

ORICO S500PRO-128GB

ORICO S500PRO 128GB SATA SSD User Manual

Model: S500PRO-128GB

1. INTRODUCTION

The ORICO S500PRO 128GB SATA SSD is a high-performance internal solid-state drive designed to significantly enhance the speed and responsiveness of your computer systems. Utilizing advanced 3D NAND flash technology and a durable aluminum shell, it offers superior data transfer speeds, improved heat dissipation, and robust data protection mechanisms.



Image: The ORICO S500PRO 128GB SATA SSD, shown with its packaging, mounting screws, and a screwdriver for installation.

Key Features:

- **Speed Up Your Old PC:** Sequential read speeds up to 450MB/s and write speeds up to 400MB/s, significantly reducing boot time and program loading.
- **Enhanced Heat Dissipation and Durability:** High-quality aluminum casing provides excellent heat dissipation and physical protection.
- **Reliable and Stable Performance:** Features 3D NAND flash, bad block management, ECC error correction, S.M.A.R.T. monitoring, TRIM commands, and power loss protection.
- **Ample Storage Space:** Provides 128GB storage for applications, HD videos, photos, and game files.
- **Wide Compatibility and Easy Installation:** Supports SATA 3 interface, compatible with desktops, laptops, PS4, and NAS devices. Includes installation screws and a screwdriver.

2. SETUP AND INSTALLATION

The ORICO S500PRO SSD is designed for straightforward installation in compatible devices. Ensure your system is powered off and disconnected from the power source before beginning installation.

Physical Installation:

1. Locate an available 2.5-inch drive bay in your desktop PC, laptop, or external enclosure.
2. Gently slide the SSD into the drive bay until it is securely seated.
3. Secure the SSD using the provided screws.
4. Connect the SATA data cable from your motherboard to the SSD, and the SATA power cable from your power supply unit (PSU) to the SSD.
5. Close your computer case or enclosure and reconnect power.

Excellent in Performance



Startup Time



Large File Transfer

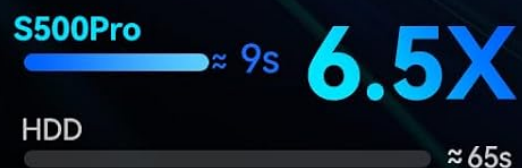


Image: Visual representation of the ORICO S500PRO SSD's superior performance compared to traditional HDDs, highlighting faster startup and large file transfer times.

Initial Setup and Formatting:

For new SSDs, it is often necessary to initialize and format the drive before it appears in your operating system. This process creates a partition that your system can recognize and use for storage.

Video: This video provides a step-by-step guide on how to format and partition your new ORICO SSD for use with Windows and Mac OS systems, addressing common issues like the drive not being recognized.

Refer to the video above for detailed instructions on how to initialize and format your SSD in both Windows and Mac OS environments. This step is crucial if your computer does not immediately recognize the new drive.

3. OPERATION

Once installed and formatted, the ORICO S500PRO SSD operates like any other storage drive in your system, but with significantly improved performance. You can use it for your operating system, applications, games, and data storage.



Image: The ORICO S500PRO SSD shown in a digital rendering, illustrating its role in accelerating computer performance, particularly for laptops.

Performance Benefits:

- **Faster Boot Times:** Experience quicker system startup.
- **Rapid Application Loading:** Programs and games launch much faster.
- **Efficient File Transfers:** Copying and moving large files is significantly accelerated.
- **Improved System Responsiveness:** Overall smoother multitasking and user experience.

Compatibility:

The ORICO S500PRO SSD is broadly compatible with a variety of systems and devices that support a 2.5-inch SATA 3 interface.

Enhanced Cooling with Aluminum Shell

Ensure fast transfer of large files and smooth
gaming without lagging



Image: The ORICO S500PRO SSD demonstrating its broad compatibility with devices such as gaming consoles (PS4), desktop computers, and laptops.

