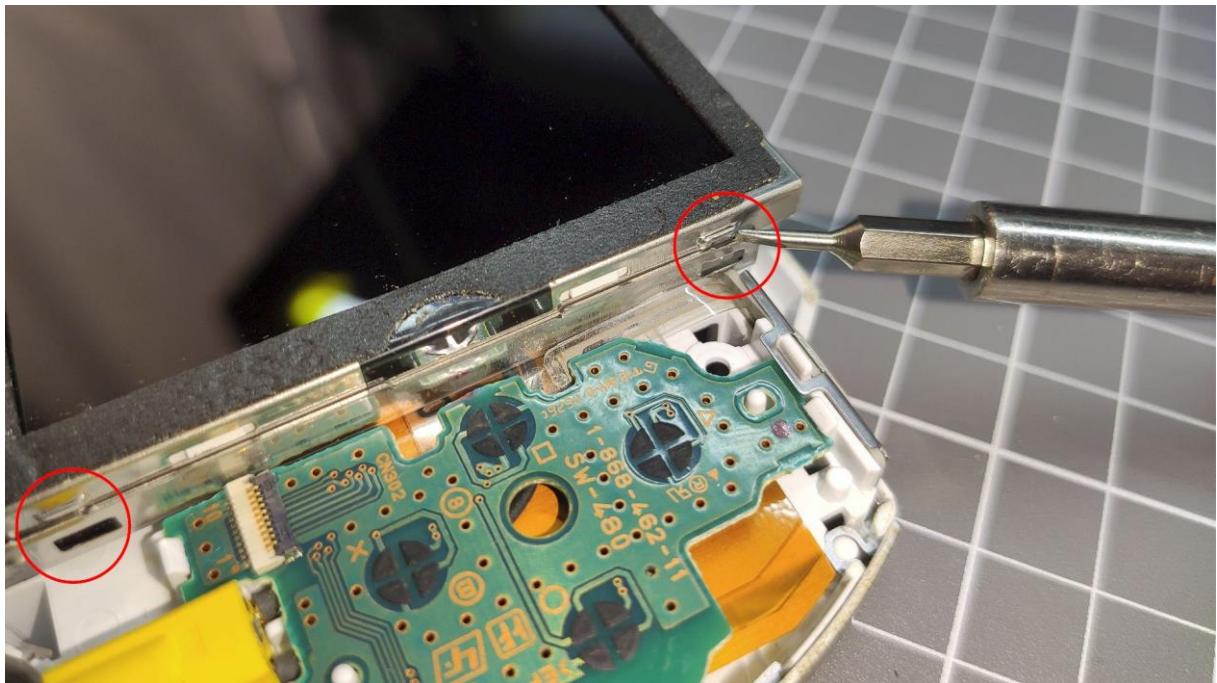
Disconnect the flexible cable from the front button panel.



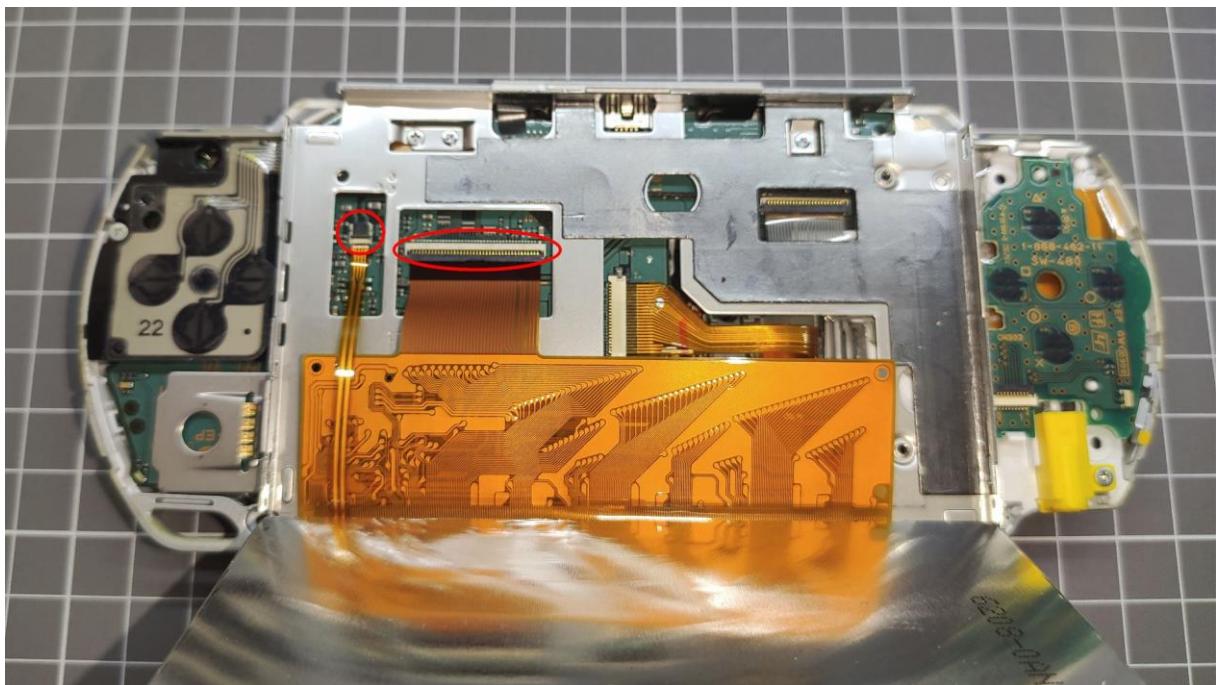
Afterwards, remove the button panel by prying on one of the sides with a flathead screwdriver.



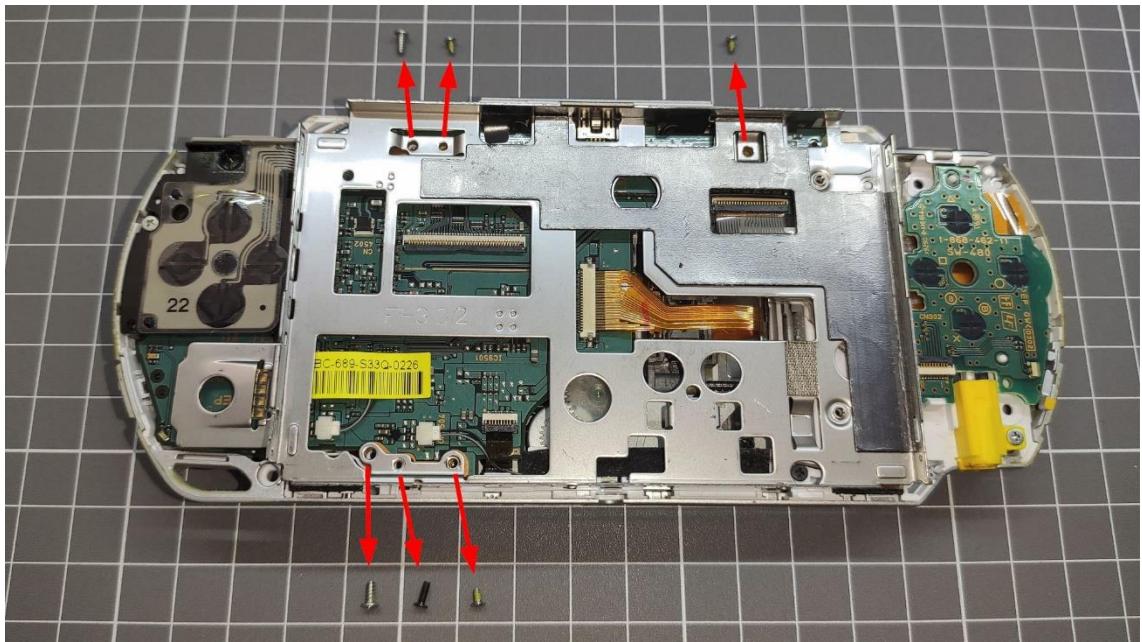
The screen is removed in the same way. Pry carefully, using a small, pointed flathead screwdriver. First on one side at the top and then at the bottom.



