BATTERY ADAPTER KIT FOR GAME BOY ADVANCE SP

PRODUCT

HTTPS://SHOP.GILTESA.COM/PRODUCT/GAME-BOY-ADVANCE-SP-BATTERY-ADAPTER-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.

DESCRIPTION

Once your **Game Boy Advance SP battery** has gone bad, and you start to look for a replacement you will see it's impossible to find original batteries since they expire if you don't keep charged with a minimum level of charge.

Compatible batteries may be an alternative. However, some manufacturers may lie with the real capacity, or their quality is not good enough.

If you have changed the screen for a **IPS screen**, or the charging port for a USB-C port. I'm sure you will also want to replace the battery and make your GBA SP perfect. This kit helps you to install any li-ion battery, however the best option is the 603048 which has 900mAh, that is 300mAh more than the original!

FEATURES

- Exact **shape for Game Boy Advance SP**.
- Protection circuit of over-discharge.

INCLUDED

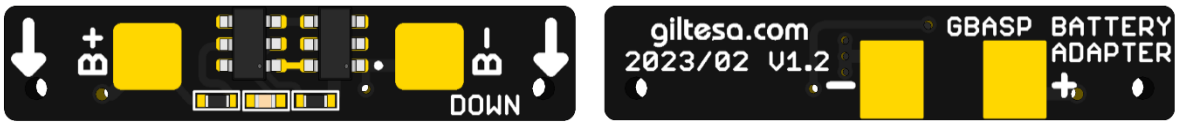
- 1 board.
- 1 Plastic adapter.

RECOMMENDED / REQUIRED [NOT INCLUDED]

- **Li-ion battery**, recommended this one: 603048 of 900mAh.
- Phillips screwdriver
- Tri-wing screwdriver (optional)
- Soldering iron
- Tin
- Flux

BOARD DETAILS

The following explains what each pad is for.



- B+ The positive input from the li-ion battery.
- B- The negative input from the li-ion battery.
- + The positive output to the GBA SP.
- - The negative output to the GBA SP.

INSTALLATION STEPS

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

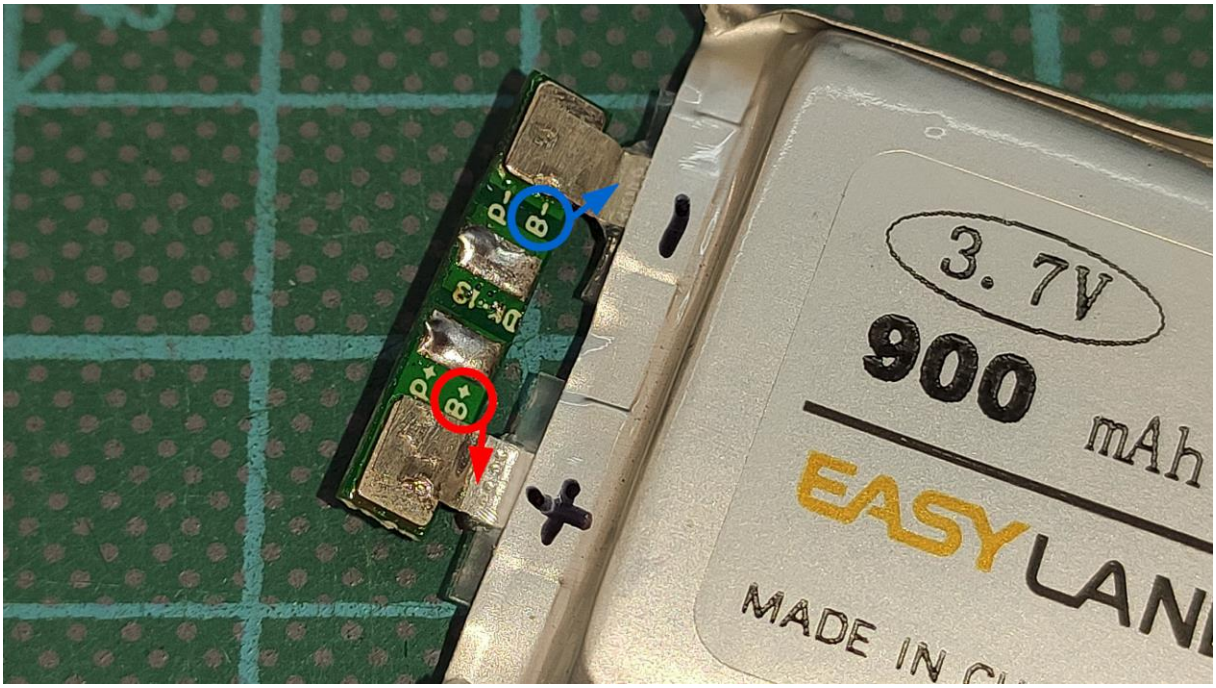
1. PREPARE THE BATTERY

If you are using the recommended battery, or also in most of the batteries, you will see that it includes a protection circuit installed. This circuit protect the battery of over discharge.

