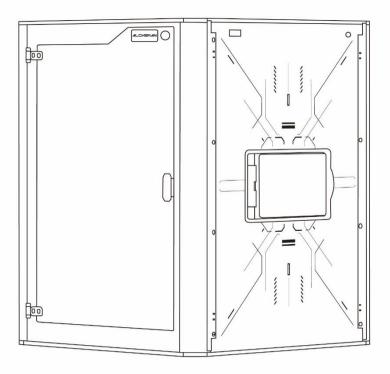


# Alcheman 3D Printer User Manual



Important: Please read this manual before operating your 3D printer and keep it for future reference.

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# **Catalogue**

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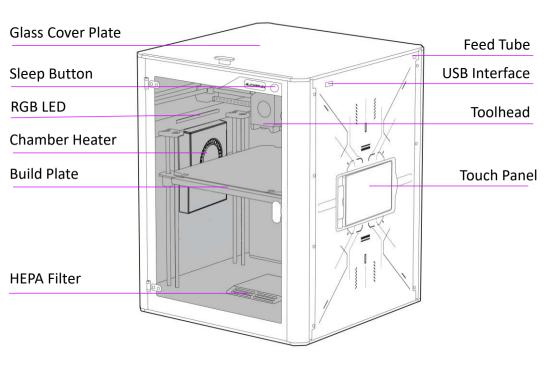
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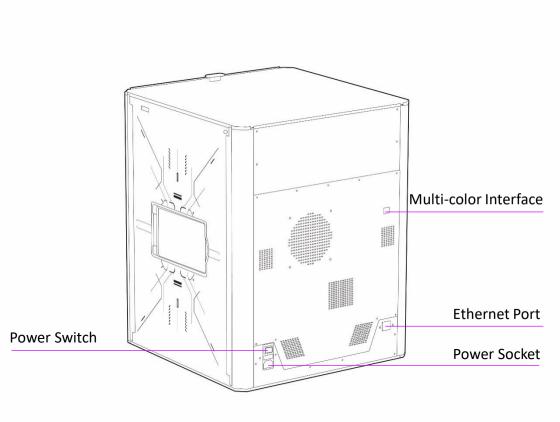
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## Front of the Alcheman 3D Printer



## **Back of the Alcheman 3D Printer**



# **Photo of the Alcheman 3D Printer**



## Follow these steps to complete the unboxing:



1. Take out protective foam from the top of the package and lay it flat on the desktop.



2. Remove the protective foam around the printer, then take out the printer.



3. Put the printer on the protective foam.

## Follow these steps to complete the unboxing:



4. Hang the top glass cover plate on the left side of the printer.



5. Take out the protective foam and all accessories.



6. Remove the retaining straps.

# Check the accessories before starting:



Hex Keys



M5-M6 Wrench



0.4mm/0.6mm Nozzle



Flexible PEI Plate



Glue



8GB USB Stick



PTFE tube

# Check the accessories before starting:



Brush for cleaning nozzle



Plier



2.5mm Screws x5



PLA-CF 1.75mm 500g



Scraper x3



Hotend



User manual

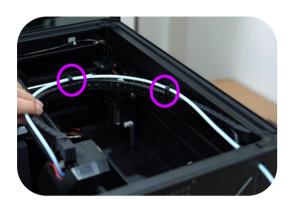
## Install the PTFE tube:



1. Take out PTFE tube.



2. Insert PTFE tube into the inlet.



3. Use 2 fixing clips to tie the PTFE tube and tank chain.

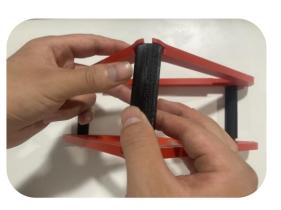
# Assemble the spool holder:



1. Take out spool holder accessories.



2. Assemble the accessories following the steps below.

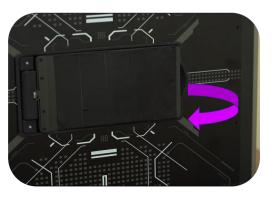


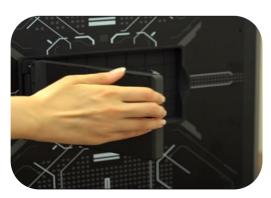
3. Insert the roller into the grooves.



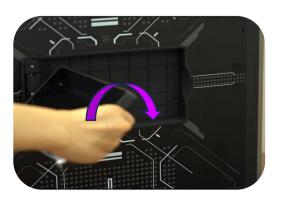
4. Complete assembly.

