



User Manual

Glowforge Personal Filter™

for your Glowforge Aura™ Craft Laser™ Printer

Version 1.0

Introduction

Your new Glowforge Personal Filter lets you and your Glowforge Aura create amazing things from almost anywhere — no windows required. Whether you're in an office, garage, or craft show, you'll get the same great results everywhere.

We can't wait for you to get started, and this manual covers everything you need to know about setting up your Glowforge Personal Filter and making it work for you. We're dedicated to making your experience delightful, so if you ever have any questions, let us help at support.glowforge.com.

Thank you again for being part of our community. We can't wait to see what you create.

P.S. The next section is long and very important, covering how to use your Glowforge Personal Filter safely. Please read the safety instructions closely, and follow them every time. We always want you to create safely!

Safety

Now, it's time to be serious. Improperly operating the Glowforge Personal Filter unit can cause fire and health hazards. These can result in serious injury or even death.

Before you start

- Read this manual before using your Glowforge Personal Filter, and ensure everyone else who uses it reads this too.
- Always follow all instructions in this manual, in the Glowforge Aura Manual and in the Glowforge App.
- Only use the hose provided with the Personal Filter, do not use and third-party products (such as booster fans) with the hose, and avoid operating with multiple bends in the hose.
- Children require the supervision and assistance of an adult at all times.
- This product may be subject to regulations and standards. Ensure that you comply with all applicable rules.

- Do not use your Glowforge Personal Filter with a Glowforge Basic, Plus, or Pro 3D laser printer.

Electrical Safety

To reduce the risk of electric shock or fire:

- Do not try to service, repair, or modify the Glowforge Personal Filter in a manner not described in this manual.
- Do not open any sealed portion of the Glowforge Personal Filter or try to access the wiring. Damage caused by opening the case is not covered by the warranty.
- If the Glowforge Personal Filter or its power cord is damaged, unplug the power cord and contact support@glowforge.com immediately.
- In the event of any emergency or malfunction, unplug the power cord from the wall.
- Use only a properly grounded 110/240 VAC outlet that meets local building codes.
- The Glowforge Personal Filter may draw up to 2 amps. Ensure that the circuit can support at least a 240 Watt load. Note: a standard household outlet can support both a Glowforge Aura printer and a Glowforge Personal Filter if nothing else is drawing power from the circuit.

General Safety

- **If you detect a strong, sharp smell that also causes eyes, nose, or throat irritation, or if there is visible smoke escaping your Glowforge Aura printer while the lid is closed, your Glowforge Personal Filter is not operating properly. Follow all instructions in this manual. If the irritation and/or smoke emissions do not abate, discontinue using your Glowforge Personal Filter and contact support.**
- Do not disconnect the hose, open the case, touch anything inside, or perform any maintenance or operations while the Glowforge Personal Filter is plugged in.
- The Glowforge Personal Filter has sparking parts inside. Do not use in areas where gasoline, paint, flammable liquids, or gasses are used or stored.

- Do not use the Glowforge Personal Filter without a Filter Cartridge.
- Ensure the lid is closed while the Glowforge Personal Filter is plugged in. This avoids electric shock or physical harm from moving parts.
- Do not use the Glowforge Personal Filter when the Filter Cartridge is clogged. This will shorten the life of the machine and any resulting damage caused is not covered by your warranty.
- Do not open or modify a Filter Cartridge for any reason.
- Use only with Filter Cartridges manufactured by Glowforge for use with this Glowforge Personal Filter.

Operating Environment

To prolong the life of your Glowforge Personal Filter and to reduce the risk of fire or mechanical failure:

- Do not use if the ambient temperature is below 40° degrees Fahrenheit (5° Celsius) or over 80° degrees Fahrenheit (27° Celsius).
- Do not use if the ambient air is below 20% humidity or above 80% humidity. Air above 80% humidity can clog the filter which may cause damage.
- Do not use the Glowforge Personal Filter outdoors.
- Do not use the Glowforge Personal Filter in an environment where it may come into contact with liquids, moisture, grease, or excessive dust or small particles.

Materials Safety

- Use your Glowforge Personal Filter only when printing on material that is laser compatible. Only the manufacturer or supplier of material can confirm that it is laser compatible. Glowforge recommends the use of Proofgrade® materials with the Glowforge Personal Filter.
- Non-laser compatible materials may contain harmful or toxic chemicals that are not treated by the Glowforge Personal Filter and could cause injury or death.
- Non-laser compatible materials may cause damage to your Glowforge Personal Filter.
- Some laser-compatible materials, such as MDF or Proofgrade Draftboard®, may

cause the Filter Cartridge to need replacement after just a few hours of operation.

