**ASUS FX517ZE-RS51**

# ASUS TUF Dash 15 (2022) Gaming Laptop Instruction Manual

Model: FX517ZE-RS51

## Introduction

This manual provides essential information for setting up, operating, maintaining, and troubleshooting your ASUS TUF Dash 15 (2022) Gaming Laptop, Model FX517ZE-RS51. Designed for performance and durability, this laptop is equipped with a 12th Gen Intel Core i5-12450H CPU, NVIDIA GeForce RTX 3050 Ti GPU, 8GB DDR5 RAM, and a 512GB PCIe NVMe M.2 SSD, running on Windows 11 Home.

The TUF Dash 15 is engineered to handle demanding tasks, from gaming and streaming to professional applications, with its robust hardware and efficient cooling system. Its military-grade durability ensures reliability in various environments.




Figure 1: ASUS TUF Dash 15 (2022) Gaming Laptop.

## Setup

### 1. Unboxing and Initial Inspection

Carefully remove the laptop and all accessories from the packaging. Verify that all components listed in the 'What's in the Box' section are present and undamaged. The box should contain the FX517ZE-RS51 laptop, power cord, and adapter.

### 2. Connecting the Power Adapter

Connect the power adapter to the laptop's power input port and then plug the power cord into a wall outlet. It is

recommended to fully charge the battery before initial use.

### 3. Initial Boot-up and Windows 11 Setup

Press the power button to turn on the laptop. Follow the on-screen instructions to complete the Windows 11 Home setup process, including language selection, network connection, and user account creation.

### 4. Connecting Peripherals

Utilize the available ports for external devices:

- **USB Ports:** Connect mice, keyboards, external storage, and other USB-enabled accessories. The laptop features 4 total USB ports.
- **Thunderbolt 4 Port:** For high-speed data transfer and connecting compatible external displays.
- **HDMI Port:** Connect to external monitors or TVs for extended display.
- **Audio Jack:** For headphones or external speakers.
- **Ethernet Port:** For wired network connectivity.

## Operating Instructions

### 1. Performance Overview

The ASUS TUF Dash 15 is powered by a 12th Gen Intel Core i5-12450H Processor (8 cores, up to 4.4 GHz) and an NVIDIA GeForce RTX 3050 Ti GPU with 4GB GDDR6. It includes 8GB DDR5 4800MHz RAM and a 512GB PCIe NVMe M.2 SSD for fast loading and multitasking.




Figure 2: Internal components and performance features.

### 2. Display Features

Experience smooth visuals on the 15.6-inch FHD (1920x1080) IPS Type Display with a 144Hz refresh rate and 3ms

response time. The display supports Adaptive-Sync technology, which synchronizes the GPU's frame rate with the display's refresh rate to reduce lag, minimize stuttering, and eliminate visual tearing.




Figure 3: Display features for smooth visuals.

## 3. Keyboard and Touchpad

The laptop features a backlit gaming keyboard with a numeric pad. The touchpad is 27% larger than previous models, offering enhanced precision and responsiveness.

## 4. Audio System

Equipped with Hi-Res Audio certification and Two-way AI Noise Cancellation, the audio system provides clear sound for both listening and communication.

## 5. MUX Switch Technology

The integrated MUX switch allows the GPU to communicate directly with the display, bypassing the integrated graphics. This feature significantly increases gaming performance and decreases latency, providing a more fluid gaming experience.

## 6. Cooling System

The TUF Dash 15 incorporates a comprehensive cooling system with Arc Flow Fans, 4 exhaust vents, and 5 heatpipes. It features 0dB Ambient Cooling and an anti-dust design to maintain optimal performance and system longevity.

