Parkside 18V (PAP 18) adapter for AX Power 20V batteries (Ferm / Action) - No soldering

Ystvan

VIEW IN BROWSER

updated 21. 6. 2024 | published 21. 6. 2024

Summary

An adaptor for 20V AX Power 20V batteries. 3 printed components and does not require soldering.

Hobby & Makers > Tools

Tags: battery adapter parkside drilling adaptor onshape powertools ferm axpower

Why?

I have a Parkside drill from the older 18V battery system, the new 20V system is not compatible. But there is an Action shop (France) close to my place where they sell cheap and quite nice 20V batteries for Ferm tools.

How does it work?

I wanted something as simple as possible, with no soldering or special parts difficult to source. The battery has the polarity inverted compared to

the 18V Parskide system, so I made the device so that the battery is to be plugged in the opposite direction. The connection is made by two L-shaped attachments connectors. They fit nicely into the device and the battery without the need for any soldering or other attachment. They are made by cutting to shape ~0.5 mm steal sheets to the right size (see picture). It can be done using any conductive metal you find with a steel thickness 0.5 to 1 mm (you can use for instance parts of an old PC metal case).

Can I use it for other batteries?

Probably not in the current form, but I made the system quite modular, only redesigning the bottom part would be required to adapt if for other batteries.

Source

Made with Onshape, do not hesitate to modify it to your needs:

https://cad.onshape.com/documents/fbb982f8712091bb952deb9c/w/5db33ef61248acc2a6fae7f2/e/6374b3dfe004d3927e2894f0

Bill of Material

In addition to the 3D part, you will need:

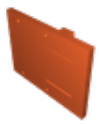
- 3x M4 25 mm screws
- 3x M4 nuts
- ~0.5 mm metal plate to cut to the right size for the connectors (see pictures)

How to build it?

The procedure is quite straightforward, follow the pictures!

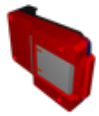
Model files

bottom.stl



middle.stl

middle.3mf



bottom.3mf

top.stl

top.3mf

Other files

connector.svg

License ©

This work is licensed under a
Creative Commons (4.0 International License)

Attribution

✖ | Sharing without ATTRIBUTION
✔ | Remix Culture allowed
✔ | Commercial Use

✔ | Free Cultural Works
✔ | Meets Open Definition