



# Voxelab Aquila D1 FDM 3D Printer User Manual

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## Voxelab Aquila D1 FDM 3D Printer



## Product Information: Aquila D1 3D Printer

Aquila D1 is the newest-developed machine of Voxelab 3D printer. It is designed to provide a better user experience, hardware upgrades, and printing improvement. The 3D printer's core technology includes extruder, guide, and leveling. It has a larger printing size than other entry-level consumer 3D printers, making it more specific among Voxelab 3D printers. Aquila D1 conquers four challenges for beginners, including auto-leveling operation, strong extruder for less nozzle jam, dual linear guides for stable printing, and an upgrade to a large printing size of 235\*235\*250mm. It also comes with all-metal body, dual Z-axis, PEI flexible plate, resume printing, open-source, filament detection, rapid cooling fan, DIY UI design, and friendly operation.

## Product Usage Instructions

Before using Aquila D1 3D printer, please read the user manual carefully and follow the instructions below:

1. Connect the power cord to the printer and turn it on.
2. Level the printing bed using the 25-point auto-leveling function.
3. Load the filament of your choice into the extruder and set the extruder temperature up to a maximum of 300 degrees.
4. Select a file format from the input/output file format list that is compatible with your design software.
5. Import your design file into the slicing software and slice it according to your preference.
6. Connect Aquila D1 to your computer via USB or Wi-Fi.
7. Transfer the sliced file to the printer and start printing.
8. If the printer loses power during printing, it will automatically resume printing from where it left off when power is restored.
9. When the print is complete, carefully remove the printed object from the printing bed using a spatula or scraper.

For flexible filament printing, use the direct drive extruder with less feeding resistance and set the nozzle temperature to a maximum of 300 degrees. Aquila D1 is compatible with a wide range of filaments, including PLA, PETG, TPU, ABS, ASA, and HIPS. For more information regarding the parameter, slicing software, screen language, connectivity, supports (OS), auxiliary leveling, noise, and flexible platform, please refer to the user manual.

Aquila D1 is a newest-developed machine of Voxelab 3D printer. Totally concerned about user experience, hardware upgrades, and printing improvement.

Aquila D1 includes the 3D printer's core technology: extruder, guide, and leveling. In addition, the larger printing size makes Aquila D1 more specific among Voxelab 3D printers. Compared with other entry-level consumer 3D printers, Aquila D1 conquers four challenges for beginners:

- 1/ Auto leveling operation
- 2/ Strong extruder for less nozzle jam
- 3/ Dual linear guides for stable printing
- 4/ Upgrade to large printing size to 235\*235\*250mm

To upgrade all the indispensable functions D1 does a lot to cover difficulties by integrating those functions on printers. Caring more about the 3D printer beginner this time, D1 makes it easier for beginners to explore DIY world.



All-metal  
Body



Dual  
Z-axis



PEI Flexible  
Plate



Resume  
Printing



Filament  
Detection



Rapid  
Cooling Fan



Open  
Source

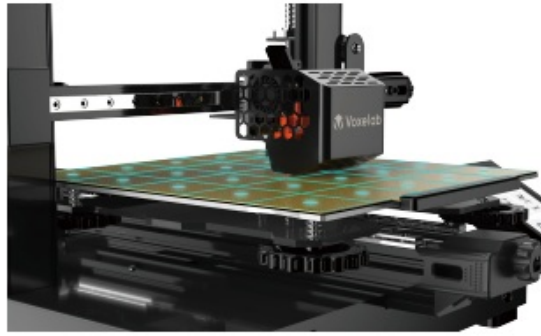


DIY UI  
Design



Build Volume  
225\*225\*250mm

## Friendly Operation



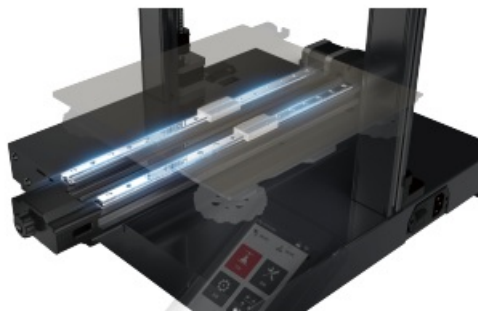
- **25-point Auto Leveling**

Overcome the first challenge in 3D printing for beginners. The more and denser detection points realize worry-free first layer printing, and guarantee the flatness of the printed first layer.

- **Impressive Filament Feeding Force**

All metal dual gear provides high filament feeding force up to 70N, ensuring the smooth nozzle extrusion and reducing clogging

## Smooth Movement



### Linear Rail

The X-Axis of D1 adopts linear guide rail at the motion accuracy of  $\pm 0.02\text{mm}$ . Compared with roller guides, it is not required to make adjustments on linear ones and it has more stable running performance and higher printing precision. The dual-linear guide rail of Y-axis enhances the platform stability so as to make its movement more smoothly. Besides, linear guide rails have longer service lifetime while less maintenance is needed. Even if the printer runs for a long time, there is no need to adjust the tightness like a roller which would free users more from worry



### Dual Z axis

3D printers usually do not focus on Z-axis upgrades. This time for a better newbie using experience and achievability, the dual Z axis improves to eliminate the layer line as much as possible. The elegant project, by the better Z axis.

### Flexible Filament Printing

Direct drive extruder with less feeding resistance, printing flexible filaments unobstructed. 300 degrees nozzle temperature, compatible with a wider range of filaments.

### Filament Available

			Wider Choice
PLA	PETG	TPU	
More Possibilities			
	ABS	ASA	HIPS

### Parameter

Extruder quantity	1
Nozzle diameter	0.4mm
Printing precision	±0.2mm
Layer thickness	0.1 mm - 0.4 mm
Print volume	235*235*250mm
Print speed	10-180mm/s
Maximum Extruder Temperatur	300°C
Maximum platform Temperature	110°C
Filament compatibility	1.75-PLA/PETG/TPU 95A/ABS/HIPS/ASA
Power supply	Input: AC 115/230V 50/60Hz
	Output: DC 24V
Slicing software	VoxelMaker, Cura, Simplify
Screen language	Chinese/English/Spanish/French/German/Russian
Input/Output file format	.g / .gcode
Connectivity	USB / SD Card
Supports(OS)	Win7/8/10/Mac OS
Auxiliary leveling	25-point auto leveling
Noise	50dB
Resume printing after power failure	Yes
Flexible platform	Yes

## Documents / Resources



[Voxelab Aquila D1 FDM 3D Printer](#) [pdf] User Manual  
Aquila D1 FDM 3D Printer, Aquila D1, FDM 3D Printer, 3D Printer, Printer