

ORICO 9828RU3

ORICO RAID Hard Drive Enclosure User Manual

Model: 9828RU3

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your ORICO RAID Hard Drive Enclosure. This 2-bay enclosure is designed to house 2.5-inch or 3.5-inch SSDs and HDDs, supporting up to 44TB of storage with various RAID modes for enhanced data management and security.



Figure 1: ORICO 2-Bay RAID Hard Drive Enclosure (Model 9828RU3)

The ORICO 9828RU3 enclosure features a robust aluminum alloy construction and supports two hard drives, offering flexible RAID configurations for data backup and expansion.

44TB Massive Storage

Single Disk Up to 22TB



11 million
HD Photos



3.6K
HD Videos



1.8 million
HIFI Music



1.8K
Files

Figure 2: Massive Storage Capacity up to 44TB.

The enclosure supports individual disks up to 22TB, providing a total storage capacity of 44TB, ideal for large-scale data storage needs.

2. SAFETY INFORMATION

- Ensure the power adapter is connected to a grounded outlet.
- Do not expose the device to water, moisture, or extreme temperatures.
- Avoid dropping or subjecting the device to strong impacts.
- Do not attempt to disassemble or repair the device yourself. Refer to qualified personnel for service.
- Always power off the enclosure and disconnect it from the computer before inserting or removing hard drives, unless

hot-swapping is explicitly supported and enabled for your specific setup.

- Handle hard drives with care to prevent damage.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x ORICO 2-Bay Hard Drive Enclosure with RAID
- 1 x 1M USB3.0 Type-B Cable
- 1 x 12V/4A Power Supply
- 1 x User Guide (this manual)

4. SETUP

4.1 Hardware Installation

1. Insert Hard Drives:

Gently slide your 2.5-inch or 3.5-inch SATA SSDs/HDDs into the drive bays until they are securely seated. The tray-less design allows for easy insertion. Ensure the drives are fully pushed in to connect with the SATA interface.



Safety Protection

Plug and Play, compatible
with 3.5-inch hard drive



Figure 3: Inserting a hard drive into the enclosure bay.

The enclosure supports easy, tray-less installation of 3.5-inch hard drives. For 2.5-inch SSDs, an adapter (not included) may be required for proper alignment.

Intelligent Sleep

Automatically enter sleep mode after 10 minutes of inactivity to extend the lifespan of the hard drive.



Figure 4: Safety lock mechanism to secure drives.

The integrated safety lock design prevents accidental ejection or loss of the hard disk, providing reliable protection for your data.

2. **Connect Power Adapter:**

Connect the provided 12V/4A power supply to the DC IN port on the back of the enclosure, then plug the power adapter into a wall outlet.

12V4A Power Supply



Figure 5: Connecting the 12V/4A power supply.

The 48W external power supply ensures stable operation and smooth data flow, especially during multi-disk reading and writing.

3. **Connect to Computer:**

Use the supplied USB 3.0 Type-B cable to connect the enclosure's USB 3.0 port to an available USB port on your computer.

4. **Power On:**

Press the power button on the back of the enclosure to turn it on. The LED indicators on the front will illuminate.

4.2 RAID Mode Configuration

The ORICO 9828RU3 supports four RAID modes: RAID 0, RAID 1, JBOD, and CLEAR. Configure the RAID mode

BEFORE initializing or formatting your drives, as changing modes will erase all data.

4 RAID Modes

RAID Mode	Minmum Number of Disks	Capacity Utilization	Safety
RAID 0	 2-5	★ ★ ★ ★	
RAID 1	 2	★ ★	
JBOD	 2-5	★ ★ ★ ★ ★	
Clear	 1-5	★ ★ ★ ★ ★	



Figure 6: RAID mode selection switches and table.

The rear panel features switches for selecting the desired RAID mode. Refer to the table for details on each mode's characteristics.

External 48W Power Supply

Ensure smooth data flow during multi-disk reading.



Figure 7: Comprehensive RAID mode table with setup and usage scenarios.

This table provides a detailed overview of each RAID mode, including minimum number of disks, features, available capacity, setup instructions, and typical usage scenarios. Always use hard drives of the same capacity for optimal performance and data integrity in RAID configurations.

