CENMATE B0CYC78RJR

CENMATE 8-Bay Hard Drive RAID Enclosure User Manual

Model: B0CYC78RJR

1. Introduction

This manual provides detailed instructions for the installation, configuration, and operation of your CENMATE 8-Bay Hard Drive RAID Enclosure. Please read this manual thoroughly before using the product to ensure proper setup and to prevent data loss or damage.

2. Safety Information

- Always ensure the enclosure is powered off and disconnected from the host computer before installing or removing hard drives.
- Handle hard drives with care to avoid physical damage.
- Do not change RAID modes when drives contain data, as this will result in data loss. Always back up your data before any RAID configuration changes.
- Use only the provided power adapter to ensure stable power supply.
- Keep the enclosure in a well-ventilated area to prevent overheating.

3. Package Contents

Verify that all items are present in your package:

- CENMATE 8-Bay Hard Drive RAID Enclosure
- USB-A to USB-B 3.0 Cable
- USB-C to USB-B 3.0 Cable
- eSATA Cable
- Power Adapter (DC 12V/20A)

- Power Cord
- Screws for 2.5-inch drives (if applicable)
- User Manual (this document)

4. Product Overview

The CENMATE 8-Bay Hard Drive RAID Enclosure is designed to provide high-capacity external storage for 2.5-inch and 3.5-inch SATA HDDs and SSDs, supporting up to 160TB total capacity (20TB per bay). It features USB 3.0 (Type-A and Type-C) and eSATA connectivity, an integrated cooling fan, and multiple RAID modes for flexible data management.

Image: Front view of the CENMATE 8-Bay Hard Drive RAID Enclosure, highlighting its 160TB large capacity and support for 2.5/3.5 inch SATA HDD/SSD.

Image: Rear view of the enclosure, showing the cooling fan, power input, USB, and eSATA ports.

5. Setup

5.1 Drive Installation

1. Ensure the enclosure is powered off and disconnected from your computer.
2. Gently pull out an empty drive tray from the enclosure.
3. For 3.5-inch HDDs: Align the drive with the tray. The enclosure supports screwless installation for 3.5-inch drives. Secure the drive by snapping it into place using the side clips.
4. For 2.5-inch HDDs/SSDs: Place the drive into the tray and secure it using the provided screws through the bottom of the tray.
5. Carefully slide the loaded drive tray back into the enclosure until it clicks into place.

Image: A note indicating that if tray protrusions conflict with the hard drive, they can be cut off or blue tabs unplugged to install the drive with screws.

5.2 Connecting to Host Computer

The enclosure supports both USB 3.0 and eSATA connections.

1. Connect the power adapter to the enclosure's DC 12V/20A input and plug it into a power outlet.
2. Choose your preferred connection method:
   - **USB 3.0:** Use either the USB-A to USB-B 3.0 cable or the USB-C to USB-B 3.0 cable to connect the enclosure to an available USB 3.0 port on your computer.
   - **eSATA:** Use the eSATA cable to connect the enclosure to an available eSATA port on your computer.
3. Power on the enclosure using the power switch.

Image: The CENMATE enclosure connected to a laptop, emphasizing the stable DC 12V/20A power supply.

5.3 RAID Mode Configuration

WARNING: Changing RAID modes will erase all data on the installed hard drives. Always back up your data before proceeding with RAID configuration.

The enclosure features DIP switches on the rear for selecting different RAID modes. After setting the DIP switches, you must press and hold the 'Reset' button for 5 seconds to apply the new RAID mode.

