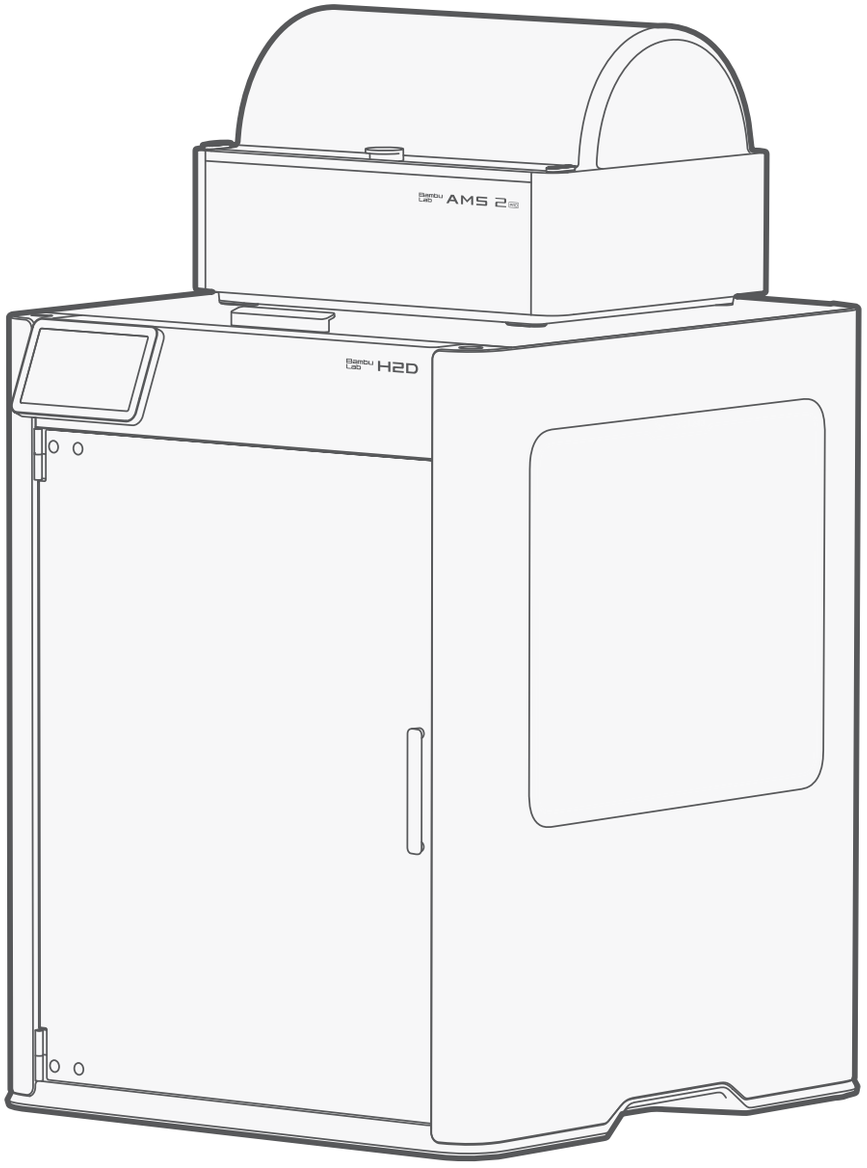
Bambu Lab H2D AMS Combo

Quick Start Guide

Please review the entire guide before using the product.

Safety notice: 1. Do not connect to power until the assembly is complete.
2. Two or more people are needed to carry the printer due to its heavy weight.



PF003-D + SA007

Unboxing Guide

Scan the QR code to access our online guides for detailed on how to unbox, assemble, set up the printer and start your first print.

bambulab.com/support/unboxing

Download Bambu Handy and Bambu Studio

Scan the QR code to download Bambu Handy, or visit the link below to download Bambu Studio. You can remotely control your printer and monitor your prints in real time on both your phone or computer.

bambulab.com/download

Explore more cool models

Scan the QR code to visit MakerWorld, our models community, where you can find a variety of free models, and quickly bring your ideas to life using the creativity tools in MakerLab and accessories in Maker's Supply.

makerworld.com

Get help

Scan the QR code to visit our support center, contact technical support, and access more useful tutorials.

bambulab.com/support

Read before use

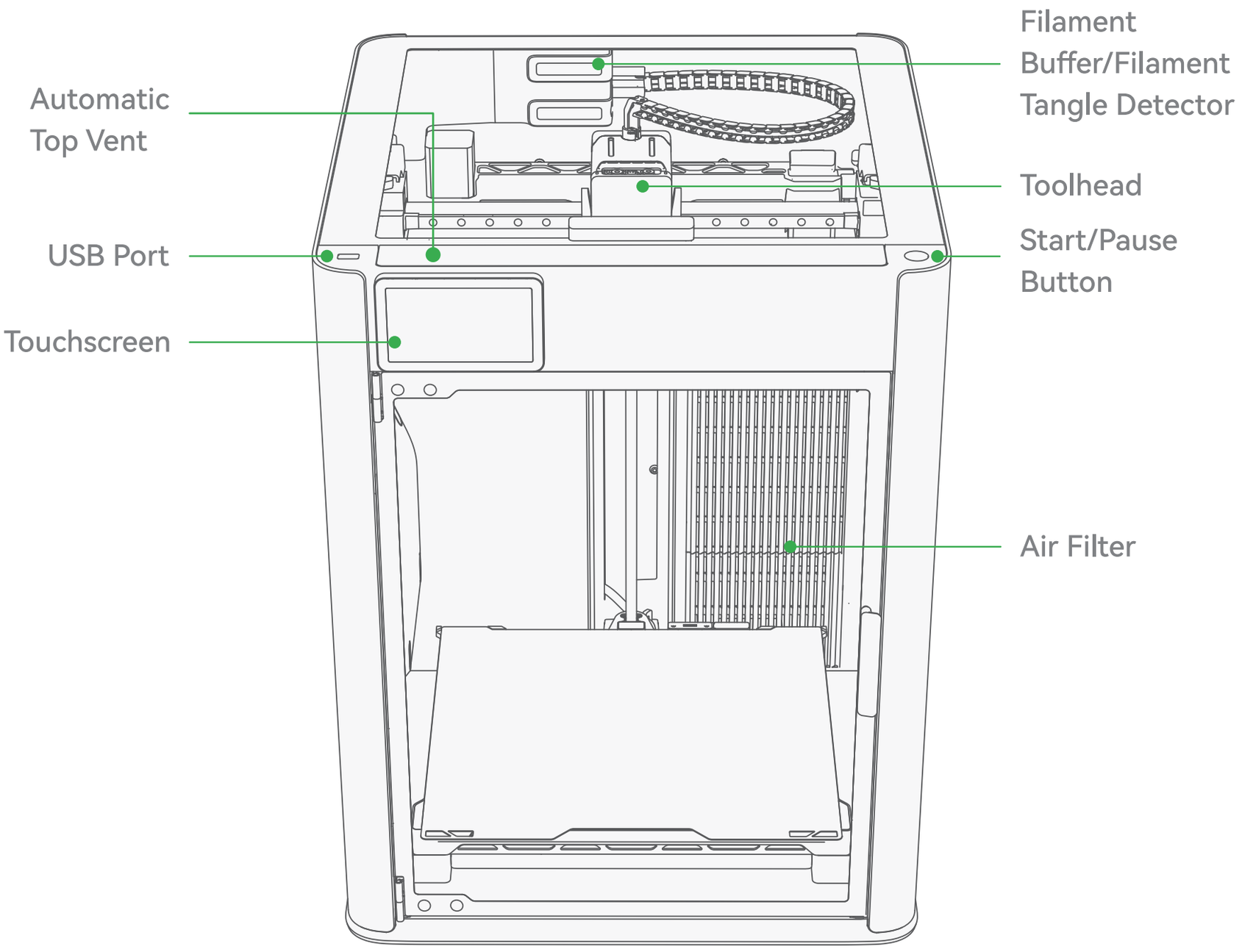
To ensure safety and optimal performance, please follow these guidelines:

- Verify that the printer's operating voltage matches the specified requirements to avoid damage or safety hazards. This can be checked on the label next to the power socket. Refer to the "Specifications" section for details.
- Regular maintenance is essential to keep the printer's complex mechanisms running smoothly. For guidance, see the "Regular Maintenance" section.
- The left hotend should not be used for TPU printing, as it may lead to nozzle clogging. For optimal results, use the right hotend when printing with TPU.
- The printer automatically switches hotends; please avoid manually switching them to prevent potential damage.
- For best results, we recommend using Bambu filaments, which have been rigorously tested for compatibility, safety, and stability with the AMS 2 Pro.
- To prevent the filament getting stuck, do not use flexible filaments such as TPU with a hardness level below 95A or damp PVA in the AMS 2 Pro.
- The AMS 2 Pro supports a spool width between 50 mm to 68 mm and a diameter between 197 mm to 202 mm. We recommend using plastic spools. If filaments with cardboard spools are used, it is recommended to pair them with a spool adapter to reduce roll slipping and debris.

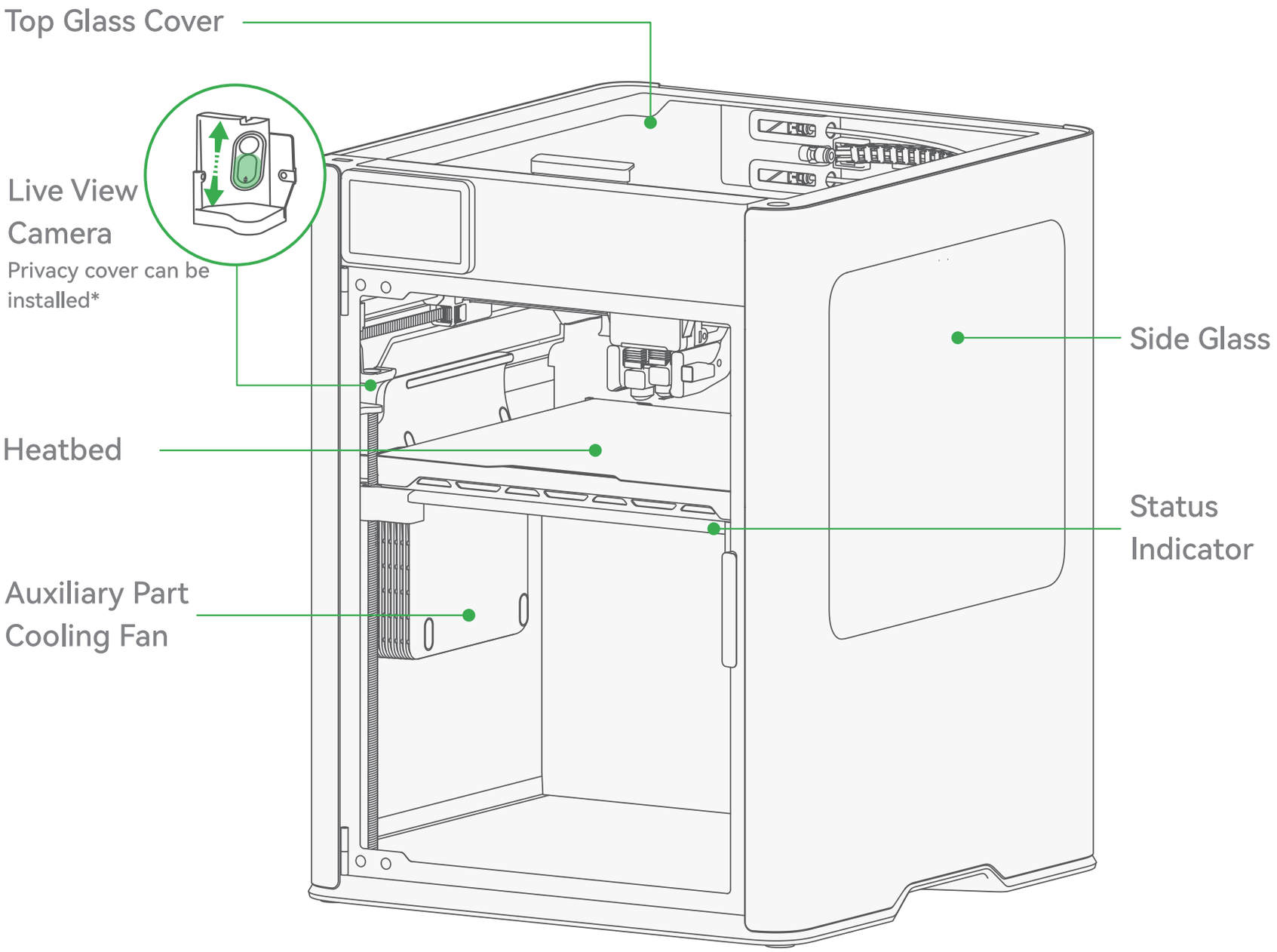
Read before use

- You can use the drying function of the AMS 2 Pro using only a 6-pin cable to connect it to an H2 series printer. If you need to dry filaments in multiple AMS 2 Pro units, you need to purchase official Bambu Lab power adapters to power the drying function of the other AMS 2 Pro units. If using X1 or P1 series printers with one or more AMS 2 Pro units, each unit will require an official Bambu Lab power adapter to power the drying function.
- During the filament drying process, the AMS 2 Pro removes moisture through external air circulation via the air inlets. Please ensure the air intake and vent are not blocked, to ensure optimum drying efficiency.

