



Solio Xcellerator and Hub Battery Pack Solar Panel Replacement

This guide covers the replacement of an unusable solar panel.

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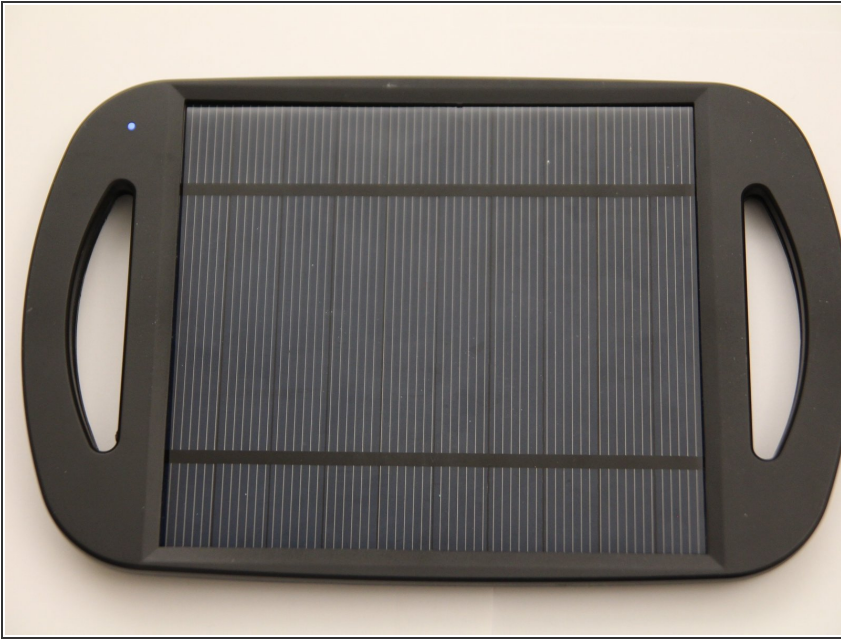
INTRODUCTION

This guide covers how to take apart the solar panel portion of the device, how to remove the solar panel, and how to install a new solar panel.

TOOLS:

- [iFixit Opening Picks set of 6](#) (15)
 - [Evo-Stick Serious Glue](#) (1)
 - [Phillips #00 Screwdriver](#) (1)
 - [Flush Wire Cutters](#) (1)
 - [Soldering Workstation](#) (1)
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Step 1 — Solar Panel



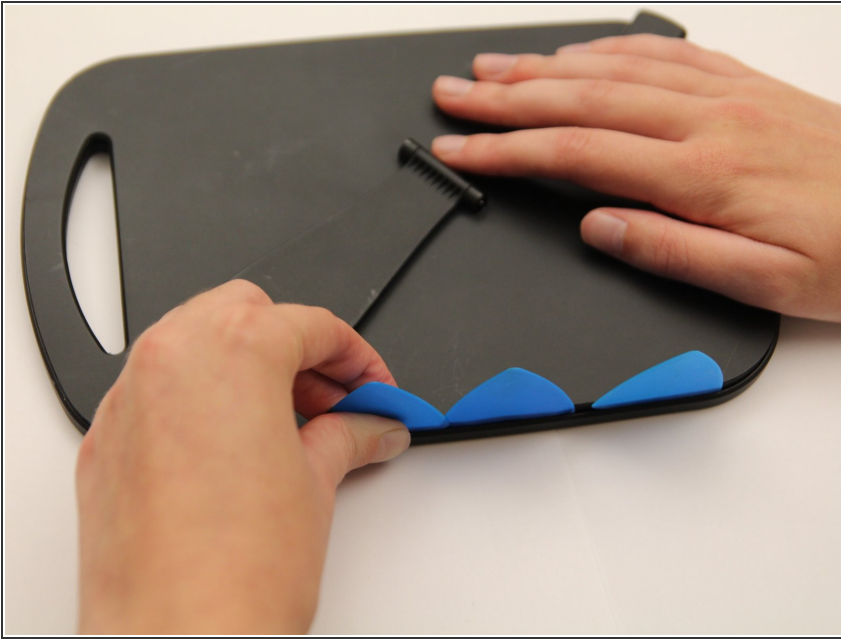
- With all cables unplugged, place the solar panel on a sturdy surface.

