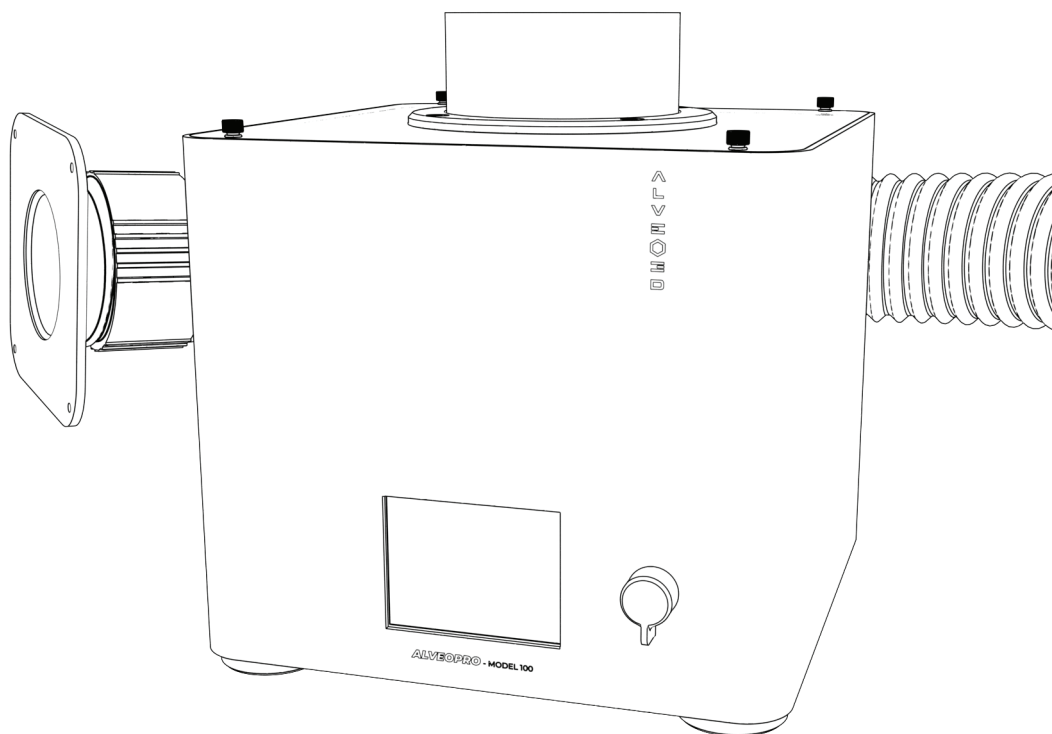


INSTRUCTIONS MANUAL

ALVEO3D

ALVEOPRO - M100

Filtering system for 3D printer - HEPA14 & active carbon



Find all assembly resources

www.alveo3d.com/en/assembly-alveopro/

and download contents

www.alveo3d.com/en/download-alveopro/

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SAFETY

Read all instructions before using

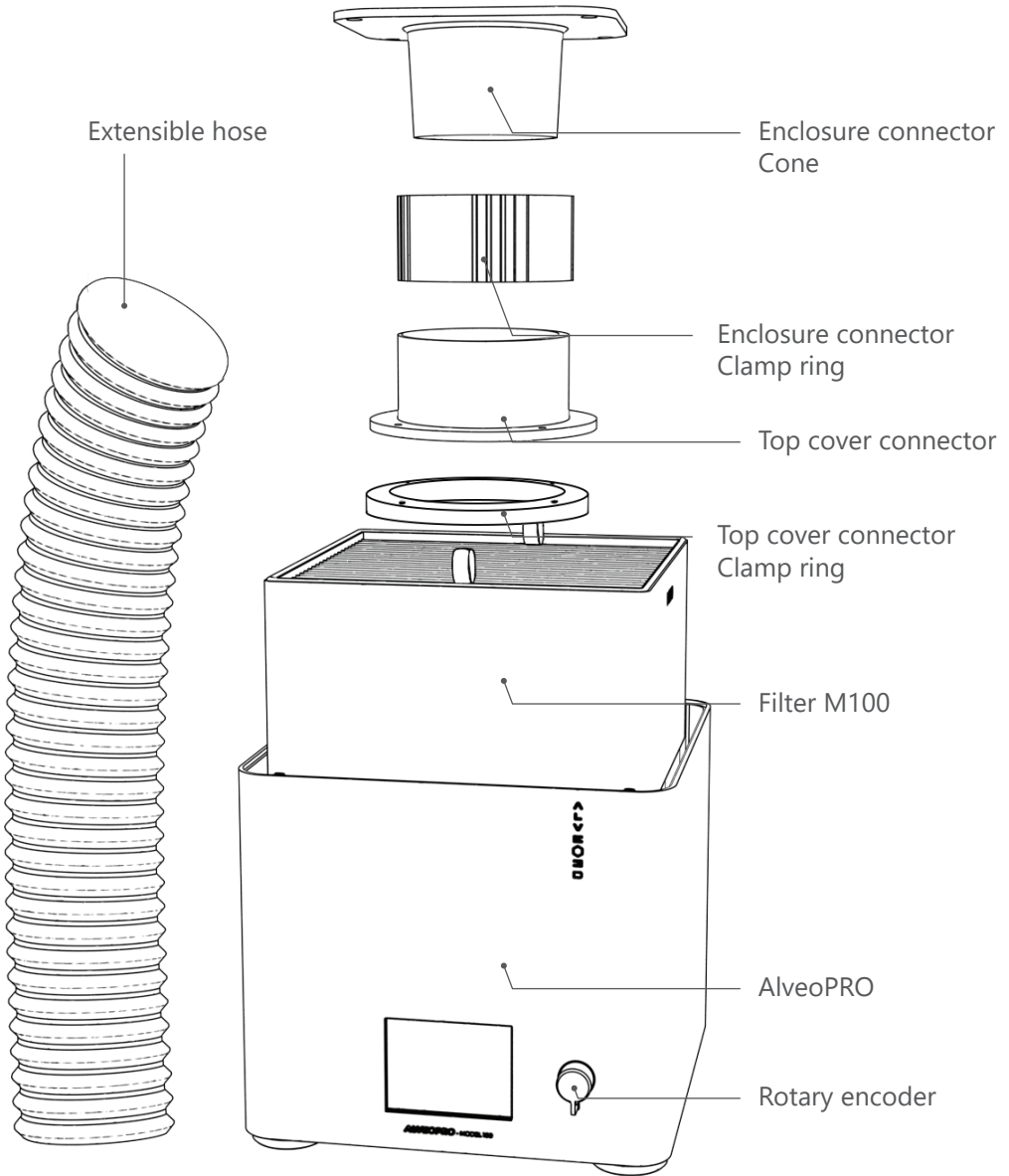
- 3D printer enclosures contain harmful emissions from 3D printing. It is advised to always turn the filtering system on during the printing process.
- The filtering system is powered by a high-pressure fan. Do not turn on the fan before full assembly is done with the protective grid and the P3D filter. Failure to comply with this instruction can cause injuries.
- Please use recommended electrical voltages to power electronic board, as indicated in the assembly instructions to prevent damage.
- Do not touch the electronic board in operation.
- Before each print, make sure the extensible hose is well connected to both connectors from AlveoPRO top cover and enclosure panel.
- Filter operational range 0-60°C max

