



Cycliq Fly 12 Battery Replacement

How to replace your Fly 12 bike front light/camera battery

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INTRODUCTION

For the price of two rechargeable batteries you can restore your Fly 12.

Rather than the generic 1865 batteries, why not upgrade to genuine Panasonic 1865B. They are the same size but have a higher capacity. Make sure you get the ones with solder tabs, even though they are more expensive you'll find them easier to solder.

I brought my replacement batteries on ebay.



TOOLS:

- [Soldering Workstation](#) (1)



PARTS:

- [Two, Flat Top Panasonic NCR 18650B 3400mAh TABBED Li-Ion Rechargeable Batteries](#) (1)

Step 1 — Remove the screws from the front



- Remove the 2 silver screws from the black cover
- Remove the 4 black screws from the camera housing
- Remove the 2 screws holding the battery into the case. One is tight so you'll need to rotate the camera without pulling the wires too much

Step 2 — Remove the screws from the back



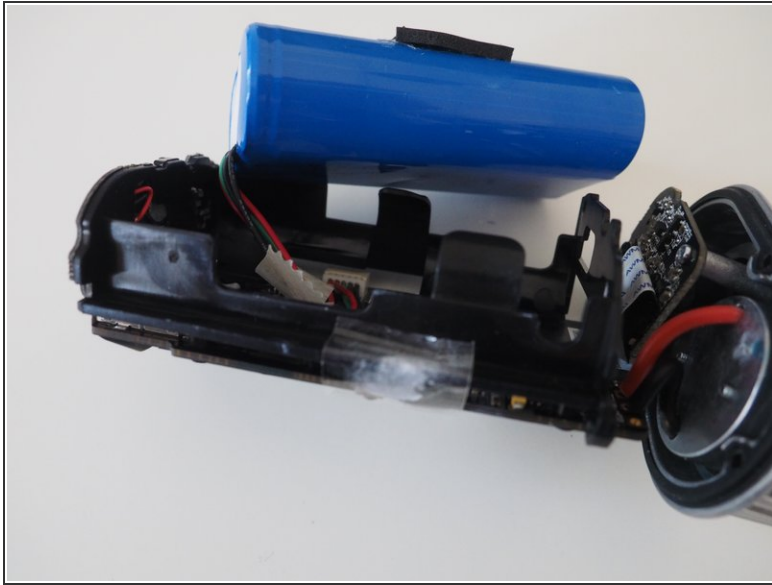
- Remove the single black screw from the back

Step 3 — Push the board out



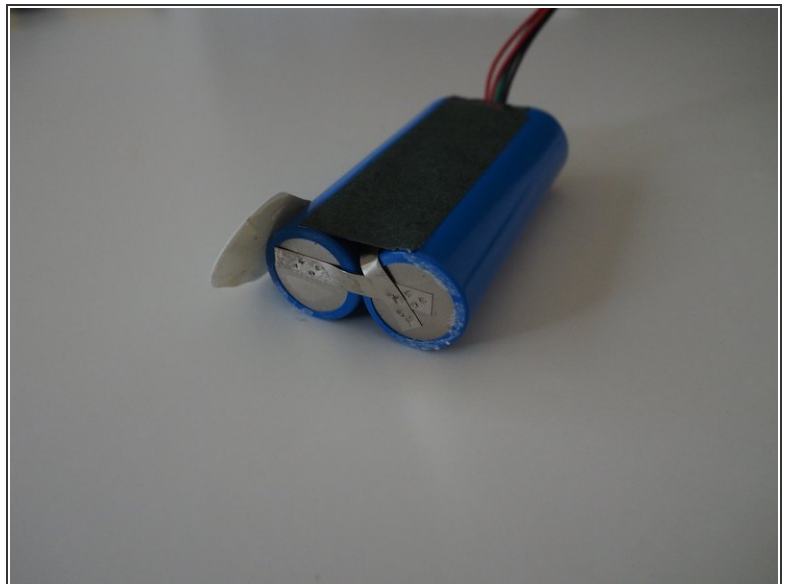
- Carefully push through the slot above the SD card (NOT the slot I'm showing!). If you have to push hard you've probably forgotten to remove a screw. Use a batch stick if you can because you are pushing on a piece of tape and don't want to tear it.
- Push until you can grab the battery from the front and pull it.