Printer component introduction

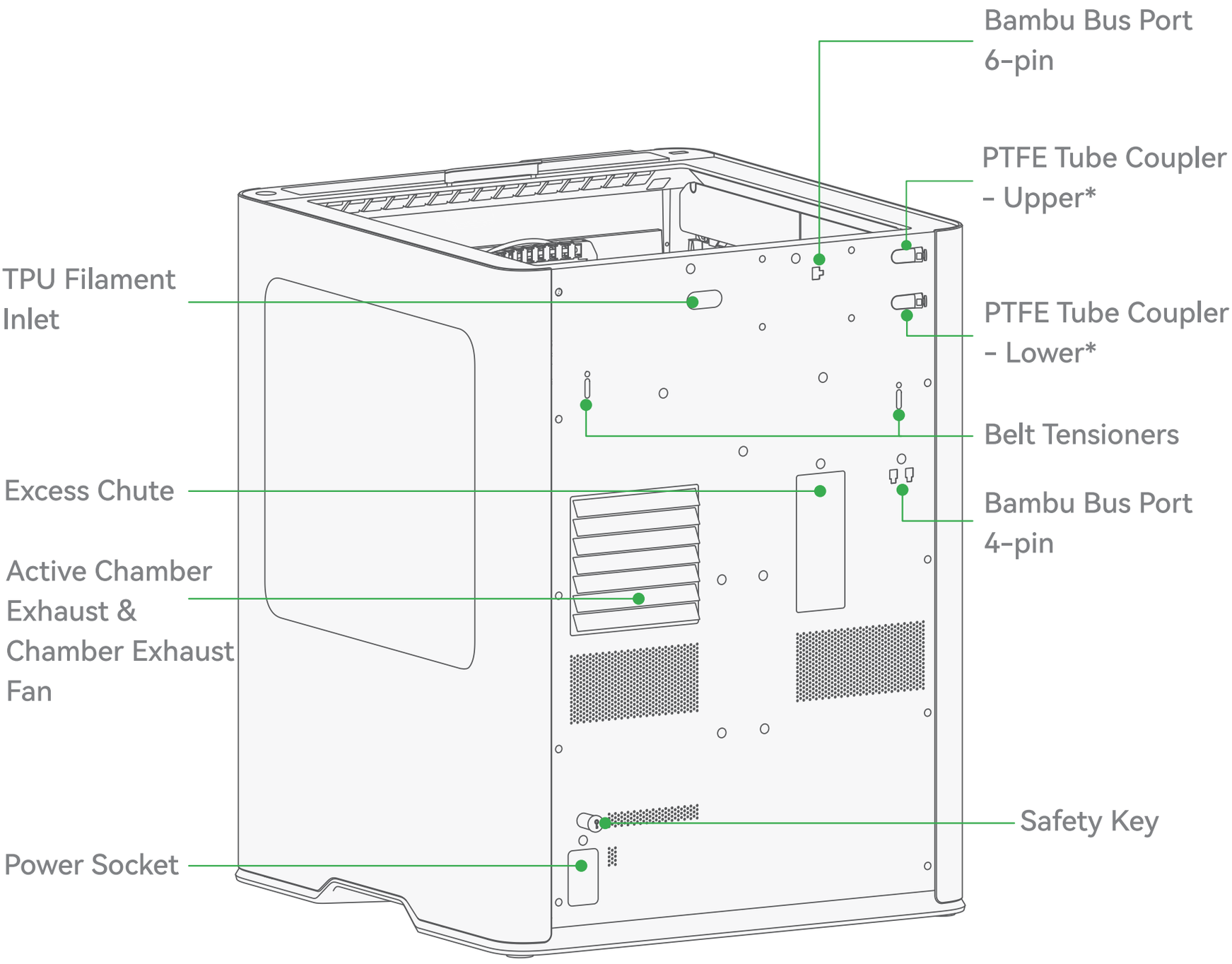


Printer component introduction



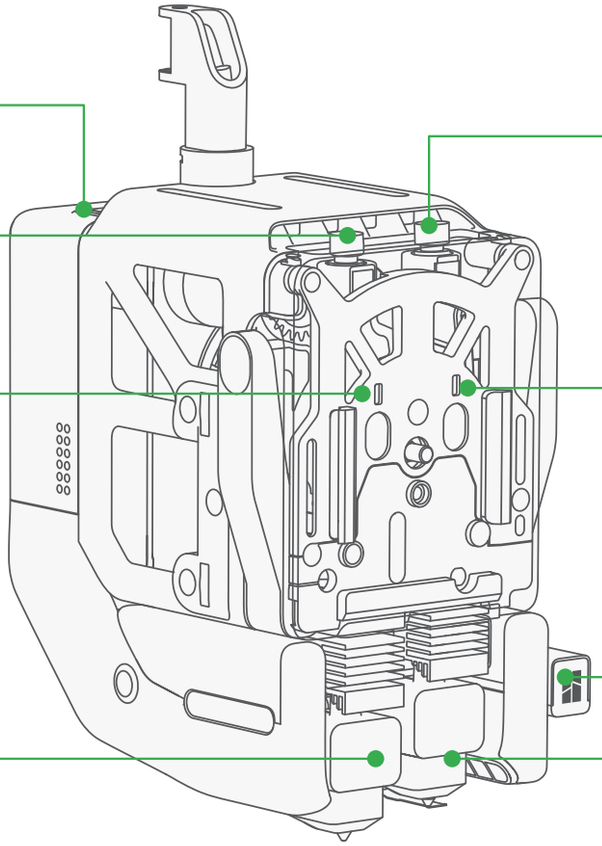
* The privacy cover is in the accessory box. You can install it magnetically on the live view camera.

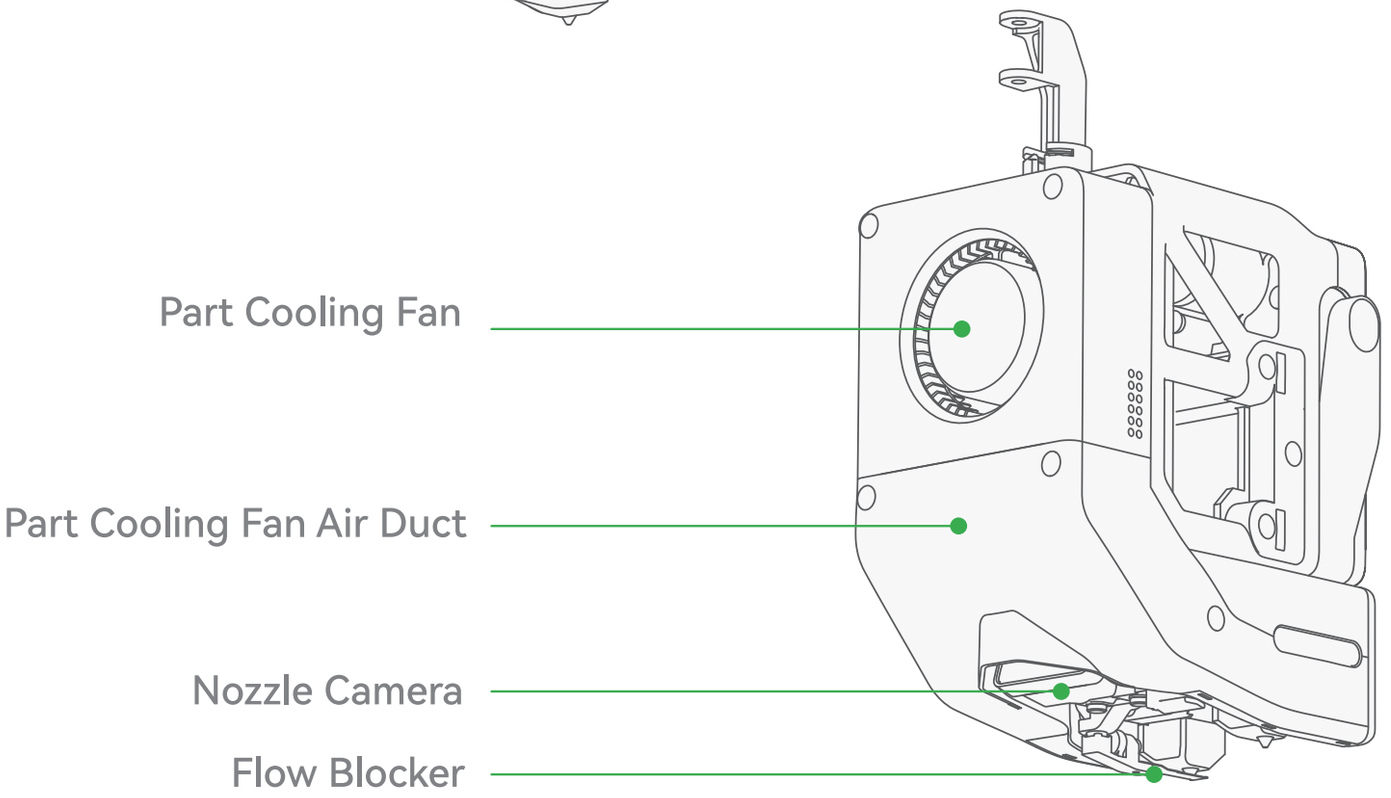
Printer component introduction



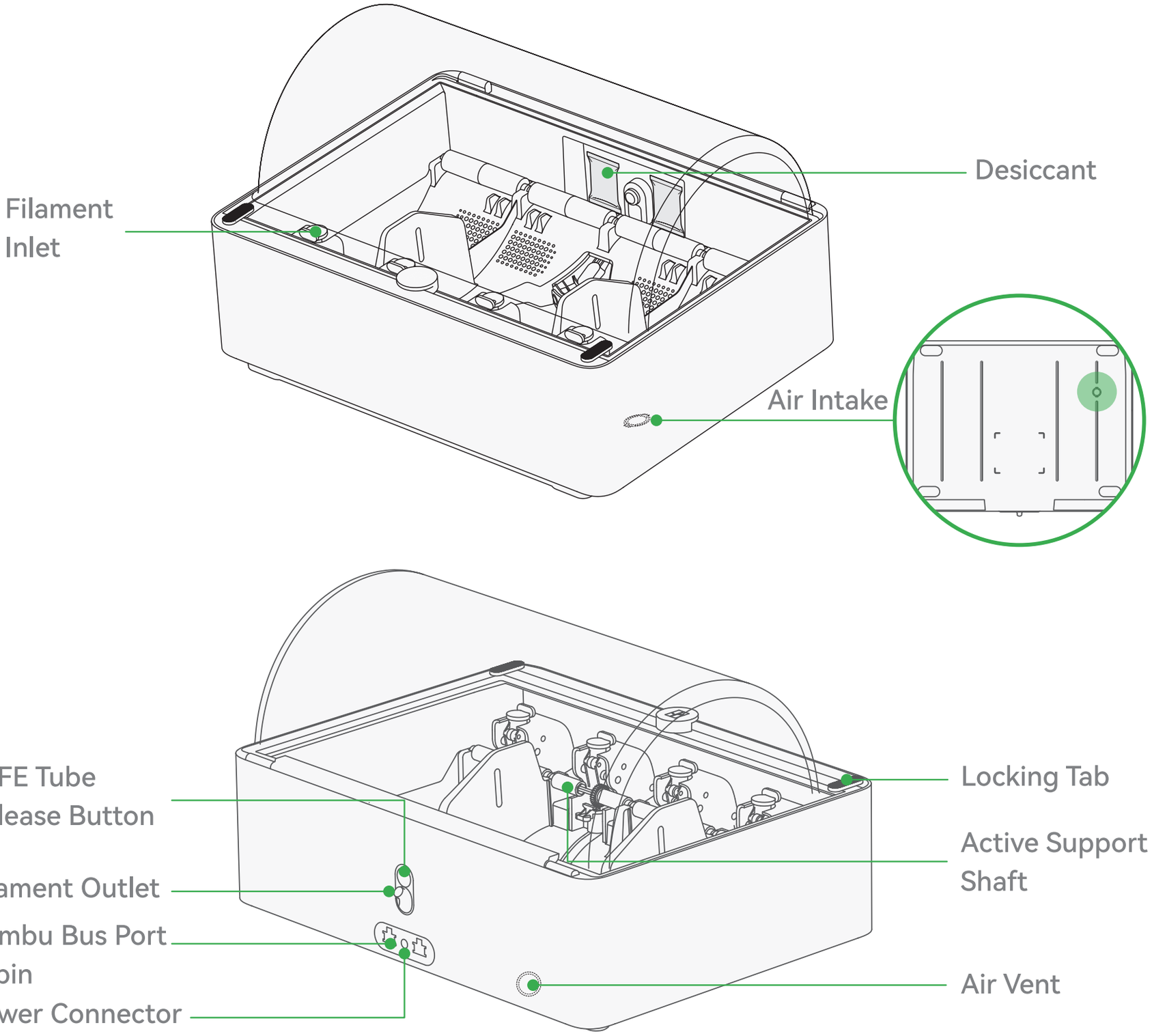
* The upper and lower PTFE tube couplers correspond to different hotends. Connecting the AMS 2 Pro to the **upper coupler** allows the **right hotend** to print in multiple colors. Connecting it to the **lower coupler** allows multi-color printing with the **left hotend**. Using **two AMS 2 Pro units** allows both hotends to support multi-color printing independently.

