Creality Ender 3 S1

Unboxing, assemble, initial leveling, print video: https://www.youtube.com/watch?app=desktop&v=Z2n3ATTNQpc&ab channel=Pergear https://www.youtube.com/watch?v=AghQEvW-4JQ

Replacing Filament mid-print: https://www.youtube.com/watch?v=tCDtsEs51D8

Materials

Material settings: PLA 60C Hotbed, 200C Nozzle, for long narrow prints use 65-70C Hotbed temp ABS 100C Hotbed, 240C Nozzle, ensure no drafts during print

Warping on long models:

Set to 60 to 65 degree and im am cooling it down after first layer by 3-8 degree to 57°). Also tried reduce the temperature from the bed to 50-55 but Amazon Basic PLA (which is known for bed layer adhesion...) don't seem to stick well with this setting.

I reduced the fan speed and i enable the fan at layer 3 instead of 2 (also read that some people start fan at laver 5). This seems to work for now....

In general i would suggest to reduce bed heat as much as possible and maybe reduce the z-offset so that the first layer is literally pressed onto the bed. (Attention to not scratch your build plate) - (Check with first layer calibration prints which z-offset is the minimum to still have a nice first layer)

Webcam holder

Note that the standard webcam/tripod/camera mount screw is 1/4-20 UNC = 6.35mm with 20 thread size. An M5/M6 screw does NOT fit.

Ender 3 s1 Modular webcam mount by Taylorthomas https://www.thingiverse.com/thing:5414618

https://www.printables.com/model/328522-ender-3-s1-webcam-mount https://www.thingiverse.com/thing:5199333 https://www.thingiverse.com/thing:5349102 https://www.printables.com/model/273755-ender-3-s1-universal-webcam-mount Gantry Camera Mount for Ender-3 S1 by Superman889 https://www.thingiverse.com/thing:5476426 https://printingatoms.com/how-to-connect-camera-to-ender-3/

Ender 3 Raspberry Pi Camera Mount https://www.thingiverse.com/thing:3188580

Official Creality LED Light bar

https://www.amazon.co.uk/Creality-Official-3D-Printer-Upgrade/dp/B09VH3NMHP

The instructions are quite bad, so here are a couple pointers:

- It doesn't matter which LED power plug goes into the switch on the right hand side
- To screw it in, remove the blind plastic pieces at the top of the Z Axis
- for cable routing use the same path as the filament sensor cable. The blind snaps off and back on:

https://www.youtube.com/watch?v=LifRM4gGVi0

Ender 3 S1 Light Bar Cable Cover by kaimimue https://www.thingiverse.com/thing:5968849

S1/ S1 Pro parts

Bed screw locks https://www.thingiverse.com/thing:6070269/comments

Ender 3 S1/Pro extruder cable holder/guide by Bananenminister https://www.thingiverse.com/thing:5532813 https://www.printables.com/de/model/297182-ender-3-s1-pro-extruder-cable-holder-curaprofiles

Ender-3 S1 Easy Space Saver Control Mount - Easy Print (S1 Pro & V2 as well) *new version 1.02 link in notes by Zakor https://www.thingiverse.com/thing:5368309

Ender 3-S1 Tray Organizer Insert https://www.thingiverse.com/thing:5971430 or: Creality Ender 3-S1 - tray insert/Organizer By-N_G by N_G4ever https://www.thingiverse.com/thing:5499212

Needs to be printed in ABS, bottom part and motor cover: Ender 3 S1 Bed Cable Angle by MrPiouPiou https://www.thingiverse.com/thing:5417098 and remix of top part: Ender 3 S1 Bed Cable Angle by Phipsi12 https://www.thingiverse.com/thing:5531129/files About 1-2mm of overhang from the original connector needs to be removed to prevent the connector from catching the Z Axis motor.

Ender 3 S1 Flexible flat cable holder by Alei100 https://www.thingiverse.com/thing:5244810

Ender 3 S1 Cable Guide by chewduh https://www.thingiverse.com/thing:5754766

to check:

Ender 3 s1-things - Search https://www.thingiverse.com/search?q=Ender+3+s1&page=25&type=things&sort=relevant

Ender 3 S1 Pro Filament Spool Clip by hayden-t https://www.thingiverse.com/thing:5418824

Ender 3 S1 - Torre de Temperatura - PRUSA Slicer by MatuKing https://www.thingiverse.com/thing:5418757

Bed Handle

Ender 3 S1 bed handle by DontKickTrees https://www.thingiverse.com/thing:5784354

Ender 3 S1 Handle for Bed by DevaZ https://www.thingiverse.com/thing:5746990

Cable Chains

Ender 3 s1 cable chain by GreySid https://www.thingiverse.com/thing:5574037

Ender 3 S1 Pro Cable Chain by Selinuahs https://www.thingiverse.com/thing:5916206