PROVIDED ELEMENTS

Provided elements with ALVEOPRO - M100

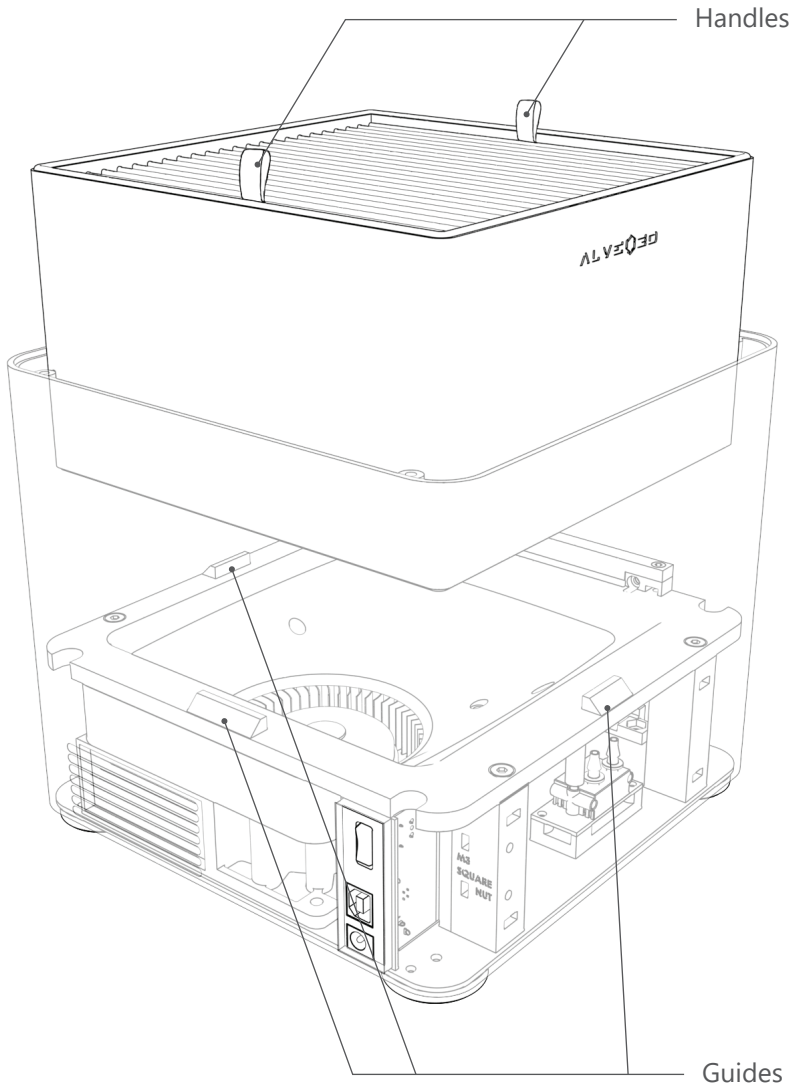
- ALVEOPRO - M100 assembled
- 4 x knurled screw
- Top cover adaptator - 2 elements
- Extensible hose 3 meters
- Enclosure connector - 2 elements
- Power supply 24v EU plug
- Filter M100 with a sealable plastic bag
- USB cable
- Allen key 2.5mm
- 4x Black countersunk M3 screw 10 mm
- 4x Black countersunk M4 screw 16 mm
- 4x Black countersunk M4 screw 20 mm
- 4x Hexagonal nut M3
- 4x Hexagonal nut M4

