

UGREEN 20Gbps Dual Bay NVMe Enclosure

UGREEN 20Gbps Dual Bay NVMe Enclosure Instruction Manual

Model: 20Gbps Dual Bay NVMe Enclosure

1. INTRODUCTION

Thank you for choosing the UGREEN 20Gbps Dual Bay NVMe Enclosure. This device is designed for efficient data management of NVMe SSDs, offering both high-speed data transfer and convenient offline cloning capabilities. Please read this manual carefully to ensure proper installation and operation.

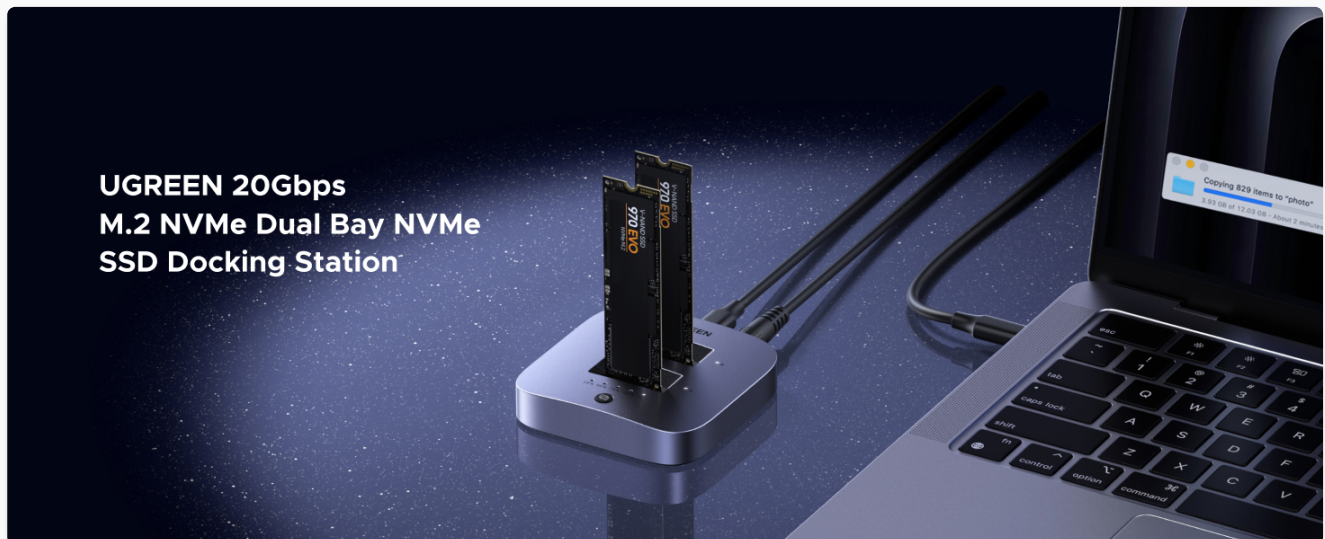


Image 1.1: UGREEN 20Gbps Dual Bay NVMe Enclosure in use.

2. PRODUCT OVERVIEW

2.1 Package Contents

- 20Gbps M.2 Dual-Bay Docking Station with Clone Function (x1)
- Power Adapter (x1)
- 20Gbps USB-C to USB-C Cable (x1)

- User Manual (x1)

2.2 Key Features

- **Tool-Free Dual-Bay Design:** Supports two NVMe SSDs up to 8TB each, for a total of 16TB capacity.
- **One-Click Offline Cloning:** Duplicate SSDs without a computer connection.
- **Ultra-High-Speed Transmission:** Up to 20Gbps data transfer rate with USB 3.2 Gen 2x2.
- **Advanced Chipset:** Equipped with JMS586U chip, supporting UASP and TRIM for optimized performance.
- **Efficient Heat Dissipation:** Open design and aluminum housing ensure 360° heat dissipation.
- **S.M.A.R.T. Functionality:** Monitors SSD health for comprehensive data protection.
- **LED Indicators:** Clearly displays cloning progress and device status.