Toolhead component introduction

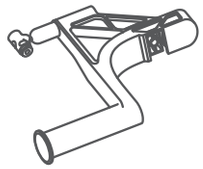




AMS 2 Pro component introduction

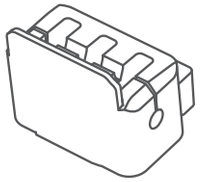


Included accessories



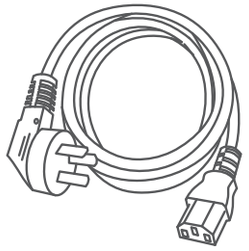
Spool Holder

Filament Cutter

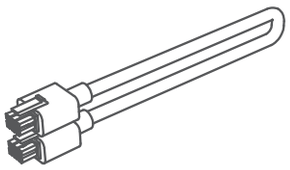


Nozzle Wiping Pad

Flow Blocker



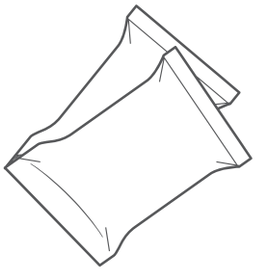
Power Cord



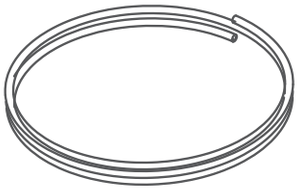
Bambu Bus Cable 6-pin

Allen Key H1.5
Allen Key H2.0

Unclogging Pin

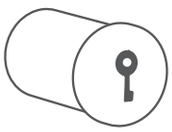


Desiccant

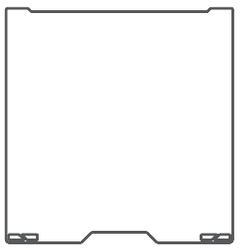


PTFE Tube

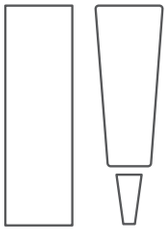
Privacy Cover



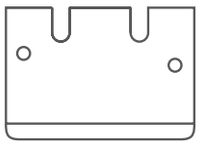
Safety Key



Build Plate
(Pre-installed on heatbed)



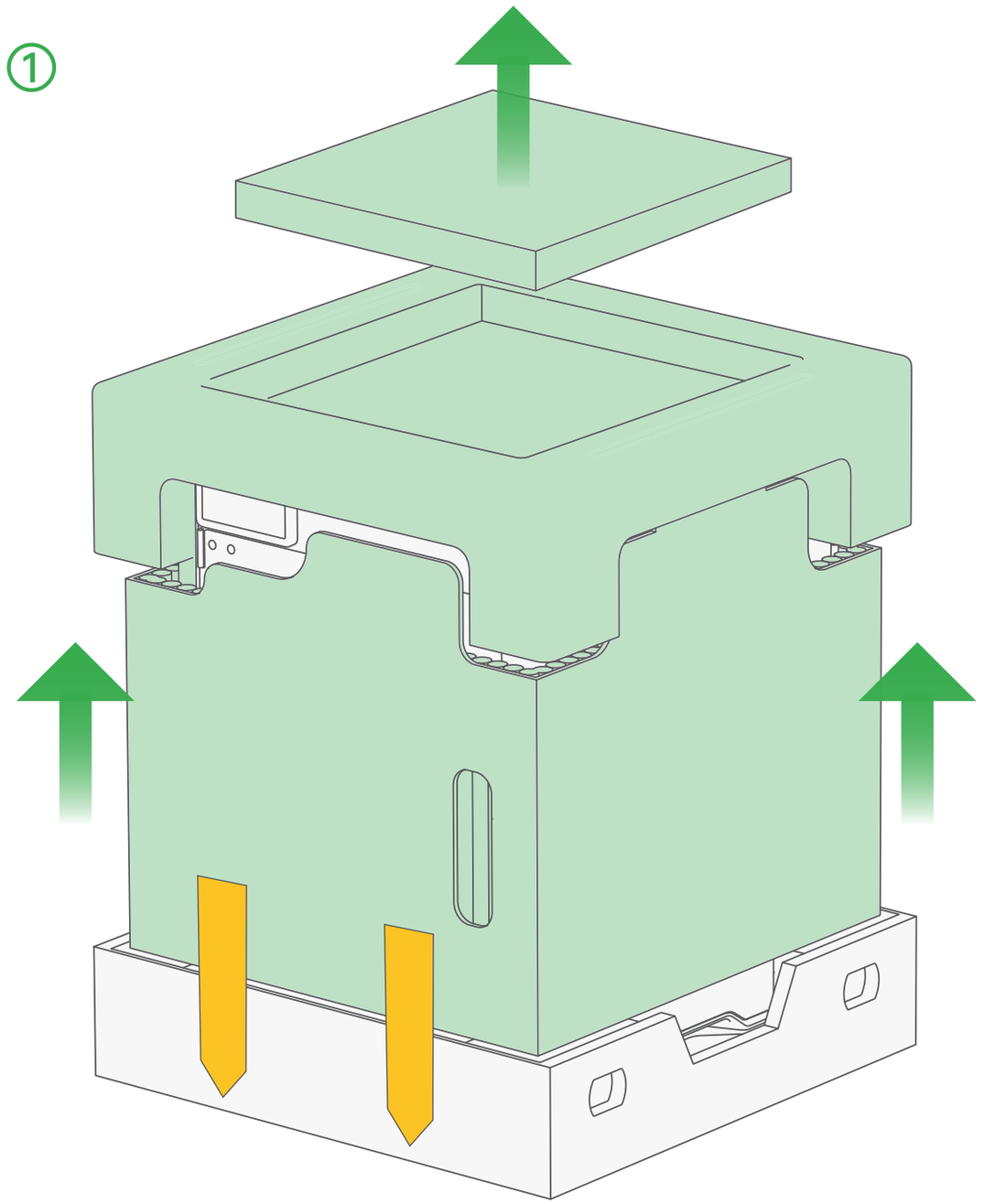
Lubricant Grease & Lubricant Oil



Scraper Blade

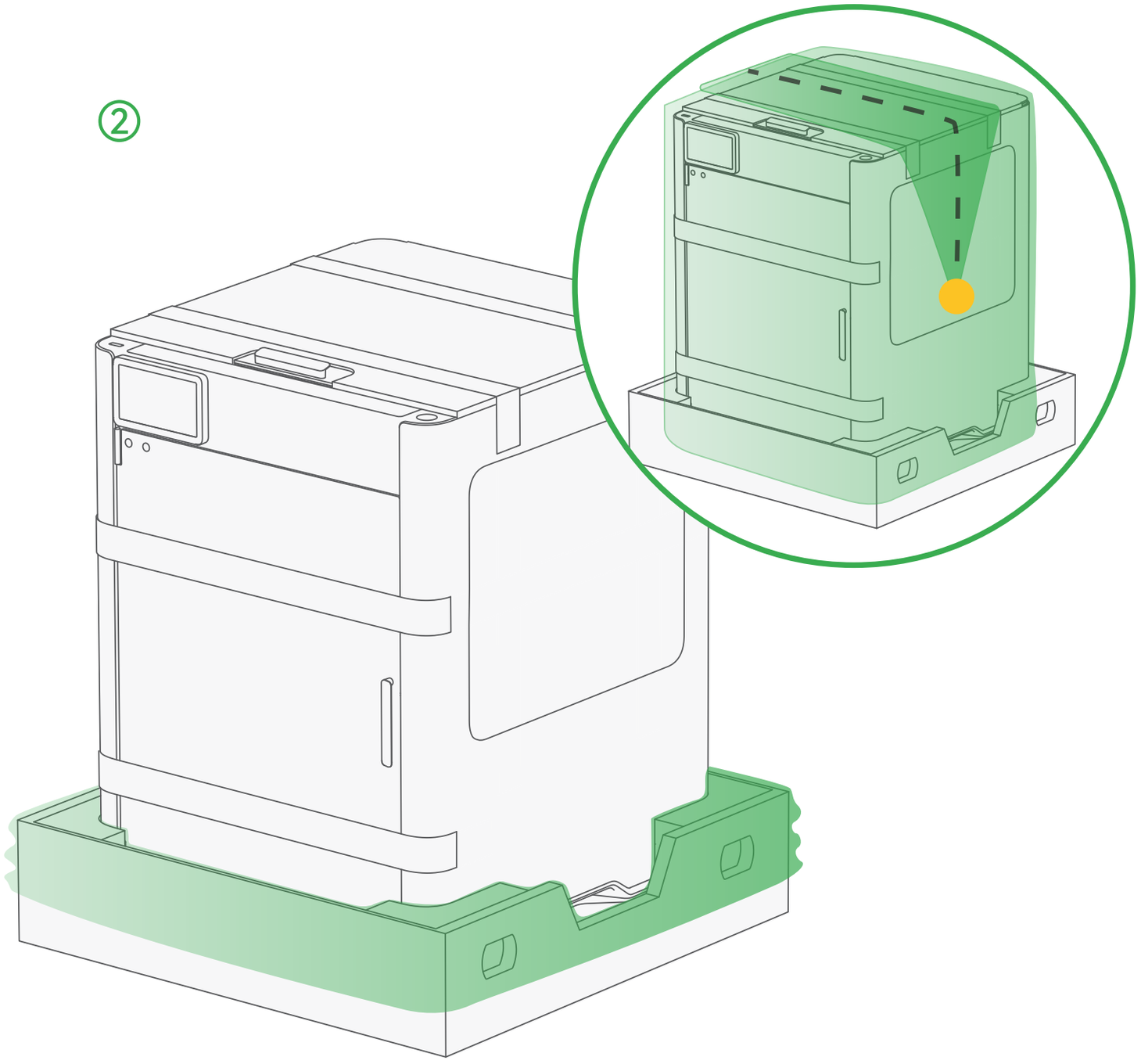
Remove the package

Keep packaging materials and screws for shipping.



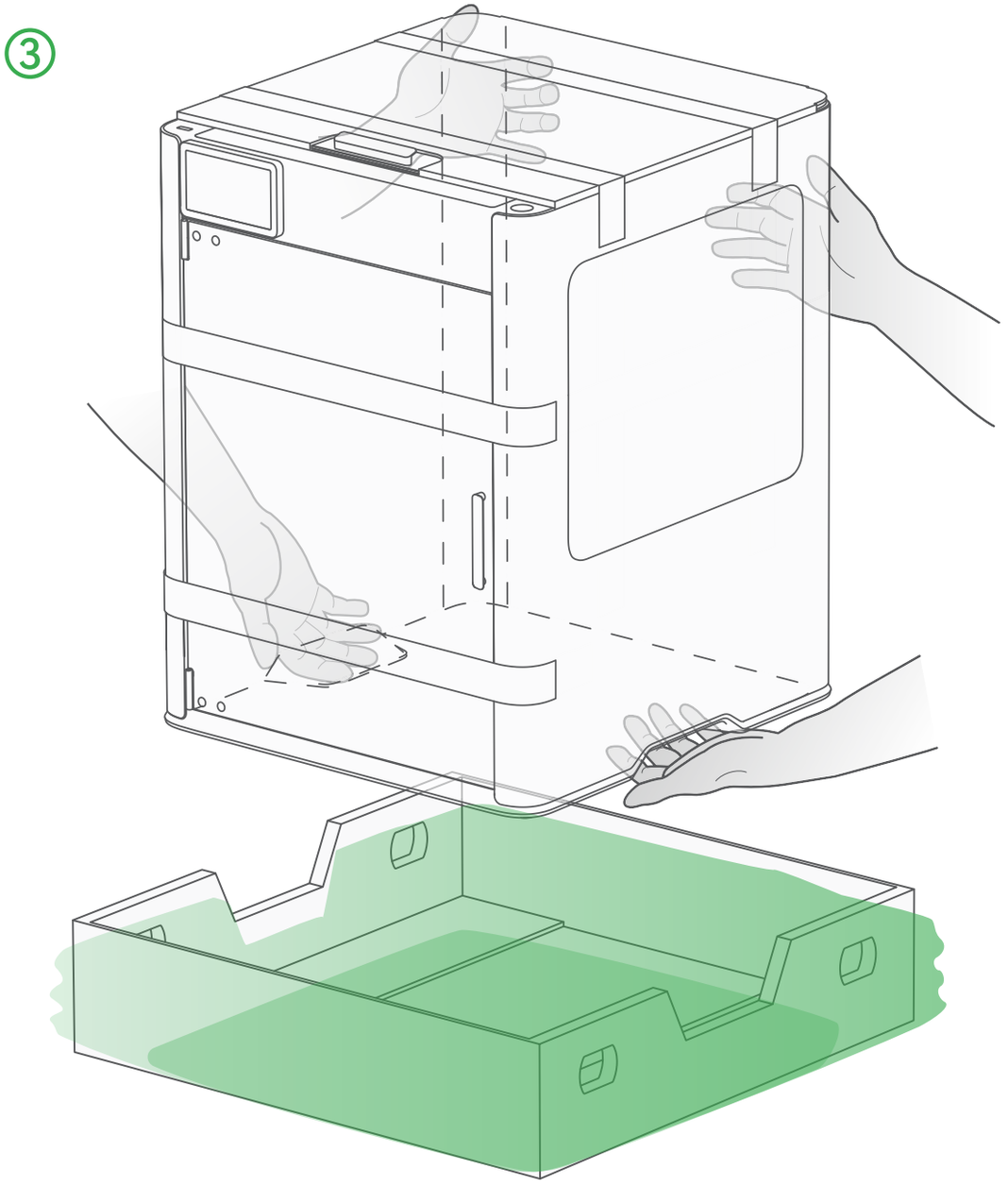
Take out the accessory box, and remove the surrounding cardboard, foam and tape.

Remove the package



Remove the stickers from the sides and top opening of the moisture-proof bag. Then, pull the bag downward and fold it over all four corners of the bottom cardboard.

Remove the package

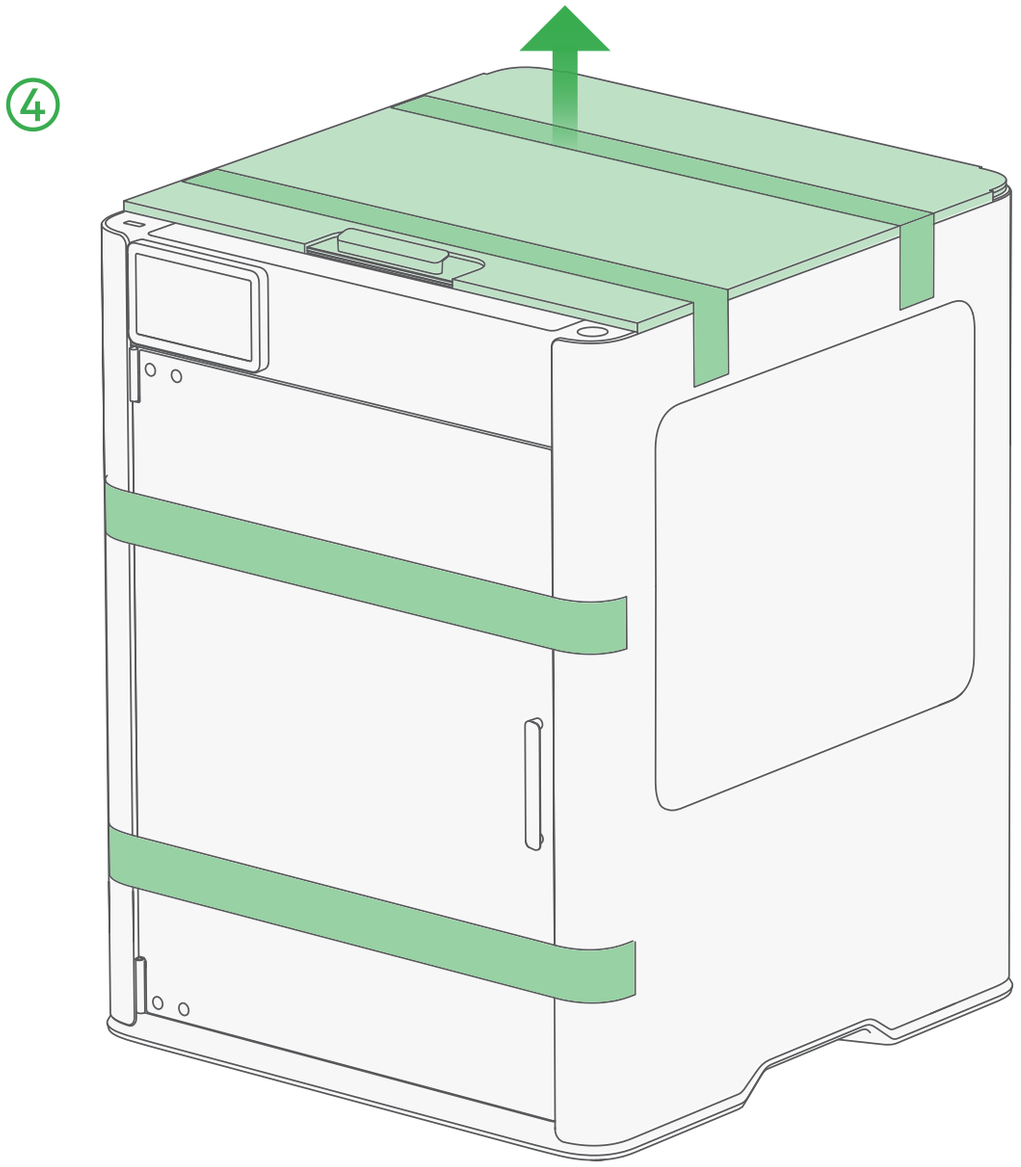


WARNING

To prevent the risk of suffocation, keep these bags away from babies and children