1. **Select Mode:** Use a small tool (like a paperclip) to adjust the DIP switches on the back of the enclosure to the desired RAID configuration (refer to the table on the enclosure or in Figure 7).
2. **Press Reset:** After setting the switches, press and hold the "RESET" button for 3-5 seconds until the enclosure restarts and the new RAID mode is applied.
3. **Initialize and Format:** Once the enclosure restarts, connect it to your computer. Open Disk Management (Windows) or Disk Utility (macOS) to initialize and format the new RAID volume. Follow the on-screen prompts to create partitions and format the drive(s) for use.

Warning: Changing RAID modes will erase all data on the hard drives. Back up any important data before reconfiguring RAID.

5. OPERATING INSTRUCTIONS

5.1 Data Transfer

Once the enclosure is connected and the drives are formatted, the RAID volume will appear as a regular drive on your computer. You can now drag and drop files, copy, paste, and manage data as you would with any other external storage device.

5Gbps High-Speed Transfer



Figure 8: High-speed data transfer via USB 3.0.

The USB 3.0 interface, combined with SATA 6Gbps specifications, allows for actual transmission rates up to 235 MB/s, facilitating quick transfer of large files and high-definition media.

5.2 LED Indicators



Figure 9: LED indicator lights for each drive bay.

Each drive bay is equipped with an LED indicator light, allowing you to monitor the working status of your hard drives at any time.

- **Solid Blue:** Drive is powered on and idle.
- **Flashing Blue:** Drive is actively reading or writing data.
- **Red (if applicable):** Indicates a drive error or RAID degradation (consult troubleshooting).

5.3 Intelligent Sleep Mode

The enclosure features an intelligent sleep mode to conserve power and extend the lifespan of your hard drives. It will automatically enter sleep mode after 10 minutes of inactivity.

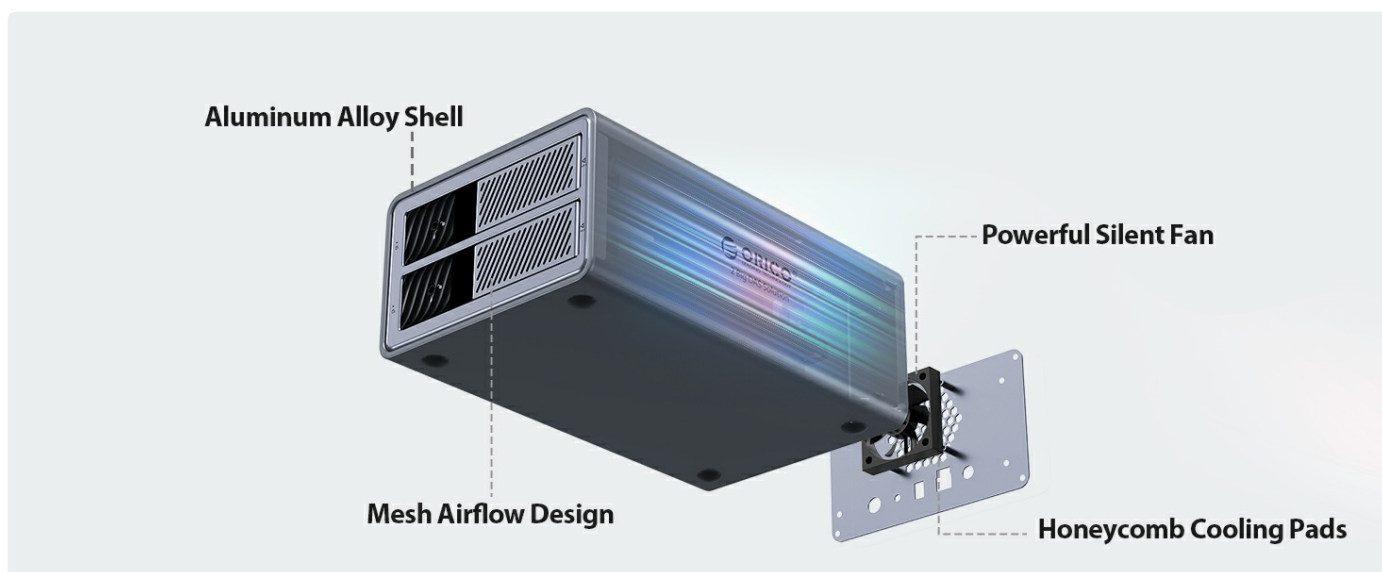


Figure 10: Enclosure automatically entering sleep mode.

