Kingston® SSD Manager

User Guide (V. 1.5.X.X)

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Introduction

Kingston® SSD Manager (KSM) is an application that provides users with the ability to monitor and manage various aspects of their Kingston® solid state drive.

With Kingston® SSD Manager, you will be able to:

- Monitor drive health, status and disk usage
- View drive identification data, including the model name, serial number, firmware version and other relevant information
- View and export detailed drive health and status reports
- Update drive firmware
- Securely erase data
- Manage TCG Opal and IEEE 1667
- Overprovision with host protected area (HPA)
- Download Acronis® True Image™ for Kingston® cloning software

Supported operating systems

Refer to the table below for Kingston® SSD Manager operating system requirements.

Software version	Supported operating systems
Kingston® SSD Manager x64 v1.5.X.X	Windows 10, 11 x64
Kingston® SSD Manager v1.1.X.X	Windows 8, 8.1, 10 x86, x64

System requirements

To use Kingston® SSD Manager, you must have:

- One or more Kingston® SSDs
- Administrator privileges in Windows®

Some older model Kingston® SSDs may not be supported by Kingston® SSD Manager x64 v1.5.X.X. In this case, you may continue to use Kingston® SSD Manager v1.1.X.X.

User interface

The KSM main user interface allows you to quickly view device information and health status. The KSM version number is displayed in the top-left corner as well as a link to contact Kingston Technical Support. To rescan for devices, click the **Refresh** button. If you have more than one Kingston® SSD, you can switch between them in the left panel. Switching between tabs is done at the top of the right panel. The bottom panel provides the following drive information:

- Partition and disk usage
- Health overview
- SSD wear indicator and spare blocks
- Temperature and power-on hours

SSD wear indicator

The SSD wear indicator gauge found at the bottom of the main user interface displays the remaining write endurance on the selected Kingston® SSD as a percentage. A brand-new drive will indicate a value of 100%, meaning it has 100% of its useful life remaining. This value will begin to decrease as the drive is used over time.

The SSD wear indicator gauge can be used to check the conditional warranty status of your Kingston® SSD. A value of 1% for SATA drives or 0% for NVMe drives would indicate the drive is out of warranty. **It is advisable to make a backup of your data and discontinue usage of any drive that has reached an SSD wear indicator value of 1% or less.**

Firmware tab

The Firmware tab provides the following drive information:

- Physical device path
- Volume information
- Vendor/Model
- Serial number
- Firmware version

If there is a firmware update available for your Kingston® SSD, you will be able to click on the **Firmware Update** button to begin the firmware update process. You will also be able to view the firmware update release notes. **Once the firmware update process has completed, it is recommended to safely shut down your system and leave it powered off for 10 seconds before powering back on again.**

Operations tab

The Operations tab includes any special operations that may be applicable to your Kingston® SSD. This tab will be hidden from view if your Kingston® SSD does not support any special operations.

Overprovisioning

The overprovisioning feature allows you to manage the overprovisioning of your Kingston® SSD by setting a host protected area (HPA). Overprovisioning is the practice of reducing the usable capacity of an SSD to increase both its performance and endurance. This feature is only supported on Kingston® Data Center series SSDs and can be accessed on the Operations tab.

If you would like to use this feature, you must first remove all partitions from the SSD. You may also need to clean the SSD using diskpart. For best performance, a secure erase is recommended.

Now enter the desired capacity in gigabytes (GB) and click the **Commit** button to apply your changes. You will be prompted to enter the last four digits of the drive serial number before the HPA modification takes place. After the HPA modification completes successfully, a power cycle of the target drive or a system shutdown and restart is required for the system to detect the new capacity.

If you encounter errors during the overprovisioning process, power cycling the SSD may help.

Health tab

The Health tab allows you to monitor various attributes related to the health and status of your Kingston® SSD. Click the **Refresh Data** button to refresh the health information currently being displayed. Click the **Export Data** button to save the health information to a file.

You may scroll up and down on this tab to view the various health attributes. The attributes with coloured gauges next to them allow you to quickly monitor their status.

There is also a table listing all supported health attributes along with their technical details and values:

- Attribute: The attribute number and description.
- Normalised: The current normalised value of the attribute.
- Worst: The lowest recorded normalised value of the attribute.
- Threshold: The value that the attribute should not exceed under normal operation.
- Raw: Raw value of the attribute.
- Flags: The flags associated with the attribute.

Security tab

The Security tab allows you to view and manage the status of the following security features of your Kingston® SSD:

- ATA Security: View the current ATA security status. You may be able to perform an ATA secure erase on a secondary non-partitioned drive by clicking on the **Secure Erase** button. You will be prompted to enter the last four digits of the drive serial number before any data is erased. **ATA secure erase will erase all data on the drive**. This will restore your Kingston® SSD to its fresh out-of-box performance. ATA secure erase may not be available on all systems.

- TCG Opal: View the current TCG status. This only applies to Kingston® SSDs that support TCG Opal. If your drive is TCG enabled and you would like to restore it to a disabled state, you can perform a TCG revert using the PSID. The PSID is a string of 32 letters and numbers located on the drive label. The SSD must be connected as a secondary drive and you must correctly type in the PSID on the label. Once you have PSID typed in, click the **TCG Revert** button to revert the drive. **TCG revert will cryptographically erase all data on the drive**.

- IEEE 1667: View the current IEEE 1667 status. This only applies to Kingston® SSDs that support IEEE 1667. You can enable or disable IEEE 1667 support by clicking on the **IEEE 1667 Enable/Disable** button. It is recommended to only have IEEE 1667 enabled if you plan to use hardware encryption with BitLocker according to the Microsoft® eDrive standard.

Events tab

The Events tab displays an event log that contains system information and a record of all actions since the application was launched.

Acronis tab

The Acronis® tab provides information on the Acronis® True Image™ for Kingston® cloning software. Here you can download the cloning software, view system requirements and review cloning instructions. A Kingston® SSD is **required** to register the cloning software.

For additional support related the Kingston® SSD Manager, please contact our Technical Support team at: kingston.com/support