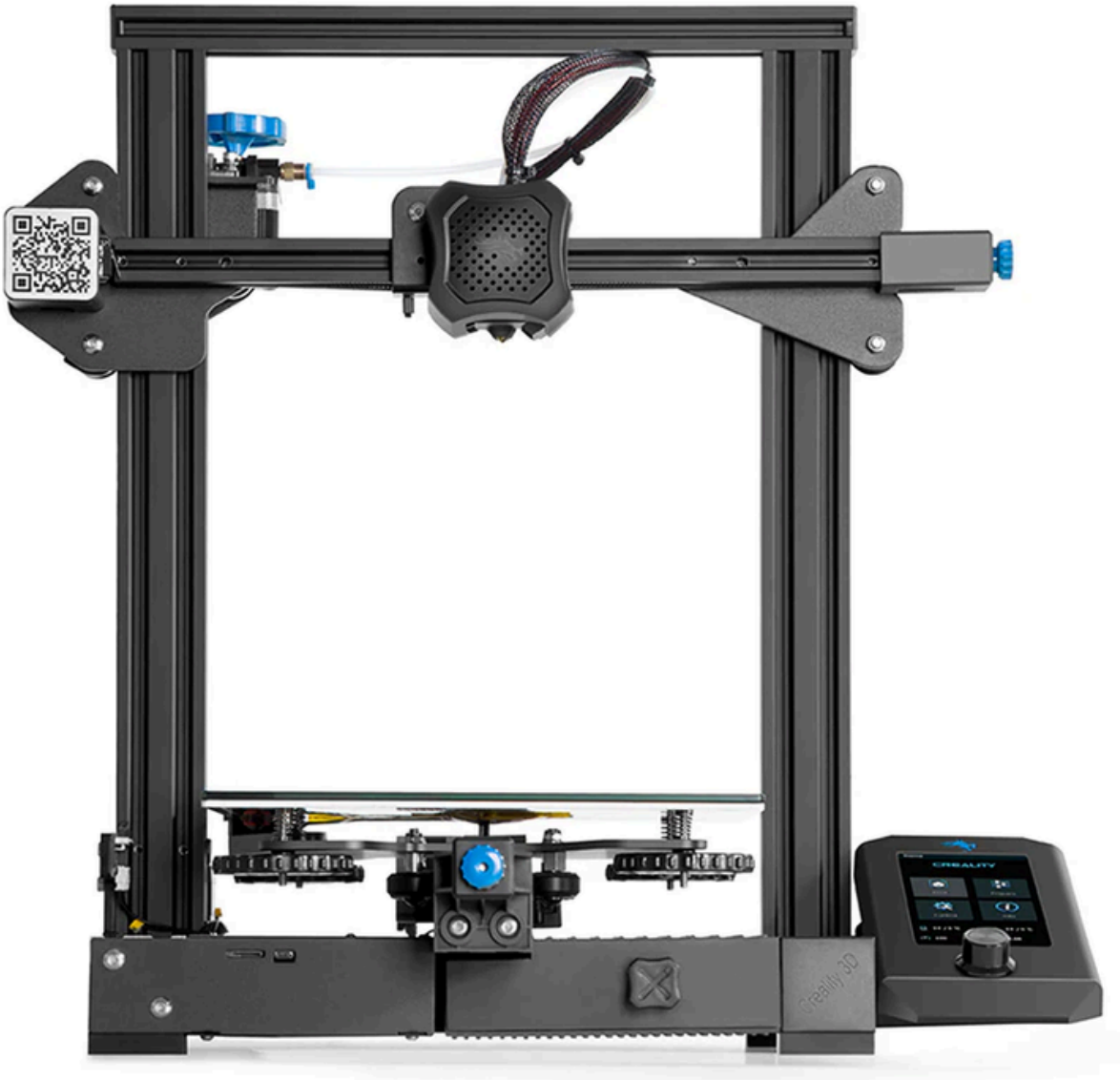
Ender 3 V2

Quick Guide



CREALITY

Contents:

Home Screen

Print:

- **File list:** Displays all *.gcode* files on the SD card.
- **Select file:** Choose a file and the printer will automatically home and begin heating.

Prepare:

- **Auto Home:** Homes all axes to their endstops.
- **Move Axis:** Lets you manually move the X, Y, Z, or extruder axes by 0.1, 1, or 10 mm increments.
- **Disable Steppers:** Turns off motors so you can move the print head by hand.
- **Preheat PLA / ABS:** Quickly sets bed and nozzle temps to stored PLA/ABS values.
- **Cool Down:** Shuts off heaters.

Control: (Control = Settings)

- **Temperature:**
  - Set nozzle and bed target temps.
  - Adjust “Preheat PLA” and “Preheat ABS” values (customizable).
- **Motion:**
  - Change movement speeds, steps per mm, and acceleration (advanced tuning).
- **Filament:**
  - Set loading/unloading temps and extrusion distances.
- **Store Settings / Restore Defaults:**
  - Save your current settings or reset to factory settings.

Info:

- **Firmware version:** Shows the installed firmware.
- **Build date:** When the firmware was compiled.