This feature helps reduce power consumption and minimizes wear and tear on the hard drives during periods of inactivity.

6. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the enclosure. Do not use liquid cleaners or aerosols.
- **Ventilation:** Ensure the front and rear vents are not obstructed to allow for proper airflow and heat dissipation. The built-in 50mm cooling fan and aluminum alloy body are designed for efficient cooling.

Efficient Heat-dissipation

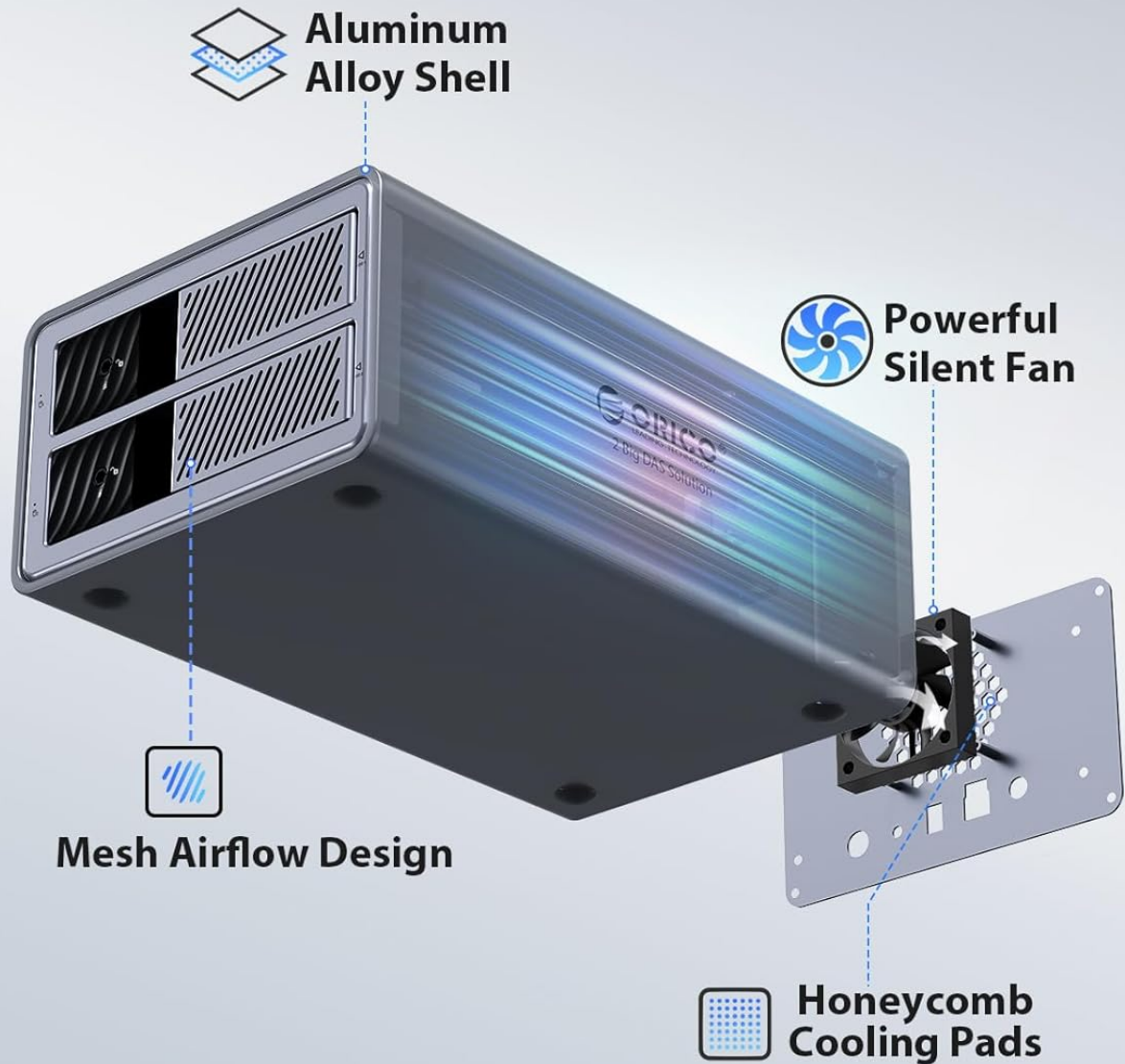


Figure 11: Internal components for efficient heat dissipation.

The design incorporates front and rear vents, a powerful silent fan, and an aluminum alloy shell to ensure optimal cooling and prolong device lifespan.

- **Firmware Updates:** Periodically check the ORICO official website for any available firmware updates for your model. Firmware updates can improve performance, add features, or fix bugs.
- **Proper Shutdown:** Always safely eject or unmount the drive from your operating system before powering off the enclosure or disconnecting the USB cable to prevent data corruption.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Enclosure not recognized by computer.	Loose USB cable connection. Power not connected or turned on. Drives not properly seated. Drives not initialized/formatted. Driver issues.	Ensure USB cable is securely connected to both enclosure and computer. Verify power adapter is connected and enclosure is powered on. Re-insert hard drives firmly into bays. Check Disk Management (Windows) or Disk Utility (macOS) to initialize and format new drives. Try a different USB port or computer. Update USB drivers on your computer.
Slow data transfer speeds.	Connected to USB 2.0 port. Old or fragmented hard drives. System resource limitations.	Ensure connection to a USB 3.0 (or higher) port on your computer. Consider using newer, faster drives. Defragment HDDs if applicable. Close unnecessary applications on your computer.
