

Alxum S1222A

Alxum S1222A M.2 NVMe and SATA Dual-Bay Enclosure User Manual

Model: S1222A | Brand: Alxum

1. INTRODUCTION

This manual provides detailed instructions for the Alxum S1222A M.2 NVMe and SATA Dual-Bay Enclosure. Please read this manual thoroughly before using the product to ensure proper operation and to maximize its functionality. This device allows for high-speed data transfer and offline cloning between M.2 NVMe SSDs and 2.5"/3.5" SATA HDDs/SSDs.

1.1 Package Contents

- Alxum S1222A M.2 NVMe and SATA Dual-Bay Enclosure
- USB-C to USB-A/USB-C Data Cable
- 12V/2A Power Adapter
- User Manual

2. PRODUCT OVERVIEW

2.1 Key Features

- **Efficient Thermal Conductivity:** Features an aluminum alloy upper cover for enhanced heat dissipation, ensuring optimal performance and longevity of your M.2 SSD.
- **High Compatibility:** Supports M.2 SSDs of sizes 2242, 2260, and 2280, and 2.5"/3.5" SATA hard drives. Compatible with Windows, Unix, Linux, Mac, and Android operating systems.
- **Speedy Data Transfer:** Achieves data transfer rates of up to 10Gbps using the USB 3.2 interface. Supports PCIe Gen 3x2 NVMe M.2 SSDs, enabling superb performance and accelerated data processing. SSD TRIM and UASP acceleration further enhance system responsiveness.
- **Offline Duplicator:** Allows for quick data copying between two SSDs without requiring a computer connection. It can also function as a dual-bay docking station to expand storage capacity for NVMe M.2 SSDs and 2.5"/3.5" SATA HDDs. Note: Does not support SATA M.2 SSDs.
- **Flexible Cloning:** Simple one-button cloning process with real-time progress indication. Ensures the target disk has a larger capacity than the source disk for successful cloning. Includes a 12V/2A power adapter to

prevent power-related issues.

2.2 Product Diagram



Figure 1: Alxum S1222A Enclosure and Accessories

This image displays the Alxum S1222A dual-bay enclosure, an M.2 NVMe SSD, a USB-C to USB-A/USB-C data cable, and a power adapter cable. The enclosure features indicator lights for SATA and M.2 drives, power, and cloning progress.

2.3 Interface and Indicators



Figure 2: Enclosure Indicators and Ports

This image highlights the various indicators and ports on the Alxum S1222A enclosure. It shows the SATA indicator, M.2 indicator, Power indicator, Cloning Progress Indicators, USB-C port, DC 12V 2A power input, Power ON/OFF switch, and Clone Switch Setting (M.2 to SATA or SATA to M.2).

Component	Description
SATA Indicator	Indicates activity for the SATA drive slot.
M.2 Indicator	Indicates activity for the M.2 NVMe drive slot.
Power Indicator	Illuminates when the device is powered on.
Cloning Progress Indicators	Multiple LEDs indicate cloning progress (e.g., 25%, 50%, 75%, 100%).
USB-C Port	Connects the enclosure to your computer for data transfer.
DC 12V 2A Power Input	Connects to the included 12V/2A power adapter. Essential for stable operation and cloning.
Power ON/OFF Switch	Controls the power supply to the enclosure.
Clone Switch Setting	Allows selection of cloning direction (M.2 to SATA or SATA to M.2).

3. SETUP AND INSTALLATION

3.1 M.2 NVMe SSD Installation

1. Ensure the enclosure is powered off and disconnected from your computer.
2. Locate the M.2 slot on the enclosure. Gently insert your M.2 NVMe SSD (2242/2260/2280 size) into the slot at an angle.
3. Press down the SSD and secure it with the provided retention mechanism (if applicable, usually a rubber stopper or screw).