ALVEOPRO - M100



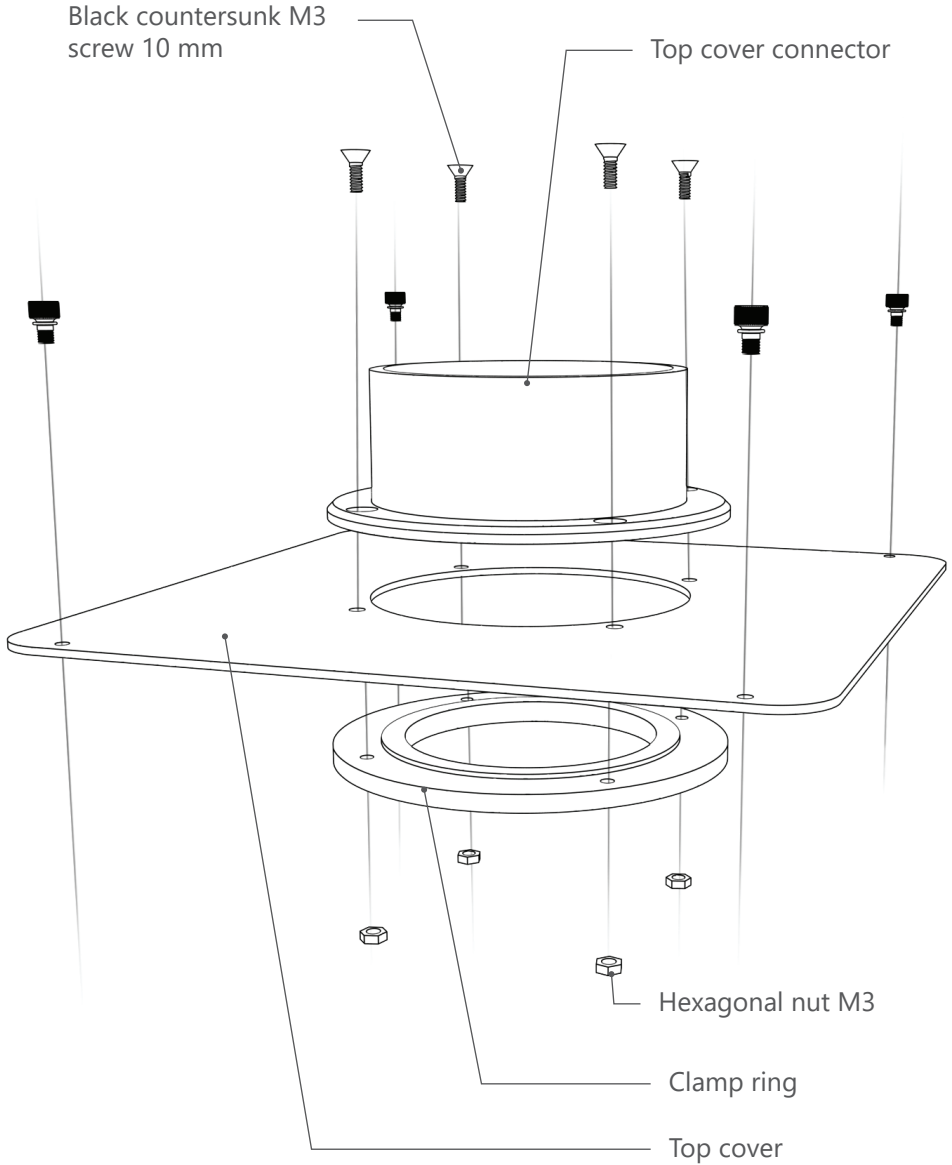
STEP 1 . POSITION FILTER

Take the filter out of the sealable plastic bag, remove the protective transparent film. Use the handles to position the filter between the guides. HEPA surface (white surface) still remain visible. Use handles to take the filter out of the alveoPRO case. Keep the sealable plastic bag for used filters.



