

EASY TAZ MINI DEVELOPER'S GUIDE



LulzBot Easy TAZ Mini Developer's Guide
by Aleph Objects, Inc.
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Audience

This is a developer's guide to hacking on the LulzBot Easy TAZ Mini 3D Printer. It is meant for developers, not users, of the printer.

Open Source Hardware, Free Software

Aleph Objects, Inc. is a Loveland, Colorado, USA company that manufactures Open Source Hardware using Free Software.

For more info, visit <http://www.alephobjects.com>.

LulzBot Easy TAZ Mini Developer Overview

1.1 Easy TAZ Mini

The LulzBot Easy TAZ Mini is a 3D Printer currently under development. The abbreviated name is mini-dev.

The source files are available here:
http://dewel.lulzbot.com/Easy_TAZ_Mini/

1.2 Versions

Each new version of the mini-dev has a new name, with the next letter in the alphabet.

- Azalea - First Prototype
- Begonia - Second Prototype, being built now
- Camellia - Third Prototype
- Daffodil - First Production batch

1.3 Begonia Photos

Figure 1.1: Begonia Front Photo

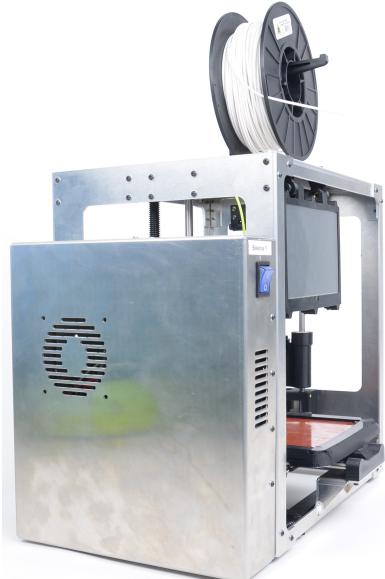


Figure 1.2: Begonia Left Photo

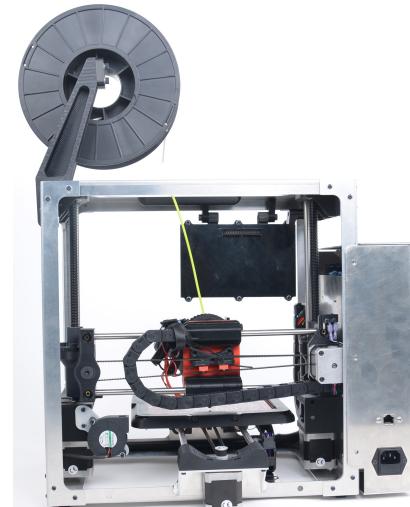


Figure 1.3: Begonia Back Photo

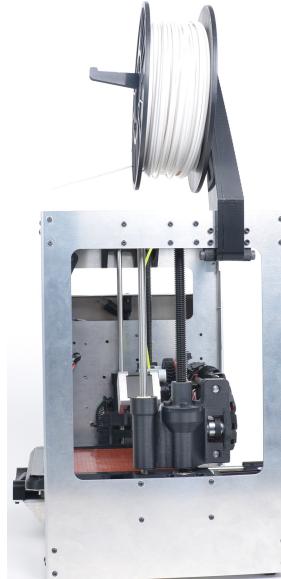


Figure 1.4: Begonia Right Photo



Figure 1.5: Begonia Spool Arm Up Photo



Figure 1.6: Begonia Spool Arm Down Photo



Figure 1.7: Begonia Green Color Scheme Photo



Figure 1.8: Begonia Black Green Color Scheme Photo

1.4 Schedule

The schedule is updated weekly. It is in Libre Office spreadsheet format.
The latest version is available here:

http://devel.lulzbot.com/Easy_TAZ_Mini/program_management/

Mechanical

Cartesian Bot in X, Y, Z

2.1 Intro

Mechanical hardware specs and parts are in these subdirectories:
http://devel.lulzbot.com/Easy_TAZ_Mini/

