

ASUS TUF GAMING TR120 FAN ARGB WHITE

ASUS TUF Gaming TR120 ARGB Fan User Manual

Model: TUF GAMING TR120 FAN ARGB WHITE

Introduction	Setup	Operating	Maintenance	Troubleshooting	Specifications	Warranty
Support						

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your ASUS TUF Gaming TR120 ARGB Single Pack White Edition 120mm Fan. The TR120 ARGB fan is engineered for optimal cooling performance in PC chassis and radiators, featuring an extra-thick 28mm frame, high static pressure, and a dual-layer addressable LED array for customizable aesthetics. Please read this manual thoroughly before installation and use to ensure proper functionality and longevity of your product.



Figure 1.1: ASUS TUF Gaming TR120 ARGB Fan (White Edition)

This image displays the ASUS TUF Gaming TR120 ARGB fan in its white edition, showcasing its vibrant rainbow LED lighting. The fan features a robust frame and a central TUF Gaming logo.

2. SETUP AND INSTALLATION

Proper installation is crucial for the performance and safety of your fan. Ensure your system is powered off and unplugged before beginning installation.

2.1 Package Contents

- ASUS TUF Gaming TR120 ARGB Fan (White Edition)
- Mounting Screws
- Documentation

2.2 Physical Installation

1. **Prepare your PC case or radiator:** Identify the desired mounting location for the fan. Ensure there is sufficient clearance.
2. **Mount the fan:** Align the fan with the mounting holes. Use the provided screws to secure the fan firmly. The extra-thick 28mm frame provides a robust foundation for optimal cooling.

28 mm Thicker Frame

The TR120 ARGB establishes a robust foundation with 28 mm fan frame, ensuring the delivery of optimal cooling performance