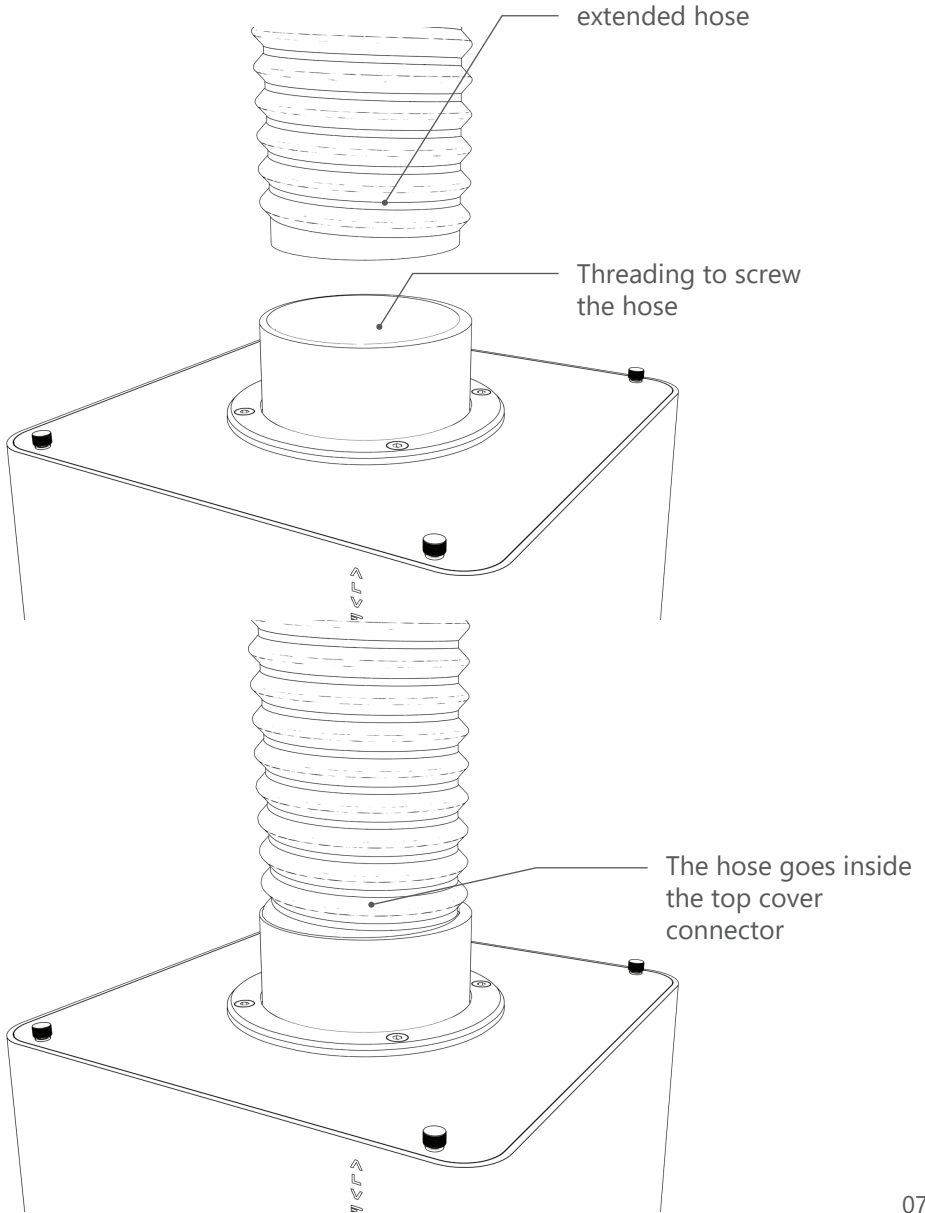
STEP 2 . ASSEMBLY TOP COVER

Put the hexagonal nuts in their slots on the clamp ring. Then assemble on both sides of the top cover the clamp ring and the top cover connector with the black countersunk M3 screw 10 mm.



STEP 3 . MOUNT EXTENSIBLE HOSE

Extend one end of the hose then plug it into the top cover connector by rotating the hose in the threading.

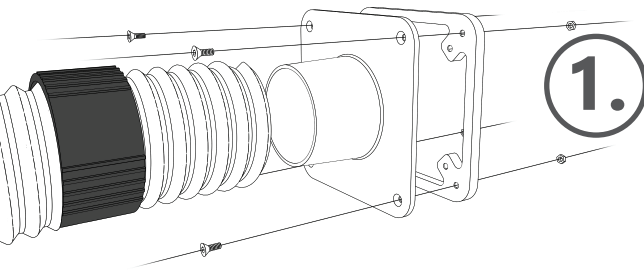
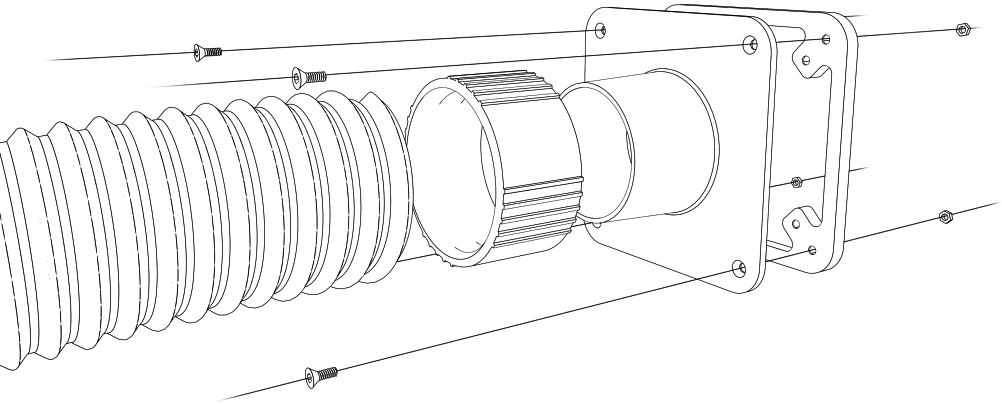


STEP4 . CONNECT TO ENCLOSURE

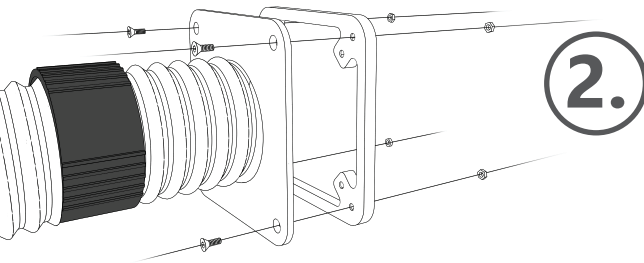
Extend the other one end of the hose by 10 cm.

Use the countersunk M4 screw 16 mm for panel thickness from 2 to 7 mm.

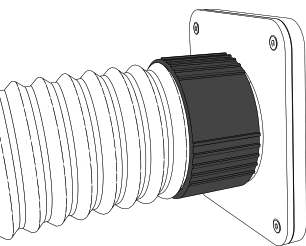
Use the countersunk M4 screw 20 mm for panel thickness from 8 to 12 mm.