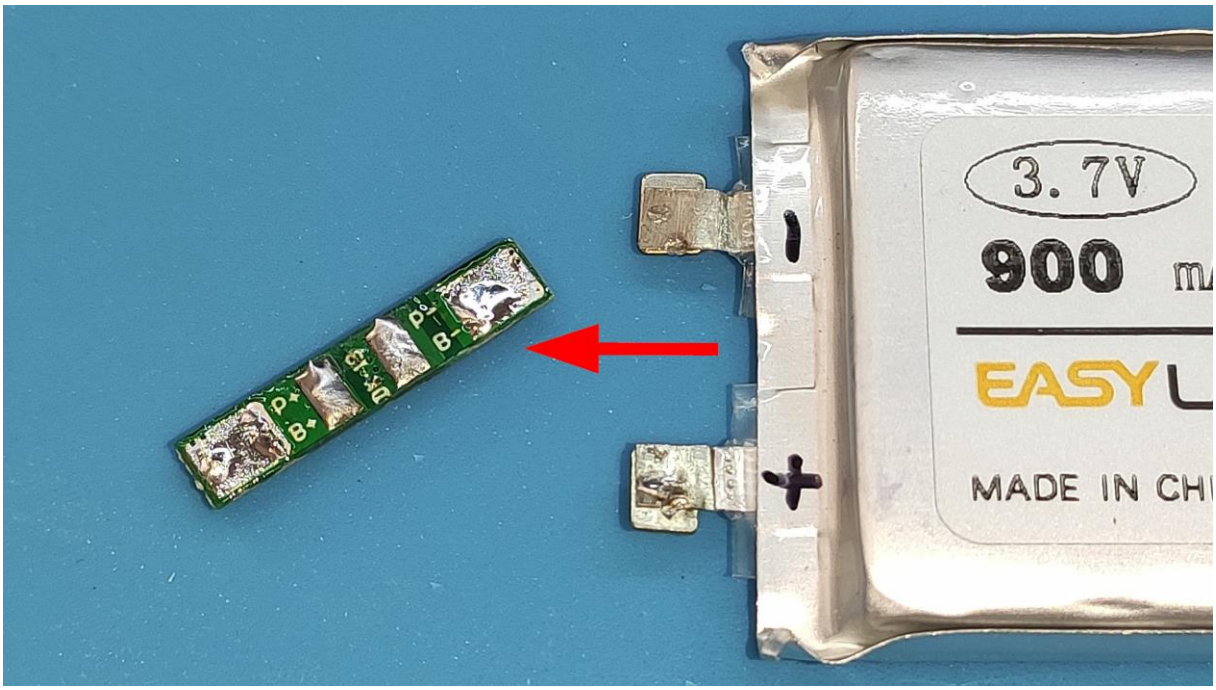
This circuit needs to be removed, because the new one included in this kit does the same function, but it has the size and pads necessaries to connect to the GBA SP.

First, remove the kapton tape:

Then, check if your battery has the positive leg on the left and the negative leg on the right. This should be universal for all batteries but check it out just in case. If you wish, you can mark it:



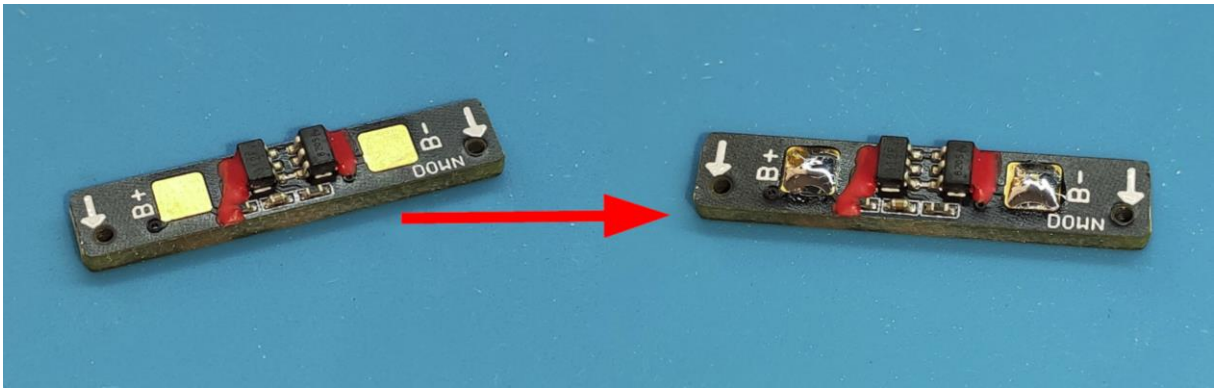
Now, you can desolder the board from the battery legs. First warm one leg with the solder iron until you can move the board and separate it. Then repeat it with the other leg:



