SSK DK201

SSK NVMe SSD Cloner & M.2 Duplicator User Manual

Model: DK201 | Brand: SSK

1. Introduction

Thank you for choosing the SSK NVMe SSD Cloner and M.2 Duplicator. This dual-bay NVMe enclosure is designed for high-speed data transfer and convenient offline cloning of NVMe SSDs. With its USB 3.2 Gen 2x2 interface, it offers data transfer speeds up to 20Gbps, making it an efficient solution for managing your M.2 NVMe SSDs. This manual provides detailed instructions for setup, operation, and troubleshooting to ensure optimal performance and longevity of your device.

2. Product Overview & Key Features

The SSK DK201 is a versatile device that functions as both an external M.2 NVMe SSD enclosure and a standalone duplicator. It is engineered for efficiency and reliability.

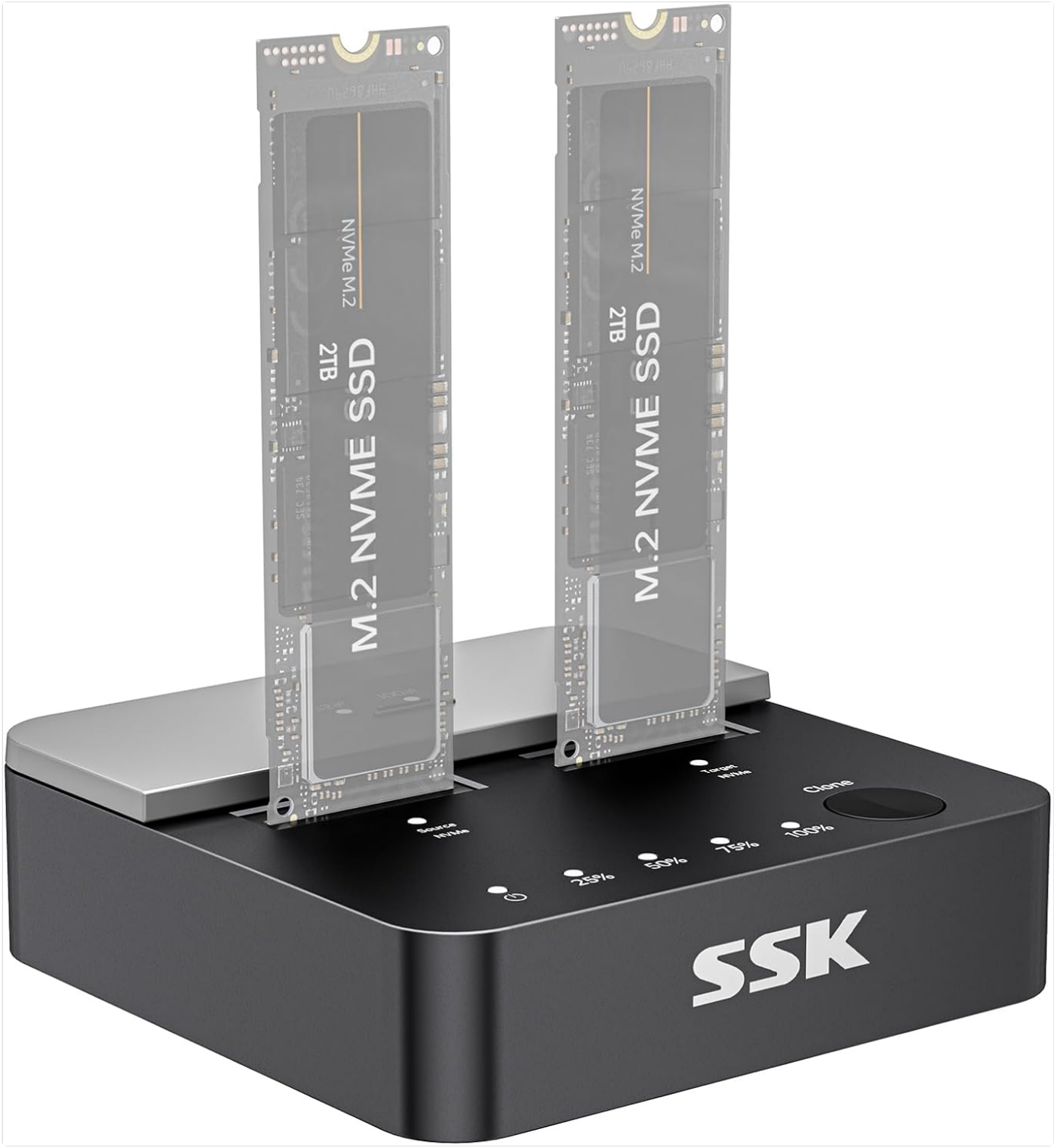

Figure 2.1: SSK NVMe SSD Cloner with two M.2 NVMe SSDs inserted.