Place the clamp ring on the extended hose. The tighten frame must be inside the enclosure.



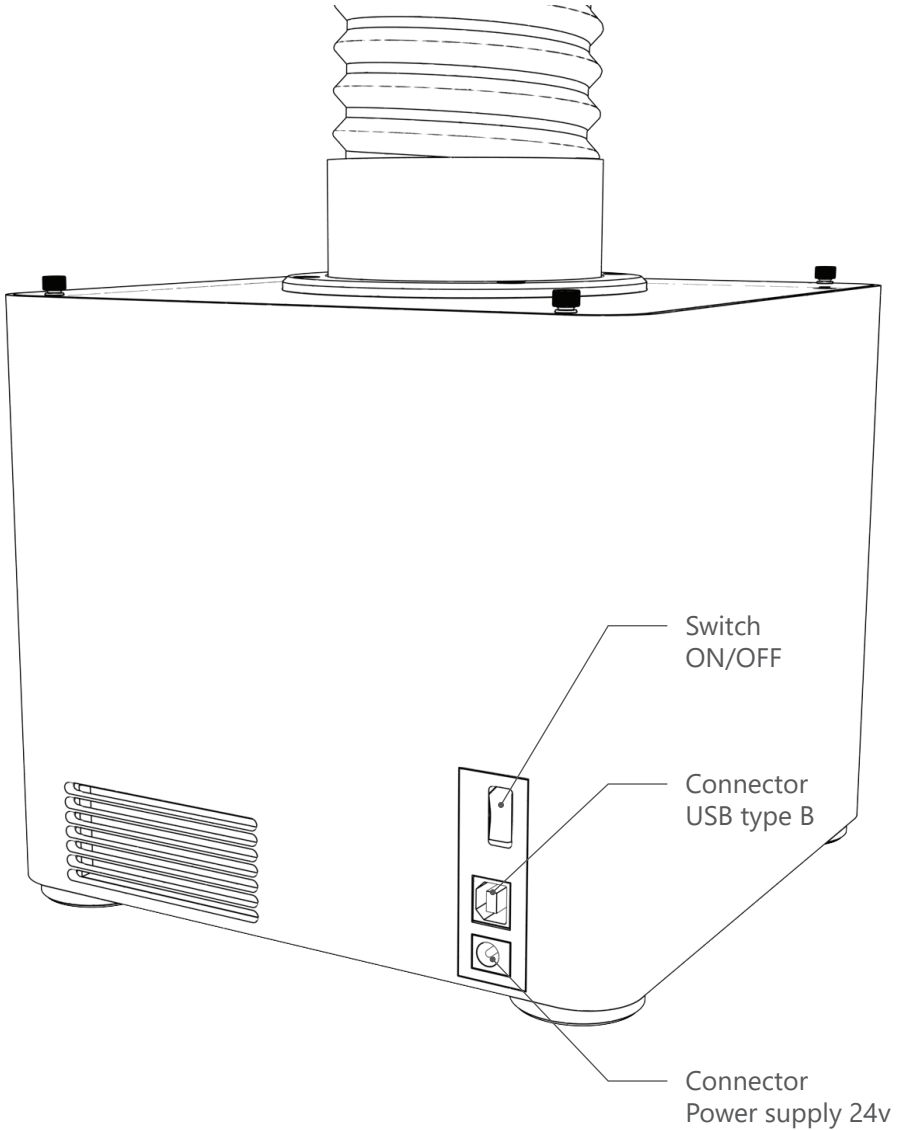
Tighten the clamp ring on the enclosure connector.



Insert hexagonal M4 nuts in the tighten frame and tighten the screws to hold the enclosure connector on the panel.

STEP 5 . CONNECTIVITY & START

plug the power supply on the backside of the device, then press the ON/OFF switch to turn it ON or OFF. The USB connector will be used to update the device firmware and remote control function.



