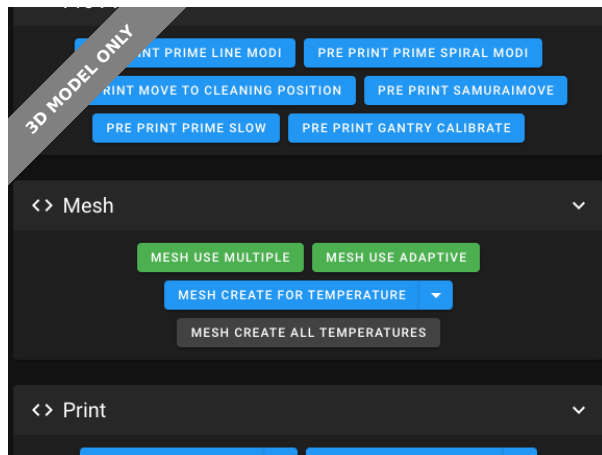




Klipper Printer Additions 3.0b9.1 - More Than Boring Start-G-Code

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[VIEW IN BROWSER](#)

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Summary

Multiple + Adaptive Bed Mesh | Smart Heating | + Extra Modules for SV07/Plus and klipperized SV06/Plus.

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Please don't forget to like - I want my Prusameters! 😊

- If you update from a previous 3.x beta, make sure to read the Release Notes, contained in the download.
- If you update from an 2.x release, please read the Setup Guide, contained in the download.