## The panel is located on the right side of the printer.





- 1. Lift the panel from the notch.
- 2. Panel folds to 90 degrees.



3. The panel can be rotated clockwise from 0 to 180 degrees for optimal operating position.

# To start, plug in the power cable and press the power button.





## To connect to the network, you can use one of the following methods.

1. Wired Connection: Plug in a network cable.



2. Wireless Connection: Connect to the Wi-Fi.

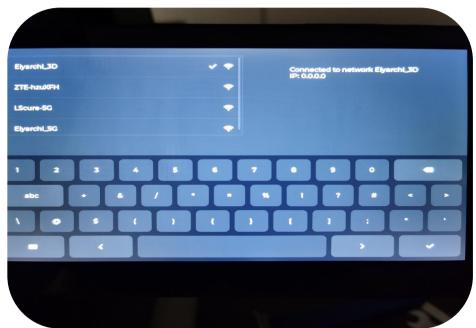




Go to the Setting page, and click the "WiFi" icon.

Connect your Wi-Fi, enter the password, and click.

#### 2. Wireless Connection: Connect to the Wi-Fi.



You are now connected to the network.

#### **Network Connection Issues:**

Check the printer's network settings for proper configuration. If it is difficult to move the router or the printer, you can create a Wi-Fi hotspot using your mobile phone and connect the printer to it. If the network connection does not work, use the provided USB flash drive to transfer the sliced files directly to the printer.

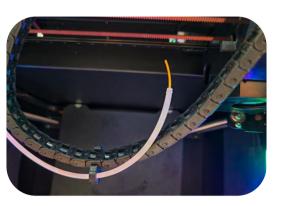
#### Load the filament:



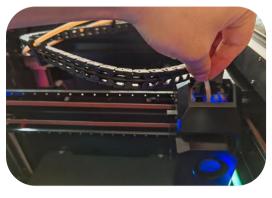
1. Place filament on spool holder.



2. Insert filament into the feeder.



3. Until it passes through the PTFE tube and reaches the other end to ensure smooth delivery.



4. Insert the other end of the tube gently into the extruder.

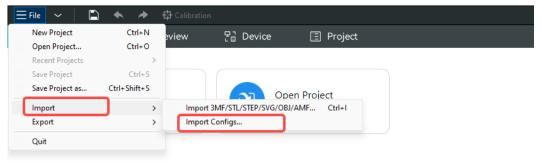
## **Download slicing software:**

Our slicing software is under development. Therefore, we recommend to use Orca Slicer for your 3D printing needs to achieve the best print results. Download URL: <a href="https://orcaslicer.net/#download-orca-slicer">https://orcaslicer.net/#download-orca-slicer</a>. Thank you for your patience.

- 1. Complete the slicer installation.
- 2. Plug the provided USB flash drive into your computer and get the perfect print parameters. These configuration parameters are derived from thousands of hours of testing by our experts and users across various vertical fields, which can masterfully handle a wide range of materials.

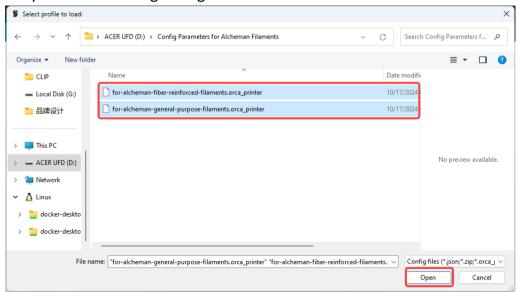


3. Click the [Import] - [Import Configs] .



Recently opened

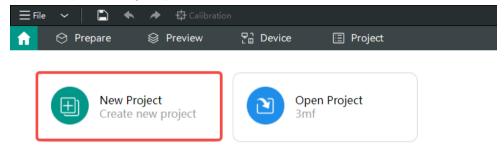
4. Import the following configs into the slicer.



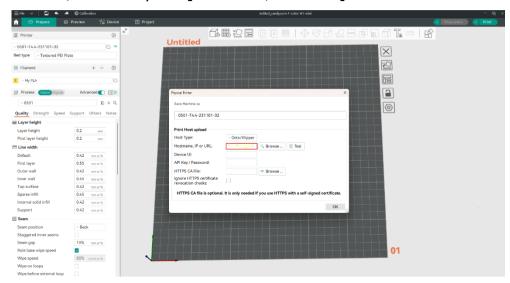
## 5. Complete the import.



