

An annotated Amazon list of supplies

https://www.amazon.com/hz/wishlist/ls/1NUGO9RZWJEU0?ref=wl_share

Linear actuator (make sure you get the option that includes the stepper motor)

<https://openbuildspartstore.com/c-beam-linear-actuator-bundle/>

This is the raspberry pi kit that I got.

<https://www.canakit.com/raspberry-pi-4-starter-kit.html>

There are other Pi retailers listed at the bottom of this page:

<https://www.raspberrypi.com/products/raspberry-pi-4-model-b/>

If Rasp Pi are perpetually sold out when you are looking, here is website and twitter page which tracks when/where new batches are released:

<https://rpilocator.com/>

<https://twitter.com/rpilocator>

To connect the stepper motor wires to the arduino using the terminal connectors (on Amazon list), wrap the metal parts around the exposed wire using a wire crimper, then push that down into the plastic housing. Here a youtube video. I did not have all the same fancier tools that they use, just a wire crimper and it worked fine:

<https://www.youtube.com/watch?v=jET1QTP1B7c&t=287s>

Github page with manual and software:

<https://github.com/CambiumRG/CaptuRING>

Video tutorials are linked from this publication. These are incredibly helpful:

<https://www.sciencedirect.com/science/article/pii/S1125786522001011>

Stepper motor calculator:

https://blog.prusa3d.com/calculator_3416/

I tried several free options for image stitching and truly none came close to the quality and ease of use of PTgui. Worth the investment.

<https://ptgui.com/>

General Notes:

Get the photo enlarger base if you can find one, and if you do, please let me know where!

Possible option:

<https://www.amazon.com/ALZO-Tabletop-Studio-Product-Photography/dp/B07K4RG3RX/ref=as>

c_df_B07K4RG3RX/?tag=hyprod-20&linkCode=df0&hvadid=366307948963&hvpos=&hvnetw=g&hvrnd=15807508261882642549&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=1018362&hvtargid=pla-804895937888&psc=1&tag=&ref=&adgrpid=74513439245&hvpone=&hvptwo=&hvadid=366307948963&hvpos=&hvnetw=g&hvrnd=15807508261882642549&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=1018362&hvtargid=pla-804895937888

We use an older Nikon DSLR (D5100) with macro lens and ring light attachment. Serious upgrades can be made here, but the photo quality is very good regardless

A wireless mouse/keyboard combo with 1 USB receiver will negate the need to buy a USB hub for the raspberry pi