- 3.0 Beta-Release Notes, partial and ultra-compact:
 - Fixed: "move out of range" errors.
 - Fixed: "Extrude below minimum temp".

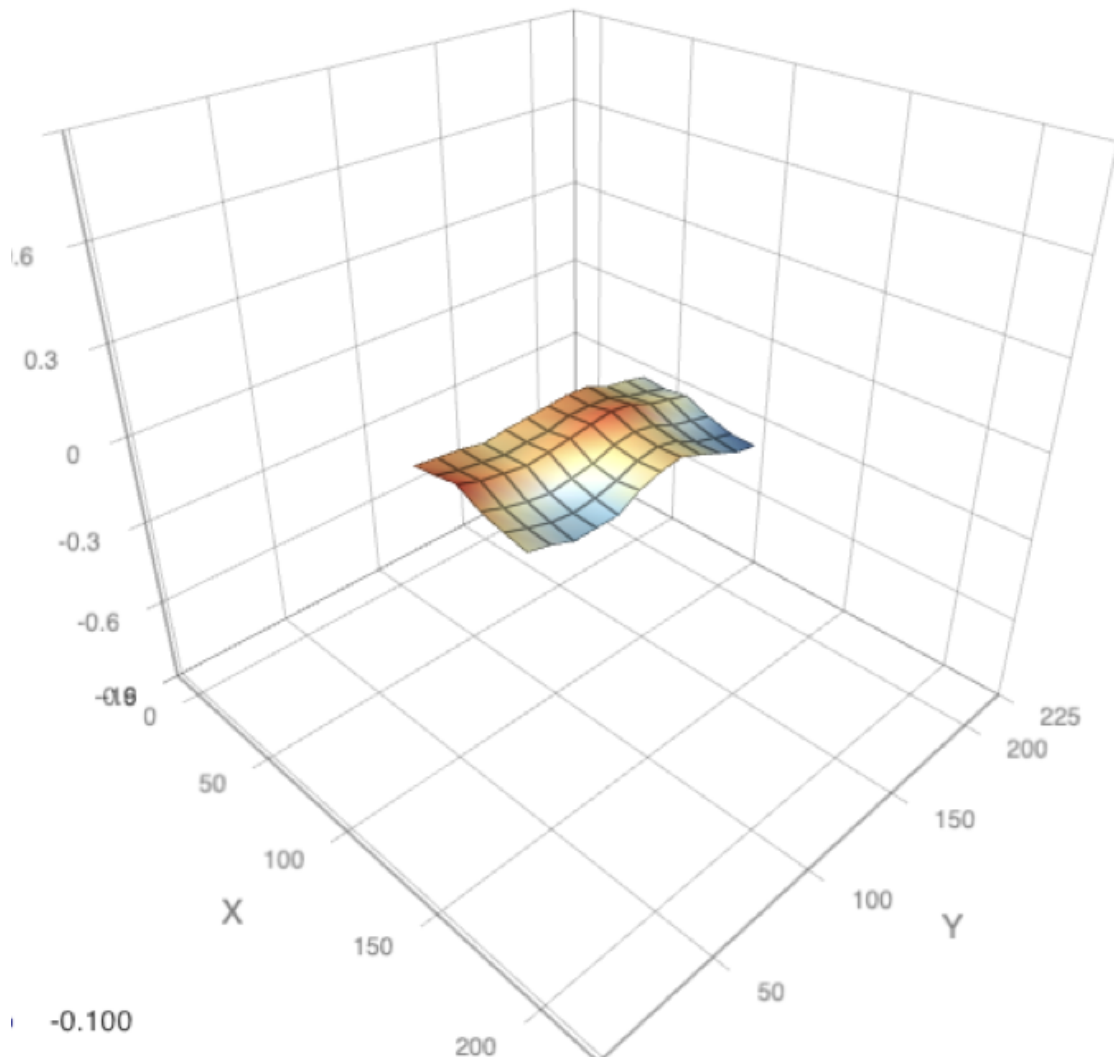
- Heat Saturation for the bed and probe, against first-layer problems.
- New Button “PrePrint Prime Options”, to enter the flow rate (and thus print speed) of the Prime Spiral and Prime Lines.
- New buttons: Calibration Tools - buttons with guidance.
- Adaptive Probe Points for bed mesh.
- New button: Bed Mesh Organizer.
- Every button re-worked (more informative).
- All documentation re-worked, and in PDF-format.
- SV07 Fan Modules improved.
- Lots of other improvements.

