

ORICO 9958RU3

ORICO 5-Bay RAID External Hard Drive Enclosure

MODEL: 9958RU3 USER MANUAL

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your ORICO 5-Bay RAID External Hard Drive Enclosure (Model 9958RU3). This device is designed to accommodate up to five 2.5-inch or 3.5-inch SATA HDDs/SSDs, supporting a total capacity of up to 110TB (22TB per disk). It features a USB 3.0 Type-A interface for data transfer and supports various RAID modes including RAID 0, 1, 3, 5, 10, JBOD, Clone, and ClearMode.

The enclosure is built with an all-aluminum alloy housing and an integrated cooling fan to ensure efficient heat dissipation and stable performance. Please read this manual thoroughly before using the product to ensure proper setup and operation.

2. Product Overview

2.1 Package Contents

Verify that all items are present in the package:

- 1 x ORICO 5-Bay DAS Enclosure
- 1 x Screwdriver
- 1 x Power Cable
- 1 x Data Cable (USB 3.0 Type-A)
- 1 x Screw Pack
- 1 x User Manual

Package List



① 5BIG DAS *1

② Screwdriver *1

③ Power Cable *1

④ Data Cable*1

⑤ Screw Pack *1

⑥ User Manual *1

Image: Contents of the ORICO 5-Bay RAID Enclosure package, showing the enclosure, cables, screwdriver, screw pack, and user manual.

2.2 Device Features

- **Massive Storage:** Supports up to 5 x 22TB drives for a total of 110TB capacity.
- **High-Speed Data Transfer:** USB 3.0 interface provides transfer speeds up to 5Gbps (235MB/s).
- **Multiple RAID Modes:** Supports RAID 0, 1, 3, 5, 10, JBOD, Clone, and ClearMode for flexible data management.
- **Efficient Heat Dissipation:** All-aluminum alloy housing with an 80mm silent cooling fan and strategically placed vents.

- **Safety Protection:** Independent safety locking mechanism for drive bays and built-in 150W power supply with overcurrent, short circuit, static, and overheat protection.
- **Smart Sleep Mode:** Automatically enters hibernation after 10 minutes of data-free interaction to reduce wear and power consumption.

Massive Storage

Each hard drive supports up to 22TB, with a maximum capacity of 110TB



≈ **22** Million

Photos (5MB/Per)



≈ **30** K

Videos (4K, 50 Mbps, 10 Min/Per)



Image: Front and rear view of the ORICO 5-Bay RAID Enclosure, highlighting its massive storage capacity and rear panel features.

3. Setup

3.1 Hard Drive Installation

Follow these steps to install 2.5-inch or 3.5-inch SATA HDDs/SSDs into the enclosure:

1. Press the door button located on the left side of the drive bay to open and release the drive tray.
2. Pull out the hard drive bracket (tray) from the enclosure.
3. Place your 2.5-inch SSD/HDD or 3.5-inch HDD into the bracket. Align the screw holes on the drive with the fixing holes on the bracket.
4. Use the provided screwdriver and screws to secure the hard drive firmly into the bracket.
5. Slide the loaded bracket back into the empty drive bay until it clicks into place. Ensure the safety locking mechanism engages.

Screw Fixing

Fit for 2.5/ 3.5-inch HDD/SSD hard disk



Image: Detailed view of installing a hard drive into the ORICO enclosure's tray, showing the screw fixing points and LED indicator.



Image: Step-by-step visual guide for installing hard drives into the ORICO 5-Bay RAID Enclosure.

3.2 Connecting to a Computer

1. Connect the provided USB 3.0 data cable from the enclosure's USB port to an available USB 3.0 (or higher) port on your computer.
2. Connect the power cable to the enclosure's power input and then to a power outlet.
3. Press the power button on the rear of the enclosure to turn it on. The LED indicators on the front panel will illuminate.

