# **Flux Laser- Recommended Starter Settings for Starter Kits**



BCB4 | CA123/CA128 | GH341771D | LM922204D | LSW18MAP | RSC10 | CC1 | SND20-BW | SST-SF20E





## **GENERAL INSTRUCTIONS**

### **Recommended Equipment & Accessories**

- Flux Laser Engraver
- Rotary attachment accessory (for drinkware items only)
- Soft clean cloth
- Isopropyl alcohol
- Degreaser cleaner

Beamo Desktop Laser Cutter and Engraver- 30W										
Item #	Description	Engraving- Medium 250 DPI			Engraving- High 500 DPI			Cutting		
		Power %	Speed mm/s	Passes	Power %	Speed mm/s	Passes	Power %	Speed mm/s	Passes
BCB4	Bamboo Cutting Board- 6" x 8"	25-30	150	1	25-30	150	1	N/A	N/A	N/A
CA123/ CA128	Solid Cast Acrylic	30-35	300 (max)	1	25-30	300 (max)	1	50-55	5-6	1
GH341771D	Rowmark ColorHues Glitter Cast Acrylic	30-35	300 (max)	1	25-30	300 (max)	1	45-55	3-4	2
LM922204D	Rowmark Lasermax White/Black Engraving Plastic	30-35	300 (max)	1	25-30	300 (max)	1	50-55	12-14	1
LSW18MAP	Solid Wood Sheets- 6" x 12"	25-30	150	1	20-25	150	1	50-55	3-5	1
RSC10	3.94" Round Slate Coaster	30-35	150	1	25-30	150	1	N/A	N/A	N/A
CC1	4" Diameter Circular Cork Coaster	20-25	300 (max)	1	20-25	300 (max)	1	Laser cutting is not recommended for this product		
SND20-BW*	20oz SS Tumblers w/ Removable Silicone Sleeve	25-30	205	1	20-30	230	1	N/A	N/A	N/A
SST-SF20E**	Simply 20oz Skinny Tumblers	40-50	203	1	20-30	203	1	N/A	N/A	N/A

<sup>\*</sup> Remove the silicone sleeve from the tumbler before engraving. For best engraving results, utilize the silicone sleeve jig template. The jig template can be found on JPPlus.com on the product page for 20oz SS Tumblers w/ Removable Silicone Sleeve under the Tech Docs and Downloads tab.

<sup>\*\*</sup> Requires use of the Beamo Rotary Extension (FLUXB30ROT).

Beambox Desktop Laser Cutter and Engraver- 40W										
Item #	Description	Engraving- Medium 250 DPI			Engraving- High 500 DPI			Cutting		
		Power %	Speed mm/s	Passes	Power %	Speed mm/s	Passes	Power %	Speed mm/s	Passes
BCB4	Bamboo Cutting Board- 6" x 8"	30-35	150	1	25-30	150	1	N/A	N/A	N/A
CA123/ CA128	Solid Cast Acrylic	30-35	300 (max)	1	25-30	300 (max)	1	60-65	10-12	1
GH341771D	Rowmark ColorHues Glitter Cast Acrylic	30-35	300 (max)	1	25-30	300 (max)	1	60-65	8-10	1
LM922204D	Rowmark Lasermax White/Black Engraving Plastic	30-35	300 (max)	1	25-30	300 (max)	1	40-45	14-16	1
LSW18MAP	Solid Wood Sheets- 6" x 12"	30-35	150	1	20-25	150	1	55-60	5-7	1
RSC10	3.94" Round Slate Coaster	30-35	150	1	25-30	150	1	N/A	N/A	N/A
CC1	4" Diameter Circular Cork Coaster	25-30	300 (max)	1	25-30	300 (max)	1	Laser cutting is not recommended for this product		
SND20-BW*	20oz SS Tumblers w/ Removable Silicone Sleeve	35-45	205	1	20-25	230	1	N/A	N/A	N/A
SST-SF20E**	Simply 20oz Skinny Tumblers	30-35	203	1	25-30	230	1	N/A	N/A	N/A

<sup>\*</sup> Remove the silicone sleeve from the tumbler before engraving. For best engraving results, utilize the silicone sleeve jig template. The jig template can be found on JPPlus.com on the product page for 20oz SS Tumblers w/ Removable Silicone Sleeve under the Tech Docs and Downloads tab.

<sup>\*\*</sup> Requires use of the Flux Rotary Extension 40W/50W (FLUXB40ROT).