Klipper Printer Additions - More Than Boring Start-G-Code

Quick Overview

- The **Power of Klipper**, and much more, baked into **simple to use buttons**.
- The KPA **automate** the whole pre-print procedure. Like a conductor, they give the right instructions at the right time, so that your print starts faster, without ouzing, and with better first layers.
- **Adaptive Mesh** Mode + Adaptive Purging/Priming.
Save time by only probing the area where the model is printed.

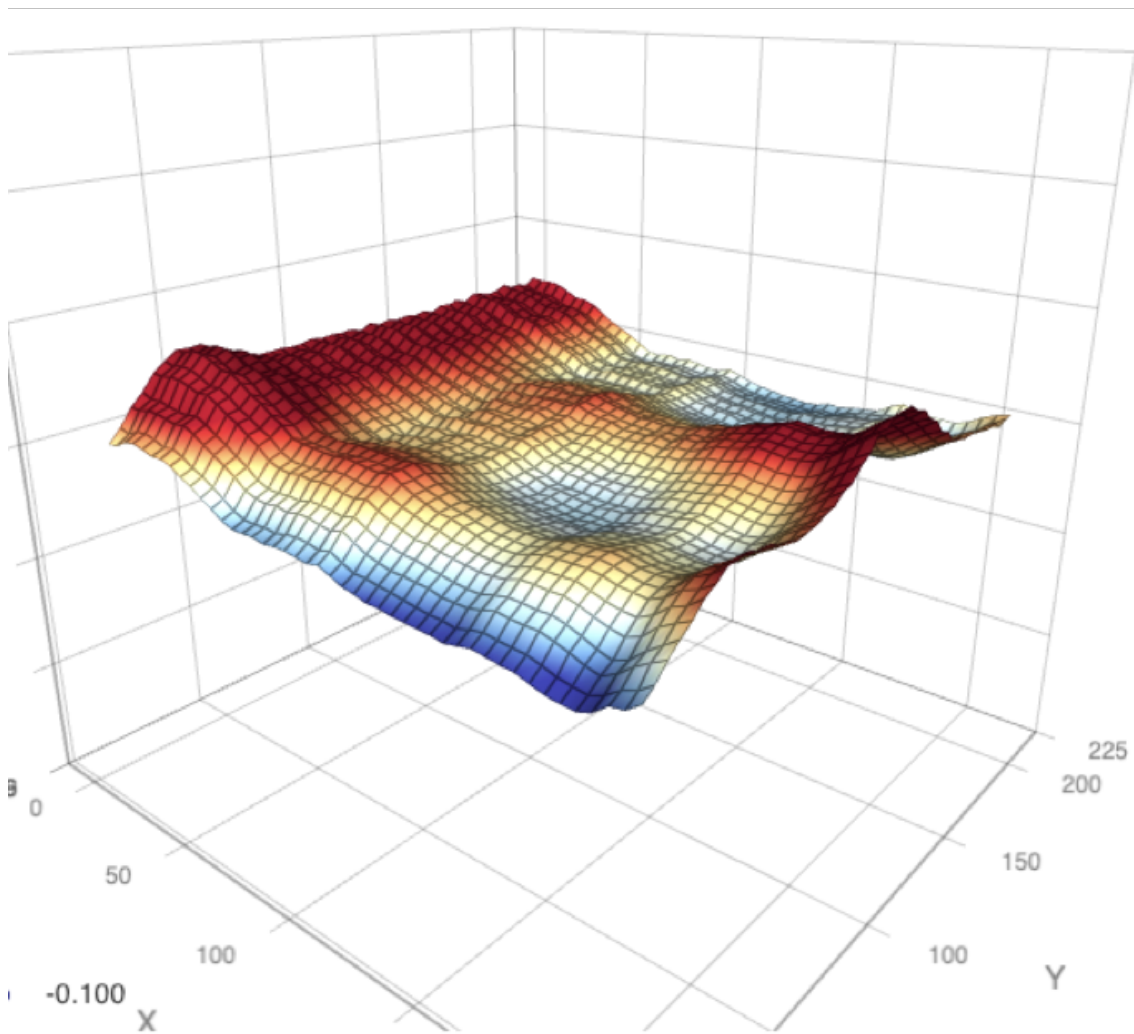
MESH ADAPTIVE MODE



- **Multiple Mesh Mode + Adaptive Purging/Priming.**

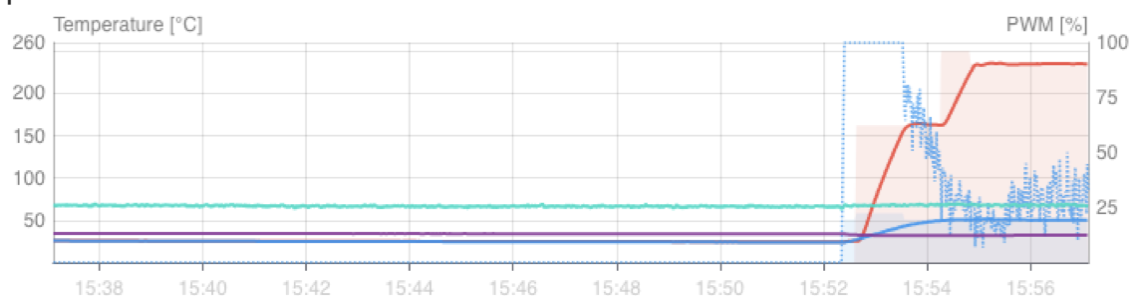
Even speeds of light **faster** than Adaptive Mesh Mode. Bed Meshes are automatically created by bed temperature, saved, and re-used. In fine temperature steps of no more than $\pm 5^{\circ}\text{C}$.