Step 2



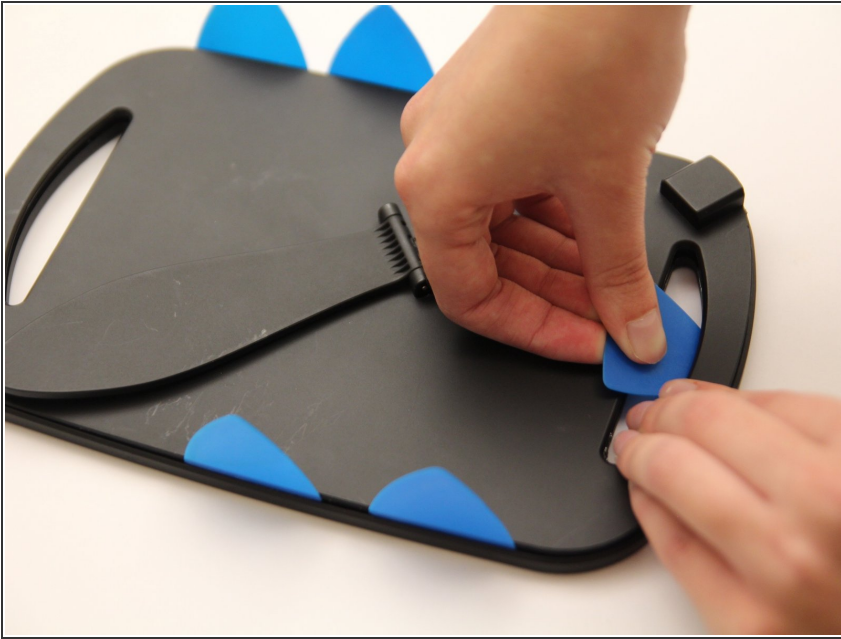
- Flip the solar panel over so that the side with the stand is facing up.
- The next part will entail removing the plastic panel so that we can see the inside of this device.

Step 3



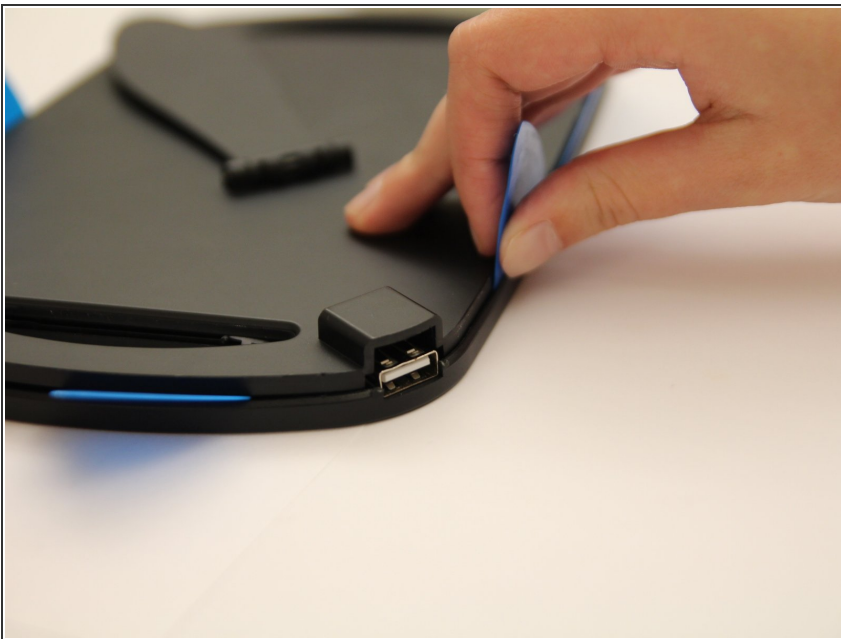
- There are many clips inside the device holding the plastic panel in place, so to remove it you must slide your [iFixit Opening Picks](#) along the edges of the panel to break or loosen the clips.
- This may take a lot of effort, as the panel is held in extremely tight. Do not be afraid to use force.