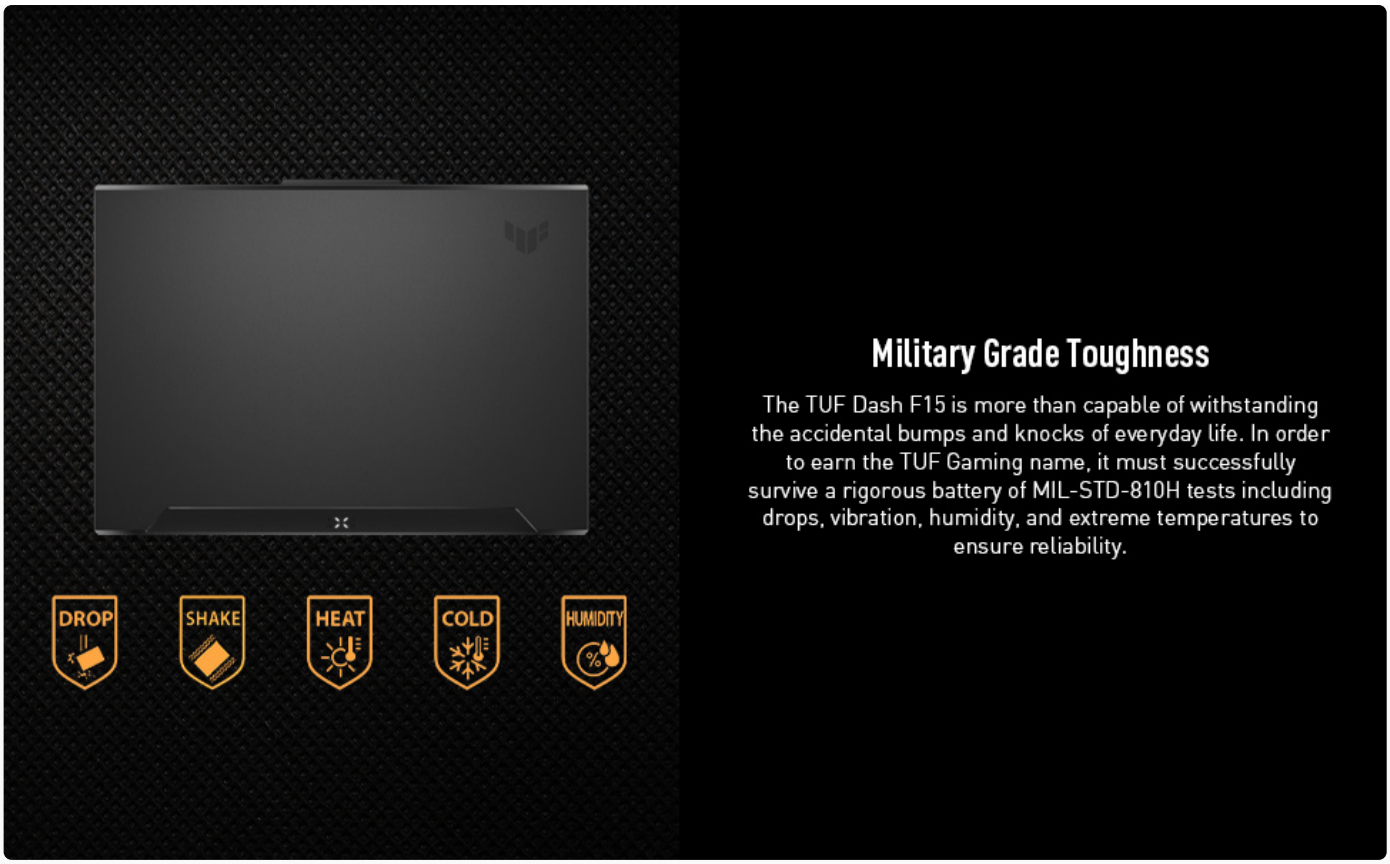



Figure 4: Advanced cooling system for sustained performance.

### 7. Battery and Charging

The laptop is equipped with a 76 Watt-Hours Lithium-Ion battery, offering approximately 5 hours of battery life. It supports Type-C Power Delivery and fast charging, reaching 50% charge in 30 minutes.

## Maintenance

### 1. General Cleaning

- **Screen:** Use a soft, lint-free cloth slightly dampened with water or a screen-specific cleaner. Avoid harsh chemicals.
- **Keyboard and Chassis:** Use a soft cloth to wipe surfaces. Compressed air can be used to remove dust from between keys and vents.

### 2. Software Updates

Regularly update your Windows 11 operating system and device drivers to ensure optimal performance, security, and compatibility. ASUS provides utility software to manage driver updates.

### 3. Storage Management

The laptop comes with a 512GB PCIe NVMe M.2 SSD. For additional storage, the device supports an extra SSD slot, allowing for future upgrades.

### 4. Battery Care

To prolong battery life, avoid fully discharging the battery frequently. Store the laptop in a cool, dry place when not in use for extended periods.

### 5. Durability

The TUF Dash 15 is built with military-grade durability (MIL-STD-810H standards), designed to withstand drops, vibration, humidity, and extreme temperatures. While robust, avoid intentional impacts or exposure to harsh conditions.