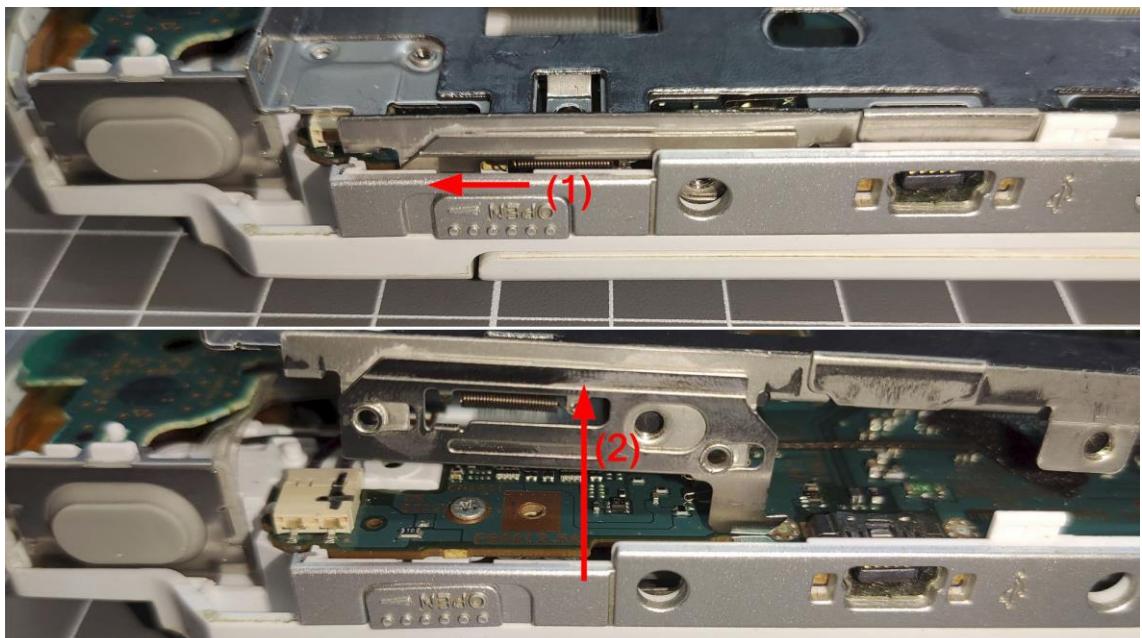
Then, disconnect the two flat cables that connect the screen to the main board.



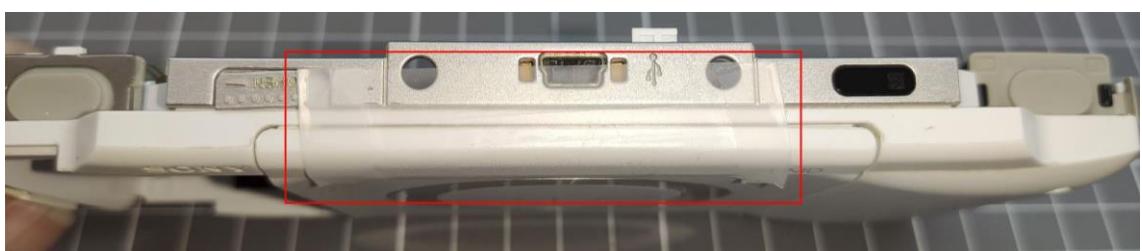
With this metal plate in sight, remove the 6 phillips screws that hold it to the rest of the chassis.



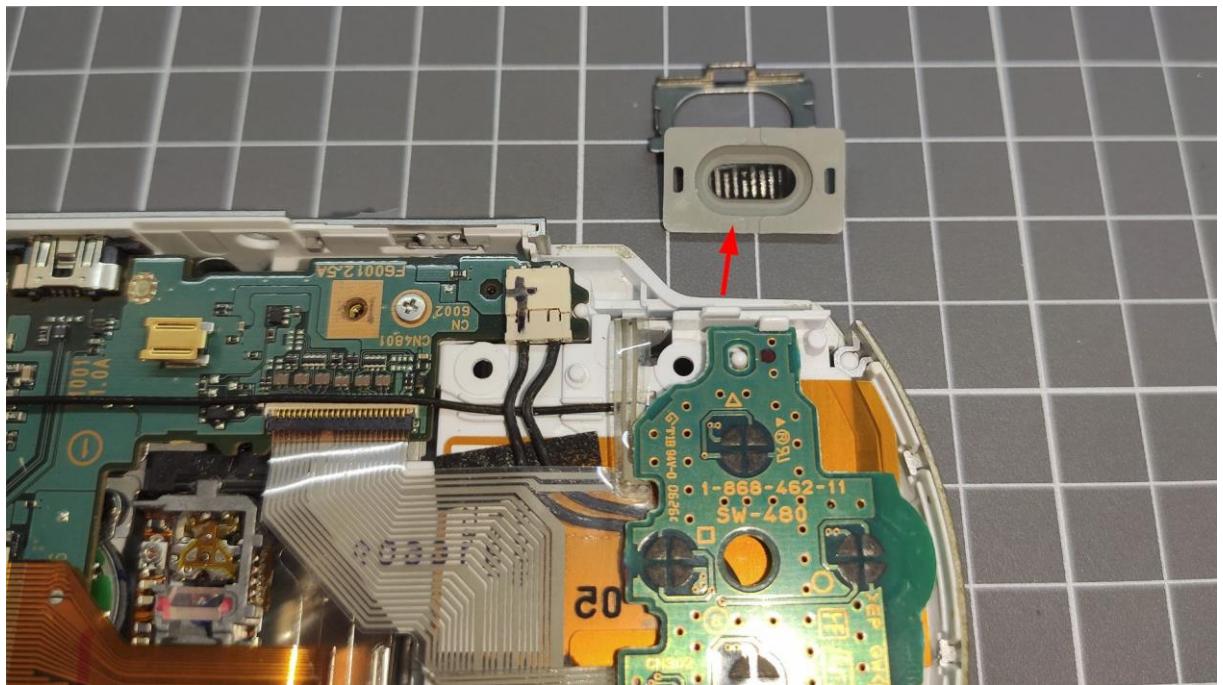
The metal plate won't come out until you release it by moving the disc tray opening button. Then, the plate can be removed upwards.