Selecting a file (Print Screen)

This menu displays a list of printable files in the root directory of the SD card. If there is no SD card inserted or no files are found the list will be empty.

Find the file with this format:

fnameLname_projectName

Printing Screen

Tune:
Tune allows you to manually modify the current print speed, nozzle and bed temperature and the fan speed. There is also a Z offset control allowing the position of the Z axis to be modified.

Pause:
Pauses the print allowing it to be resumed.

Stop:
After confirmation the print is stopped and cannot be resumed

Preheating:

- Navigate to the **“Prepare”** screen
- Select either:
  - **Preheat PLA:** Heats the bed and nozzle to the preset PLA temperatures
  - **Preheat ABS:** Heats the bed and nozzle to the preset ABS temperatures

Set custom temperatures:

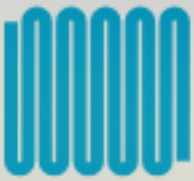
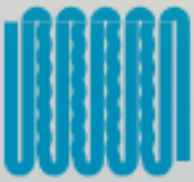
- Navigate to the **“Control”** screen
- Select either:
  - **Nozzle Temperature:** Heats the nozzle to a value that you enter
  - **Bed Temperature:** Heats the bed to a value that you enter

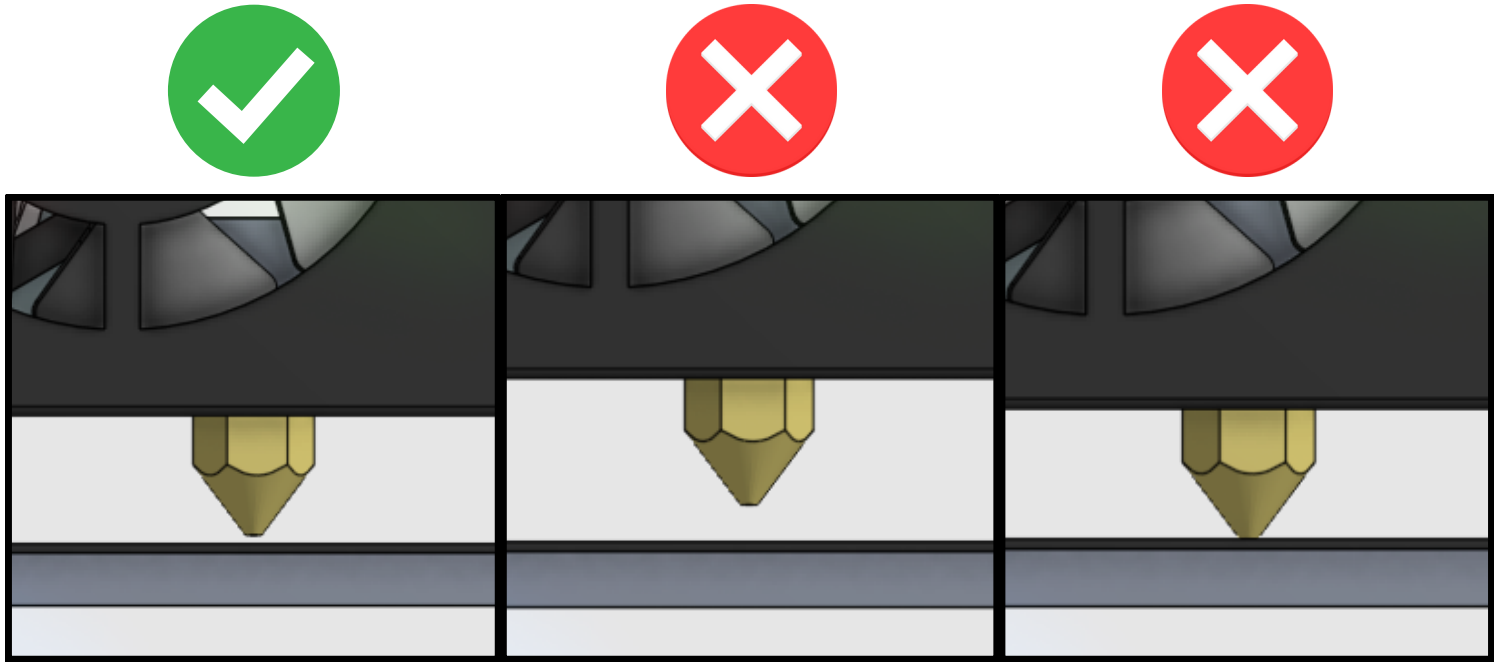
Adjusting preset temperatures:

- Navigate to the **“Control”** screen
- Select either:
  - **Preheat PLA Settings:** Allows for adjustment of quick preheat values for PLA
  - **Preheat ABS Settings:** Allows for adjustment of quick preheat values for ABS

4. Bed leveling

- Home the nozzle (In the **“Prepare”** screen)
- Move the tool head to one of the four corners of the build plate and check the height
- Refer to the graphic below:
  - **Too Close**: Turn the leveling wheel clockwise
  - **Too Far**: Turn the leveling wheel counter clockwise
- Repeat for all corners