The enclosure is universally compatible with Windows, macOS, and Linux operating systems, and can be connected to desktops, laptops, and tablets.



Image: Illustrates the universal compatibility of the ORICO 5-Bay RAID Enclosure with various devices and operating systems.

4. Operating

4.1 RAID Mode Configuration

The ORICO 9958RU3 supports various RAID modes configured via DIP switches on the rear panel. **WARNING: Always back up all data before changing the RAID mode, as this process will erase all data on the drives.**

To configure RAID:

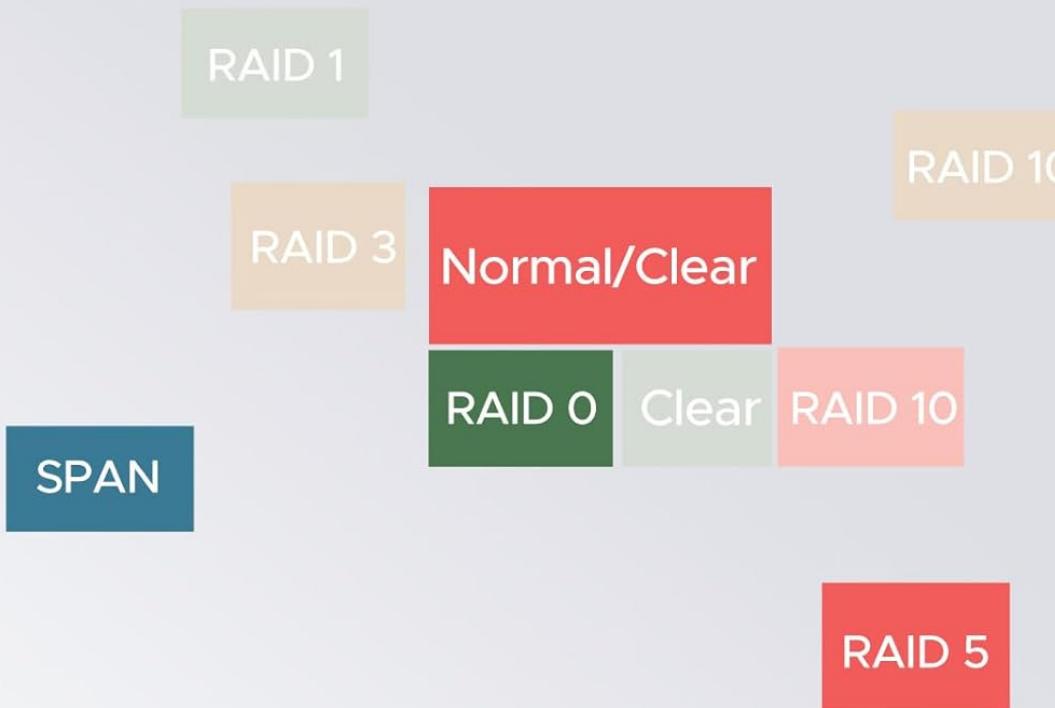
1. Ensure the enclosure is powered off and disconnected from the computer.
2. Locate the DIP switches on the rear panel.
3. Set the DIP switches according to the desired RAID mode as shown in the diagram below.
4. Connect the enclosure to your computer and power it on.
5. Initialize and format the new RAID volume through your operating system's disk management utility.

RAID Mode DIP Switch Settings

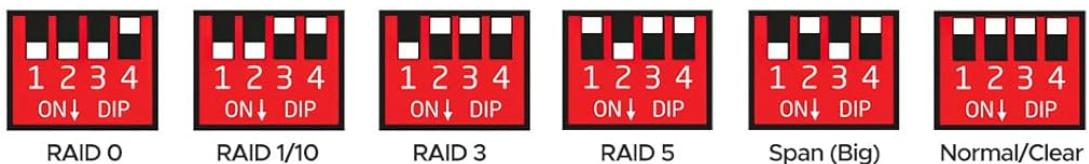
RAID Mode	DIP Switch 1	DIP Switch 2	DIP Switch 3	DIP Switch 4
RAID 0	ON	OFF	OFF	OFF
RAID 1/10	OFF	ON	OFF	OFF
RAID 3	OFF	OFF	ON	OFF
RAID 5	OFF	OFF	OFF	ON
SPAN (Big)	ON	ON	OFF	OFF
Normal/Clear	ON	OFF	ON	OFF

