MOVE SPEED YSSDMDS-512GSQ

MOVESPEED

MOVE SPEED 512GB 3D NAND Internal PC SSD User Manual

Model: YSSDMDS-512GSQ

1. Introduction

This manual provides essential information for the installation, operation, and maintenance of your MOVE SPEED 512GB 3D NAND Internal PC SSD. Designed for enhanced performance and reliability, this solid-state drive offers a significant upgrade for both desktop PCs and laptops.

2. Product Features

- **Enhanced Speed:** Up to 4 times faster than traditional hard disk drives (HDDs), significantly reducing boot times, application load times, and system responsiveness.
- **High Efficiency:** Utilizes a SATA III 6Gb/s transfer interface, achieving read/write speeds of up to 540/480 MB/s for efficient data transfer.
- **Capacities:** Available in various capacities from 128GB to 1TB to suit diverse storage needs.
- **Reliable Data Management:** Features include garbage collection, wear-leveling technology, ECC (Error Correction Code), S.M.A.R.T., and TRIM functions to ensure operational efficiency, monitor drive status, maintain maximum performance, and prolong service life.
- **Durable Design:** Equipped with an anti-seismic and anti-fall metal shell for enhanced physical protection.
- **Universal Compatibility:** Compatible with both PC systems and notebooks.

Image: The MOVE SPEED SSD is compatible with a wide range of devices, including desktop PCs, laptops, and gaming consoles.

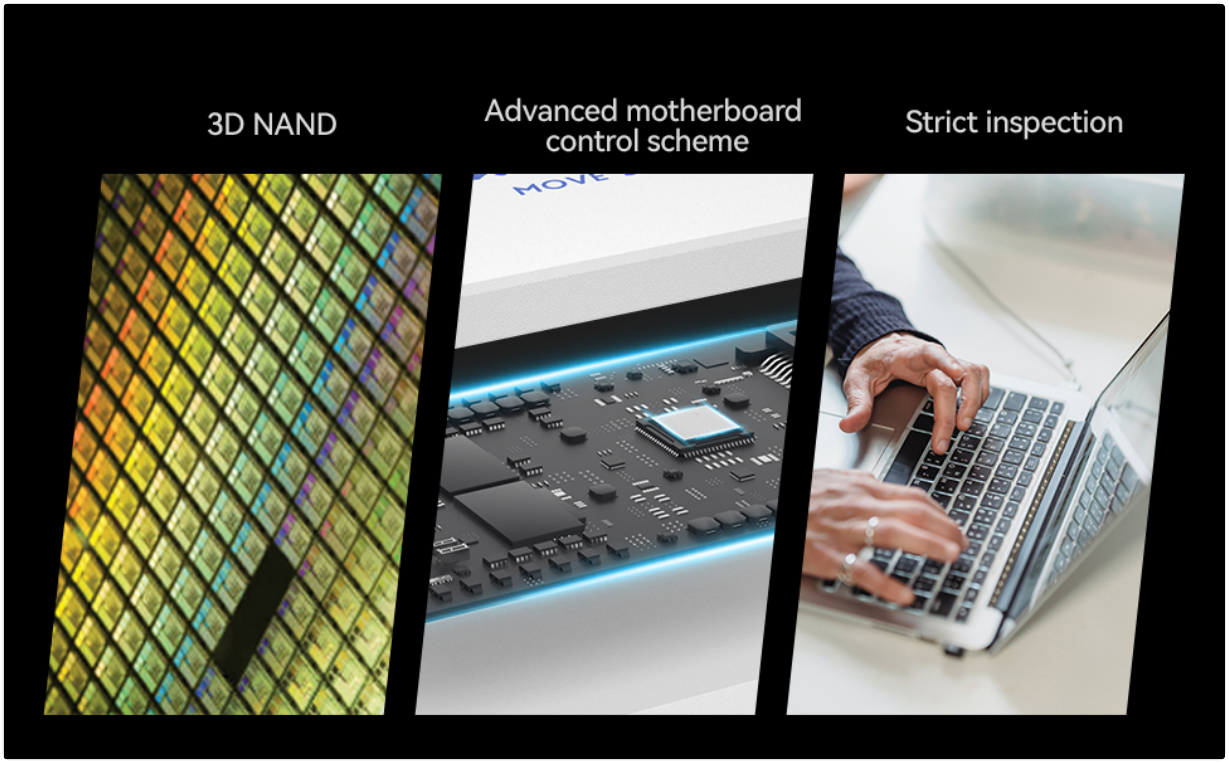

Image: The SSD is designed for seamless integration into both PC desktop systems and notebooks.