3.2 2.5"/3.5" SATA HDD/SSD Installation

1. Ensure the enclosure is powered off and disconnected from your computer.
2. Slide your 2.5" or 3.5" SATA HDD/SSD into the SATA drive bay until it firmly connects with the SATA connector.

3.3 Connecting to a Computer

1. Connect the included 12V/2A power adapter to the DC 12V 2A input port on the enclosure, then plug it into a power outlet.
2. Connect the USB-C data cable to the USB-C port on the enclosure and the other end to an available USB-A or USB-C port on your computer.
3. Turn on the enclosure using the Power ON/OFF switch. The power indicator light will illuminate.
4. Your computer should automatically detect the connected drives. For new drives, you may need to initialize and format them through your operating system's disk management utility before use.



Figure 3: Plug and Play Connectivity

This image illustrates the plug-and-play nature of the Alxum S1222A enclosure, showing it connected to a laptop. Icons for Mac OS, Windows, Unix, Linux, and Android indicate broad operating system compatibility.

4. OPERATING INSTRUCTIONS

4.1 Data Transfer Mode (External Drive Function)

Once connected to your computer and powered on, the installed M.2 NVMe SSD and/or SATA HDD/SSD will appear as external storage devices. You can drag and drop files, copy, paste, or perform any standard file operations as you would with any other external drive.

Super Fast Data Transfer Rate

Full Transfer Performance



Figure 4: High-Speed Data Transfer

This image shows the Alxum S1222A enclosure connected to a laptop, illustrating its capability for super-fast data transfer rates of up to 10Gbps, suitable for various media files and applications.



Figure 5: Simultaneous Read/Write Operations

This image depicts the Alxum S1222A enclosure performing simultaneous read/write operations on both an NVMe M.2 SSD and a SATA HDD/SSD, connected to a laptop.

4.2 Offline Cloning Function

The offline cloning function allows you to duplicate data from a source drive to a target drive without connecting to a computer. Ensure the target drive has a capacity equal to or larger than the source drive.

Offline Clone

Easily to Backup your Data from 2 Disks



Figure 6: Offline Cloning Overview

This image provides an overview of the offline cloning feature, showing an M.2 NVMe SSD as the source and a SATA SSD as the target. Progress indicators (25%, 50%, 75%, 100%) are visible, emphasizing the requirement for the destination disk to be equal to or larger than the source disk.

1. **Prepare Drives:** Ensure both the source M.2 NVMe SSD and the target 2.5"/3.5" SATA HDD/SSD are properly installed in their respective slots. The enclosure should be powered off and disconnected from any computer.
2. **Set Clone Direction:** Use the "Clone Switch Setting" to select the desired cloning direction (M.2 to SATA or SATA to M.2).
3. **Connect Power:** Plug in the 12V/2A power adapter to the enclosure and a power outlet.
4. **Initiate Cloning:** Press and hold the "Clone" button for 3 seconds until all four blue cloning progress indicator lights illuminate. Release the button, then quickly press it again to start the cloning process.
5. **Monitor Progress:** The blue indicator lights will illuminate sequentially (25%, 50%, 75%, 100%) to show the cloning progress.
6. **Completion:** Once all indicator lights are solid, the cloning process is complete. Switch off the power, then safely eject the hard disks.

