

ORICO M435-V1

ORICO MiniTower M435-V1 Hybrid Storage System and Mac mini Docking Station

USER MANUAL

1. Introduction

This manual provides detailed instructions for the ORICO MiniTower M435-V1, a versatile hybrid storage system and docking station designed to enhance the capabilities of your Mac mini and other compatible devices. It integrates high-speed SSD storage with large-capacity HDD bays, offering flexible data management and expanded connectivity options.



Figure 1: ORICO MiniTower M435-V1 with internal drives visible.

2. Product Overview

The ORICO MiniTower M435-V1 combines multiple functionalities into a compact design, perfectly matching the aesthetic of your Mac mini. Key features include:

- **Hybrid Storage:** Supports two 3.5-inch HDDs (up to 24TB each) and one M.2 NVMe/SATA SSD (up to 8TB).
- **RAID Support:** Offers RAID 0, RAID 1, PM (JBOD), and SPAN modes for flexible data management and protection.
- **High-Speed Connectivity:** Features USB 3.2 10Gbps for rapid data transfer.
- **Expanded Ports:** Includes SD 3.0/TF card reader and multiple USB 2.0 ports for peripherals.
- **Efficient Cooling:** Built-in silent fan, air duct design, and aluminum alloy casing ensure optimal heat dissipation.
- **Wide Compatibility:** Supports macOS, Windows, Linux, Android, iOS, and HarmonyOS.

2.1 Front and Rear Panels

Mac Miniに拡張ポートを追加する



前面



TF/SD3.0 (104MB/s)



USB 3.2 (10Gbps)



USB 2.0 (480Mbps)



電源ボタン (ON/OFF)

背面



RAIDキー (RAID 0/1, PM, SPAN)



USB 2.0 x 2 (480Mbps)



DC (12V5A)



PC IN (ホストデバイスへの接続)

Figure 2: Front and Rear Panel Layout.

Front Panel:

- **TF/SD3.0 Card Reader:** Supports data transfer up to 104MB/s.
- **USB 3.2 (10Gbps) Port:** For high-speed data transfer.
- **USB 2.0 (480Mbps) Port:** For connecting standard peripherals.
- **Power Button:** For turning the device ON/OFF.

Rear Panel:

- **RAID Key:** Switches for selecting RAID 0, RAID 1, PM (JBOD), or SPAN modes.
- **USB 2.0 x 2 (480Mbps) Ports:** For additional peripheral connections.

- **DC IN (12V 5A):** Power input port.
- **PC IN:** USB-C port for connecting to the host device (Mac mini, PC, etc.).

3. Setup Instructions

3.1 Package Contents

Before proceeding, please verify that all items are present in the package:



Figure 3: Package Contents.

1. ORICO MiniTower M435-V1 Unit
2. Packaging Box
3. Screwdriver
4. SSD Heatsink and Thermal Silicon Pad
5. Screws (x2)
6. Instruction Manual
7. 15cm USB-C to USB-C Cable (10Gbps)
8. 1m USB-C to USB-A Cable (10Gbps)
9. 12V 5A Power Adapter

3.2 Installing HDDs and SSDs

The MiniTower supports two 3.5-inch HDDs and one M.2 NVMe/SATA SSD. Ensure the device is powered off and disconnected from your computer before installation.



取り付けブラケット付属

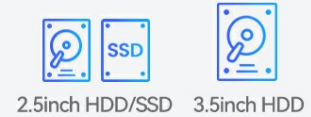


Figure 4: Included mounting brackets for various drive types.

1. **For 3.5-inch HDDs:** Open the top cover of the MiniTower. Slide the 3.5-inch HDDs into the designated bays. Ensure they are securely seated.
2. **For M.2 NVMe/SATA SSD:** Locate the M.2 slot on the side of the MiniTower (behind the magnetic cover). Insert your M.2 SSD into the slot, secure it with the provided screw, and apply the heatsink and thermal pad for optimal performance. The device supports M.2 SSDs with M Key (NVMe) and B+M Key (SATA) in sizes 2280, 2260, 2242, and 2230.

