

noctua NF-A4x10 24V PWM Fan Instruction Manual

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noctua NF-A4x10 24V PWM Fan



Product Information

The Noctua NF-A4x10 24V PWM is a high-quality 40mm fan designed for superior quiet cooling performance. It incorporates advanced aerodynamic design measures and features found in larger Noctua fan models, making it one of the most optimized 40mm fans available on the market.

Specifications

• Model: Noctua NF-A4x10 24V PWM

• Voltage: 24V

• Connector: 4-pin PWM

• Speed: 5000rpm (4100rpm with Low-Noise Adaptor)

• Compatibility: Suitable for devices such as 3D printers (not for standard PC applications)

Included Mounting Parts

- NA-AC9 4-pin molex to 2-pin adaptor cable
- · OmniJoinTM adaptor set
- NA-EC1 30cm extension cable
- NA-RC8 Low-Noise Adaptor (L.N.A.)
- 4x NA-AV3 anti-vibration mounts
- 4x fan screws

Product Usage Instructions

Installation

If you are replacing an existing 40mm fan with the NF-A4x10 24V PWM in devices like 3D printers, it is

recommended to use the screws or other mounting mechanism used for the original fan.

Note: The NF-A4x10 24V PWM is a 24V fan and cannot be run at 12V. It requires a starting voltage of at least 17V. Therefore, it is not suitable for standard PC applications.

For installing the fan using the NA-AV3 anti-vibration mounts, follow these steps

- 1. First, pull the F (fan side) through the fan's mounting holes until pawl 2 is all the way through the first hole.
- 2. Then, pull the C (case side) through the mounting holes of the case. Be careful not to overstretch the mounts by pulling further pawls than necessary.
- 3. If the long ends of the mounts are in the way, you can use scissors to cut them after installation. However, note that this will make them difficult to reinstall in the future.

Connection

- The NF-A4x10 24V PWM comes with a 4-pin PWM fan connector for PWM-based speed control. It can also be connected to standard 3-pin fan headers, but it will run at full speed in that case.
- The included NA-AC9 adaptor cable allows you to connect the fan to 2-pin JST XHP-2 2.5mm sockets commonly used in many popular 3D printer models such as Creality Ender 3 and CR-10, Anycubic Mega.
- If you want to connect the fan to other fan headers, use the supplied OmniJoinTM adaptor set as described in the manual.
- The fan features a short 20cm primary cable to minimize cable clutter. If you need a longer cable, you can add the supplied 30cm extension cable (NA-EC1).
- The NF-A4x10 24V PWM also includes a Low-Noise Adaptor (NA-RC8) that allows you to reduce the fan speed from 5000 to 4100rpm. You can use the adaptor to set the fan to a fixed speed of 4100rpm (if speed control is deactivated) or to cap the maximum speed at 4100rpm during PWM speed control.

Cleaning

To clean the NF-A4x10 24V PWM, gently remove any dust or debris from the fan blades and surrounding areas. You can use compressed air or a soft brush to remove the dirt. Avoid using excessive force or liquid cleaners, as they may damage the fan.

FAQ

Can I run the NF-A4x10 24V PWM at 12V?

No, the NF-A4x10 24V PWM is a 24V fan and requires a starting voltage of at least 17V. It is not suitable for running at 12V.

Can I connect the fan to a standard 3-pin fan header?

Yes, the NF-A4x10 24V PWM can be connected to standard 3-pin fan headers. However, it will run at full speed in that case.

How can I reduce the fan speed?

The NF-A4x10 24V PWM comes with a Low-Noise Adaptor (NA-RC8) that allows you to reduce the fan speed from 5000 to 4100rpm. You can use the adaptor to set the fan to a fixed speed of 4100rpm (if speed control is deactivated) or to cap the maximum speed at 4100rpm during PWM speed control.

· How do I clean the fan?

To clean the NF-A4x10 24V PWM, gently remove any dust or debris from the fan blades and surrounding areas. Avoid using excessive force or liquid cleaners, as they may damage the fan.

Dear customer,

Congratulations on choosing the Noctua NF-A4x10 24V PWM.

We at Noctua always strive to achieve superior quiet cooling performance regardless of whether it's a big 200mm fan or a small 40mm one. That's why the NF-A4x10 24V PWM sports many of the features and advanced aerodynamic design measures of our award-winning larger models, making it perhaps the most thoroughly optimised 40mm fan on the market.

Each Noctua fan is double-checked for flawless operation by our quality control team before it leaves the factory and I'm confident that you will be able to sense some of the research, attention and care we've put into making this product.

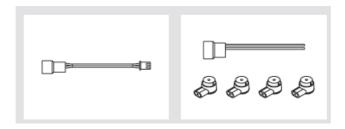
Enjoy your NF-A4x10 24V PWM!

