



# Product Introduction

Thank you for purchasing Doron Velta 3D printer kit from FYSETC (no printed parts included).



You can download the print parts at [https://github.com/FYSETC/FYSETC-Doron\\_Velta/tree/main/STLs](https://github.com/FYSETC/FYSETC-Doron_Velta/tree/main/STLs)

In case of any printer-related problem, do not hesitate to contact our customer service. We are glad to receive all of your valuable comments and tips. **More product info here:** [https://github.com/FYSETC/FYSETC-Doron\\_Velta](https://github.com/FYSETC/FYSETC-Doron_Velta)



## Product details

### Mechanical structure:

- Frame: aluminum box structure
- Printing platform: 6061 thickened aluminum
- Plate: elastic powder steel plate

### Print parameters:

- Printing technology: FDM
- Build volume:  $\varnothing$  140x160mm (Sealing) / 170x160mm (No Sealing)
- Printing layer height: 0.05-0.3mm (use 0.4mm nozzle)
- Maximum printing speed: 200mm/s (recommended: 20-80mm /s)
- Filament diameter: 1.75mm
- Nozzle diameter: 0.4mm
- Filament types: PLA, PETG, PLA-CF carbon fiber, ABS, TPU, HIPS, WOOD, etc. (The default printing parameter is for PLA, and other filaments should be adjusted according to the parameters provided by the filament supplier.)

### Temperature:

- Maximum extruder temperature: 300°C
- Maximum temperature of hot bed: 120°C

### Software parameters:

- Firmware: Klicky kit, Membrane level switch
- Supported formats: STL, G-code, AMF, OBJ
- Input mode: Ethernet, WiFi
- Operating software: Simplify3d, PrusaSlicer, Cura, Repeater host
- Operating system: Windows 7/ Mac OS / Linux

### Hardware parameters:

- WiFi: support (Based on Raspberry Pi)
- Controller : R4+ Raspberry Pi 3/4
- Power supply: Meanwell LRS-200-24
- Input: 100-120V, 4.0A / 200-240V, 2.0A

### Size & weight:

- Machine size: 344x360x625mm
- Package size: 625x415x155mm
- Net weight of machine: 10.2kg



## Disclaimer

Failure to read the assembly descriptions may lead to personal injury, inferior results, or damage to the 3D printer. Always ensure that anyone who operates the 3D printer knows and understands the operation description. We cannot control the conditions in which you assemble the kit. For this, and other reasons, we do not assume responsibility, and expressly disclaim liability for loss, injuries, damage, or expense arising out of, or in any way connected with, the assembly, handling, storage, use or disposal of the product. The information in this handbook is provided without any warranty, expressed or implied, regarding its correctness.



## Licenses

VORON 2.4 R2 printer is a part of the VoronDesign project, the first open-source 3D printer project free to use under a GNU General Public License v3.0 license ([www.gnu.org/licenses/gpl-3.0.en.html](http://www.gnu.org/licenses/gpl-3.0.en.html)).

Permissions: Commercial use, Modification, Distribution, Patent use, Private use

Limitations: Liability, Warranty



# Safety Guide

**Read and understand the assembly manual and safety instructions before beginning to assemble and use the kit. Failure to do so may result in serious injury or death. Save this document.**

Please be very cautious during any interaction with the printer. This printer is an electrical device with moving parts and hot-temperature areas.



## Assembly

- Never disassemble the printer's power supply: it does not contain any parts that can be - repaired by unskilled workers. All repairs must be carried out by qualified technicians.
- In the process of assembling and using the printer, please be careful not to touch or go deep into the moving position to avoid scratching or pinching.
- Adult supervision required: Prevent children from touching printer parts or printers unattended, even if the printer is not assembled or printed. Observe children closely and intervene if necessary to prevent potential safety issues and ensure proper use of the printer. Ensure that young children cannot touch small 3D printed parts or 3D printed parts. These are potential suffocation hazards for young children.



## Wiring

- Before starting the wiring, please read the wiring diagram carefully, understand the installation method of each position, confirm the positive and negative positions, especially confirm that the AC wiring of the PSU is correct and there is no short circuit. The inspection is to observe the wiring position instead of just looking at the color.
- Please make sure that all electronic wires are not damaged mechanically or otherwise. If so, please stop using the damaged electronic wire immediately and replace it.
- Before powering on for the first time, please make sure that you have selected the input voltage of the PSU according to your area, otherwise the PSU will be severely burned, or even other peripherals such as the

motherboard, and cannot be repaired.



## Use

- The printer is for indoor use only. Do not expose the printer to rain or snow. Always place the printer in a dry environment and keep at least 30 cm away from other objects.
- Always place the printer in a stable place to prevent it from falling or tipping over.
- After the machine is debugged, you must be on duty throughout the printing process to avoid malfunctions. In several cases, it may cause a fire. Please do not leave the printer unattended when the printer is turned on!
- When you unplug the power cord from the socket, pull the plug instead of the power cord to reduce the risk of damaging the plug or AC power outlet.
- During the process of setting up and operating the printer, the printing platform and the printing nozzle are at a high temperature. Avoid direct contact with these areas. The nozzle temperature is 190-300°C (374-572°F); the heating bed temperature can reach above 100 °C (212 °F). Temperatures higher than 40 °C (104 °F) can cause harm to the human body.
- The plastic melts during the printing process and produces a peculiar smell. Put the printer in a well-ventilated place.