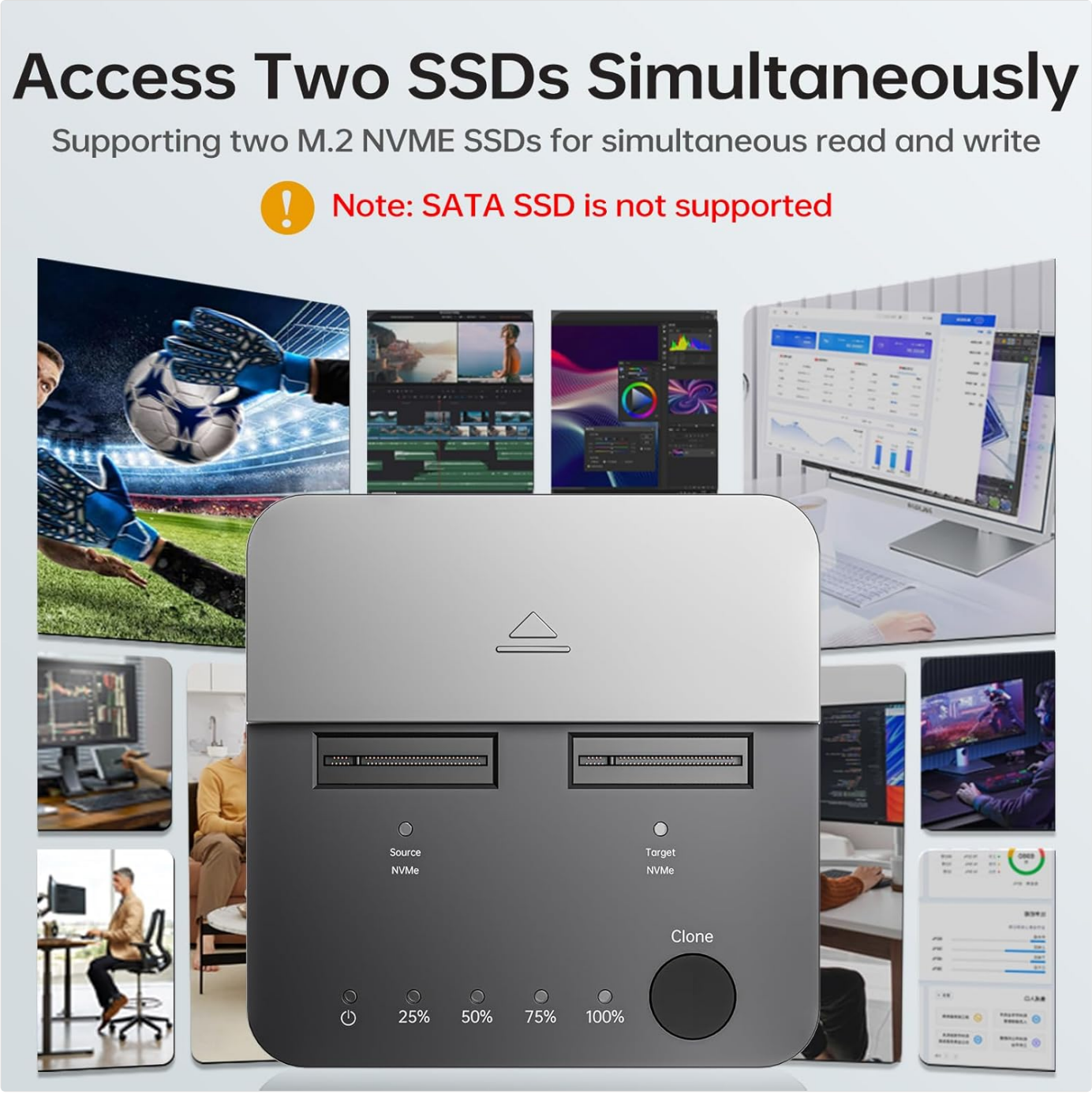

Figure 2.2: Top view of the SSK DK201 showing the Source and Target bays, clone button, and progress indicators.

Key Features:

- **Dual Bay NVMe Enclosure:** Supports simultaneous operation of two M Key and B+M Key NVMe SSDs.*Note: This device supports NVMe SSDs ONLY and does not support SATA or other non-NVMe SSDs.*
- **Ultra-Fast 20Gbps Transfer Speed:** Equipped with a USB 3.2 Gen 2x2 interface, providing data transfer rates up to 2000 MB/s.
- **One-Click Offline SSD Cloner:** Allows direct drive-to-drive cloning without requiring a computer. Simply press the clone button to duplicate your NVMe SSD. *Important: The target drive's capacity must be equal to or larger than the source drive. Cloning will erase all data on the target drive.*
- **Optimized Performance:** Features USAP protocol support for faster data transfer and includes S.M.A.R.T monitoring for SSD health and TRIM optimization for drive efficiency.
- **Efficient Heat Dissipation:** The open design facilitates effective heat dissipation, crucial for high-performance NVMe SSDs.
- **Broad Compatibility:** Compatible with various operating systems including Windows, macOS, and Linux, and devices

such as PCs, laptops, and gaming consoles.