Yours sincerely,

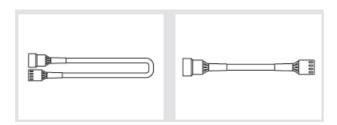


Roland Mossig, Noctua CEO

- NA-AC9 4-pin molex to 2-pin adaptor cable
- OmniJoin™ adaptor set

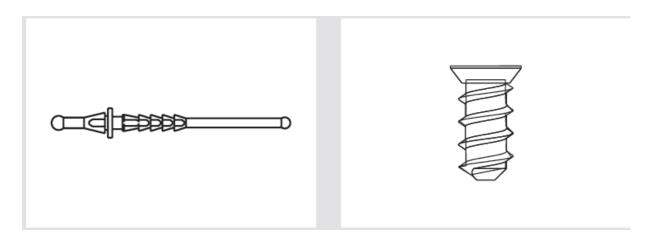


- NA-EC1 30cm extension cable
- NA-RC8 Low-Noise Adaptor (L.N.A.)





- 4x NA-AV3 anti-vibration mounts
- 4x fan screws

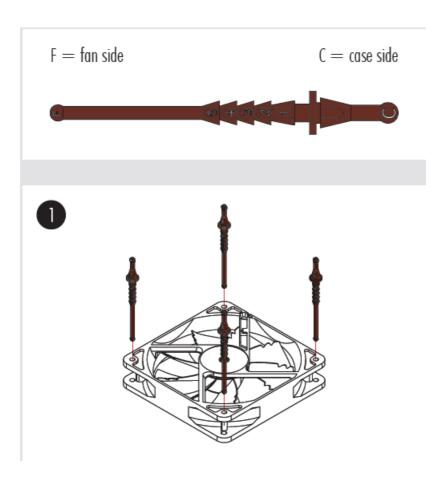


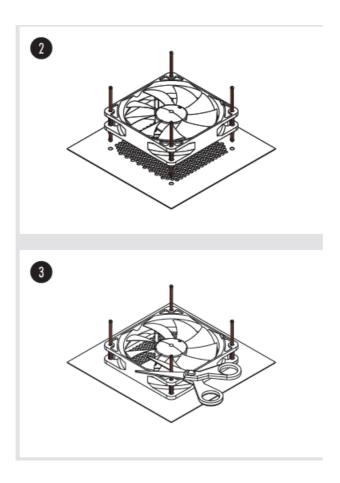
Installation

If you replace an existing 40mm fan with the NF-A4x10 24V PWM in devices such as 3D printers, it is usually best to use the screws (or other mounting mechanism) used for the original fan.

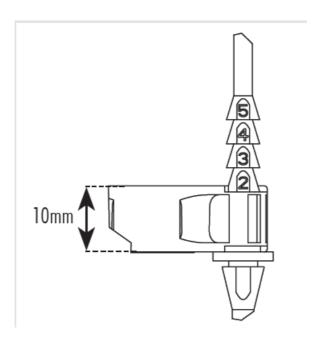
Caution: Being a 24V fan, the NF-A4x10 24V cannot be run at 12V and requires a starting voltage of at least 17V. It is therefore not suitable for standard PC applications.

For installing the fan using the NA-AV3 anti-vibration mounts, please first pull the F side through the fan's mounting holes until pawl 2 is all the way through the first hole.





Caution: Only pull pawl 2 through the first hole. Don't overstretch the mounts by pulling further pawls through! Then pull the C side through the mounting holes of the case. If the long ends of the mounts are in the way, you can use scissors to cut them after installation. Note that this will then make them difficult to reinstall in the future.



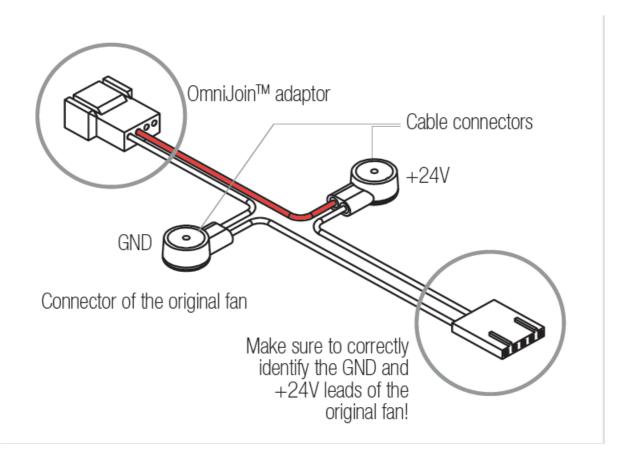
Connection

- The NF-A4x10 24V PWM comes with a 4-pin PWM fan connector for PWM based speed control. Please note that the fan can also be connected to standard 3-pin fan headers, though. When connected to 3-pin fan headers, the fan will run at full speed.
- The included NA-AC9 adaptor cable allows the fan to be connected to the 2-pin JST XHP-2 2.5mm sockets used on many popular 3D printer models (e.g. Creality Ender 3 and CR-10, Anycubic Mega).