- Desktop PCs
- Laptops
- PS4 (PlayStation 4)
- NAS (Network Attached Storage) devices
- DIY External Drive Enclosures

4. MAINTENANCE

To ensure the longevity and optimal performance of your ORICO S500PRO SSD, consider the following maintenance practices:

Heat Management:

The aluminum casing of the S500PRO SSD is designed to provide excellent heat dissipation. Ensure adequate airflow within your system to prevent excessive heat buildup, especially during prolonged heavy usage.



Image: The ORICO S500PRO SSD highlighting its aluminum alloy casing and good heat dissipation properties, crucial for maintaining performance.

Data Integrity and Longevity:

The S500PRO SSD incorporates several technologies to maintain data integrity and extend its lifespan:



Image: Diagram illustrating the multiple data protection mechanisms of the ORICO S500PRO SSD, including TRIM, ECC, S.M.A.R.T., and PLP.

- **TRIM Support:** Helps maintain the performance of the SSD over time by actively managing data blocks. Ensure TRIM is enabled in your operating system.
- **ECC (Error Correction Code):** Corrects data errors to ensure reliable data transmission.

- **S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology):** Monitors the drive's health and performance, enabling early detection of potential issues.
- **Power Loss Protection (PLP):** Safeguards data during unexpected power outages.
- **3D NAND Flash:** Provides higher density, lower power consumption, and enhanced durability compared to traditional NAND.

Broad Compatibility



Image: Close-up view of the 3D NAND flash chip, emphasizing its role in providing long-lasting durability, lower power consumption, and shock resistance for the SSD.

5. TROUBLESHOOTING

If you encounter issues with your ORICO S500PRO SSD, consider the following common troubleshooting steps:

- **Drive Not Recognized:**
 - Ensure all SATA data and power cables are securely connected.
 - Check your system's BIOS/UEFI settings to confirm the SATA port is enabled and the drive is detected.
 - For new drives, ensure it has been initialized and formatted in Disk Management (Windows) or Disk Utility (Mac OS). Refer to the "Initial Setup and Formatting" section and the embedded video for guidance.
 - Try connecting the SSD to a different SATA port or a different computer to rule out port or system issues.
- **Slow Performance:**
 - Ensure your system's SATA controller is set to AHCI mode in BIOS/UEFI.
 - Verify that TRIM is enabled in your operating system.
 - Check for sufficient free space on the SSD (SSDs perform best when not completely full).
 - Update your motherboard's SATA drivers.
- **Frequent Disconnections/Errors:**
 - Check cable connections for looseness or damage.
 - Monitor the drive's health using S.M.A.R.T. tools.
 - Ensure your power supply unit (PSU) provides stable power.

6. SPECIFICATIONS

Detailed technical specifications for the ORICO S500PRO 128GB SATA SSD:

Feature	Specification
Model	S500PRO-128GB
Interface	SATA III 6Gb/s
Capacity	128 GB
Read Speed (Max)	Up to 450 MB/s
Write Speed (Max)	Up to 400 MB/s
TBW (Terabytes Written)	50 TB
NAND Flash Type	3D NAND
Form Factor	2.5 Inches
Dimensions (L x W x H)	100 x 69.8 x 7.0 mm
Weight	40g (1.41 oz)
Operating Temperature	0°C to 55°C
Storage Temperature	-55°C to 85°C
Shell Material	Aluminum Alloy

Feature	Specification
Special Features	TRIM Support, ECC, S.M.A.R.T., PLP

7. WARRANTY AND SUPPORT

ORICO stands behind the quality of its products.

Warranty Information:

The ORICO S500PRO 128GB SATA SSD comes with a **3-year limited warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

Customer Support:

For technical assistance, troubleshooting, or warranty inquiries, please visit the official ORICO store or contact their customer support team:

- **ORICO Official Store:** [Visit ORICO Store on Amazon](#)
- Refer to the product packaging or the official ORICO website for additional contact information.

© 2025 ORICO. All rights reserved.

ASK A QUESTION ABOUT THIS MANUAL

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.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

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

