



Suited for Advanced Users

# **LulzBot TAZ Dual Extruder v3 Tool Head**

Take your designs to the next level with the all-new LulzBot TAZ Dual Extruder v3 Tool Head. This tool head was engineered to utilize dedicated support material, including soluble filament, like PVA, that dissolves and separates in water, freeing you to focus on the function of your design rather than on how to make it 3D printable.

The Dual Extruder v3 does not require nozzle leveling or offset calibration, is lighter and more compact than its predecessor, and features improved heat sink and part cooling. With hassle-free hardware, integrated software, and water-soluble support material, who knew geometric freedom could be this easy?

### **Features**

The LulzBot TAZ Dual Extruder v3 was engineered with a focus on printing with dedicated support materials. The Dual Extruder v3 enables 3D printing complex geometry that previously would have required time spent removing same-material supports with a risk of breaking your print and almost always leaving evidence of the support in imperfect bottom surfaces. With water-soluble supports like PVA, let the water do the work and enjoy clean and accurate bottom surfaces.

The Dual Extruder v3 features a unibody heatsink with two hot ends co-developed with E3D, makers of the ever popular line of all-metal hot ends. The precision-machined design brings the hot ends closer together, resulting in a dual extruder with no need for nozzle leveling or offset calibration. Just install the tool head and accessories, quickly flash firmware with Cura LulzBot Edition, and start printing.

The Dual Extruder v3 comes with everything you need to install on your LulzBot TAZ 6, including an extra wide wiper pad mount that enables your Dual Extruder v3 to work flawlessly with LulzBot self-cleaning and self-leveling technology.

The Dual Extruder v3 was specifically designed for 3D printing models with soluble support material, which is the primary reason LulzBot users want dual extrusion. Soluble support allows freedom of design which means better rapid prototypes and better efficiency. We have had many questions about the v3's ability to do other kinds of dual extrusion printing:

Question 1: Can the LulzBot TAZ Dual Extruder v3 Tool Head print in two colors of the same material?

Answer: Yes, absolutely, however the print profiles built into Cura LulzBot Edition have not been optimized for multicolor printing. If multicolor printing is your goal, you may need to make modifications to the included profiles for optimal results. We have included all LulzBot supported material base profiles under the Experimental classification in Materials as a good starting point. As we continue to develop Cura LulzBot Edition, we hope to have more supported material combinations in the future.

Question 2: Can the LulzBot TAZ Dual Extruder v3 Tool Head print flexible materials?

Answer: Yes, the Dual Extruder v3 is capable of printing flexible materials. Through our internal testing, we have found that PolyDissolve S1 and PVA stick very will to TPU's (flexible filaments), but the profiles have not yet been fine-tuned for optimal cosmetic results. Because of this, all of our flexible material profiles have been included in the Experimental section of Cura LulzBot Edition as a starting point for making your own modifications. Printing with flexible materials is recommended for advanced users on the Dual Extruder v3. As we continue to work on Cura LulzBot Edition, we hope to have more supported materials in the future.

Question 3: Can the LulzBot TAZ Dual Extruder v3 Tool Head print solid and flexible materials together?

Answer: Yes, the hardware of the Dual Extruder v3 is capable of printing solid and flexible material together, but the profiles have not been optimized for reliability or cosmetic results. Because ofthis, all of our flexible and solid material profiles are included in the Experimental section of Cura LulzBot Edition Materials, and can be used as a good starting point for making your own modifications. Printing with flexible

and solid materials is recommended for advanced users on the Dual Extruder v3.

Question 4: Where can the individual components for the LulzBot TAZ Dual Extruder v3 be purchased?

Answer: We are currently ramping up production on the v3 Dual Extruder Tool Head, and at the moment we are using all components for production units. Once our inventory levels stabilize, we will likely be carrying the harder-to-find components, such as the hot ends, machined parts, and motors. Sign up for our New Product newsletterin order to get the latest information on new product releases.

# **Parts & Specifications**

#### Parts Included

- (1) LulzBot TAZ Dual Extruder Tool Head v3 (Fully Assembled)
- (1) 3D Printed Z-axis endstop extension mount (for TAZ 6)
- (1) Machined Z-axis endstop extension (for TAZ 6)

Note: The Z-axis Toggle Extension and Mount should only be used on a TAZ 6 with the Dual Extruder v3 Tool Head. Leaving this extension on the printer and using it with other tool heads will cause failed probes due to the higher registered minimum position.

- (1) Dual v3 wiper mount
- (1) Additional spool arm
- (1) Feed tube spinner
- (1) T-nut holder jig

- (1) Idler jig
- (4) Wire tie
- (4) 3D printed low profile bed corners (For TAZ 5)
- (2) Extension harnesses
- (1) M5 washer (Black)
- (1) M5 x 14 socket head cap screw
- (1) Filament Feed tube
- (1) Sample length of Polylite PLA
- (1) Sample length of PolyDissolve S1

## Specifications

Required filament diameter: 2.85mm diameter

Hot end temperature range: 120°C - 300°C

Nozzle diameters: 0.5mm

Required power system: 24 Volts

Fans: Two 24v 40mm axial fans for extrusion cooling, one 5v

40mm axial fan for heat-sink cooling

Weight: 0.96 kg (2.11 lbs)