Image: The robust metal shell provides anti-seismic and anti-fall protection for the SSD.

3. Setup and Installation

Installing the MOVE SPEED SSD is a straightforward process for both desktop computers and laptops. Always ensure your system is powered off and disconnected from the power source before beginning installation.

3.1 Desktop PC Installation

1. Open your computer case.

2. Locate an available 2.5-inch drive bay. If your case only has 3.5-inch bays, you may need a 2.5-inch to 3.5-inch adapter bracket (not included).
3. Secure the SSD into the drive bay using screws.
4. Connect a SATA data cable from the SSD to an available SATA port on your motherboard.
5. Connect a SATA power cable from your power supply unit (PSU) to the SSD.
6. Close your computer case.

Image: The SSD is shown securely installed in a desktop PC drive bay, connected via SATA data and power cables.

3.2 Laptop Installation

1. Refer to your laptop's service manual for specific instructions on accessing the drive bay.
2. Carefully remove the existing hard drive (if any).
3. Install the MOVE SPEED SSD into the laptop's 2.5-inch drive bay.
4. Secure the SSD with any retaining screws or brackets.
5. Reassemble your laptop.

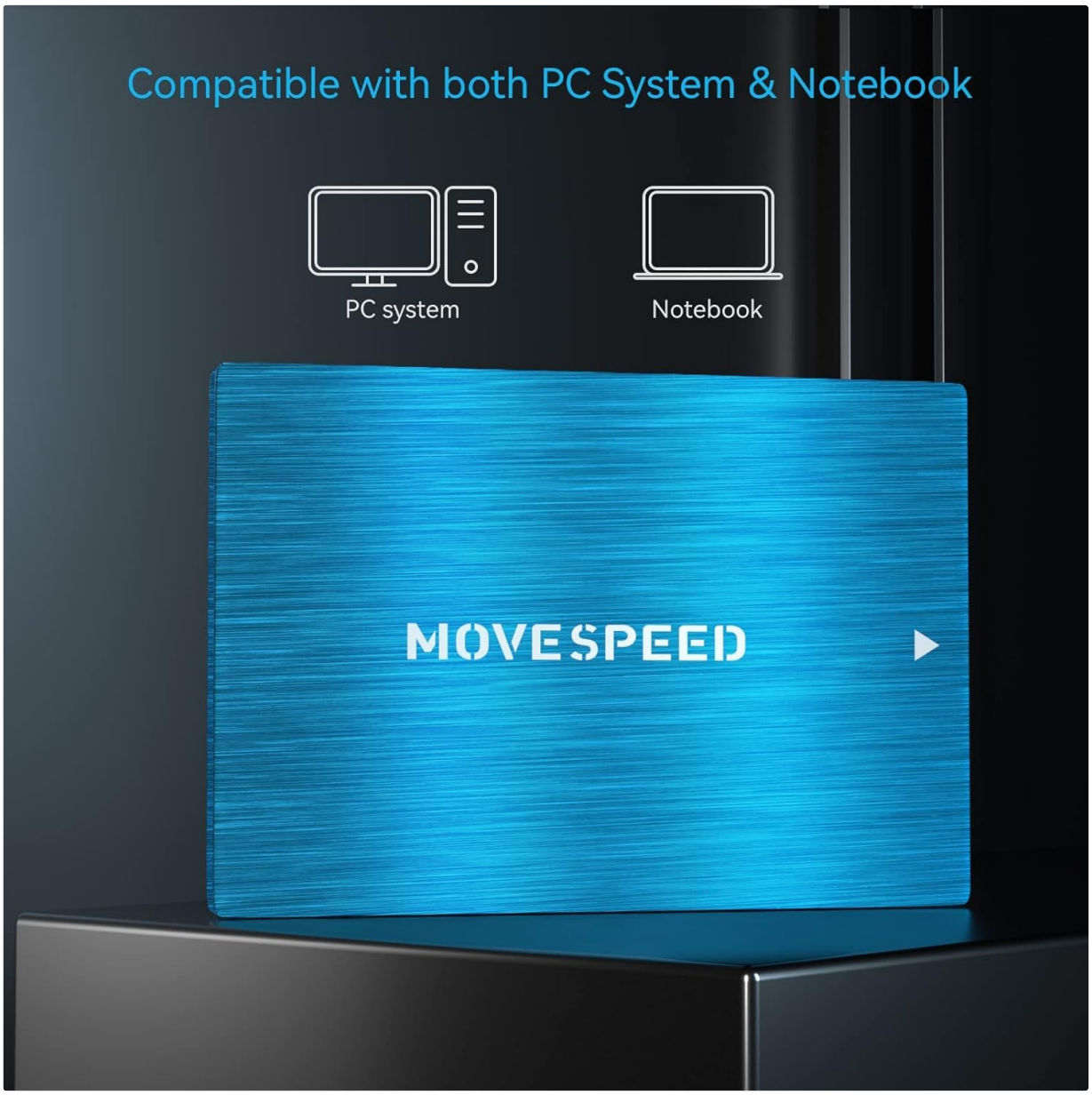

Image: The SSD is being inserted into a laptop's internal drive bay, replacing an older drive.

3.3 Initializing the SSD

After physical installation, you may need to initialize and format the SSD in your operating system's Disk Management utility before it can be used. Please refer to your operating system's documentation for detailed steps.

Your browser does not support the video tag.

Video: This video demonstrates the installation process of the MOVE SPEED Medusa series SATA SSD in a desktop PC and a laptop, highlighting its compact size and performance benefits. It also shows the boot speed improvement after upgrading.

4. Operating Instructions

Once installed and configured, your MOVE SPEED SSD will operate automatically, providing faster data access and improved system performance. No specific user interaction is required for its daily operation beyond standard file management.

4.1 Performance Benefits

The SSD significantly enhances system responsiveness. You will experience:

- Faster operating system boot times.
- Quicker application loading.
- Accelerated file transfers and data access.

Image: This chart illustrates the performance difference between an SSD and a mechanical hard drive, showing significantly faster boot times, file opening, and data transfer speeds with the SSD.

