

QUICK START GUIDE
LGX® lite V2



QUICK START GUIDE

Read this Quick Start Guide for proper extruder installation.



Each LGX Lite V2 extruder is supplied with:

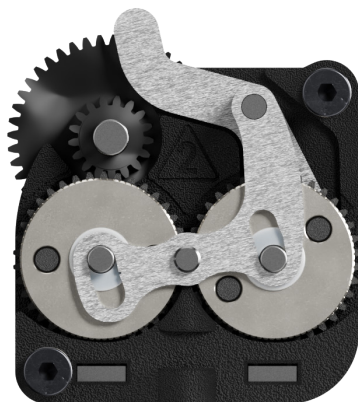
- 1x LGX Lite V2 feeder;
- 1x Nema14 Round 20mm pancake stepper motor (mounted on extruder)
 - 1m long lead cable with JST-XH 4-pin connector
- 1x 2mm Hex Key (recommended tool)
- 1x Powered By Bondtech sticker

Also shipping with additional accessories:

- 1x Push-fit collar (inserted)
- 1x 30mm PTFE tube to use in the PTFE Tube Adapter
- 8x M3 square nuts for reinforcing mounting holes (inserted)

LEVER POSITIONS

The different lever positions of the LGX lite V2 allows for flexibility when using different kinds of filaments and for loading and unloading. Below we have outlined the intended use of these different positions.



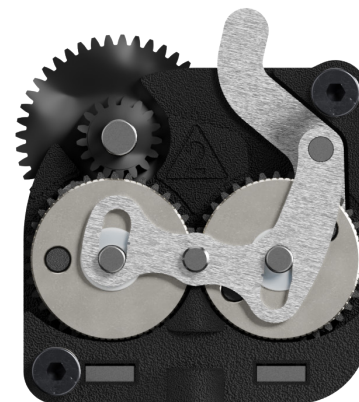
Position 0

Load or unload filament without pressure from the drivegears



Position 1



For rigid materials





Position 2

For semi-flexible or flexible materials

MOUNTING HOLES

For the LGX lite V2 offers eight different mounting hole locations for different uses. Side holes  may be used for peripherals such as accelerometers or toolhead boards while the top hole  is ideal for mounting a filament sensor.

The bottom mounting holes  are commonly used for mounting the LGX lite V2 to a toolhead.

The single side mounted hole  is an addition we introduced in this V2 of the extruder, in order to provide increased flexibility when developing integrations.



MACHINE CONFIGURATION

For the LGX lite V2 to work on printers where current is set with trimpots you need to adjust a couple of settings regarding the extruder system.

VREF

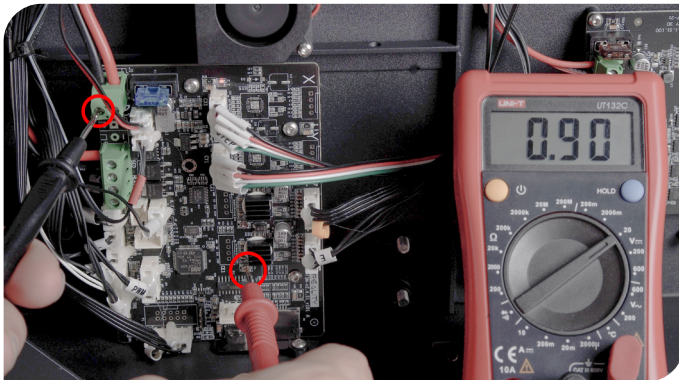
This will differ depending on your specific drivers. Aim for about 550-650 mA RMS.

E steps/mm

562

This is set by using the *Settings.gcode* file or with the following gcode sent in pronterface:

```
M92 E562 ; set esteps  
M500 ; save esteps
```



Tuning the VREF, an example

KLIPPER CONFIGURATION

Below we have listed the common Klipper parameters for LGX lite V2

rotation_distance

5.7

This is set in your [extruder] section in your cfg in Klipper

```
rotation_distance: 5.7
```

```
#gear_ratio: #not used
```

```
run_current: 0.65
```

```
#hold_current: #not used
```

SLICER CONFIGURATION

When using the LGX lite V2 for the first time, verify the retraction parameters in your slicer. For larger nozzles than 0.40 mm you may need to add length to this.

35 mm/s

0.6 mm length

If these settings still gives you stringing, we suggest you dry your filament and calibrate your extrusion multiplier since that is often the root cause of stringing when retraction has these settings.

TAKE GOOD CARE OF IT

Every 6 months, or sooner if you have a higher than 15h per week average usage, perform the following maintenance operations:

1. With a tooth brush and alcohol:
 - a. Clean the double gear and the drive gears
 - b. Clean the needle bearings
2. With a fine brush and lubricant
 - a. Lubricate the needle bearings
3. With compressed air
 - a. Blow the housing plastic parts to remove dust and dirt particles

HOW TO GET HELP

We are available to help you with any questions or issues you may have. Simply go to our website where you can access our customer support and send us your questions or follow the provided link:

https://www.bondtech.se/contact/#tab_technical-support-requests

