

Part 03 - 1st layer tweaking

[JellyBox HowTo: Z-Probe Setup Part THREE \(5.5 min\)](#)



Notes and more:

Short version

- Observe and analyse the 1st layer and use the Nozzle +/- function to adjust until the filament is nicely squished and sticking to the build platform.
- Blue tape stops sticking after a few prints. Replace the affected area. Alternatively, buff the blue tape using some medium grit sandpaper.
 - The sandpaper treatment does wonders - we've been able to even hold even ABS quite well. (Still [we do NOT recommend printing ABS](#). Don't do it. The fumes are toxic.)

Long version

The probe's sensing distance is always larger than 1mm. If you followed the "Z height set up" guide, you can simply tweak the first layer height by adding a negative offset to the probe's sensing distance. A good precaution is to first go into settings and set the Z probe offset to zero. This ensures you will not drive your nozzle into the build plate.

The general procedure is to simply start printing anything, and lower the nozzle if it's too high and raise the nozzle if it's too low. That's all that is to it.

Go ahead and tell Jellybox to print something.

1. Insert the card into the reader on the left side of the LCD controller
2. Press the knob once, scroll all the way down and select
 - a. "Print from SD" -> select a compatible imade3d profile sliced gcode file
 - b. If you're using pre-loaded Imade3d SD card, navigate to GCODES folder and select any file (PLA if you're printing PLA). For example, "s3d_EvilDucky PLA..."
3. Jellybox should heat up to the printing temperature, perform auto bed leveling procedure, and start printing

Observe the first layer

If the nozzle is too high (which initially it should), lower the nozzle by lowering lower Z probe offset, that is making the value more negative. (Note that the Z probe offset can never be positive by design.) This puts the nozzle close to build plates.

Repeat this step as many times as necessary. What you're looking for is a moderately squished first layer with no visible gaps between parallel lines throughout the first layer. Squishing the first layer more will get you a better adhesion while making the first layer oversized. Squishing it less will get you a more 'precise' print, but with a higher risk of the object warping, lifting, and getting completely messed up.

Attachments

1st LAYER SQUISHINESS REFERENCE

relative additional
Z PROBE OFFSET

TOO HIGH 0 -0.1 -0.2 -0.3 -0.4 -0.5 -0.6

sticks less *middle ground* *sticks more*

IMADE3D

Image

(printable pdf
downloadable at
<https://www.imade3d.com/support/>)