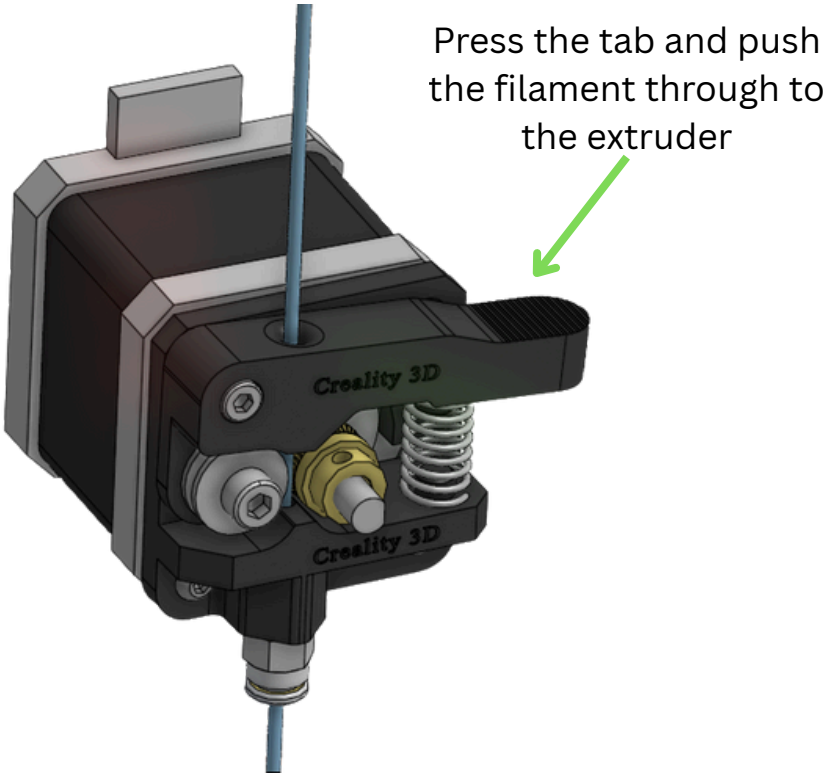
		The nozzle is at the correct height above the platform.	✓
		The nozzle is too far from the platform. This may cause the extruded material to not stick to the build plate.	X
		The nozzle is too close to the build plate. This may damage the nozzle and the build plate.	X



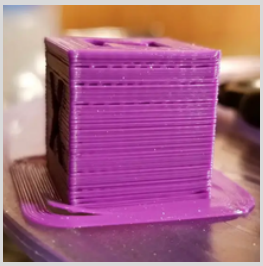
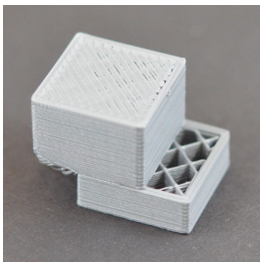
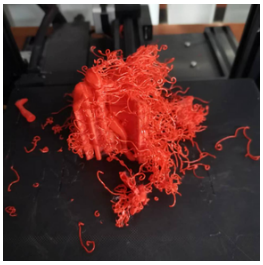
Correct **Too Far** **Too Close**

- The nozzle **must** be hot to load or remove filament.
- Preheat the nozzle on the "**Prepare**" screen to the required temperature for the filament you are loading/removing.
  - If switching to a new material, make sure the nozzle is hot enough for the old material as well!
- Push filament through to the extruder and push until the old color has purged.

Material	(Nozzle) Extrusion Temperature
PLA	180 to 230 °C
ABS	210 to 250 °C
PETG	80 to 110 °C
Nylon	240 to 260 °C
TPU	210 to 230 °C



6. Common Errors & Signs of failure

Issue	Cause	Solution
Filament is not extruding (Often linked with the extruder motor clicking or ticking)	Nozzle is too close to the bed	Re-level the bed. Follow steps on **page 5**
	Nozzle is clogged	Heat up the nozzle then insert an acupuncture needle to break up the blockage
	Filament is out, tangled or snapped	Reload filament and ensure that the quality is apt for printing
Filament is under-extruding 	Nozzle temperature is too low for the loaded filament	Adjust the nozzle temperature in the slicer software and restart the print
		OR Click the tune button and manually adjust the current printing temperature
	Nozzle has a minor clog	Heat up the nozzle then insert an acupuncture needle to break up the blockage
Layer shifts 	Poorly tensioned belts & pulleys	Tension belts and pulleys **with assistance**
Warping (Item begins to peel off the bed during printing)	Moist filament	Load a new roll of filament
	Incorrect print temperatures	Check the material specifications listed on the spool
	Excessive sharp corners in your design	Add rounding to sharp outer corners of your design (Tool is often called **Fillet**)
Spaghetti Failure 	Bed is poorly leveled	Re-level the bed. Follow steps on **page 5**
	Bed temperature is incorrect	Adjust the bed temperature in the slicer software and restart the print.
		OR Click the tune button and manually adjust the current printing temperature
	Bed contact area is too low	Try adding a **"Brim/Skirt"** in the slicer