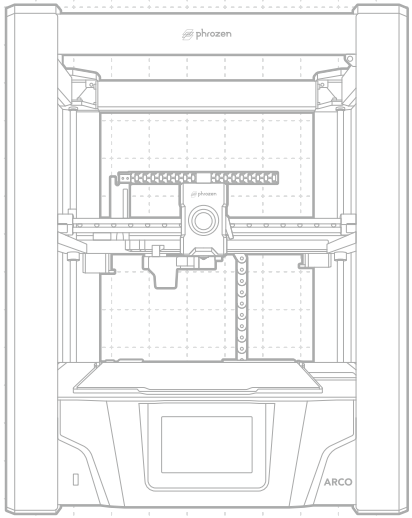
phrozen

ARCO



Dear User,

Thank you for joining us. Please read the Arco manual thoroughly and follow the instructions step by step to get the best printing experience.

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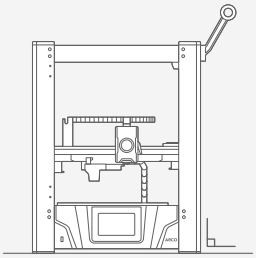
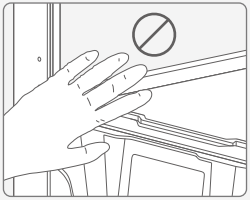
01 Key Notes



-5 ~ 45 °C / 23 ~ 113 °F

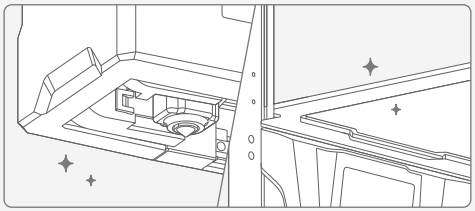
Printing Environment

- Keep the printer and its accessories away from children.
- Store your 3D printer in a dry and well-ventilated environment. Place it on a flat surface to avoid vibration or movement that could affect the print quality.
- Make sure the printer's power cord is properly grounded. Improper grounding or failure to ground can increase the risk of electric shock.
- Protect the printer from water, moisture, and dust. Unplug it if you're not using it for a while to ensure safety.



Safety Cautions

- In case of an emergency, turn off the printer immediately.
- Don't touch the nozzle or heated bed while the printer runs to avoid burns from high temperatures.
- The printer has high-speed moving parts, do not put your hands inside while it's operating to avoid injury.