Step 4



- Keep on sliding [iFixit Opening Picks](#) into the edges of the panel without removing the ones already in place. The panel may reattach if the clips are not completely broken.
- You must also slide [iFixit Opening Picks](#) between the interior edges of the handles, as clips exist inside there as well.

Step 5



- Once enough of the clips are broken, you will see that the panel will start to pop off.

Step 6



- When you have broken enough clips around the plastic panel, lift it off of the device.
- There may still be some clips holding on to the panel, so do not be afraid to use force to pull the panel off.

Step 7



- Once you have removed the plastic panel, place it to the side.

Step 8



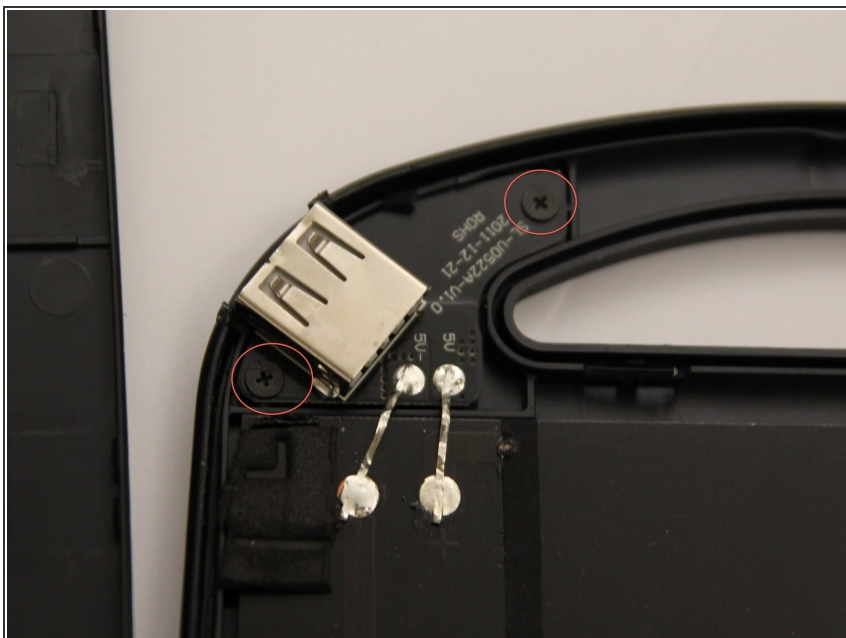
- This is an example of one of the clips you may have broken to remove the panel.

Step 9



- The only thing holding the solar panel in place now is gravity, so make sure not to flip the device over! This may damage the connections.

Step 10



- You must now unscrew the circuit board that holds the USB port in place.