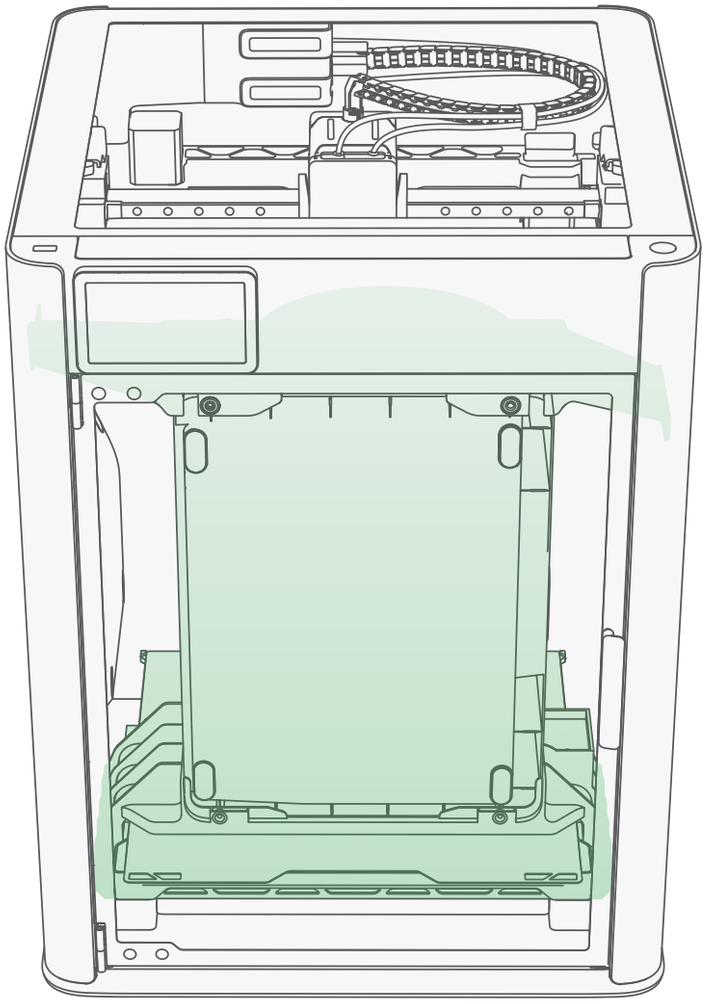
As shown in the picture, ensure the bottom cardboard stays in place. With two people, carefully lift the printer out of the cardboard and moisture-proof bag, and place it on a stable surface.

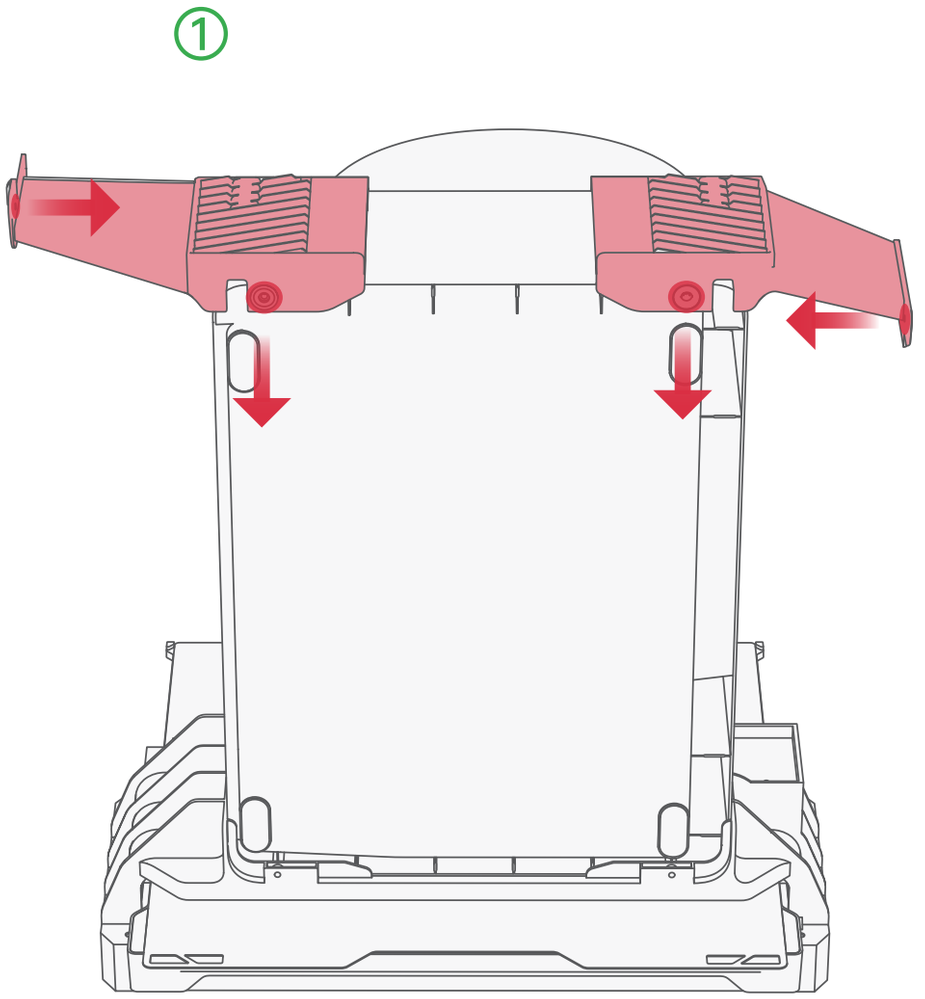
Remove the package



Remove the adhesive tapes and other packaging materials, and then take out the top glass cover and set it aside.

Unlock the AMS 2 Pro

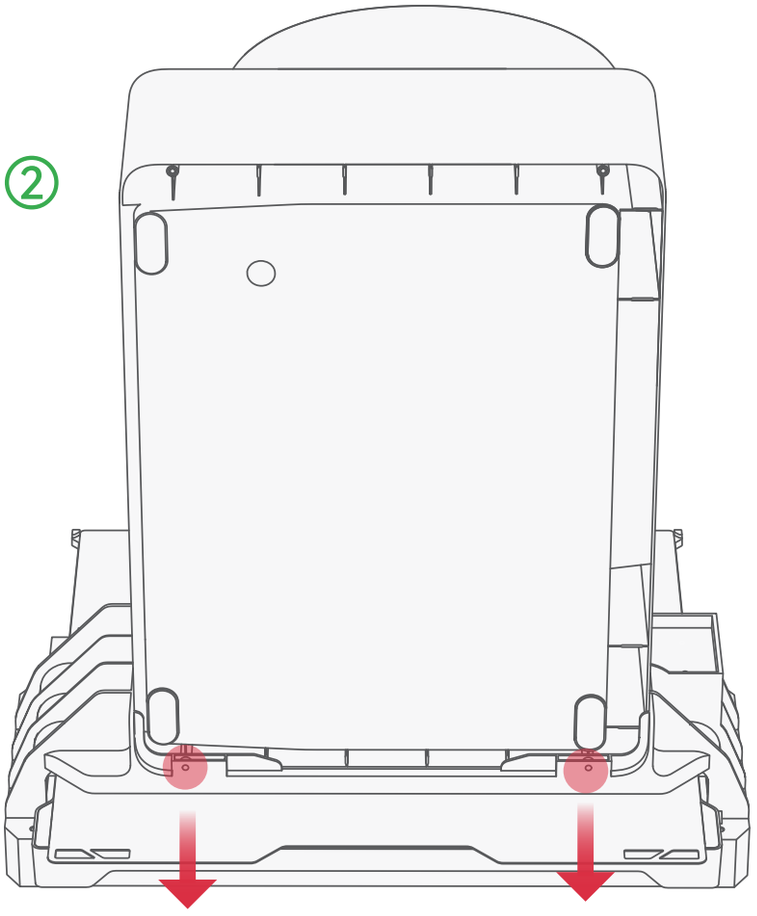




Use the longer H2.0 allen key from the accessory box to remove the 4 screws marked in red. Next, detach the two plastic parts from the top.

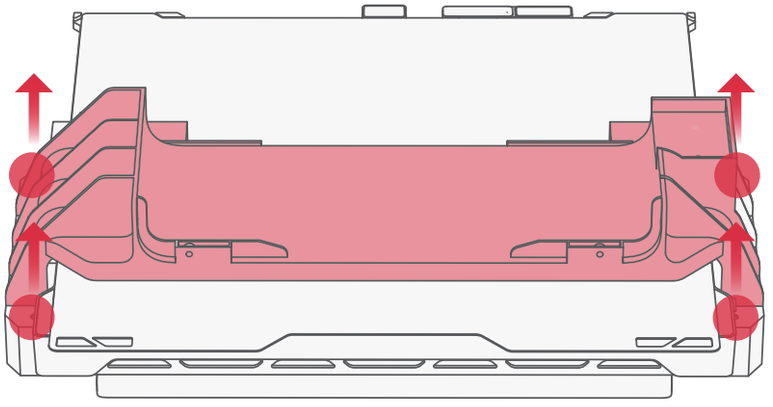
Unlock the AMS 2 Pro

②



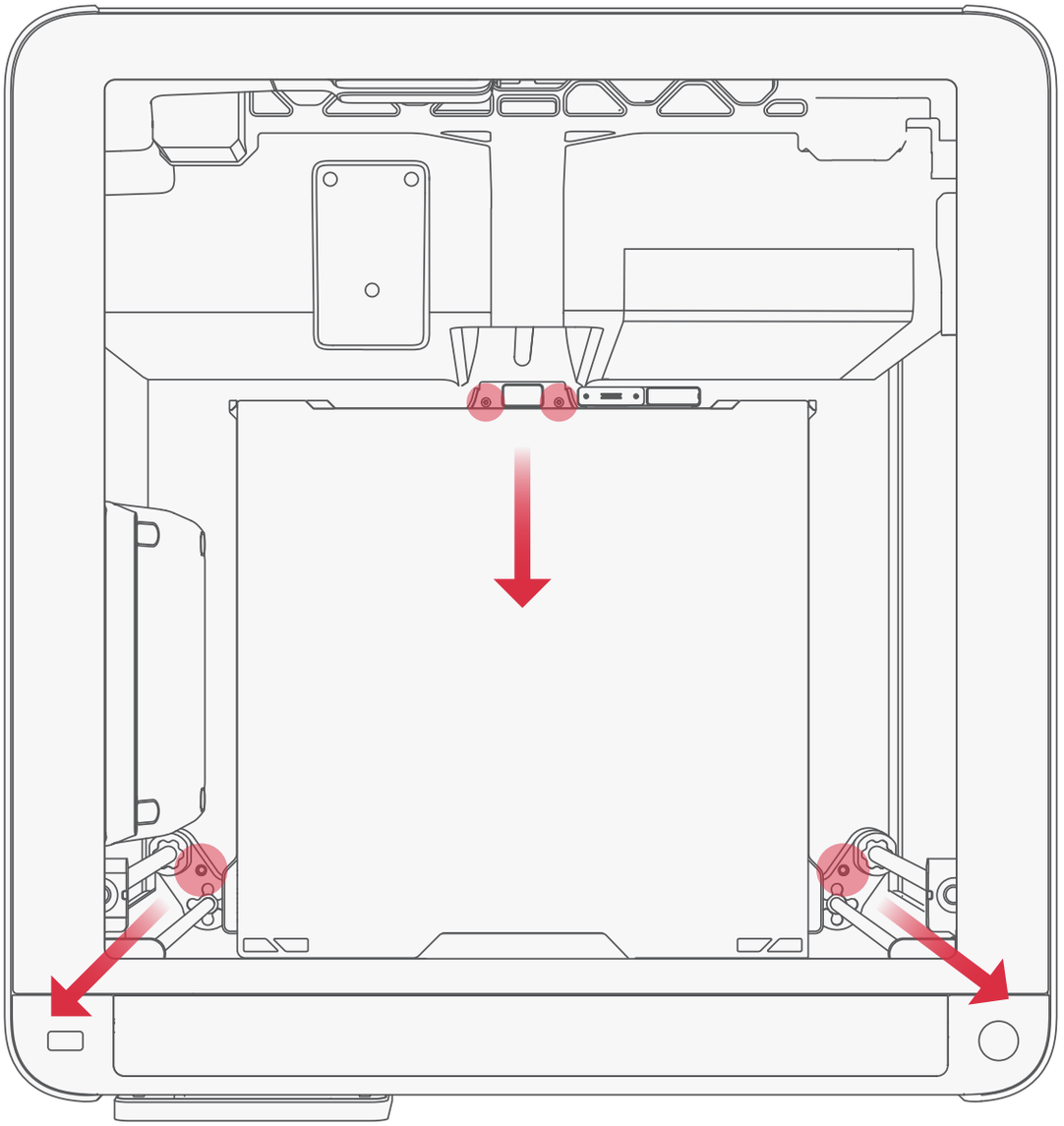
Use the H2.0 allen key to remove the 2 screws marked in red. Then, carefully take out the AMS 2 Pro.