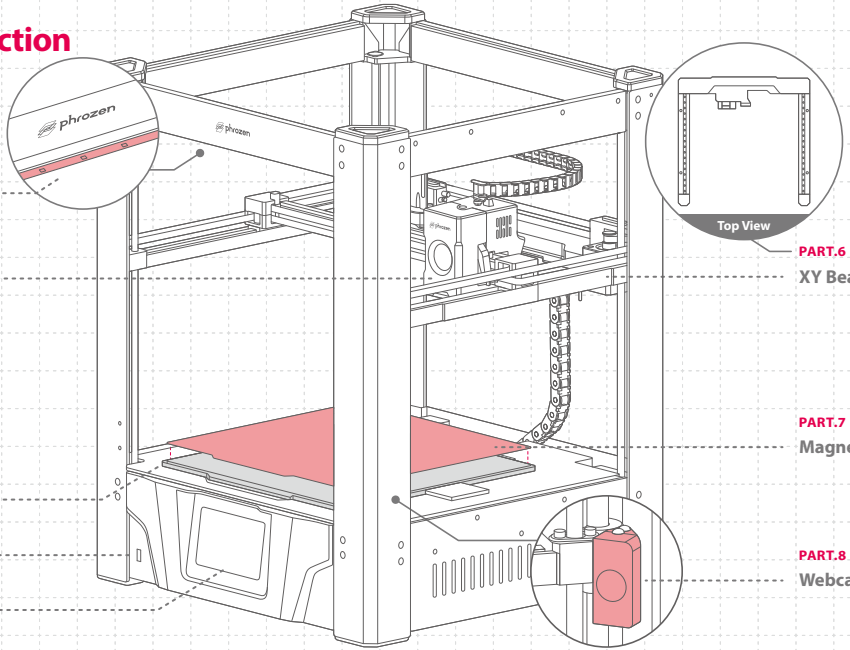


Maintenance

- It is recommended to use Phrozen filament for Arco for best printing results and to avoid printing issues.
- Before performing any maintenance or cleaning, please ensure that the printer is powered off.
- Before printing, please make sure the magnetic building plate is clean and free of any debris, and check the belt tension.
- After printing, it is recommended to clean the filament adhered to the nozzle with a brush.
- Regularly lubricate the linear rails and lead screws.
- Regularly clean the nozzle, platform, linear rails, lead screws and fan.
- **Please only use officially designated software, firmware, and hardware accessories.** Modifying the product or using any accessories not officially recommended will prevent us from providing you with official technical support, and any issues arising from this will not be covered under warranty.

02 Introduction

Printer Parts



PART.1
Interior Light

PART.2
Extruder

PART.3
Heated Bed

PART.4
USB Port

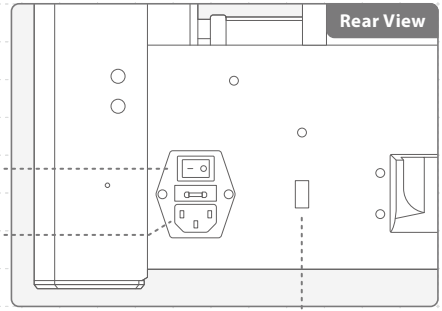
PART.5
Touch Panel

PART.6
XY Beam

PART.7
Magnetic Building Plate

PART.8
Webcam

Printer Parts

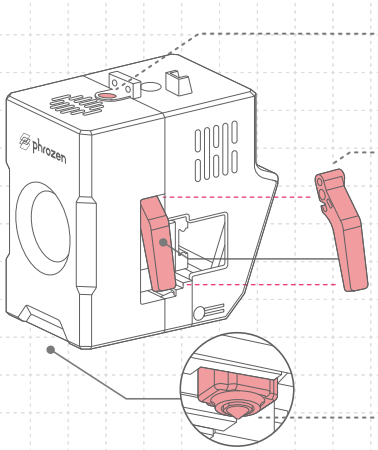


PART.9
Power Switch

PART.10
Power Socket

PART.11
Chroma Kit Port

Extruder



PART.12
Filament Inlet

PART.13
Filament
Clip Lever

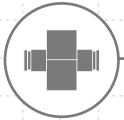
PART.14
Nozzle

Accessories

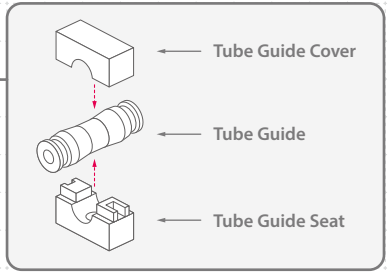
Warranty Card

PIXUP card

Power Cord 1.5 m



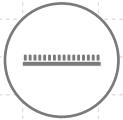
Tube Guide Accessories



Hexagon Socket Head Screws
M4 X 8 x2 / M3 X 8 x1

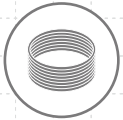
Hex Wrench set

Open-End Wrench



Silicone Brush

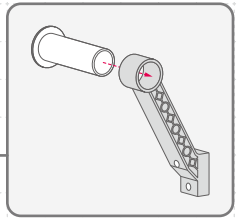
PTFE Tubes
Short x1 / Long x1



PLA Filament 38 g

USB

Lubricant Grease



Filament Spool Bracket
(with Axis)

Specification

Technology		FDM
Framework		CoreXY
Single / Multi-Color		Multi-Color Compatible (requires Chroma Kit)
Body	Printing Volume (W x D x H)	30.0 x 30.0 x 30.0 cm
	Printer Size (W x D x H)	49.2 x 47.5 x 62.0 cm
	Material	Aluminum Alloy
	Case	Sheet Metal / Glass / Acrylic
	Printer Weight	22 kg
	Operating Temperature	-5 ~ 45 °C / 23 ~ 113 °F
Extruder	Maximum Printing Speed	1,000 mm/s
	Maximum Acceleration	40,000 mm/s^2
Hot End	Material	Brass
	Maximum Flow Volume	50 mm^3/s (CHT nozzle)