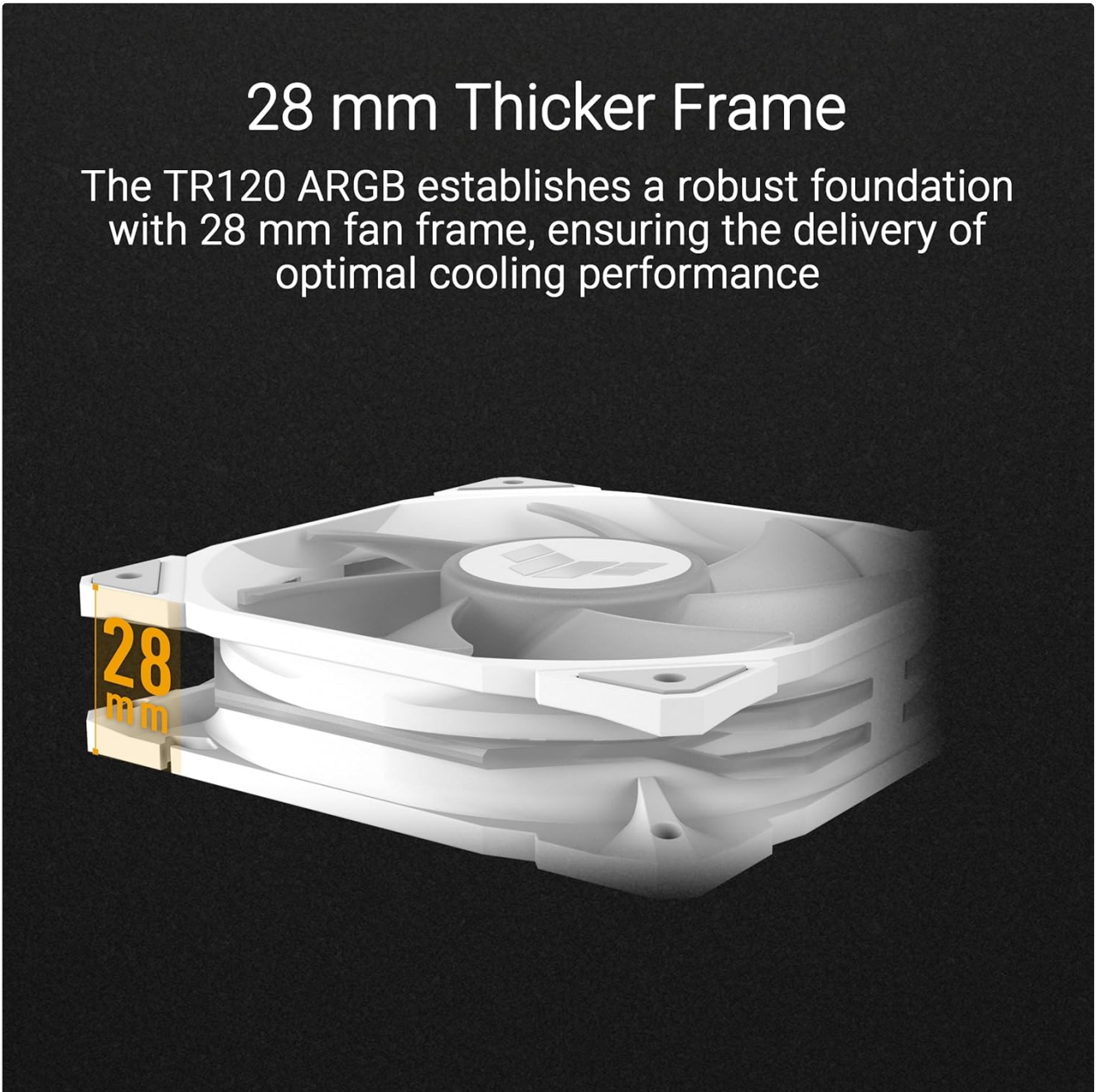


Figure 2.1: Fan Frame Thickness

This diagram highlights the 28mm thickness of the fan frame, emphasizing its robust construction designed for enhanced cooling performance.

3. **Connect the power cable:** Locate the 4-pin PWM fan header on your motherboard or fan controller. Connect the fan's 4-pin connector to this header.
4. **Connect the ARGB cable:** Connect the fan's ARGB cable to a compatible 3-pin 5V addressable RGB header on your motherboard. This enables synchronization with Aura Sync.

Double-layer LED Array

The TR120 ARGB features an addressable double-layer LED array that emits light evenly through each fan blade



Figure 2.2: Double-Layer LED Array in System

This image shows multiple ASUS TUF Gaming TR120 ARGB fans installed within a PC case, demonstrating the vibrant illumination from their double-layer LED array and how they enhance the system's aesthetic.

Duo Side Patterns

Incorporated with dual side lighting patterns, this feature allows for a diverse range of captivating visual displays through versatile arrangements

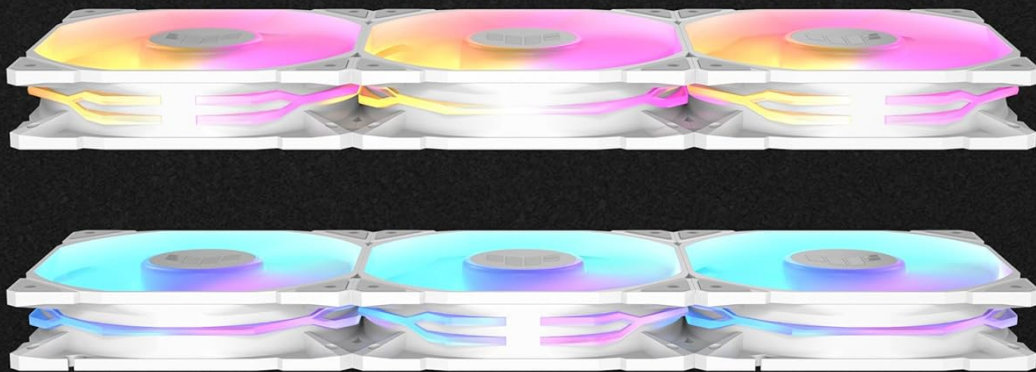


Figure 2.3: Duo Side Patterns

This diagram illustrates the two distinct side lighting patterns available on the fan, allowing for versatile visual displays depending on installation orientation.

5. **Cable Management:** Route cables neatly to avoid interference with other components and to improve airflow.

2.3 Fan Orientation

The TR120 ARGB fans are available in standard and reverse versions, allowing for flexible airflow configurations while maintaining optimal aesthetic appeal.

Duo Colors & Orientation

Allow you to craft your PC build with a personalized aesthetic while ensuring optimal cooling performance.



Figure 2.4: Duo Colors & Orientations

This image compares the standard blade and reverse blade versions of the fan, available in both black and white, demonstrating how different orientations can be used to optimize airflow and aesthetics in a PC build.

3. OPERATING INSTRUCTIONS

3.1 Power On

After installation, power on your computer. The fan should begin to spin, and the ARGB lighting should illuminate.

3.2 PWM Fan Control

The TR120 ARGB fan supports Pulse Width Modulation (PWM) control, allowing your motherboard or fan controller to dynamically adjust fan speed based on system temperature. This ensures optimal cooling performance while maintaining a low noise profile.