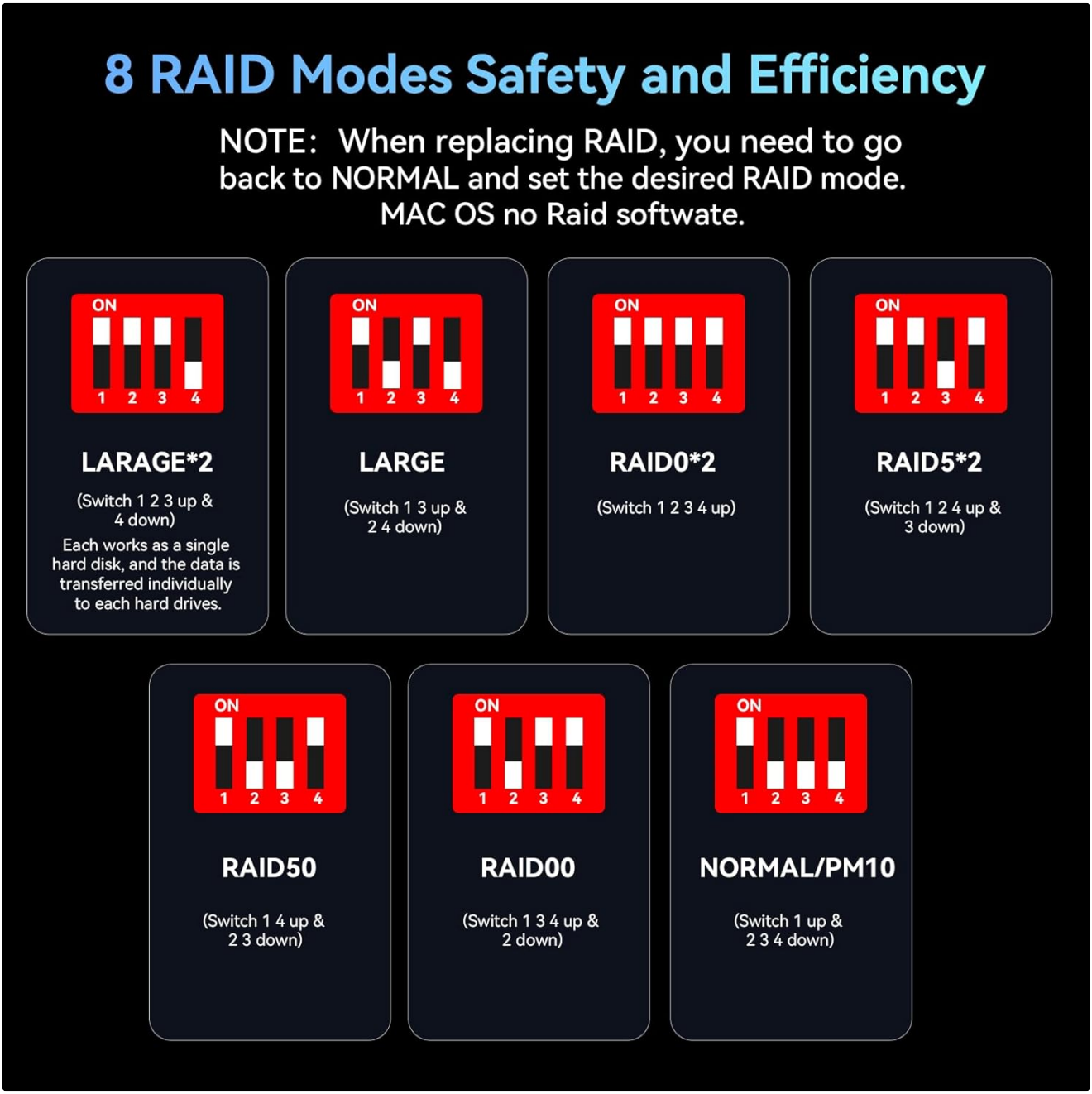

Image: A diagram illustrating the DIP switch settings for the 8 available RAID modes: LARAGE*2, LARGE, RAID0*2, RAID5*2, RAID50, RAID00, and NORMAL/PM10.