Product Videos:

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Video 2.1: An overview of the SSK NVMe SSD Cloner, highlighting its dual-bay design and 20Gbps transfer capabilities.

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Video 2.2: A brief demonstration of the SSK Dual Bay M.2 NVMe SSD Dock in action.

3. Package Contents

Please verify that all items are present in your package:

- 1 x SSK NVMe SSD Cloner & M.2 Duplicator (Model DK201)
- 1 x 20Gbps USB-C to USB-C Cable
- 1 x 10Gbps USB-A to USB-C Cable
- 1 x 12V/2A Power Adapter
- 1 x User Manual (this document)

4. Setup Guide

Follow these steps to set up your SSK NVMe SSD Cloner:

1. **Prepare SSDs:** Ensure your M.2 NVMe SSDs are compatible (M Key or B+M Key NVMe only). SATA SSDs are not supported.
2. **Insert SSDs:** Gently slide open the top cover of the dock. Carefully insert your NVMe SSD(s) into the designated slots (Source and/or Target) until they are fully seated. The open design allows for easy installation.
3. **Connect Power:** Connect the provided 12V/2A power adapter to the DC 12V port on the back of the dock and plug it into a power outlet.
4. **Power On:** Flip the ON/OFF switch to the 'ON' position. The power indicator light should illuminate.