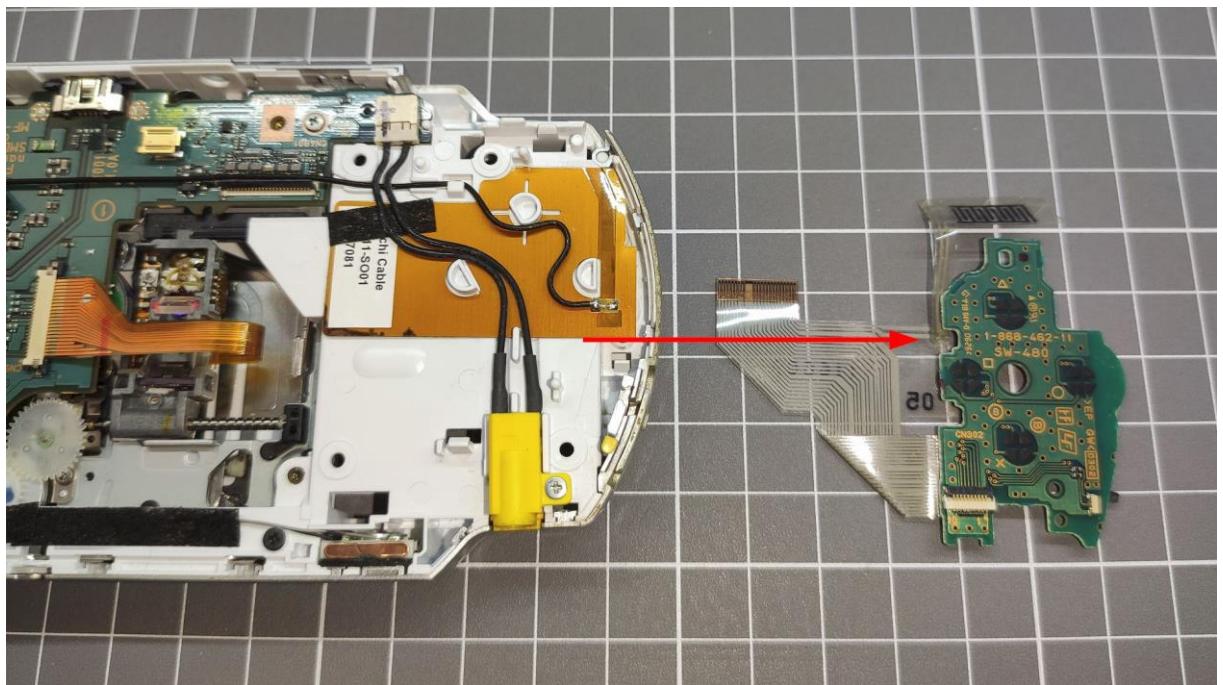
It is recommended to keep the disc tray closed using a piece of tape or kapton tape.



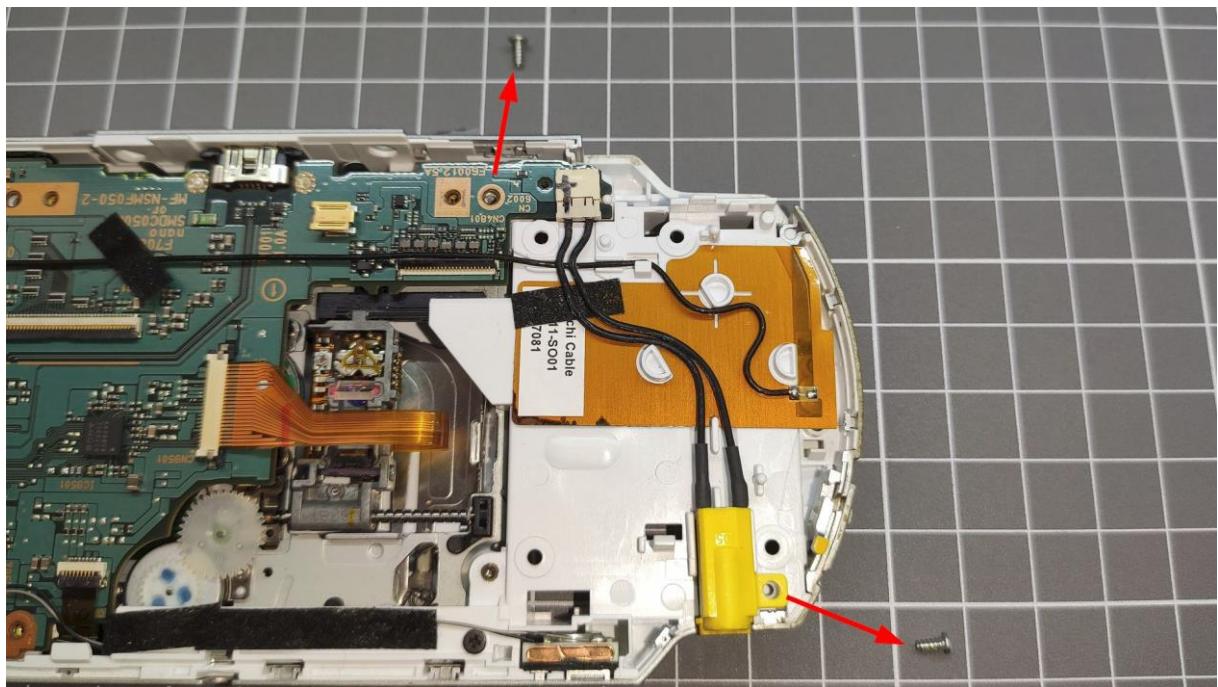
Now it's necessary to remove the circuit of the right button panel. Start by removing the upper trigger. Then, pry carefully to lift the circuit and separate it from the casing.



Finally, disconnect the cables on the main board.

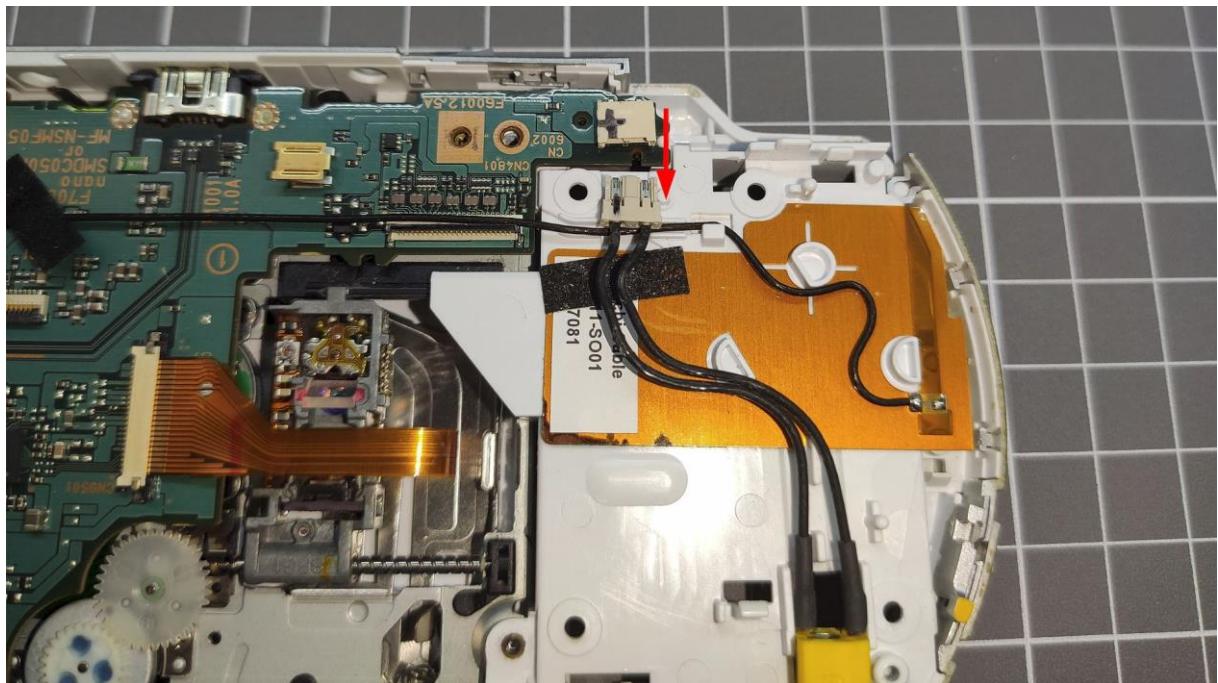


The last step is to remove these two screws.