Nozzle	Material	Brass
	Maximum Temperature	300 °C / 572 °F
	Diameter	0.4 mm
	Supported Filament Diameter	1.75 mm
Heated Bed	Magnetic Building Plate	High-Temperature Double-Sided Textured PEI Print Bed
	Maximum Temperature	110 °C / 230 °F
Supported Material	PLA, PETG, ABS, ASA, PET	Compatible with Arco and Chroma Kit
	PVA, TPU	Compatible with Arco, not compatible with Chroma Kit
	PA, PC	Supported with Specialized Nozzle Installed
	Carbon / Glass Fiber Reinforced Wire	Supported with Specialized Nozzle Installed

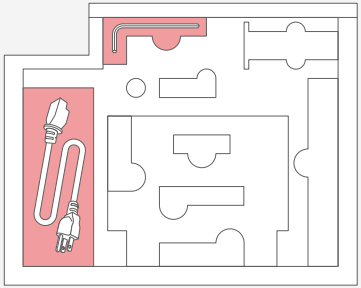
Assistance Features	Built-in Camera	Resolution: 720p, 150° Wide Angle Lens
	Material Breakage Detection	Supported
	Printing after Power Outage	Supported
	Auto Leveling	25 point leveling / Tolarence <0.05 mm
Hardware	Display	5-inch Touch Panel
	Connectivity	Wi-Fi
	Storage	8 GB
	Operation Method	Touch Panel

Software	Slicer	PIXUP FDM Slicer / Orca Slicer * PIXUP FDM Slicer is recommended for comprehensive functional compatibility.
	Connectivity	Wi-Fi / USB
	Printing File Format	.gcode
Power	Power Requirement	100-240 V AC ; 50-60 Hz
	Rated power	900 W

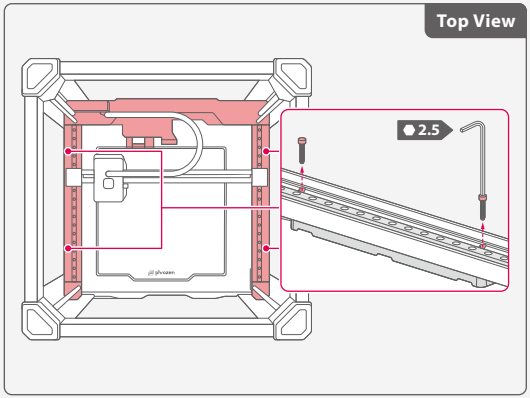
* All specifications were tested in a laboratory and are subject to change without prior notice. For the latest update, please refer to Phrozen's official website.
* The included power cord set packaged with the main unit cannot be used with electrical equipment other than the specified device.

03 Get Started

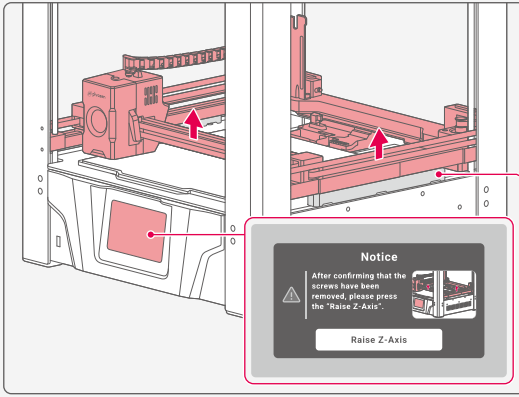
Unboxing



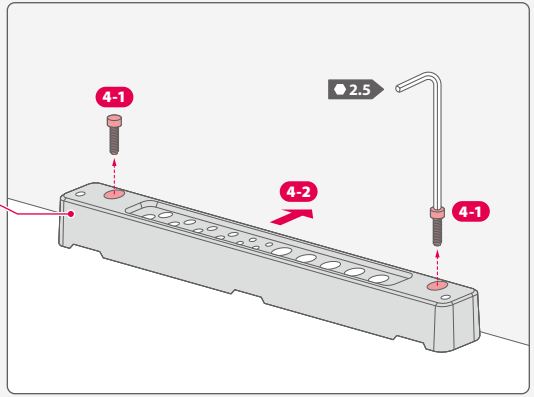
1 Pull out the EPE, then take out **the 2.5 mm hex wrench** and **power cord** in the EPE box.