- Damage resulting from the use of non-laser compatible materials is not covered by the Glowforge Personal Filter warranty.

Glowforge Personal Filter Regulatory Information

This product conforms to

EN/IEC 62368-1, EN 301 489-1, EN 301, 489-3 and EN 301 489-17, EN 300 328, EN 300 330, FCC Part 15 C - §15.225, FCC Part 15 C - §15.247

RoHS, WEEE

It is suitable for use with compatible Glowforge Craft Laser™ printers.

FCC ID 2A83C-1JM2D

The Glowforge Personal Filter is only compliant if no changes or modifications are made to the device.

The Glowforge Personal Filter is compliant with the requirement for RF exposure in US with 200 mm separation distance between the user and/or bystander of the device.

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: —Reorient or relocate the receiving antenna. —Increase the separation between the equipment and receiver. —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. —Consult the dealer or an experienced radio/TV technician for

help.

Canada Regulatory Information

The Glowforge Personal Filter is only compliant if no changes or modifications are made to the device.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1) L'appareil ne doit pas produire de brouillage;

2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The Glowforge Personal Filter is compliant with the requirement for RF exposure in Canada with > 200 mm separation distance between the user and/or bystander of the device.

Le Glowforge Personal Filter est conforme aux exigences d'exposition aux RF au Canada avec une distance de séparation > 200 mm entre l'utilisateur et/ou le spectateur de l'appareil.

Specifications

The Glowforge Personal Filter has the following specifications:

Glowforge Personal Filter	
Air Inlet Interface	4 inch hose connection

Input Voltage	AC110V / 240V
Maximum Power	85W
Noise	< 65dBa
Dimensions of Main Unit	470 mm H x 445 mm W x 254 D 18.5" x 17.5" x 10.0"
Weight	6.4 kg / 14 lb

The Glowforge Personal Filter is manufactured by:

Glowforge, Inc.
1938 Occidental Ave S, Suite C
Seattle, WA 98134

For more information or support, contact support@glowforge.com

Labeling

This label appears on the bottom of every Glowforge Personal Filter, with an appropriate serial number, on the bottom of the Air Filter.



Glowforge Air Filter
Serial Number: JVR-668
MAC address: 6C:3A:36:00:38:91

Order replacement cartridges at glowforge.com
Supply Voltage 100-240VAC
Frequency: 50-60Hz Rated Current: 2A
FCC ID 2A83C-1JM2D, ISED ID: 29844-1 JM2D
Assembled in China

See glowforge.com/patents for patent information.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Model: AF100



Complies with
UL 62368-1
CSA C22.2
No. 62368-1

Let's Get Started

Now that you've read all about safety, you're ready to get lasering! Unboxing will take just a few minutes. If you encounter any challenges, you can get help in our [Help & Learning Center](#).

Let's get started!

Any Damage?

Once you've broken the seal on your Glowforge Personal Filter's box, you can't return it to the retail store. We're here to help, though!

If any part of your Glowforge Personal Filter comes out of the box visibly damaged, we want to make it right! Send photos of the damage to support@glowforge.com and wait until you hear back from us. If the Glowforge Personal Filter is visibly damaged, do not plug it in or attempt to operate it; contact us immediately.

Unboxing & Setting Up

Prepare your Area

Your Glowforge Personal Filter must be on a flat surface, like the floor. It needs to be positioned so that the 8-foot (2.4384 m) exhaust hose can connect to the back

of your Glowforge Aura without twisting, pinching, kinking, or flattening.

Your Glowforge Personal Filter blows air out, so ensure that there are no obstructions within two inches (5.08 cm) of the vents on either side.

Unboxing

1. Carefully cut the tape sealing the top of your Glowforge Personal Filter box and open it.
2. Remove the power cord and set it aside, then remove the cardboard insert to reveal your Glowforge Personal Filter.



3. Grasp the handle on the rear of the Glowforge Personal Filter through the clear plastic bag. Lift the filter out of the box, and place it on the floor.



4. Open the bag, and remove it from the filter.



5. Open the filter by lifting the lid at the notch. Remove the yellow warning notice.







6. Grasp the handle on the filter cartridge through the clear plastic bag. Lift the filter cartridge out of the filter.



7. Remove the filter cartridge from the plastic bag, and discard the desiccant pack.



8. Save everything! Save the packaging material including the box, foam, and bags. If you need to move your Glowforge Personal Filter or ship it back for warranty service, you'll need all the original packing materials. The Glowforge Personal Filter cannot be shipped safely without the original packaging materials.