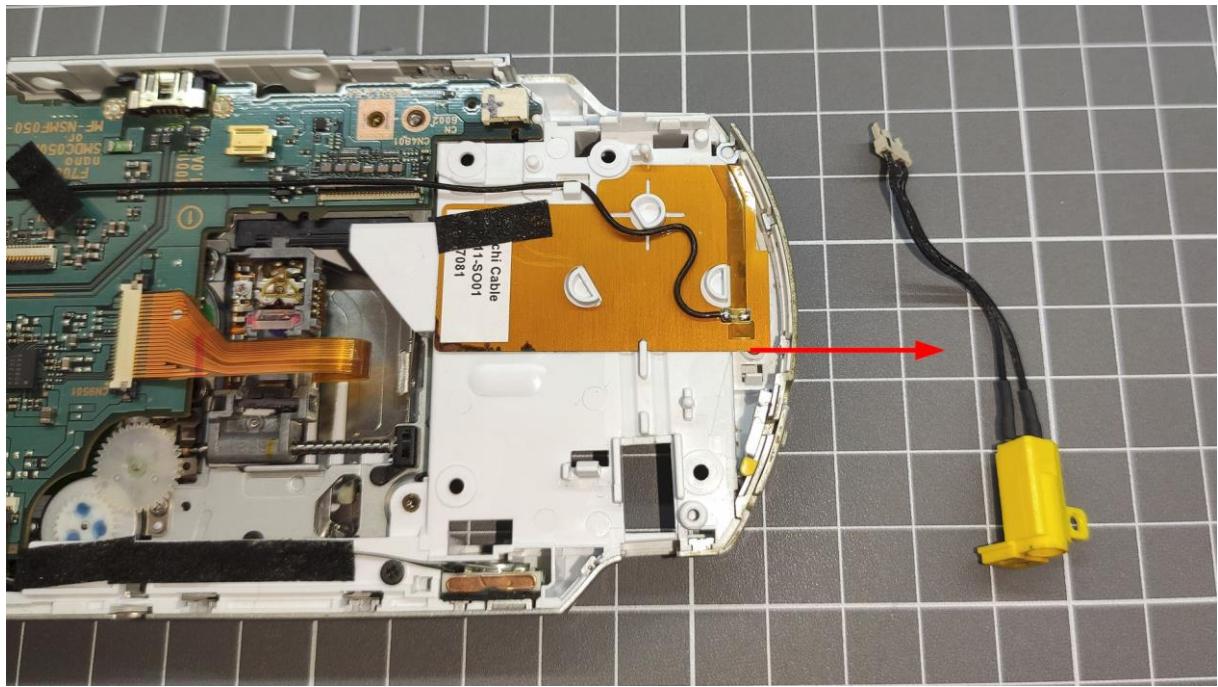


And disconnect the power cable from the connector. You'll need to pry a bit under the main board to lift the upper right corner slightly, otherwise, the connector will hit and cannot be disconnected.

**IMPORTANT NOTE:** It is recommended to mark the positive pin on both sides of the connector. This will greatly help us identify the positive and negative pins later.



This is the connector that we are going to replace with the USB-C kit. Don't get rid of it; we need to reuse its cable later.



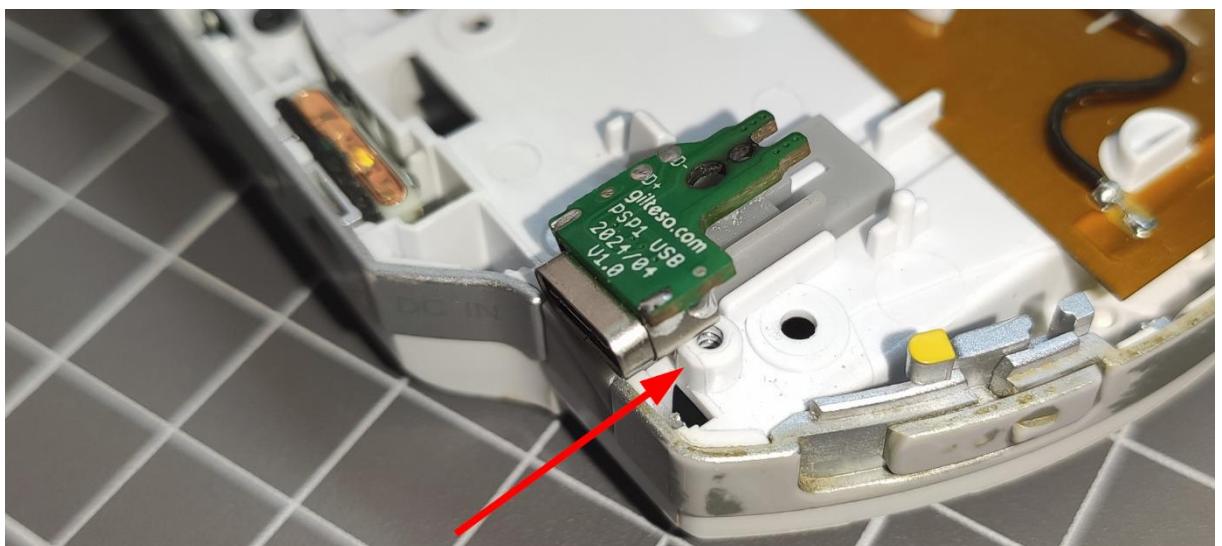
# INSTALLATION STEPS

## I. CUTTING THE INTERNAL PLASTIC SHELL

To install the kit, it's necessary to lightly cut the console shell in two specific areas.

The first cut involves the support/pillar where the power connector was originally screwed in. It's not needed for the kit; in fact, it's in the way, so it needs to be removed.