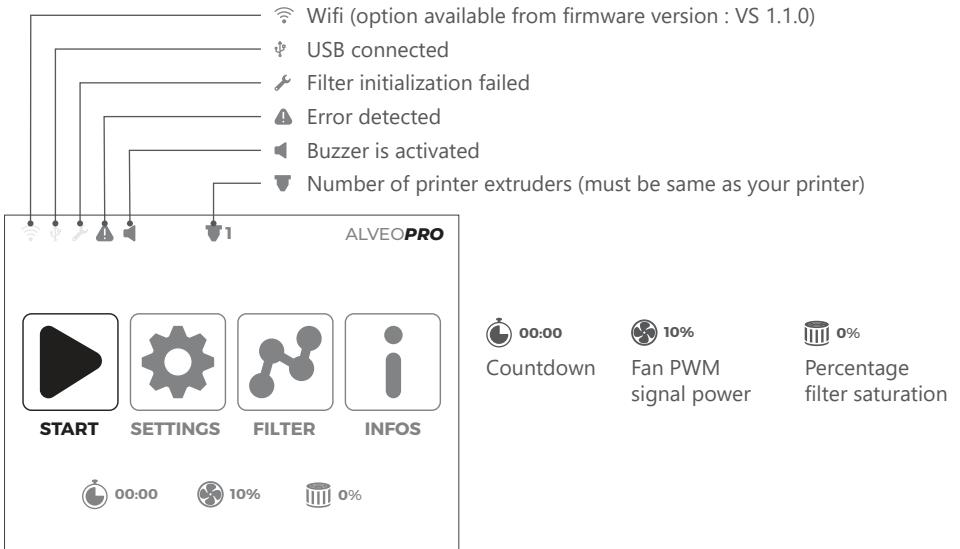
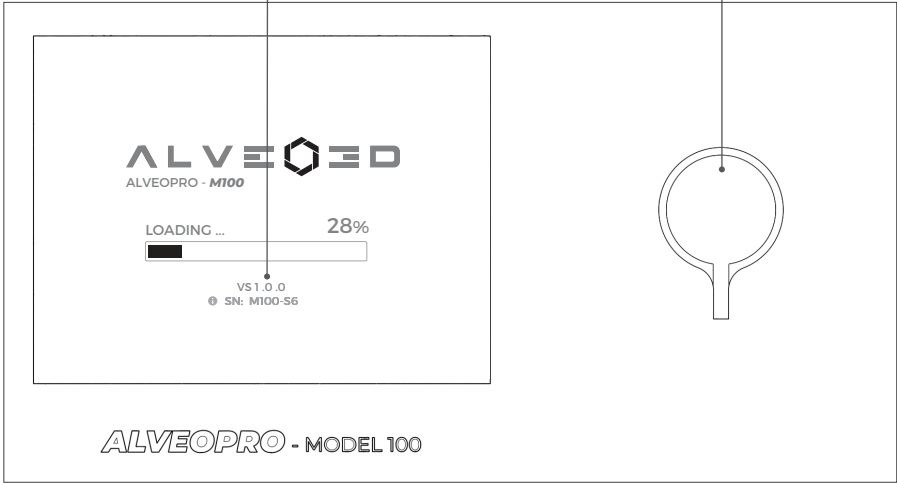
STEP 6 . DISPLAY INTERFACE

AlveoPRO software interface is composed of 4 main menus :

- **START** : Manage fan and timer
- **SETTINGS** : Device settings
- **FILTER** : Settings and information regarding the filter
- **INFOS** : General information and technical support

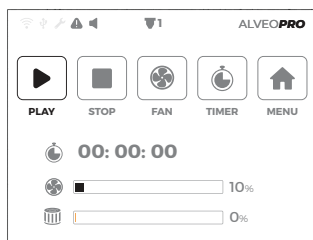
Firmware version number

Rotary encoder



STEP 7 . FAN CONTROL

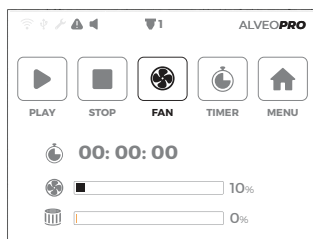
In the menu START, fan speed can be managed as well as the timer. With the timer, you can set the end of the countdown at the right time.



ALVEOPRO - MODEL100



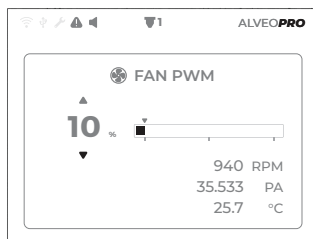
1. **PLAY** starts filtration
STOP stops filtration
FAN control PWM signal power (fan speed)
TIMER set the countdown
MENU return to home screen



ALVEOPRO - MODEL100



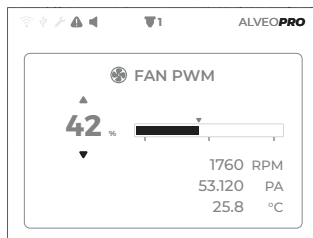
2. Rotate the selector to select the icon FAN then press it to validate your choice