Assembly

1. Put the cartridge back into the filter, lining up with the green mark on the filter case. It will slide into the notch at the bottom. To make sure it's inserted correctly, try to turn the cartridge using the handle. It should stay firmly in place.







2. Put the lid back on the filter, so the notch on the lid lines up and the lid fits snugly.



3. Find the white hose that came in your Glowforge Aura printer box. Attach one end of the hose to the filter by sliding the rubber ring over the intake. Push it on as far as it will go. It should be a snug fit around the entire intake, and should not come off with a gentle tug.



4. Attach the other end of the hose to your Glowforge Aura printer by sliding the rubber ring over the flange (the lip that extends over the exhaust area). Again, push it on as far as it will go. It should be a snug fit all around, and should not come off with a gentle tug.



5. Verify the filter cartridge is installed and the lid is firmly closed.

Pairing your Glowforge Personal Filter and Glowforge Aura Printer

1. **Connect your Glowforge Aura to Power**

If you haven't yet set up your Glowforge Aura, do that now.

Unplug your Glowforge Aura and plug it back in so it is ready to find and pair with your Glowforge Personal Filter.

2. **Connect your Glowforge Personal Filter to Power**

Plug the power cord into the back of the Glowforge Personal Filter. Then plug the power cord into a standard grounded household socket.



3. Wait for wireless pairing

As soon as your Glowforge Personal Filter is plugged in, it will begin searching for your Glowforge Aura. The button on the front of your Personal Filter is a status indicator. It will blink blue for a few seconds when the Personal Filter is pairing with your Glowforge Aura. When pairing is complete, the button will turn off.



4. Check the App

In your web browser, navigate to app.glowforge.com and sign in.

A screenshot of the 'Glowforge Owners' sign-in page. The page has a light blue background. At the top, the text 'Glowforge Owners' is displayed in a bold, dark font. Below this, there are two input fields: the first is labeled 'email' and the second is labeled 'password'. Under the 'email' field, there is a checkbox labeled 'remember me'. To the right of the 'password' field, there is a link that says 'Need help?'. At the bottom of the form, there is a large, dark teal button with the text 'SIGN IN' in white capital letters.

Click on your Glowforge Aura printer icon in the upper right corner.



When your Personal Filter is paired to your Glowforge Aura, you'll see a "+ Air Filter" along with your Glowforge Aura.



5. Get Your Updates

After your Personal Filter pairs wirelessly to your Glowforge Aura, it needs to update to the latest firmware. This update will be applied automatically and should only take a few minutes. In order to allow these updates to apply, wait about ten minutes before running your first print using your Personal Filter.

Now, your Glowforge Personal Filter will start and stop automatically during each print.

Print Amazing Things

After you've paired your Glowforge Personal Filter, perform the following steps for each print.

1. Choose your material

Your Glowforge Personal Filter has been tested with a wide variety of Proofgrade materials. We suggest avoiding Proofgrade Draftboard on your Glowforge Aura, however, as it will cause your filter cartridge to fill up and require replacement much more quickly.

2. Run your print

There is no power button on your Glowforge Personal Filter. Once it's paired, it will run automatically when you start printing. The button on the front of your printer is a status indicator.

When you're ready to print, the button on the filter will blink white just like the button on your Glowforge Aura. When you push the button on your

Glowforge Aura to begin the print, your Personal Filter will automatically begin filtering.

When your print finishes, your Personal Filter will run for a few extra moments to avoid odors and prolong the life of the cartridge. Wait until the filter turns off to open your printer.

Button Colors

When your Personal Filter is powered on, after the initial update is applied, the button will light up with different colors to indicate its status.

- **Teal**
A teal button means that the filter is not paired with your Glowforge Aura. You will see this color briefly when you power the filter on, and anytime it is “searching” for your printer.
- **No color**
If the filter is powered on and the button is not lit up with a specific color, the filter is paired to your Glowforge Aura.
- **Blinking white**
The button will blink white when a print is waiting to start.
- **White**
While filtering during a print, the button will glow a steady white.

Manual Control Mode

While the button is teal, it is not paired with your printer. You can manually control the filter by tapping the button. Each tap will cycle through filter power settings, starting with 100%.

- First tap = 100%
- Second tap = 75%
- Third tap = 50%
- Fourth tap = 0% (exits manual mode)

Cleaning, Service & Moving

Power Off

Always turn your Glowforge Personal Filter and Glowforge Aura printer off by unplugging it before cleaning or moving.