Refer to the diagram above for specific DIP switch settings for each mode. A brief explanation of common modes:

- **NORMAL/PM10:** Each drive operates independently. This is the default mode and recommended if you want to access each drive separately.
- **LARGE:** Combines all drives into a single large volume. Data is written sequentially across drives.
- **RAID0 (Striping):** Combines drives into a single volume for increased performance. Data is striped across all drives. No redundancy; failure of one drive results in data loss.
- **RAID5 (Striping with Parity):** Combines drives for performance and data redundancy. Requires at least 3 drives. Data is striped, and parity information is distributed, allowing recovery from a single drive failure.
- **RAID50:** A combination of RAID0 and RAID5, offering both performance and redundancy.
- **RAID00:** A nested RAID level, typically RAID0 over RAID0, for very high performance but no redundancy.

Note for macOS users: This enclosure does not include RAID software for macOS. RAID configuration must be done via the hardware DIP switches.

6. Operating Instructions

6.1 Power On/Off

Use the power switch located on the rear of the enclosure to turn the unit on or off. Ensure all connections are secure before powering on.

6.2 LED Indicators

Each drive bay has an LED indicator:

- **Blue (Solid):** Indicates standby mode or drive present and idle.
- **Red (Flashing):** Indicates active reading or writing to the drive.

Image: The CENMATE enclosure displaying blue LED indicators for each drive bay, signifying standby mode.

6.3 Data Transfer

The enclosure supports data transfer speeds of up to 5Gbps via USB 3.0. Actual speeds may vary depending on the host system, drives used, and RAID configuration.

Image: The CENMATE enclosure connected to a computer, visually representing high-speed data transfer up to 5Gbps.

7. Maintenance

7.1 Cooling Fan

The enclosure includes a built-in cooling fan to maintain optimal operating temperatures for your hard drives. Ensure the fan vents are not obstructed to allow for proper airflow.

Image: An internal view of the enclosure highlighting the built-in cooling fans, which require a USB or eSATA cable connection to function.

7.2 Cleaning

To clean the enclosure, power it off and disconnect all cables. Use a soft, dry cloth to wipe the exterior. Do not use liquid cleaners or aerosols directly on the unit.

8. Troubleshooting

- **Enclosure not recognized by computer:**
  - Ensure all cables (USB/eSATA and power) are securely connected.
  - Try a different USB or eSATA port on your computer.
  - Test with a different USB/eSATA cable.
  - Verify the enclosure is powered on.
  - Check Device Manager (Windows) or System Information (macOS) to see if the device is listed. You may need to initialize and format new drives in Disk Management (Windows) or Disk Utility (macOS).
- **Drives not appearing or data loss after RAID change:**

- Changing RAID modes will erase all data. This is expected behavior. Always back up data before changing RAID configurations.
- Ensure the DIP switches are set correctly for your desired RAID mode and that you have pressed and held the 'Reset' button for 5 seconds after making changes.

- **Enclosure disconnects randomly:**
  - Ensure the power adapter is firmly connected and providing stable power (DC 12V/20A).
  - Try connecting to a different USB/eSATA port or using a different cable.
  - Check for overheating; ensure the cooling fan vents are clear.
- **Drives not fitting correctly in trays:**
  - For some 3.5-inch drives, if the tray's plastic protrusions interfere, you may need to carefully cut them off or remove the blue tabs and secure the drive with screws.

9. Specifications

Brand	CENMATE
Model	B0CYC78RJR
Hardware Interface	USB, USB 3.0, eSATA
Color	Black
Hardware Platform	Windows, macOS, Linux
Memory Storage Capacity	Up to 160 TB (20 TB per drive)
Compatible Devices	Laptop, PC, Router, Smart TV
Hard Disk Form Factor	2.5 Inches, 3.5 Inches
Supported Devices Quantity	8 (individual drives)
Data Transfer Rate	6 Gigabits Per Second (theoretical max, USB 3.0 is 5Gbps)
Power Supply	DC 12V/20A

10. Warranty and Support

CENMATE products typically come with a limited warranty. Please refer to the warranty card included with your product or visit the official CENMATE website for detailed warranty terms and conditions. For technical support, product inquiries, or assistance with troubleshooting, please contact CENMATE customer service through their official channels.