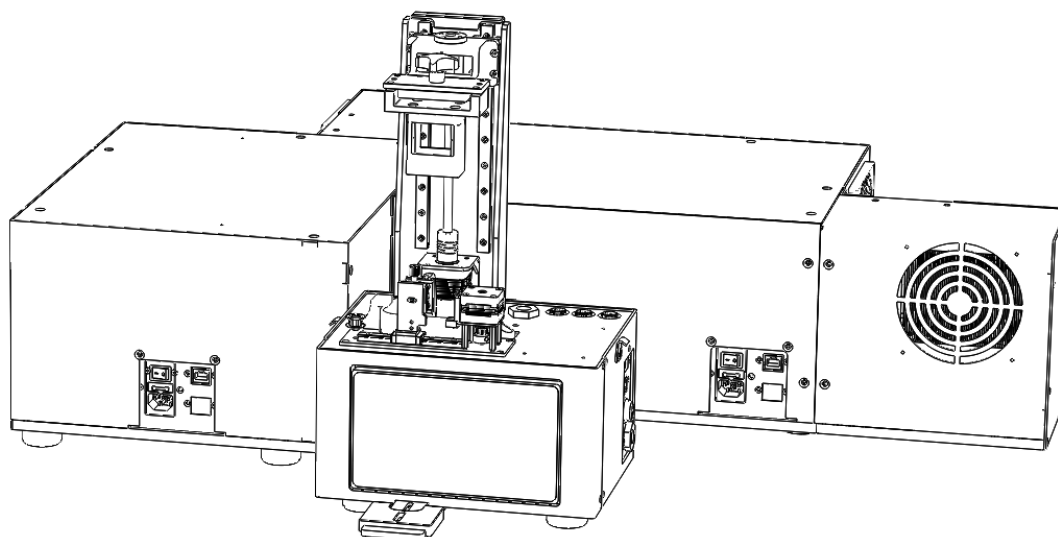


MonoPrinter.com

MONO3Z Series Printer Firmware

Rev. 1.1



Revision History

Document number: MN3Z-C04

Rev. 1.0	07-09-2021	Initial draft
Rev. 1.1	06-23-2022	Update based on Mono3Z-V2 design

Please read thoroughly and contact us if you have any further questions or suggestions at info@monoprinter.com

1. Prepare MNF file within MonoWare

- The first step for printing is to prepare an MNF file from your model.
- Brief step is
 - import models
 - create supports if needed
 - slice models
 - export MNF file with printing parameters.
- For more details, please check a related manual (MN3Z-C03-MonoWare_Job_File)

2. Transfer the MNF file from MonoWare into Mono3Z Printer

- There are two options for transferring files. One is to use a USB stick and the other one is to send the file via network
- Using the USB stick is straightforward.
- If you want to send the file via network, you need to connect the printer with a wireless or wired connection.
- Check the IP address of the printer at the INFO page inside the printer.
- If there is a hostname (ex. mono3z1), you can type the hostname instead of the IP address.

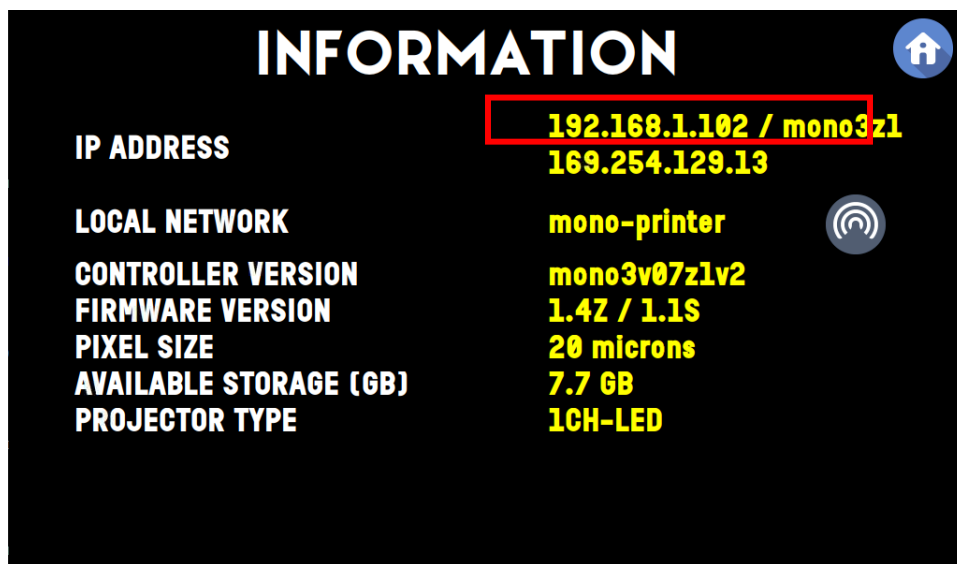


Fig. 1

- Enter the IP address (or hostname) on the Process window on MonoWare
- When you use the hostname, you need to add .local. For example, you need to use 'mono3z1.local' as an IP address.
- Then connect the printer using the button (marked as blue box in Fig. 2)

