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2014 Series 1

Tips & Troubleshooting Guide

Better Printing Tips

Filament should extrude smoothly onto the build surface, adhere to the platform, and have minimal gapping or ripples. Below are tips on how to resolve several common causes of print quality issues.

- **Build Surface Treatment:** An applied surface treatment ensures your print adheres to the platform.
  - **What to Do:** Ensure the build surface is freshly treated with an even layer of gluestick or blue painter's tape. If the edges of a build peel up after a gluestick treatment, try using the tape. If edges continue to peel, check build platform alignment.
- **Print Head Temperature:** If filament is printed at too low of a temperature it can affect adhesion between layers leading to skipping, gaping between layers and brittle prints. If the temperature is set too high the filament can "leak" from the print head, leaving strands or loops.
  - **What to Do:** Ensure designated temperature matches recommended temperature for brand, material, & recommendations for your 2014 Series 1 with late-2014 print head.

    Note on Temperature: *Series 1 printers shipped since mid 2014 come equipped with our high durability print head. This extruder runs at higher temperatures than previous Series 1 print heads. We recommend 220˚C for most PLA filament.*

    Build platform home position: If the home position of the build plate is set incorrectly it can exert pressure on the print head. This will cause the print head's nozzle to drag on the glass, and block extrusion of filament and may result in a clicking sound. If the home position puts the build surface too far from the print head (more than just barely touching), it will cause your print to adhere poorly to the build surface, make ripples, or waves, rather than a flat. smooth line.
  - **What to Do:** Follow the instructions found in the Quick Start Guide or User Manual to set the Build Platform Home Position.
- **Build platform installed correctly?** It's possible the build platform is not fully in place.
  - **What to Do:** Remove & reset the platform onto standoffs, ensure corners are in place.
- **Build platform out of alignment:** If the build platform is not aligned with the print head across the entire surface, your prints may adhere inconsistently.
  - **What to Do:** Check build platform alignment. Use X/Y buttons in the Control tab of the printer's web interface to move the print head to each corner of the build platform and ensure the distances between print head and build surface are consistent. If not consistent, you will need to align the build platform.
  - The build platform standoffs feature a bolt with a hex socket and spring protruding above the platform arm and a large black finger nut under the platform arm.
  - Go to the printer's web interface, click the Control tab, then click Z Home. Using the X/Y controls, move the print head to each corner of the build surface and ensure the print head needle just touches the glass build surface, but doesn't exert pressure.
  - To make an adjustment, loosen the black thumb nut found under each corner of the platform arm. Use the hex wrench to turn the bolt, raising or lowering only that corner. Check all corners and adjust as needed. Be sure to tighten the black thumb nuts or your build platform may drift out of alignment.

Print Head Not Extruding Filament

- **Temperature:** The temperature may not be high enough for the filament being used. Check in the Temperature tab of the web interface and verify it is appropriate.
- **Dust on the Pinch Wheel:** Blow off dust accumulated on the pinch wheel which feeds filament into the print head to ensure it's not slipping. This may be a symptom of the temperature being set too low for the filament used.
- **Print Head Clogged with Filament:** To clear your print head of filament, bring the temperature up to 220˚C in the Control tab, attempting to extrude the filament with the extrude button in the Temperature tab. If unsuccessful, manually remove the clog by pushing another strand of filament through. Pulling up on the filament may also work.
- **Poor Quality Filament:** Poor quality filament can jam a print head. Clear the clog as noted above, then contact your filament source, ask for a refund and cease using any filament which has uneven diameter or occasional lumps.

Trouble Connecting to the Printer

Via Router or Base Station

- Restart the printer after connecting via Ethernet to your router or base station.
- Restart the router or Wi-Fi base station.

Via Ethernet cable

- Ensure Ethernet cable is inserted into both printer and computer first and restart printer.
- Confirm that the URL has been entered correctly, with the last four digits from the number engraved on the front panel, replacing "XXXX" in *series1-XXXX.local:5000* and allow up to six minutes for the printer's web interface to load.
- Finally, restart the printer and computer.

Via Wi-Fi

- If you've just set up Wi-Fi, ensure the Ethernet cable is unplugged and restart the printer.
- Be sure to set the printer and your computer are on the same Wi-Fi network.
- The printer may be temporarily slow to respond during active printing. Refresh the page.

Trouble With the Printer's Web Interface

- If the printer's web interface exhibits unexpected or unresponsive behavior, refresh the page.
- To enable or disable the GCode viewer go to Settings in the top right of your browser window, then click on "Features" then click on the "Enable GCode Visualizer" checkbox, then refresh the page.

Trouble Turning on the Printer

- Ensure printer is securely plugged in, then turn it on using the power switch on the back.
- Ensure the front button is flush with the front panel (not depressed) and lit, then restart printer.

Getting More Out of Your Series 1

Visit our Getting Started page for a Quick Start Guide video, Series 1 User Manual, models to print, and desktop slicing software to prepare your own models for printing.

www.typeamachines.com/gettingstarted