MESH MULTIPLE MODE



Ridiculous 2025 probe points, but just for testing some things out. 😊

- **Adaptive Mesh Probe Point Count**, Independent of your printer's bed size, the probe density is the same (and adjustable). This applies to Multiple- and Adaptive Mesh Mode.
- **Faster Print Start**, by heating smart, and without ouzing - you can print even without a skirt.



- **Prime lines** which clean better than regular prime lines, have **anti-ouzing**, and are **very easy to remove**.
- **Prime Spiral** which cleans in **360°**, and indicates if your **z-level** is fine.
- **Calibration Tools at your fingertips**, no printer display required. For example, a fully automated and guided measurement of Rotation Distance Calibration! 😊

<> Calibration ▼

CALIB Z LEVEL PAPER TEST

CALIB BED SCREWS

CALIB ROTATION DISTANCE ▼

CALIB PROBE ACCURACY

CALIB PID ▼

CALIB INPUT SHAPER ▼

CALIB BED FINALIZER

CALIB SAVE CONFIG

- **Print Slow In Height**, can seamless reduce the printing speed on tall models. Very handy on bed slinger printers. Automated, or fully configurable, also during the print.

PRINT SLOW IN HEIGHT ▼

START_AT_HEIGHT
 auto

END_AT_HEIGHT
 slicer

END_SPEED_PERCENT
 auto

SEND

- **Print Pause In Heights**, pauses the print at desired points. Fully configurable, also during the print.

PRINT PAUSE IN HEIGHTS ▼

HEIGHT_POINTS_MM
11+22.2

SEND

Usability

- The **KPA are easy to use**, by simple buttons, which show you state and infos. Everything is directly accessible in Mainsail / fluidd.
- **Easy to set up**, by copy & paste. Minimal "invasion" of your printer.cfg (only one text line).
- **Easy to update**, by just uploading new files to the printer via Mainsail / fluidd.
- **Easy Slicer Guides**, without a single step missing, on how to set up your slicer app: OrcaSlicer / PrusaSlicer / Cura / IdeaMaker / Others.
- **Guide**, how to fix first layer problems on the hardware-side, and test-print-files.
- **Guide**, why and how to level a printer which calibrates the gantry with Z-Tilt.

Modularity

Most KPA modules can be enabled / disabled, to have the KPA customized as you want them.

- Bed Mesh Area
- Bed Mesh Multiple
- Bed Mesh Organizer
- Pre-Print
- Pre-Print Prime Tools
- Print Slow In Height
- Print Pause In Heights
- Calibration Tools

- Speed Heat Buttons
- Slicer OrcaSlicer
- Slicer PrusaSlicer
- Slicer Cura

Printer Modules

In addition there are extra Printer Modules, to plug-in additional functionality and bug fixes for specific printers. Currently:

