

How to print a part with the 3DWOX1?

To make a 3D printed part, you need to:

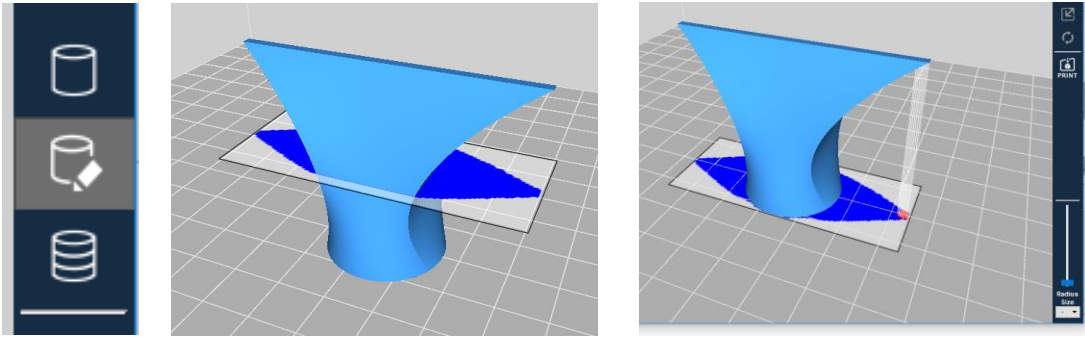
- STEP 1:** Create a GCODE file that's configured for the printer and filament type you will use
- STEP 2:** Switch between FILAMENT (no Sindoh chip required) or CARTRIDGE (Sindoh chip required) loading options
- STEP 3:** Load filament
- STEP 4:** Select and print your file



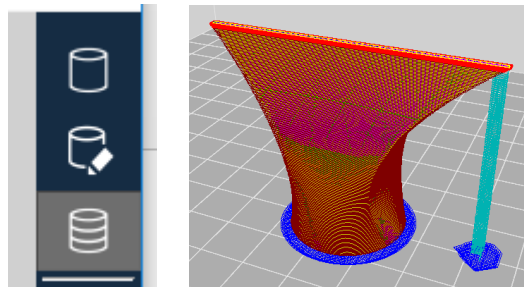
3DWOX Desktop icon

STEP 1: CREATE A GCODE FILE

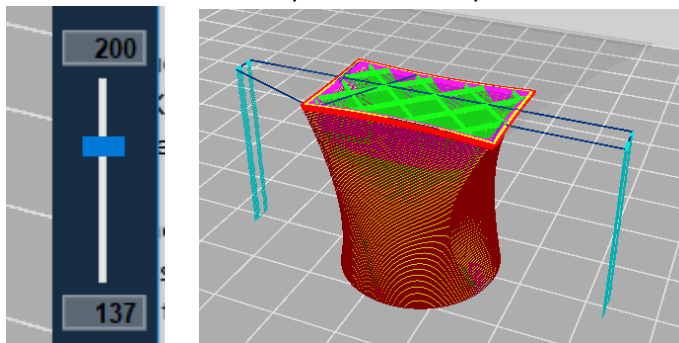
- 1.1. Make a part in SolidWorks
- 1.2. Export the part as an STL (using "save-as" and selecting the stl filetype)
- 1.3. Download 3DWOX Desktop from [Downloads | Sindoh 3D Printer | Unmistakable Sindoh](#) or use a campus computer
- 1.4. Import (or drag and drop) the STL file into the 3DWOX Desktop slicer app window
- 1.5. Under "**Settings**"-->"**Printer Setting**", select the printer you plan to use: "**3DWOX1**", or "**DP200**"
- 1.6. Under "**Mode**", check if you're in the "**Advanced**" or "**Easy**" mode.
 - i) If in **EASY** mode:
 - (1) Under Settings, set Material in Cartridge 1 to PLA
 - (2) Choose placement of support (None, Touching Buildplate, or Everywhere)
 - (3) Choose the Support Pattern or leave it in the default "Zigzag"
 - (4) Select from one of the four Quick Print Profile options and hit OK
 - ii) if in **ADVANCED** mode:
 - (1) set Profile in Settings to "**Sindoh PLA**"
 - (2) Chose the desired support type and bed adhesion
 - (3) Adjust other settings (as needed) and hit OK
- 1.7. (Optional) Edit support material with the "**Support Edit Viewer**" (cylinder with pen icon): select the radius size and click in the darker blue part shadow to place support material. (Only add support if needed)



1.8. Build layers with the “**Layer Viewer**” (multi-layered cylinder icon) – this compiles the G-code



1.9. Use the slider to view individual layers and travel paths



1.10. Click “**File**”-->“**Save G-Code**”.

1.11. Put the G-Code on a thumb drive.

STEP 2: SWITCH BETWEEN FILAMENT AND CARTRIDGE LOADING

3DWOX1 printers can use cartridges or spools (w/o cartridge), depending on the mode they are in (*Open Source* Setting ON or OFF).

2.1. Figure out what mode it’s currently in by looking at the touchscreen home page.

- If the 2nd option on the display reads “CARTRIDGE”, you have to use a cartridge with a Sindoh chip.
- If the 2nd option on the display reads “FILAMENT”, it’s in OPEN SOURCE mode and can use a spool without a cartridge or a spool in a cartridge without a chip. Microchips are located on the end of the cartridge that gets inserted into the printer.

- 2.2. Change filament modes on the 3DWOX1 by entering the SETTINGS menu, toggling to the 4th screen and selecting OPEN SOURCE.
 - Turn ON to print from a spool
 - Turn OFF to print using a cartridge

STEP 3: LOAD FILAMENT

- 3.1. From the touchscreen home page, select FILAMENT or CARTRIDGE depending on the mode.
- 3.2. Follow on-screen instructions to load filament (see Step 2 if you need to change the filament loading mode).

STEP 4: SELECT AND PRINT YOUR FILE

- 4.1. Put thumb drive into the printer's usb port (front side, upper-right of printer)\
- 4.2. Using the touch screen, select "**Print**", select your file, and follow on-screen instructions to start the print.
- 4.3. Remove your thumbdrive when the icon indicates it is safe to remove.

Note: there will be a small icon in the lower right of the screen (it is supposed to be a usb stick with an arrow showing removal). If the arrow has an 'X' on it, the files are still transferring (leave it in); if the X has gone away, the files have finished transferring and you can safely remove the flash drive.

- 4.4. Watch the first layer or two to make sure the PLA adheres properly to the bed. Most issues happen early on in a print.
- 4.5. Come back after the part has finished, remove the flexible print bed from the printer. Allow the part time to cool.
- 4.6. While the part is cooling, use the touchscreen to unload filament under the "FILAMENT" option, following on-screen instructions, and removing the cartridge so the printer is ready for the next user.
- 4.7. Flex the bed to pop the part free from the surface. Avoid prying or peeling the part off the bed, especially with a hot bed to limit adhesive separation between the bed and bed sheet. This will help our print beds to last longer.

Note: If you arrive to the printer with a finished print that isn't yours, there is an extra print bed that can be swapped with the one that has a part on it. Set aside to allow recently printed part time to cool.