Step 4 — Remove the battery



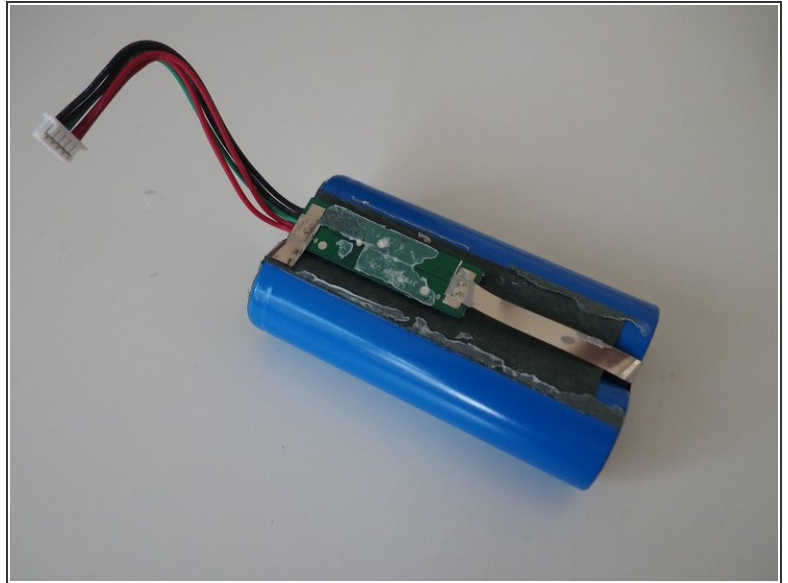
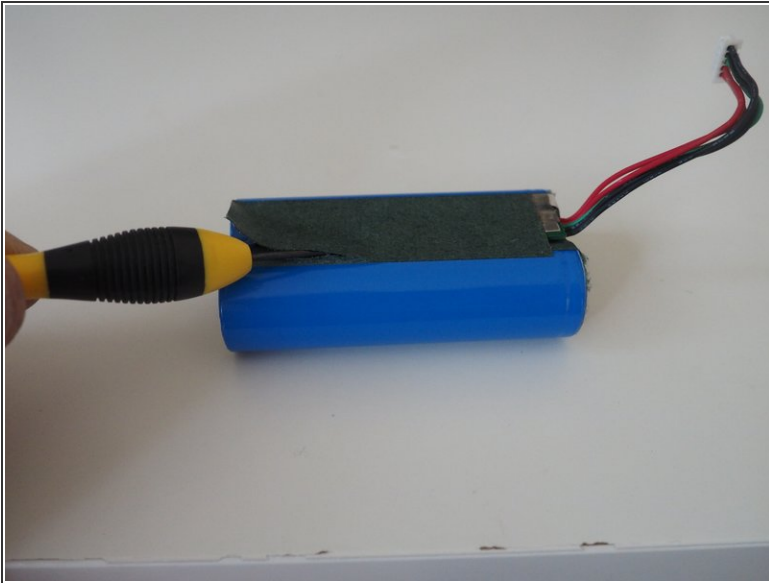
- The blue battery pack is taped in. Remove it. Save the foam and double sided tape.
- Make a note of plug orientation (maybe mark with a pen), then unplug the white clip from the board.

Step 5 — Separate the batteries



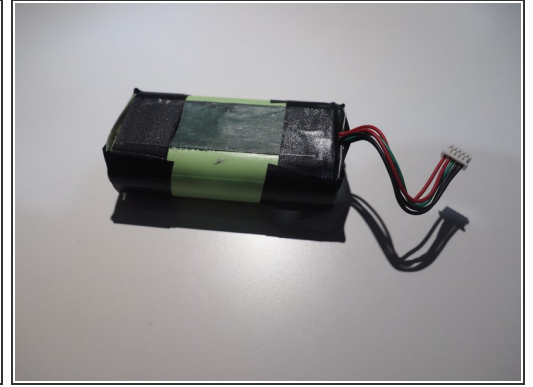
- Cut the blue plastic holding the batteries together, and peel it off to reveal the black strip shown in the second pic.