Once the battery legs are free, the battery is ready for the next step.

2. PREPARE THE GBA SP ADAPTER

Place the circuit with the electronics facing up, then presolder both pads called B+ and B-



Insert the circuit inside the plastic adapter, be sure you insert it like this picture:

The board is ready for next step.

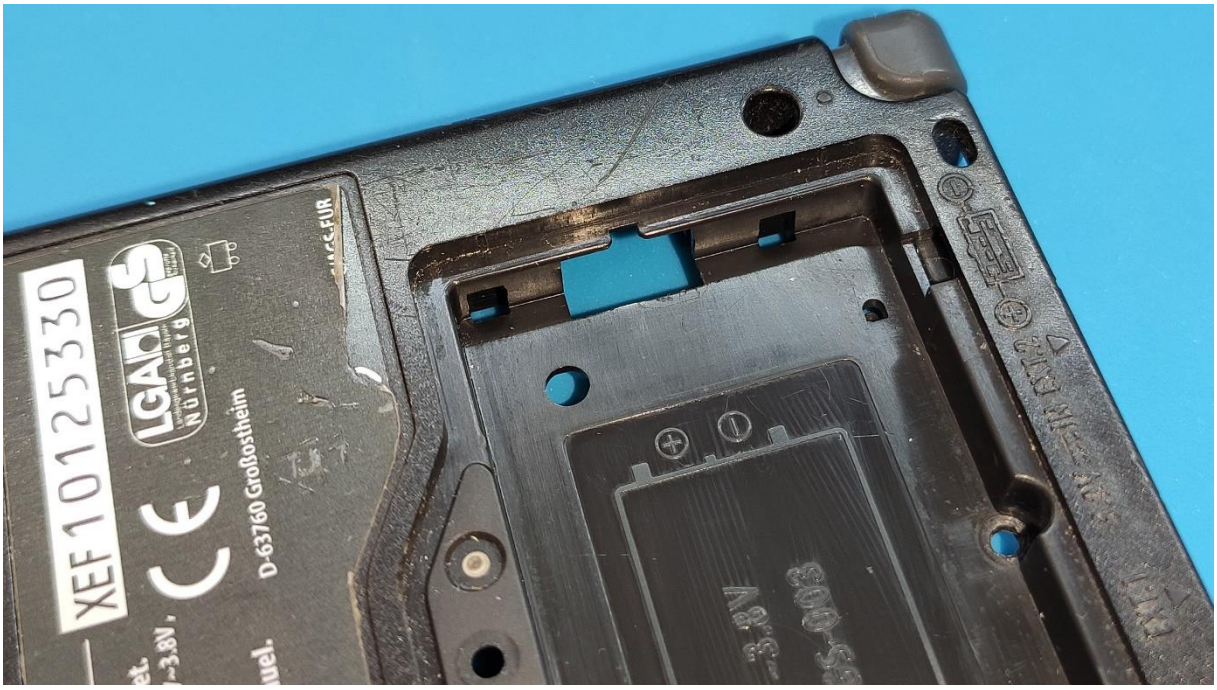
OPTIONAL: The part of the plastic adapter with letters helps if you want to put a bit of thin double-sided tape to hold the battery, but once you solder the legs, it feels robust and doesn't move in the battery compartment, so the tape may be unnecessary.

