SABRENT SB-RKT4L-1TB

SABRENT Rocket 4 1TB NVMe SSD PCIe Gen4 M.2 2280 Internal Solid State Drive User Manual

Model: SB-RKT4L-1TB

1. Introduction

This manual provides essential information for the installation, operation, and maintenance of your SABRENT Rocket 4 1TB NVMe SSD. This high-performance solid state drive is designed for demanding applications, including gaming, content creation, and general computing, offering significant speed improvements over traditional storage solutions.

The Sabrent Rocket 4 NVMe SSD, a compact M.2 2280 form factor solid state drive.

2. Setup and Installation

The SABRENT Rocket 4 SSD utilizes the M.2 2280 form factor and connects via a PCIe Gen4 interface. Ensure your system (desktop, laptop, or compatible gaming console like PS5) has an available M.2 slot that supports PCIe Gen4 NVMe SSDs. Refer to your system's motherboard or device manual for specific M.2 slot locations and installation procedures.

2.1 Desktop/Laptop Installation

1. **Power Off:** Completely shut down your computer and disconnect all power sources.
2. **Access M.2 Slot:** Open your computer case or laptop chassis to locate the M.2 slot. This may require removing specific panels or components.

3. **Insert SSD:** Gently insert the SABRENT Rocket 4 SSD into the M.2 slot at a slight angle. The gold contacts should align with the slot.
4. **Secure SSD:** Once fully seated, push the SSD down and secure it with the provided screw (usually included with your motherboard or laptop).
5. **Reassemble:** Close your computer case or laptop chassis and reconnect all power sources.

The Sabrent Rocket 4 SSD seamlessly integrated into a desktop computer's M.2 slot.

2.2 PS5 Installation

For PS5 installation, refer to the official PlayStation 5 user guide for detailed instructions on how to open the console and install an M.2 SSD. Ensure the SSD meets all PS5 compatibility requirements, including physical dimensions and performance specifications.

The slim profile of the Sabrent Rocket 4 SSD makes it suitable for laptop upgrades.

3. Operating the SSD

After physical installation, the SSD needs to be initialized and formatted before use.

3.1 Initializing and Formatting

1. **Access Disk Management:**
    - **Windows:** Right-click on 'This PC' or 'My Computer', select 'Manage', then 'Disk Management'.
    - **macOS:** Go to 'Applications' > 'Utilities' > 'Disk Utility'.
    - **Linux:** Use a disk utility tool like GParted or the 'fdisk' command.
2. **Initialize Disk:** Locate your new SSD (it may appear as 'Unallocated Space'). Right-click on it and select 'Initialize Disk' (Windows) or 'Erase' (macOS).
3. **Partition and Format:** Follow the on-screen prompts to create a new partition and format the drive. Choose an appropriate file system (e.g., NTFS for Windows, APFS for macOS, Ext4 for Linux).

3.2 Performance Characteristics

The SABRENT Rocket 4 SSD delivers high-speed performance with sequential read speeds up to 7450MB/s and sequential write speeds up to 6100MB/s. It also offers high random IOPS (up to 850K/800K)

for responsive application loading and multitasking. The drive is engineered for stable performance with low heat generation and power consumption.

A graphical representation comparing the sequential read and write speeds of the Sabrent Rocket 4 SSD against other drive types.

4. Maintenance

To ensure optimal performance and longevity of your SABRENT Rocket 4 SSD, consider the following maintenance practices:

- **Firmware Updates:** Regularly check the official SABRENT website for any available firmware updates. Firmware updates can improve performance, stability, and compatibility.
- **TRIM Support:** Ensure your operating system has TRIM enabled. TRIM helps maintain the performance of SSDs over time by allowing the OS to inform the SSD which data blocks are no longer in use and can be wiped internally.
- **Temperature Management:** While the Rocket 4 is designed for low heat, ensure adequate airflow within your system, especially in high-performance scenarios, to prevent thermal throttling.
- **Avoid Full Capacity:** Try to avoid filling the SSD to its absolute maximum capacity. Leaving some free space (typically 10-15%) can help maintain performance and extend the drive's lifespan.

