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Phanteks PH-F120D30_DRGB_PWM_BK01_3P

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Model: PH-F120D30_DRGB_PWM_BK01_3P

Brand: Phanteks

1. Introduction

The Phanteks D30-120 is a high-performance 120mm case fan designed for optimal cooling and aesthetic appeal in modern computer systems. It features integrated D-RGB lighting visible from all sides, a unique fan linking system to reduce cable clutter, and a robust 30mm thick frame with aerodynamic blades for superior airflow and pressure. This manual provides essential information for the proper installation, operation, and maintenance of your Phanteks D30-120 fans.



Image: A set of three Phanteks D30-120 fans showcasing their integrated D-RGB lighting and linked design.

2. KEY FEATURES

- Integrated D-RGB Lighting: Equipped with D-RGB lighting throughout its frame and blades on all sides, offering vibrant illumination. Compatible with Digital-RGB equipped motherboards and Phanteks Digital-RGB products.
- Easy and Clean Fan Linking System: Multiple D30-120 fan frames can be linked together as one unit using bridge connectors and screw cover plates, significantly reducing cable clutter for a cleaner build.
- **Optimized Performance:** Features a 30mm thick frame and aerodynamic fan blades, inspired by the T30 fan, to provide excellent air pressure and airflow (up to 64.3 CFM) even through restrictive meshes or radiators.
- Versatile Airflow Models: Available in both regular and reversed airflow models, allowing for flexible fan configurations to suit any system layout without compromising the lighting effect.
- Fluid Dynamic Bearing (FDB): Ensures quiet operation and extended lifespan (MTBF of 50,000 hours at 40°C).

3. PACKAGE CONTENTS

Before installation, please verify that all components are present in your package:

- Phanteks D30-120 D-RGB PWM Fan(s)
- · Mounting Screws
- Bridge Connectors
- Screw Cover Plates
- PWM Fan Cable (4-Pin)

- D-RGB Cable (3-Pin JST Daisy-chain)
- Instruction Manual



Image: Contents of the Phanteks D30-120 fan package, showing three fans, various cables, mounting screws, and linking accessories.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of your Phanteks D30-120 fans:

- 1. **Plan Fan Placement:** Determine the optimal placement for your fans within your PC case. Consider airflow direction (intake or exhaust) and choose between regular or reversed airflow models accordingly.
- 2. **Link Multiple Fans (Optional):** If installing multiple fans together, align them and use the provided bridge connectors to physically link them. This creates a single, cohesive unit and simplifies cable management. Secure the screw cover plates over the bridge connectors for a clean look.



Image: Multiple Phanteks D30-120 fans connected using the easy linking system, minimizing visible cables.

- 3. **Mount the Fans:** Secure the fan(s) to your PC case or radiator using the provided mounting screws. Ensure the fans are oriented correctly for your desired airflow.
- 4. **Connect Power (PWM):** Connect the 4-Pin PWM fan cable from the fan unit (or the last fan in a linked series) to an available 4-Pin fan header on your motherboard. This allows for speed control.
- 5. **Connect D-RGB Lighting:** Connect the 3-Pin JST D-RGB daisy-chain cable from the fan unit to a compatible 3-Pin Digital-RGB header on your motherboard or a Phanteks D-RGB controller.



Image: The D-RGB and PWM cables of the Phanteks D30-120, illustrating compatibility with Digital-RGB motherboards and Phanteks D-RGB products.

6. Cable Management: Route all cables neatly to ensure optimal airflow and a clean build aesthetic.



Image: An example of a perfectly set up PC with Phanteks D30-120 fans, demonstrating their aesthetic integration and D-RGB effects.

5. OPERATING INSTRUCTIONS

Once installed, the Phanteks D30-120 fans operate as follows:

- Fan Speed Control: The 4-Pin PWM connection allows your motherboard or fan controller to dynamically adjust the fan speed (250-2000 RPM) based on system temperature, optimizing cooling performance and noise levels.
- D-RGB Lighting Control: The D-RGB lighting can be controlled via your motherboard's RGB software (e.g., ASUS Aura Sync, MSI Mystic Light, Gigabyte RGB Fusion, ASRock Polychrome Sync) or a dedicated Phanteks D-RGB controller. This allows for customization of colors, effects, and synchronization with other D-RGB components.



Image: Detailed view of the D-RGB lighting on the Phanteks D30-120 fan, highlighting its visibility from all angles.

