

DIY Solar: Phone Chargers

Demand for Energy Equality

June 2019

Root source version: Version 2.0

Translation version: Version 0.1



TODO ADD IMAGE



This guide is provided under a Creative Commons BY-SA license:

Material may be freely shared and adapted under the following terms: You must give appropriate credit, provide a link to the license, and indicate if changes were made, and further distribution must be under the same license as the original.

Contents

Preface	3
Introduction	4
The Demand Energy Equality project	4
Using this guide	4
The design	4
Disclaimer	4
Before starting	5
Staying safe	5
Tools and materials	5
How to Solder	5
Building the panel	5
Step 1: Soldering tabbing wire to the top of the cells	5
Step 2: Preparing the polycarbonate and placing the cells	5
Step 3: Heating the EVA to stick the cells	5
Step 4: Tabbing the other side of the cells	5
Step 5: Cross tabbing	5
Step 6: Encapsulation	5
Step 7: Bonding the panel into the neoprene case	5
Step 8: Attach USB DC-DC voltage converter	5
Appendix: Sourcing materials (and possible alternatives)	6

Preface

Introduction

This PDF has taken the content of the "DIY Solar: Phone Chargers" PDF and put them into a form which can be easily corrected, improved and translated by the community using LaTeX a markdown language for technical topics.

Notes

Please note the modifications which have been made & where you can find updates.

1. All the content of the PDF and put them into a form which can be easily corrected, improved and translated by the community using LaTeX a markdown language for technical topics.
2. Any updates, corrections or translations to the PDF will be available at <https://github.com/darigovresearch/DIY-Solar-Phone-Chargers> so do return periodically to check if you have the latest version.
3. Modifications from the original work includes typo correction, card merging & consistency consolidation (see the commit history for [en] for the specific changes if any).

Feel free to share the PDFs and give the repository a star so more people are likely to see this work and can get the most out of it.

License

Unless otherwise specified, everything in this PDF is covered by the following licence:



This work was based on the work ***DIY Solar: Phone Chargers*** by Demand Energy Equality, licensed under a Creative Commons BY-SA.

To see this work in full go to <https://www.demandenergyequality.org/build-your-own-panels>

Introduction

The Demand Energy Equality project

Using this guide

The design

Disclaimer

Before starting

Staying safe

Tools and materials

How to Solder

Building the panel

Step 1: Soldering tabbing wire to the top of the cells

Step 2: Preparing the polycarbonate and placing the cells

Step 3: Heating the EVA to stick the cells

Step 4: Tabbing the other side of the cells

Step 5: Cross tabbing

Step 6: Encapsulation

Step 7: Bonding the panel into the neoprene case

Step 8: Attach USB DC-DC voltage converter

Appendix: Sourcing materials (and possible alternatives)