2.2 Begonia Renders

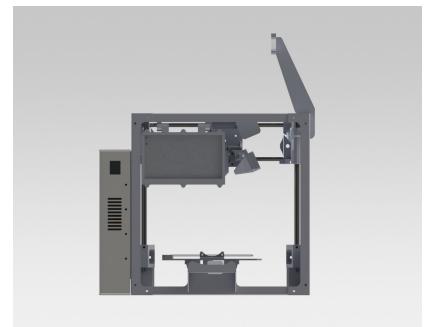


Figure 2.1: Begonia Front Render

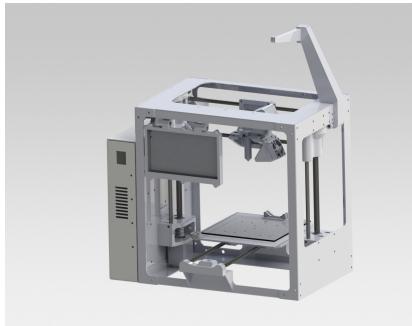


Figure 2.2: Begonia ISO Render

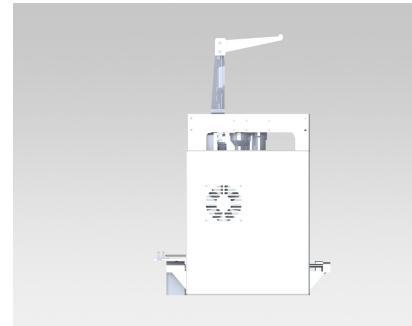


Figure 2.3: Begonia Left Render

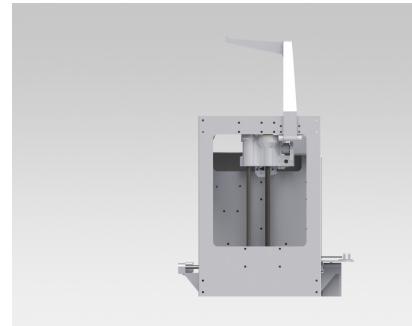


Figure 2.4: Begonia Right Render

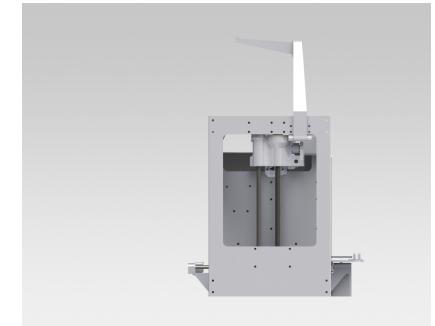


Figure 2.5: Begonia Right Render

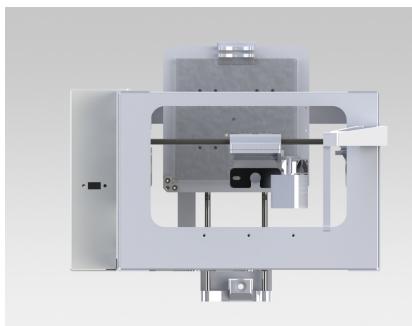


Figure 2.6: Begonia Top Render

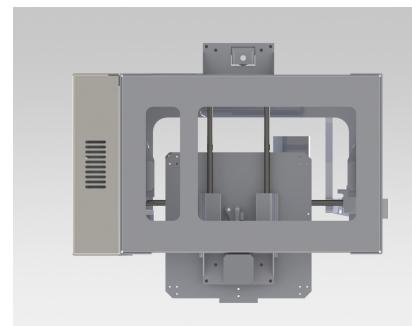


Figure 2.7: Begonia Bottom Render

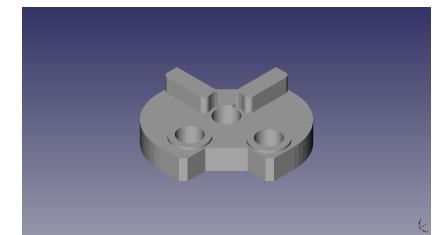


Figure 2.8: Begonia 3D Printed Bed Corner Render

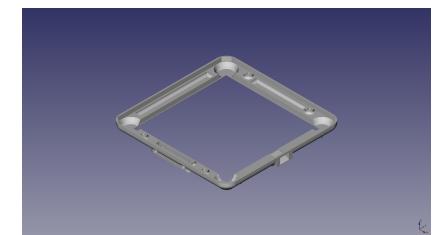


Figure 2.9: Begonia 3D Printed Bed Cover Render



Figure 2.10: Begonia 3D Printed Bed Fan Mount Render

2.5 Begonia Extruder

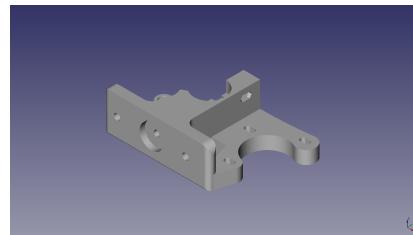


Figure 2.12: Begonia 3D Printed Extruder Body Hex Render

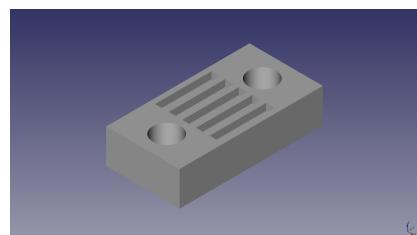


Figure 2.11: Begonia 3D Printed Belt Clamp Render



Figure 2.13: Begonia 3D Printed Extruder Mount Render

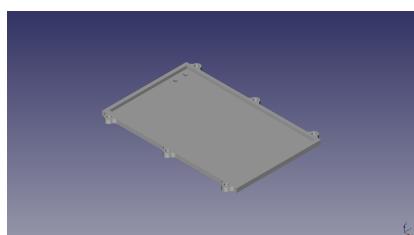


Figure 2.14: Begonia 3D Printed LCD Back Cover Render

