

Drawing Pen

This 3D Stereo Drawing Pen allows you to create 3D objects with your own hands. Now you can literally draw your own 3D designs. It melts ABS and PLA plastics which gets pushed down through the extruder similar to the 3D printers. With this, you have more control over when and where the plastic is extruded to create your design.

STEP 1: Setting up the Pen

- Insert the Power Adapter AC plug into an outlet and insert the DC plug into the end of the pen. A **YELLOW** light will appear next to the Display screen indicating that it has a charge and is properly connected.
- The Display screen will say "PLA" or "ABS", select which material you will be using by cycling through them with the buttons on both sides of the Display screen.
- After selecting the filament type, press the "wire feed button" it has an arrow facing down towards the Nozzle. When a **RED** light turns on by the Display screen it means the pen has reached the warming state. When the light changes to **GREEN** it indicates it has reached the correct temperature to melt the plastic filament.
- Insert the filament into the hole at the end of the pen, with your other hand, press and hold the Wire Feed Button. You will feel the filament being pulled into the pen. Do this until the nozzle extrudes some of your filament.

STEP 2: Creating with the Pen

- On one side of the pen, there is a Speed Switch that allows you to control how fast or slow the filament will come out of the nozzle.
- To make the filament extrude from the pen you will press and hold the Wire Feed Button. This will work as your control button for using the pen. The filament will only extrude when you hold down this button and it will stop when you let go.
- Begin extruding onto the surface by pressing the nozzle down to allow the filament to stick. Extrude enough plastic onto the surface till you have a small blob the size of a ladybug, this will be it's support when you start going up. Now you can draw upwards and out to create three-dimensional designs.

STEP 3: Removing the Filament

- Removing the filament is as simple as loading it. Above the Wire Feed Button is the Wire Withdrawal Button. All you have to do is hold down that button and it'll reverse the plastic out through the hole at the end of the pen.
- Help it out by gently pulling the filament out of the back.
- After it's removed cut the uneven end of the filament before putting it back in the pen.
- Whenever you are done using the drawing pen you should remove the plastic filament from the pen.

STEP 4: Changing filaments

- When changing the plastic filaments of the same type, ABS to ABS or PLA to PLA, you can just load it in right after unloading the last filament. Just follow the last bullet of Step 1.
- If you are loading PLA after using ABS you will have to unplug the pen and let it cool down for about two minutes. After the two minutes plug the pen back in and on the Display select PLA, then follow Step 1.
- If you are loading ABS after using PLA you will have to unplug the pen and let it cool down for about two minutes. After the two minutes plug the pen back in and on the Display select ABS, then follow Step 1.

TROUBLESHOOTING, COMMON PROBLEMS, AND QUESTIONS

- If you can't get your pen to turn on, check/try the following. Is the Power Adapter AC plug plugged into a working outlet? Is the DC plug firmly plugged into the port in the back of the pen?
- If the filament is not coming out as fast as you would like or not enough is coming out while you are drawing increase the speed with the Speed switch.
- If you do not use the pen for more than two minutes the pen will go into sleep mode, this will be indicated on the Display screen. Press the Wire Feed Button to wake the pen back up.
- If your plastic is not sticking to the surface and you are positive you are using the correct plastic you can use the Display buttons to increase or decrease the temperature. The theoretical temperatures are as followed. ABS 230°C and PLA 170°C. However to not increase the temperature too much for it may damage the pen. If you start hearing a strange clicking or cracking noise turn off the pen immediately, you have turned the temperature too high for the plastic.