



**re:3D HQ**

A 701 Brazos St  
Suite 1616  
Austin, TX, 78701

W [www.re3d.org](http://www.re3d.org)  
P (512) 730-0033

## re:3D Training Outline

### 1) Contact us

- a. [www.re3d.org](http://www.re3d.org)
- b. [Wiki.re3d.org](http://Wiki.re3d.org)
- c. Email: [support@re3d.org](mailto:support@re3d.org)
- d. YouTube: <https://www.youtube.com/user/GigaBot3D/>
- e. Twitter: @re3Dprinting
- f. Instagram: @re3dprinting

### 2) Environmental requirements

- a. Power: 110V or 220V @ 10A or 5A respectively
- b. Low dust environment (typical office space)
- c. Ambient temperature: 10C to 30C
- d. Humidity: <70% RH
- e. Footprint: 90cm x 130cm x 130cm (W x D x H)

### 3) Receiving and preparing to operate

#### i. Getting started Guide:

<https://www.youtube.com/playlist?list=PL8n1nJeRvWq0uPRZyvPX5TGv5yq8kLF4c>

### 4) Viki controller

- a. Select file and start print
- b. Stop print
- c. Move axis
- d. Home machine
- e. Monitoring your print
- f. Importance of first layer

## 5) Machine / Mechanics overview

- a. Bed leveling
- b. Setting Z home position
- c. Setting dual extruder
- d. Changing filament
  - i. Importance of the filter cloth
  - ii. Extruder tension
- e. Out of filament detection

## 6) Simplify3D

- a. 3D model export settings
  - i. .stl or .obj
  - ii. # of triangles
- b. Verify model is manifold
- c. Model orientation to minimize support material, strength and print time
  - i. Largest flat surface on bed
  - ii. Part strength
  - iii. Support material
  - iv. Tall thin parts
- d. Pre-set profiles for material, resolution, extruder
- e. Custom Settings
  - i. Infill percentage
  - ii. Solid top and bottom layers vs infill percentage
  - iii. Raft
  - iv. Multiple processes
  - v. Vary the print parameters based upon print height (Advanced tab)
  - vi. Apply different process settings to different models on the table
- f. Dual extrusion
  - i. Prime pillar
  - ii. Multi-material prints
    - 1. PVA
    - 2. Dual Color

- 7) Gigabot Maintenance
  - a. Cleaning
  - b. Grease rods
  - c. Tension belts
  - d. Check bed level
- 8) Wiki and website resources
  - a. Getting the most from your Gigabot
  - b. Changing filament
- 9) Design for 3D printing
  - a. Overhangs
  - b. Hole dimensions
  - c. Part tolerance and model resizing
  - d. Part strength