③



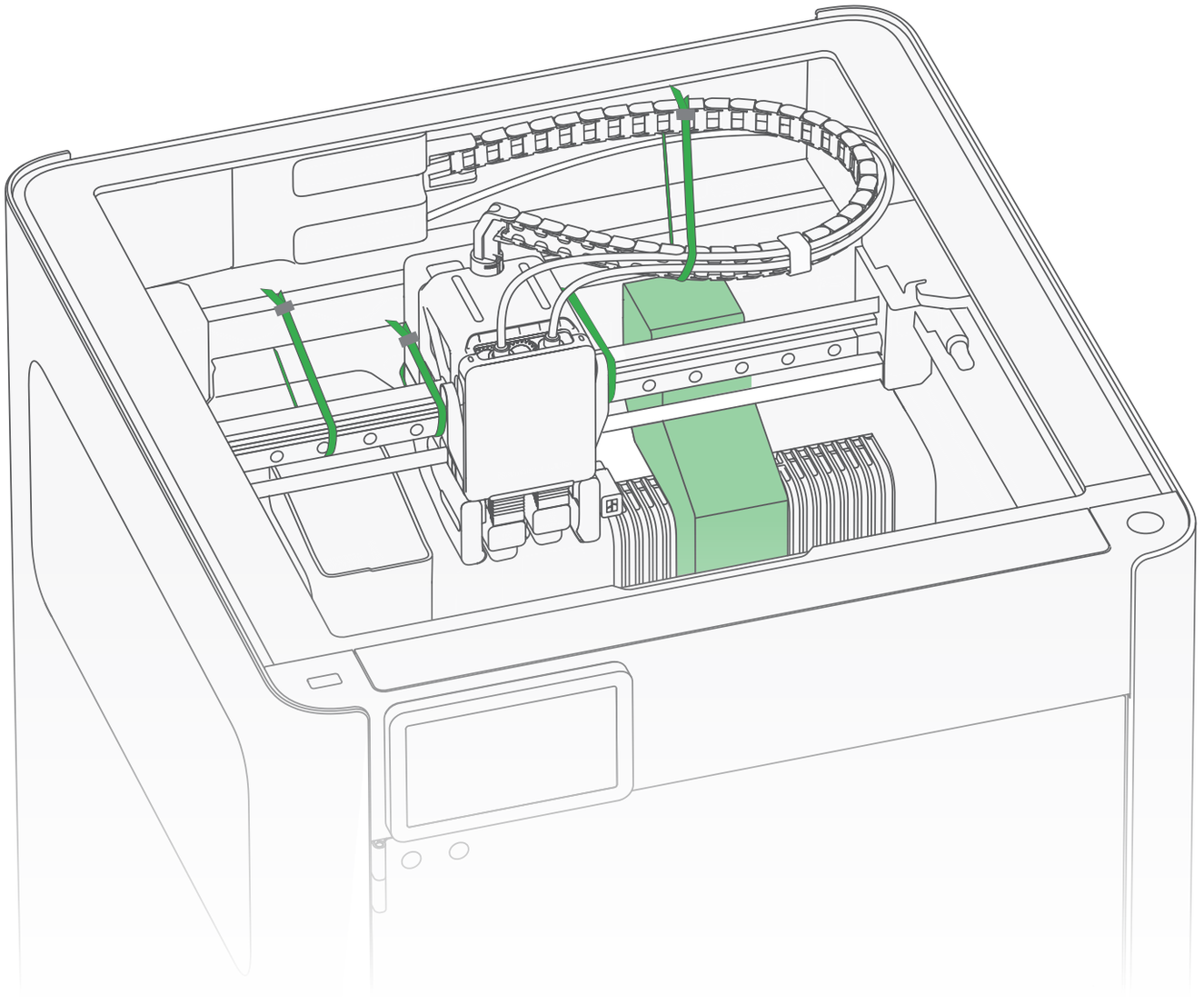
Use the H2.0 allen key to remove the 4 screws marked in red. Then, take out the fixture and the nearby foam (except the foam under the heatbed).

Unlock the heatbed



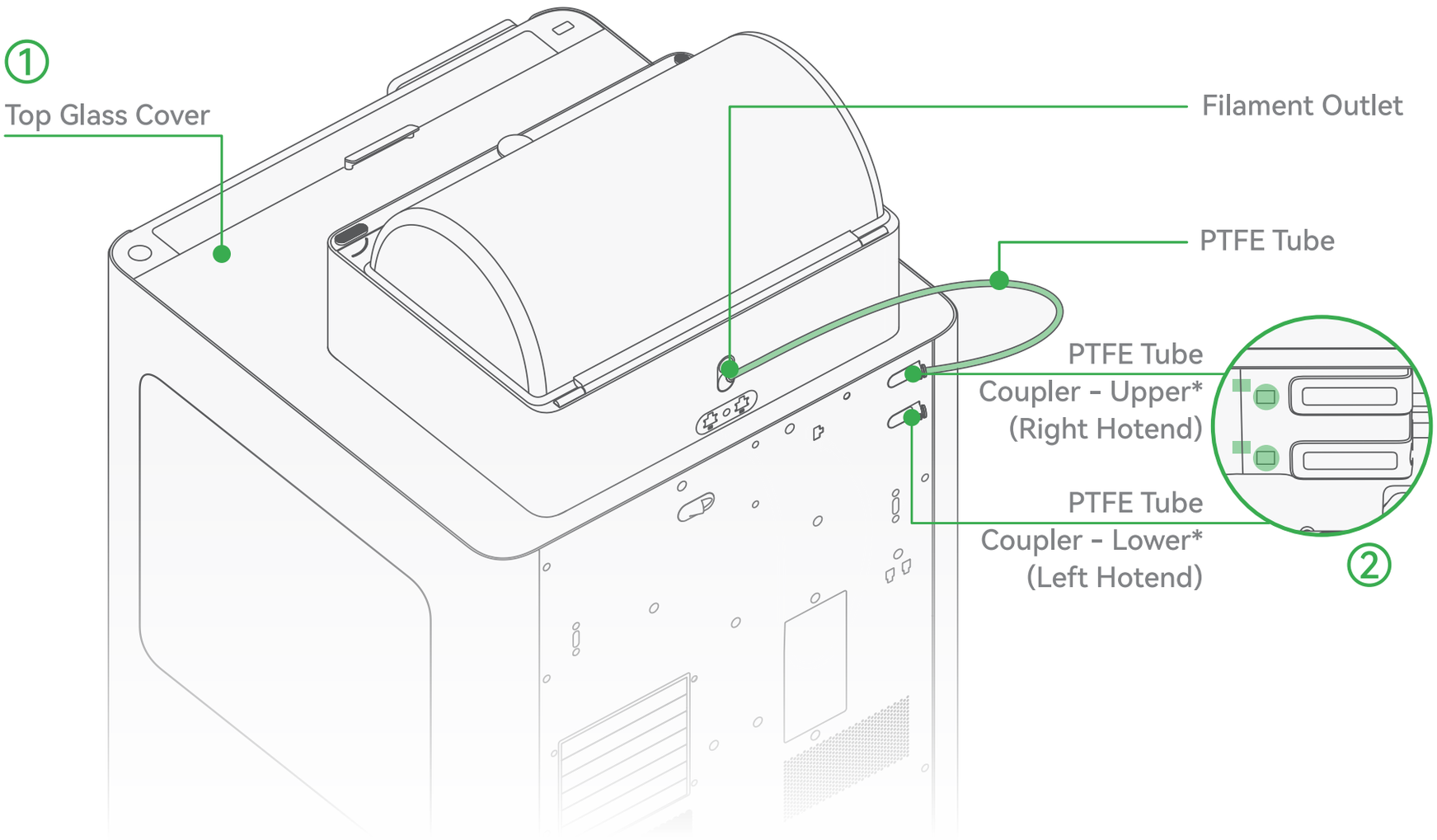
Use the H2.0 allen key to remove the 4 screws marked in red to unlock the heatbed.
Do not remove the foam under the heatbed. This can be removed after the calibration.

Unlock the toolhead



Cut and remove 4 zip ties. Pull the toolhead toward the front of the printer, then remove the foam piece marked in green.

Install the AMS 2 Pro

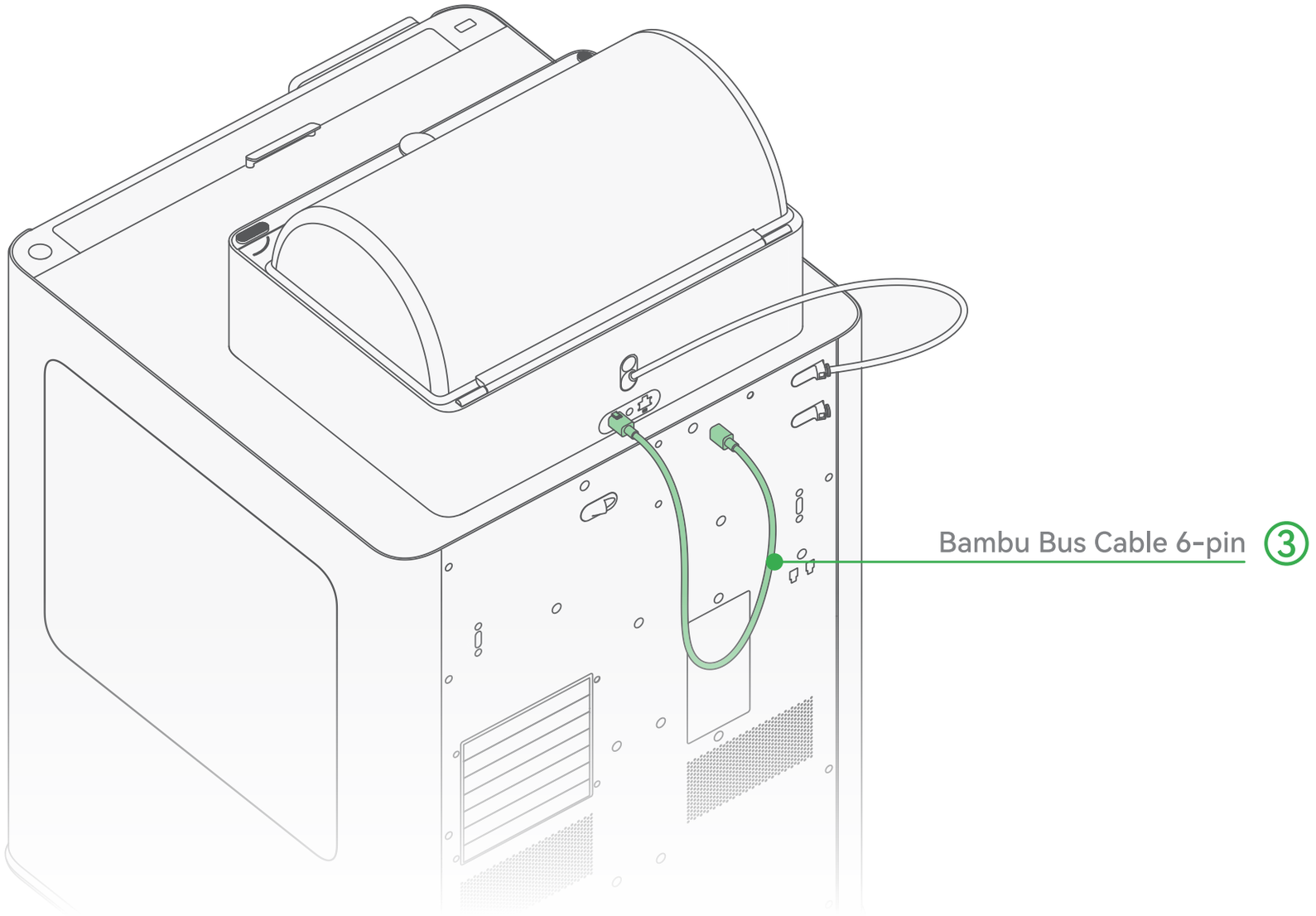


① Place the top glass cover and AMS 2 Pro on top of the printer.

② Take out the PTFE tube from the accessory box, insert it into the AMS 2 Pro's filament outlet and any PTFE tube coupler of the printer, and push the tube forward for approximately 10 cm until it stops (if you can see the PTFE tube from the window next to the buffer from the front of the printer, it is correctly inserted).