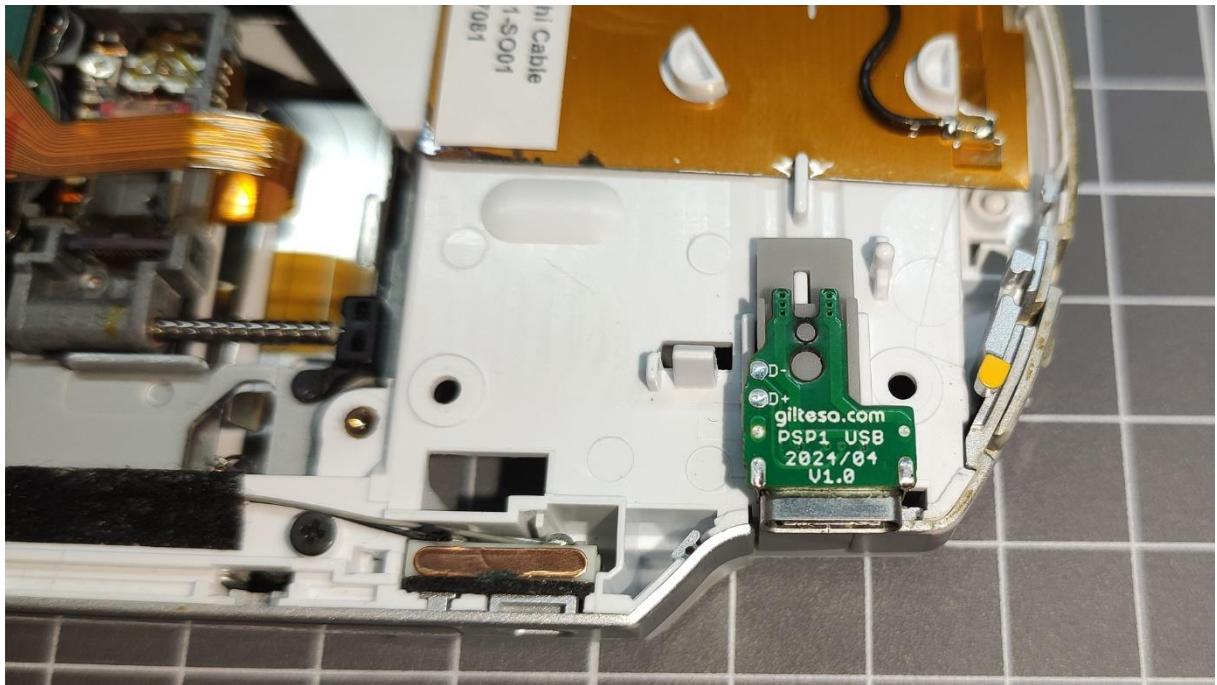
In this picture, you can see how it's not possible to install the kit because the support/pillar is interfering:



To cut it, you can use wire cutters and then a utility knife to finish and leave the area completely smooth.



To test that everything is okay, place the 3D printed plastic in its place, and then the circuit on top of the plastic.



The second part to trim is the front casing, as the hole needs to be enlarged for the USB-C connector to protrude.

When you place the rear casing, you'll notice that it's not possible to close it because the USB-C is in the way.



Take measurements with a marker, then use a cutter to gradually trim the plastic. Regularly test to see if the cut is sufficient; this will help you avoid making the hole larger than necessary.



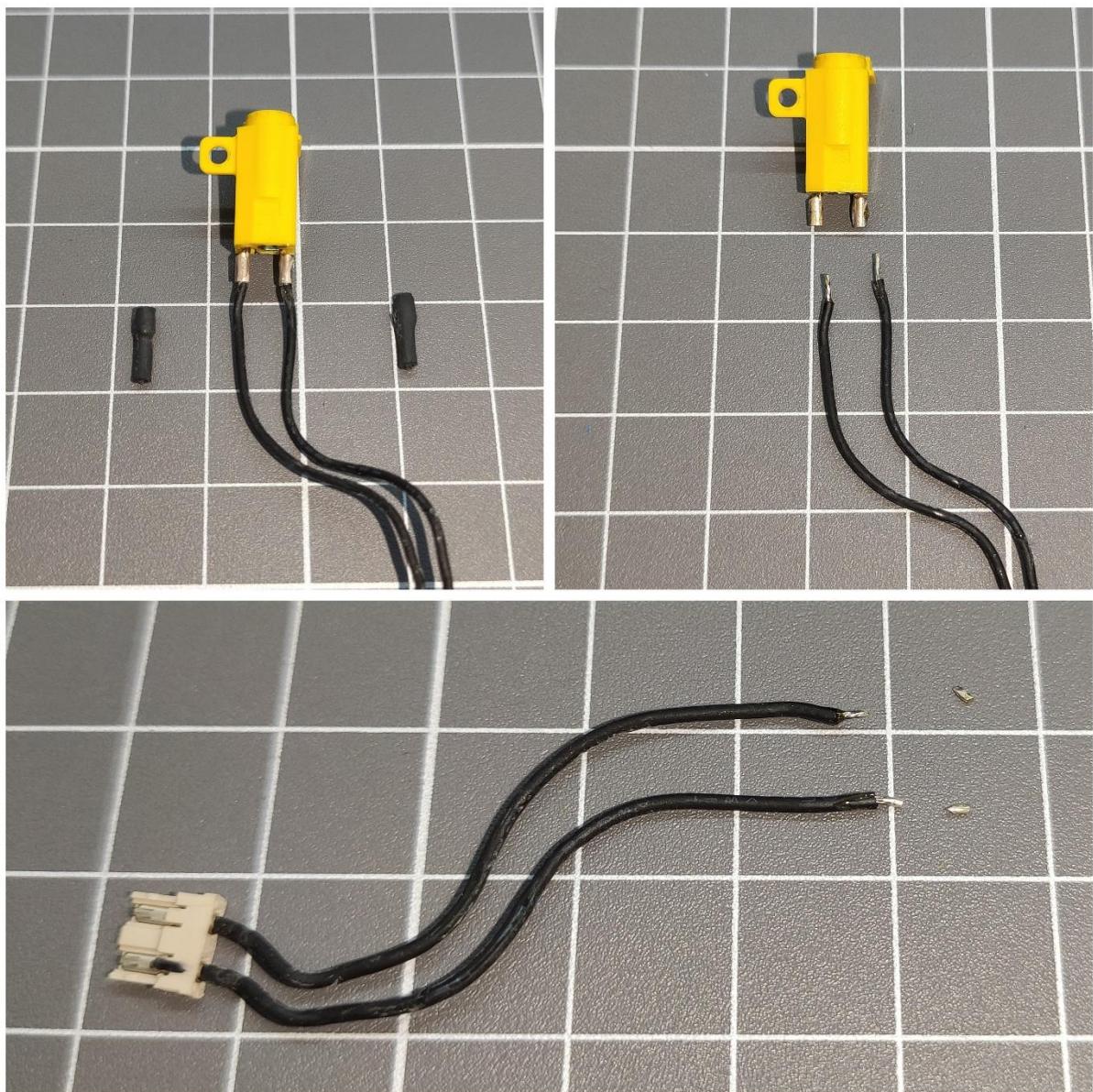
**NOTE:** If you're having trouble taking measurements because the circuit separates from the plastic piece, you can proceed with the installation: solder the wires and glue it in plastic piece, and then continue with this step.