3. SOLDER THE BATTERY TO THE BOARD ADAPTER

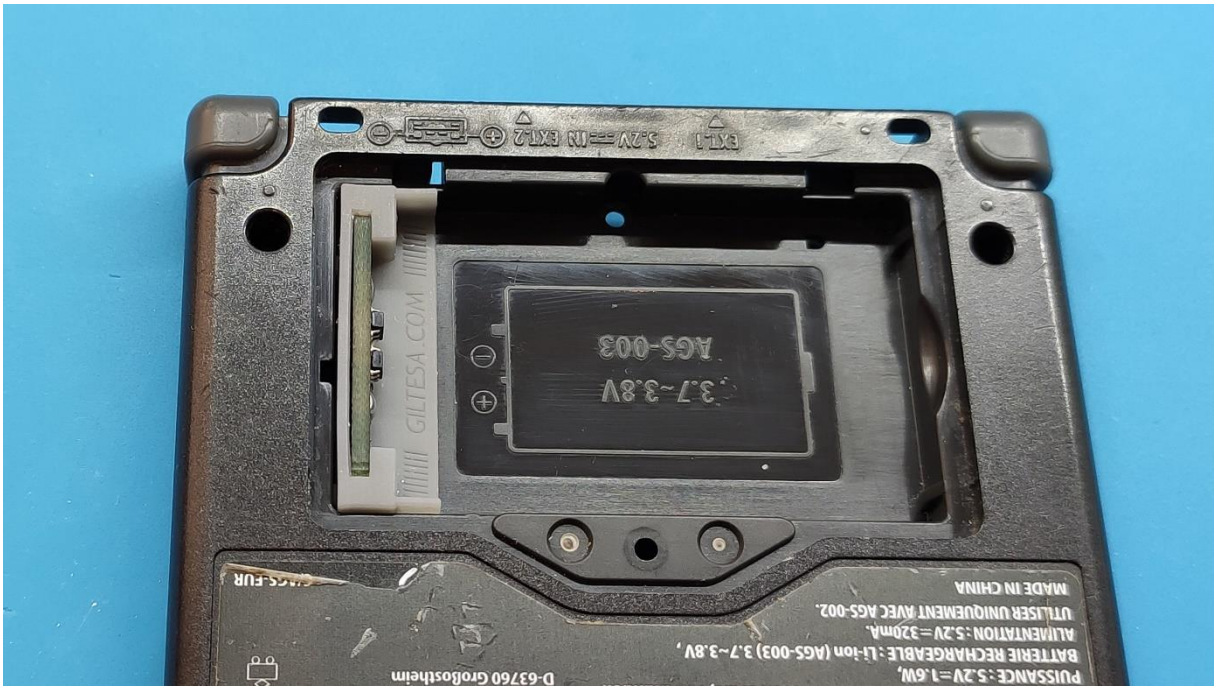
The distance between the battery and the adapter must be the correct one, otherwise the assembled battery may not fit in the battery compartment or may not touch the GBA SP pads and do bad electric connection.

The easiest way to assemble it well, it's doing inside the battery compartment. However, the GBA SP spring contacts may annoy you when you put the adapter in the place.

If you have other GBA SP shell not assembled, or you can remove the bottom shell, it will help:

