



Installing a Heated Bed

This guide will instruct you on how to install a heated bed and help you get started printing with it.

Written By: Nicki





TOOLS:

- [2.5 mm allen key](#) (1)

found in Fix-it kit

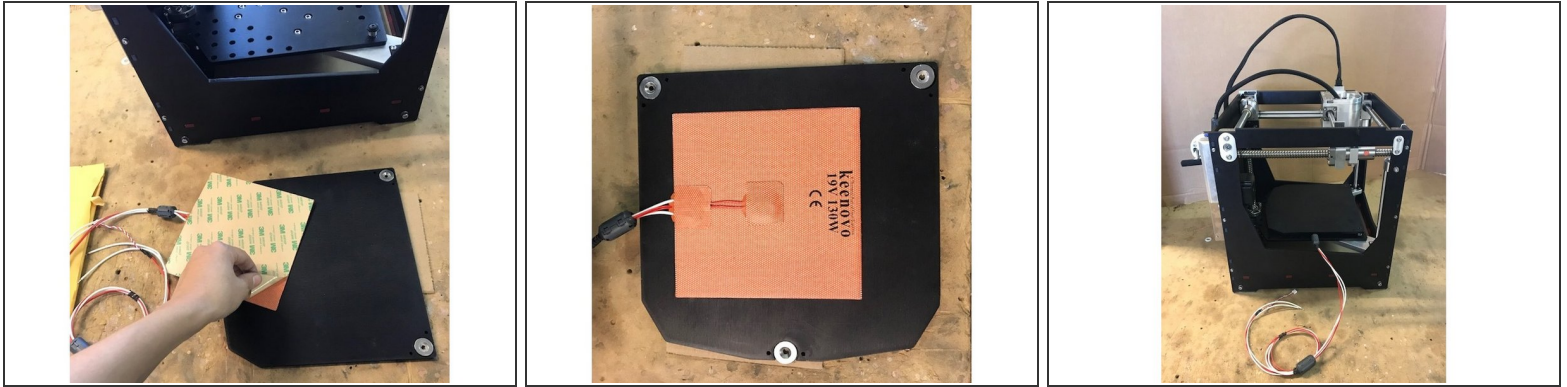
- [small flat head screw driver](#) (1)



PARTS:

- [heated bed](#) (1)

Step 1 — Position heated bed on print plate



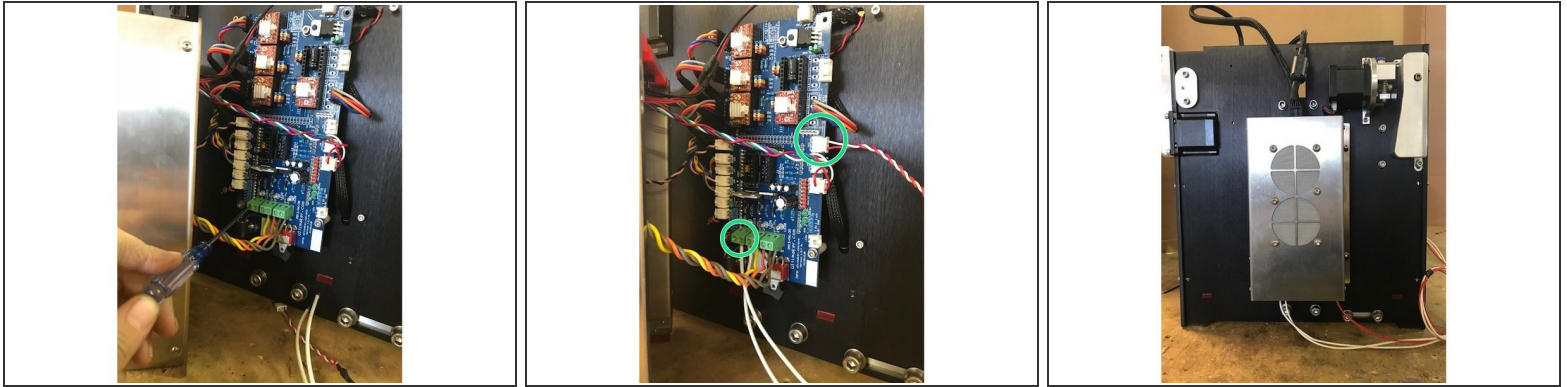
- Decide where you would like to adhere your heated bed to the print plate.
 - We recommend adhering it so that its about centered on the plate with the wiring coming out the side of the BoXZY with the X ball screw.
- When you are ready to adhere it to the bed, peel the sticker off the back of the heated mat and stick it to the bottom of the print plate.