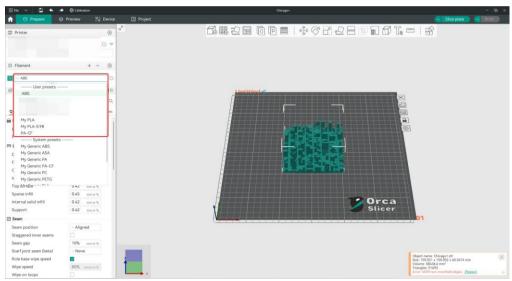
# 6. Click the [New Project]



7. Click , and fill in your (Hostname, IP or URL).



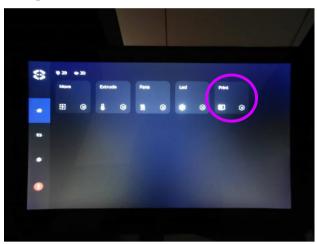
8. Import the file, and select the corresponding configuration according to the print filaments.



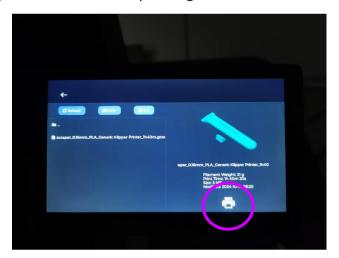
9. Finish slicing and start printing.

# Printing a pre-loaded file:

1. Click the [Print] icon.



2. Click the printer icon to start printing.



## **Specifications**



## Warning

- 1. When printing special filaments (e.g. PEEK, PEI, etc.), the hot end should be replaced with a special high-temperature hot end, do not use the hot end that has been printed with ordinary filaments.
- 2. When printing common filaments (e.g. PLA, ABS, etc.), the hot end should be replaced with the hot end that has not been printed with special filaments to avoid material residue that affects the print quality.

Components	Туре	Parameter
Body	Maximum Stroke	300 x 300 x 300 mm
	Chassis	Steel
	Shell	Aviation Aluminum Alloy
Tool Head	Hot End	Ceramic
	Extruder Gears	Metal & Nylon
	Nozzle	Brass
	Max Hot End Temperature	450°C
	Nozzle Diameter (Included)	0.4/0.6mm
Hot Bed	Build Plate	Flexible Steel Plate
	Temperature	130°C
Supported Filament	-	<ul> <li>Industrial Grade: PEEK、PPS、PEI, etc.</li> <li>Engineering Grade: PC、PA、ABS, etc.</li> <li>General Purpose: PLA、PLA+、PETG、TPU, etc.</li> </ul>
Speed	Max Speed of Tool Head	500 mm/s
	Max Acceleration of Tool Head	20000 mm/s²
Cavity Temperature Control	Active Chamber Temperature Control	✓
	Maximum Controllable Chamber Temperature	90°C
Air Purification	Particulate Matter Filtration	✓

# **Specifications**

Components	Туре	Parameter
Sensors	Temperature Sensor	✓
	Acceleration Sensor	✓
	Electromagnetic Sensor	✓
	Pressure Sensor	✓
Cooling	Part Cooling Fan	✓
	Hotend Fan	✓
	Control Board Fan	✓
	Internal Circulation Fans	✓
	Chamber Temperature Regulator Fan	<b>√</b>
	Air Filter	HEPA
Power Requirements	Voltage	24V
	Maximum Power	350W
Electronic Component	Display	7 Inches
	Storage	16GB
Wi-Fi	Frequency Range	2.4G/5G
	Protocol	IEEE 802.11 b/g/n
Ethernet	Interface	RJ45
	Speed	Gigabit
Physical Dimensions	Dimensions	450 x 450 x 562 mm
	Net Weight	≈29KG

#### Contact us

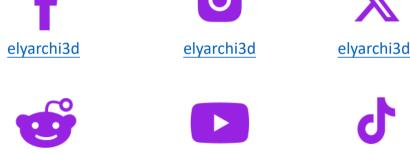
## Support

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For detailed information about Elvarchi products and services, visit the following websites: www.elvarchi.com

- Alcheman Support: https://elyarchi.com/alcheman-support/
- Pre-Sales and After-Sales: info@elvarchi.com
- Tech Support: support@elvarchi.com

## **Get Help and Update via Social Media**





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