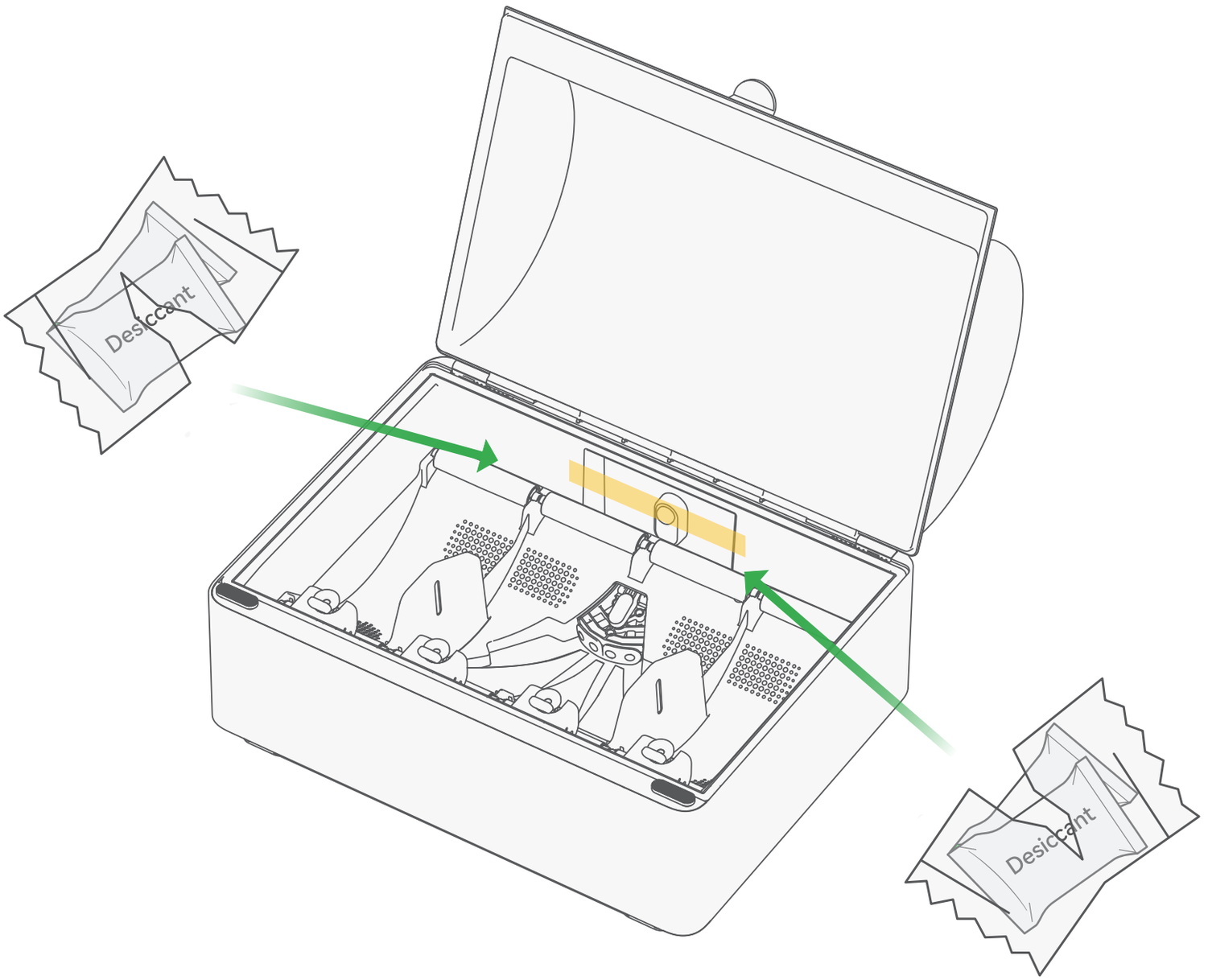
* The upper and lower PTFE tube couplers correspond to different hotends. Connecting the AMS 2 Pro to the **upper coupler** allows the **right hotend** to print in multiple colors. Connecting it to the **lower coupler** allows multi-color printing with the **left hotend**. Using **two AMS 2 Pro units** allows both hotends to support multi-color printing independently.

Install the AMS 2 Pro



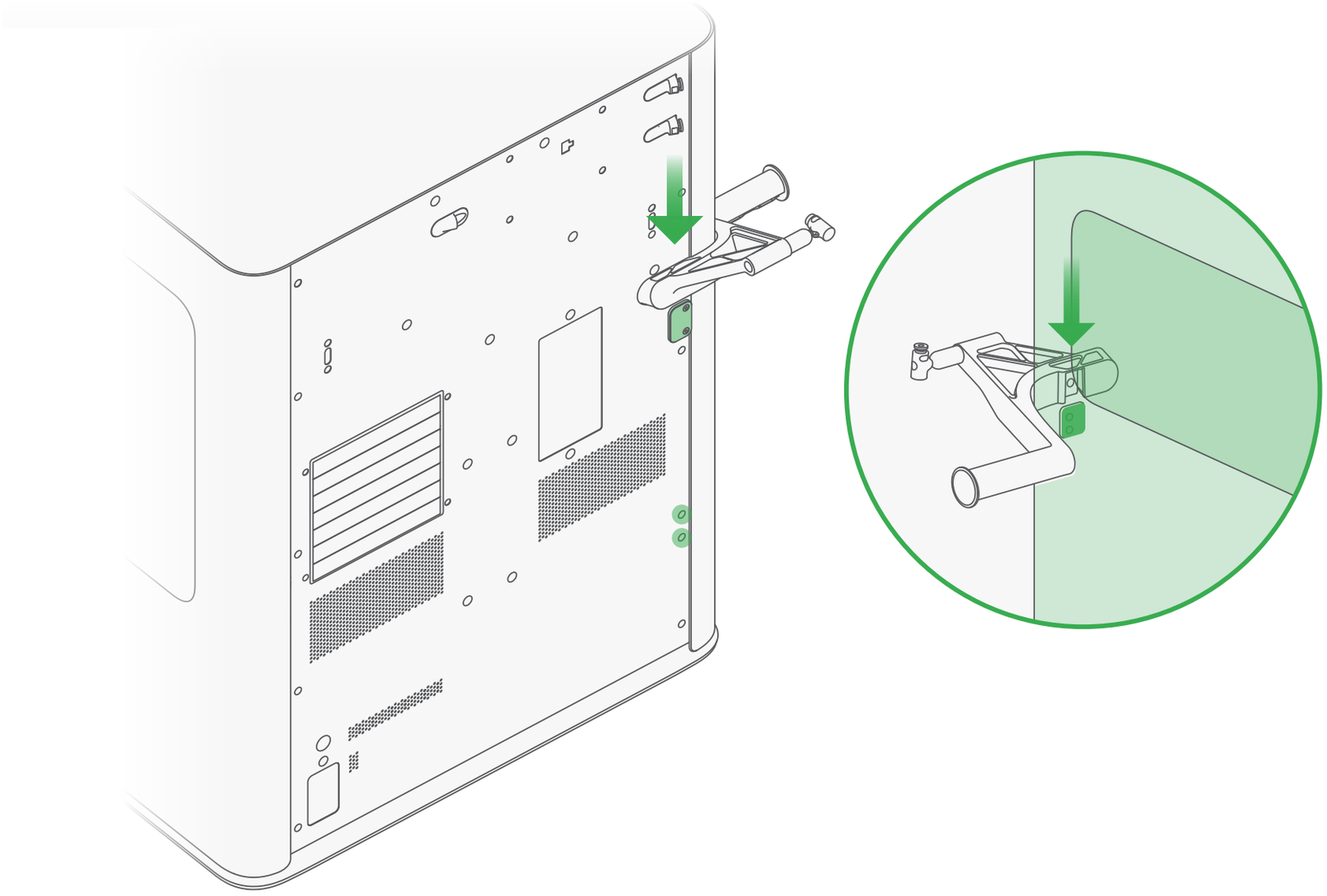
③ Take out the Bambu Bus Cable 6-pin from the accessory box, and connect it to the printer and either 6-pin port of the AMS 2 Pro.

Remove the desiccant packaging material



Remove the tape from the back of the AMS 2 Pro and take out the desiccant packs. Remove the outer plastic packaging material and install 2 packs of desiccant on each side of the empty space.

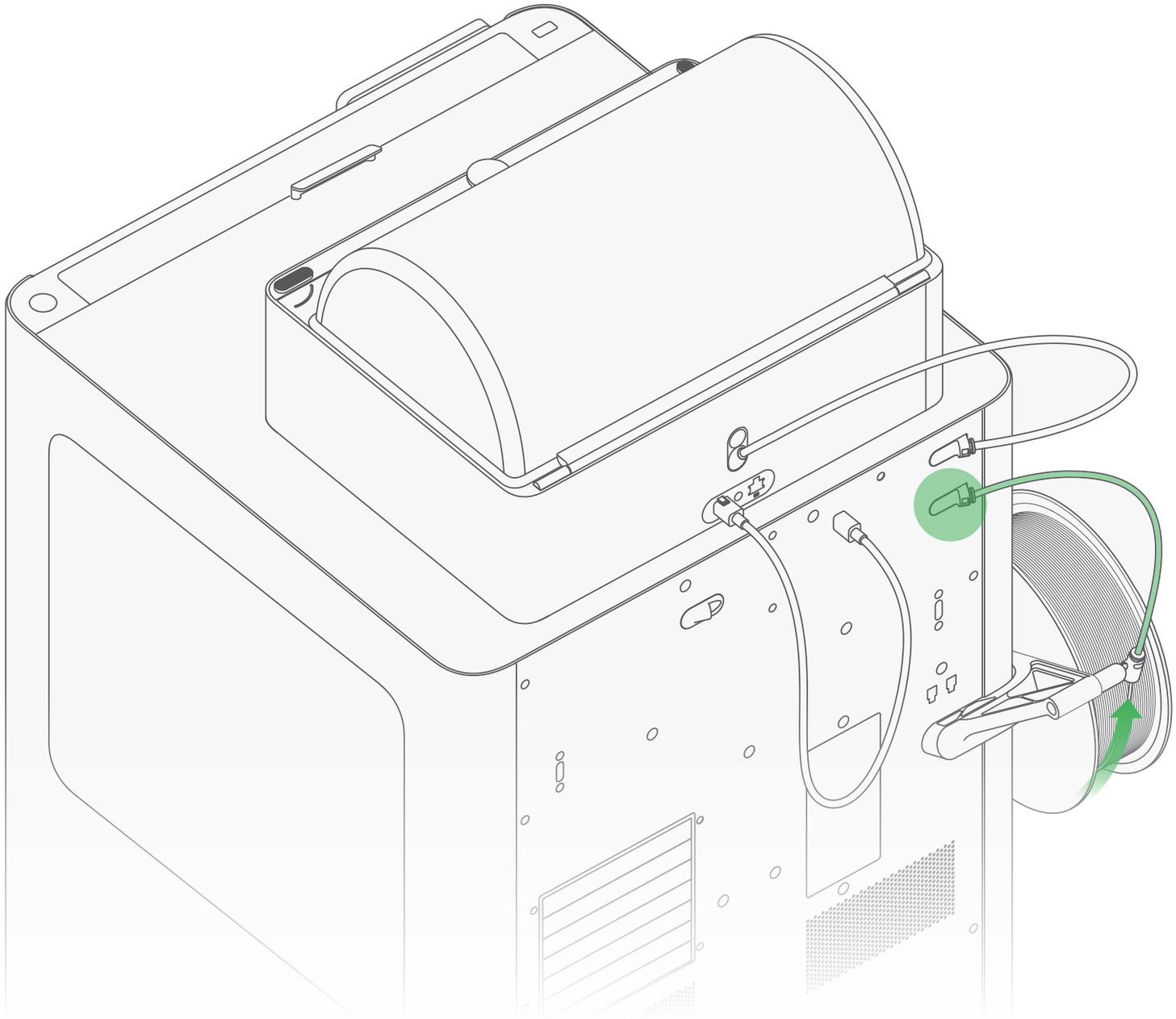
Install the spool holder



Take out the spool holder from the accessory box. Slide in the spool holder in the direction shown above.

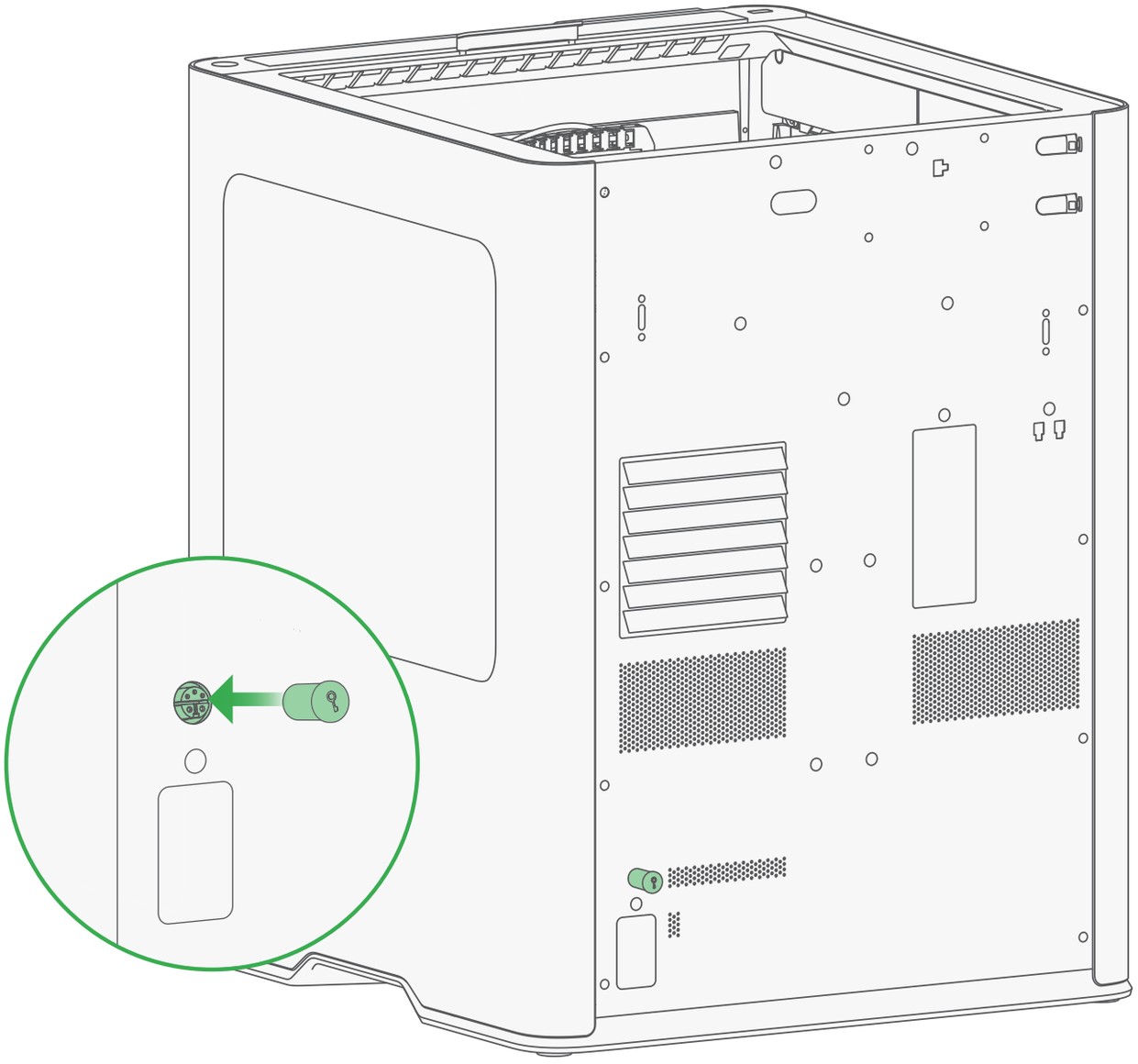
* The screws holes marked in green near the bottom of the printer can also be used to install a spool holder base plate, allowing you to add an additional spool holder. This setup enables you to print with two external spools of filament simultaneously. The package includes 1 base plate and spool holder by default.