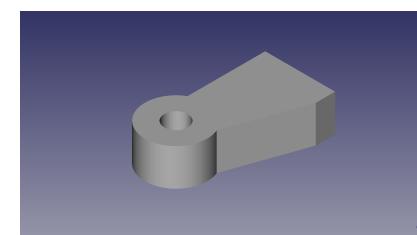


Figure 2.16: Begonia 3D Printed LCD Hinge Render

2.7 Begonia Spool



Figure 2.18: Begonia 3D Printed Spool Arm Render

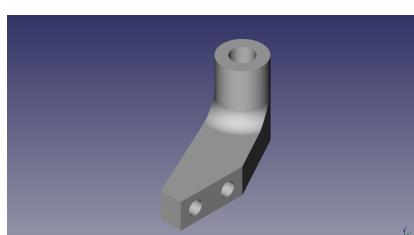


Figure 2.15: Begonia 3D Printed LCD Catch Render

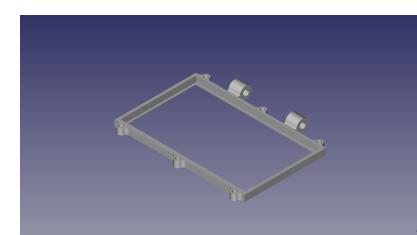


Figure 2.17: Begonia 3D Printed LCD Mount Render

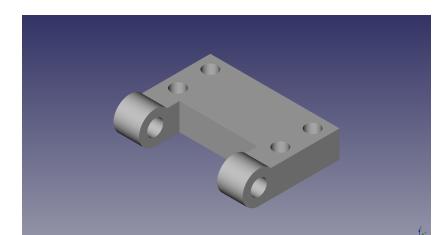


Figure 2.19: Begonia 3D Printed Spool Hinge Render

2.8 Begonia X



Figure 2.20: Begonia 3D Printed Spool Mount Render

2.9 Begonia Y

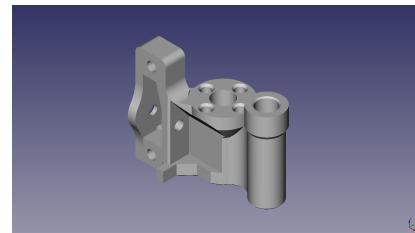


Figure 2.21: Begonia 3D Printed X End Idler Render

2.10 Begonia Z

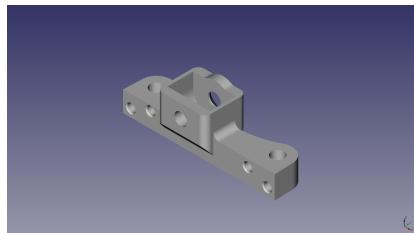


Figure 2.23: Begonia 3D Printed Y End Idler Render

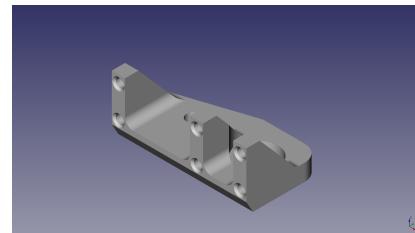


Figure 2.25: Begonia 3D Printed Upper Z Left Render

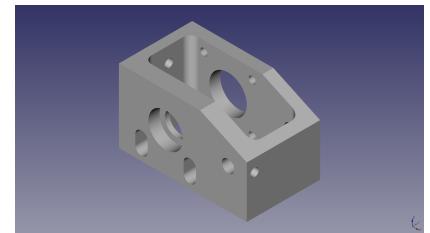


Figure 2.27: Begonia 3D Printed Lower Z Left Render

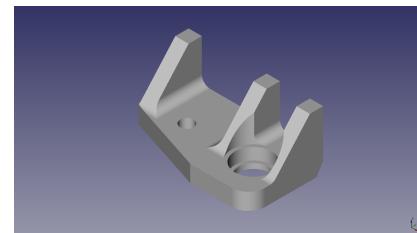
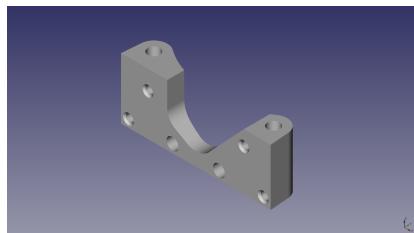


Figure 2.26: Begonia 3D Printed Upper Z Right Render

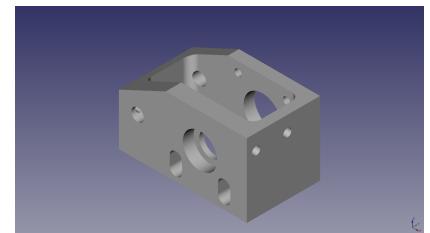