5. Maintenance

SSDs require different maintenance practices compared to traditional HDDs. Modern operating systems typically manage SSDs effectively, but understanding key features can help ensure optimal performance and longevity.

- **TRIM Command:** Ensure your operating system has TRIM enabled. TRIM helps the SSD manage deleted data blocks, preventing performance degradation over time. Most modern operating systems (Windows 7+, macOS, Linux) enable TRIM by default for SSDs.
- **S.M.A.R.T. Monitoring:** Self-Monitoring, Analysis, and Reporting Technology (S.M.A.R.T.) allows you to monitor the health and performance of your SSD. Various third-party tools can read S.M.A.R.T. data.
- **Garbage Collection:** This is an internal process within the SSD that reclaims unused data blocks. It operates automatically in the background to maintain performance.
- **Avoid Defragmentation:** Unlike HDDs, SSDs do not benefit from defragmentation. Defragmenting an SSD can reduce its lifespan without improving performance.
- **Firmware Updates:** Periodically check the MOVE SPEED official website for any available firmware updates for your SSD model. Firmware updates can improve performance, stability, and compatibility.

6. Troubleshooting

If you encounter issues with your MOVE SPEED SSD, consider the following troubleshooting steps:

- **SSD Not Detected:**
  - Check all SATA data and power cable connections to ensure they are secure.
  - Verify that the SATA port on your motherboard is enabled in the BIOS/UEFI settings.
  - Try connecting the SSD to a different SATA port or with different cables.
  - Ensure the SSD is properly initialized and formatted in Disk Management (Windows) or Disk Utility (macOS/Linux).
- **Slow Performance:**
  - Confirm that the SSD is connected to a SATA III (6Gb/s) port. Connecting to an older SATA II (3Gb/s) port will limit performance.
  - Ensure TRIM is enabled in your operating system.
  - Check for background processes that might be consuming system resources.
  - Verify that your motherboard's SATA drivers are up to date.
- **Operating System Installation Issues:**
  - Ensure your BIOS/UEFI is set to AHCI mode for the SATA controller.
  - If installing Windows 7, you may need to load SATA drivers during installation.

If these steps do not resolve your issue, please contact MOVE SPEED customer support for further assistance.

7. Specifications

The following table details the technical specifications of the MOVE SPEED 512GB 3D NAND Internal PC SSD (Model YSSDMDS-512GSQ).