Load filament from an external spool



If the printer is connected to the AMS 2 Pro on a coupler, you can feed filament from an external spool using the additional coupler. Connect one end of the PTFE tube to the spool holder’s PTFE tube coupler and the other end to the printer's other coupler, pushing it in until it stops. Next, insert the filament into the PTFE tube and continue pushing until it enters the extruder and can no longer move forward.

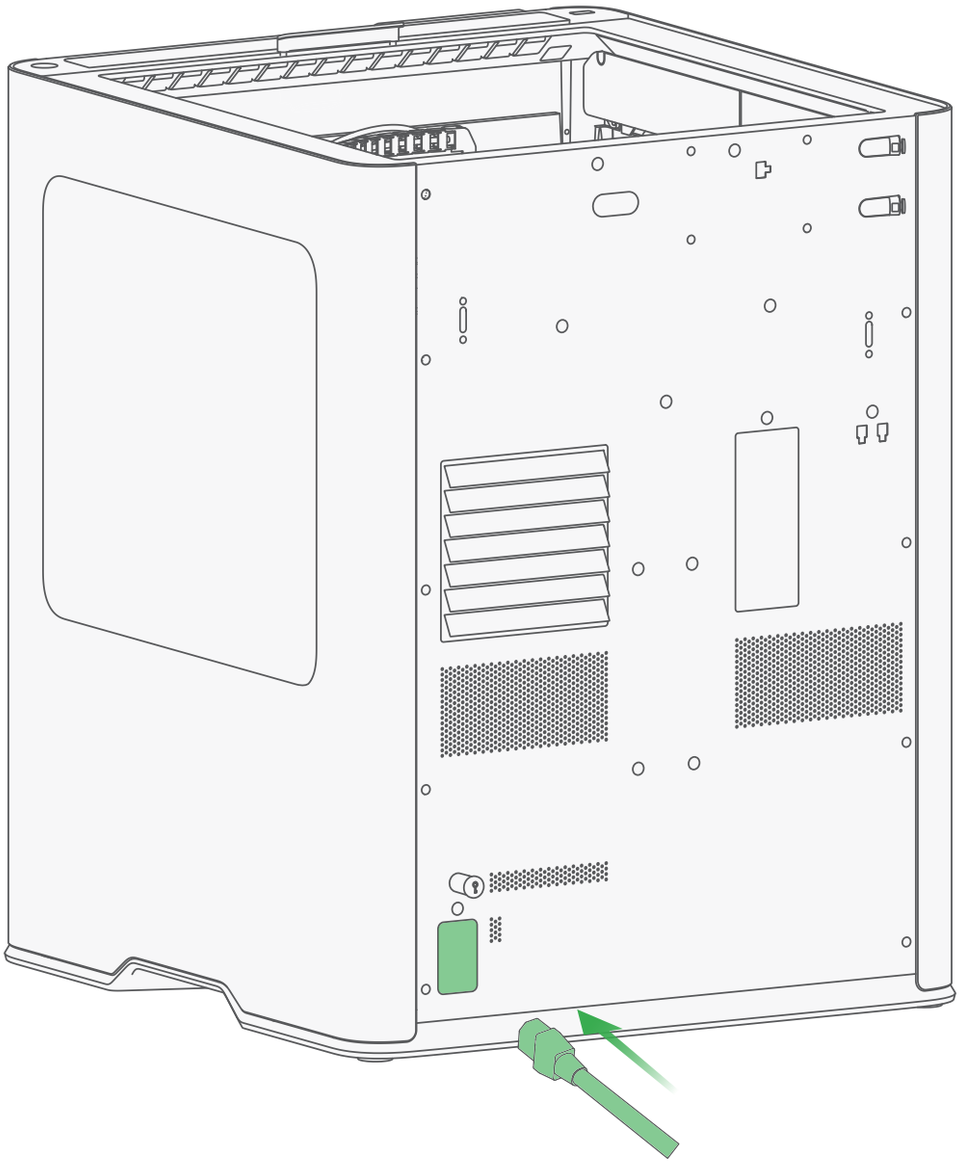
Install the safety key



Take out the safety key on the rear panel, and insert it into the installation slot located above the power socket.

Please do not skip this step, as the printer cannot be powered on without it.

Plug in the power cable and power on

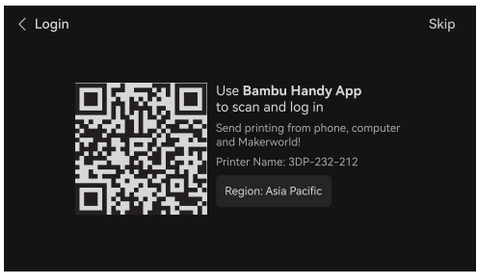


Plug the power cord in the power socket on the back. Then, turn on the power switch.

Bind the printer - Bambu Handy

1. Scan the QR code on the right to download Bambu Handy. Register and log in to your Bambu Lab account.

2. Follow the instructions on the screen until a QR code appears.

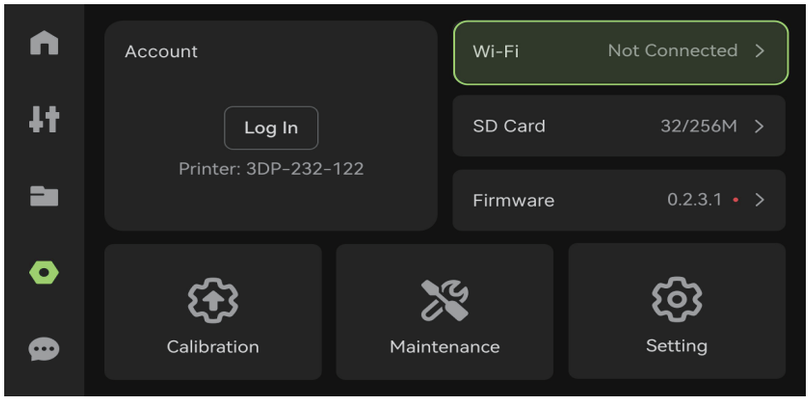


3. Scan the QR code on Bambu Handy to bind the printer to your Bambu Lab account.

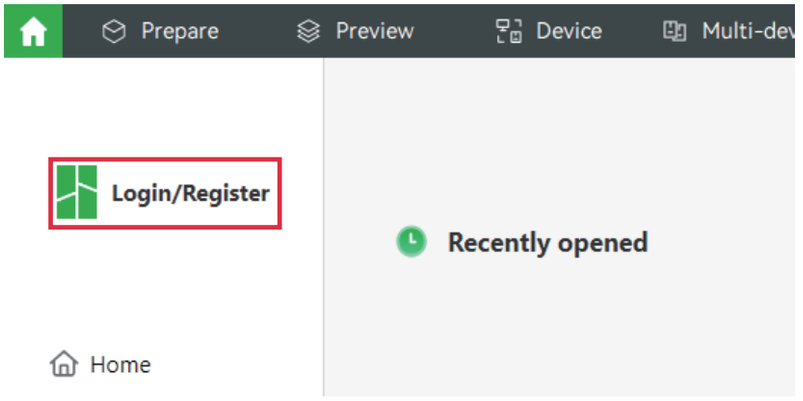
4. Follow the instructions on the screen to complete the initial calibration. It is normal to have vibration and noise during the process.

* DO NOT remove the foam under the heatbed until calibration is complete.

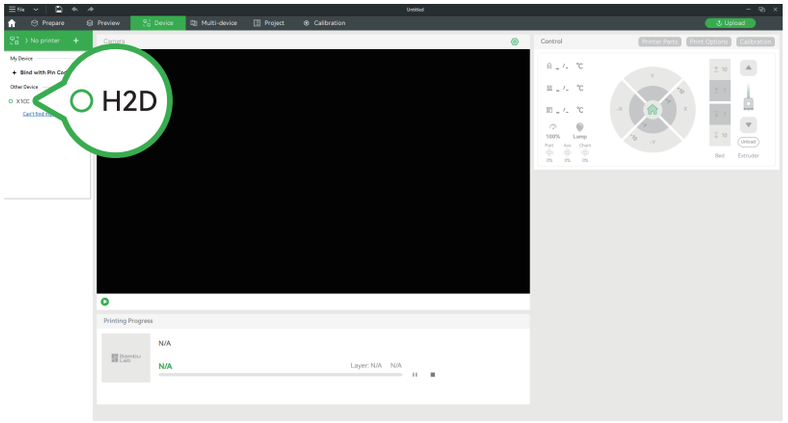
Bind the printer - Bambu Studio



1. Connect both the computer and printer to the **same wireless network**, and do not use a **guest network** that has network device separation enabled.

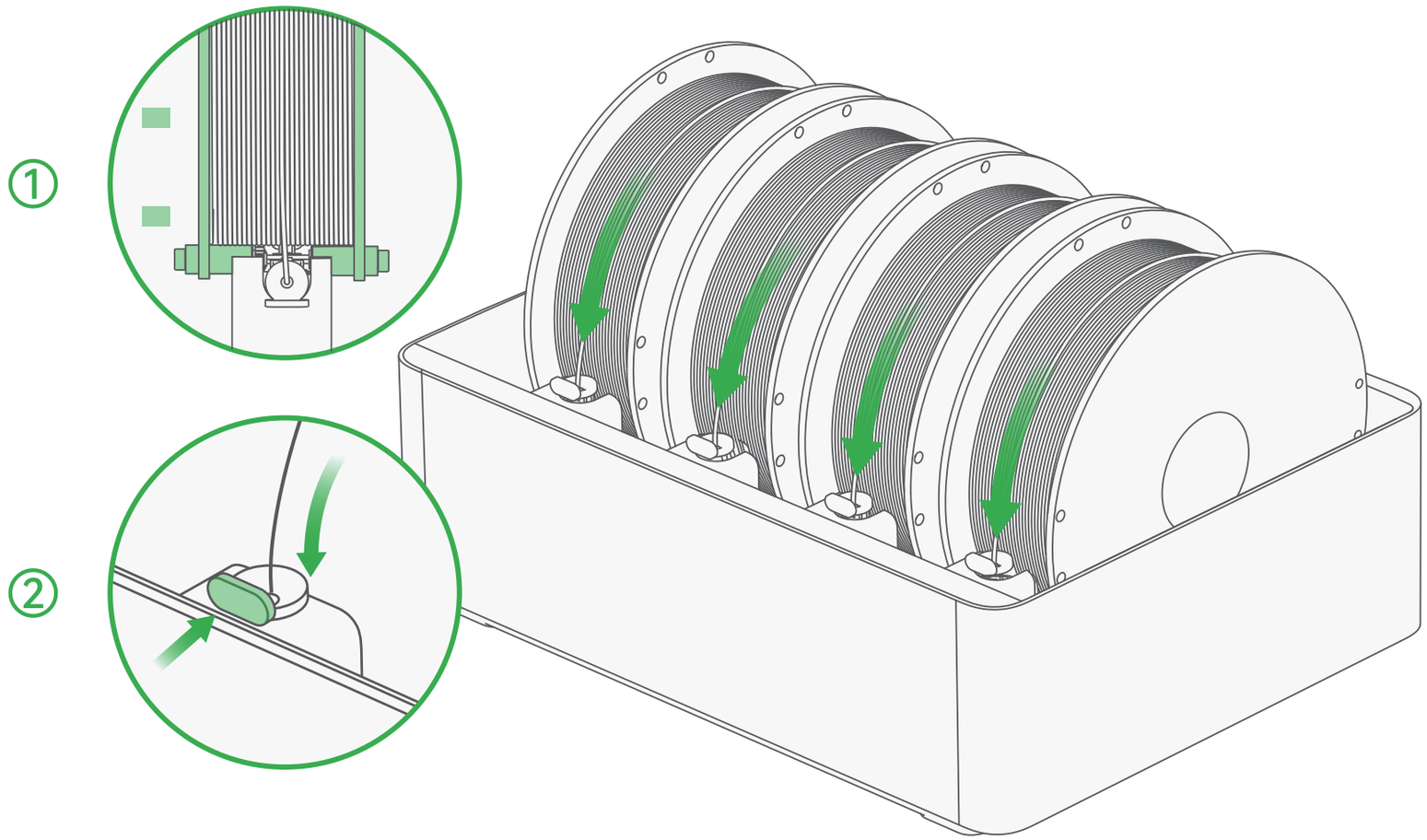


2. Visit the link below to download and install Bambu Studio. Register and log in to your Bambu Lab account.
bambulab.com/download/studio



3. Click “+” on the device page, and Bambu Studio automatically discovers printers on the same network. Click the detected printer to bind it to your Bambu Lab account.