Change Filter Cartridge

If printing produces smoke and fumes (a strong, unpleasant, or irritating odor) while using the Air Filter, it may be time to replace the cartridge. You can purchase a replacement at shop.glowforge.com. Follow these steps to make the change.

- 1. Unplug the Glowforge Personal Filter**



2. **Open the Filter**

The lid on top of the Glowforge Personal Filter is held in place by magnets. Lift the Glowforge Personal Filter lid. You do not need to remove the exhaust hose to change the filter cartridge.



3. Remove and dispose of old filter cartridge

Have a plastic bag on hand. Grab and lift the handle on top of the full cartridge to remove it. Carefully place the full cartridge into the bag without shaking it. Tie or otherwise secure the bag, and dispose of it in the garbage.

4. Install the new filter cartridge

Remove the clear plastic bag from your new filter cartridge, and dispose of the small, white moisture-absorbing packet.

Hold the new filter cartridge by the handle. Insert it into the filter, lining up with the green mark on the filter case. The cartridge will slide into the notch at the bottom. To make sure it's inserted correctly, try to turn the cartridge using the handle. It should stay firmly in place.



5. **Check the hose**

Ensure that the exhaust hose has not become disconnected from either the lid or the back of your Glowforge Aura.

That's it - you can get back to printing with a fresh filter cartridge!

Cleaning

- Your Glowforge Personal Filter does not need to be cleaned to operate properly.
- If you do clean it, clean only the exterior; interior areas should not be cleaned.
- Ensure that the Glowforge Personal Filter lid is closed before cleaning.

- You can clean all exterior surfaces using a cloth dampened with isopropyl alcohol.
- Do not spray liquids on the Glowforge Personal Filter, as they may get inside.

Moving

For protection, the Glowforge Personal Filter must be either hand-carried, or packed in its original packaging when moved. Whether it's for a big move, taking your Glowforge Aura and Personal Filter to an event, or for warranty service, you'll need to package your Glowforge Personal Filter properly with the original box and packing materials. The Glowforge Personal Filter cannot be shipped safely without the original packaging materials.

To repack your Glowforge Personal Filter

1. Disconnect the power cord.



2. Disconnect the exhaust hose from the lid.



3. Holding the filter handle, lower your Glowforge Personal Filter into the box. It should fit snugly in the indentation of the cardboard insert at the bottom of the box.



4. Place the top cardboard insert over the filter. When everything is packed correctly, the top of the cardboard insert should be even with the top of the box.



Reducing Odors

The Glowforge Personal Filter is designed to allow you to safely and comfortably operate your Glowforge Aura printer indoors. It will dramatically reduce odors, smoke, and fumes to safe levels.

You should smell little to no odor coming from the exhaust vents of the Glowforge Personal Filter itself. Note, however, that even when used properly, odors may still occur from the following:

- Opening the printer lid after a print
Tiny amounts of smoke and fumes remain trapped in the crumb tray, and will escape when the lid is opened and the material is removed. This can be

reduced by leaving the material in the Glowforge Aura printer for a minute or two before removal

- The materials themselves
After printing, the materials may have an odor for as long as a day or two. This can be minimized by using Proofgrade material, removing and disposing of the protective masking (which has the bulk of the odor), and by setting the materials aside for a day
- The Glowforge Aura printer itself
After being used for many hours, tiny particles of dust and resin will accumulate on the Glowforge Aura printer itself. To minimize the odor, keep the lid closed when not in use, clean according to the Glowforge Aura user manual, and leave the Glowforge Aura connected to the Glowforge Personal Filter when not in use.

Troubleshooting

If you detect a strong, sharp smell that also causes eyes, nose, or throat irritation, or if there is visible smoke escaping your Glowforge Aura printer while the lid is closed, your Glowforge Personal Filter is not operating properly. Discontinue using your Glowforge Personal Filter and follow these instructions.

- Ensure your Glowforge Personal Filter is turned on before every print, and left running until the print is complete.
- Check if the exhaust hose is securely connected to the Glowforge Aura printer and the Glowforge Personal Filter.
- Check if the Glowforge Personal Filter is paired in the Glowforge App (refer to the “Pairing your Glowforge Personal Filter and Glowforge Aura Printer” section above for details on how to do this).
- Ensure that the filter cartridge is not in its bag.
- Ensure that the filter cartridge has been properly installed in the filter. To make sure it’s inserted correctly, try to turn the cartridge using the handle. It should stay firmly in place.
- Check if the materials you are using are laser-compatible. The Glowforge Personal Filter has been tested with Proofgrade materials; other materials might have smoke and fumes that are not fully removed by the Glowforge Personal Filter.
- Change the filter cartridge. If you have been printing for a while, it may be time to replace your filter cartridge.