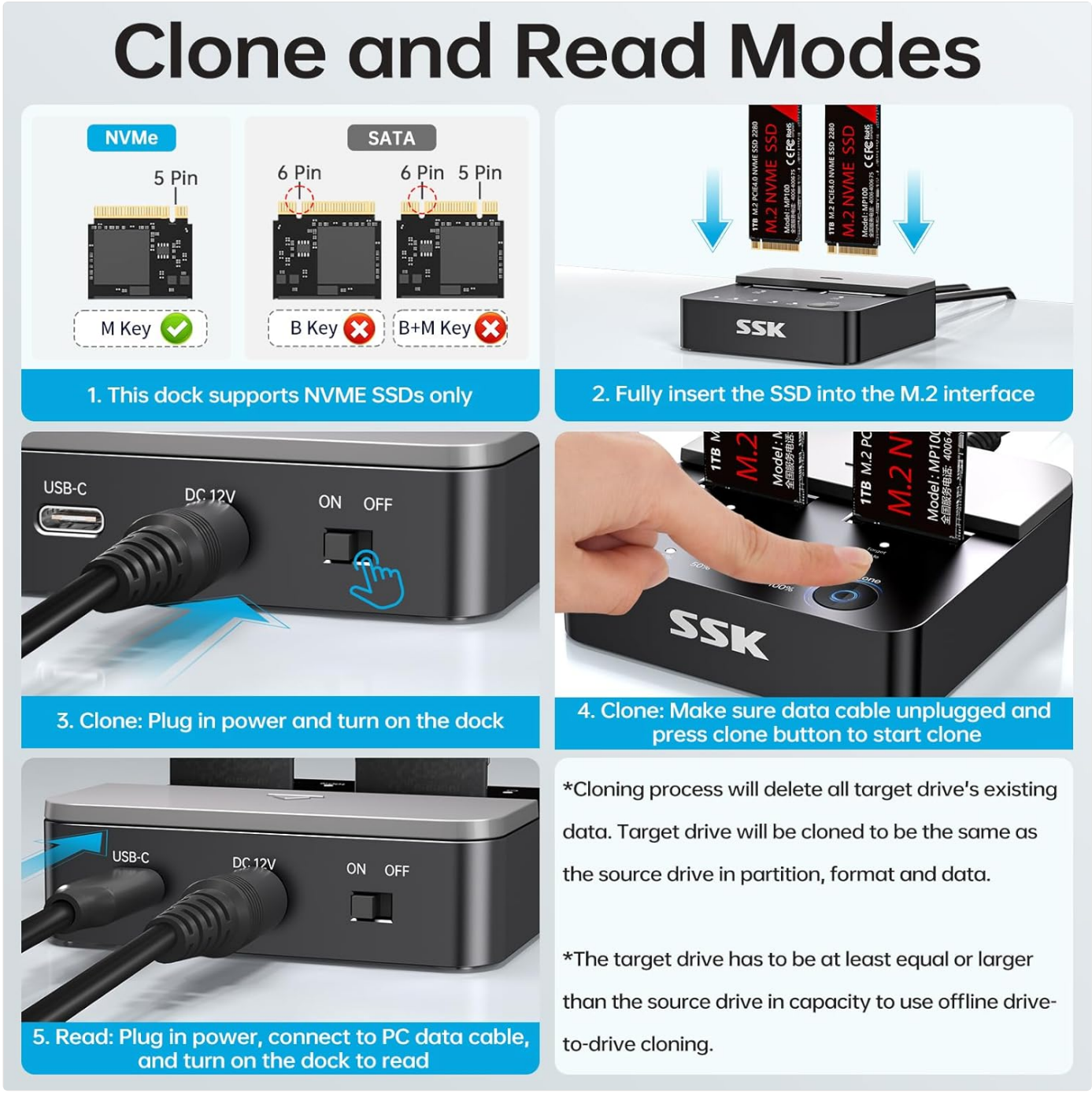

Figure 4.1: Visual guide for SSD insertion and power connection.

5. Operating Instructions

5.1. Read Mode (Connecting to PC)

To use the device as an external SSD enclosure for data transfer with a computer:

1. Ensure SSD(s) are properly inserted and the dock is powered on (as per Setup Guide).
2. Connect the dock to your computer using either the 20Gbps USB-C cable (for USB-C ports) or the 10Gbps USB-A cable (for USB-A ports). For optimal speed, use the 20Gbps USB-C cable with a compatible USB 3.2 Gen 2x2 port on your computer.
3. Your computer should detect the SSD(s) automatically. The SSD LED indicator on the dock will light up when successfully connected.
4. You can now access the SSD(s) like any other external drive. For new SSDs, you may need to initialize and format them through Disk Management (Windows) or Disk Utility (macOS) before use.