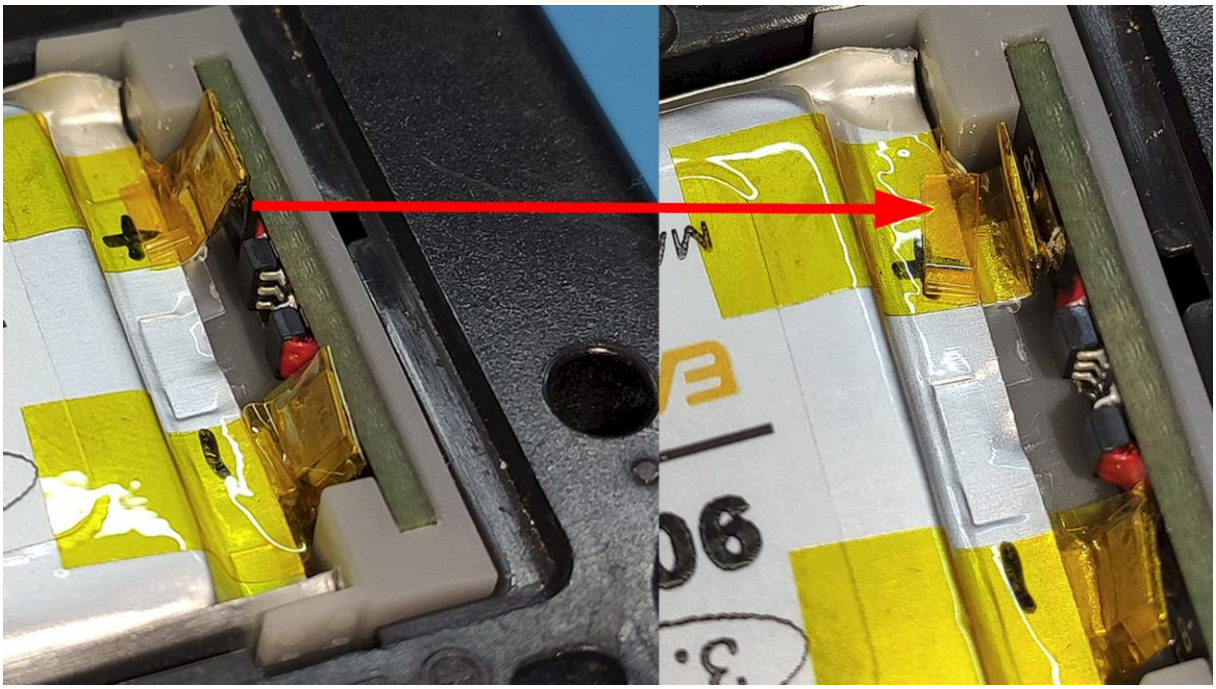


First, put the adapter in position:



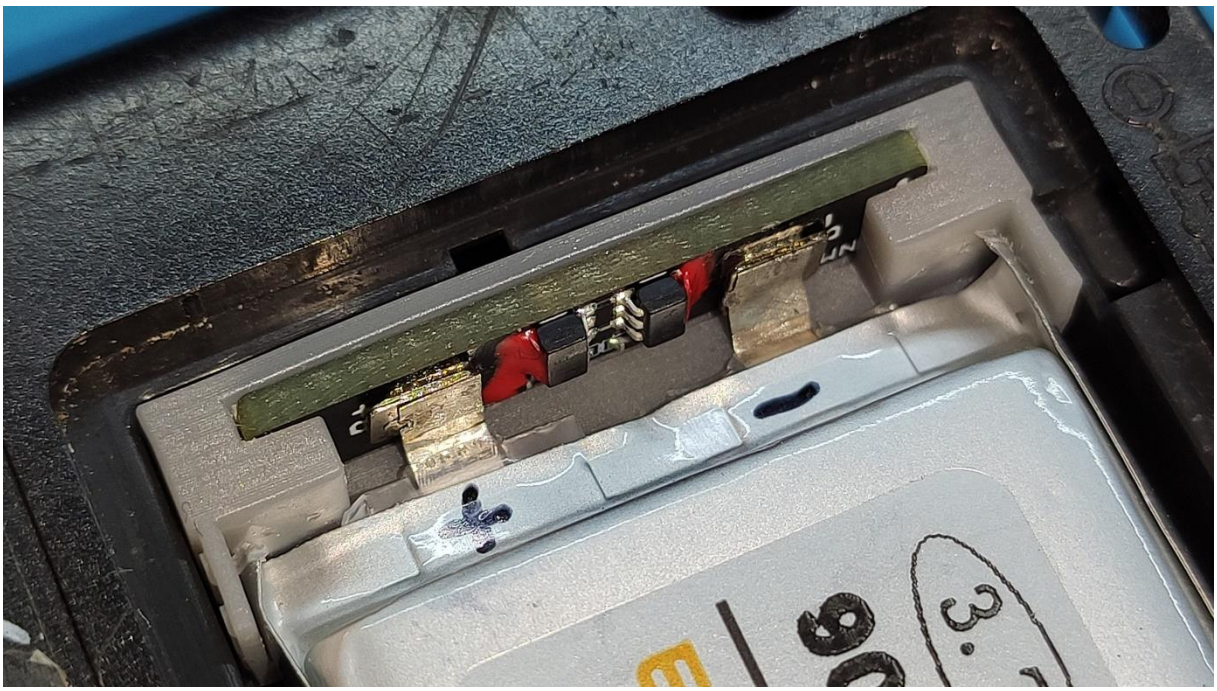
Then **when you put the battery in the battery compartment you will notice that the battery legs make impossible to put it**, don't worry, just put there and the legs will fold themselves. You can also use something **not metallic** to help them to take the 90 grades angle.

In these two photographs you can see what I mean, but I covered the battery legs with kapton tape, you don't need to do it.



If you remove the battery, you can see the result:

Ok, put back the battery in the battery compartment and solder it. First put the solder iron over the first battery leg and press it which will start to melt the tin and solder itself to the board. Repeat the seme operation with the second leg:



Once both legs are soldered, the installation is done, and you can use it. This photograph shows the comparison between original and the new battery:

4. *DONE!*

Here we are, it’s time to enjoy it!