5. Troubleshooting

If you encounter issues with your SABRENT Rocket 4 SSD, try the following troubleshooting steps:

- **SSD Not Detected:**
  - Verify the SSD is correctly seated in the M.2 slot.
  - Check your system's BIOS/UEFI settings to ensure the M.2 slot is enabled and configured correctly (e.g., PCIe mode).
  - Ensure your motherboard drivers are up to date.
  - If using an external enclosure, ensure the enclosure is powered and connected securely.
- **Slow Performance:**
  - Confirm the SSD is connected to a PCIe Gen4 compatible M.2 slot. Connecting to a Gen3 slot will limit performance.
  - Check for background processes that might be consuming disk resources.
  - Ensure your operating system and drivers are up to date.
  - Monitor the SSD's temperature. Excessive heat can lead to thermal throttling and reduced performance.
- **Data Corruption/Errors:**
  - Run a disk check utility (e.g., CHKDSK on Windows, First Aid on macOS) to identify and repair file system errors.
  - Ensure your system's power supply is stable.

If problems persist, contact SABRENT customer support for further assistance.

6. Specifications

Feature	Specification
Brand	SABRENT
Series	ROCKET 4
Model Number	SB-RKT4L-1TB
Digital Storage Capacity	1 TB
Hard Drive Interface	Solid State
Connectivity Technology	NVMe
Hard Disk Form Factor	M.2 2280
Sequential Read Speed	Up to 7450MB/s
Sequential Write Speed	Up to 6100MB/s
Compatible Devices	Desktop, Docking Stations, External Enclosures, Gaming Console (PS5), Laptop
Installation Type	Internal Hard Drive
Item Weight	0.282 ounces

Feature	Specification
Product Dimensions (LxWxH)	3.1 x 0.87 x 0.08 inches
Hardware Platform	Linux, Mac, PC

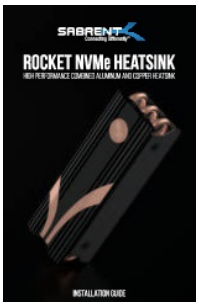
7. Warranty and Support

The SABRENT Rocket 4 SSD is engineered with premium hardware and supports Windows, macOS, and Linux operating systems. For warranty information, firmware updates, and expert technical assistance, please register your drive online at the official SABRENT website.

For additional support, visit the SABRENT Store on Amazon or their official website.

Related Documents - SB-RKT4L-1TB

	Sabrent ROCKET NVMe PCIe M.2 2280 SSD Installation Guide This guide provides detailed instructions for installing the Sabrent ROCKET NVMe PCIe M.2 2280 SSD as both a primary and secondary drive in a desktop computer system. It covers required tools, step-by-step installation procedures, BIOS configuration, Windows setup, and essential warranty information.
	Sabrent Rocket 2230 NVMe SSD Installation Guide This guide provides step-by-step instructions for installing the Sabrent Rocket 2230 NVMe PCIe 4.0 M.2 2230 SSD as a primary or secondary drive. It includes required tools, installation procedures, important notes on BIOS/UEFI configuration, and detailed warranty information.
	Sabrent Rocket NVMe Heatsink Installation Guide | Optimize SSD Performance Step-by-step installation guide for the Sabrent Rocket NVMe Heatsink. Learn how to properly attach this high-performance cooler to your M.2 NVMe SSD for maximum thermal efficiency and to prevent throttling.
	Sabrent Rocket Enterprise PCIe 4.0 U.2/U.3 NVMe SSD User Manual Explore the Sabrent Rocket Enterprise PCIe 4.0 U.2/U.3 NVMe SSD with this comprehensive user manual. Learn about its high performance, endurance, specifications, and setup for enterprise storage solutions.

	Sabrent Rocket NVMe Heatsink Installation Guide Step-by-step installation guide for the Sabrent Rocket NVMe Heatsink, designed to improve thermal performance for PCIe Gen 4 M.2 SSDs.
	Sabrent Rocket NVMe Heatsink Installation Guide Detailed installation guide for the Sabrent Rocket NVMe Heatsink, explaining how to properly install it on PCIe Gen 4 NVMe SSDs for optimal thermal performance and to prevent throttling.