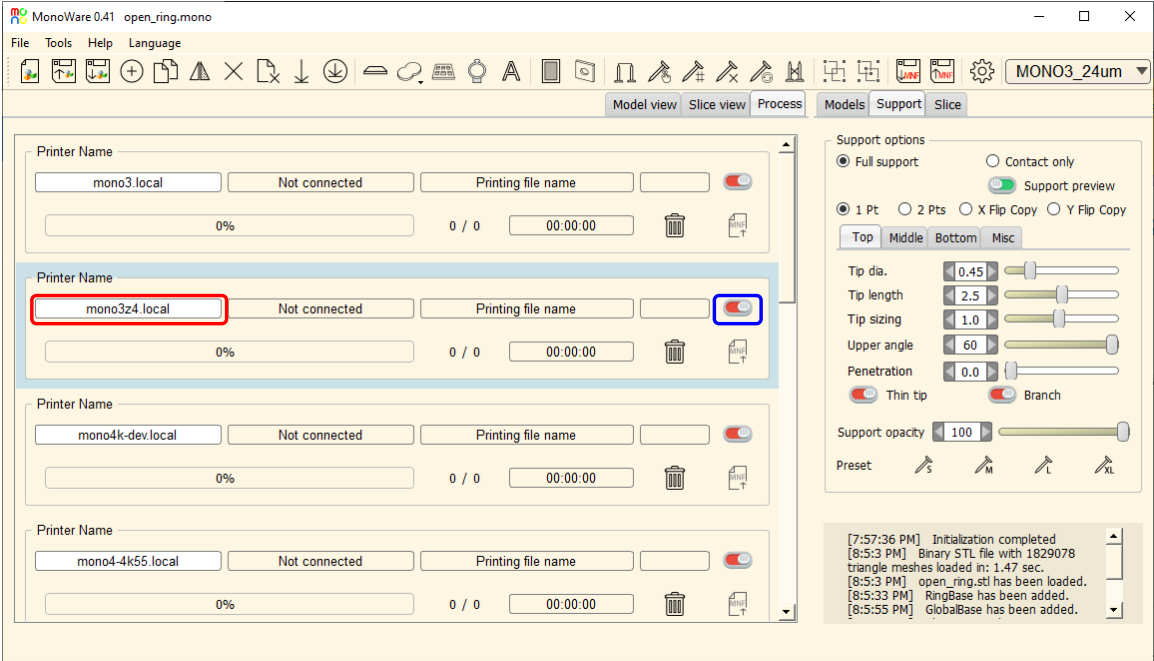


Fig. 2

- After the printer is connected, you can transfer the MNF file using the upload button. You will be asked to choose a file to send. If the transfer is successful, the FILE menu will be shown on Mono3 printer firmware.
- 3. Prepare Mono3 for printing**
- Before printing, we recommend you to perform the homing procedure.

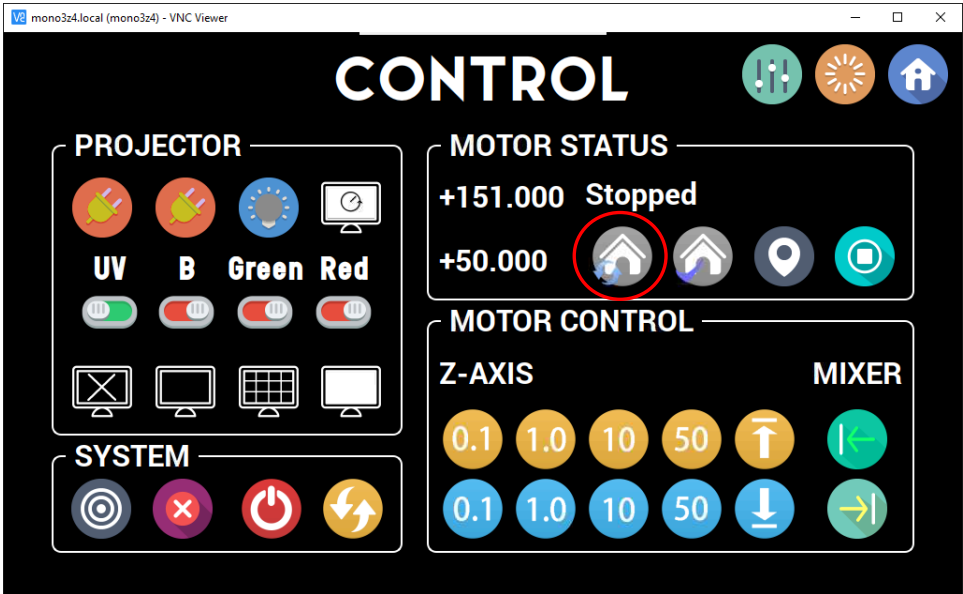


Fig. 3

- Place the build platform and pour a resin into the vat.

