ObJet 3D Printer Tool Manual

Quick Guide

1. Log on to CORAL.

2. Switch to the Server screen on the monitor. Copy your .STL files into your folder on the Desktop:USER FILES FOLDER.

3. Is the correct ink loaded (VeroClear, RGD 525 or DurusWhite)?
   If YES: go to step 4.
    If NO: Switch to the Printer screen on the monitor. Run the Material Replacement Wizard in the economy mode to load the ink (takes 25 minutes).
   Switch to the Server screen. Load .STL files on the build tray while this runs.

4. Switch to the Printer screen. Clean the print heads and roller. Use the Head Cleaning Wizard.

5. Switch to the Server screen. Load your patterns into the tray if you have not done so already.
   -Verify that object dimensions are correct on the tray.
   -Use the Transform command to scale or rotate the objects on the tray.
   -Choose Matte or Glossy finish for the top side of each object.

6. Use the Placement Tool to place objects for best printing. (You may move them and override this if needed).

7. Use the Validate Tool to check integrity of all object files. Fix any errors.

8. Use the Estimate Tool to see how much material and time the job will take.

9. Press the Build Tool button to spool the job to the Printer. Wait for the message to save or overwrite the tray, and save the tray to your USER Folder. If no more than 4 slices are sent, the printer is offline. Go to step 10.

10. Switch the monitor to the printer screen, and click on the circle button to take the printer online, if it is not online yet. Verify that the printer is warming up in pre-print mode (about 25 minutes if starting form cold.)

WHEN PRINTING HAS FINISHED:
11. Remove printed devices by using a spatula from the drawer and holding an IPA-wetted beta wipe over the device as you scrape to minimize flicking support material everywhere. Use a razor blade to gently (not scratching) remove remaining support material from the tray. Wipe the tray with the IPA-wetted wipe. Use the vacuum cleaner to remove any flakes in the printer.

12. Click "OK" on the screen. Run the Head Cleaning Wizard.

13. Log out of CORAL and enter the amount of support and model material used.

HOW TO PROCESS PRINTED DEVICES

Bring your own tools for cleaning, or take the devices back to your lab for post-cleaning.

Soak devices in soapy water to loosen the support material. 30 minutes is OK, 2 hours is great, overnight is FANTASTIC. Use a few drops of Dawn dish detergent from under the sink.

Work off loosened support using a combination of spraying water, physical picking and scrubbing with brushes or sponges. Be warned that the model material is a little soft for the first few days, and strong water sprays can wear it away.

To use the water sprayer:
1. Load devices into the tool.
2. Shut the lid.
3. Turn on the power switch on the backside of the chamber.
4. Turn the water stopcock to the blue hose or sprayer.
5. Have a blast. If you need higher water pressure, use the foot pedal.
6. Turn the water stopcock whenever possible to save water.
7. Open the lid, and remove samples.
8. Close the lid and turn off the power switch.

Use the sonicating water bath if that can help. Use water ONLY in the bath.

(OPTIONAL) To remove support residue, soak 30 minutes in 2% NaOH. Then rinse well and wipe off the device.