

Lite-On LCS-256M6S

LITEON LCS-256M6S 256GB SSD User Manual

Model: LCS-256M6S

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, maintenance, and troubleshooting of your LITEON LCS-256M6S 256GB Solid State Drive. Please read this manual thoroughly before using the product to ensure proper functionality and longevity.

The LITEON LCS-256M6S is a high-performance 2.5-inch SATA III SSD designed for fast data access and reliable internal storage in compatible systems.

2. SAFETY INFORMATION

- Always handle the SSD by its edges to avoid touching the connectors.
- Ensure your system is powered off and unplugged before installation.
- Use appropriate anti-static precautions (e.g., anti-static wrist strap) to prevent electrostatic discharge (ESD) damage.
- Do not expose the SSD to extreme temperatures or moisture.
- Do not attempt to disassemble the SSD, as this will void the warranty.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- LITEON LCS-256M6S 256GB SSD
- Quick Start Guide (if included)
- *Note: Windows 10 is listed as included in the product features, implying it might be pre-installed or provided as a recovery medium.*

4. SETUP AND INSTALLATION

4.1 Physical Installation

1. **Prepare your system:** Power off your computer and disconnect the power cable. Open the computer case.

2. **Locate a drive bay:** Identify an available 2.5-inch drive bay in your desktop or laptop. For desktops, you might need a 3.5-inch to 2.5-inch adapter bracket (not included).
3. **Connect the SSD:**
Carefully slide the SSD into the drive bay. Connect a SATA data cable from the SSD to an available SATA port on your motherboard. Then, connect a SATA power cable from your power supply unit (PSU) to the SSD.



Image: The LITEON LCS-256M6S 256GB SSD, showing its 2.5-inch form factor and the standard SATA data and power connectors on one end, ready for installation into a computer system.

4. **Secure the SSD:** Secure the SSD in the drive bay using screws or the system's tool-less mounting mechanism.
5. **Close the system:** Replace the computer case cover and reconnect the power cable.

4.2 Initializing and Formatting (for new installations)

If you are installing the SSD as a secondary drive or for a fresh operating system installation, you may need to initialize and format it.

1. **Boot your computer:** Power on your computer.
2. **Access Disk Management (Windows):**
 - Right-click on the Start button and select "Disk Management".
 - The "Initialize Disk" dialog box should appear automatically for new drives. Select MBR (Master Boot Record) or GPT (GUID Partition Table) based on your system's requirements (GPT is recommended for modern systems and drives larger than 2TB, though this 256GB drive can use either). Click "OK".
 - Locate the unallocated space on your new SSD. Right-click on it and select "New Simple Volume".
 - Follow the New Simple Volume Wizard to assign a drive letter, choose a file system (NTFS is standard for Windows), and perform a quick format.
3. **Operating System Installation (if applicable):** If you intend to install an operating system on this SSD, boot from your OS installation media and follow the on-screen prompts. The SSD should be detected during the installation process.

5. OPERATING THE SSD

Once installed and formatted, the LITEON LCS-256M6S SSD operates like any other storage drive in your system. Its solid-state nature provides significant advantages:

- **Faster Boot Times:** Operating systems installed on an SSD will boot significantly faster than on traditional hard drives.
- **Quicker Application Loading:** Programs and applications stored on the SSD will launch and run more quickly.
- **Improved Responsiveness:** Overall system responsiveness, including file transfers and multitasking, will be enhanced.
- **Durability:** With no moving parts, SSDs are more resistant to physical shock and vibration.
- **Silent Operation:** SSDs produce no noise during operation.

5.1 Optimizing SSD Performance

- **Enable TRIM:** Ensure TRIM is enabled in your operating system. TRIM helps the SSD manage data more efficiently, maintaining performance over time. Windows typically enables TRIM by default for SSDs.
- **Avoid Defragmentation:** Do not defragment an SSD. Defragmentation is unnecessary for SSDs and can reduce their lifespan.
- **Leave Some Free Space:** It is recommended to leave at least 10-15% of the SSD's capacity free to allow for optimal performance and wear leveling.
- **Update Firmware:** Periodically check the Lite-On website for firmware updates for your SSD. Firmware updates can improve performance, stability, and compatibility.

6. MAINTENANCE

SSDs require minimal maintenance compared to traditional hard drives. The primary focus is on ensuring optimal operating conditions and software settings.

- **Regular Backups:** Always perform regular backups of your important data, regardless of the storage device type.
- **System Updates:** Keep your operating system and drivers updated to ensure proper compatibility and performance with your SSD.
- **Monitor Health:** You can use third-party SSD monitoring tools (e.g., CrystalDiskInfo) to check the health and temperature of your SSD, though this is generally not required for normal operation.