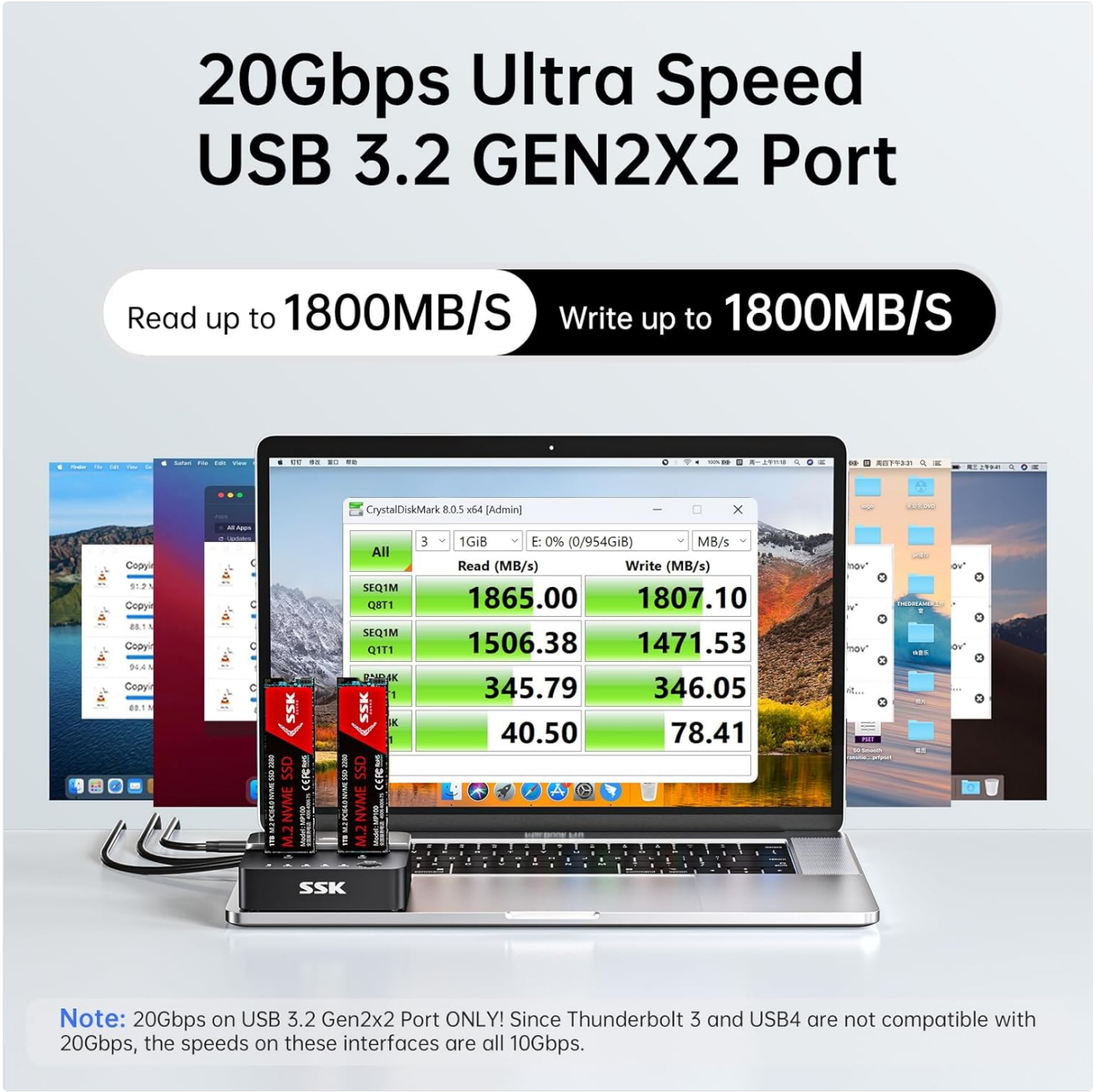

Figure 5.1: High-speed data transfer in Read Mode.