RAID volume shows as degraded or offline.	Drive failure (especially in RAID 1). Improper shutdown.	For RAID 1, identify and replace the failed drive. The enclosure should rebuild the array automatically. Ensure proper shutdown procedures are followed. If data loss occurs, consult data recovery specialists.
Enclosure powers off unexpectedly.	Power supply issue. Overheating.	Ensure the power supply is firmly connected and functioning correctly. Try a different power outlet. Ensure adequate ventilation around the enclosure. Clean vents if dusty.

8. SPECIFICATIONS

Feature	Detail
Model Number	9828U3
Brand	ORICO
Compatible Devices	Laptop, Desktop, Tablet
Hard Disk Form Factor	3.5 Inches (supports 2.5-inch with adapter)
Max Number of Supported Devices	2
Data Transfer Rate	5 Gigabits Per Second (USB 3.0)
Memory Storage Capacity	Up to 44 TB (22TB per disk)
RAID Modes Supported	RAID 0, RAID 1, JBOD, CLEAR
Hardware Interface	USB 3.0 Type B
Hardware Platform	Windows, Mac OS, Linux, Android
Material	Aluminum Alloy
Item Weight	6.03 pounds
Package Dimensions	13.7 x 9.45 x 9.21 inches

Feature	Detail
Date First Available	April 15, 2024
Country of Origin	China

Comprehensive Compatibility



Suitable Devices



Laptop



Desktop



iPad



OTG Phone



Projector



NAS



Monitoring

.....

Compatible 3.5" Hard Drives



Regular disk.



Enterprise disk



NAS disk



Surveillance disk



Gaming disk

.....

Figure 12: Comprehensive compatibility overview.

The enclosure is compatible with a wide range of devices including laptops, desktops, and iPads, and supports various types of 3.5-inch hard drives such as regular, enterprise, NAS, surveillance, and gaming disks.

9. WARRANTY AND SUPPORT

ORICO products typically come with a standard manufacturer's warranty. Please refer to the warranty card included in your package or visit the official ORICO website for detailed warranty terms and conditions specific to your region and product model.

For technical support, troubleshooting assistance, or warranty claims, please contact ORICO customer service through their official website or the contact information provided on your product packaging.

ORICO Official Website: www.oricotech.com