## **2. INSTALLATION OF THE USB-C BOARD**

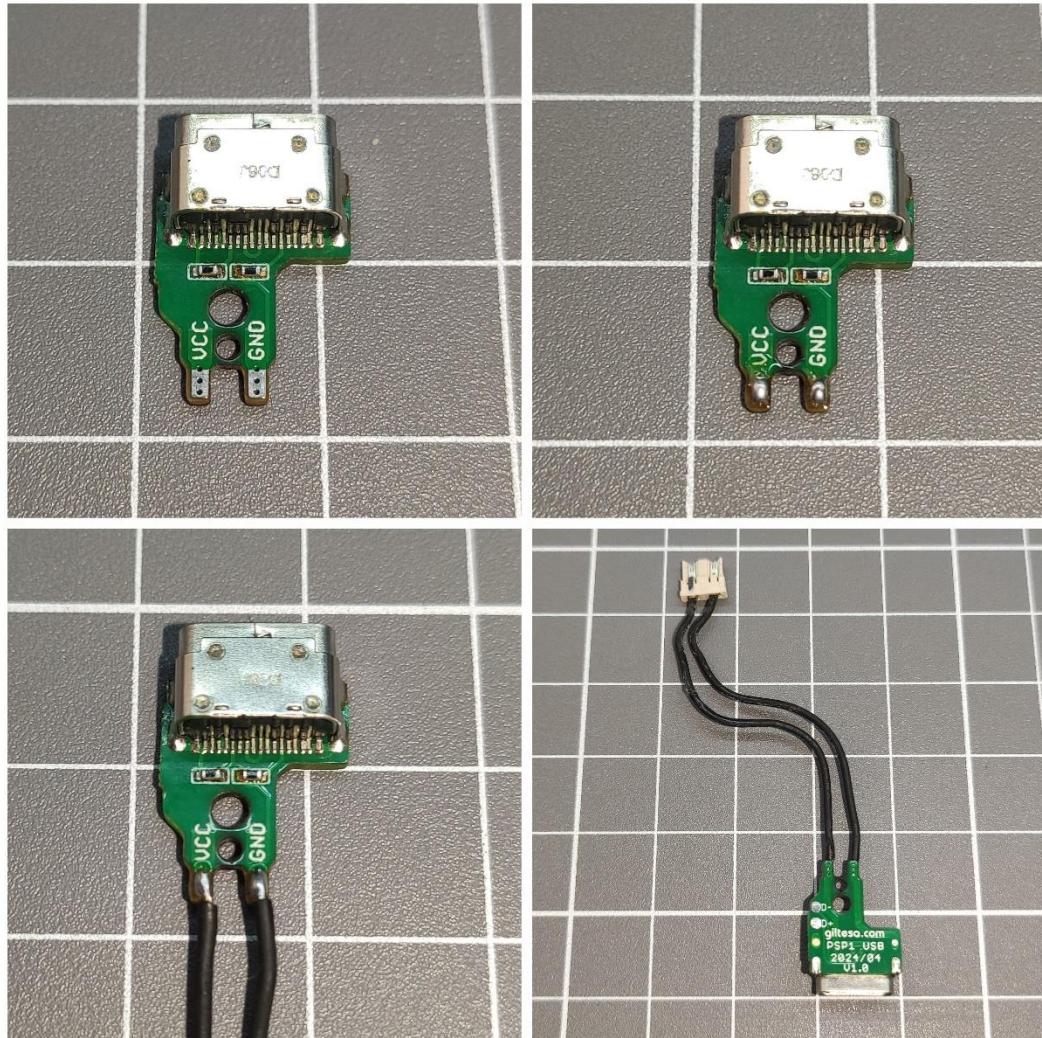
The first step is to remove the power cable from the original power connector since we need to reuse it. With the help of a utility knife, you can cut the plastic sleeve covering the copper pins.

You'll also need to trim the cable so that the exposed part is only about 2mm (third photo).

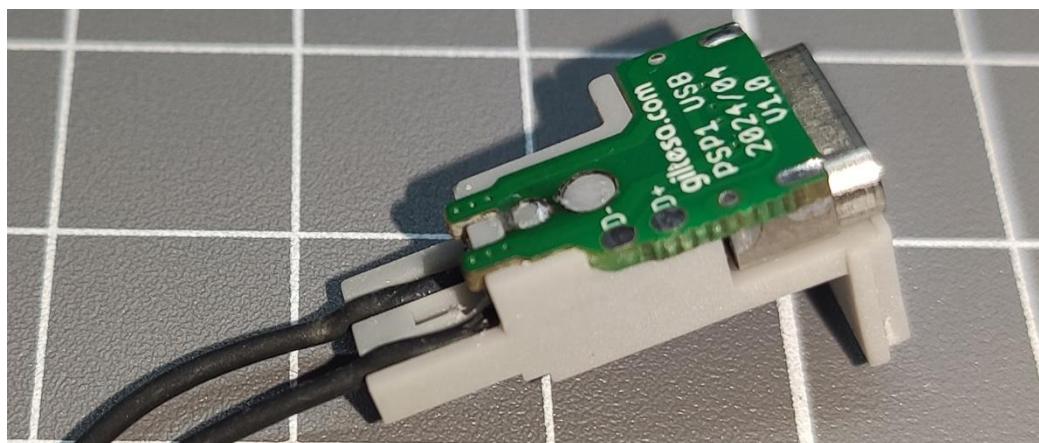


It's time to solder the cable to the new USB-C connector. First, pre-solder the pads on the board with a little bit of solder, then solder the cables in place.

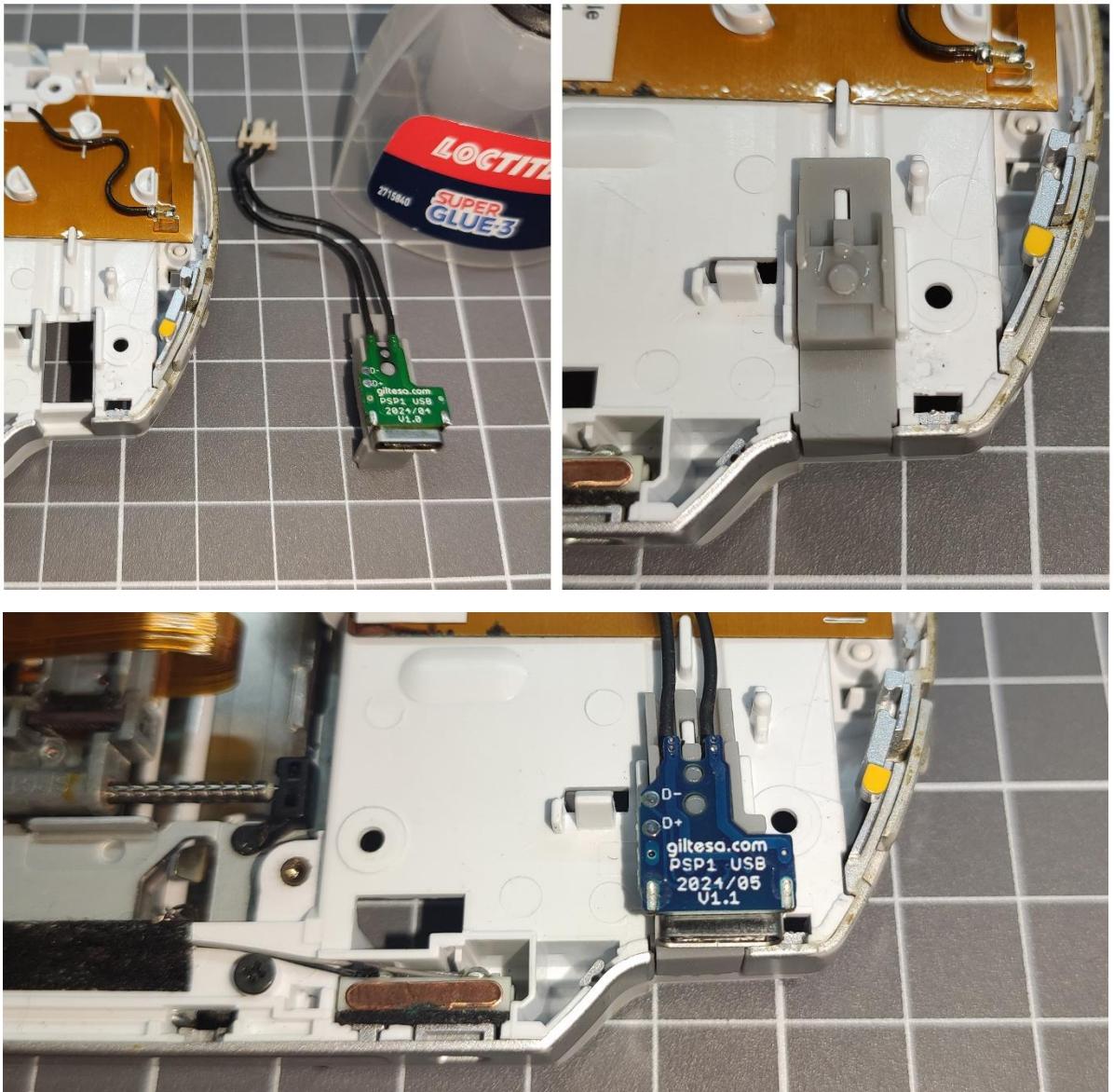
**IMPORTANT NOTE 1:** Make sure to solder the **positive cable** (on the left side) to the **VCC pad** and the **negative cable** to the **GND pad**.