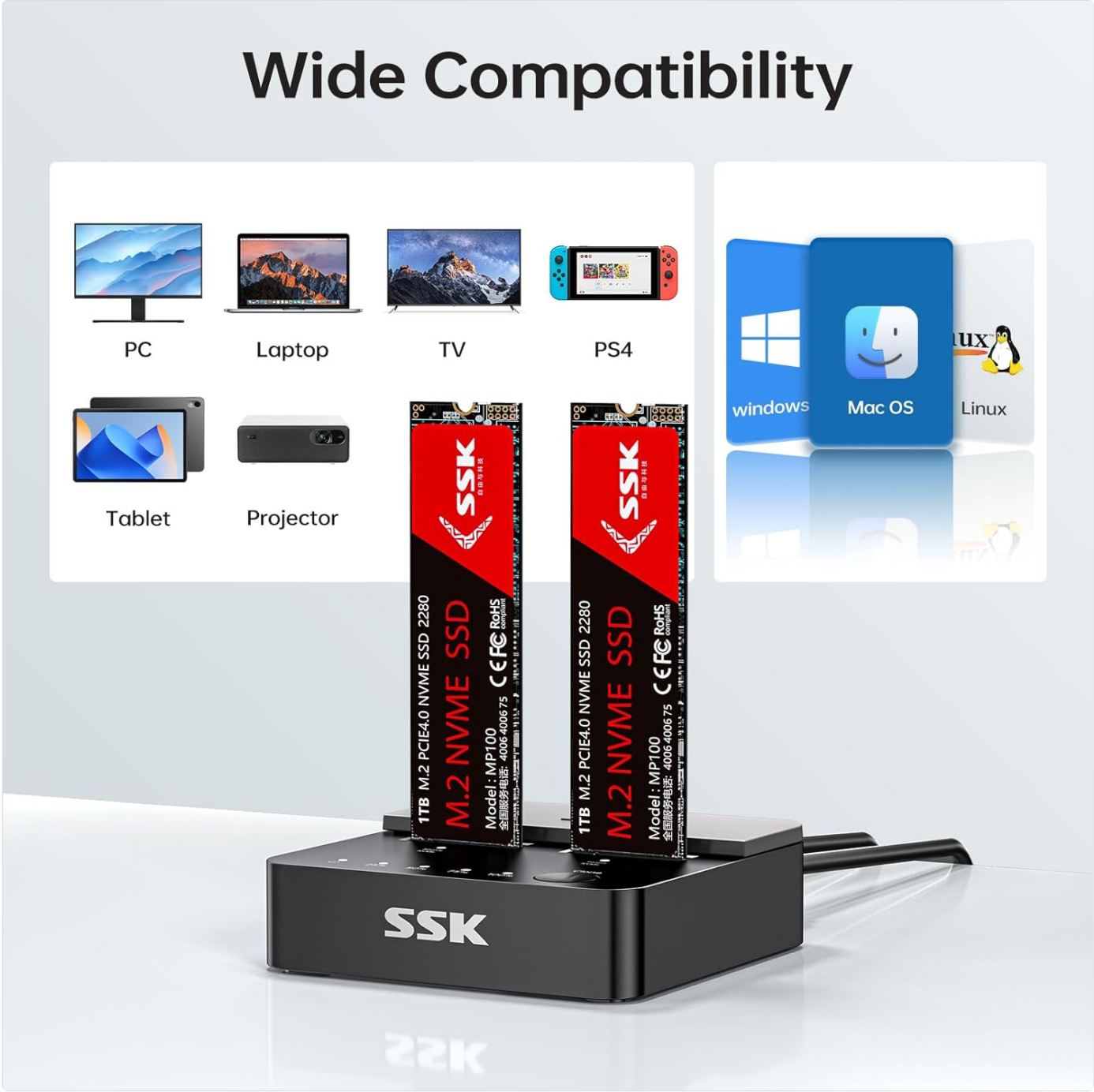

Figure 5.2: Compatibility with various devices and operating systems.

5.2. Offline Clone Mode

The offline clone function allows you to duplicate an NVMe SSD without connecting the dock to a computer. This process will erase all data on the target drive.