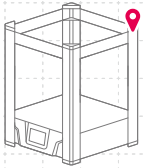
2 Use the 2.5 mm hex wrench from the EPE box to remove **the four fixing screws** on both sides of the XY Beam.



3 Plug in the power cord, turn on the printer, and follow the instructions on the touch panel until you reach the page of "Raise Z-Axis".

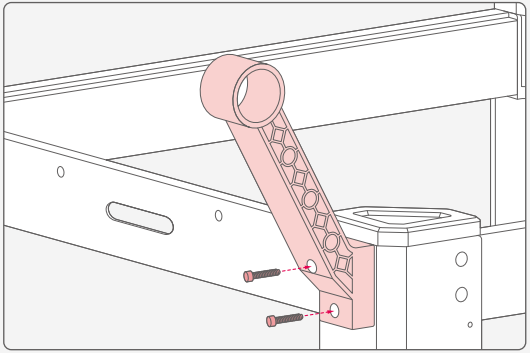


4 Use a 2.5 mm hex wrench to remove **the four screws** of the fixtures under the XY Beam and remove the fixtures.

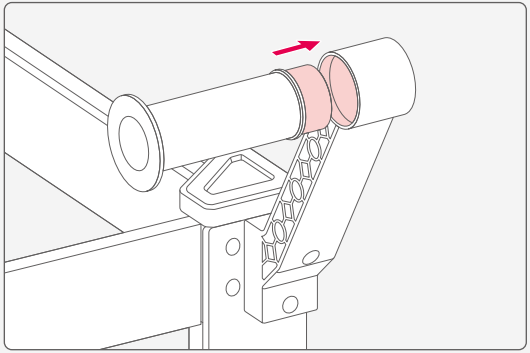


Hardware Installation

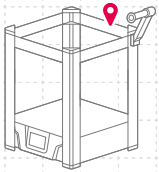
Installation of Filament Spool Bracket



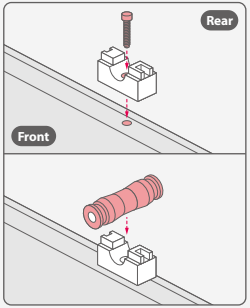
1. Place the filament spool bracket on the right rear side of the printer and lock **the two hexagon socket head M4 X 8 screws** with a **3 mm hex wrench**.



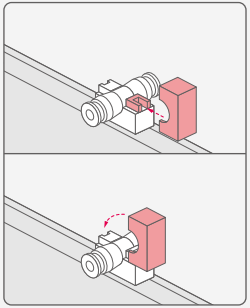
2. Lock the axis onto the filament spool bracket, now you finished the installation of the filament spool bracket.



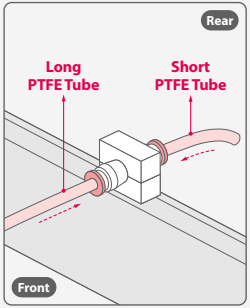
Installation of PTFE Tube



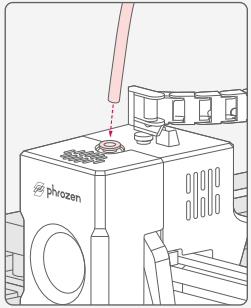
1 Place the tube guide seat on the beam at the rear of the printer and use a **2.5 mm hex wrench** to secure **an M3 X 8 hex socket screw**, then place the tube guide.



2 Place and lock the tube guide cover in place.



3 Connect the short PTFE tube to the rear and the long PTFE tube to the front.



4 Insert the other end of the **long PTFE tube**.

Test Print

1 When you reach this page in the boot instructions, click "Next" to perform a test print.
If you click "Skip", the printer will only complete the calibration.

2 Install the PTFE tube onto the printer. If the PTFE tube is already installed, click ⊖ to proceed to the next step.

*: You can find instructions for this installation in the 'Installation of PTFE Tube' section on page 12.