**IMPORTANT NOTE 2:** Try to solder the cables pointing upwards, so that when you flip the board and place it in the plastic, the cables will go downwards. This will prevent them from interfering with the PSP button circuitry:

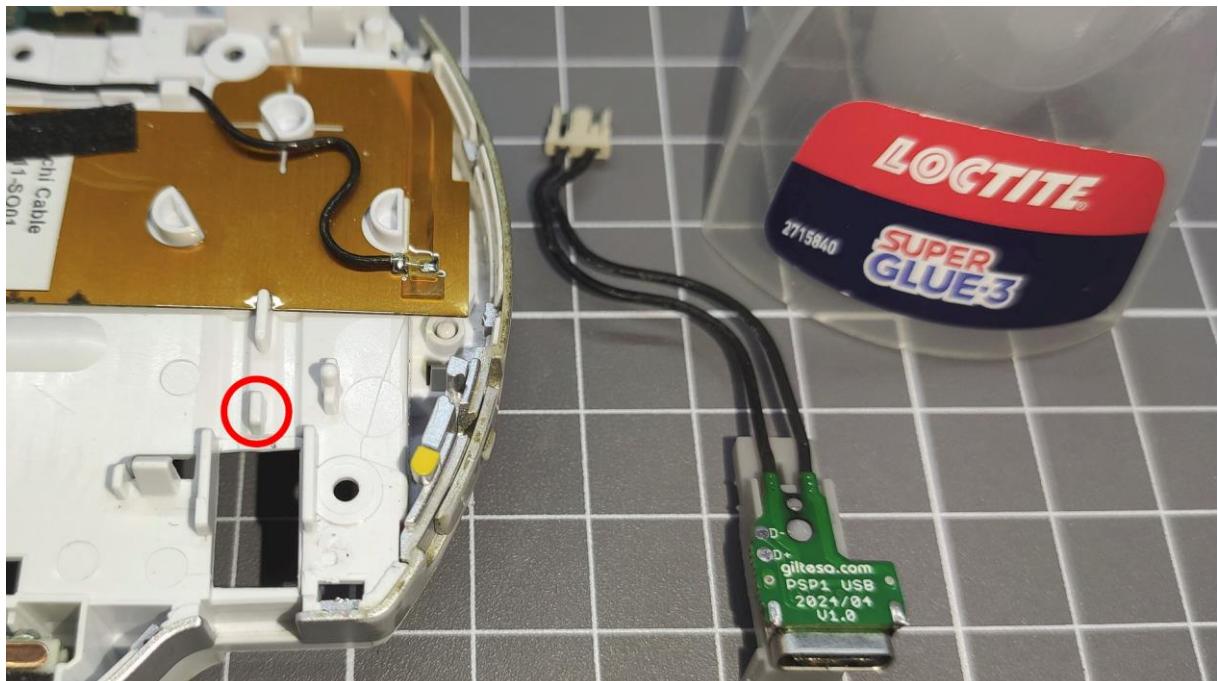


It's time for the instant glue. You should apply a drop on the 3D printed plastic, between the two pillars that match the two holes on the USB-C board. This will create a permanent bond.

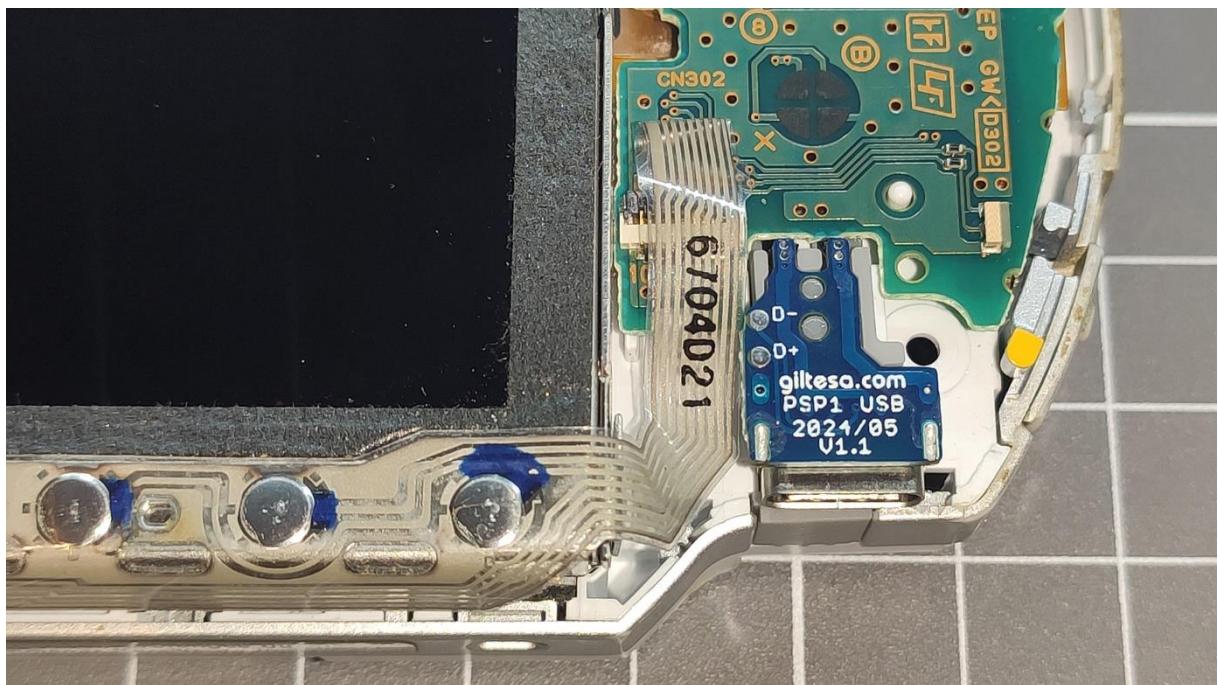


*Don't worry about the board color; the final release color is the blue one.*

**As a last step:** if you've already made the hole in the front casing and you're sure everything is correct, you can add glue in this area and then place the plastic piece next to the connector.



Now you can put all the parts of the console back together: circuits, metal plates, screws, etc., in their original places and close the console. The installation is complete.