10Gbps NVMe/SATAホット データストレージエンクロージャ

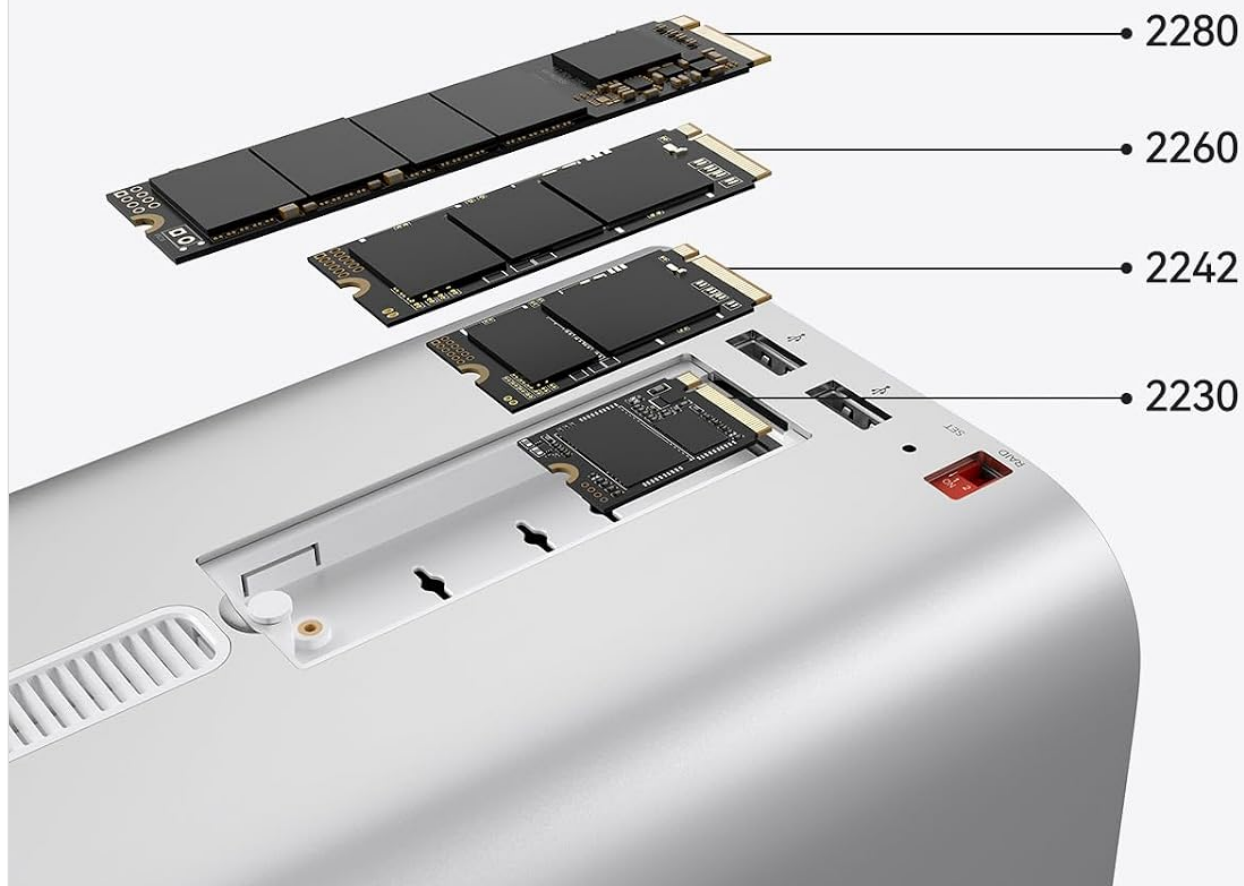
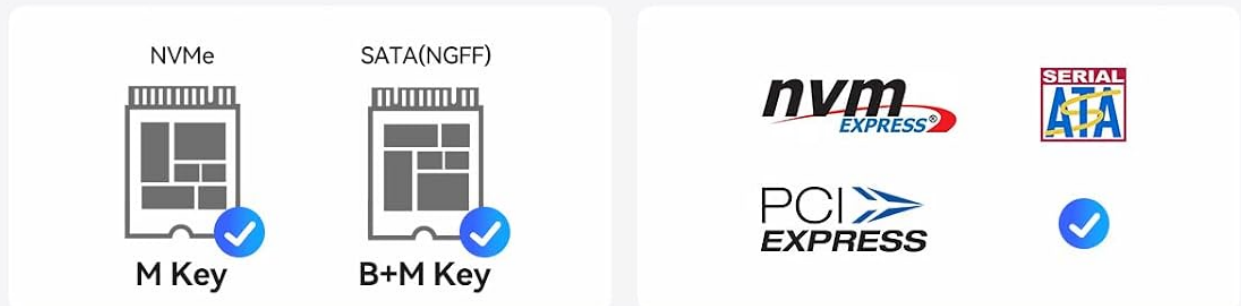


Figure 5: M.2 SSD compatibility and installation.

3.3 Connecting to Your Computer

1. Connect the 12V 5A power adapter to the DC IN port on the rear panel and plug it into a power outlet.
2. Use the provided USB-C to USB-C or USB-C to USB-A cable to connect the MiniTower's PC IN port to your computer (Mac mini, PC, laptop).
3. Press the power button on the front panel to turn on the MiniTower.

4. Operating Instructions

4.1 RAID Mode Configuration

The MiniTower supports various RAID modes. **Important: Changing RAID modes will erase all data on the installed HDDs. Always back up your data before making any changes.**





RAIDキー

⚠ 注意: 本機の RAID モードコントロールは、下から上への逆の順序で動作します。

適切な設定とデータの安全性を確保するため、設定を確定する前に必ず確認してください。

4つのRAIDモード、コールドデータフォーカス

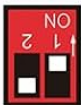
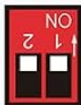
RAIDモード	PM 	RAID 1 	RAID 0 	SPAN/JBOD 
最小ディスク数	 1-2	 2	 2	 2
容量	★★★★★	★★	★★★★★	★★★★★
安全性				
速度	⚡⚡⚡	⚡⚡⚡	⚡⚡⚡⚡	⚡⚡⚡

Figure 6: RAID Mode Selection and Characteristics.