4. Start printing

- You can start printing by following simple 3 steps.
 - 1) Select a printing file

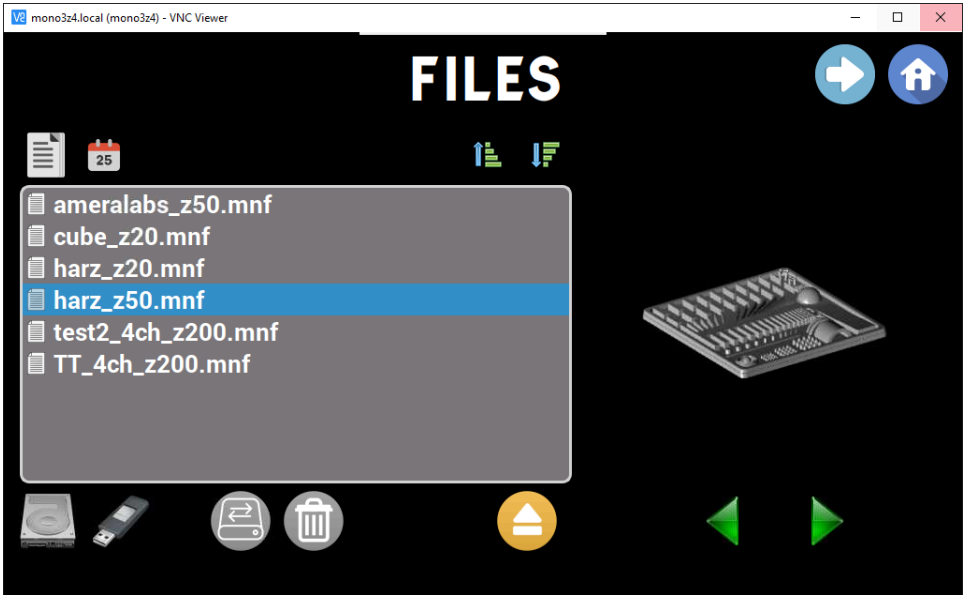


Fig. 4

- 2) The confirm printing parameters. If you need to override some parameters, modify them in this step