ALVEOPRO - MODEL100



3. Rotate the selector to choose the fan PWM signal power then press to validate



ALVEOPRO - MODEL100

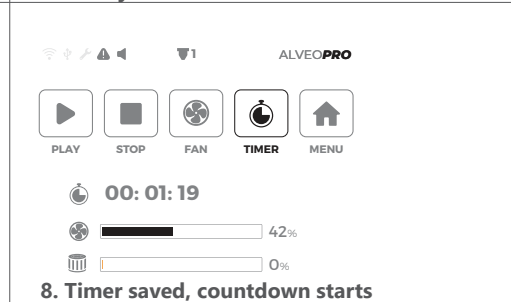
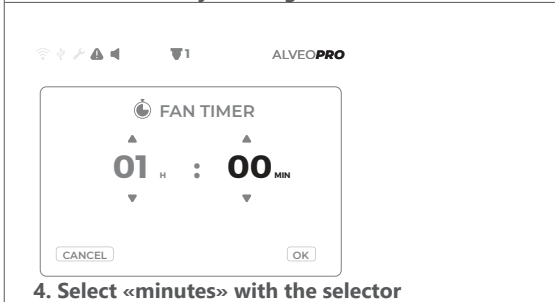
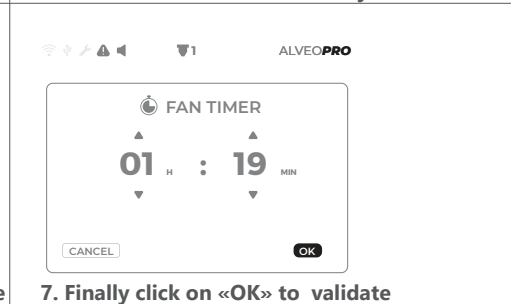
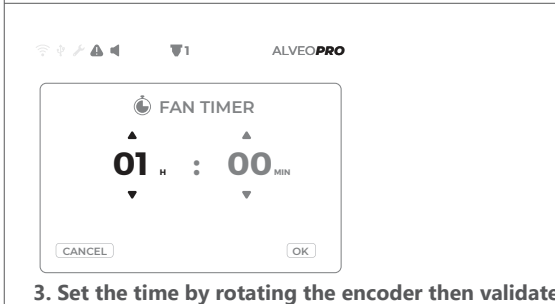
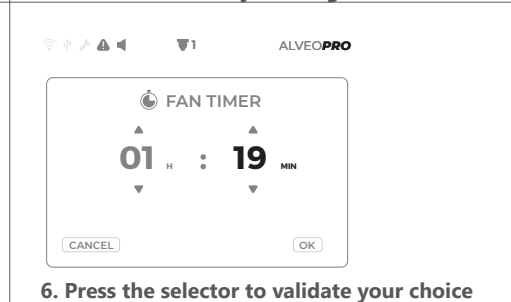
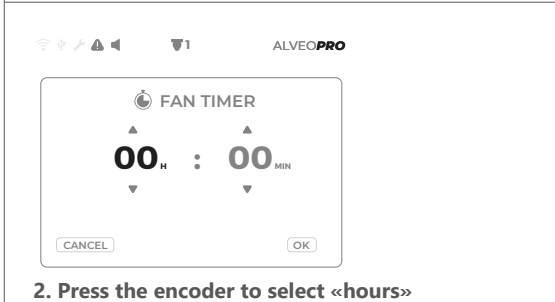
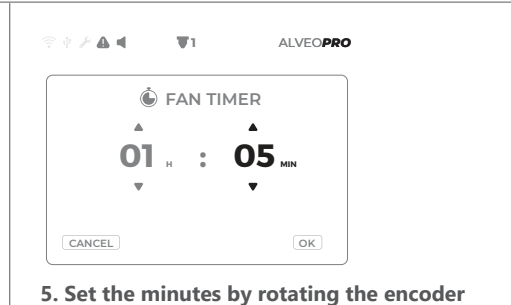
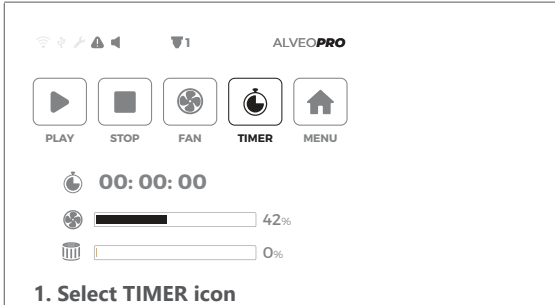


4. On the FAN menu
RPM : fan speed
PA : Differential air pressure (filter autodetection)
°C : temperature inside the alveoPRO (for security purposes)

STEP 8 . TIMER SETTINGS

TIMER settings (countdown) manage the filtering time and let you set it to follow the printing time and hotbed cooldown.

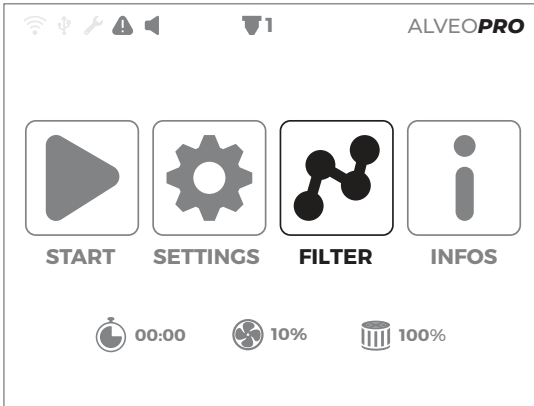
Select the TIMER icon then validate by pressing the rotary encoder.



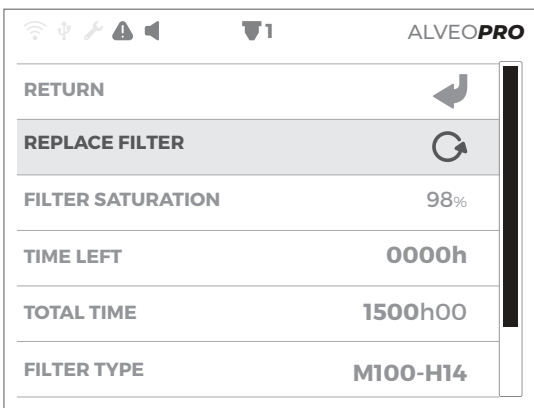
STEP 9 . FILTER CHANGE

Filter M100 replacement comes with a new initialization process through the display interface:

Follow the steps below :



In the main menu select « FILTER» then get access to filter management option.



Scroll down to select REPLACE FILTER then start the process by pressing the rotary encoder. Follow all displayed instructions on the screen.

STEP 10 . ONLINE SUPPORT

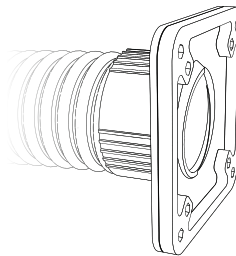
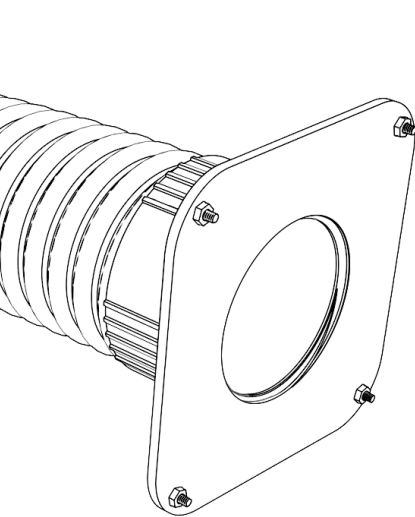
A detailed interface manual will be soon available on the support page and extra 3D files will be shared as well.