Step 2 — Connect heated bed wires to electronics board



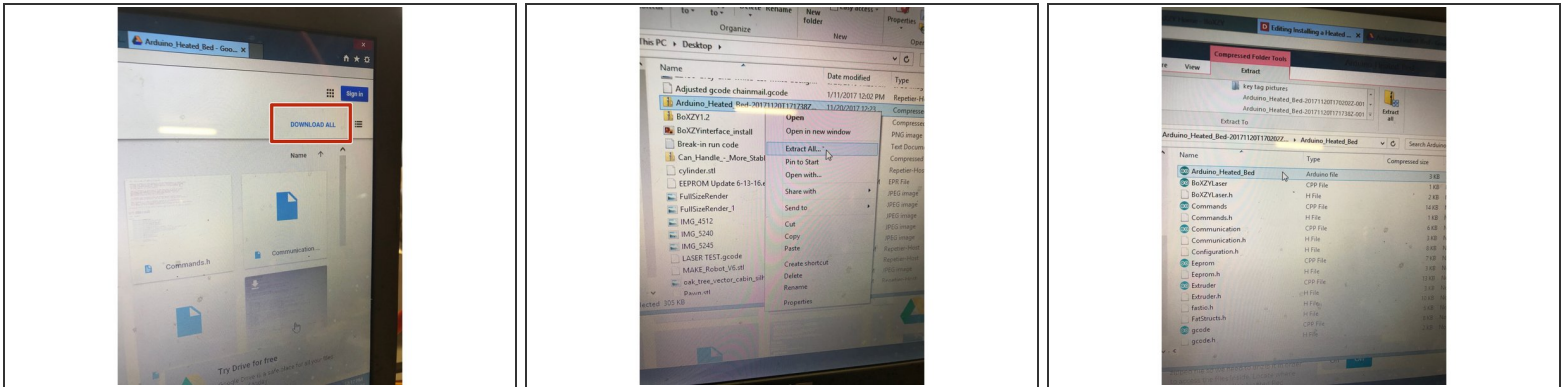
- First, use your 2.5mm allen key to loosen the 4 bolts on the side of the electronics cover.
- Carefully push the cover up and over the bolts to access the electronic board. Be mindful of the wiring as you pull the cover away from the machine.
- Now, lets make sure the wiring on your heated bed is ready to go. The red wires should come with a 3 pin connector already attached at the end. The white wires may need stripped so that about 1/4 inch of the inner wire is exposed. Make sure the ends of the wires are neat and twisted.

Step 3 — Connect heated bed wires to electronics board cont.



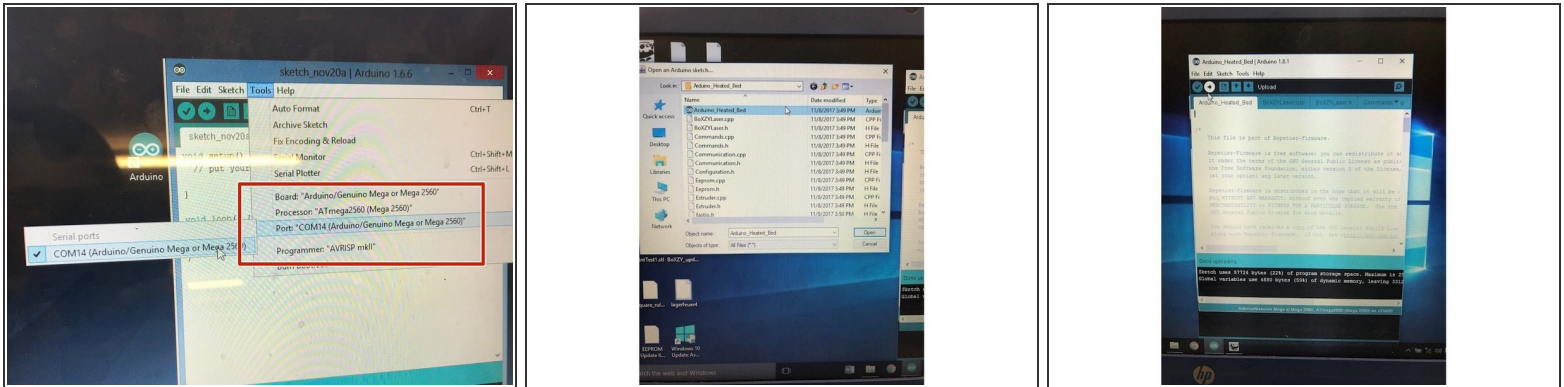
- At the bottom of the board you will see a row of green connectors. Use a small flat head screw driver to loosen the 2 screws on the far left that have nothing attached to them already. If you look close you will see that it is labeled HOT_BED.
- Insert the 2 white wires into the open green connectors and tighten the screws so that there is a secure connection. Be sure no exposed wire is visible.
- Then take the 3 pin connector at the end of the red wires and connect that to the only open connector about half way up the the right side of the board (labeled A10)
- You can now carefully return the fan cover to the back panel of BoXZY and retighten the 4 bolts its mounted on.
 - Be sure to keep the wiring neat and out of the way of the fan blades.

