3D Printer Pen Instructions

It's like a hot glue gun, just with plastic instead of glue! The plastic it uses is called filament. PLA filament is biodegradable and made from corn. ABS is synthetic plastic polymer made from oil, and has a stronger odor when it melts. Order more at nwa3d.com.
BE CAREFUL OF THE HOT NOZZLE.

Loading and Unloading Filament:

- Plug in the 3D printer pen to turn it on.
- Use the buttons next to the screen and choose ABS and press the white "down" loading arrow closest to the nozzle. ABS is a higher temperature, but PLA will melt on either setting. The light will turn red and you will see the temperature of the nozzle in Celsius as it heats up. Press the buttons next to the screen to make slight adjustments to the temperature.
- When the light turns green, it's heated. To load the filament, clip the end of the filament to straighten it and remove any melted gunk from the end. Then, hold down the "down" arrow again and <u>gently</u> push the filament into the hole on the top of the pen. You will feel the gear grab onto the filament and pull it in. Hold it down until the filament comes out the hot end on the bottom. DO NOT JAM IN FILAMENT MANUALLY.
- To unload filament, ensure the pen is heated (the light will be green). Then hold down the white "up" unloading arrow for two seconds. The filament will now unload automatically from the 3D printer pen. DO NOT YANK OUT FILAMENT MANUALLY.

Using the Pen:

- DO NOT JAM IN OR YANK OUT FILAMENT. Only use the loading and unloading arrows to feed filament, or the small gear and motor inside the pen will break and the 3D printer pen will not function. Failure to use this method can break the 3D printer pen and, unfortunately, NWA3D is not able to offer free replacements on broken motors due to misuse. We only offer replacements on factory defects.
- To create designs, hold the pen like a pencil. Be careful not to touch the white tip of the nozzle, it is HOT. Then, hold down the white "down" loading arrow, closest to the nozzle and the filament will come out, or extrude, from the nozzle of the pen.
- Just like a hot glue gun, when you hold down the loading arrow, filament will extrude. When you let go, it will stop. The white nozzle will be very hot, the black part will be warm, and the rest of the pen will be cool.
- Change the speed of the filament extruding by moving the up and down switch on the opposite side of the arrows. The closer to the nozzle it is, the slower the filament will come out.

Troubleshooting and Tips:

- If something isn't working, first try unplugging and plugging back in the pen and heating it back up to try again.
- If the filament isn't loading, first check that the speed switch is all the way up, farthest away from the hot end.
- Always clip the end of the filament before loading, to ensure it's straight and not bent or melted.
- Draw designs on masking or painter's tape on a table, for easy removal.
- Use a template on a piece of paper to create designs in 2D that will fuse together in 3D, like drawing 6 boxes and fusing them together with the 3D printer pen to make a cube! It will be easier to remove from paper when it completely dries, in about 30 seconds.
- The pen will go to sleep and cool down if it isn't used for several minutes. Just press the loading arrow to heat it back up and resume printing.
- The pen can be turned off without unloading the filament.
- If the filament isn't coming out, it may be clogged. Press the white unload arrow and unload the filament from the pen. Unplug the pen and plug it back in. Use the arrows next to the screen to choose ABS and press the white load arrow. Clip the filament end to ensure it is straight and try reloading the filament. Reloading new filament at a higher temperature will usually force clogs through.
- Jamming in or yanking out filament is the number one way that causes malfunctions in the 3D printer pen. If you take care of the it, you'll be able to print thousands of amazing things!
- If it still isn't working after trying these tips, contact service@nwa3d.com and we'll walk you through some things to try. Happy 3D printing!