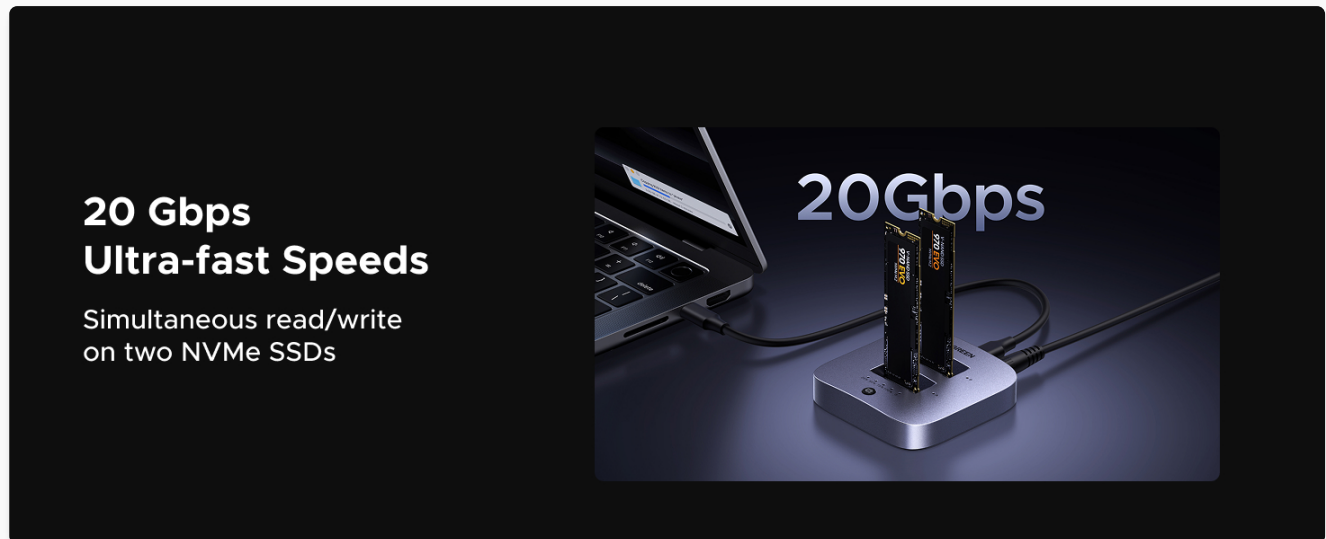


Image 2.1: High-speed data transfer capability.

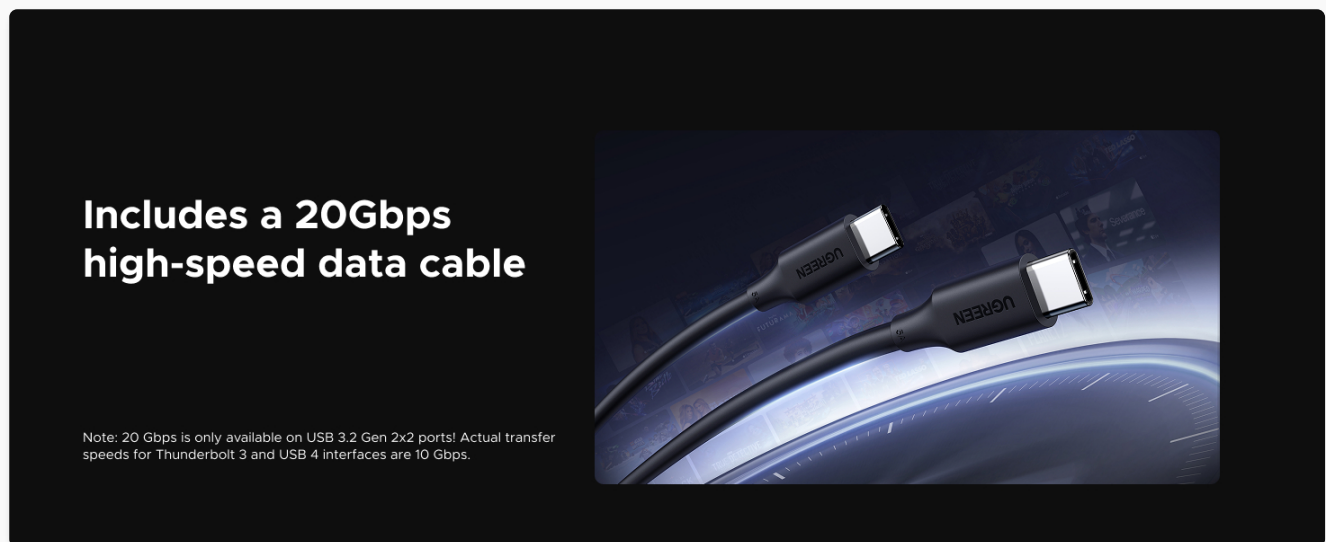
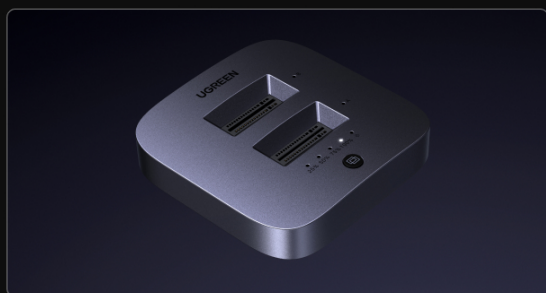