Figure 2.28: Begonia 3D Printed Lower Z Right Render

2.11 Begonia Misc



Figure 2.29: Begonia 3D Printed Double Bearing Holder Render

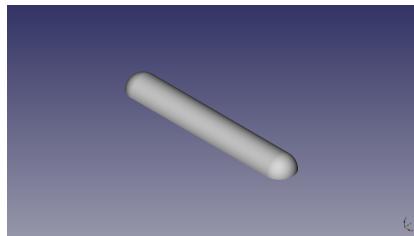


Figure 2.31: Begonia 3D Printed Handle Bar Render

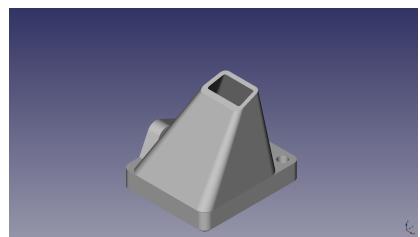


Figure 2.30: Begonia 3D Printed Fan Mount Render

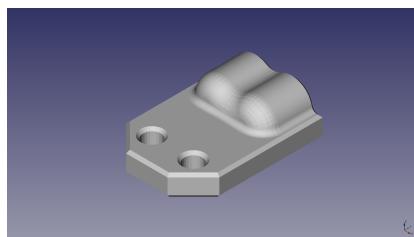


Figure 2.32: Begonia 3D Printed Cable Carrier Mount Render

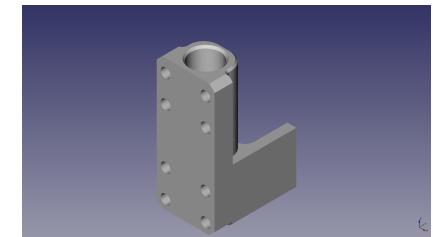


Figure 2.33: Begonia 3D Printed Extruder Mt Top Double Bearing Holder Render

2.12 Begonia Drawings

2.13 Camillia Drawings

3.1 Electrical Layout

Electrical
Power Supply, wiring

3D Printer Controller
Mini-RAMBo

4.1 Intro

The printer controller will be the RAMBo-Mini.

Contact
Phone, Email, Web, Location

5.1 Support

Email: support@alephobjects.com
Phone: +1-970-377-1111 x010
LulzBot Forum
<http://forum.lulzbot.com>

5.2 Sales

Email: sales@alephobjects.com
Phone: +1-970-377-1111 x600

5.3 Websites

Aleph Objects, Inc.
<http://www.alephobjects.com>
LulzBot 3D Printers
<http://www.lulzbot.com>

Colophon

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GNU/Linux
 \LaTeX Memoir