- If you would like to connect the fan to other fan headers, please use the supplied OmniJoinTM adaptor set as
 described below.
- The fan features a short 20cm primary cable in order to help you minimise cable clutter in typical applications. If you need a longer cable, please add the supplied 30cm extension (NA-EC1).
- The NF-A4x10 24V PWM comes with a Low-Noise Adaptor (NA-RC8) that allows you to reduce the fan speed from 5000 to 4100rpm. You can either use the adaptor to set the fan to a fixed speed of 4100rpm (if speed control is deactivated) or to cap the maximum speed to 4100rpm during PWM speed control.

Using the OmniJoinTM adaptor set

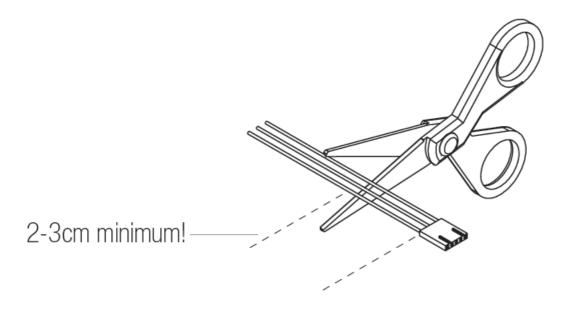
- The supplied OmniJoinTM adaptor set allows you to easily connect the NF-A4x10 24V PWM to proprietary fan headers.
- Please first identify the individual leads of the OmniJoinTM adaptor and the original fan. The OmniJoinTM adaptor uses black for ground (GND) and red for +24V.
- The black lead of the adaptor has to be matched with the original GND lead and the red adaptor cable with the original +24V lead. Many fan cables use the same colours as the OmniJoinTM adaptor, but please note that there is no guarantee for this, so make sure to correctly identify the GND and +24V leads of the original fan. Please refer to the manual that came with the device or contact the device manufacturer if in doubt.



After you've identified the individual leads, please proceed with the following steps to install the OmniJoinTM adaptor:

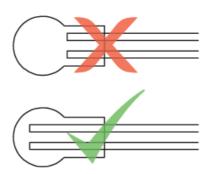
Step 1

Cut off the connector of the fan that was originally used in the device. Make sure not to cut the cable directly at the connector, there should be least 2-3cm of cable left:



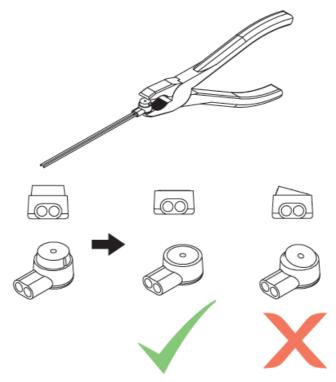
Step 2

Then take one of the supplied cable connectors and insert the GND lead of the original cable and the black lead of the OmniJoinTM adaptor into the two holes of the cable connector. Make sure that both leads are fully inserted and pushed all the way back.



Step 3

Then use flat nose pliers to push down the yellow button of the cable connector. Make sure that the button is not jammed and pushed all the way down. If the button is jammed, push it down from both sides of the cable connector using the flat nose pliers.



Repeat step 2 and 3 for the +24V lead.

After you've fixed the original fan's cable to the OmniJoinTM adaptor using the cable connectors, simply connect the NF-A4x10 24V PWM to the adaptor in order to use it in your device.

Cleaning and maintenance

- In order to maintain maximum performance, please clean your fans regularly using a duster, slightly moist tissue or canned air. Please be careful not to use too much force in order to prevent any damage to the fan. Please don't use a vacuum cleaner as this may apply excessive force to the fan.
- In order to ensure flawless operation over many years of usage, the NF-A4x10 24V PWM's premium grade SSO2 bearing is fully sealed to prevent the entering of fine dust particles.
- Please note that the fan is not designed to be taken apart by the user. Removing the impeller from the frame will break the sealing of the bearing and results in a loss of warranty.

Warranty, support and FAQs

- Even with high-grade products and strict quality control, the possibility of defects cannot be eliminated entirely. Therefore, we aim at providing the highest possible level of reliability and convenience by offering a warranty period of 6 years and direct, fast and straightforward RMA service.
- Should you encounter any problems with your NF-A4x10 24V PWM, please don't hesitate to contact our support team (<u>support@noctua.at</u>).
- Please also consult the FAQ section on our website: faqs.noctua.at



Documents / Resources



noctua NF-A4x10 24V PWM Fan [pdf] Instruction Manual NF-A4x10 24V PWM Fan, NF-A4x10 24V PWM, Fan

References

- © Support : Noctua Knowledge Centre
- Moctua
- User Manual

Manuals+, Privacy Policy