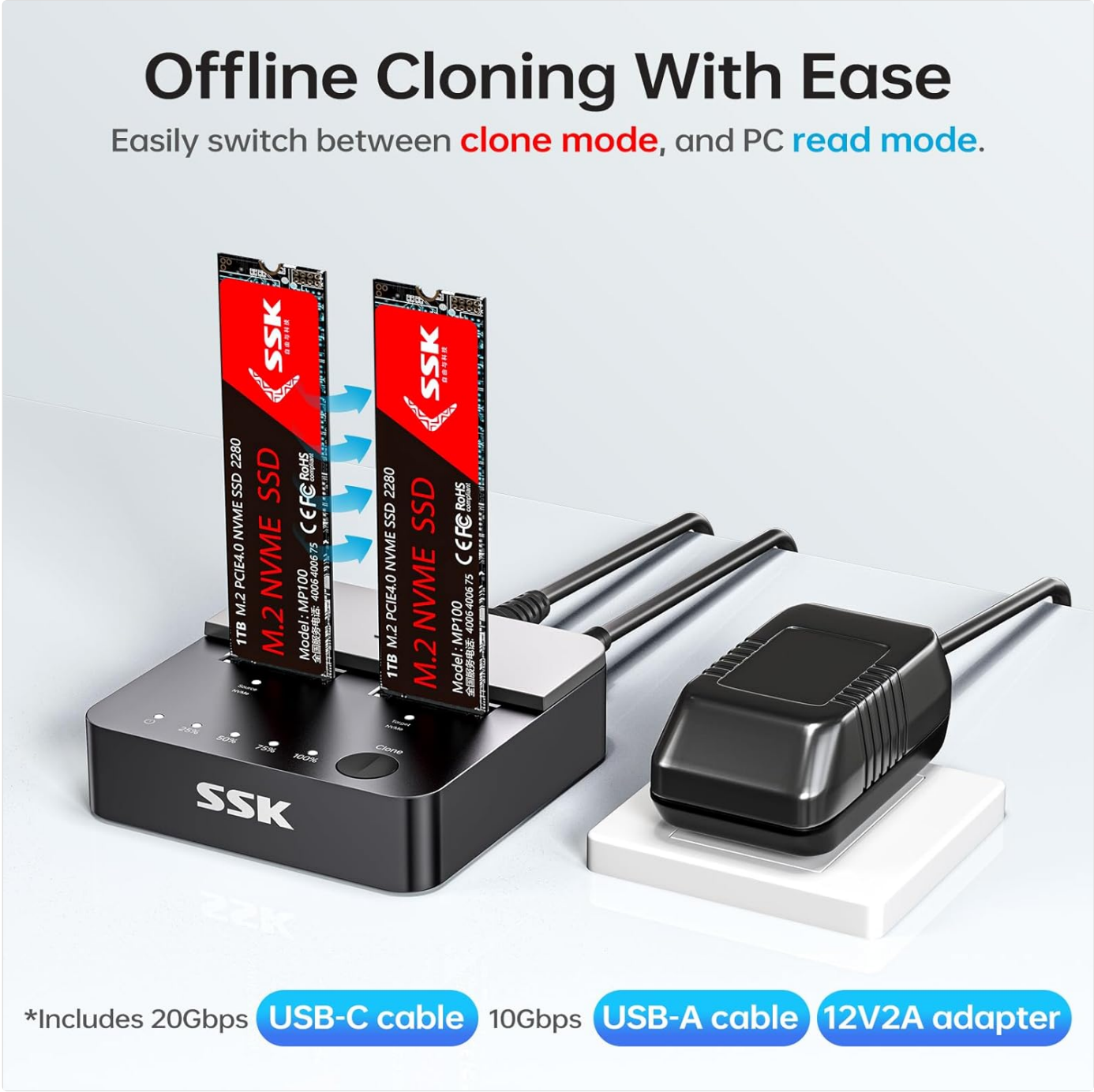

Figure 5.3: Setup for Offline Cloning.