Step 11



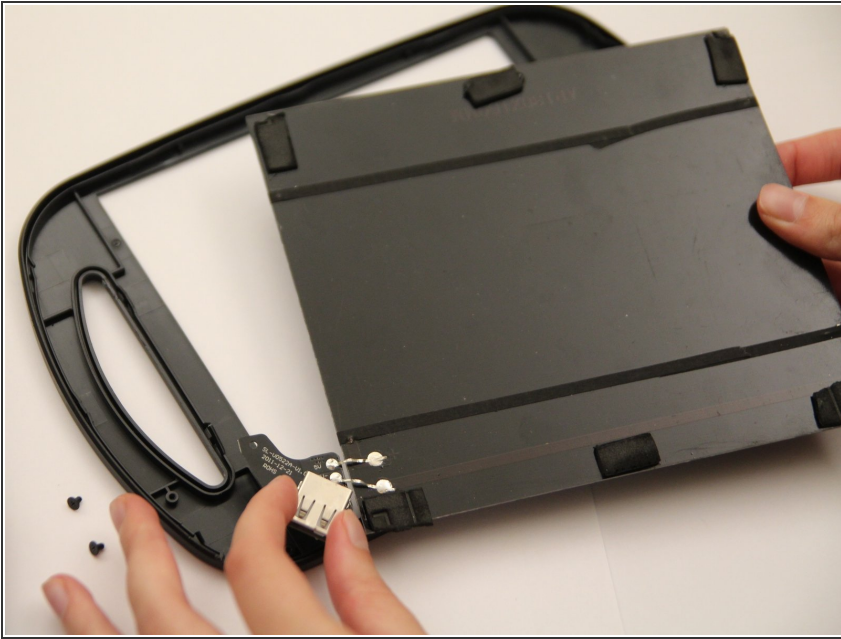
- Take your [Phillips # 00 Screwdriver](#) and begin to unscrew the two black screws.

Step 12



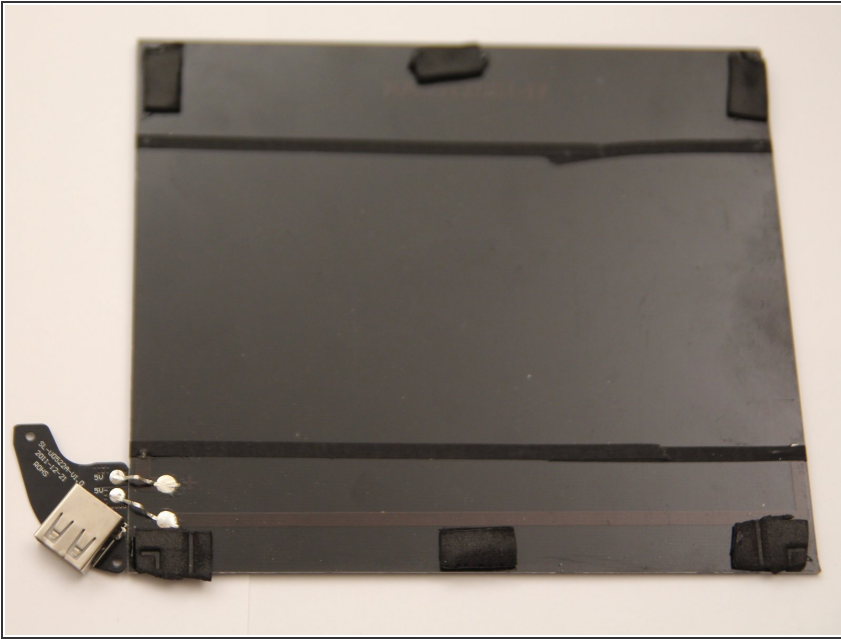
- Once the screws are removed, place them on the side. Be careful not to lose them as they are very small.

Step 13



- By holding onto both the USB port and the solar panel, remove both the circuit board and solar panel from the casing.
- Be careful as the connection between the circuit board and solar panel is very weak, so any wrong movement may ruin it.

Step 14



- Place the solar panel on a surface that you can solder on.
- Cut the two wires connecting the circuit board to the solar panel at the base near the solar panel using [wire cutters](#).
- Take out your [Soldering Station](#). With your new solar panel, solder each lead back to the circuit board, ensuring the positive and negative leads match up correctly as displayed in the photo. Refer to the [Repairing Soldered Connection Guide](#).
- Put the device back together following the same guide in reverse order.
- When you reach step 8, apply your [Evo-Stick Super Glue](#) along the edges of the plastic panel.
- Press the panel back into place on the device. Let it sit to dry for 24 hours before use.
- Enjoy your working device!

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