Ender 3 S1 / Neo x Micro Swiss Direct Drive Cable Chain & right side carriage mount by hviet17 https://www.thingiverse.com/thing:5708954

Ender 3 S1 Pro - Heat Cable Chain by krebstiago https://www.thingiverse.com/thing:5800678

Ender 3 S1 Bed Cable Chain by Achaios https://www.thingiverse.com/thing:5834115

Ender 3 S1 Pro - Extruder Cable Chain by krebstiago https://www.thingiverse.com/thing:5800864

Bed Level Lock

Ender 3 S1/S1 pro - Locking Bed Level Knob by ajcam44 https://www.thingiverse.com/thing:5908385

Ender 3 S1 Pro Bed Level Lock by squat0001 https://www.thingiverse.com/thing:5903091

Bed Adjustment Wheel Clip by alei100 https://www.thingiverse.com/thing:5387968

Sensor mount

Ender 3 S1 and S1 Pro filament sensor bracket by mddatthngvrs https://www.thingiverse.com/thing:5419960

Sensormount - Creality Ender 3 S1 by jodill https://www.thingiverse.com/thing:5571665

Ender 3 S1 Filament Sensor Mount / Holder Rotated Version by joaolsneto https://www.thingiverse.com/thing:5332875

Ender 3 S1 runout sensor bracket by beefdrip https://www.thingiverse.com/thing:5905176

Display mount

Ender 3 S1 display bracket display mount by KennethBernal https://www.thingiverse.com/thing:5407497

Rotatable screen for Ender 3 s1 and s1 Pro by JohannBreid https://www.thingiverse.com/thing:5863301

Display Holder for ALL ender 3 s1 screens (knob and touchcreen) (Separate from printer) by HankTank109_https://www.thingiverse.com/thing:5626066

Sonic Pad

Enable root access: How to find the root password for Creality Sonic Pad:

- 1. Select "Other Settings" from the Creality Sonic Pad interface.
- 2. Select "Advanced Options"
- 3. Select "Root Account"

root pw: cxsw-sonic_2023

root@spad-3858:/mnt/UDISK/printer_config# vi moonraker.conf

create .ssh/config entry and add something like the following

```
Host spad
HostName 192.168.1.13
Port 22
User root
HostKeyAlgorithms=+ssh-rsa
PubkeyAcceptedKeyTypes +ssh-rsa
```

Transfer ssh id to host either by editing/creating /etc/dropbear/authorized_keys or using copy_ssh_id

ssh-copy-id -oHostKeyAlgorithms=+ssh-rsa root@192.168.1.13

For OctoPrint, enable compat mode in moonraker.conf

Input shaping: Bracket holder STL files are on the provided usb stick.

Resonance Measurement configure \rightarrow other settings \rightarrow Advanced options \rightarrow Measuring Resonances Select printer (moving print bed or static print bed) connect sensor to sonic pad Connect sensor to print head via bracket Test takes about 3 minutes detach sensor from print head and connect to print bed sonic pad will reboot

disable slicer acceleration control (cura etc)

klipper added input_shaper section in printer.cfg

[resonance_tester] # accel_chip: adxl345 # accel_per_hz: 70 # probe_points: # 117.5,117.5,10

[input_shaper] #shaper_type_x = mzv #shaper_freq_x = 56.4 #shaper_type_y = mzv #shaper_freq_y = 36.2

https://m.youtube.com/watch?v=LGsbYTR7shk https://m.youtube.com/watch?v=TKInn-KMe9g https://m.youtube.com/watch?v=B_zB5UHMZws https://m.youtube.com/watch?v=Kr2R5b8Z1y0

Cura and Klipper/Sonic Pad

https://all3dp.com/2/cura-klipper-tutorial/ - disable coasting in cura (interferes with klipper's pressure advance) - disable acceleration control and jerk control in speed settings tab - set Cura's retraction

Addons from marketplace: arc welder

moonraker connection

- 1. Install and restart cura
- 2. Go to "Settings > Printer > Manage Printer" and select "Connect Moonraker".
- 3. Now configure the URL for your Klipper-Moonraker instance using the IP address.
- 4. Optionally add the identifiers of any powered devices you've configured in Klipper (e.g. LED lights), and add a camera URL if installed.

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5. Choose to upload G-code or UFP files. Configuration settings are saved when this window is closed.

After slicing a model, the usual file save options will now include the prompt "Upload to <Printername>" that pops up a window where you can change file names and set other details. It's as simple as that!

From: http://wuff.dyndns.org/ - **Wulf's Various Things**

Permanent link: http://wuff.dyndns.org/doku.php?id=3dprinter:ender3s1&rev=1701379175

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