Wave FIFO Battery Holder

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VIEW IN BROWSER

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Summary

A stylish battery holder for AA, AAA or 18650 batteries that is first-in first-out.

Household > Office

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This is a parameterized OpenSCAD model. If you want to do AAAA or C cells, you should be able to measure the batteries and change the parameters in the model to produce a new holder suitable for your needs. You can change the amplitude of the wave and the period as well. You can make it taller if you want to store a lot of batteries, though it might get tippy if you go too high. I haven't tested all the possible parameter settings, so let me know what you find. I think that if you make the period too short the batteries may jam. Note that the model preview time in OpenSCAD is extremely long (20 minutes for me).

The dovetail joints are tapered and on my MK3 they wedge tightly with the struts slightly below the surface. Some people said they had trouble getting it together so I made some undersized struts where the dovetail is smaller. These are for the AA size holder.

I printed this at 0.15 resolution with 20% infill using Galaxy Black Prusament PLA.

Assembly

The battery holder prints in four pieces, two sides and to struts that hold the sides together. The struts may be different thicknesses, and it matters which way you assemble it. The marked face of the strut must face inward, because the dovetails are tapered. The joint starts loose but as you push it together it will wedge tightly. With my printer the spars end up slightly recessed into the joint.

Model files

wave_battery.scad

undersized_struts.stl

wave_battery_18650.stl

wave_battery_aaa.stl

wave_battery_aa.stl

Find source .stl files on Thingiverse.com

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