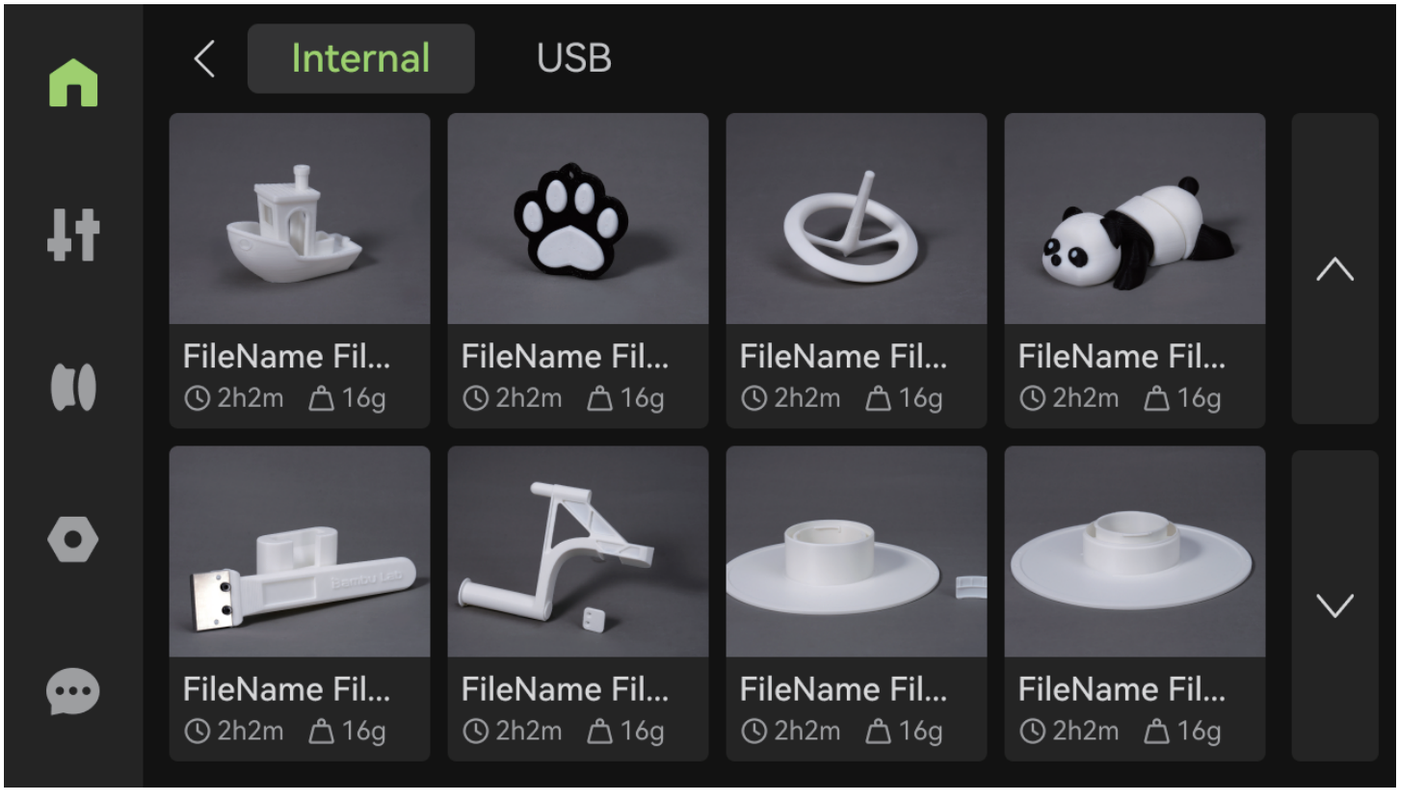
First print with the AMS 2 Pro



① Power on the printer and place a spool of filament in any of the four slots. Make sure the spool is correctly placed on the active support shaft as shown in the picture.

② Push the feeder tab towards the spool, and insert the filament. The AMS 2 Pro will pre-load it after it is detected. When the feeder LED light under the filament inlet is on, the AMS 2 Pro is ready to print.

③

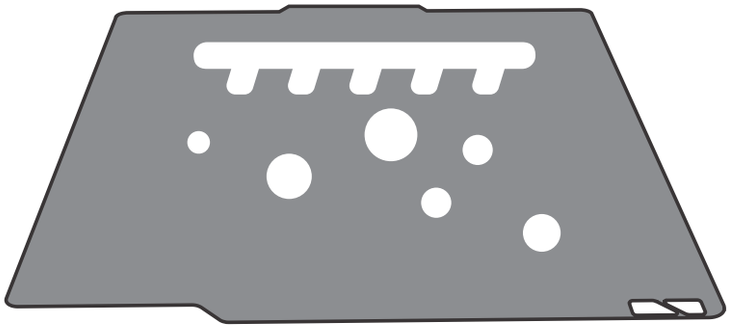


Select – Print Files, then select a model you wish to print.

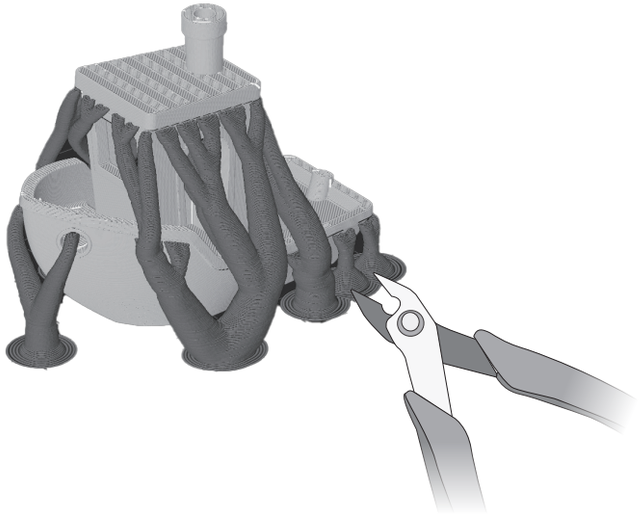
* The textured PEI plate that comes with the printer is sensitive to dirt and oil. If you have touched the surface of the plate with your hands, oils from your hands can transfer to the surface and impact the plate's adhesion properties. It is recommended to wash it with hot water and detergent first to ensure the best adhesion.

After-print notes

Wait until the build plate fully cools down to remove prints.



Wash the build plate regularly with hot water and detergent for best adhesion.



If there is a support structure used, remove it as soon as possible after the heatbed fully cools down. It will be harder to remove if the filament absorbs moisture.

Regular maintenance

A 3D printer has a complex mechanical structure and numerous moving parts. Regular maintenance is essential to ensure stable operation and high-quality prints.

Metal Moving Parts:

- Lubricate lead screws, linear rods, guide rails, idler pulleys, and extruder gears regularly to prevent rust.
- Use lubricating oil for guide rails, linear rods, and idler pulleys, and apply lubricating grease to lead screws and extruder gears.

Consumables:

- Inspect plastic and rubber parts, such as filament cutters, for signs of wear, deformation, or aging.
- Replace consumable parts as needed, such as nozzle wipers and PTFE tubes, to maintain print quality.

Other Components:

- Check camera lenses, fans, and filament sensors for dust or debris.
- Clean fans with compressed air, and gently clean camera lenses using a microfiber cloth with isopropyl alcohol for optimal clarity.

bambulab.com/support/maintenance

Please refer to the "Regular Maintenance Recommendations" section on our wiki for more information.

Specifications

Item		Specification
Printing Technology		Fused Deposition Modeling
Body	Build Volume (W*D*H)	Single Nozzle Printing: 325*320*325 mm^3 Dual Nozzle Printing: 300*320*325 mm^3 Total Volume for Two Nozzles: 350*320*325 mm^3
	Chassis	Aluminum and Steel
	Outer Frame	Plastic and Glass
Physical Dimensions	Physical Dimensions	492*514*626 mm^3
	Net Weight	31 kg
Toolhead	Hotend	All Metal
	Extruder Gear	Hardened Steel
	Nozzle	Hardened Steel
	Max Nozzle Temperature	350 ℃
	Included Nozzle Diameter	0.4 mm
	Supported Nozzle Diameter	0.2 mm, 0.4 mm, 0.6 mm, 0.8 mm
	Filament Cutter	Built-in
	Filament Diameter	1.75 mm
	Extruder Motor	Bambu Lab High-precision Permanent Magnet Synchronous Motor
Heatbed	Build Plate Material	Flexible Steel Plate
	Included Build Plate Type	Textured PEI Plate
	Supported Build Plate Type	Textured PEI plate, Smooth PEI Plate
	Max Heatbed Temperature	120 ℃
Speed	Max Speed of Toolhead	1000 mm/s
	Max Acceleration of Toolhead	20,000 mm/s^2
	Max Flow for Hotend	40 mm^3/s (Test parameters: 250 mm round model with a single outer wall; Bambu Lab ABS; 280 ℃ printing temperature)
Chamber Temperature Control	Active Chamber Heating	Supported
	Max Temperature	65 ℃
Air Purification	Pre-filter Grade	G3
	HEPA Filter Grade	H12
	Activated Carbon Filter Type	Granulated Coconut Shell

Specifications

Air Purification	VOC Filtration	Superior
	Particulate Matter Filtration	Supported
Cooling	Part Cooling Fan	Closed Loop Control
	Cooling Fan for Hotend	Closed Loop Control
	Main Control Board Fan	Closed Loop Control
	Chamber Exhaust Fan	Closed Loop Control
	Chamber Heat Circulation Fan	Closed Loop Control
	Auxiliary Part Cooling Fan	Closed Loop Control
Supported Filament Type	PLA, PETG, TPU, PVA, BVOH	Optimal
	ABS, ASA, PC, PA, PET	Superior
	Carbon/Glass Fiber Reinforced PLA, PETG, PA, PET, PC, ABS, ASA	Superior
	PPA-CF/GF, PPS, PPS-CF/GF	Ideal
Sensor	Live View Camera	Built-in; 1920*1080
	Nozzle Camera	Built-in; 1920*1080
	Toolhead Camera	Built-in; 1920*1080
	Door Sensor	Supported
	Filament Run Out Sensor	Supported
	Filament Tangle Sensor	Supported
	Filament Odometry	Supported with AMS
	Power Loss Recovery	Supported
Electrical Requirements	Voltage	100-120 VAC / 200-240 VAC, 50/60 Hz
	Max Power*	2200 W@220 V / 1320 W@110 V
	Average Power	1050 W@220 V / 1050 W@110 V
Electronics	Touchscreen	5-inch 720*1280 Touchscreen
	Storage	Built-in 8 GB EMMC and USB Port
	Control Interface	Touchscreen, mobile App, PC App
	Motion Controller	Dual-core Cortex-M4 and Single-core Cortex-M7
	Application Processor	Quad-core 1.5 GHz ARM A7
	Neural Processing Unit	2 TOPS

Specifications

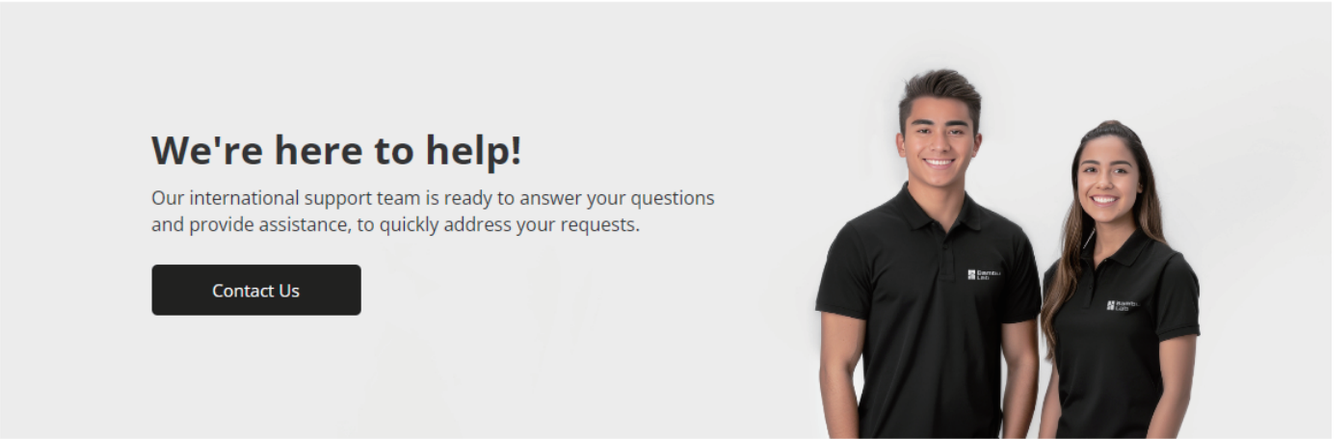
Software	Slicer	Bambu Studio Supports third-party slicers which export standard G-code, such as Super Slicer, PrusaSlicer and Cura, but certain advanced features may not be supported.
	Supported Operating System	MacOS, Windows
Network Control	Ethernet	Not Available
	Wireless Network	Wi-Fi
	Network Kill Switch	Not Available
	Removable Network Module	Not Available
	802.1X Network Access Control	Not Available
Wi-Fi	Operating Frequency	2412 - 2472 MHz, 5150 - 5850 MHz (FCC/CE) 2400 - 2483.5 MHz, 5150 - 5850 MHz (SRRC)
	Wi-Fi Transmitter Power (EIRP)	2.4 GHz: <23 dBm (FCC); <20 dBm (CE/SRRC/MIC) 5 GHz Band1/2: <23 dBm (FCC/CE/SRRC/MIC) 5 GHz Band3: <30 dBm (CE); <24 dBm (FCC) 5 GHz Band4: <23 dBm (FCC/SRRC); <14 dBm (CE)
	Wi-Fi Protocol	IEEE 802.11 a/b/g/n

* To ensure the heatbed quickly reaches the needed temperature, the printer will maintain maximum power for about 3 minutes.

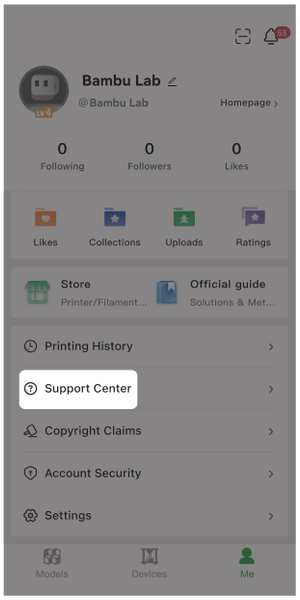
Technical Support

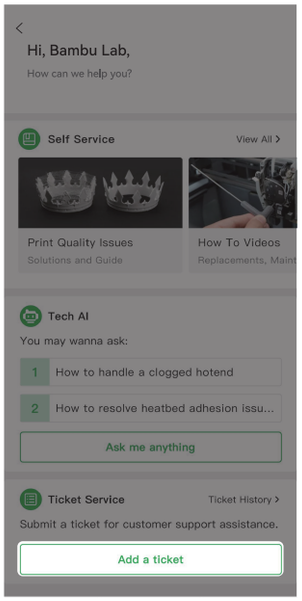
If you need technical support, please follow either of the following methods:

Method 1: Get in touch by using the Contact Us button in our Support Center.
bambulab.com/support



Method 2: Create a support ticket on Bambu Handy, from the Support Center section.





You can also visit the Bambu Lab Wiki for more tutorials and maintenance guidance.
wiki.bambulab.com/home

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Enjoy!

www.bambulab.com