PWM Curve

PWM control facilitates a low noise profile while maintaining optimal system temperatures

Standard fan blade

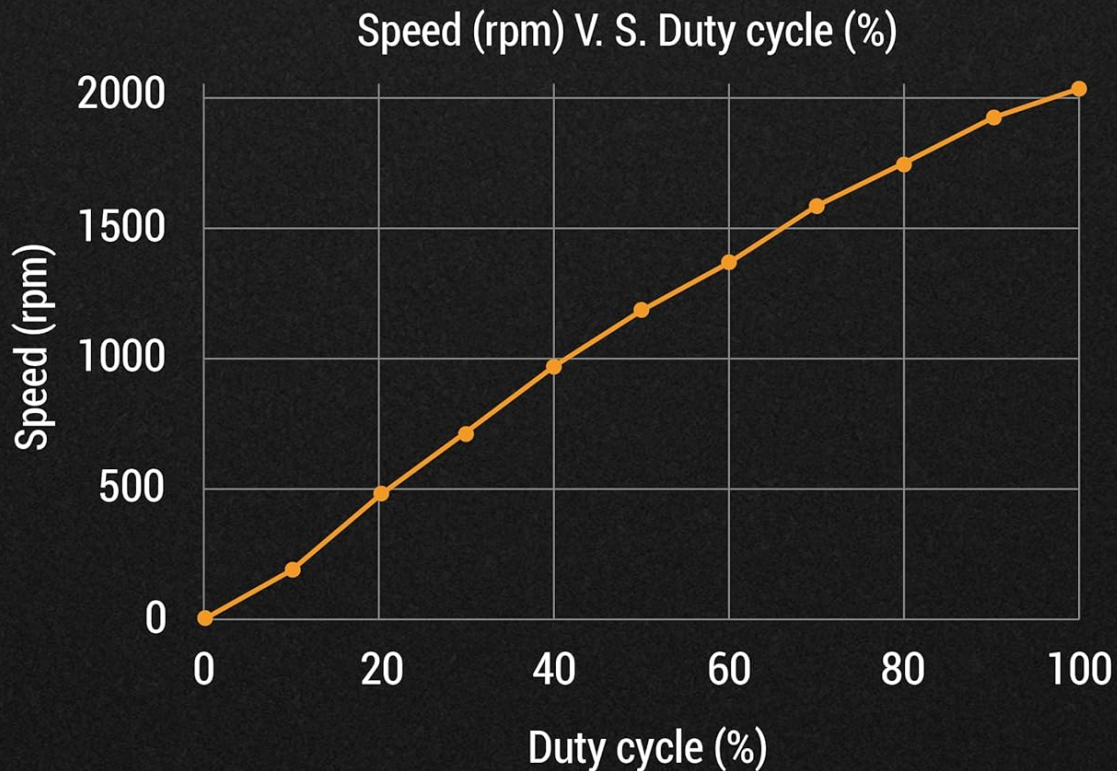


Figure 3.1: PWM Curve

This graph illustrates the relationship between the fan's speed (RPM) and the PWM duty cycle percentage, demonstrating how the fan speed scales with the control signal for optimal temperature management.

3.3 ARGB Lighting Control

The fan's addressable RGB lighting can be controlled via compatible motherboard software (e.g., ASUS Aura Sync) or a dedicated ARGB controller. Refer to your motherboard's manual for specific instructions on ARGB software control.

4. MAINTENANCE

Regular maintenance helps ensure optimal performance and extends the lifespan of your fan.

4.1 Cleaning

- **Frequency:** Clean your fan every 3-6 months, or more frequently if operating in a dusty environment.
- **Procedure:**

- a. Power off your computer and unplug it from the wall outlet.
- b. Carefully remove any accumulated dust from the fan blades and frame using compressed air or a soft, dry cloth.
- c. Avoid using liquid cleaners or abrasive materials, as these can damage the fan or its components.

4.2 Inspection

- Periodically check the fan for any signs of damage, such as cracked blades or loose connections.
- Ensure all mounting screws are secure.

5. TROUBLESHOOTING

If you encounter issues with your ASUS TUF Gaming TR120 ARGB fan, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
Fan not spinning	• Loose power connection • Incorrect fan header connection • Faulty fan header on motherboard	• Ensure 4-pin PWM cable is securely connected. • Connect to a different fan header if available. • Test the fan on another system if possible.
ARGB lighting not working	• Loose ARGB connection • Incorrect ARGB header (e.g., connected to 12V RGB instead of 5V ARGB) • Software issue	• Ensure 3-pin ARGB cable is securely connected to a 5V ARGB header. • Verify motherboard ARGB header type. • Check motherboard's ARGB control software (e.g., Aura Sync) for settings.
Excessive noise	• Dust accumulation • Loose mounting screws • Fan blade obstruction	• Clean the fan blades and frame. • Tighten all mounting screws. • Ensure no cables or objects are interfering with fan blades.
Poor cooling performance	• Incorrect fan orientation • Dust accumulation • Insufficient airflow in case	• Verify fan is oriented correctly for desired airflow (intake/exhaust). • Clean the fan. • Consider adding more fans or improving case airflow.