• Airflow Direction: Ensure the fans are pushing air in the intended direction for your cooling setup. Regular models typically push air from the front (logo side) to the back, while reversed models push air from the back to the front.



Image: A regular model of the Phanteks D30-120 fan, illustrating its standard airflow direction.

6. MAINTENANCE

To ensure optimal performance and longevity of your Phanteks D30-120 fans, periodic maintenance is recommended:

- **Dust Removal:** Regularly inspect the fan blades and frame for dust accumulation. Use compressed air or a soft brush to gently remove dust. Ensure the fan is powered off before cleaning.
- Cable Check: Periodically check all cable connections (PWM and D-RGB) to ensure they are securely seated.
- **Bearing Noise:** While Fluid Dynamic Bearings are designed for quiet operation, listen for any unusual noises. Excessive noise might indicate an issue requiring further inspection.

7. TROUBLESHOOTING

If you encounter issues with your Phanteks D30-120 fans, refer to the following common troubleshooting steps:

• Fan Not Spinning:

- Ensure the 4-Pin PWM cable is securely connected to the motherboard fan header.
- Check your motherboard's BIOS/UEFI settings or fan control software to ensure the fan header is enabled and configured correctly.
- Verify that your power supply is providing adequate power to the system.
- D-RGB Lighting Not Working/Incorrect Colors:

- Ensure the 3-Pin JST D-RGB cable is correctly connected to a compatible Digital-RGB header (5V, not 12V RGB).
- Check your motherboard's RGB software or Phanteks D-RGB controller settings.
- If multiple fans are linked, ensure all bridge connectors are properly seated.

• Excessive Noise:

- Check for any obstructions (cables, dust) interfering with the fan blades.
- Ensure the fan is securely mounted and not vibrating against the case.
- Adjust fan speed settings in your motherboard's BIOS/UEFI or fan control software.

8. SPECIFICATIONS



Image: The Phanteks D30-120 fan, highlighting its 30mm thickness and aerodynamic blades for enhanced performance.

Feature Specification

Feature	Specification		
Model Number	PH-F120D30_DRGB_PWM_BK01_3P		
Туре	Case Fan		
Fan Size	120 x 120 x 30 mm		
Bearing Type	FDB (Fluid Dynamic Bearing)		
Rated Voltage (Fan)	12V		
Rated Voltage (LED)	5V		
Operating Voltage Range	5~13.2V		
PWM Control	Yes		
Rated Current (Fan)	0.15A		
Rated Current (LED Max)	0.45A		
Power Consumption	≤ 1.8W		
Speed	250-2000 ± 10% RPM		
Max. Airflow	64.3 CFM		
Max. Air Pressure	3.01 mm H2O		
Noise Level	30.2 dB(A)		
Fan Connector	4-Pin PWM		
Fan Cable Length	700 mm / 27.56 in		
D-RGB Connector	3-Pin JST Daisy-chain		
D-RGB Cable Length	600+100 mm / 23.62+3.94 in		
LED Number	32 (D-RGB)		
MTBF (Life Expectancy)	50,000 hrs at 40°C		
Materials	PBT (Polybutylene terephthalate), Copper		
Color	Black (Fan Frame), White Matte (Blade)		

9. WARRANTY AND SUPPORT

Phanteks products are manufactured to the highest quality standards. This product is covered by a manufacturer's warranty against defects in materials and workmanship. For specific warranty terms and conditions, please refer to the official Phanteks website or contact their customer support.

For technical assistance, troubleshooting, or warranty claims, please visit the official Phanteks support page or contact their customer service department. Keep your proof of purchase for warranty validation.

- Phanteks Official Website: www.phanteks.com
- Support Contact: Refer to the support section on the official website for contact information.

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Product Model: PH-F120D30_DRGB_PWM_BK01_3P

Related Documents - PH-F120D30_DRGB_PWM_BK01_3P



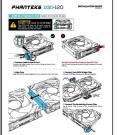
Phanteks Evolv X Mid-Tower PC Case User Manual and Installation Guide

Comprehensive user manual and installation guide for the Phanteks Evolv X mid-tower PC case, detailing specifications, component installation, water cooling, D-RGB lighting, and support.



Phanteks Eclipse G500A Installation Guide

Comprehensive installation guide for the Phanteks Eclipse G500A PC case, covering panel removal, hardware installation, storage mounting, and D-RGB controls.



Phanteks D30-120 Fan Installation Guide

A comprehensive guide to installing Phanteks D30-120 D-RGB computer fans, covering fan connection, chassis mounting, and radiator installation.



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