Image 2.2: The JMS586U chip ensures stable operation and performance.

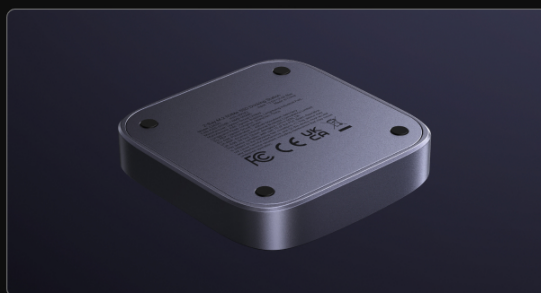
3. SETUP GUIDE

3.1 SSD Compatibility

This enclosure supports M-Key and B+M-Key NVMe SSDs only. SATA-based M.2 SSDs are **not** supported. Ensure your SSDs are NVMe type before insertion.



The indicator light clearly shows the copying process.



The anti-slip mat ensures that the docking station stays in place and prevents it from slipping.

Image 3.1: Supported NVMe SSD types and sizes (2230, 2242, 2260, 2280, 22110).

3.2 Inserting NVMe SSDs

1. Ensure the device is powered off and disconnected from any computer.
2. Gently insert your NVMe SSD(s) into the designated slots (Slot A and Slot B) on the enclosure. The tool-free design allows for easy insertion.
3. Ensure the SSDs are firmly seated.

3.3 Power Connection

1. Connect the provided power adapter to the enclosure's power input port.
2. Plug the power adapter into a wall outlet. The device requires external power for operation.



Image 3.2: The 12V power supply ensures stable data transmission.

4. OPERATING INSTRUCTIONS

4.1 Offline Cloning

The offline cloning feature allows you to duplicate an SSD without connecting the enclosure to a computer.

1. Insert the **Source SSD** (the drive you want to copy FROM) into Slot A.
2. Insert the **Target SSD** (the drive you want to copy TO) into Slot B.
3. **Important:** The capacity of the Target SSD (Slot B) must be greater than or equal to the capacity of the

Source SSD (Slot A). Both SSDs must be NVMe type.

4. Ensure the power adapter is connected and the device is powered on.
5. Press and hold the "Clone" button (usually located on the top or side of the device) for approximately 3-5 seconds until the LED indicators begin to flash.
6. Release the button. The cloning process will begin, and the progress will be indicated by the LED lights (e.g., 25%, 50%, 75%, 100%).
7. Once all LED indicators are solid, the cloning process is complete.
8. Safely remove the SSDs after the cloning is finished.

High-quality chip

The JMS586U chip supports the stable operation of two SSDs.



UASP: 20%
faster



S.M.A.R.T.: SSD
Security Reminder



TRIM: SSD
optimization

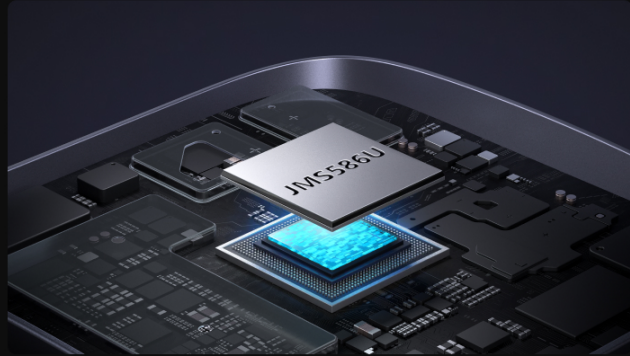


Image 4.1: One-click offline cloning process.