AlveoPRO firmware will be seasonally updated to bring new functionalities. To install incoming updates, go to www.alveo3d.com with the link below :

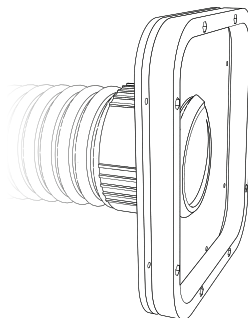


<https://www.alveo3d.com/en/alveopro-support/>

The enclosure connector is available in STEP format on the support page (link above) in order to let you modify it easily to fit with your enclosure shape.



Enclosure connector
for fan 120x120mm
and fan 90x90mm



Enclosure connector
for AlveoONE cutout

STEP 11 . ALERT & ERROR LIST

When an error or alert pops up on the screen, check in the description below to know how to deal with it :

N°	TYPE	VS (version)	DESCRIPTION & SOLUTION
#100	ERROR BOOTLOADER	1.0.0	Press the rotary encoder Update the firmware
#101	ERROR BOOTLOADER & FIRMWARE	1.0.0 1.0.0	EEPROM not responding Reboot the device
#102	ERROR FIRMWARE	1.0.0	SRAM not responding Reboot the device
#103	ERROR FIRMWARE	1.0.0	SDP not responding Reboot the device
#104	ERROR FIRMWARE	1.0.0	Tachymeter not responding Fan working but the screen displays 0 RPM Contact the Alveo3D technic support
#105	ERROR FIRMWARE	1.0.0	Low pressure (small airdrop) Check if the filter is well positioned
#106	ERROR FIRMWARE	1.0.0	High pressure (PWM:10% & PDIFF>80Pa) Too much air drop (displayed if fan speed : 10%) Check nothing block the airflow to the filter in the hose or between the filter and fan
#107	ALERT	1.0.0	Filter saturation high (>= 90%) Monitor the filter replacement time
#108	ALERT	1.0.0	Filter saturation very high (>= 98%) Change the filter

NOTES

HEPA Filter P3D lifetime:

Filter working life is associated with many factors including filament type, melting temperature, the concentration of nanoparticles and VOCs, ambient humidity... We suggest replacing HEPA filter P3D according to the following table:

Filter replacement	Intensive use	Occasional use
	6 months	12 months

We do not recommend going above 1500 hours of use before to replace the filter.

Filter replacement tracking:

	Date
Date of purchase	
Replacement 1	
Replacement 2	
Replacement 3	
Replacement 4	
Replacement 5	
Replacement 6	
Replacement 7	
Replacement 8	
Replacement 9	
Replacement 10	

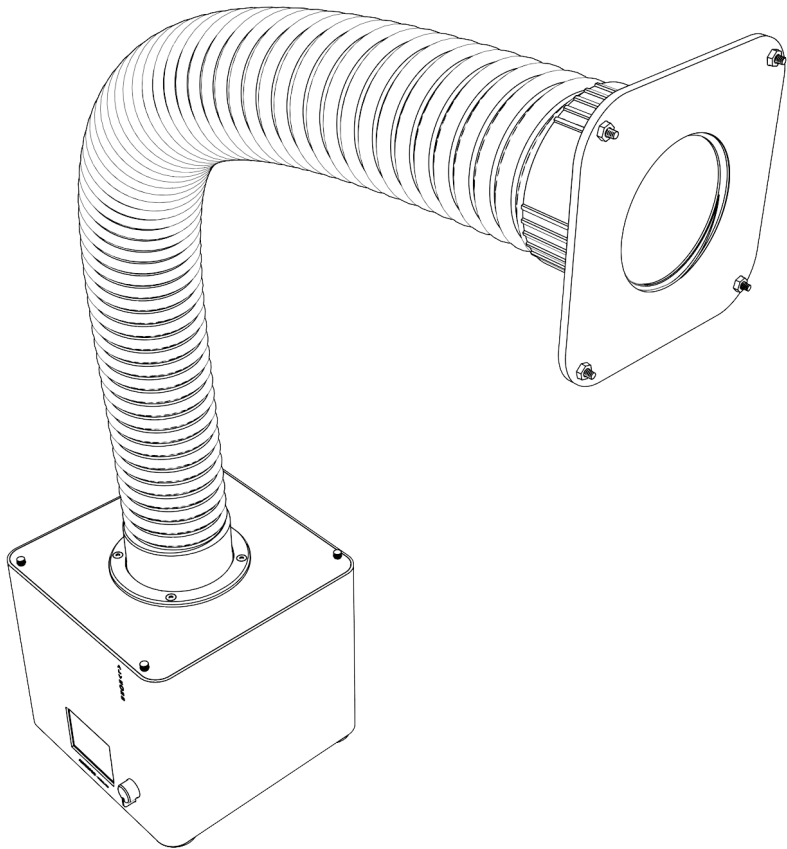
NOTES :

A series of horizontal dashed lines for writing notes.

NOTES :

A series of horizontal dashed lines for writing notes.

Breath ! You are filtering !



Share your experience on www.facebook.com/alveo3d/

ALVEO3D by
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73290 La Motte-Servolet
www.alveo3d.com
contact@alveo3d.com

Designed & assembled in France
