3 axis camera slider

Kiki Hobby Repair

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Summary

This is an Open source DIY motorised portable 3 axis camera slider

Gadgets > Photo & Video

Tags: cameraslider   diycameraslider

My newest DIY project is a 3 Axis motorised camera slicer. It is capable of handling smaller DSLR cameras and phones. It is portable because can be operated from a battery or alternatively from a DC power supply.

Link to the Youtube video: https://www.youtube.com/watch?v=ZBGcE2LZntI
Link to my Github for all the files: https://github.com/KikiHobbyRepair/3-axis-camera-slider

I will also post a video later on about the full build process. I will put a link here as soon as it is published.

Parts list:

-3D printed parts (preferred: PETG) -openbuilds V wheel gentry. Most probably these are mostly the same but this is what I used: https://www.ebay.com/itm/403322339944 -2040 V slot aluminum extrusion profile (I used 600mm long) -3 pcs Nema 17 stepper motors (I used 2pcs 0,9deg 2A and 1pc 1,8deg 2A version). High torque is needed especially for the

tiliting mechanism -3pcs TMC2209 stepper motor drivers https://www.aliexpress.com/item/33025652788.html?gatewayAdapt=glo2fra&spm=a2g0o.order_list.0.0.72a81802hnKEYC -Bigtreetech extension board https://www.aliexpress.com/item/4001286167374.html?spm=a2g0o.productlist.0.0.46804285m8dEHG&algo_pvid=eab06c10-fa89-4f56-ac7f-1b9dc65db445&algo_exp_id=eab06c10-fa89-4f56-ac7f-1b9dc65db445-0&pdp_ext_f=%7B%22sku_id%22%3A%2210000015612441433%2 mainSearch -Arduino Nano (5V) -1,3" OLED screen (SPI version) https://www.aliexpress.com/item/32683739839.html?spm=a2g0o.order_list.0.0.72a81802AinbYI -Rotary encoder: https://www.aliexpress.com/item/10000056483250.html?spm=a2g0o.order_list.0.0.72a81802AinbYI -Momentary pushbutton: https://www.aliexpress.com/item/32965284265.html?spm=a2g0o.order_list.0.0.72a81802AinbYI -GT2 Belt 6mm wide -20 teeth GT2 pulley with 5mm inner dia -20 teeth GT2 idler with 5mm inner dia -M3 and M5 allen screws in different length (buy an assortment kit) -M5 hammerhead nuts or T slot nuts -M5 and M3 rectangluar nuts https://www.aliexpress.com/item/32964308882.html?spm=a2g0o.order_list.0.0.72a81802hnKEYC -Some wires -Rubber band for phone mount https://www.aliexpress.com/item/32751762287.html?spm=a2g0o.order_list.0.0.72a81802hnKEYC -F623ZZ bearing 1 pcs -Flange shaft coupler 2pcs (I have designed a 3D printed version too (STL available) but I prefer the metal here) https://www.amazon.de/gp/product/B0833PTFZM/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&psc=1 -etc

Buy Me a Coffe. If you find my work useful and valuable you can support the channel on the following link: https://www.buymeacoffee.com/kikihobbyrepair

Model files

aeg-battery-holder.stl

leg-1.stl

box-top.stl

box-bottom.stl

bottom-stepper-holder-53mm-inner.stl

phone-holder-top.stl

top-stepper-holder.stl

shaft-coupler.stl

x-idler-holder.stl

x-stepper-holder.stl

camera-mount.stl

phone-holder-bottom.stl

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