4.2 Online Data Transfer (Docking Station Mode)

To use the enclosure as an external docking station for data transfer:

1. Insert one or two NVMe SSDs into the slots.
2. Connect the provided USB-C to USB-C cable from the enclosure to a compatible USB 3.2 Gen 2x2 port on your computer. For optimal 20Gbps speed, ensure both your device and cable support this standard.
3. Connect the power adapter to the enclosure and a wall outlet.
4. Your computer should recognize the SSD(s) as external storage devices. You may need to initialize and format new SSDs through your operating system's disk management utility before use.

360° all-round Heat Dissipation



Image 4.2: Supports up to 16TB total storage capacity.

5. MAINTENANCE

The UGREEN NVMe Enclosure is designed for durability and efficient heat management. To ensure optimal performance and longevity:

- **Heat Dissipation:** The aluminum housing and open design facilitate 360° heat dissipation. Ensure the device is placed in a well-ventilated area during prolonged use, especially during cloning or large data transfers, to prevent overheating.
- **Cleaning:** Keep the device free from dust and debris. Use a soft, dry cloth for cleaning. Avoid liquid cleaners.
- **S.M.A.R.T. Monitoring:** The built-in S.M.A.R.T. functionality helps monitor the health of your SSDs. Regularly check your SSD health through your operating system's tools for proactive data protection.



Image 5.1: Effective heat dissipation for stable operation.

6. TROUBLESHOOTING

- **Device Not Recognized by Computer:**
 - Ensure the USB-C cable is securely connected to both the enclosure and your computer.
 - Verify that the power adapter is connected and providing power to the enclosure.
 - Try connecting to a different USB port on your computer.
 - Check if your computer's USB port supports USB 3.2 Gen 2x2 for optimal performance.
 - For new SSDs, ensure they are initialized and formatted in your operating system's Disk Management (Windows) or Disk Utility (macOS).
- **Offline Cloning Fails or Does Not Start:**
 - Confirm that the Source SSD is in Slot A and the Target SSD is in Slot B.
 - Verify that the Target SSD's capacity is equal to or greater than the Source SSD's capacity.
 - Ensure both SSDs are NVMe type. SATA SSDs are not compatible.
 - Make sure the power adapter is connected and the device is powered on.
 - Press and hold the "Clone" button for the required duration (3-5 seconds) until LEDs flash.
- **Slow Transfer Speeds:**
 - Ensure your computer's USB port supports USB 3.2 Gen 2x2 (20Gbps). If connected to a lower-speed port (e.g., USB 3.0/3.1 Gen 1, USB 3.1 Gen 2), speeds will be limited.
 - Verify that the provided 20Gbps USB-C cable is being used.

- Actual transfer speeds can be affected by the performance of the SSDs themselves and the operating system.
- **Drives Getting Hot During Operation:**
 - It is normal for NVMe SSDs and the enclosure to generate heat during high-speed operations. The aluminum housing is designed to dissipate this heat.
 - Ensure adequate airflow around the device. Avoid placing it in enclosed spaces.

7. SPECIFICATIONS

Feature	Detail
Brand	UGREEN
Hardware Interface	USB 3.2 Gen 2x2
Data Transfer Rate	20 Gigabits Per Second
Supported Devices Quantity	2
Memory Storage Capacity	Up to 16 TB (8TB per slot)
Compatible Devices	Desktop, Laptop, Tablet
Enclosure Material	Aluminum
Hardware Platform	Universal
Color	Silver

8. WARRANTY AND SUPPORT

8.1 Warranty Information

This UGREEN product comes with a **1-Year Limited Warranty** from the date of purchase. The warranty covers manufacturing defects and malfunctions under normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or external factors.

8.2 Customer Support

For technical assistance, troubleshooting, or warranty claims, please contact UGREEN customer support through the official UGREEN website or your point of purchase. Please have your product model and purchase details ready when contacting support.