Beambox Pro Desktop Laser Cutter and Engraver- 50W										
Item #	Description	Engraving- Medium 250 DPI			Engraving- High 500 DPI			Cutting		
		Power %	Speed mm/s	Passes	Power %	Speed mm/s	Passes	Power %	Speed mm/s	Passes
BCB4	Bamboo Cutting Board- 6" x 8"	25-30	150	1	20-25	150	1	N/A	N/A	N/A
CA123/ CA128	Solid Cast Acrylic	25-30	300 (max)	1	20-25	300 (max)	1	55-60	10-12	1
GH341771D	Rowmark ColorHues Glitter Cast Acrylic	25-30	300 (max)	1	20-25	300 (max)	1	55-60	8-10	1
LM922204D	Rowmark Lasermax White/Black Engraving Plastic	25-30	300 (max)	1	20-25	300 (max)	1	35-40	14-16	1
LSW18MAP	Solid Wood Sheets- 6" x 12"	20-25	150	1	15-20	150	1	50-55	5-7	1
RSC10	3.94" Round Slate Coaster	25-30	150	1	20-25	150	1	N/A	N/A	N/A
CC1	4" Diameter Circular Cork Coaster	20-25	300 (max)	1	20-25	300 (max)	1	Laser cutting is not recommended for this product		
SND20-BW*	20oz SS Tumblers w/ Removable Silicone Sleeve	30-40	205	1	15-20	230	1	N/A	N/A	N/A
SST-SF20E**	Simply 20oz Skinny Tumblers	25-30	203	1	20-25	230	1	N/A	N/A	N/A

<sup>\*</sup> Remove the silicone sleeve from the tumbler before engraving. For best engraving results, utilize the silicone sleeve jig template. The jig template can be found on JPPlus.com on the product page for 20oz SS Tumblers w/ Removable Silicone Sleeve under the Tech Docs and Downloads tab.

<sup>\*\*</sup> Requires use of the Flux Rotary Extension 40W/50W (FLUXB40ROT).

#### **General Laser Engraving Instructions**

- Place the product onto the laser bed.
- Move the laser head by hand over to the surface of the product and adjust the laser focus to the product's surface.
- Open the Beam Studio software. Click the "Image" icon on the left toolbar to import artwork into the Beam Studio software.
- Enter the Camera Preview feature by clicking on the camera icon at the top left of the Beam Studio window. In the Camera Preview mode, click the "Camera +" button to activate the camera function.
  - o The screen may show "entering RAW mode..". The laser is calibrating the camera to be able to photograph the laser bed properly.
- Left mouse click-hold and drag over the area of the bed that the product blank is located. Once the photos are populated, exit the Camera Preview feature by clicking the "End Preview" button at the top of the left toolbar.
- With the photo of the bed populated on the Beam Studio layout, position the artwork as needed on top of the bed photo. Make any additional adjustments needed using the available Beam Studio tools.
  - Text, shapes, etc. can also be created within Beam Studio without the need for importing previously created artwork.
- Once the artwork is positioned, engrave/cut using the suggested starting settings.
  - o Send the job to the laser by clicking the "Go" button at the top right of the Beam Studio window.
  - o Settings may need adjusted depending on the laser tube wattage.
- When finished, remove the product from the laser bed.
- If cleanup is needed, wipe the surface with a clean cotton cloth lightly misted with isopropyl alcohol.
- If cleanup is needed on coated products such as powder coated drinkware, wipe the engraved area with a cloth misted with a degreaser cleaner.

#### **Tips and Tricks**

- To find a range of settings that work best on the product, a laser power grid test can be run in the Beam Studio software by going to File > Examples.
  - o Select one of the "Material Engraving" options for testing laser engraving.
  - o Select one of the "Material Cutting" tests for testing laser cutting.
  - o These tests should be done on a spare product or extra piece of material, as it will alter the product/material permanently.

#### **Troubleshooting**

- The engraving is too shallow.
  - o Laser power setting and/or resolution may need to be increased.
  - o Laser speed setting may need to be decreased.
  - o Check laser focus.

- o Check and clean laser lenses and mirrors.
- o Check laser alignment. (see laser users manual on how to check and adjust laser beam alignment)
- The engraving is too deep.
  - o Laser power setting and/or resolution may need to be decreased.
  - o Laser speed setting may need to be increased.
- The engraved area is charring/melting.
  - o Laser power setting and/or resolution may need to be decreased.
  - o Laser speed setting may need to be increased.
- The edges along the laser cut line are curling.
  - o Laser power setting may need to be decreased.
  - o Laser speed setting may need to be increased.
  - Make sure the laser cutting ("honeycomb") grid is inserted to set the product up off of the solid metal laser bed.
  - o Make sure air assist is running when cutting.

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For additional product support and troubleshooting, please contact JPPlus Advanced Support Team:

- Phone: 419-500-4877
- Email: ast@jpplus.com
- Schedule an appointment: https://jpplusadvancedsupport.setmore.com/