If the problem persists after trying these solutions, please contact ASUS customer support.

6. SPECIFICATIONS

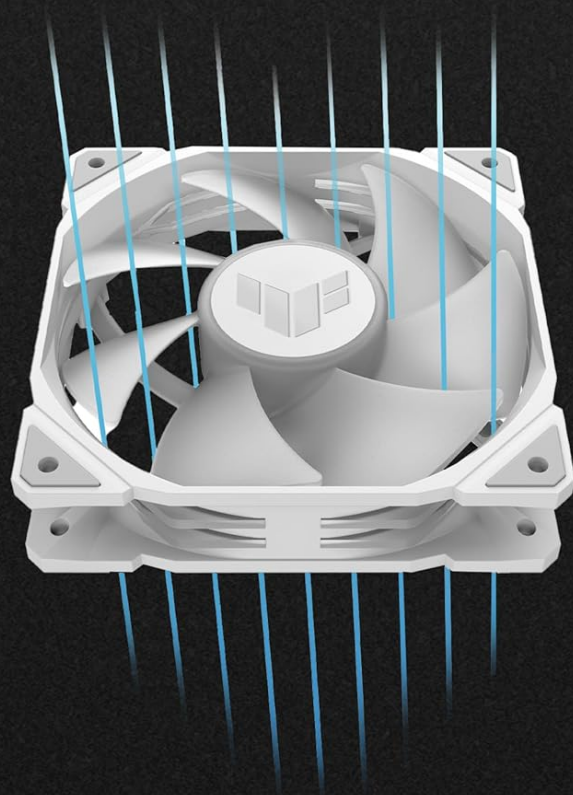
Key technical specifications for the ASUS TUF Gaming TR120 ARGB Fan:

Feature	Detail
Model Number	TUF GAMING TR120 FAN ARGB WHITE
Dimensions (L x W x H)	4.72 x 4.72 x 1.1 inches (120 x 120 x 28 mm)

Feature	Detail
Fan Frame Thickness	28mm
Static Pressure	3.3 mmH2O
Max Airflow	77.4 CFM
Noise Level	29 dB
Maximum Rotational Speed	2000 RPM
Power Connector	4-Pin PWM
ARGB Connector	3-Pin 5V Addressable RGB
Voltage	12 Volts (DC)
Wattage	2.04 watts
Cooling Method	Fan
Compatible Devices	Desktop PCs
Material	Copper (referring to motor windings/internal components)
Manufacturer	ASUS
Date First Available	June 13, 2024

Optimized Cooling Performance

Crafted to excel in both chassis and radiator applications, the TR120 ARGB sets a new standard for cooling performance



3.3 mmH₂O
Static Pressure

77.4 CFM
Max Airflow

Figure 6.1: Optimized Cooling Performance Metrics

This image visually represents the fan's optimized cooling performance, highlighting its impressive 3.3 mmH₂O static pressure and class-leading 77.4 CFM airflow, suitable for both chassis and radiator applications.

7. WARRANTY INFORMATION

ASUS products are manufactured to the highest quality standards. For detailed warranty information, please refer to the warranty card included with your product or visit the official ASUS support website. Keep your proof of purchase for warranty claims.

Typical protection plans offered for this product include:

- 3-Year Protection Plan
- 4-Year Protection Plan
- Complete Protect (monthly subscription covering multiple eligible purchases)

Note: Protection plans are typically offered by third-party providers and may have separate terms and conditions.

8. CUSTOMER SUPPORT

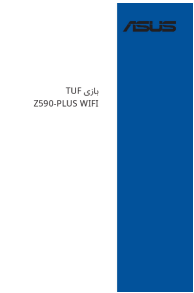
For technical assistance, product inquiries, or warranty claims, please contact ASUS customer support through their official channels.

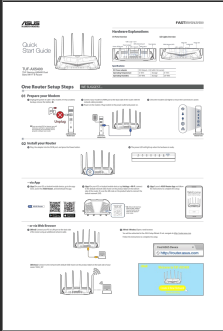
- **ASUS Official Website:** www.asus.com/support/
- Refer to the contact information provided in your product packaging.