• Sovol SV06/Plus Features Module

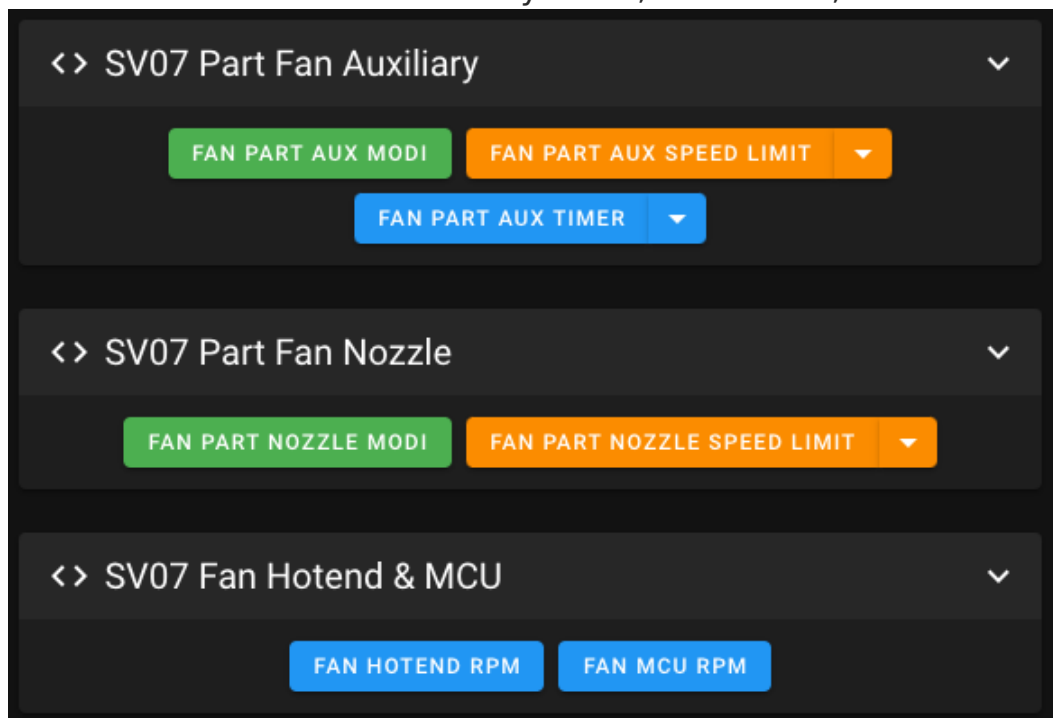
- More reliable probing for homing and bed meshes.
- Custom Gantry-Level method, that does not drive brutal into the gantry.
- No error "Move exceeds maximum extrusion".
- Improves PAUSE, RESUME and CANCEL_PRINT.
- Handles Filament Change commands from the Slicer (M600).
- Display stuck in startup-animation: Sometimes the displays of KlipperScreen / SV07 go into an endless startup-animation-loop, while the printer is still normally working via Mainsail. A missing preference of KlipperScreen causes this. This preference item is now created by the Klipper Printer Additions, so the display can exit the loop.
- Adds a 15-minutes-inactivity safety timeout, and it respects filament changes.
- Corrections for printer.cfgs with wrong values.

• Sovol SV07/Plus Features Module

- Cures most of the SV07's z-level / First Layer Problems.
- More reliable probing, for homing, z-tilt and bed mesh.
- Protects you from executing Z-Tilt manually, if printing with Z-Tilt is disabled, to save you from bad first layers.
- No error "Move exceeds maximum extrusion".
- Displays the temperatures of the MCU and the MKS Pi. In Mainsail, fluidd, and the Printer's Display.
- Display stuck in startup-animation: Sometimes the displays of KlipperScreen / SV07 go into an endless startup-animation-loop, while the printer is still normally working via Mainsail. A missing preference of KlipperScreen causes this. This preference item is now created by the Klipper Printer Additions, so the display can exit the loop.
- Replaces Sovol's PAUSE, RESUME and CANCEL_PRINT Macros.
- Handles Filament Change commands from the Slicer (M600).
- Handles the print head's LED on print-start / print-end / print-cancel. Fully customizable to whatever behavior you prefer.
- Adds a 15-minutes-inactivity safety timeout, and it respects filament changes.

- **Sovol SV07/Plus Part Fans**

- Auxiliary Part Fan mode control: Dynamic, Permanent, Off (the modes are in detail explained when you click their buttons).
- You can also set a Speed Limit, and a Cool-Down-Timer.
- Nozzle Part Fan mode control: Dynamic, Permanent, Off.