Powerful Hardware RAID

Flexible video editing, enhance material transfer speed, and ensure secure storage



Supports RAID 0/1/3/5/10/Span and Clear



WARNING: Please back up all data before change the RAID mode!

Image: Diagram illustrating the DIP switch settings for various RAID modes (0, 1, 3, 5, 10, JBOD, Clone, ClearMode) on the ORICO 5-Bay RAID Enclosure.

4.2 Data Transfer

Once the enclosure is connected and the drives are formatted, you can transfer files to and from the enclosure like any other external storage device. The USB 3.0 interface supports data transfer speeds up to 5Gbps, facilitating efficient backup and management of large files and videos.

5Gbps Transmission Speed



Read Speed up to
230MB/s



Write Speed up to
230MB/s



Image: Depicts the ORICO 5-Bay RAID Enclosure connected to a computer, highlighting its 5Gbps transmission speed for data transfer.

4.3 Smart Sleep Mode

The enclosure features a Smart Sleep Mode. If there is no data interaction for 10 minutes, the device will automatically enter hibernation. This feature helps to reduce hard drive wear and power consumption, extending the lifespan of your drives.

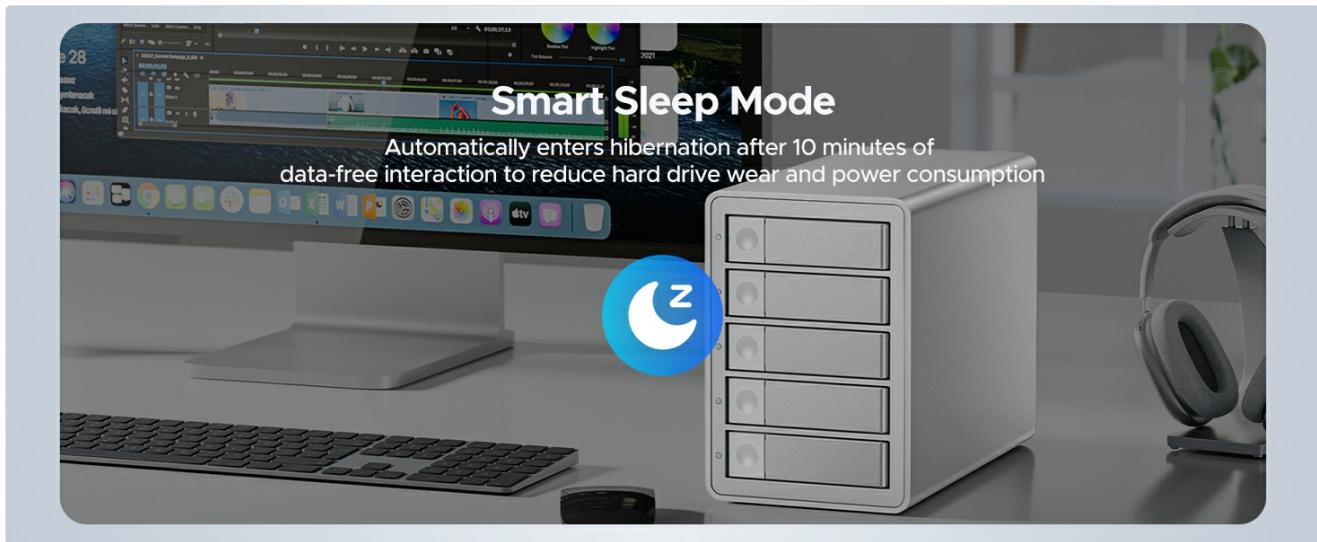


Image: The ORICO 5-Bay RAID Enclosure on a desk, with an icon indicating its Smart Sleep Mode functionality.