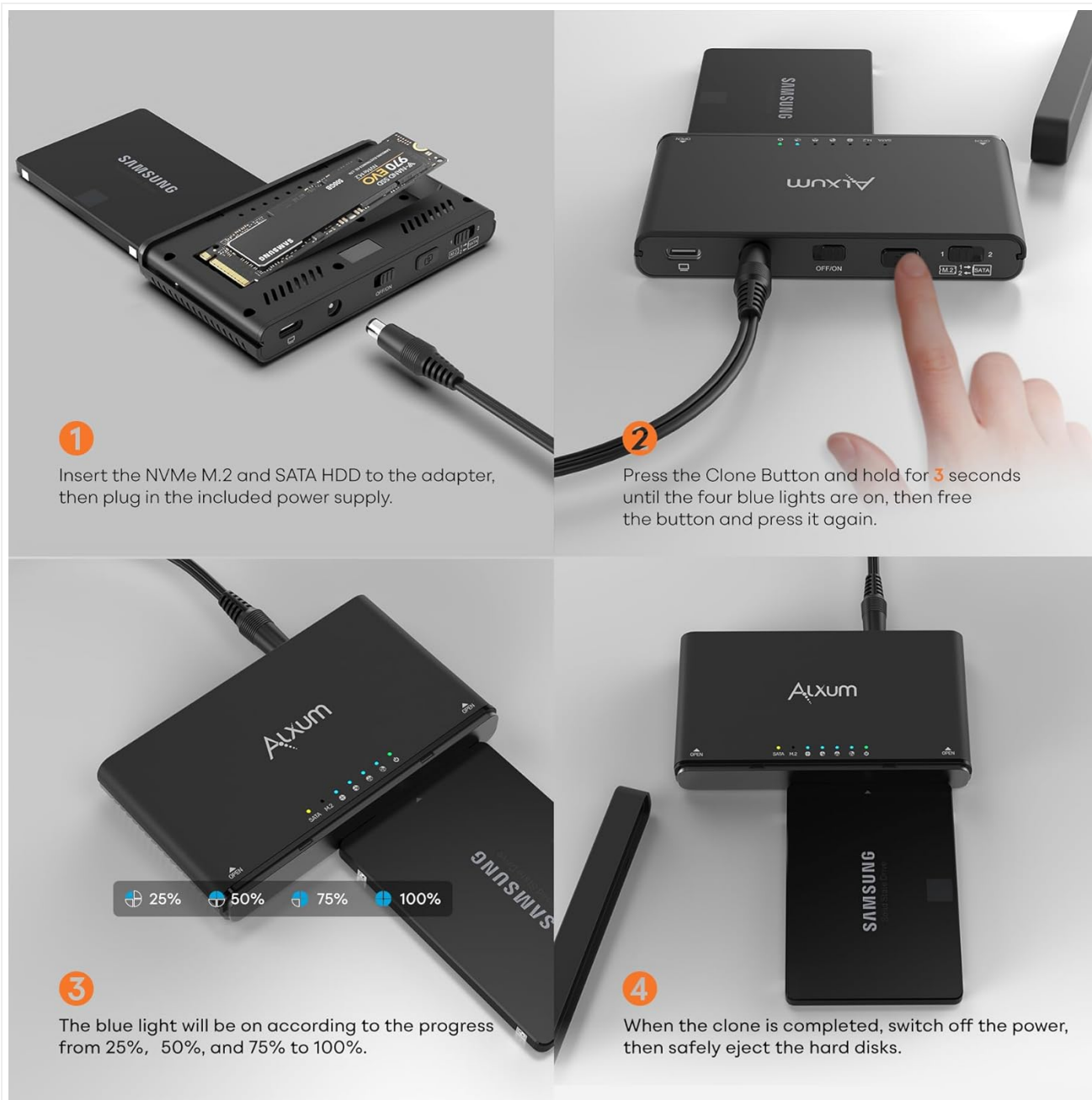


Figure 7: Step-by-Step Offline Cloning

This image provides a visual four-step guide for offline cloning: 1. Insert drives and power supply. 2. Press and hold the clone button for 3 seconds, then press again. 3. Monitor blue progress lights. 4. Power off and eject drives upon completion.

4.3 Important Considerations for Cloning

- The target disk must have a capacity equal to or greater than the source disk.
- All data on the target disk will be overwritten during the cloning process. Back up any important data from the target disk before proceeding.
- Ensure a stable power supply throughout the cloning process to prevent data corruption.
- The enclosure does not support cloning from SATA M.2 SSDs. Only NVMe M.2 SSDs are supported in the M.2 slot.