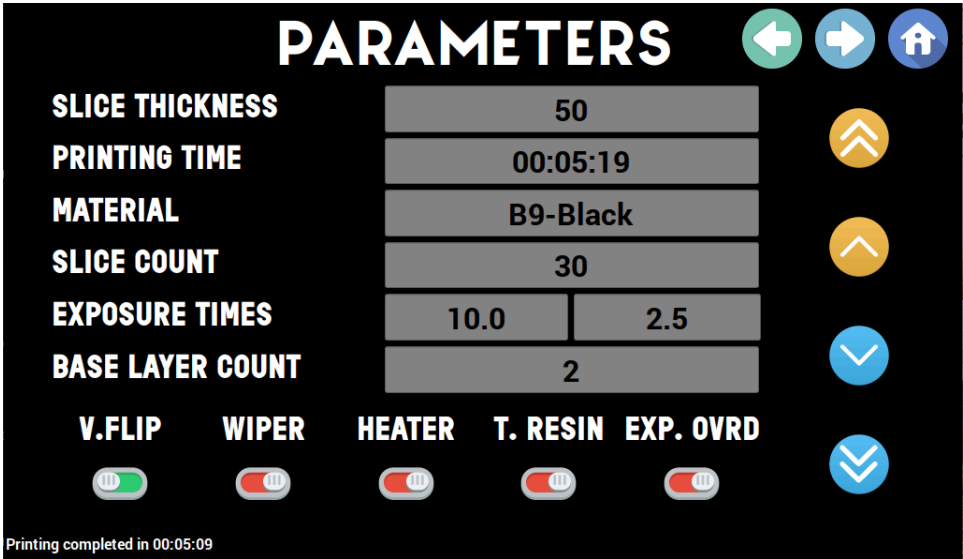


Fig. 5

- 3) Then start printing

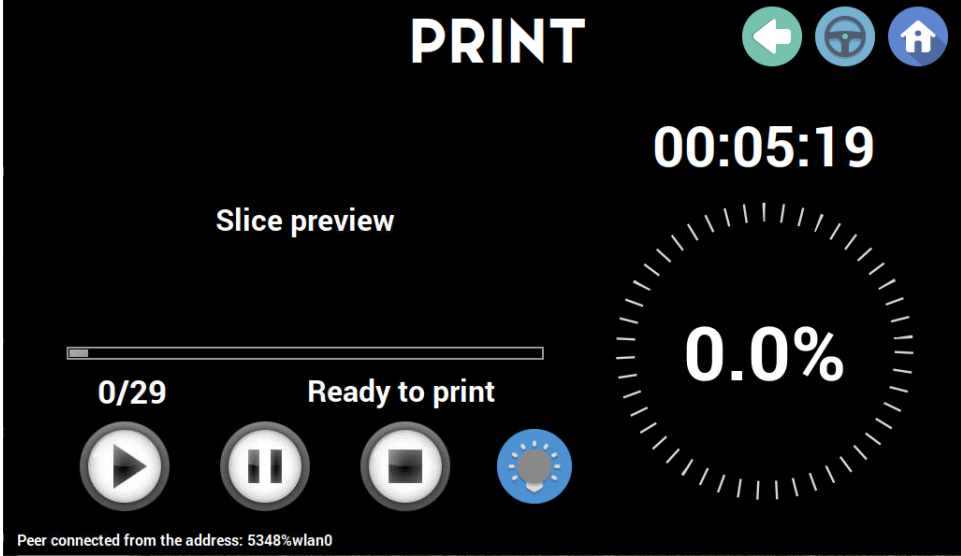


Fig. 6

- Confirm all parameters are correct. The displayed parameters will be different by printer models.

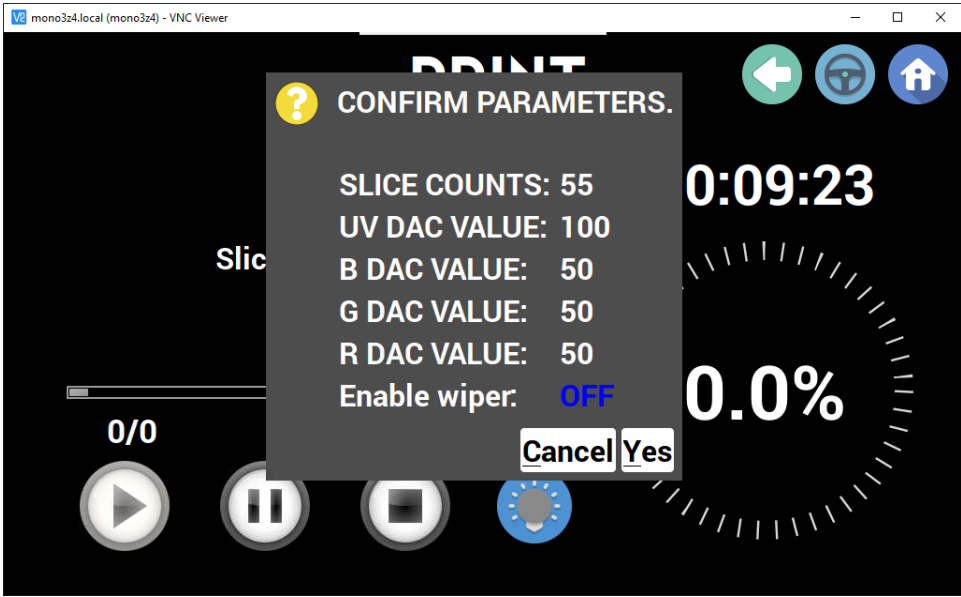


Fig. 8

- After you press the 'Yes' button, you will be prompted with a couple of messages like 'platform is moving to start position', 'preparing slices', etc. After these messages, the actual printing will get started.

5. Post-processing

- General procedure can be found on below link
- <https://www.matterhackers.com/articles/how-to-print-clean-and-post-process-sla-3d-prints>
- Briefly you need to take 3 steps
 - 1) Detach the complete prints from a build plate.

- 2) Immerse the prints in IPA bath for more than 5 mins. Manual agitation will be enough for some resins, however if you are using a wax based resin, ultrasonic double bath will be helpful. In this case, 2-4 mins with the ultrasonic bath will clean the print surface.
- 3) After taking the prints from the IPA bath, remove excessive IPA of the print surface by air blow. The final step is curing with UV. A cheap nail curing station will be enough to cure small prints.