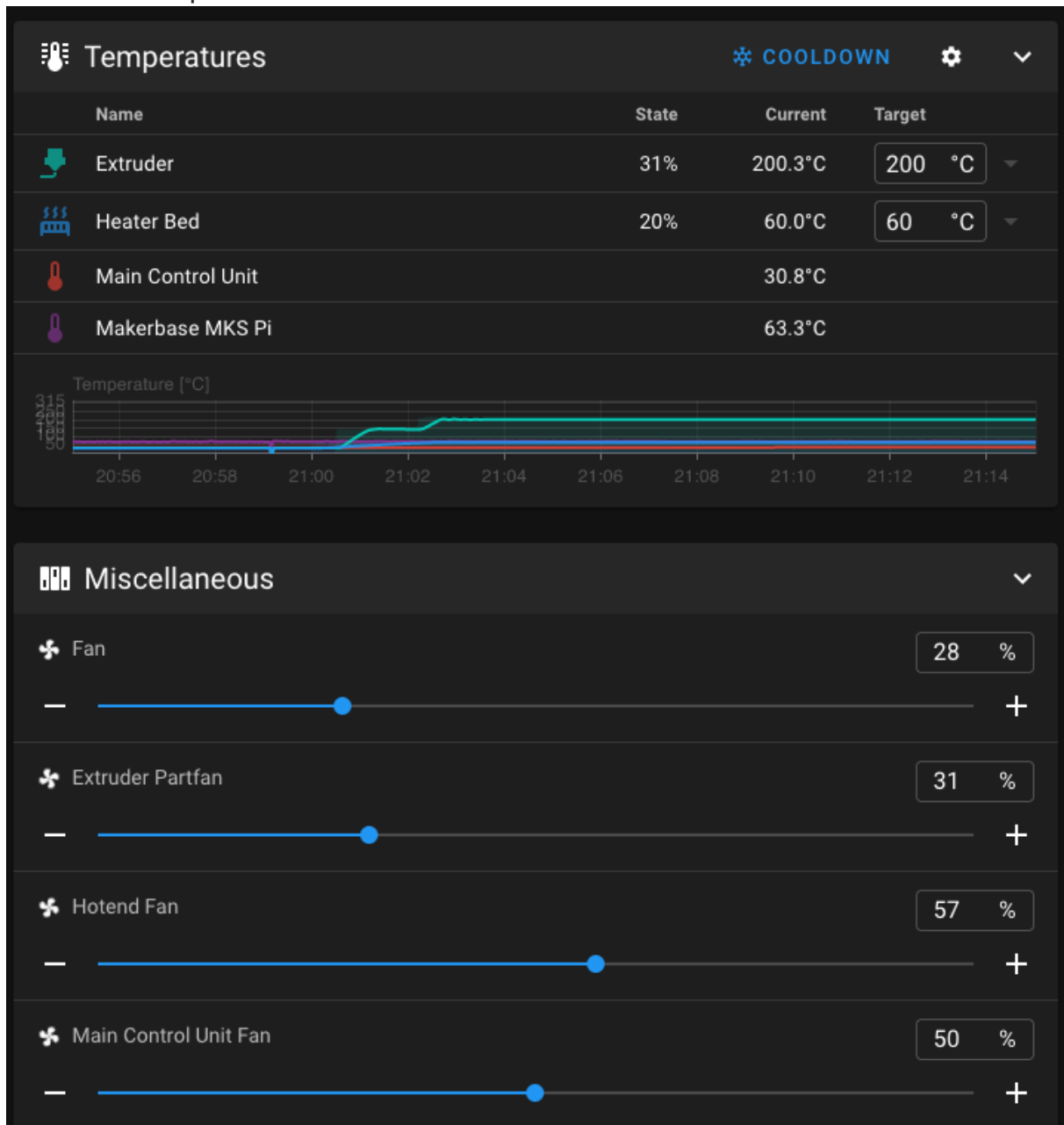
- **Sovol SV07/Plus MCU Fan**

- Great noise reduction.
Options: Full Speed (like factory) or temperature-controlled with variable speed.

- **Sovol SV07/Plus Hotend Fan**

- Great noise reduction.
Options: Full Speed (like factory) or temperature-controlled with variable speed.

All SV07 Temperatures & Fans



More detailed Info and extensive documentation about the KPA...

...can be found in the documentation in the download.

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- Amazon: <https://amzn.to/3L35OX2>

Thank you!
Christian

Disclaimer

Use everything entirely at your own risk.

Model files



first-layer-220x220x028-edge-cut.stl

Other files

klipper-printer-additions-30b91.zip

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