5. COMPATIBILITY

5.1 Operating System Compatibility

- Windows

- macOS
- Linux
- Unix
- Android

5.2 Drive Compatibility

- **M.2 Slot:** Supports PCIe Gen 3x2 NVMe M.2 SSDs (M-Key and B&M-Key) of sizes 2242, 2260, and 2280. Does NOT support SATA M.2 SSDs.
- **SATA Slot:** Supports 2.5" and 3.5" SATA HDDs/SSDs. Does NOT support IDE drives.



Figure 8: Drive Interface Compatibility

This diagram visually clarifies the supported M.2 interfaces (B&M-Key, M-Key for 2242/2260/2280 NVMe SSDs) and SATA interface (SATA ✓, IDE X), ensuring users select compatible drives.

6. MAINTENANCE

6.1 Care and Storage

- Keep the device clean and free from dust. Use a soft, dry cloth for cleaning.
- Avoid exposing the enclosure to extreme temperatures, humidity, or direct sunlight.
- Store the device in a cool, dry place when not in use.
- Do not attempt to disassemble or repair the device yourself. This may void the warranty.
- Always safely eject drives from your operating system before disconnecting the enclosure to prevent data loss.

7. TROUBLESHOOTING

7.1 Common Issues and Solutions

- **Issue:** Drive not detected by computer.

Solution:

- Ensure the power adapter is connected and the enclosure is powered on.
- Check all cable connections (USB and power).
- Try a different USB port on your computer.
- For new drives, ensure they are initialized and formatted in your operating system's Disk Management (Windows) or Disk Utility (macOS).

- Verify the drive is correctly seated in its slot.
- Confirm the drive type is compatible (NVMe M.2 for M.2 slot, SATA for SATA slot).
- **Issue:** Cloning fails or does not start.
Solution:
 - Ensure the target drive's capacity is equal to or larger than the source drive's capacity.
 - Verify both drives are properly inserted.
 - Confirm the power adapter is connected and providing sufficient power.
 - Ensure the clone button sequence is followed correctly (press and hold for 3s, release, then quick press).
 - Check the clone switch setting for correct source/target direction.
 - Ensure you are not attempting to clone a SATA M.2 SSD.
- **Issue:** Slow data transfer speeds.
Solution:
 - Ensure you are connected to a USB 3.2 (or USB 3.0/3.1) port on your computer. Older USB 2.0 ports will result in slower speeds.
 - Check the quality of the USB cable.
 - The actual speed may vary depending on the SSD/HDD performance and your computer's system configuration.

8. SPECIFICATIONS

Feature	Detail
Model Number	S1222A
Brand	Alxum
Hardware Interface	USB 3.1 Type A, USB 3.1 Type C
Connectivity Technology	SATA, NVMe (M.2)
Data Transfer Rate	Up to 10 Gigabits Per Second (USB 3.2 Gen2)
Compatible Devices	Laptops, Desktops, Tablets (with compatible USB ports)
Supported Drive Types	M.2 NVMe SSD (2242/2260/2280), 2.5"/3.5" SATA HDD/SSD
Max Number of Supported Devices	2 (1x M.2 NVMe, 1x SATA)
Power Input	DC 12V 2A
Product Dimensions	4.02 x 2.66 x 0.57 inches
Item Weight	11.3 ounces
Material	Plastic, Aluminum Alloy (upper cover)
Features	Offline Cloning, Hot-swapping, UASP, TRIM

9. WARRANTY AND SUPPORT

9.1 Warranty Information

Alxum products are designed and manufactured to high-quality standards. For specific warranty details regarding your Alxum S1222A enclosure, please refer to the warranty card included in your package or visit the official Alxum website. Keep your purchase receipt as proof of purchase for warranty claims.

9.2 Customer Support

If you encounter any issues or have questions about your Alxum S1222A enclosure, please contact Alxum customer support. You can typically find contact information on the product packaging, the official Alxum website, or through the retailer where you purchased the product. Please have your model number (S1222A) and purchase details ready when contacting support.