7. TROUBLESHOOTING

If you encounter issues with your LITEON LCS-256M6S SSD, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
SSD not detected by system/BIOS	Incorrect cable connection SATA port disabled in BIOS Driver issue	Ensure SATA data and power cables are securely connected. Check BIOS/UEFI settings to ensure the SATA port is enabled and set to AHCI mode. Try a different SATA port or cable. Update motherboard chipset drivers.

Problem	Possible Cause	Solution
SSD detected but not visible in "My Computer" / "File Explorer"	Not initialized or formatted No drive letter assigned	Go to Disk Management (Windows) and initialize/format the drive and assign a drive letter (refer to Section 4.2).
Slow performance	TRIM not enabled Drive nearly full Incorrect SATA mode Outdated firmware	Verify TRIM is enabled (Windows usually does this automatically). Ensure sufficient free space (10-15% recommended). Check BIOS/UEFI for AHCI mode. Check Lite-On website for firmware updates.

If the problem persists, contact Lite-On customer support or your retailer for further assistance.

8. SPECIFICATIONS

Feature	Detail
Model	LCS-256M6S
Capacity	256 GB
Interface	SATA III (6.0Gb/s), backward compatible with SATA II (3.0Gb/s)
Form Factor	2.5-inch, 7mm height
Read Speed	Up to 450 MB/s
Write Speed	Up to 450 MB/s
Dimensions	Approx. 4.5 x 4 x 0.8 inches (Package Dimensions)
Weight	Approx. 2.4 ounces
Operating Temperature	0°C to 70°C (32°F to 158°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Shock Resistance	1500G @ 0.5ms
Vibration Resistance	20G Peak, 10-2000Hz
MTBF (Mean Time Between Failures)	1,500,000 hours (typical)

9. WARRANTY INFORMATION

Lite-On products typically come with a limited warranty. Please refer to the official Lite-On website or the warranty card included with your product for specific terms and conditions, including warranty period and coverage details. Keep your proof of purchase for warranty claims.

Note: Disassembling the SSD or improper installation may void the warranty.

10. CUSTOMER SUPPORT

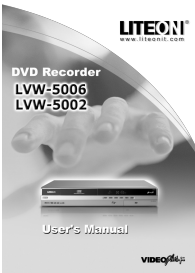
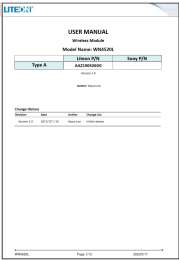

For technical support, driver downloads, firmware updates, or further assistance, please visit the official Lite-On support website:

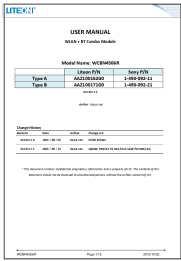
www.liteon.com/en/support

When contacting support, please have your product model (LCS-256M6S) and serial number ready.

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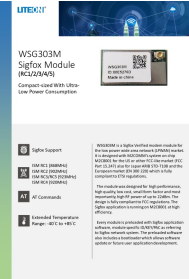
Related Documents - LCS-256M6S

	<p>LiteOn LVW-5006 & LVW-5002 DVD Recorder User Manual</p> <p>Comprehensive user manual for the LiteOn LVW-5006 and LVW-5002 DVD recorders, covering setup, recording, playback, editing, and troubleshooting to help users maximize their device's functionality.</p>
	<p>LITEON WN4520L Wireless Module User Manual</p> <p>User manual for the LITEON WN4520L Wireless Module, detailing its features, specifications, regulatory compliance, and OEM integration guidelines. Supports 2.4GHz and 5GHz bands with 150Mbps PHY rate.</p>
	<p>LITEON US Type Charger-80A User Manual</p> <p>User manual for the LITEON US Type Charger-80A, an 80A Level 2 AC Electric Vehicle Supply Equipment (EVSE) for North America, detailing installation, safety, and operation for faster EV charging.</p>



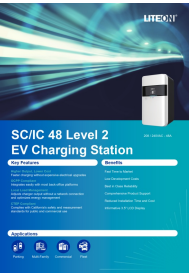
[Liteon WCBN4506R WLAN + BT Combo Module User Manual](#)

User manual for the Liteon WCBN4506R, a WLAN + BT Combo Module featuring MTK Chipset MT7662RU. Includes specifications, board outline, pin configuration, and regulatory information.



[WSG303M Sigfox Module: Datasheet and Specifications](#)

Detailed technical specifications, features, pinout, AT commands, and reflow profile for the LITEON WSG303M Sigfox Module, a compact and ultra-low power LPWAN modem.



[LITEON SC/IC 48 Level 2 EV Charging Station Datasheet](#)

Explore the LITEON SC/IC 48 Level 2 EV Charging Station, designed for efficient and reliable electric vehicle charging. This datasheet details key features, benefits, specifications, and applications for parking, multi-family, commercial, and fleet use.