1. **Prepare Drives:** Insert the **Source** NVMe SSD into the 'Source' bay and the **Target** NVMe SSD into the 'Target' bay.
2. **Important Compatibility Note:** Both Source and Target drives must be NVMe protocol SSDs. SATA SSDs are not supported for cloning.
3. **Target Drive Capacity:** The capacity of the Target drive must be **equal to or larger than** the Source drive.
4. **Disconnect Data Cable:** Ensure the USB data cable (to PC) is **unplugged** from the dock. The dock must only be connected to the power adapter for offline cloning.
5. **Power On:** Turn on the dock using the ON/OFF switch.
6. **Initiate Clone:** Wait for the SSD LEDs to light up (indicating drives are recognized). Then, press and hold the 'Clone' button for 3-5 seconds until the progress LEDs (25%, 50%, 75%, 100%) begin to flash.
7. **Cloning Process:** The progress LEDs will sequentially illuminate and flash, indicating the cloning progress. Do not disconnect power or drives during this process.
8. **Completion:** All four progress LEDs (25%, 50%, 75%, 100%) will remain solid when the cloning process is complete.

9. **Power Off & Remove:** Turn off the dock, then safely remove the SSDs.

WARNING: Cloning will permanently erase all data on the Target SSD. Please back up any important data on the Target drive before proceeding.

Offline Clone Video:

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Video 5.1: A short demonstration of the offline cloning feature of the SSK M.2 NVMe SSD Dock.

6. Specifications

Feature	Detail
Model Number	DK201
Material	Plastic
Item Weight	90 Grams (3.17 ounces)
Product Dimensions	2.8 x 2.8 x 0.85 inches
Compatible Devices	Laptop, PC
Max Number of Supported Devices	2
Data Transfer Rate	2000 Megabytes Per Second (20Gbps)
Hardware Interface	Solid State Drive, USB 3.2 Gen 2x2
Hardware Platform	Support NVMe SSD Only
Color	Black

7. Troubleshooting

- **SSD Not Recognized by PC:**
  - Ensure the SSD is fully inserted into the bay.
  - Verify the power adapter is connected and the dock is powered on.
  - Try a different USB port on your computer.
  - Ensure the correct USB cable (USB-C or USB-A) is used and is securely connected.
  - For new SSDs, check Disk Management (Windows) or Disk Utility (macOS) to initialize and format the drive.
  - Confirm the SSD is an NVMe type; SATA SSDs are not supported.
- **Cloning Fails or Does Not Start:**
  - Ensure the USB data cable to the PC is**unplugged**. Offline cloning requires only power.
  - Verify both Source and Target SSDs are NVMe protocol.
  - Confirm the Target SSD's capacity is equal to or larger than the Source SSD's capacity.
  - Press and hold the 'Clone' button for 3-5 seconds until the progress LEDs start flashing. A quick press will not initiate cloning.
  - Ensure both SSDs are fully seated in their respective bays.

- **Slow Transfer Speeds:**
  - Ensure you are using the 20Gbps USB-C cable and connecting to a USB 3.2 Gen 2x2 compatible port on your computer. Older USB ports (e.g., USB 3.0/3.1 Gen 1, USB 2.0) will result in lower speeds.
  - Actual speeds can vary based on your SSD's performance and your computer's hardware.
- **Device or SSDs Become Warm During Operation:**
  - It is normal for high-performance NVMe SSDs and the enclosure to generate heat during intensive operations like large data transfers or cloning. The open design helps dissipate this heat.
  - Allow SSDs to cool down before handling them after heavy use.

8. Maintenance

- Keep the device in a clean, dry environment, away from direct sunlight and extreme temperatures.
- Avoid dropping or subjecting the device to strong impacts.
- Clean the exterior with a soft, dry cloth. Do not use liquid cleaners or solvents.
- Ensure proper ventilation around the device during operation to aid heat dissipation.

9. Warranty & Support

SSK products are designed for reliability and performance. For specific warranty information, please refer to the warranty card included with your product or visit the official SSK website. If you encounter any issues or have questions not covered in this manual, please contact SSK customer support through their official channels for assistance.

You can typically find support contact information on the SSK brand website or through the retailer where you purchased the product.