5. Maintenance

5.1 General Care

- Keep the enclosure in a clean, dry environment, away from direct sunlight and extreme temperatures.
- Avoid exposing the device to liquids or excessive dust.
- Clean the exterior with a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.

5.2 Heat Dissipation

The enclosure is designed with an all-aluminum alloy housing and an 80mm silent cooling fan to ensure optimal thermal performance. To maintain efficient heat dissipation:

- Ensure the front and rear ventilation vents are not obstructed.
- Allow adequate space around the enclosure for airflow.

Improved Heat Dissipation

Aluminum alloy + 80mm silent fan for quieter cooling



Image: Rear view of the ORICO 5-Bay RAID Enclosure, highlighting the 80mm silent fan and heat dissipation vents.

6. Troubleshooting

If you encounter issues with your ORICO 5-Bay RAID Enclosure, please refer to the following common solutions:

- **Device Not Detected:**

- Ensure the power cable is securely connected and the enclosure is powered on.
- Verify the USB data cable is properly connected to both the enclosure and your computer.
- Try connecting to a different USB port on your computer.

- Check your computer's Disk Management (Windows) or Disk Utility (macOS) to see if the drives are recognized but uninitialized/unformatted.

- Slow Data Transfer Speed:**

- Ensure you are using a USB 3.0 port on your computer. Connecting to a USB 2.0 port will result in slower speeds.
- Check the health of your hard drives. Degraded drives can impact performance.
- Verify that your computer's drivers are up to date.

- RAID Configuration Issues:**

- Double-check the DIP switch settings against the manual for your desired RAID mode.
- Remember that changing RAID modes will erase data. If you changed modes without backing up, data recovery may not be possible.
- For RAID rebuilds (e.g., in RAID 5), replace the faulty disk with a new disk of equal or larger capacity while the device is powered off. Then power on and use the RAID management software (downloadable from ORICO's official website) to monitor the rebuild process. Hot-swapping is not supported for RAID rebuilds.

- Drives Not Appearing After Installation:**

- Ensure drives are securely seated in their trays and the trays are fully inserted into the bays.
- Check the drive's health. A faulty drive may not be recognized.

If these steps do not resolve your issue, please contact ORICO customer support.

7. Specifications

Feature	Specification
Model Number	9958RU3
Hard Disk Form Factor	2.5 / 3.5 Inches SATA HDD/SSD
Max Number of Supported Devices	5
Memory Storage Capacity	Up to 110 TB (5 x 22TB)
Hardware Interface	USB 3.0 Type-A (compatible with USB 3.2 Gen 2x2)
Data Transfer Rate	Up to 5Gbps (235 Megabytes Per Second)
RAID Modes Supported	RAID 0, 1, 3, 5, 10, JBOD, Clone, ClearMode
Power Supply	Built-in 150W
Compatible Devices	Desktop, Laptop, Tablet
Compatible Operating Systems	Windows, macOS, Linux
Item Weight	10.43 pounds
Package Dimensions	13.3 x 12.6 x 8.5 inches
Manufacturer	SHENZHEN ORICO TECHNOLOGIES CO.,LTD

8. Warranty and Support

8.1 Warranty Information

ORICO products typically come with a limited warranty covering manufacturing defects. Please refer to the warranty card included in your package or visit the official ORICO website for specific warranty terms and conditions applicable to your region. Keep your purchase receipt as proof of purchase for warranty claims.

8.2 Customer Support

For technical assistance, troubleshooting, or any product-related inquiries, please contact ORICO customer support:

- **Email:** supports@orico.com.cn
- **Official Website:** Visit the ORICO official website for FAQs, driver downloads, and additional support resources.