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Related Documents - TUF GAMING TR120 FAN ARGB WHITE

	ASUS TUF GAMING B850-PLUS WIFI Motherboard User Manual Comprehensive user manual for the ASUS TUF GAMING B850-PLUS WIFI motherboard, detailing installation, specifications, BIOS/RAID support, and safety information.
	ASUS TUF GAMING TF120 ARGB FAN [3-pack] Quick Start Guide Get started quickly with the ASUS TUF GAMING TF120 ARGB FAN 3-pack. This guide provides clear instructions for installation, connecting the ARGB controller hub, and understanding lighting effects.
	ASUS TUF GAMING Z590-PLUS WIFI راهنمای مادربرد شامل مشخصات فنی، راهنمای نصب، راهنمای جامع مادربرد برای پردازنده‌های اینتل نسل ۱۰ و ۱۱ RAID و پیکربندی BIOS چیدمان قطعات، تنظیمات.
	ASUS TUF Gaming AX3000 V2 WiFi 6 Router: Quick Start Guide Get started quickly with the ASUS TUF Gaming AX3000 V2 Dual Band WiFi 6 Router. This guide covers hardware setup, app and web browser configuration, Link Aggregation, FAQs, and important compliance and safety information.

	ASUS TUF Gaming AX5400 Dual Band Wi-Fi 6 Router Quick Start Guide Quick start guide for the ASUS TUF Gaming AX5400 Dual Band Wi-Fi 6 Router, covering hardware explanations, setup steps via app or web browser, and important safety and compliance information.
	ASUS TUF Gaming Power Supply Unit Quick Start Guide Quick start guide for the ASUS TUF Gaming Power Supply Unit, detailing installation, product overview, and safety information. Available in multiple languages.

Documents - ASUS – TUF GAMING TR120 FAN ARGB WHITE

Wentylator Asus TUF GAMING TR120 FAN ARGB WHITE 3IN1 120mm PWM

Indeks: 535497 Producent: ASUS Kod producenta: TUF GAMING TR120 FAN ARGB WHITE 3IN1

Cena: 246.75 zł

Opis

Wentylator Asus TUF GAMING TR120 FAN ARGB WHITE 3IN1 120mm PWM

Parametry

Stan

Nowy

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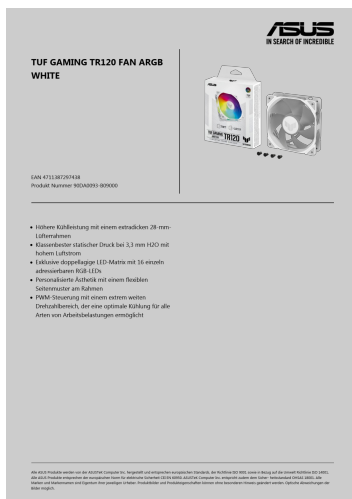
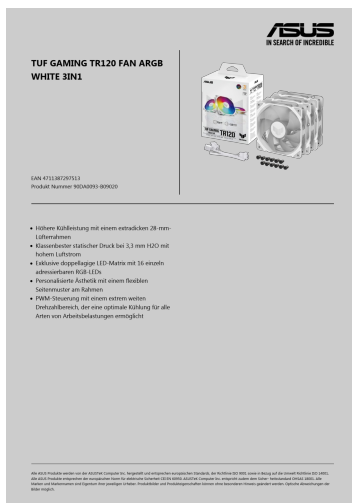
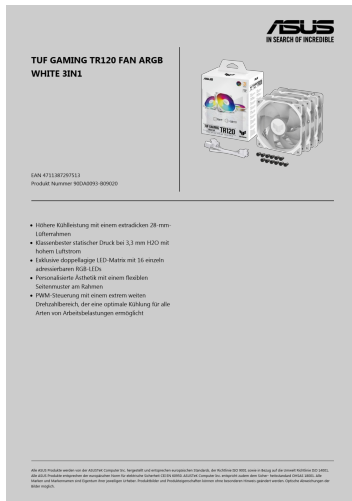
- Höhere Kühlung mit einem extradicken 28-mm-Lüfterrahmen
- Klassischer statischer Druck bei 3,3 mm H2O mit hohem Luftstrom
- Exklusive doppelagige LED-Matrix mit 16 einzeln adressierbaren RGB-LEDs
- Personalisierte Aufleucht mit einem flexiblen Selbstmuster am Rahmen
- PWM-Steuerung mit einem weiten Drehzahlbereich, der eine optimale Kühlung für alle Arten von Arbeitsbelastungen ermöglicht

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