- Check the hose to make sure it is not kinked, squished, or twisted.
- Remove the hose and inspect the inside to ensure it is not obstructed.
- Review the “Reducing Odors” section above for other sources of smell.

If all of these do not help, you are using a new filter, and you are experiencing eye, nose, and throat irritation when using Proofgrade materials with your Glowforge Personal Filter, stop using your Glowforge Personal Filter and contact Glowforge support.

Service

Other than the procedures shown above, the Glowforge Personal Filter may not be serviced or repaired by the user. Should service or repair be required, it must be returned to the factory; contact us through our Help & Learning Center at support.glowforge.com for instructions.

Finding Community & Support

Having trouble? Want to do something new? We'll do our best to help you succeed!

Support Online

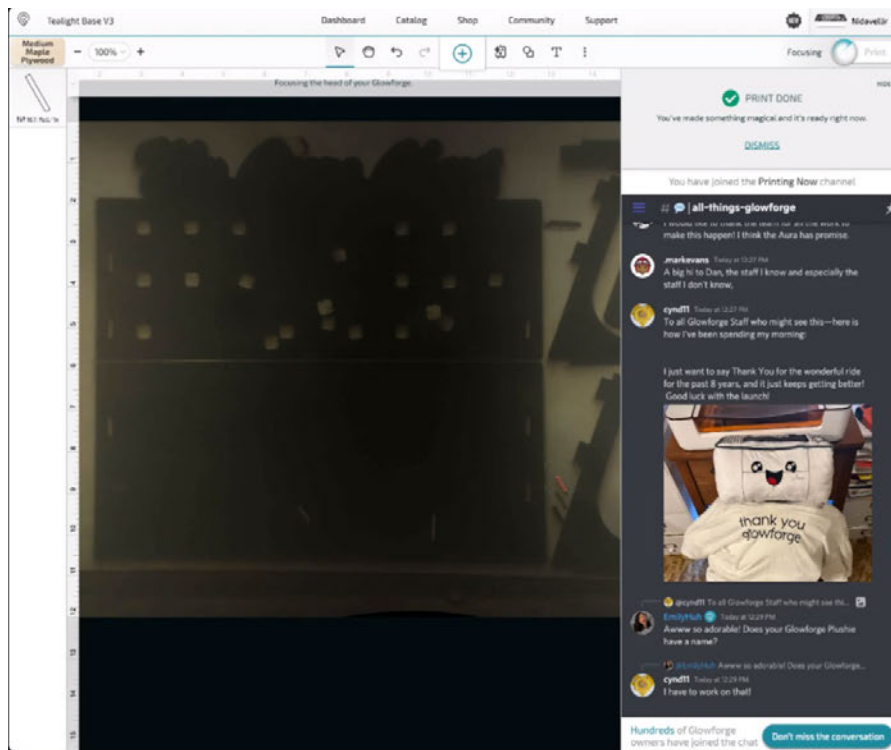
Go to our Help & Learning Center at support.glowforge.com to find guidance any time of day or night. The [Learn](#) area includes tutorials to get you started with your Glowforge Aura and Personal Filter, and our [Solve](#) area has troubleshooters and technical how-tos in case something doesn't go according to plan. You can also connect with our support team live in chat or [send us a message](#) if you can't find exactly what you need.

Community Chat

Glowforge Community Chat is our newest community feature that lets Glowforge Owners connect with each other in real-time lively discussion.

Community Chat is powered by Discord and only Glowforge Owners can participate. You can see the Community Chat each time you run a print. And from there, you can choose to join the rest of the community on Discord to interact.

If you do choose to join, you will have access to many more discussion topics to ask questions, get help, or share your stories, experiences and creations!



Community Forum

Most Glowforge owners have registered at the Glowforge Community Forum, where hundreds of Glowforge owners post each day. You'll find some incredibly talented (and helpful) folks who can provide assistance, suggestions, and ideas.

The [Made on a Glowforge](#) section is a great place to go for inspiration. You can also get help with many common questions from helpful community members in the [Community Support](#) section.

Support by Phone and Email

We are here for you! Our support team is available by phone at +1 (855) 338-2122 or contact us through our Help & Learning Center at support.glowforge.com with your questions, challenges, feedback, and even your stories of perfect prints. Our goal is to reply within hours on weekdays, and always within three days.

We provide the best support when we fully understand what you're facing.

Please send:

- A description of the steps you took, what happened and what you expected
- The date and time of the issue
- The name of your file, if there was a file involved
- The name of your Internet browser and Operating System
- A screenshot or photo of what happened