Step 4 — Program Arduino



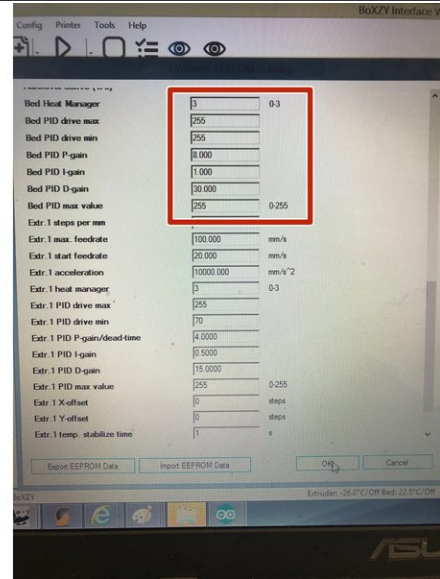
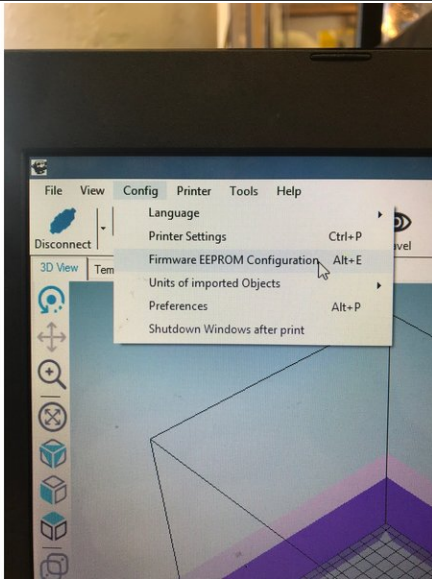
- Now that your heated bed is set up we need to reprogram the Arduino with the heated bed settings. Click on this link to get the [Arudino Heated Bed Settings](#) (I recommend right clicking and opening it in a new tab so you don't leave this page)
- Click on "download all" then save the folder somewhere you will be able to easily find.
- The Arudino settings download as a zipped file so we need to unzip it in order to access the files inside. Locate where you saved the Arudino Heated Bed Settings. Right click on the folder and select *Extract all* and then *Extract*.
- Now you should be able to double click on the Arudino Heated Bed Folder to access the unzipped heated bed setting. Take note of where this is saved. We will be coming back to it in a moment.

Step 5 — Program Arduino cont.



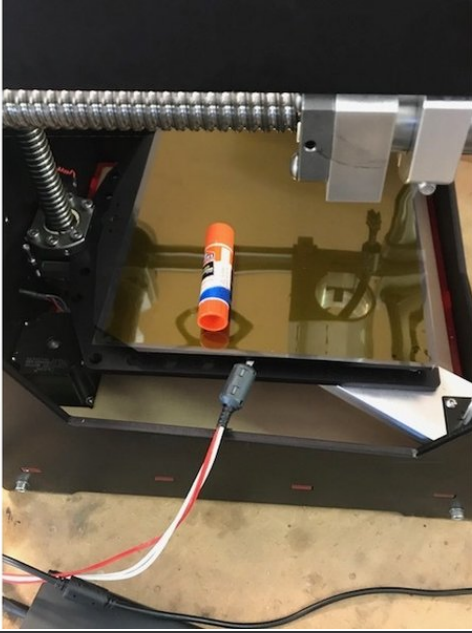
- At this point make sure your BoXZY is connected to your computer via the USB cord.
- Now, open the arduino software. This would have been downloaded as part of your initial BoXZY set up. There should be an icon for it on your desktop.
- Under the *Tools* tab find where it says *Port*. There should be one option for you to select. Select it. The COM number will be different for everyone. Also make sure all the other selections under the *Tools* tab match what is shown in the first picture including: Board, Processor, and Programmer selections.
- Next, under the *File* tab click *Open*. Now is when we need to relocate the files we downloaded in the previous step.
- Find the folder labeled *Arduino_Heated_Bed*. Double-click it and select the file called *Arduino_Heated_Bed*. Make sure you have the file selected and not the folder of the same name. Click open.
 - This should open an identical looking window but with the text for the heated bed settings.
- Click on the *Upload* icon that looks like an arrow pointing to the right. It is located in the top left corner of the newly opened window, directly under the *Edit* tab.
- It may take up to a minute to upload the new settings. You will know it is done when it reads "done uploading" at the bottom of the window. If there is an error be sure you are not connected in the BoXZY Interface at this time and that all the settings under *Tools* match what you see in the first picture of this step.

Step 6 — Update EEPROM firmware



- Open the BoXZY Interface and click the *Connect* icon in the top left corner.
- Click on the *Config* tab at the top of the interface and select *Firmware EEPROM Configuration*. This will open a new window with all of the firmware settings.
- Scroll down the page to you see the "Bed" settings. Change your settings to match what is shown in the second picture. Only change the values that are in the red box in the picture. Then click *OK*.

Step 7 — Get ready to print



- At this point your heated bed is ready to go.
- You can set your heated bed to your desired temperature within the Slicer.
- The heated bed works best with kapton tape and some kind of adhesive on top.
- For PLA we have found that kapton tape coated with the glue from an ordinary glue stick works well.