Step 6 — Remove the voltage regulator



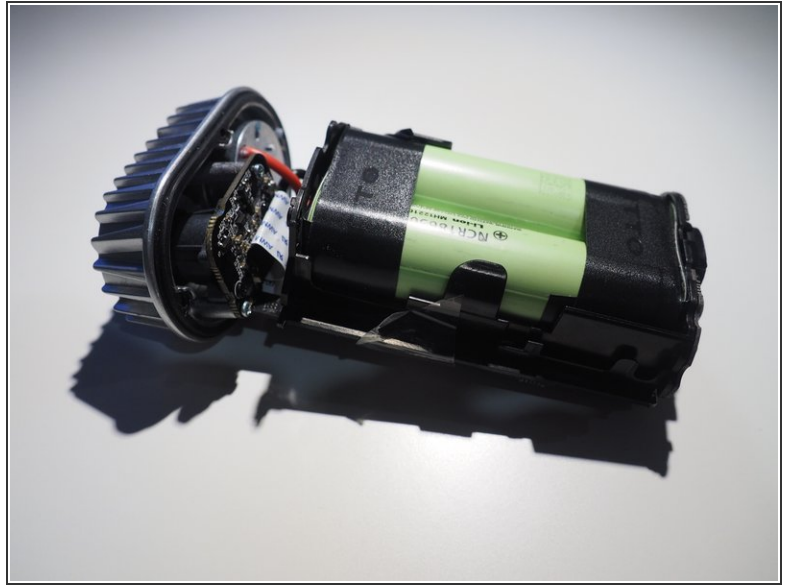
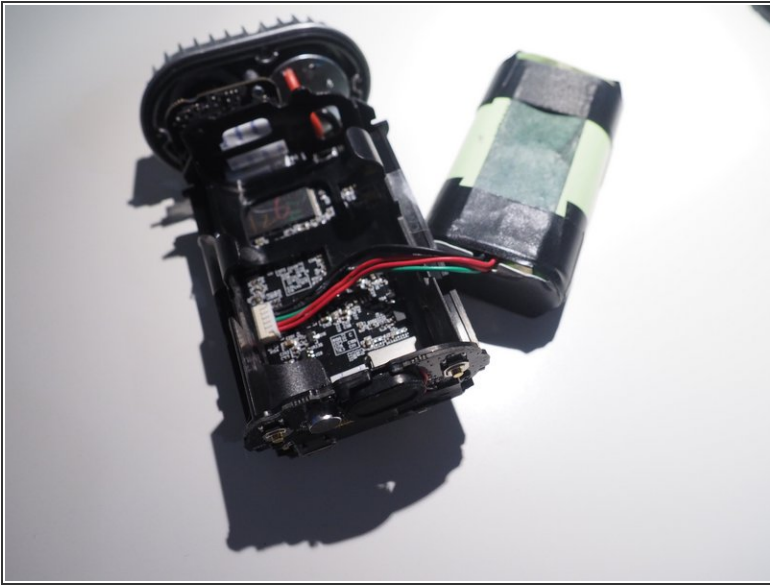
- Remove the strip of black tape to reveal the voltage regulator.
- Notice how the batteries are soldered - +ve to +ve if I remember correctly, and the board goes close to the end with the lip.
- Remove the voltage regulator and its attached wires. Keep it because you'll solder to the new batteries.

Step 7 — Solder the new batteries and join with tape



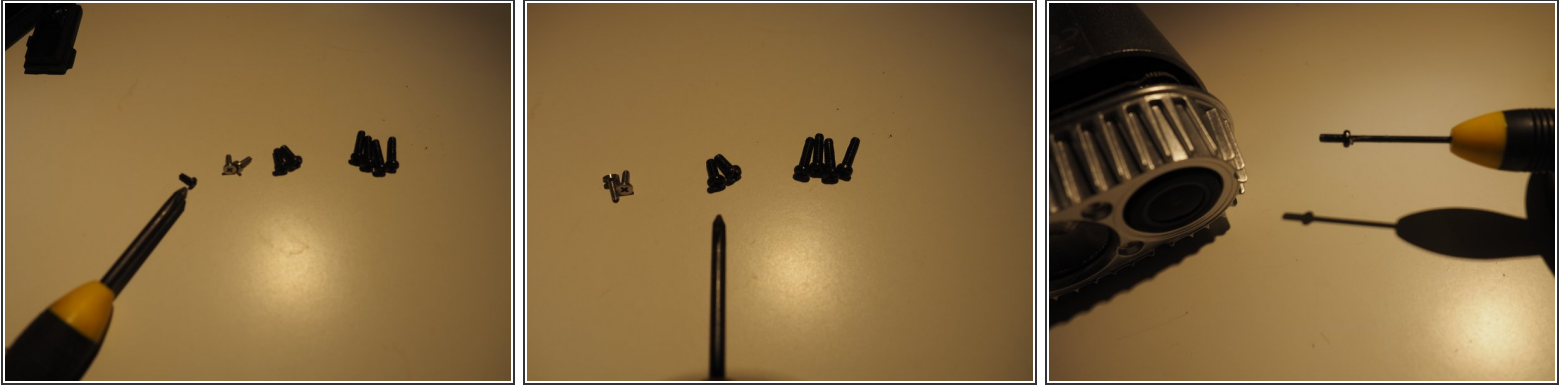
- Use the battery tabs to solder the two batteries together. The tolerances around the battery pack are tight, so keep the overlaps and solder to a minimum. You solder the negative to negative. Take a look at the batteries and you'll see they have an indent on the body at one end.
- Solder the voltage regulator board between the batteries. Be careful not to heat the batteries too much.
- I used tape on the two ends of the batteries, but a heat shrink tube would work better.

Step 8 — Install the battery



- Plug the battery pack's white clip back in.
- Now's a good time to charge the battery and check the light works before completely reassembling.

Step 9 — Re assemble



- Push the board back into the case. Make sure the back USB and micro SD card flaps are attached. Check you can open the flaps when the board is pushed in.
- The smallest single black screw goes in the back
- The two smallest black screws hold the battery in. I used a bit of bluetack to hold onto the screw driver.
- One screw is tight to get in. I used a small flat bladed screwdriver held at an angle

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