3 Place the spool on the filament spool bracket.

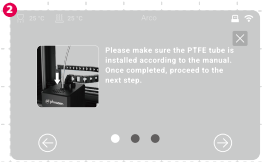
4 Wait for the nozzle to heat up.

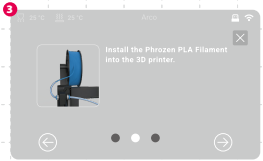
5 Feed the filament into the PTFE tube.

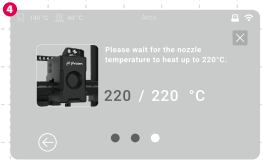
6 The printer will perform each calibration and automatically start a test print once all calibrations are complete.

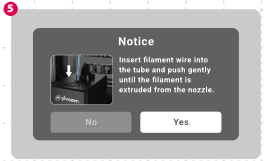
7 Test print details will be shown once the printing is complete. Click "OK" to proceed to the next page.

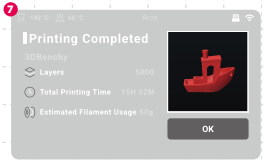
8 You can scan the QR code to learn more about the test print on Phrozen's official website.







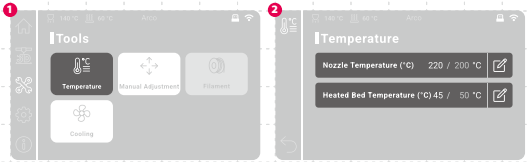




04 Function

Adjust the Temperature of the Nozzle and Heated Bed

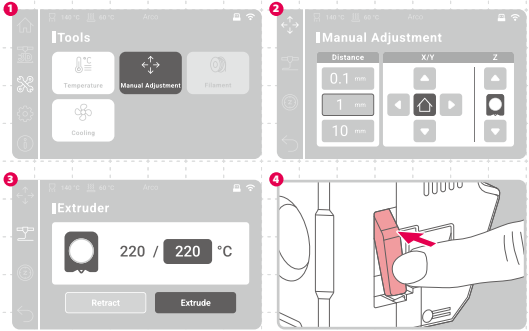
1. You can access the "Temperature" from "Tools" .
2. In the "Temperature" , you can adjust the temperature of the nozzle and the heat bed .



Use of Extruder for Feeding and Retracting Filament

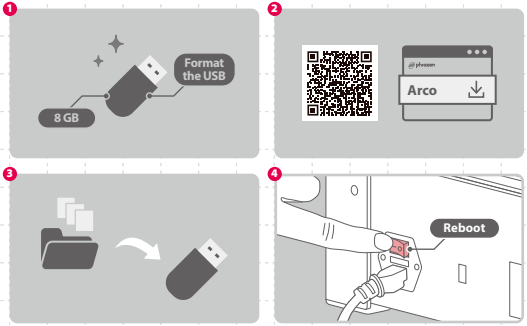
1. You can access the "Manual Adjustment" from "Tools" .
2. Click the "Extruder" .
3. Set the temperature and wait for the nozzle to heat up, then you can click "Extrude" to feed the filament.
4. To retract the filament, first press the extruder clip lever to cut the front part of the filament, then retract the filament to avoid nozzle clogging.

* Avoid letting the filament at the spool come loose during the process of retracting the filament.



Firmware Update

1. Please use a USB with at least 8 GB and format the USB.
2. Download the Arco firmware from the Firmware downloads Page.
3. Unzip the installation files into the root folder of the USB.
4. Insert the USB and reboot to update Arco.
5. Once the update is complete, remove the USB and restart to use the new firmware.



After-Sales Service & Warranty

- Phrozen offers 1-year warranty covering non-human-caused damage for Arco, excluding extruder, nozzle, PTFE tube and consumable components.
- Extruder is covered under a 3-month warranty for non-human-caused damage.
- If you have any questions while using Arco, please scan the QR code to visit the Phrozen Help Center, where you can find helpful product guides or get in touch with our support team.

Phrozen Help Center

Congratulations!

You have just completed your first run.
We hope you've had a great experience!

Please follow Phrozen's social media accounts to learn more about printing tips and share your printing experience with the community.

Facebook

YouTube

Instagram

Phrozen Official Website