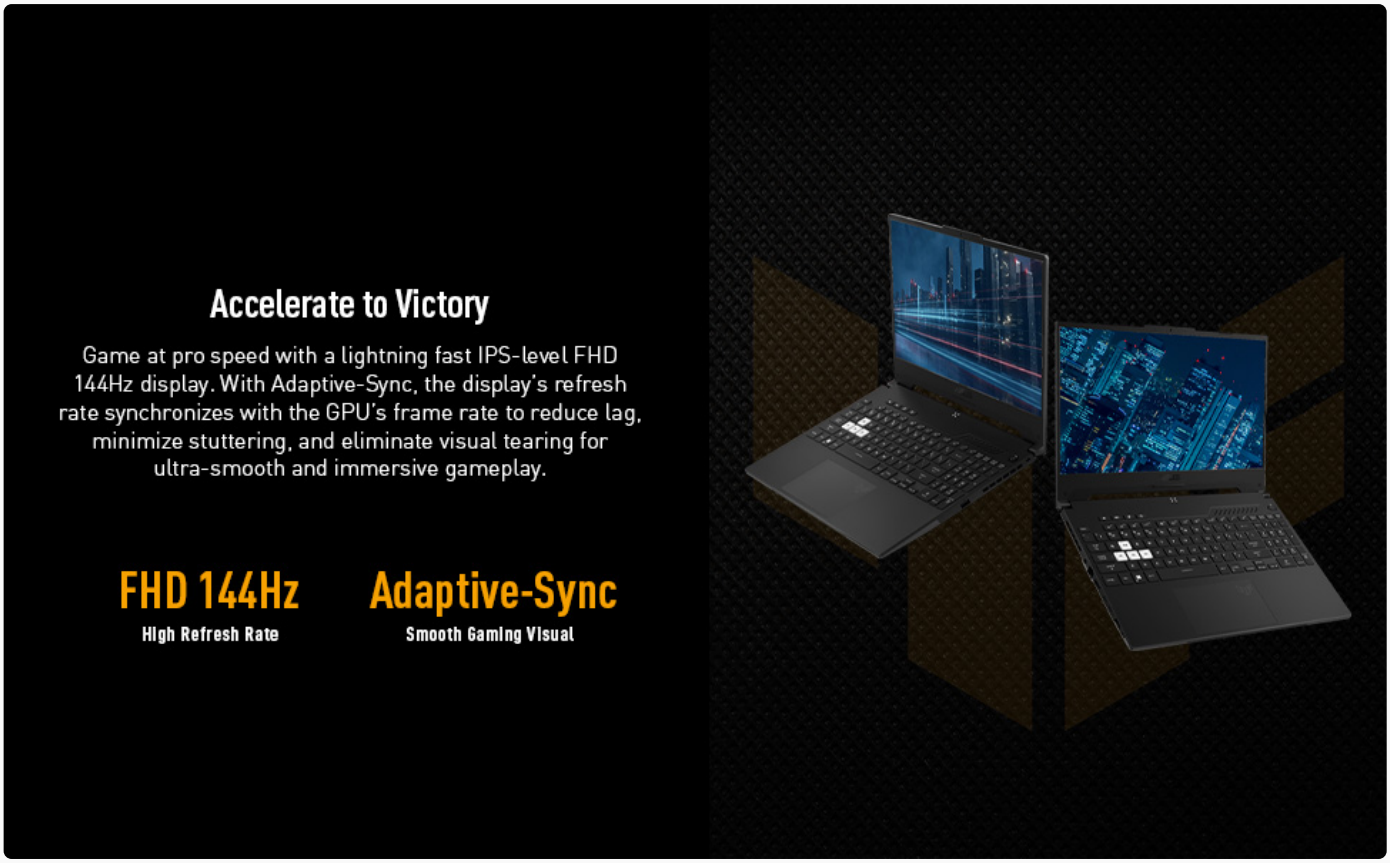



Figure 5: Military-grade durability and design.

## Troubleshooting

If you encounter issues with your ASUS TUF Dash 15, consider the following common solutions:

- **No Power:** Ensure the power adapter is securely connected to both the laptop and a working power outlet. Check the power indicator light.
- **Display Issues:** If the screen is blank, try connecting an external monitor to verify if the issue is with the laptop's display. Update graphics drivers.
- **Performance Lag:** Close unnecessary applications. Check for background processes consuming high resources. Ensure cooling vents are clear.
- **Connectivity Problems (Wi-Fi/Bluetooth):** Verify that Wi-Fi and Bluetooth are enabled in Windows settings. Restart your router or the laptop.
- **Audio Issues:** Check volume settings, ensure correct audio output device is selected, and update audio drivers.

For more complex issues or persistent problems, refer to the ASUS official support website or contact customer service.

## Specifications

| Feature | Specification |
| --- | --- |
| Brand | ASUS |
| Model Name | TUF Dash 15 |

| Feature | Specification |
|---|---|
| Model Number | FX517ZE-RS51 |
| Screen Size | 15.6 Inches |
| Display Resolution | 1920x1080 Pixels (FHD) |
| Refresh Rate | 144 Hz |
| CPU Model | Intel Core i5-12450H (12th Gen, 8 cores, up to 4.4 GHz) |
| Graphics Coprocessor | NVIDIA GeForce RTX 3050 Ti (4GB GDDR6) |
| RAM Memory Installed Size | 8 GB DDR5 4800MHz |
| Hard Disk Size | 512 GB PCIe NVMe M.2 SSD |
| Operating System | Windows 11 Home |
| Special Features | Backlit Keyboard, Fingerprint Reader, MUX Switch |
| Connectivity Technology | USB, Wi-Fi (802.11ax), Bluetooth, Thunderbolt 4, HDMI |
| Battery Life | 5 Hours (approx.) |
| Item Weight | 3.56 Kilograms |
| Item Dimensions (L x W x Thickness) | 13.94"L x 0.81"W x 9.88"Th |

## Warranty and Support

### Warranty Information

Your ASUS TUF Dash 15 laptop comes with a 1-Year International Warranty. It is also eligible for 1-Year free Domestic Accidental Damage Protection (ADP) upon registration, which includes 1-way free shipping for standard hardware warranty repair.

### Customer Support

For technical assistance, driver downloads, or service inquiries, please visit the official ASUS support website or contact their customer service. Keep your product's serial number handy for faster service.

Video 1: 3 Things You Should Know About The ASUS TUF Gaming F15 Gaming Laptop. This video provides an overview of key features and benefits.

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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**Question**

Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

**Submit question**