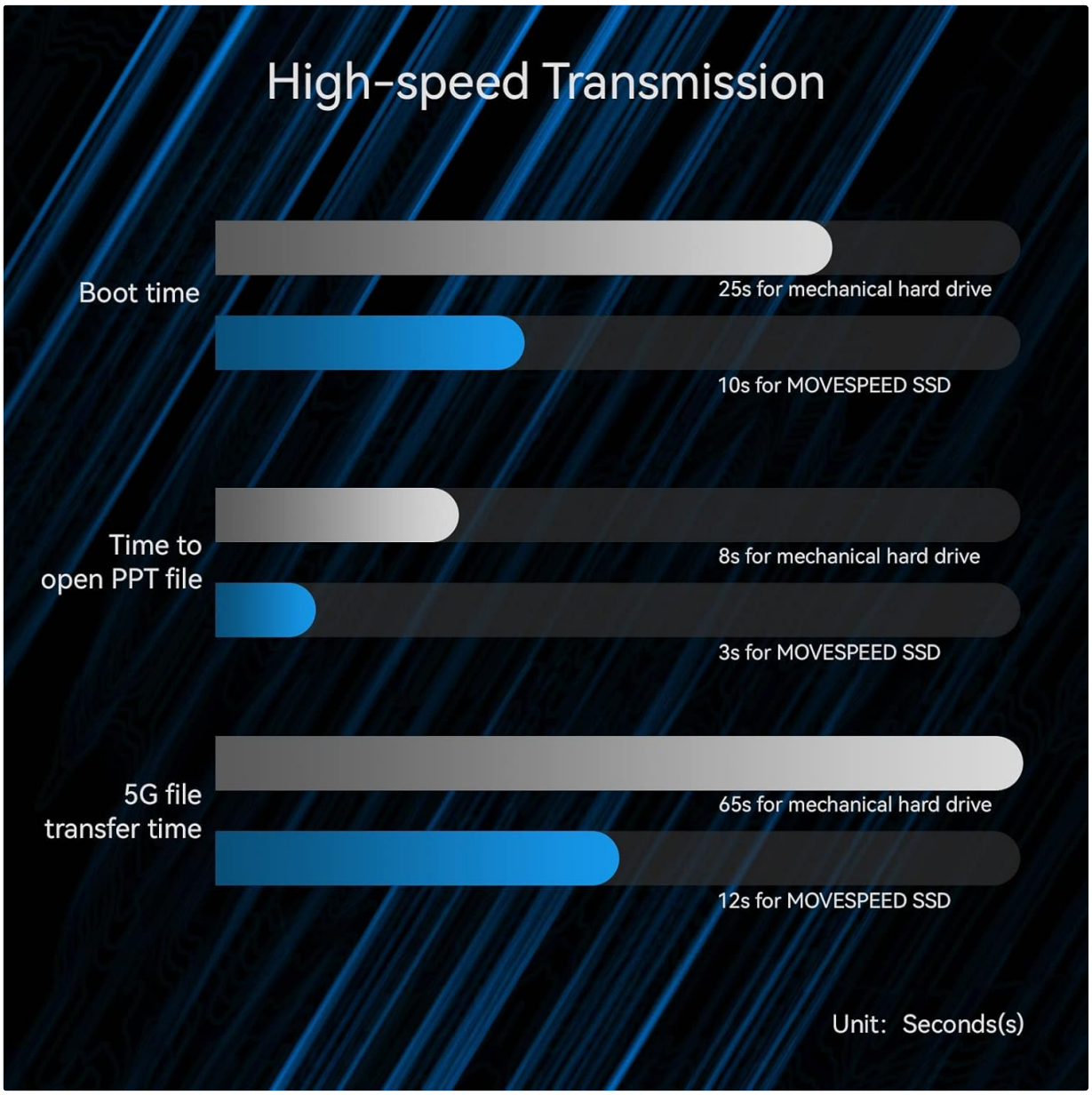

Image: The SSD is displayed alongside a table showing read and write speeds for different capacities (128GB, 256GB, 512GB, 1TB).

Feature	Specification
Digital Storage Capacity	512 GB
Hard Disk Interface	Solid State
Connectivity Technology	SATA III (6Gb/s)
Brand	MOVE SPEED
Hard Disk Description	Solid State Drive
Compatible Devices	Desktop, Laptop
Installation Type	Internal Hard Drive
Read Speed	Up to 540 MB/s
Item Model Number	YSSDMDS-512GSQ

Feature	Specification
Hardware Platform	PC, Laptop
Item Weight	2.89 ounces
Package Dimensions	5.16 x 3.94 x 0.63 inches
Flash Memory Size	512 GB
Manufacturer	MOVE SPEED
Date First Available	September 2, 2021

8. Warranty and Support

MOVE SPEED products are manufactured to high-quality standards. For warranty information, technical support, or service inquiries, please refer to the official MOVE SPEED website or contact their customer service directly. Keep your proof of purchase for warranty claims.