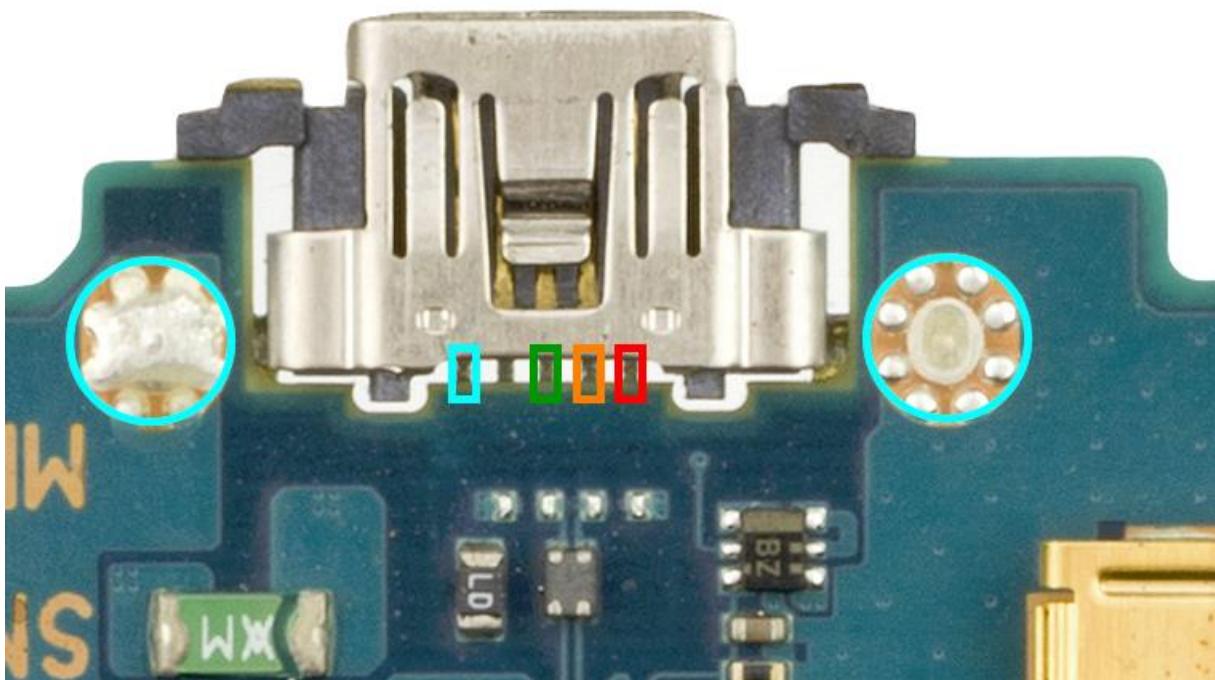
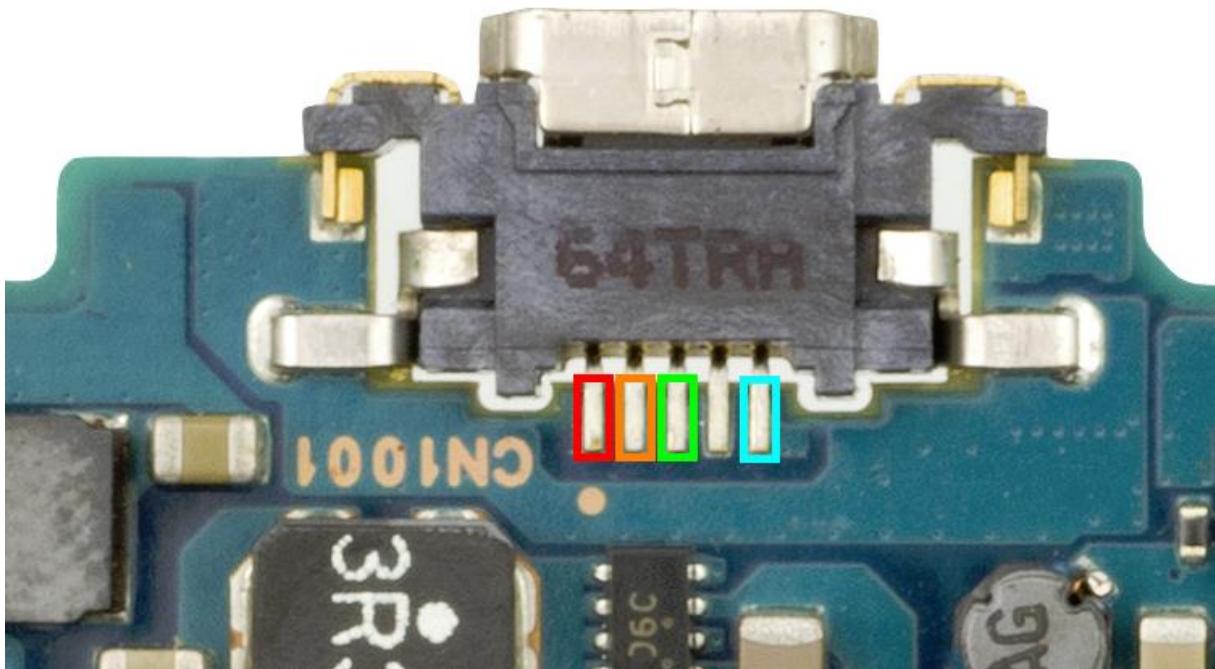


### 3. DATA CONNECTION [OPTIONAL]

To make the PSP's data connection work from the USB-C just like it does from the MiniUSB, it is necessary to solder 3 wires from the USB-C board to the MiniUSB.

The wires are the two corresponding to **D-** and **D+**, as well as the **VCC** wire, since the latter allows the PSP to detect that data transfer mode needs to be activated.

This has not been tested, but in principle, the pinout would correspond to the following (double-check it before soldering anything).



#### 4. FINISHING THE INSTALLATION

Now, you can put the mainboard back to the shell, and put the screws and cables as before. Enjoy it!



*I bought this second-hand PSP, and the PSP battery seems damaged :(*



# FREQUENTLY ASKED QUESTIONS - FAQ

## WHAT CHARGER CAN BE USED?

You can use any standard charger for mobile phones, computers, etc., with 5V 1A. It doesn't need to be a Power Delivery charger since this feature is not used. Of course, if you want to use a Power Delivery charger, there's no problem or risk.

*Technical data for curious minds:*

*Power Delivery chargers can supply a wide range of voltages: 5V, 9V, 12V, 15V, and 20V. However, for this to happen, the device must communicate with the charger to explicitly request the desired voltage. Without this communication, the charger will never supply more than 5V. That's one of the advantages of USB-C, as it can be used with both old and modern devices.*

## THE CONSOLE DOESN'T CHARGE WITH USB-C TO USB-C CABLES/CHARGERS.

All our kits incorporate two resistors to indicate to the charger that it is a legacy device and should charge at a maximum of 5V.

The only reason one might consider for it not working is that one might be using a charger/cable from Apple or another company that doesn't follow the standard 100%. Trying other cables, for example from the Nintendo Switch, a laptop, or another mobile device, should work.

## THE DATA CONNECTION IS NOT WORKING

If you have decided that the USB-C will support data connection using the **D-** and **D+** pads and the data connection is not working, you also need to solder a **VCC** wire from the board to the PSP's MiniUSB. This is essential for the console to detect and activate data transfer via USB.