To configure RAID mode:

1. Ensure the MiniTower is powered off.
2. Locate the RAID key switches on the rear panel.
3. Use a small tool (like a straightened paperclip) to adjust the switches to the desired RAID configuration as indicated in Figure 6.
4. Press and hold the 'SET' button (located near the RAID switches) for approximately 22 seconds before powering on the device. This initiates the RAID mode change.
5. Power on the MiniTower. The system will detect the new RAID configuration.
6. Initialize and format the drives through your operating system's disk management utility.

RAID Mode Descriptions:

- **PM (Port Multiplier / JBOD):** Each drive is recognized as an independent disk.
- **RAID 1 (Mirroring):** Data is duplicated across two drives, providing data redundancy. If one drive fails, data is preserved on the other. Capacity is limited to the size of one drive.
- **RAID 0 (Striping):** Data is split and written across two drives, increasing read/write speeds. No data redundancy; if one drive fails, all data is lost.
- **SPAN (Concatenation):** Drives are combined into a single large volume. No performance increase or data redundancy.

4.2 Data Transfer and Usage

Once connected and drives are formatted, the MiniTower will appear as external storage on your computer. You can drag and drop files, use it for backups, or as an extended storage solution for applications.



Figure 7: Data transfer in progress.

The integrated SD/TF card reader and additional USB 2.0 ports allow you to connect other devices directly to the MiniTower, expanding your Mac mini's connectivity.

5. Maintenance

The ORICO MiniTower M435-V1 is designed for stable and long-term operation with minimal maintenance. Its aluminum alloy casing, internal air duct, and silent cooling fan work together to dissipate heat efficiently, ensuring optimal performance and drive longevity.

優れた放熱性



冷却ファン



エアダクト



アルミニウム合金



Figure 8: Efficient heat dissipation design.

To maintain optimal performance:

- Ensure the device is placed in a well-ventilated area.
- Keep the air vents clear of obstructions.
- Periodically clean the exterior with a soft, dry cloth.

6. Troubleshooting

If you encounter issues with your ORICO MiniTower M435-V1, please refer to the following common problems and solutions:

- **Device Not Recognized:**
 - Ensure all cables (power and USB) are securely connected.
 - Try connecting to a different USB port on your computer.
 - Verify that the MiniTower is powered on.
 - Check your computer's Disk Management (Windows) or Disk Utility (macOS) to see if the drives are detected but uninitialized or unformatted.
- **Difficulty Changing RAID Mode:**
 - Ensure the device is powered off before adjusting the RAID switches.
 - The 'SET' button requires a prolonged press (approx. 22 seconds) before powering on to register the change. Use a thin, pointed object to ensure the button is fully depressed.
- **No HDD Activity LED:**
 - This model does not feature individual HDD activity LEDs. Monitor drive activity through your operating system's task manager or disk utility.
- **Drives Not Spinning Down (No Power Saving):**
 - The MiniTower M435-V1 does not support automatic HDD spin-down for power saving or PC power ON/OFF synchronization. Drives will remain active as long as the unit is powered on.
- **M.2 SSD Cover Loose:**
 - Ensure the M.2 SSD is properly seated and secured with its screw. The magnetic cover should hold firmly.

7. Specifications

Feature	Detail
Model Number	M435-V1
Brand	ORICO
Manufacturer	SHENZHEN ORICO TECHNOLOGIES CO.,LTD
Supported Drives	2 x 3.5-inch HDDs (up to 24TB each), 1 x M.2 NVMe/SATA SSD (up to 8TB)
Total Storage Capacity	Up to 56 TB (2x 24TB HDD + 1x 8TB SSD)
RAID Modes	RAID 0, RAID 1, PM (JBOD), SPAN
Data Transfer Rate	USB 3.2 Gen 2 (10Gbps / 1.25 GB/s)
Card Reader	SD 3.0 / TF (104MB/s)
USB Ports	1 x USB 3.2 (10Gbps), 3 x USB 2.0 (480Mbps)
Power Input	DC 12V 5A
Cooling System	Built-in silent fan, air duct, aluminum alloy casing

Feature	Detail
Operating System Compatibility	macOS, Windows, Linux, Android, iOS, HarmonyOS
Dimensions	27 x 21.5 x 18.3 cm
Weight	1.93 kg

8. Warranty and Support

For warranty information, please refer to the documentation included with your purchase or contact your retailer. For technical support, product inquiries, or further assistance, please visit the official ORICO website or contact their customer service department.

ORICO Official Website: www.orico.com.cn

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